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National
Skill Development
Corporation

District wise skill gap study
for the State of
Rajasthan (2012-17, 2017-22)



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Acronyms and Abbreviations

CII	Confederation of Indian Industries
CMIE	Centre for Monitoring Indian Economy
DRS	Development and Research Services Private Ltd.
FGD	Focus Group Discussion
GDDP	Gross District Domestic Product
GSDP	Gross State Domestic Product
ITI	Industrial Training Institute
ITC	Industrial Training Centre
MSME	Micro, Small and Medium Enterprises
NSDC	National Skill Development Corporation
NSDF	National Skill Development Fund
RIICO	The Rajasthan State Industrial Development & Investment Corporation Ltd.
RSLDC	Rajasthan Skill & Livelihood Development Corporation
SSI	Small Scale Industries
TOR	Terms of Reference
VTI	Vocational Training Institute

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Preface

Skills enhancement has always been critical for the economic and social development of any country. It is observed that countries with skilled manpower respond more effectively to the challenges and opportunities of globalization. To benefit from globalization, a developing economy such as India requires a large and skilled workforce. However, the lack of quality trainers and training institutes is proving to be a roadblock to growth. Skill shortage is evident in every sector of the economy.

India has one of the largest and the youngest population in the world. However, it has been observed that about 80 percent of the Indian workforce does not possess identifiable marketable skills. This is primarily due to the lack of focus on development of specific skills required by industry. Besides, employers, particularly in small-scale industries, do not give due recognition to the value skilled workers bring, and this is another reason for the poor skill sets of the Indian workforce.

India is transitioning to a skills-based economy and its competitive edge will be determined by the abilities of its people to create, share and use knowledge more effectively. It needs to develop skilled workers who will be more flexible, analytical, adaptable and multiskilled.

Given the above context, the **National Skill Development Corporation (NSDC)** has undertaken an exercise to conduct a skill gap assessment for the state of Rajasthan. The objective was to identify a district-wise skill gap by mapping the expected skill requirements to match the growth plans across various high-impact sectors. A pilot study was undertaken in five districts to examine the robustness of the research tools in terms of their efficacy in addressing critical data needs and ease in using them during the field survey on respondents identified by the **Rajasthan Skill and Livelihoods Development Corporation (RSLDC)**.

For this engagement, Accenture teamed up with **Development & Research Services (DRS)** to provide firsthand information relevant to this study through field surveys, and innovative use of research tools focused on extracting accurate information in quantitative or qualitative formats.

Executive Summary

Background and Scope of Work

The National Skill Development Corporation (NSDC) is an apex body for defining and building sustainable skill development initiatives through public private partnership (PPP). It strives to sustain an environment conducive to the inclusive growth of India by partnering with industries, civil society organizations and nongovernment organizations (NGOs).

NSDC is in the process of conducting a district-wise skills gap study for all the states in the country. Accenture was given the mandate of conducting the study for Rajasthan. The overall objective of the study was to assess the district-level skills gap, both in terms of numbers and the required skills and competence. The study projects the skills needed and the skill gaps in various sectors for every district. It helps understand the requirements and opportunities within Rajasthan.

The study focuses on identifying the current demand-supply trends, and the support mechanism available to address the skilled workforce needs of every district and eventually of the state. It shows the existing gaps in the labor market and the future needs of industry based on projected growth, first for every district and then for the state as a whole. The study looks at the current and future profile of industries, the employment opportunities available, existing skills gap in vocational and skill training infrastructure (demand-supply gap), action plans and recommendations to enhance the overall workforce scenario. The final report is broadly divided into four sections. Based on the findings of our study and our recommendations, an action plan would be developed for each district. The study will be leveraged by all the stakeholders such as NSDC, the Government of Rajasthan, training providers and industry to develop suitable skilling interventions.

Approach, Methodology, Sampling and Data Sources

Given the outlined scope of work, a detailed approach and methodology was developed for skills gap and requirement assessment keeping in mind the key focus areas for various stakeholders. The methodology designed for the study included primary and secondary research. The qualitative and quantitative aspects were covered by interviews with key stakeholders such as industries, youths and vocational training institutes (VTIs). Structured questionnaires and qualitative approaches such as focused group discussions (FGDs) and in-depth interviews one-to-one interviews were used to gather data from primary sources. For secondary research, we used various published reports and data from relevant departments of the state and central government. The secondary data was gleaned from various sources such as census data and the statistical abstract report from the Department of Economics and Statistics.

The study looked at the current and future potential for employment generation and absorption of skilled, semiskilled and unskilled workforce into appropriate sectors. It also examined the following three critical components:

—**Demand-side parameters:** Investment trends (sector-specific), Gross District Domestic Product (GDDP), value per worker, and percentage of skilled, semiskilled and unskilled resources

—**Supply-side parameters:** Population projection, workforce participation rate, and workforce continuing in the similar work sphere for a specified period

—**Support-side parameters:** The number of students passing out from various institutes and thus the infrastructure available to provide skilled workforce

A meticulous approach was adopted to ensure a proper representation of all stakeholders as per the methodology. Stratified (disproportionate) sampling was used to select the employers in industry sample.

In case of VTIs, a more convenient sampling was used to cover both public and private sectors. Young trainees, unemployed and employed (post training) were interviewed to complete the groupings for the youth survey who were interviewed at various training institutes, colleges and work places/homes. Accenture took the help of the Confederation of Indian Industry (CII) to contact other industry associations for in-depth interviews of the employers. District officials involved in similar initiatives were also interviewed. Selection of educational institutes such as engineering and medical colleges were based on cluster sampling, mapping known institutes for an understanding of the skill-job market scenario of the state.

Socioeconomic Analysis of Rajasthan: Comparing with other states of India

Accenture tried to understand the state's macro socioeconomic conditions by identifying the key industries and high-growth sectors, various skill development schemes, and other factors that have a direct or indirect bearing on the study.

Rajasthan currently accounts for 4 percent of the country's gross domestic product (GDP). It is primarily an agrarian economy, but there has been steady decline in the GDP share of agriculture over the years—from 35.8 percent in 2001-02 to 21.5 percent in 2010-11. On the contrary, the manufacturing and services sectors have seen significant growth in the last decade and now account for faster increase in GDP. Growths in manufacturing and services have also pushed up income levels.

The high-growth phase started in 2003 after the announcement of the New Industrial Policy, which led to increased investments in large and medium-scale industries. It brought about rapid growth in the secondary sector as well as in the tertiary sector. IT and IT-enabled services (ITES) and retail emerged. Within the secondary sector, manufacturing and construction have been leading the growth story at 87 percent; manufacturing witnessed the highest growth during the last few years. In the tertiary sector, trade, hotels, restaurants and transport have seen the maximum growth.

A relative analysis of Rajasthan—its population, area, demographic pattern and other socioeconomic indicators—will be useful in understanding where Rajasthan stands with respect to other states.

- **Population:** In the last 10 years, the population of Rajasthan has grown at an alarming rate—by about seven times compared with five times for India during the same period. The decadal growth rate of Rajasthan's population at 21.44 percent is higher than that of India at 17.64 percent, between 2001 and 2011. Though the pace of growth has slowed, it is still higher than

the national average. According to the census, the population of India is 121.02 crore; Rajasthan's is 6.86 crore.

- **Population Density and Sex Ratio:** Rajasthan's population density has increased from 165 per square kilometers in Census 2001 to 201 in Census 2011. The state's sex ratio, expressed in terms of number of females per thousand males, is 926 compared with the all-India 940. On an all-India scale, it is at twenty-first position in 2011, down from twentieth place in 2001. Significantly in a country where female infanticide is still an issue, Rajasthan has seen a slight increase of five females per thousand males in the last decade—the sex ratio is now at 926, up from 921 in 2001. But the state has slipped in child sex ratio, defined as the number of females per thousand males in the age group 0–6 years. From the twenty-eighth position it occupied in 2001, it declined to twenty-ninth place in 2011.
- **Literacy:** Rajasthan's literacy rate is 67.06 percent—80.51 percent for males and 52.66 percent for females. This is against the all-India level of 74.04 percent, and 82.14 percent for males and 65.46 percent for females. Rajasthan ranks No. 33 among India's 35 states and union territories in literacy. In male literacy, it is at No. 27 and in case of females, it is at No. 35, at the bottom. But an analysis indicates that a rise in female literacy increases the likelihood of a reduction in infant mortality rate (IMR)—that an increase of one unit in the female literacy rate will result in a decline of 0.715 unit in IMR and it is significant at 1 percent level of probability. This is significant in a state where the IMR is much higher than the national average; it stands at 59 per thousand live births, which is five times that of Kerala and way above the 50 for all of India. Fertility as well as mortality levels in Rajasthan are very high, with the fertility rate at 3.3 births per woman against the national 2.6. At 388 per lakh live births, the maternal mortality ratio (MMR) is four times that of Kerala and the third-highest in India; MMR for India is 254.
- **Industries:** Rajasthan is on the verge of a major industrial transformation. First, Rajasthan's relatively less fertile land with low occupational density is becoming an advantage since converting land for industrial use comes at a lower cost. Second, mineral wealth, including gas and oil, has been discovered in the state. Third, Rajasthan has enormous scope for development of renewable energy. Even the state's landlocked character is an advantage as the state is now part of the rapid transit corridor that links western and northern India. Rajasthan introduced the Micro, Small and Medium Enterprises (MSME) Policy Package in 2008 to help small and medium enterprises achieve global competence. As of March 31, 2010, there were **3,34,518 MSMEs** registered in the state, accounting for investments of **INR10,584.74 crore** and providing employment to **13,95,979** people.

Key Findings

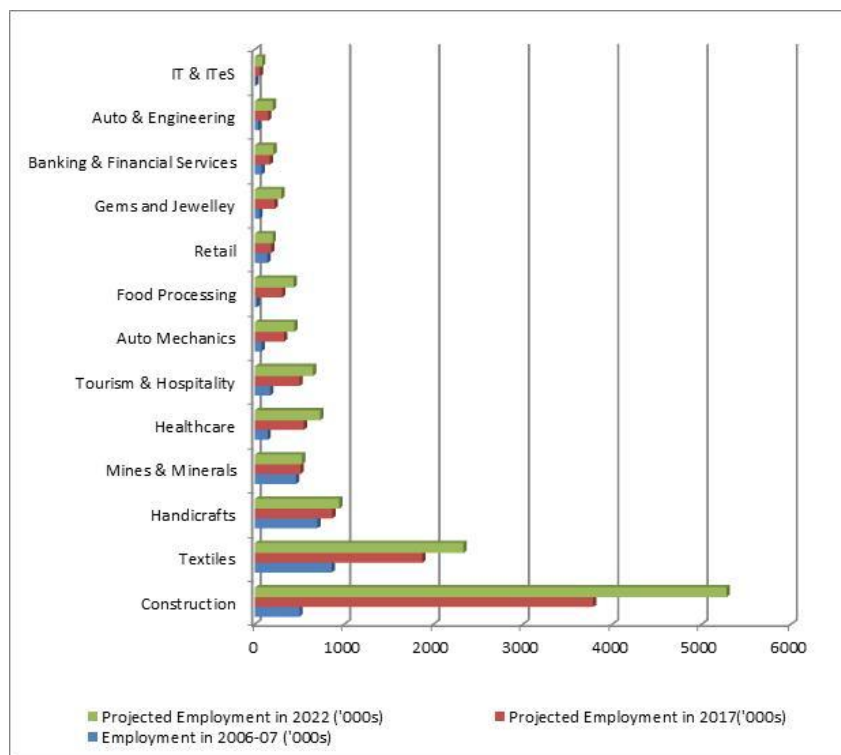


Figure 1 Incremental human resource requirement across high growth sectors till 2017 and 2022 in the state of Rajasthan

The working population of the State is 280 lakhs and is growing at the rate of 2.2% per annum, which translates to a net addition of 6 lakh persons in the workforce every year. Taking backlog of the unemployed persons, Rajasthan needs to create 7-8 lakh new livelihoods every year. Many of those employed are working at a subsistence level of existence due to emphasis on hiring of casual labour and risky and low income yielding agriculture. Although about two-thirds of the workforce in the state is employed in agriculture, their contribution to state domestic product (SDP) is only about 30

percent. In contrast, the remaining one-third of the workforce involved in other occupations contributes 70 percent. While the share of agriculture in SDP growth has declined rapidly over time, the agricultural workforce has shown only a marginal decline of 9 percent between 1950 and 2011.

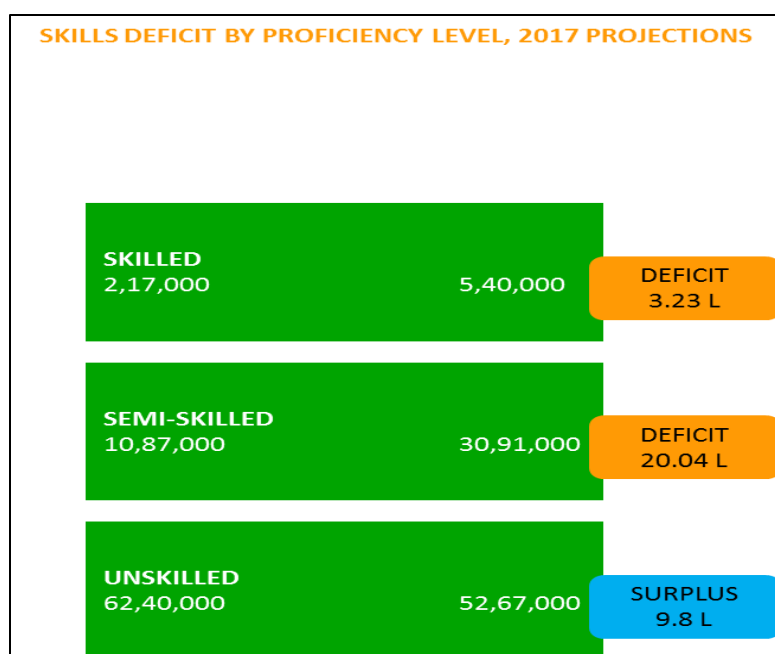


Figure 2 Projected workforce distributions by 2017

According to a preliminary analysis based on secondary resources, it is estimated that Rajasthan will have an incremental human resource requirement of approximately 60 lakh workers by 2017 across a few high-priority sectors (see figure 1). If we factor in factors such as workforce participation and investment patterns, the state would require an additional 3.23 lakh of skilled and 20.04 lakh semiskilled workers by 2017. The unskilled workforce is projected at a surplus of 9.8 lakh by 2017 as the supply of this category of workforce will remain high while the demand

will reduce substantially (the maximum number of unskilled workers are household workers and agricultural laborers). The figure below summarizes the projected workforce scenario of the state by 2017 under the skilled, semiskilled and unskilled categories.

The human resources requirement was estimated on the basis of the following parameters: historical growth rate of the industry, employment pattern, industrial productivity, technology changes, customer preferences and government policy. Simultaneously, the availability of human resources was calculated on the basis of the following parameters: current educational infrastructure of the industrial training institutes ITIs, polytechnics, engineering institutes and colleges, number of students graduating, migration and employability.

The inference drawn from the study regarding the skilling requirement draws similarity in the state's target to train, by 2017, 24 lakh youths through various initiatives under the Twelfth Five Year Plan. Large-scale initiatives for skilling the unskilled to semiskilled, and to provide sustainable livelihoods and better financial security will also be key to fulfilling the future workforce needs of the state. The additional targets needs to be maintained in successive plans (Twelfth Five Year Plan is for the period 2012 to 2017) keeping in mind developments after 2017. Another key focus for the state should be on the possibility of converting surplus unskilled workers to semiskilled, and up-skilling of semiskilled workers to skilled.

The unorganized sectors in general have various levels of skilled defined as per the number of months/years put as experience. From the primary survey carried out in terms of requirement across sectors of skilled, semi-skilled and unskilled resources as per requirement of industries (survey carried out with 366 industries from 21 sectors) the following classification was inferred:

Unskilled (Informal/Unorganized)	Semi-Skilled	Skilled	Specialized/ Highly Skilled
Early school drop outs, illiterate, residential skilled potential	No formal skilling provided, skilled over a period of time with experience, maximum absorption into unorganized sector	ITIs, ITCs, Diploma, skilled work experience people, technicians, private skilling initiatives in the state etc.	MBA graduates, highly skilled in specific domain, strong communication and analytical skills, experienced- form the part of skilled category
46%	37%	17%	3%
Unorganized labour in farms and allied, household workers	Unorganized/ Informal/ Handicrafts/ Tourism sectors (local level)/ Services	IT/ITES, Auto-engineering, manufacturing industries, hospitality etc.	Managerial positions, leadership roles, etc.

Table 1: Workforce breakdown in 2017 across sectors

In Rajasthan, the major unorganized sectors would be handloom and handicrafts, gems and jewelry, construction, and stone polishing/workers. Apart from these trades like security, beautician, drivers and mechanics also form a considerable segment of unorganized sector.

Skilling initiatives by the state

In Rajasthan, the Ministries/ Departments have launched and implementing various schemes on skill development to empower the workforce engaged in various sectors with an objective to provide employable skills to the school pass outs, existing workers and ITI graduates along with specific training modules and courses outlined for artisan groups, farmers and entrepreneurs.

<p>Department of Agriculture</p> <ul style="list-style-type: none"> Train 20,050 farmers, youths and farm women (KVK + Department) Budget outlay – 1146 lakhs Over 950 training programmes Centrally Sponsored Schemes & RSLDC supported 	<p>Directorate of Training</p> <ul style="list-style-type: none"> Increase intake capacity to 4,00,000 379 new institutes proposed Take the overall tally to over 1200 ITIs+ITCs 	<p>RSLDC</p> <ul style="list-style-type: none"> Train 2,80,000 youths New partners for achieving results Strengthen training providers Rs. 7500 lakhs from State Government Scaling up strategies
<p>RGAVP</p> <ul style="list-style-type: none"> Train 17,000 rural youths Part of Rajasthan Rural Livelihoods Project Train SHG members for livelihoods Rs.3260 lakhs (Central + WB) 	<p>Dept. of Local Self Governance</p> <ul style="list-style-type: none"> Train 1,00,000 youths Rs. 2500 lakhs from State Government Placement & certification of 70% trained 	<p>RRECL</p> <ul style="list-style-type: none"> State Government to install 500 Solar Voltaic Power Plants Train 1,000 workers 50 orientation cum trainings Rs. 25 lakhs (Ministry of New and Renewable Energy, GoI)
<p>Dept. of Science & Technology</p> <ul style="list-style-type: none"> Train 1,000 youths Skill & Entrepreneurship programmes Rs. 25 lakhs Awareness camps- Rs. 20 lakhs (50,000 students) 	<p>Dept. of Tribal Area Development</p> <ul style="list-style-type: none"> Train 10,000 youths Short term training to migrating laborers Placement camps Establish 1 engineering college and ITIs in every tribal block 	<p>EMI & RKCL</p> <ul style="list-style-type: none"> EMI- training of trainers: 1750 ; 78 programmes; 5-12 days Rs. 150 lakhs RKCL- training 25,000 youths; IT literacy training

Source : Working Group Report of the State on Skill Development- 12th Five Year Plan

Figure 3 Skilling initiatives across various departments in the state- a summary snapshot

Some of the other trainings which are provided within the state by central budgets fall under the MSME, Khadi and Village Industries, Health & Family Welfare, Social Justice & Empowerment etc. Rajasthan Knowledge Corporation Limited, a public limited company promoted by Government of Rajasthan has trained 1.5 lakh aspirants in various IT related training courses in last three years of which above 35,000 youths have been given online government recruitment services and placed 15,000 youths. The VTIs (ITI/ITC/KVK/other institutes supported by state) have very small number in terms of overall skilling imparted to the beneficiaries. The major figures could be summarized as follows for the previous five year plan:

Departments/ Institutes	Number of youths trained	Duration of courses
Department of Agriculture	8762	2 months to 2 years
Department of Higher & Technical Education	69873	6 months- 3 years
RSLDC (erstwhile RMoL)	65172	45-90 days
EMI	2240	4-6 weeks
Dept. of Science & Technology	384	4-6 weeks

Table 2 Trained youths through major initiatives of the state in skilling

The observations made were that the VTIs were underutilized in terms of seating capacity, fund utilization and outdated in the course curriculum structures. The figure below highlights few of these aspects:

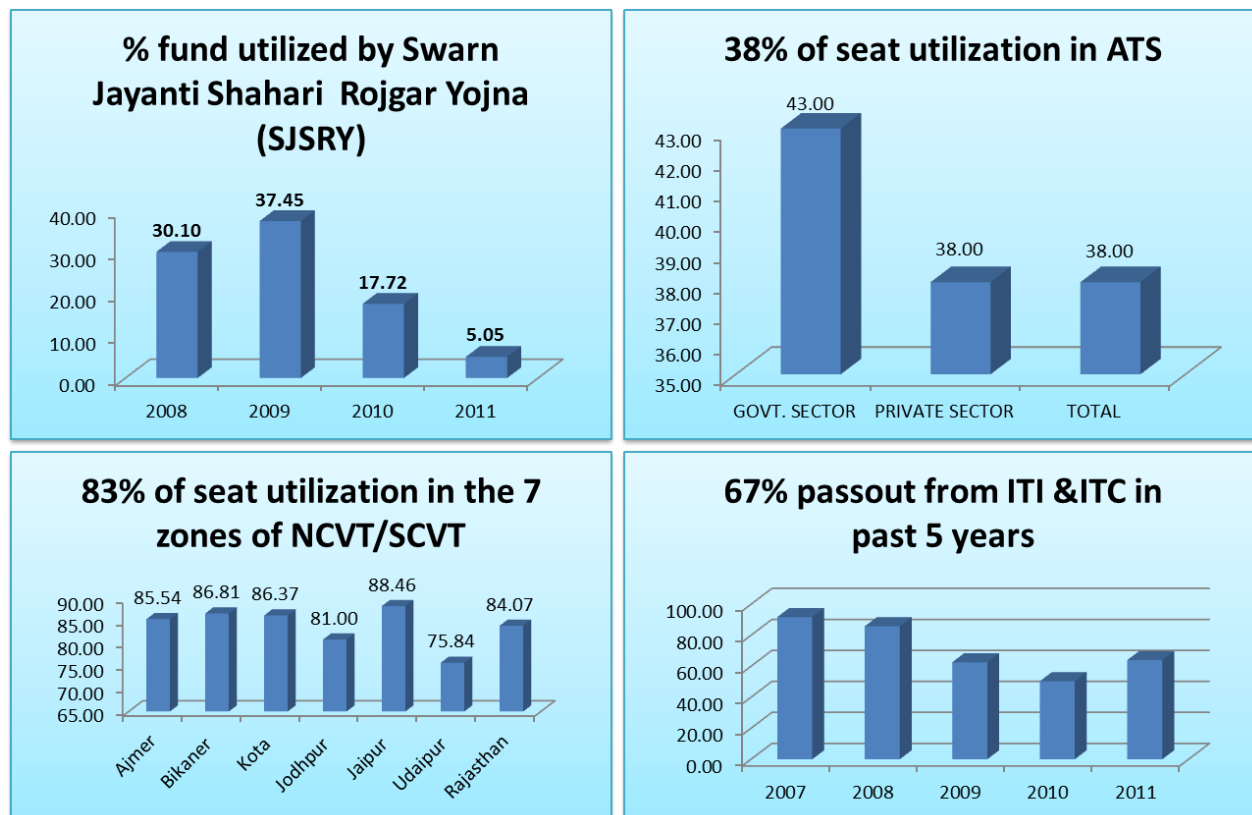


Figure 4 Status update of state skill development schemes

Youths Aspiration

In terms of youth aspirations, the state had some of the following findings:

- High Preference for government jobs over private jobs-** The common phenomenon observed across districts was the preference of youth for government jobs. This was due to reason that the youth believed that government jobs were more secure. Awareness regarding the upcoming private organizations and scope of work was far less. Parents also desired for salaried government jobs for better future (as per parents). More than 87% of the respondents felt that they were ready for any kind of government jobs of which only 15% had received complete training for getting absorbed as semi/skilled workforce
- Higher and better salary structure after getting training and absorbed by industry-** The average starting salary expected post training completion was Rs. 7000 (even though engaging in start-up jobs) with basic perks of Rs.1500. More than 90% of the youth (among the employed category) interviewed did not get any annual increments neither they opined for any such incentives. In contemporary market, the average initial salary was on the lower side, especially

for service sector industries (refer table 3). The mismatch in expectations and actual scenario was clearly high.

- **Preference for courses** - The courses in preference were more from the present available options largely from existing ITI/ITC lists. These courses were electrical, fitter, IT, wiring and mechanic. Some of the self-employing courses which were available options with the youth was in tailoring, hair cutting, make-up etc. The awareness of some specific training courses designed for shorter duration with better placement results was lacking and if available, it was more in few top five districts performing in skill development training.

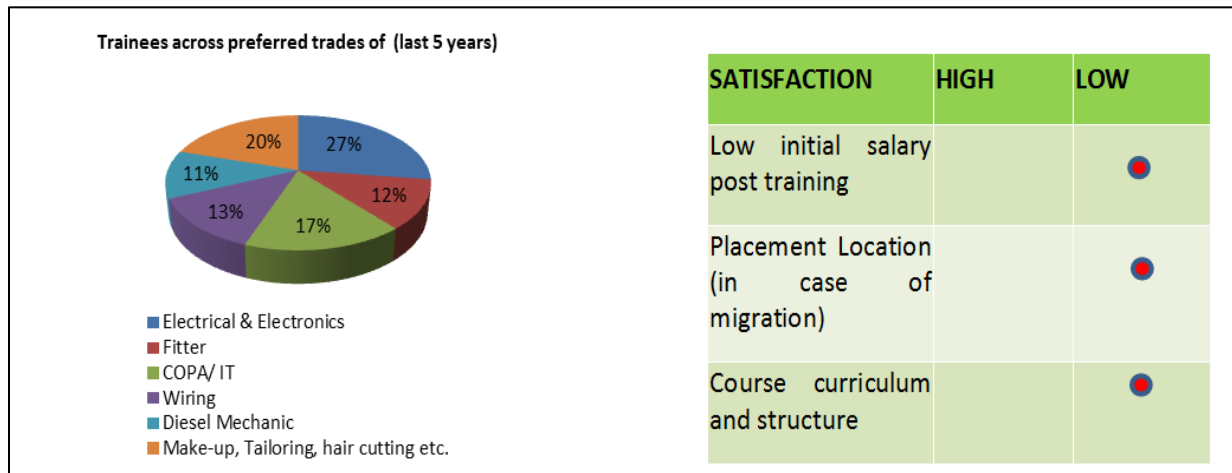


Figure 5 Preferred trades and the satisfaction levels post trainings among youths-primary survey

- **Training for better communication and basic know-how of computer-** This was fast emerging requirement among the youths that better communication skills, along with basic knowledge of computers would enable them for better job opportunities with higher better starting salaries. This was also essential for growth in professional terms. In terms of technical skills preference, the IT skills in IT/ITES, retail and manufacturing sector was followed by engineering technical skills in manufacturing, mines and minerals and construction sector.

District Perspective

Only 11 districts have had some major initiatives moving in skill development and private partners (NGOs, private colleges etc.). If ranked as per rankings, the top five and the bottom five in terms of skilling initiatives shall be as follows (Also, **summarized district fact sheet** for each of the district study given which highlights the skill prospects of the district):

Top Five	Emerging Five	Bottom Five
Jaipur	Jodhpur	Pratapgarh
Alwar	Ajmer	Tonk
Kota	Bhilwara	Sawai Madhopur
Jhunjhunu	Bikaner	Jalore
Bharatpur	Udaipur	Rajsamand

Table 3 Districts positioned in skill development training initiatives of the state

Also, it was inferred that 62% of the state GDP comes from just 12 districts and the top five districts were namely Jaipur (15.30%), Alwar (5.95%), Jodhpur (5.77%), Ajmer (5.04%), and Bhilwara (4.69%). The commonality in the performance of the districts in terms of economy, industrialization and skill development was evident as the same set of districts appeared in every set.

Across the districts the service sectors (across various industries) had specific pattern and workforce requirement in skilled categories. In terms of the demand for some of the high priority service sectors (analyzed across all the districts) the workforce requirement could be observed with relatively high demand and low entry level remuneration. The supply was on the lower side due to the inadequate support mechanism across districts. This could be summarized as given in the table 3 (below):

Trades	Demand	Supply	Support	Remarks
Electrician	High	High	ITIs, ITCs	Self-employment; initial salary expected is Rs.4000
Computer Based Accountancy & IT	High	Low	None (a few initiated- private training providers)	Requirement of TALLY accounting in malls, supermarkets, medicine shops; initial salary expected
Mobile Repairing	High	Low	Localized (on job training at shops)	Self-employment option with rise of mobility and accessibility; initial salary Rs.3500
Wiring & Repairing (domestic)	High	Low	ITIs, Polytechnics	Private providers exist in few numbers; self-employment; initial salary Rs.3500
Automobiles mechanic	High	Low	None	Engagement in two & four wheeler mechanic; self-employment; initial salary Rs.3500
Courier Delivery	High	Low	None	Upcoming requirement as per the market needs; initial salary Rs.3500
Sales & marketing	High	Low	None (far less than existing demand)	Potential in small scale set ups is high; formalized training in sales is absent; initial salary Rs.4000
Gems & Jewelry	High	Low	Localized & Low (trained in industry)	High potential in Jaipur, demand very high with initial salary of Rs. 4000
Handicrafts & Handloom	High	Medium	None (no specific support apart from MSME trg)	Skilling process is as per the trade and initial salary is Rs 3000

Table 4 High priority service sector demand, supply and support in the state of Rajasthan

These trades would majorly cater for the existing repair and services industries with the upcoming IT sector, industries in DMIC and Alwar region and the handicraft & handloom sector. Some of the most

common trades like gems and jewelry, local hotels (hospitality) and construction set-ups would continue to engage household workers or in other words the major portion of unorganized labour. Similarly the rural set-up of agriculture and allied industries would engage the unskilled unorganized labour with quick access to the resource pool in the villages.

Skills shortages aren't confined to just a few industries. There were some examples of how skills gaps manifest themselves across companies in different sectors as well. As observed across the districts of the state, some of the common sectors which had bearing over the state results were tourism and hospitality, auto-engineering, manufacturing, mines and minerals, handloom and handicrafts, leather, gems and jewelry, construction, and IT/ITES. Some of the common requirements which could be also highlighted as gaps were lack of life skills, communication, less flexible and fit into a model, lack of market understanding and linkages, and orientation to the services provided as a provider.

Recommendations

The broad contours of our skill building development plan with certain action points for each stakeholders would be as follows (*the complete report would bring out the district specific plans and action plans for stakeholders at various levels of planning, implementation and operations*):-



Figure 6 Action points for stakeholders of the study- a snapshot

Therefore, focus would be needed on all the above mentioned areas to ensure the emergence of a 'skilled workforce', which shall be in the interest of all stakeholders – the Government, industries, training partners, and the agencies like NSDC. The Government of Rajasthan would continue to play an active role in these initiatives and coordinate with all stakeholders and NSDC would play an enabling catalyst to fasten the results by getting its partners more skill development grounds to work on. Thus, it

is by transforming the 'skill landscape' of the state we would be preparing the state human resources to face the challenges and opportunities thrown by the demands of economic growth in the coming years.

Challenges and Limitations

Some of the challenges and limitations of this study were the unavailability of the employers for data sharing and scheduling issues. Since, the survey was time bound, repeated visits to the employers for data collection was not feasible. In all the districts of Rajasthan, the sample size of the stakeholders envisaged was not advisable to cover as there are limited trades across industries and similar trends are observed in the formation/running of VTIs. Assumptions made for the projections were to determine the academic and arithmetic results and some of the factors like migration (seasonal/distress/volunteer etc.) were not factored for the generation of results. Also, this study was the major output of survey carried out at district and some block level, so reflection of village level data would not be possible. The sectors included in the study are secondary and tertiary sectors.



1. Introduction

This chapter outlines the overall concept of Skill Development initiative in India, the emerging trend of the workforce demand in the market. The main objective of this section is to give an understanding on how the Globalization is creating a great demand for a skilled workforce with emerging market needs.

1. Chapter 1: Introduction

1.1. Study Background

India's population is huge at 1.21 billion. It is fast expanding at a rate of 17% and integrating rapidly into the global economy. India is among the 'young' countries in the world, with the proportion of the work force in the age group of 15-59 years, increasing steadily. However, presently only 5% of the total workforce in India have undergone skills training. India has a great opportunity to meet the future demands of the world, India can become the worldwide sourcing hub for skilled workforce. India's skill development initiatives of skilling approximately 500 million people will make India the 'global manpower hub'. In order to sustain labour-intensive growth would depend crucially on the expansion of the labour force's skill capabilities with skills and knowledge as driving forces of economic growth.

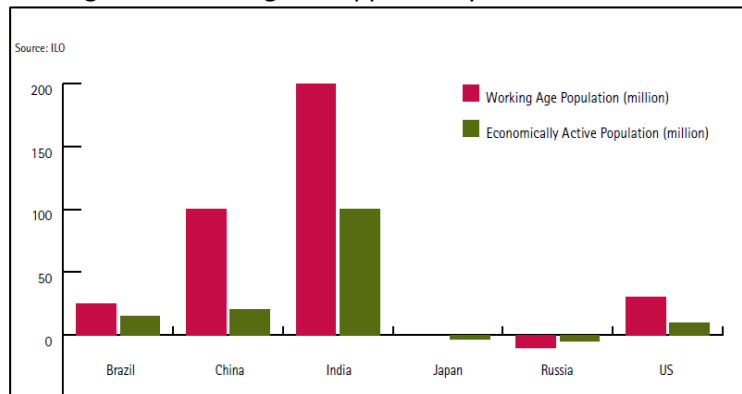


Figure 7 Change in Population 2007-2020 (projected)

The world (both developed and developing economies) is experiencing an ever widening gap between the demand and supply of skilled labour. By 2050, the world population of people above 60 years will hit the 1.3 billion mark. This trend will lead to the widening of the demand-supply gap, especially in the developed nations like America, Germany and France. On the other hand, India is emerging with one of the youngest populations in the world comprising of a highly mobile, English speaking population. India will have a 2 billion sized English speaking work force by the end of 2020. Training such a workforce will imply that India can become the major exporter in the services sector as well as an exporter of manpower itself. It is estimated that by 2022, India will face a demand of 500 million skilled workers.

Skills development is an area that spans across all sectors of the economy. From manufacturing to services and agriculture, skilled labour is a key requirement to fuel the growth engine of any economy. The key stakeholders in skills development are the Industry (both the Service and the Manufacturing

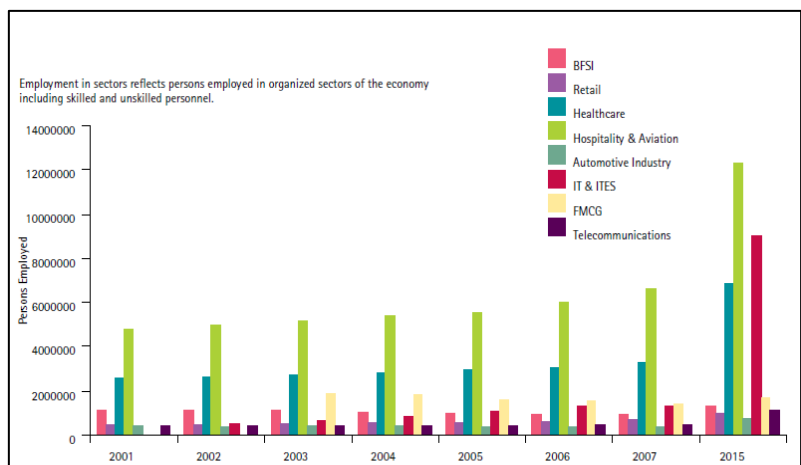


Figure 8 Employment by Sectors - 2001 to 2015 (Projected)

sectors), labour, Vocational Training Institutes, and the Government. As the Indian economy matures, the services sector has the potential to become the primary employment generator.

Growth and productivity in any part of the value chain in a sector will substantially contribute to the national economy and automatically attract FDI inflows. Productivity is directly affected by the efficiency of labour and capital inputs. Therefore, labour needs to be sufficiently skilled as per the changing industry dynamics, in order to contribute to growth. India has seen increased FDI inflow in recent years especially in the manufacturing sector.

1.2. Project Scope

The overall objective of this assignment is to assess the district level skill gap both in terms of quantifiable numbers and required skills and competence. The study will be leveraged by NSDC and Government of Rajasthan to develop a suitable skilling intervention for various districts of the state. This study would provide the As-Is scenario of skill gap in terms of numbers of manpower estimates and required skills and competence. This would include the current and future profile of industries, employment opportunities associated to the industry profiles, existing skill gap in vocational/skill training infrastructure (demand supply gap), action plans and recommendations to enhance the overall structure and input.

1.2.1. Scope of Work

The scope of work as articulated in the terms of reference (TOR) is listed as below:

- Review district wise Socio-economic profile– demography, economic profile of district by industry, state of education
- Identify developmental opportunities keeping in mind factor endowments and stakeholder perspectives
- Identify specific developmental initiatives/projects which have an impact on employment generation
- Articulate the aspirations of the youth
- Identify the current and future (next 5 years) skills and manpower requirements by industry and estimate the gap that exists
- Study the existing vocational training infrastructure both in the private sector and the government domain
- Suggest suitable interventions/recommendations to address the skills gap. Recommendations have to be specific and actionable.
 - Recommendations should also include specific initiatives that NSDC can take based on the mandate of the organisation
 - Action plan with indicative timelines

1.3. Hypothesis for Skill Gap Assessment & Prediction

Given the scope of work outlined in the previous section, a detailed approach and methodology has been developed for skill gap assessment and prediction keeping in mind the key focus areas across

various stakeholders and the outcome to be derived during assessment study as depicted in the figure below:

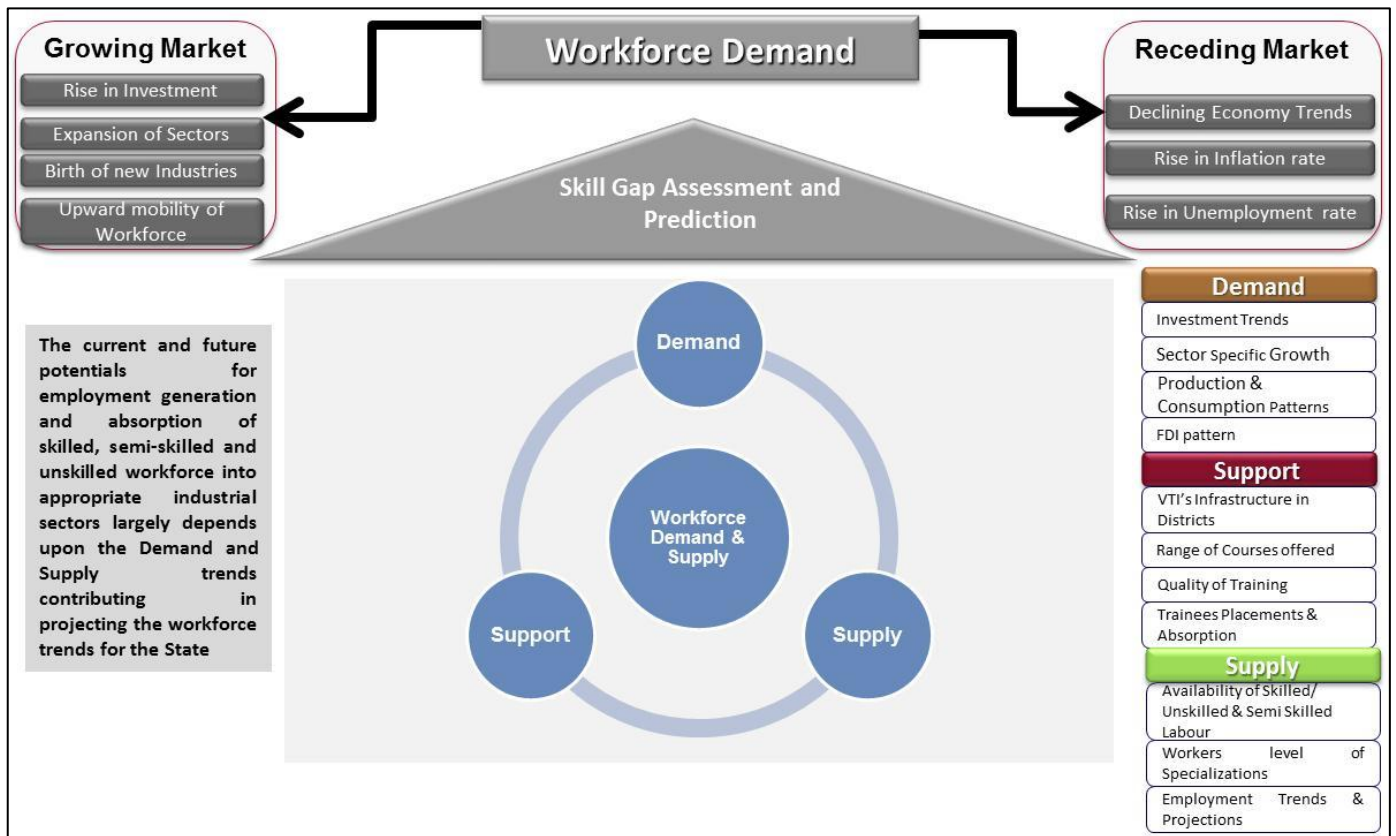


Figure 9 Hypothesis on Skill Gap Assessment and Prediction

An attempt will be made to understand the current and future potential for employment generation and absorption of skilled, semi-skilled and unskilled workforce into appropriate sectors. It would also entail examination of the following three critical components:

1. Demand side parameters;
2. Supply side parameters; and
3. Support side parameters

Demand side will include an overview of the investment trends and potentials, sector specific growth patterns, production and consumption patterns, FDIs and other factors.

The supply side review would require an examination of availability of skilled, semi-skilled and unskilled workers, their levels of qualification and specialization, need for possible skill enhancement to adapt to new technologies and demand trends.

The support side would include an assessment of available vocational training facilities in terms of access, range of learning opportunities, quality of offered services, adaptation to technological growth and other parameters.

It is essential to understand the interplay of parameters in the above three sub-groups and cluster them as 'cause and effect parameters'. While primary and secondary data may be available for many parameters, there is still a need to use proxy indicators to validate the hypothesis.

It is also critical to examine the interplay of parameters under two different scenarios such as

- Growing Market
- Receding Market

In a growing market scenario, it is expected that there will be rise in investments, expansion of sectors, opening of new industries, upward mobility of the workforce, etc., with a corresponding reflection in the supply side – with demand for new training courses and skills. The support side should thus show a reaction in terms of increasing number of VT institutions, new options for training with upgraded technology, etc.

On the other hand, in a recession scenario, the demand side parameters will show negative trends, with the supply side reacting to this with deviation of workforce from investing on or seeking better skills. The support side will also show its reaction by limiting the VT sector to a more financially viable scale instead of expanding. The present study proposes to test the above mentioned scenarios using primary and secondary data on objectively verifiable indicators.

1.4. Study Methodology

Considering the primary objectives of the study, the respondent's from Employers/ Industry, Labour unions, youths and VT providers (Private and Government) has been covered through extensive field survey across the districts in Rajasthan. The study intends to rely on data from primary as well as secondary sources. The data from primary sources was elicited using the structured questionnaires and qualitative approaches like FGDs and in depth interviews using the discussion guidelines on a one-to-one basis. The secondary data from various sources like census data and other reports like Statistical abstract report from Department of Economics and Statistics has been used for this study.

In this regard, professional investigators from Development and Research Services Private Ltd. (DRS)-survey partner, deployed a trained supervisor and a professional team of field investigators for field survey and were given a formal orientation on the subject and initial mock rounds were conducted (as per convenience) in the district of Jaipur for the ease of investigators.

The detailed methodology entailed the scope of covering the qualitative and quantitative approach by doing primary and secondary research for the quantitative data and Focused Group Discussions (FGDs), case studies, in-depth interviews, and observations along with expert comments were the tools used for qualitative study. As part of projections, secondary research was carried out along with setting up of assumptions for division of workforce into skilled, semi-skilled and unskilled labour into various

sectors. As part of the follow-up action after the detailed study, an analysis would be carried out and then provide with the state action plan.

The following figure provides a snapshot of the activities undertaken with the key stakeholder's who were consulted during the pilot study conducted in five districts, highlighting the methodology and the implementation process. This was proposed by carrying out both primary as well as secondary survey of the key stakeholders and resources of the study. The support from RSLDC & CII enabled better access to VTIs, Industries, Labour Unions, key district officials etc. :-

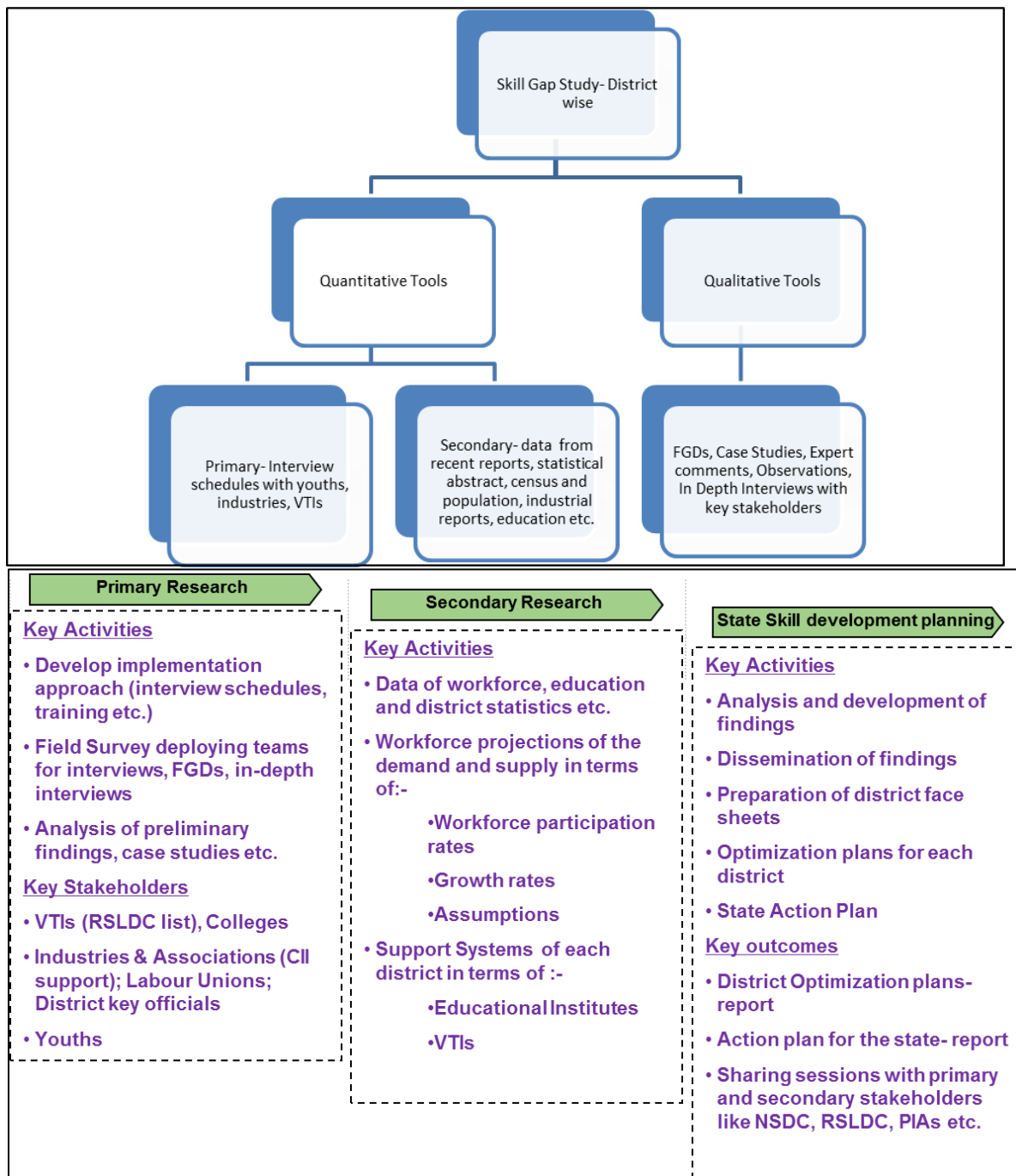


Figure 10 Snapshot of the study methodology and the implementation approach

The approach adapted for selection of the stakeholders were meticulously planned in order to have the representation of the stakeholders as per the methodology. Stratified (Disproportionate) Sampling was used to capture the employer (industry) sample. The profile of the employer database for the state would be as follows (illustrative representing the sample of the industries in the state and also for districts):-

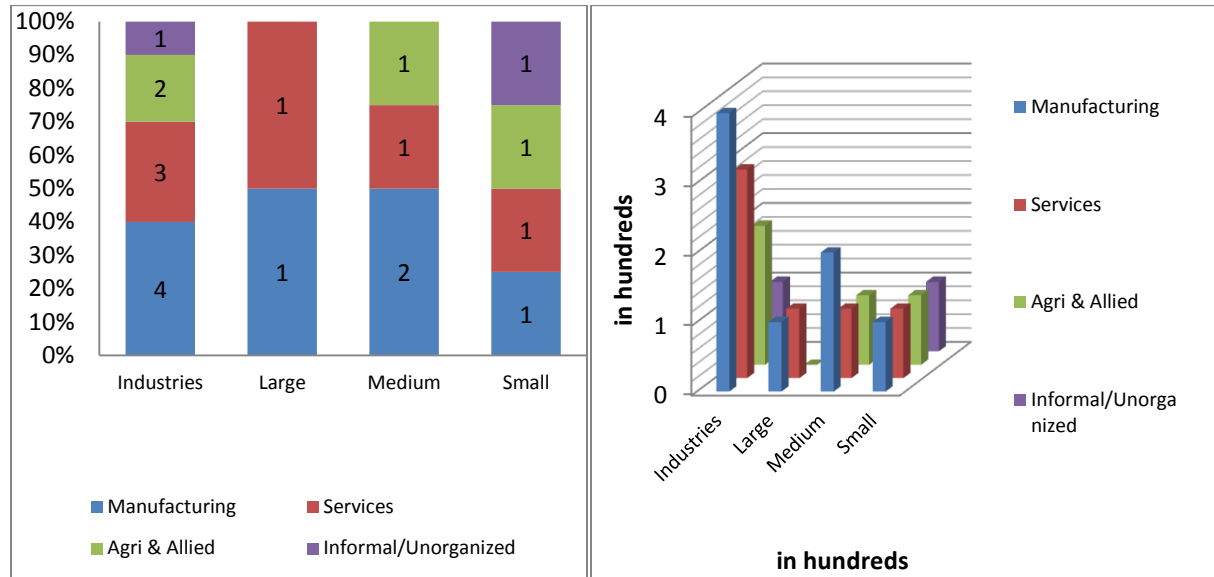


Figure 11 Stratified (disproportionate) sampling for selection of industries

In case of Vocational Training Institutes (VTIs) a more convenient sampling was sought after to reach 10 of them taking care of the composition of private as well as government for every district. The youth were interviewed in the VTIs (and snowball effect was observed for getting the required respondents) to complete the groupings of trainees, unemployed, self-employed and employed. Industry associations were reached out through the efforts of CII and Accenture team in order to get in-depth interviews of the industry associations. Similarly, district officials related to similar initiatives were also interviewed. Selection of educational institutes like engineering and medical colleges were based on cluster sampling mapping the known institutes in order to capture the understanding of the skill-job market scenario of the state.

(Please refer to annexure for detailed list of employers, VTIs, youth coverage and industry associations covered in the pilot study)

Full Scale Roll out Approach

In order to complete the study within the stipulated time frame with full scale rollout we shall be doing this study in a cluster based approach wherein we have segregated the districts of Rajasthan into small clusters of four to five districts each cluster. The proposed clustering is presented in the following table:

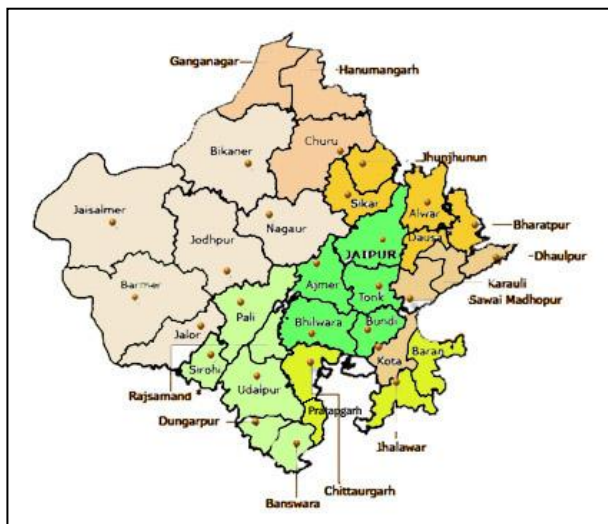


Figure 12 Division of Rajasthan into seven clusters for survey

Rajasthan Total no. of Districts to be covered: 33	
Cluster No.	Districts Covered
1	Jaisalmer, Bikaner, Jodhpur, Barmer, Jalore, Nagaur
2	Sirohi, Pali, Rajsamand, Udaipur, Dungarpur, Banswara
3	Pratapgarh, Chittorgarh, Jhalawar, Baran
4	Bhilwara, Bundi, , Tonk, Ajmer, Jaipur
5	Sawai Madhopur, Kota, Karauli, Dholpur
6	Sri Ganganagar, Hanumangarh, Churu
7	Jhunjunun, Sikar, Udaipur, Bharatpur, Dausa

Table 5 Division of Rajasthan into seven clusters for survey

Each cluster presented in the tables above will have a field team led by Cluster Supervisor supported by a team of three Investigators. The field teams will be recruited locally to ensure that the team members have knowledge of local conditions and understand the language. The study will be coordinated by one senior professional in each state who will be in charge of recruitment, orientation and training of the field teams. The Supervisors will be in charge of data quality control and timely completion of surveys in their respective clusters. It is expected that the completion time for the survey will range between 18 to 20 days for a seven districts cluster.

1.5. Limitations of the Study

- Unavailability of the employers for data sharing and scheduling issues. Since, the survey is time bound repeated visits to the employers for data collection may not be feasible.
- In all the districts of Rajasthan the sample size of the stakeholders envisaged may not be feasible as there are limited trades across industries and similar trends are observed in the formation/running of VTIs
- Assumptions made for the projections were made to determine the academic and arithmetic results and some of the factors like migration (seasonal/distress/volunteer etc.) are not factored for the generation of results



2. State Industrial & Education Scenario

This chapter outlines the overall analysis and findings on the State level macro Socio economic parameters, Key industries and key growth areas of the state, Geographical clusters for the large, medium, small and micro industries in the state; highlights various government schemes & programs towards skill development aiming to promote a meaningful and employable skill development system and provides an insight on the attitudes and perceptions of the youth at state level. The main objective of this section is to provide an insight to the education and workforce in light of the State Economy.

Chapter 2: State Industrial & Educational Scenario

2.1. Macro-economic Factors

Rajasthan is the largest state of the nation and covers close to 10.4% of India. The state features the Thar Desert and the Aravalli Ranges. Primarily agriculture economy since years, there has been steady decline in the GDP share of agriculture from 35.8% in 2001-02 to 21.5% in 2010-11. Manufacturing and services sector on the contrary witnessed enhanced growth in last decade. Thus, these account for faster increase in the GDP and increased the income levels.

Rajasthan currently accounts for 4% of the country's GDP. While India's GDP reported a compounded annual growth rate (CAGR) of 7.7% over the period 2000-01 to 2005-06, the NSDP of Rajasthan reported a CAGR of 4% over the same period. Over the years, the structure of the State's economy has undergone a change, as is true of the rest of the country. In the pre-1990s, Rajasthan's economy was primarily agrarian, with agriculture accounting for over 50% of the share of the primary sector. Industrial activity was restricted to Jaipur, Bhilwara, Udaipur and Jodhpur, and Ganganagar and Chittorgarh grew as agro-processing and cement producing centres.

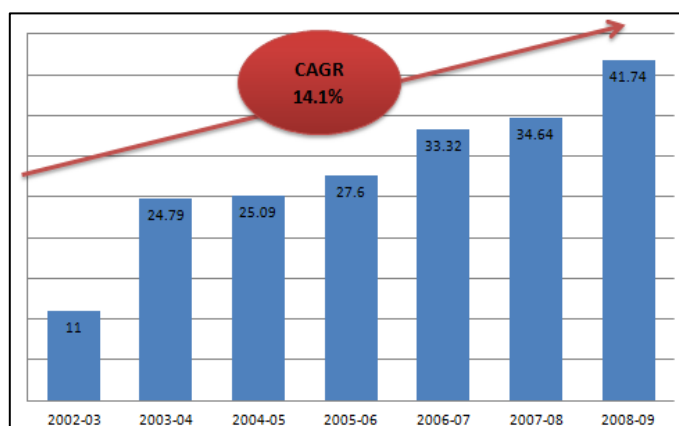


Figure 13 GSDP of Rajasthan (in \$billion); source CMIE

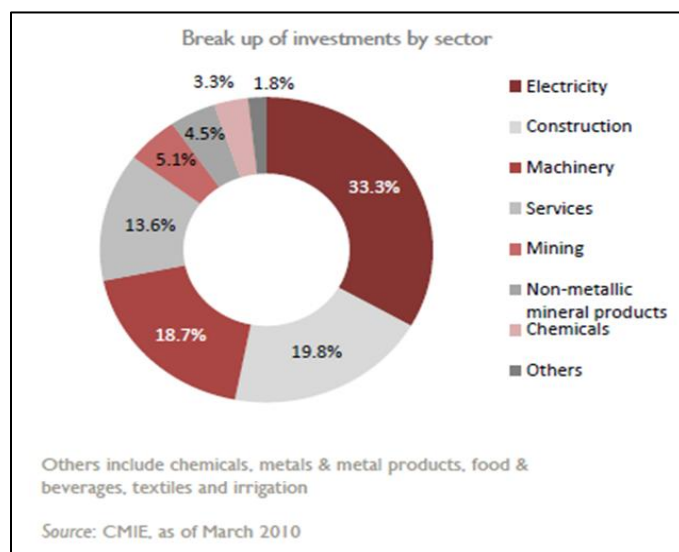


Figure 14 Break-up of sectors as per investment

The industrial landscape then consisted of small scale industries. Post-2003 however a vast change was seen. The high growth phase started after the announcement of the New Industrial Policy, which led to increased investments in large and medium scale industries. The secondary sector showed rapid growth, followed by the tertiary sector, while sectors like IT/ITES¹, and Retail also emerged. Within the secondary sector, manufacturing and construction have an 87%

contribution; manufacturing has witnessed the highest growth during the last few years. In the tertiary sector, trade, hotels, restaurants and transport have the highest contribution. The **Per Capita Income** is an indicator of the standard of living of the people in Rajasthan. The per capita GSDP of Rajasthan increased at a CAGR of almost 7.9% from 1999-2000 to US\$ 699.2 in 2009-2010. According to the Reserve Bank of India,

the State had FDI inflow of US\$ 470 million over a decade primarily in sectors related to electricity and construction.

Socio-Economic Analysis of Rajasthan w.r.t other states & India

A relative analysis keeping in mind the population, area, demographic pattern and other socio-economic indicators would aid in drawing parallel of the state of Rajasthan with other states of the nation and also showcase the overall position in the nation.

Population: Population is a perennial problem in India as well as some of its constituent states. In order to address this population problem in India, India was the first country to initiate a family welfare programme way back in the 1950s. This problem is more acute in Rajasthan, one of the Empowered Action Group (EAG) states. It is alarming that historically during the last 110 years between 1901 and 2011; the population of Rajasthan has grown by about seven times compared to five times in case of all India during the same period. According to the census provisional total figures, the population of India is 121.02 crore, whereas, the provisional population of Rajasthan is 6.86 crore. The percentage variation between the projected population of 2011 and the actual provisional population of 2011 is 1.17 percent in Rajasthan compared to 1.48 percent in case of India.

Decadal Growth Rate: The decadal growth rate of the population of Rajasthan is 21.44 percent compared to 28.41 percent in the previous decennial period of 1991-2001. It is still higher than the decadal growth rate of India, which is 17.64 percent between 2001 and 2011, which has declined from a high of 21.54 percent during 1991 and 2001. Though the pace of growth has slowed down, but still, it is higher than the all India level.

Population Density & Sex Ratio: The Population density in Rajasthan has increased from 165 per sq.km. in Census 2001 to 201 in Census 2011. It has increased from 30 in 1901 to 201 in 2011 in the last 110 years. The overall sex ratio of the population of Rajasthan in terms of number of females per thousand males is 926 compared to 940 in case of all India. There is a slight increase of five females per thousand males from 2001 to 2011. In the last 110 years from 1901 to 2011, in Rajasthan, the overall sex ratio has increased from 905 to 926 compared to a decline from 972 to 940 in case of India. Among the states in India, in case of child sex ratio, Rajasthan was 28th in position during Census 2001 and it has declined to 29th position during the recent census of 2011. In overall sex ratio, it was in the 20th position among the states during Census 2001 and now it has assumed 21st position in Census 2011.

Literacy: The literacy rate of Rajasthan is 67.06 in total and 80.51 percent and 52.66 for males and females respectively compared to 74.04 percent, 82.14 and 65.46 percent respectively for persons, males and females in case of all India. In total literacy, Rajasthan ranks 33rd amongst the 35 states and union territories and in case of male and female literacy it ranks 27th and 35th respectively. Among the States, Rajasthan is at the bottom in terms of the female literacy rate. An analysis reveals that an increase of one unit in the female literacy rate will result in a decline of 0.715 units in the IMR and it is significant at 1 percent level of probability. This indicates that increase in female literacy may increase the likelihood in the reduction of IMR.

The fertility and mortality levels of Rajasthan are unacceptably high with the Total Fertility Rate of Rajasthan at 3.3 births per woman as compared to 2.6 in case of India and the Maternal Mortality Ratio

(MMR) at 388 per lakh live births (four times to that of Kerala and third highest in India) compared to 254 in case of India and Infant Mortality Rate (IMR) at 59 per thousand live births (five times to that of Kerala) compared to 50 in case of India.

2.2. Industry Scenario- Rajasthan

The Directorate of Industries is responsible for the development of industries and handicrafts in the State and providing necessary guidance, assistance and facilities for industrial activities. At present, 34 District Industries Centres and 7 sub-centres are working under the Department of Industries for providing inputs and other facilities to entrepreneurs.

Rajasthan is on the cusp of a major industrial transformation. Several of its erstwhile disadvantages are now turning into advantages for industrial development. First is the issue of acquisition of land which is now emerging as a chief constraint for industrial development in India. In that respect, Rajasthan's relatively less fertile land with low occupational density is becoming an advantage since it has a lower opportunity cost for transformation into industrial use. Secondly, there have been major discoveries of mineral wealth including gas and oil. And since most of this mineral wealth is under sand, it is easier to exploit than is the case with mineral wealth under forests in other parts of India. Thirdly, Rajasthan has enormous scope for development of renewable energy. The strong sun for long duration is now an advantage as solar power becomes an ecologically preferred source of power with subsidies available from domestic and international sources. So is the strong surface wind for wind power. Lastly, even the state's landlocked character becomes an advantage as the state becomes land-linked through rapid transit between two rapidly growing regions of western and northern India as well to the sea. These new-found strengths combined with the traditional advantages in terms of business-friendly government, long-standing tradition of entrepreneurship and peaceful labor relations augur well for rapid industrialization of Rajasthan.

Industry Department

The main functions of the Industry Department are promotion of small scale industries, to assist in the marketing of their products, development of salt areas, handicrafts artisan development, development of handloom, etc. The Department also provides various

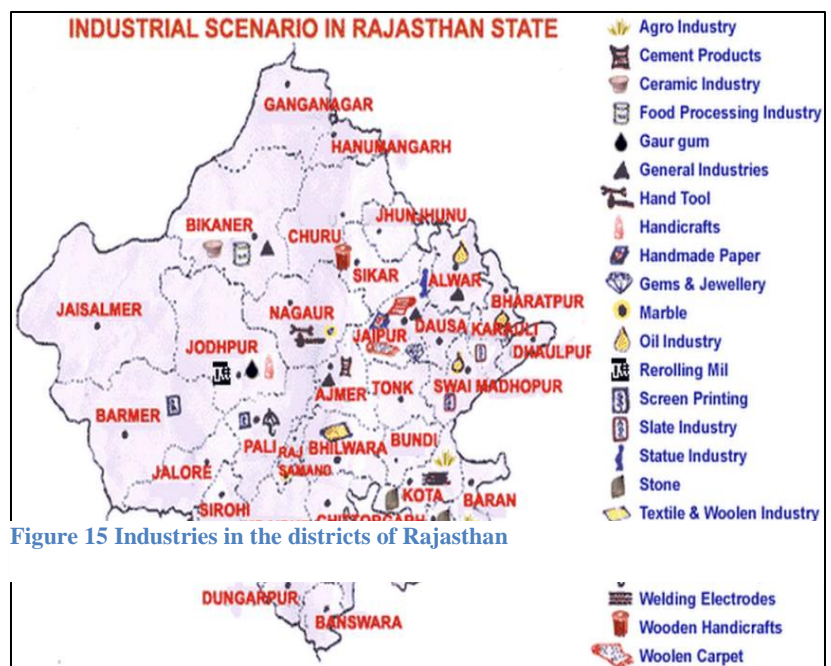


Figure 15 Industries in the districts of Rajasthan

concessions, facilities and assistance for setting up of industrial units in the State. There are 35 DICs working in the State and 7 sub-centres at Balotra, Phalodi, Abu Road, Beawar, Makrana, Kishangarh and

Falna have also been set up to cater the need of small scale industries of the area. All the development schemes are being implemented through the DICs set up in the State.

Micro, Small & Medium Enterprises

MSME Policy Package, 2008 was introduced with a view to modify Micro, Small and Medium Enterprises to a global competence. 334518 MSMEs were registered with the State having investment 10584.74 crores providing employment to 1395979 person's upto 31st Mach 2010.

There has been certain growth and concerted efforts to bring up the MSME for engaging more number of labour and provide employment. The MSME have grown over 20% engaging maximum number of worker population of the state. The report of Rajasthan states the engagement of labourers in share of employment in the informal sector is maximum and varies between 54% to 61% from progressive districts to the less progressive ones respectively.

2.3. Sectoral Demand and Supply Status

The Government of Rajasthan is taking up several initiatives to enhance the sectoral growth of the industries by attracting investments (domestic and foreign), by preparing suitable policies for various sectors of the Industry and explore the availability of resources, provide conducive industrial environment, increase in labour intensive industries.

The focus is on development of key sectors like Cement, SEZs, Infrastructure, Oil & gas, power

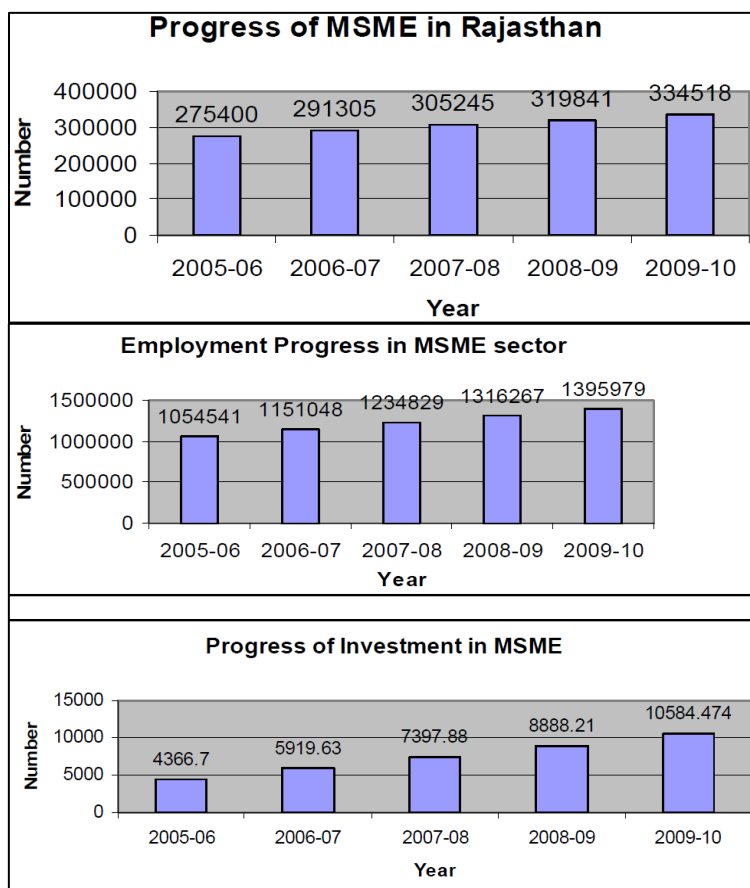


Figure 16 MSME Units in Rajasthan

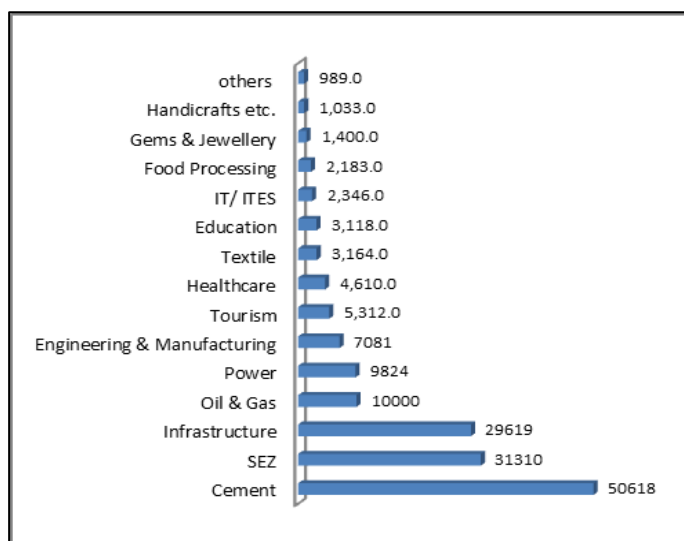


Figure 17 Sectoral Investment for Resurgent Rajasthan

tourism, engineering etc. set by the investment patterns done in Resurgent Rajasthan. While Rajasthan has factor advantages in a number of sectors backed by favorable policies and support, the State faces challenges from various dimensions such as unemployment rate, difficult working conditions, early stage of industrial culture, need for entrepreneurship and skewed economic development. Some of the parameters considered while mapping the skill demands across various sectors of the state were Industrial policies, market linkages, historical presence in the availability of trained manpower, availability and quality of training centre, time taken to train, and the employment opportunities state, infrastructure adequacy, availability of trained manpower, availability and quality of training centre, time taken to train, and the employment opportunities created. The industries identified on the basis of the above parameters are: Auto & Engineering, Healthcare, Textiles, Repair servicing, Mines & Minerals, Oil & Gas, Food processing, Tourism and Hospitality, Handloom and Handicraft, Construction, and IT/ITES.

The human resources requirement was estimated on the basis of the following parameters: historical growth rate of the industry; employment pattern; change in industry productivity; technology changes; change in customer preference; and changes in Government policy. Simultaneously, the availability of human resources was calculated on the basis of the following parameters: current education infrastructure of the ITIs, polytechnics, engineering colleges and arts & science colleges; students pass-out and migration; and employability of human resources.

It was estimated that Rajasthan will have an incremental human resource requirement of 6 to 6.4 million persons till 2017 (preliminary analysis carried out by secondary resources and projection) on some of the sectors as shown in the figure below.

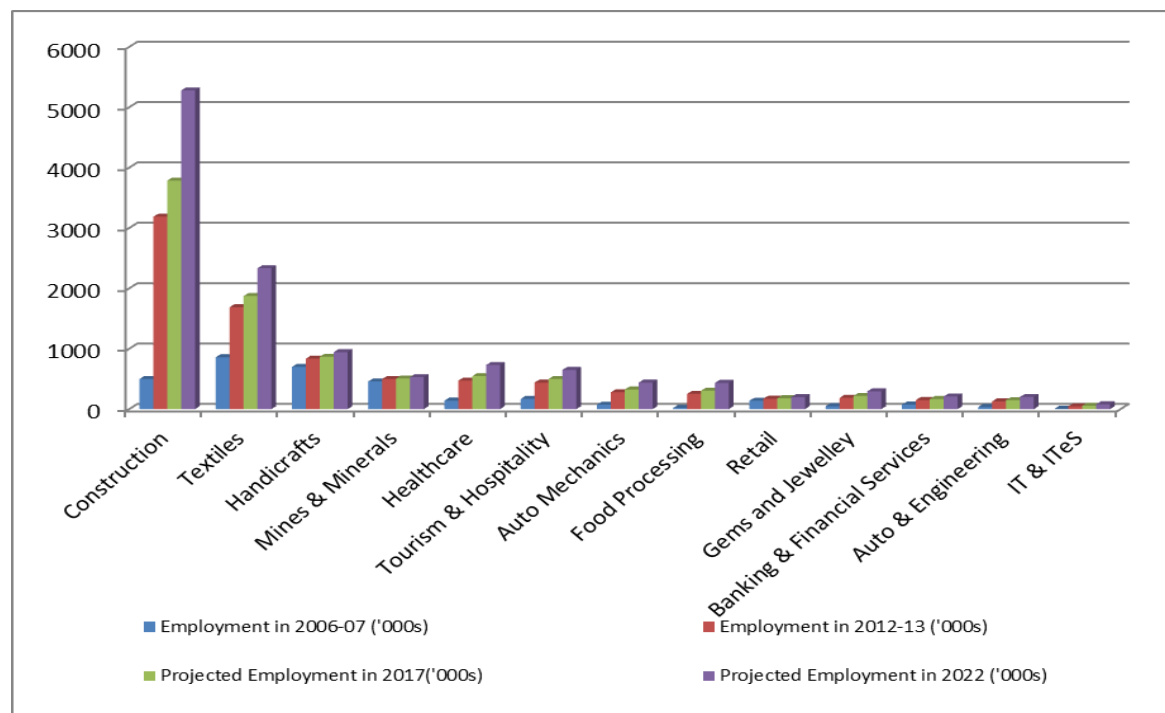


Figure 18 Sectoral Employment till 2017- an estimate projected based on secondary sources

The maximum requirement will be in the construction industry, followed by textiles, healthcare, tourism and hospitality, food processing, auto mechanics, gems and jewellery, handicrafts, auto and engineering, banking and financial services, IT/ITES, mines and minerals, and retail (not included the emerging sectors provided in the current Industrial Scope). The net incremental demand of workforce to be around 60.6 lakhs by 2017 keeping in mind the investment pattern and economic scenario to be similar to that existing now. The break-up for such job opportunities will emanate from various skill levels as illustrate below:

Unskilled (Informal/Unorganized)	Semi-Skilled	Skilled	Specialized/ Highly Skilled
Early school drop outs, illiterate, residential skilled potential	No formal skilling provided, skilled over a period of time unorganized sector	ITIs, ITCs, Diploma, skilled work experience people, technicians, private	MBA graduates, highly skilled in specific domain, strong communication and analytical skills, experienced
46%	37%	17%	3%
Labor/ Agri & allied sectors	Unorganized/ Informal/ Handicrafts/ Tourism sectors (local level)	IT/ITES, Auto-engineering, manufacturing	Managerial positions, leadership roles, etc.

Figure 19 Key sectors with proposed Skill requirement across sectors in Rajasthan

The unorganized sectors in general have various levels of skilled defined as per the number of months/years put as experience. In Rajasthan, the major unorganized sectors would be handloom and handicrafts, gems and jewelry, construction, and stone polishing/workers. Apart from these trades like security, beautician, drivers and mechanics also form a considerable segment of unorganized sector.

Sl No	Unorganized Segment (along with description)	% of workforce	No. of Years' Experience		
			Unskilled	Semi-skilled	Skilled
1	Agriculture allied & Forestry	53%	0 to 2	3 to 5	>5
2	Domestic Worker (wholesale and retail trades, mechanics, live in and live out workers etc.)	8	0 to 1	2 to 4	>5
3	Mining and Construction	20	0 to 1	2 to 3	>4
4	Handloom and Handicrafts (found in various clusters at various skill levels in carpet making, metal crafts, stone quarrying, wooden etc.)	6	< 2	3 to 6	>7

5	Beauticians (hair stylists, block level beauticians etc.)	2	< 1 (Typically performs support functions to beauticians. Will not be involved in core functions)	2 to 3	>4
6	Facility Management (housekeeping, landscaping, electricians, fitter, plumber, etc.)	3	NA	1 to 3	>4
7	Security Guards (Residential & Industrial	2	0 to 1	2 to 3	>5
8	Drivers - Non-critical goods	4	0 to 1 with driving license	2 to 3	>5 experience with vehicle repair management
9	Drivers - Critical goods	2	NA	1 to 3	>8 experience
10	Tourism & Hospitality (90% of the hotels and restaurants fall under unorganized sector)	7	0 to 1	1 to 3	>4

Table 6 Experience of the workforce across unorganized sector (in terms of years of work done)

Rajasthan boasts of 302 registered large units, 156843 MSME units from 319 industrial areas (as per DIC, 2009). There are 33 recognized clusters registered with the DIC and the chronology of these has been as follows:

S.NO.	Year	Name of clusters
1.	2005-06	1. Kota Doria Cluster -Kaithun (Kota) 2. Moorti Kala Talwara (Banswara) 3. Leather Tanning -Bansoor (Alwar) 4. Dyeing and Printing-Akola, (Chittorgarh) 5. Handloom Cluster- Dariba, (Churu)
2.	2006-07	1. Kanch Kashida Cluster -Dhanau (Barmer) 2. Leather Juti Cluster -Bhinmal (Jalore) 3. Gotaloom Cluster -Ajmer 4. Ari-Tari Cluster -Nayla (Jaipur) 5. Moortikala clusters -Gola Ka Bas (Alwar) 6. Tie & Dye Cluster -Jodhpur 7. Honey Cluster - Bharatpur 8. Teracotta Cluster -Molela (Rajsamand) 9. Stone Cluster -Jaisalmer 10. Pottery & Teracotta Cluster -Ramgarh (Alwar)
3.	2007-08	1. Embroidery Cluster -Shiv (Barmer) 2. Stone Cluster -Sirohi 3. Stone Artware Cluster- Dungarpur 4. Teracotta Cluster -Siyana (Sirohi) 5. Wooden Art Cluster -Bassi (Chittorgarh) 6. Lac Art Cluster -Jaipur 7. Leather Juti & Leather productClusterPratapnagar(Jodhpur) 8. Carpet Cluster -Thanagaji (Alwar)

		9. Forest Product Cluster -Baran 10 Forest Product Cluster - Talchhaper (Churu) 11 Embroidery Cluster - Pungal/Aaduri (Bikaner)
4.	2008-09	1. Auto component cluster-Alwar 2. Handloom cluster-Rajpura Patalwas, (Jaipur) 3. Brass utensils cluster,- Balahedi (Daussa) 4. Marble cluster- chhittoli (Jaipur) 5. Sand Stone cluster- Pichupada (Daussa)
5.	2009-10	1. Pottery& Teracotta Cluster- Gogunda, Hrishabhdev (Udhaipur) 2. Handblock Printing Cluster-Bagru (Jaipur)

Table 7 List of clusters in Rajasthan (MSME report, 2010)

2.4. Status on Vocational Educational Schemes

Several large scale state level projects have been implemented with successful results using a comprehensive participatory approach to evolve the inclusive development for the poor. Some of the projects were like the Special SGSY Projects implemented by various partners with set targets and budgets, EGMM of Andhra Pradesh which has eventually led to the formation of REEMAP as an integrated skilling initiative of the state of Andhra Pradesh, and some of the more recent initiatives like NSDC and Himayat in J&K. Many of these include the first **generation projects implemented in Andhra Pradesh, Tamil Nadu, Kerala and Gujarat, as well as the World Bank financed projects of Bihar & Odisha, UNDP supported projects in Jharkhand etc.** With the advent of NRLM and SRLM in respective states, separate bodies like societies have anchored the roles of rural skilling in the state and responsible to budget for 1/3rd of the total project cost. These projects have adopted approaches different from the conventional rural development programmers' and in the process created several best practices and learning which could be adopted by other states.

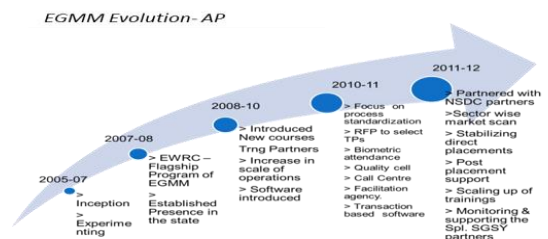
Some of the State's best practices could be summed up as follows:

STATE	BEST PRACTICES	LEARNINGS
ANDHRA PRADESH	Evolution cycle of EGMM- AP's initial work in employment generation Well Structured till village level, robust processes and norms Support Services like call centres, MIS, Quality cell, placement cell, post placement support, etc.	STRUCTURE: Graduation from EGMM (sub- mission) to REEMAP (integrated mission) structures in the state
TAMIL NADU	Mahalir Thittam- the skill development initiative present in 85% of the state's blocks 80% of placement rate through job fairs, advocacy with industry houses, optimization of state resources for training, tripartite agreements with partners with clear mandate	OPERATION: Tripartite agreement in between government machinery, training partners and the placement agencies reflects on the placement percentage (65%)

MAHARASHTRA	<p>Skill development is one of the KRA of Chief Secretary and 20% weightage across departments in respective KRAs</p> <p>Established Sector Skill Committees for its 11 identified high demand sectors to identify the skill gaps within various industrial sectors based on geographic & demographic distribution in Maharashtra</p> <p>Establish the State 'Knowledge Management Centre on Skill Development'</p>	PROJECT MANAGEMENT SUPPORT: For the effective planning, implementation and monitoring MSSDS has been designated as a Single Nodal Agency of the Skill Development Initiative in Maharashtra
GUJARAT	<p>Skill Voucher System introduced in the system</p> <p>Skill Training Providers at any level either D-SAG or District are selected only through e-Tendering process</p> <p>Inclusive approach especially for tribal welfare</p>	INNOVATION & CO-CREATION: Skill voucher system provides the beneficiaries the freedom to make choice and encourages certification process in skilling

Table 8 Results from rural development projects across states

Similarly, the Himayat Project of J&K has been one of the flagship programmes initiated as a part of the Skill Empowerment and Employment scheme of the Prime Minister's Office (PMO) recommended by the Rangarajan Committee. Ministry of Rural Development (MoRD) acts as the nodal agency for the project. The project envisages to train and place over 100000 youths of J&K in the next five years. The skill training is to be imparted for multiple sectors like items, Retail, Hospitality etc.



Mahalir Thittam Placement Scenario- TN

Sl.No	Name of the Trade	No of youth trained	No of youth Placed
1	Computer hardware, soft ware and IT Enabled services	13,645	8613
2	Construction equipments and skills	23,861	15,786
3	Driving automobile mechanism	16116	10252
4	Electronics and Electrical equipments	6393	4432
5	Garments & Textiles	10615	7176
6	Catering and House Keeping	3944	2840
7	Nursing and Hospital management	7890	5327
8	Heavy Machineries	7882	4247
9	Others (office management, Handicrafts, etc.)	3416	1735
10	Total	93,762	60,408



Skill Development Project, Himayat –J&K



Figure 20 Skilling initiatives of states in India

In Rajasthan, the Ministries/ Departments have launched and implementing various schemes on skill development to empower the workforce engaged in various sectors with an objective to provide employable skills to the school pass outs, existing workers and ITI graduates. The transition of India into a knowledge-based economy requires a skilled workforce, and therefore a focus on the existing vocational education and training (VET) system. The details on various training schemes, target group, duration of the training courses (short term/long term), Ministries/Departments is given below:

Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Achievement in 11 th Five Year Plan	Target for 12 th Five Year Plan
Agriculture	<p>The Department has no scheme, but conducting a variety of training programmes from 2 months duration to 2 years. It has conducted 6 different programmes during the Plan and trained 8762 persons (farmers, farm women and rural youth). Similarly, it has trained 14181 Krishak Mitra through 5 days duration training programmes. These training programmes have been organized through 3 State Institute of Agriculture Management (SIAM), 10 Adaptive Trial Centers(ATC) and 10 Agriculture Research Stations(ARS).</p> <p>32 Krishi Vigyan Kendra working in the State has also organized skill training programmes through funding from RMoL and other agencies.</p>	<p>There was no Plan outlay, but the department has used 384.14 Lakhs of the Centrally Sponsored Schemes (CSS) and trained 8762 farmers/farm women/rural youth.</p>	<p>Train 20,050 farmers, youths and farm women</p> <p>Budget outlay – 1146 lakhs, Over 950 training programmes</p> <p>Centrally Sponsored Schemes & RSLDC supported</p>
Labour, Employment and Training	<p>Craftsman Training Scheme(CTS):</p> <p>Under this scheme, 134 Government & 714 Private ITC's are providing Craftsman Training with the training capacity of 105005. Under the scheme, training is provided in 38 Engineering Trades of duration from 06 months to 03 years and 36 Non engineering trades of duration from 06 Months to 01 Years. Training infrastructure of Institutes is developed as per GOI, Director General for Employment and Training (DGE&T) norms & Guidelines. After the establishment of new Institutes, affiliations are sought from NCVT (National Council of Vocational Training) of DGE&T. The Trades which are affiliated to NCVT, ITIs (Government & Private)</p>	<p>During the 11th FYP, 18 ITIs were established in the Government sector and 640 number of ITIs were established in the private sector with an increment of 87106 number of training seats. Total students who successfully completed the training were 69873.</p> <p>A sum of Rs. 5916 lakhs has been released during the 11th FYP. Besides, an additional sanction of Rs. 1634.60 for establishment of 10 minority ITIs and Rs. 4.35 lakh for establishment of 01 ITI in Sahariya area has been released for the current FY 2011-12. Similarly, funds of Rs. 1654.93 lakh through Social welfare Department have been released under</p>	<p>Increase intake capacity to 4,00,000</p> <p>379 new institutes proposed</p> <p>Take the overall tally to over 1200 ITIs+ITCs</p>

Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Achievement in 11 th Five Year Plan	Target for 12 th Five Year Plan
	<p>provide training according to the syllabus & guidelines of DGE&T. The certification is done by NCVT and Rajasthan Council of Vocational Education and Training (RCVET).</p>	<p>Devnarayan Yojana to establish 06 it is</p>	
	<p>Apprenticeship Training Scheme: Training under Apprenticeship scheme is being imparted through Industries/establishments notified under the Apprentices Act, 1961. Under the scheme, 37 designated trade groups are divided into 231 trades covering 254 types of Industries.</p>	<p>A total of 3080 candidates were trained which was just 37.89% of the seat utilization.</p>	
	<p>Rajasthan Mission on Skill and Livelihoods (RMoL); presently known as Rajasthan Skill And Livelihoods Development Corporation (RSLDC)</p> <p>Skill Training Programme: Under this, short duration skill training programmes of 40 days(240 hrs.) to 90 days(540 hrs.) are offered in 34 economic sectors. There are 192 courses, which are offered through more than 275 training institutions/organizations. Funding for these programmes is made available to the training institutions on per hour basis of training. Budget for this programme is made available by the Government of Rajasthan.</p> <p>Rajasthan Institute of Security Education (RISE): RMoL has set up 7 Rajasthan institute of Security Education in the state in PPP mode in the year 2009-10 for preparing manpower for security sector. These institutions are located at the 7</p>	<p>RMoL has trained 65,172 youth during the first four years of the Plan.</p> <p>RMoL has utilized approximately Rs.2335.45 lakhs during the first four years of the Plan for training 65172 unemployed youth. It may use another Rs. 700 lakhs in the last year of the Plan for training 15000 youth.</p> <p>RISE has trained 2392 youth, since, they were set-up. A sum of Rs. 261.62 lakhs was provided by the state government as part of the overall budget of the RMoL.</p> <p>The Academies, so set up, have trained 750 youth. The Government of Rajasthan has provided 219.36 lakhs for Construction Academy buildings and for implementation of construction related skill training courses.</p>	<p>Train 2,80,000 youths</p> <p>New partners for achieving results</p> <p>Strengthen training providers</p> <p>Rs. 7500 lakhs form State Government</p>

Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Achievement in 11 th Five Year Plan	Target for 12 th Five Year Plan
	<p>divisional headquarters of the state.</p> <p>Construction Academy: RMoL has also set up 7 Construction Academies in the year 2009-10, one at each Divisional Head quarter premises of ITI. These Academies have been set up for preparing manpower for construction sector, which has the maximum employment potential in the State. Courses of varying duration are offered in these Academies. Buildings for these Academies are under construction.</p>		
	<p>Employment: The Directorate of Employment is not conducting any type of skill training programmes, but, implementing Akshat Kaushal Scheme 2009. The Scheme is meant for graduate unemployed youth whose annual family income is below Rs.1.0 lakh. Under the scheme, directorate issues credit vouchers for receiving skill training from selected training institutions, especially Rajasthan Knowledge Corporation (RKCL). The duration of skill training can vary depending up on the course.</p> <p>Entrepreneurship and Management Development Institute (EMI)</p> <p>The institute was set up by the Government under the Society Registration Act 1958. It is self-financed institution. It does not</p>	<p>Since the scheme was launched in October 2009, the Directorate could benefit 13945 youth by August, 2011 at a cost of Rs. 249.73 lakhs. There was no target set under the scheme.</p> <p>It has trained 1782 Youth through 51 programmes of 3 days to 6 weeks duration.</p>	<p>NA</p> <p>The institute has proposed 78 programmes of 5 and 12 days duration for enhancing capacity of 1750 faculty members of training institutions at a cost of Rs. 150</p>

Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Achievement in 11 th Five Year Plan	Target for 12 th Five Year Plan
	receive any funding from the Government. It has to get programmes from other departments of the Central and State Governments. The institute was the implementing agency for RMoL skill training programmes for last six years, for which it was receiving service charges.		lakhs
Rajasthan Grameen Ajjivika Vikas Parishad(RGAVP)	The <i>Parishad</i> is looking after all the 3 livelihood projects, viz., Rajasthan Rural Livelihood Project (RRLP), Monitoring Poverty in Western Rajasthan (MPOWER) and National Rural Livelihood Mission (NRLM). It has not conducted any skill training programmes during the 11 th Five Year Plan.	Nil	It proposes to impart training to 17000 rural youths in the project districts i.e. 1000 youths per project district of RRLP. Besides, it also proposes to impart skill training to about 4.0 lacs members of 33000 SHGs as per the needs of members in accordance with their selected livelihood.
Local Self Government(DLSG)	The Department is implementing Swarn Jayanti Shahari Rojgar Yojna (SJSRY) of the Government of India during the 11 th FYP. Under the scheme, BPL families are the beneficiaries.75% of the budget is provided by the Government of India and 25% by the State Government.	As per the targets, the Department was to train 58863 BPL youth at a cost of 4764.43 lakh, but trained 33312 youth by spending 621.27 lakhs	Train 1,00,000 youths Rs 2500 lakhs from state contribution
Rajasthan Renewable Energy Corporation Limited(RRECL)	The Corporation is imparting training to villagers for successful operation and maintenance of solar photo voltaic home lighting systems installed at their household in remote un-electrified villages and hamlets under Remote Village Electrification Programme (RVEP) of the Ministry of New and Renewable Energy, Government of India. The duration of the programme is 1 day.	It has conducted 30 programmes of 1 day duration for literate/illiterate villagers in selected villages	The State Government has a target to install about 500 megawatt solar photo voltaic power plants during the plan. The operation and maintenance of these would require large number of skilled workers and therefore corporation has a plan to organize 50 orientation cum training programmes to train 1000 workers through 1 day programmes

Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Achievement in 11 th Five Year Plan	Target for 12 th Five Year Plan
Science & Technology	The department has no scheme, but organizes Entrepreneurship Motivation of 1 day duration and Entrepreneurship Awareness of 3 days duration camps, besides organizing skill development programmes of 4 to 6 weeks duration in collaboration with various institutions by using government funds. The entry qualification for these programmes varies from diploma to degree in science and technology.	The department has trained 384 youth in different skills and inculcated entrepreneurship awareness/motivation in about 39000 students at a cost of Rs. 26 lakhs approximately. It has used government and institutional funds for training and/or inculcating awareness amongst students of various technical and science institutions	The Department intends to train 750 to 1000 youth each in SDP & EDP at a cost of Rs.25.0 lakhs and 50000 students through Entrepreneurship Awareness camps at a cost of Rs. 20.0 lakhs
Tribal Area Development	The department has no state scheme for imparting skill training to tribal youth, however, it receives funds from the Central Government for imparting training to tribal youth. The department gets its selected youth trained through Industrial Training Institutes (ITI) and Food Craft Institutes (FCI) and for that purpose it pays the fees to ITI s and Food Craft institutes.	During the Plan, as against target of training 3785 youth it could train 3181 youth through the ITI s. Similarly, against a target of 200 youth, it could train 155 youth through Food Craft Institute	<p>Training of 10000 youth per year.</p> <p>Establishment of ITI in every block of the scheduled areas. Short term training to migrating labourers at the place of their residence. Survey of skilled workers in the scheduled areas.</p> <p>Establishment of one Government Engineering college in schedule area with 45% reservation for local ST students.</p> <p>Placement camps for tribal in every district of schedule area, MADA area and at Baran district.</p>

Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Achievement in 11 th Five Year Plan	Target for 12 th Five Year Plan
MSME	The MSME - Development Institute provides impetus for promotion and development of Small Scale Industries in Rajasthan. Expertise is available in various disciplines like Mechanical, Metallurgical, Electrical/Electronics, Chemical/Rubber/Plastics, Food, Glass & Ceramics, Leather & Footwear, Economic Investigation, Industrial Management & Training, Ancillary, Technology Resource Center (TRC) & SENET etc. to guide the entrepreneurs. One of the main function is to conduct Management/Entrepreneurship Development Programmes/Skill Development		

Table 9 Vocational Education & Training Schemes

Some of the other trainings which are provided within the state by central budgets fall under the MSME, Khadi and Village Industries, Health & Family Welfare, Social Justice & Empowerment etc. Rajasthan Knowledge Corporation Limited, a public limited company promoted by Government of Rajasthan has trained 1.5 lakh aspirants in various IT related training courses in last three years of which above 35,000 youths have been given online government recruitment services and placed 15,000 youths.

SWOT of Skill Initiatives for Rajasthan

<p>Strengths</p> <ul style="list-style-type: none"> • DAg.- Staff, infrastructure & innovation • DLE&T- large no. of Trades offered, Hands on skills • RSLDC- Ideal for scaling and housing more partners • DLSG- budget not a constraint, BPL families • DST- Specific for entrepreneurial activities, curriculum • DTAD- Tribal Youth inclusiveness 	<p>Weakness</p> <ul style="list-style-type: none"> • Scarcity of demand driven courses • Unorganized sector not catered for skilling • Floating Vacancies & Training Staff • Underutilization of funds & seats • Negligible industry participation • Lack of monitoring structure & MIS
<p>Threats</p> <ul style="list-style-type: none"> • Staffing solutions for skilling initiatives • Awareness and communication strategies • Quality of training across various trades- certification • Gap Funding and capacity building • No/ Less technology integration for decision making 	<p>Opportunities</p> <ul style="list-style-type: none"> • Cover a large segment of the targeted segments through all the departments • Increase reach by meticulous distribution of funds and redistribution of targets plus regions • Determining a Nodal Agency to monitor, strategize and assist in implementation across departments

Figure 21 SWOT of Vocational Education & Training Schemes

The SWOT analysis details the challenges faced by the departments imparting skilling initiatives of the state. Along with these the private and unregistered bodies have been scantily present in the state to provide the institutional support. Few initiatives like Rajasthan Knowledge Corporation Ltd. and Rajasthan Skill and Livelihoods Development Corporation have been successful and got substantial support from the state government. The state rural livelihoods mission has also embarked upon skilling in the rural areas and training to empower the rural communities by engaging in participatory approaches.

2.4.1. Performance of the Vocational Training Institutes

Vocational Training is primarily imparted through public Industrial Training Institutes (ITI) and privately owned Industrial Training Centres (ITC) with an objective to increase the productivity of individuals, profitability of employers and aid national development. The below trend indicates the region wise capacity of government and private ITIs/ITCs. It is observed that the proportion and the spread of Vocational training Institutes in government and private set up is better in southern region than in comparison to the northern region and other regions. This implies that the State government In Rajasthan,

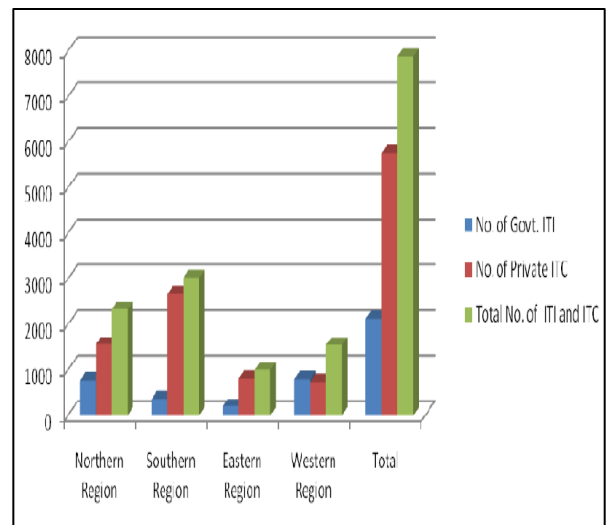


Figure 22 Region wise Government. & Private ITIs

the proportion of the seating capacity in government ITI (22%) is lower than the overall capacity in the Private ITCs (78%).

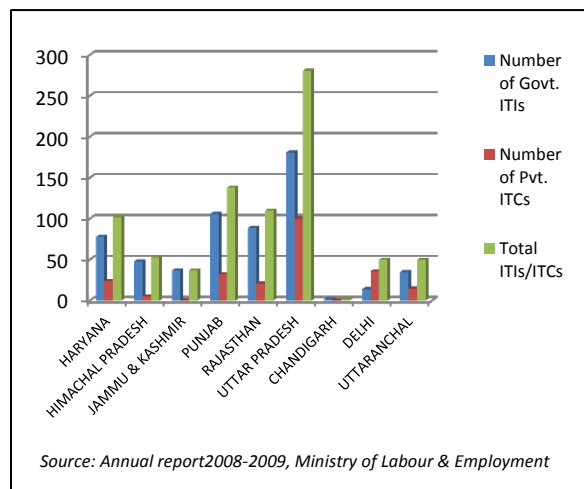


Figure 23 Number of Government. & Private ITIs in northern region states

The above graph indicates the trend followed by the trainees in the private and the government vocational educational and training courses. As per the trend depicted in the above figure, the largest state of India certainly lacked the infrastructure for skilling the population in comparison to states like UP, Haryana and Punjab. The total seating capacity was far below the expected and it was also reflected in the vocational initiatives currently running in the states by various departments. Currently, Rajasthan has over 90,000 schools, 64 engineering colleges, 40 polytechnics, 430 ITIs, and 75 MBA institutes. A shift

system is followed in the polytechnics and ITIs. As for seats, the State has 20,755 graduate engineering seats, 6,890 diploma seats, and 43,824 ITI seats. These are much lesser than the number of seats in other States like Maharashtra, Tamil Nadu and Andhra Pradesh (AP), as the table below shows. Also, Rajasthan’s literacy rate is lower than the national average; it has a literacy rate of 67.06% as compared with the national average of 74.04%.

2.5 Youth Aspirations in the state

The aspirations and perceptions of the youth in the state would provide the State government and other policy analysts, data with regard to the aims, aspirations, attitudes and priorities of the youth of the State. This would help in aligning government policies which have implications for the youth of the state. As part of the study carried out in each district focused group discussion with youths and interview schedules were filled out to understand the current scenario of training perception, job preference, and further demands in terms of skilling for enabling enhanced job scope. The majority of respondents could be categorized under the following specific groups:-

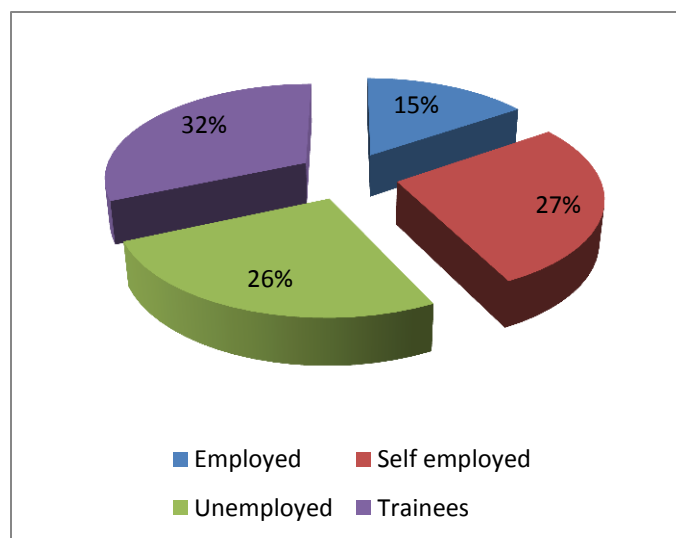


Figure 24 : Youths' profile as respondents of primary survey Rajasthan

The basic criteria for selection of respondents was that all the respondents were part of the skill development training either in the past or in the present courses of different registered and unregistered

- Employed
- Unemployed
- Trainee
- Self-employed

The basic criteria for selection of respondents was that all the respondents were part of the skill development training either in the past or in the present courses of different registered and unregistered

vocational training. The FGDs conducted at these VTIs were mainly discussed among the current trainees posing queries related to their understanding of the training imparted and the scope of the training regarding jobs and placement.

Some of the major findings on the state level were as follows:-

- a) **High Preference for government jobs over private jobs-** The common phenomenon across districts was the desire of the youth to engage in government jobs. This was due to reason that the youth believed that government jobs were more secure. Awareness regarding the upcoming private organizations and scope of work was far less. Parents also desired for salaried government jobs for better future (as per parents). More than 87% of the respondents felt that they were ready for any kind of government jobs of which only 15% had received complete training for getting absorbed as semi/skilled workforce.
- b) **Higher and better salary structure after getting training and absorbed by industry-** The average starting salary expected post training completion was Rs. 7000 (even though engaging in start-up jobs) with basic perks of Rs.1500. More than 90% of the youth (among the employed category) interviewed did not get any annual increments neither they opined for any.
- c) **Preference for courses like electrician, diesel mechanic or fitter-** The trainees across districts have the awareness of very limited courses which are offered in the local ITI/ VTI and therefore the preferences for these courses seemed obvious among the youths.

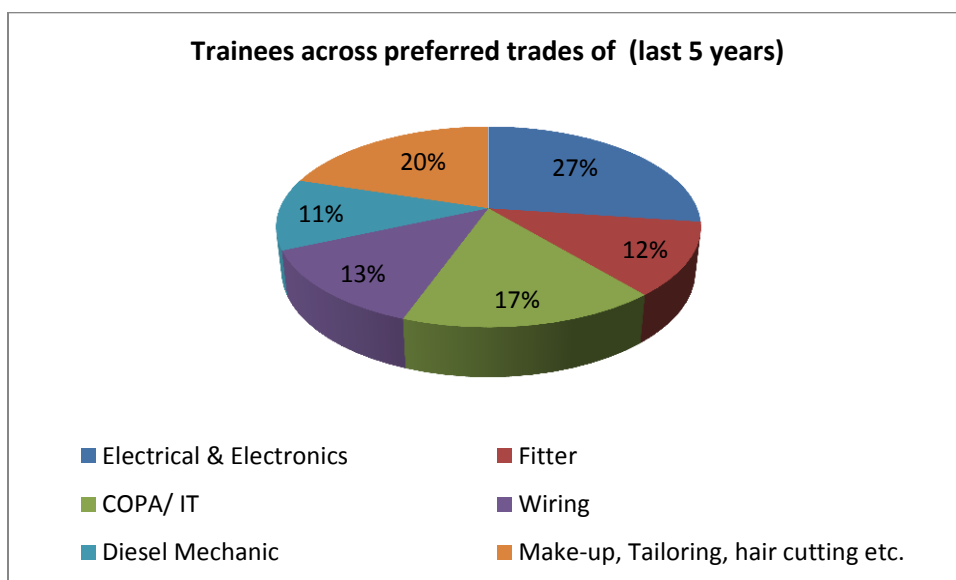


Figure 25 Youths' profile as respondents of primary survey_ Rajasthan

- d) **Training for better communication and basic know-how of computer-** This was fast emerging requirement among the youths that better communication skills, along with basic knowledge of computers would enable them for better job opportunities with higher better starting salaries. This was also essential for growth in professional terms.

Various factors influencing the youth to make a job choice would be assessed on various factors like job with a good income, job security, job with an opportunity to work with people of your choice and job that gives a feeling of accomplishment or satisfaction was analyzed. The general expectations of the family and the self-aspirations from a job were broadly seen under the following heads:-

Desires and aspirations from work (pre-training of the candidate)	Expectations of the family (post training from the candidate)
<ul style="list-style-type: none"> • Learning about new trades 	<ul style="list-style-type: none"> • Easy work
<ul style="list-style-type: none"> • Better salaries 	<ul style="list-style-type: none"> • Better salaries
<ul style="list-style-type: none"> • Family security 	<ul style="list-style-type: none"> • Government service
<ul style="list-style-type: none"> • Work satisfaction 	<ul style="list-style-type: none"> • Home town based job
<ul style="list-style-type: none"> • Improved lifestyle 	<ul style="list-style-type: none"> • Job security

Table 10 Desires & Expectations of the youth and family in terms of pre and post training

Majority of the youth denied of any support received by the government in terms of better opportunities in skilling provisions, absorbing post training as employee and providing the basic counseling for selection of courses. An effort was made to assess issues the youth of the state was facing in the labour market in tracing the employment opportunities. The analysis made brought focus on factors like political instability, poor infrastructure, inadequate education facilities, and other contemporary issues like corruption and reference as the reasons for making proper employment opportunities accessible uniformly to all the educated/ trained youths.



3. State Findings

This chapter outlines the overall State socio-economic analysis, workforce pattern, demography, and economic profile of the state, education status. The main objective of this section is to bring out insight on the Skill patterns prevailing in state and the expected skill requirements to match growth plans across various high impact industries. This section ends with the set of recommendations applicable to the various stakeholders of the report

Chapter 3: State Findings and Action Plan

Rajasthan presents a unique combination of geographical and cultural diversity endowing magnificent forts, palaces, natural resources, heritage, beauty and culture. It forms as a corridor between the northern and the western states in the country. It has been largely an agrarian economy with recent trends of industrialization and future growth paths in terms of SEZs and the Delhi Mumbai Industrial Corridor.



It is the largest State in the country which presents a unique combination of geographical and cultural diversity. It is predominantly an agrarian economy with agriculture and related activities accounting for about one-third the State's income. However, the recent wave of industrialization has brought about a change in Rajasthan's economic landscape and new industries are coming up in the State. Rajasthan currently has a marked presence in the Tourism and Hospitality, Handicrafts, Textiles, Engineering, Gems & Jewelry,

Minerals, Marble, Oil & Gas. However, to be able to support its growth plans, attract investments and thereby fully realize its economic potential, the State, among other things, needs to bridge the wide gap in the local availability of skilled human resources, a key growth enabling factor.

3.1 Socio-economic Findings of the state

3.1.1 Economy

- The Rajasthan economy has shown a healthy growth path during the recent years. GSDP (at current prices) has almost doubled from Rs1,17,274crore in FY05 to Rs3,

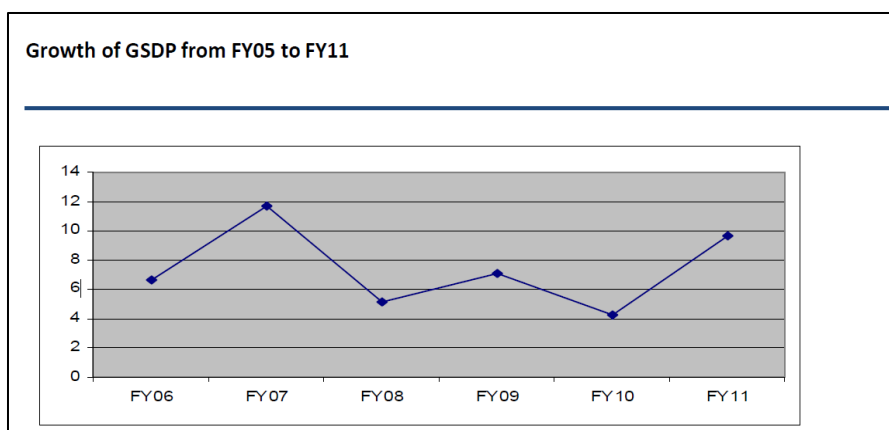


Figure 26 Rajasthan's Growth in terms of GSDP

03,358 crore in FY11. This has made Rajasthan one of India's faster growing states with the average growth rate of around 7.43% (real GSDP) during FY05-FY11.

- The services sector contributes around 47% in GSDP followed by the industry and agriculture sectors at 27% and 26% respectively. Over the last ten year period (FY01-10) the share to the GSDP has changed from 27% to 26%, from 28% to 27% and 45% to 47% in the agriculture, industry and services sectors respectively.
- Rajasthan has been ranked 12th on the basis of macro economy, investment environment, infrastructure, agriculture, primary education and consumer markets. It stands at 10th in agriculture, 11th in infrastructure, 12th in consumer markets, 14th in macro economy, 15th in investment environment, and 17th in primary education.
- In terms of its business efficiency, governance quality, human resource, Rajasthan has been ranked 10th in the growth of manufacturing employment, reform outlook, and 12th-13th in governance quality, industrial workers, and IT literates

Business efficiency	Labour cost per worker 5th rank
	Growth in manufacturing employment 10th rank
	Number of new enterprises/ industries 7th rank
Governance quality	Reform outlook 10th rank
	Fiscal deficit 12th rank
	Speed of response 13th rank
	Computerization of records 13th rank
	Government procedure 13th rank
Human resource	Industrial workers 12th rank
	Female labour participation 2nd rank
	Unemployment rate 1st rank
	IT literates 13th rank

Table 11 Rajasthan's ranking in terms of business efficiency, governance and human resource

- Rajasthan stands at lower side of the capita income level. Per-capita income in the state is Rs39967 (FY2011) which is much below the national average of Rs54527 (FY2011).
- The share of Rajasthan in industrial investments as a percentage to India's total industrial investment has been steady; it has been increased from 1.26% in 2006 to 1.71% in 2010. The industrial investments in Rajasthan increased to Rs29700 crore in 2010 from Rs7502 crore in 2006.
- Rajasthan's exports increased at a CAGR of about 19.5% during 2001-02 to 2008- 09period. In order to boost exports the state government is laying stress on developing EPIP (Export Promotion Industrial Parks). The thrust of the exports policy is to provide infrastructural facilities such as setting up of container depots near major industrial growth centres, facilities

for product testing and developments, particularly for small scale units, encouragement of quality upgradation by adoption of total quality management and ISO series certification.

- Agriculture and allied sector plays an important role in State’s economy. It contributes around 26% in GSDP. Around two third of Rajasthan’s population is still dependent on agricultural activities for their livelihood. Agriculture in Rajasthan is largely dependent on rains, only 35% of the total agricultural area is irrigated. Out of the total area irrigated 65 to 70% area is under wells and tube well irrigation. Rajasthan is the leading producer of coarse cereals, pulses, gram, oilseeds and seed spices. It ranks first in the livestock population in the country and third in terms of per hectare yield of Mustard.
- Rajasthan enjoys a strategic geographical position wherein it is situated between Northern and Western growth hubs in the country and 40% of Delhi Mumbai Industrial Corridor (DMIC) runs through it. Investors have set up ventures in fields as diverse as Information Technology, Electronics, Textiles, Chemicals, Agro-processing, Cement, Granite, and Engineering. The state has 322 industrial areas at present and setting up of three new is in pipeline. It is one of the favoured destinations for cement industry, being endowed with limestone which acts as the base for cement production. The state boasts of tremendous bio diversity, rarely to be found in others state. Thus has a potential to create immense industrial activity in the field of biotechnology and modern biotech products like recombinant DNA products and Bio Informatics. Construction of four state-of-art Biotech Parks is under consideration. The recent Rajasthan budget for FY12 has made allocations of Rs 178 Crores to develop industry and minerals sectors.
- The economic agenda of Rajasthan focuses on the following four sectors, contributing over two-thirds of the state’s economic output:

Agriculture and animal husbandry	Shift in cropping pattern; Increase in productivity; Develop animal husbandry potential
Manufacturing	New industries – attracting MNCs; Further development of select existing industries; Revitalisation of other poor performing industries
Mining	Strengthening mining infrastructure; Focus on exports; Focus on high value minerals
Tourism	Domestic tourism; Increased spending

- **Table 12 Rajasthan’s four sectors contributing two-thirds of the economy**

budget allocation.

- Rajasthan Government has adopted the SEZ policy for developing Special Economic Zones in the state. The SEZs, earmarked as duty-free enclaves, aimed at promoting rapid industrial development and employment generation. The State Government has worked out a package of concessions and incentives, along with the Board of Infrastructure Development and Investment Promotion (BIDI). There are 4 SEZs in Rajasthan at Jaipur, Jodhpur, Sitapur and Boranada.
- Services sector in Rajasthan contributes around 47% in GSDP. IT and ITEs, Tourism, Hospitality, and Banking services are important components of services sector in Rajasthan.

- **Tourism**--Rajasthan is one of the leading tourism states of India. Jantar Mantar Jaipur was enlisted in “World Heritage Sites” of UNESCO. The glorious heritage and colourful culture of the state is a special attraction for domestic and foreign tourists. During the calendar year 2010, the number of tourist arrival in state was 268.22 lakh. Rajasthan New Tourism Unit Policy 2007 provides various concessions and facilities for the tourism units. The state has amended its rule for availability of land for hotels and also conversion of agricultural land for commercial purposes (hotels) and heritage properties into hotels and other tourism units. There is a proposed investment of Rs 5332 Crore for the tourism sector (2007). In the Rajasthan Budget 2011-12 Rs 25 crore has been allocated to the tourism sector. Realising the potential of wild Rajasthan state has prepared a policy on eco-tourism. Where in tourist would be allowed to go trekking on designated routes, river cruising, overnight camping etc.
- **IT and ITEs Services** -- The IT and ITEs policy aims at making government accessible to citizens and empowering them through enhanced access to information through use of IT. Creating and expanding economic opportunities in the knowledge economy and attracting investments to the state for this purpose. Enhance employment opportunities by developing capabilities of youth to make them employable. In order to attract investments in IT sector, RIICO (Rajasthan State Industrial Development and Industrial Cooperation Ltd.) has developed State-of- Art IT Parks at Jaipur, Kota, Udaipur and Jodhpur, where as it plans to develop a similar one in Bhiwadi too.
- **Banking** - In Rajasthan, Regional Rural Banks (RRBs) account for 6.90% of the total branches in India, similarly, SBI and its associates have 6.21%, private banks accounting for 4.75% and nationalised banks have 3.96% which portrays a good picture. But when we come over to foreign banks the performance is not that impressive with only 2.14% of the offices of these banks all over India are in Rajasthan. One bank branch in Rajasthan caters to the needs of 16623 persons and covers an average area of 86 sq. km.

3.1.2 Social Infrastructure

- **Poverty** -- Rajasthan has been able to reduce its poverty by substantial amount over a period of time. Its overall poverty is less than the national average i.e. 22.1% as against 27.5% respectively. Its poverty in rural sector i.e. 18.7% is far more less than the national average of 28.3%. But the situation is opposite when it comes to urban poverty, Rajasthan has 32.9% as against the national average of 25.7%. Several projects have been initiated to eradicate poverty in the state.
- **Unemployment** – Despite the fact that several employment exchanges have been opened up in different parts of the state, there is a chronic problem of unemployment in Rajasthan; it ranks first in terms of number of unemployed workforce. There have been various efforts towards employment generation but their impact has not been substantial. It may be mentioned that recently under MGNREGA, 55.53lakh employments (2010-11) have been generated. The minimum wage for the unskilled labour has been revised to Rs135. But still there is a need for stronger implementation of all of these in order to improve the current situation.

- **Education** -- There are 9 deemed universities and 20 universities in Rajasthan. There are over 1032 colleges, 51525 primary schools, 11606 secondary schools and 6010 senior secondary schools. Rajasthan's literacy rate according to 2011 census was 67.06%, male and female literacy rates being 80.51% and 52.66% respectively. Although the female literacy rate has improved over the last decade, it lags behind the national average of 65.46%, whereas the male literacy is close to the national average of 82.14%. Over 1990s and 2000s enrollment ratio have been increasing but the female enrollment ratios still need to catch up. There are high dropout ratios in the state only 60% of those who enroll in class 1 are able to reach class 8. State government is aggressively pursuing a policy to achieve the goal of universalization of elementary education. It has spent over 4.6% SDP on education. State Literacy Mission Authority encourages PPP (Public Private Partnership) to strengthen the infrastructure of CECs (Continuing Education Centres). In the state budget of 2011-12 a sizeable amount of Rs 1707.72 Crores has been allocated to education sector.
- **Health** --The Health infrastructure in the state comprises of 127 hospitals, 199 dispensaries, and 1504 Rural PHCs, 37 Urban PHCs, 368 CHCs, 118 Maternity and Child Health Centres, 13 Urban Aid Posts, 11487 Sub Health Centres and 43864 inpatient beds as on December 31st 2009. There is a provision of Rs 663.53 Crores for medical and health sector including ayurved in the Rajasthan budget FY12. Rajasthan Health System Development Project, which is assisted by World Bank, is being implemented by the state government. However, there is a need to promote private sector investment in Health Sector in order to facilitate establishing of quality health care institutions within the frame work of set standards and norms. Private sector can play an important role to supplement State Government efforts in the fields of secondary and tertiary health care and diagnostic services. With the help of private sector participation, the State can maximize the benefits which might accrue from the opportunities in medical tourism, expand availability and access of quality health care services and integrate allopathic treatment with Indian and other alternative systems of medicine.

The performance of Rajasthan in six thrust areas could be summarized as given in the table below:

Agriculture and Agribusiness	There have been measures taken up by the state government towards improving agriculture on a whole, by providing irrigation facilities, promoting agro processing and agri business etc. Rajasthan ranks 7 th in terms of food grain production in India. It is a leading producer of coarse cereals, pulses, grams etc. but on the contrary the contribution of the sector has been decreasing over time in states GDSP and also it has a low per hectare yield. So the outcome is mixed in terms of its overall performance. According to the survey published in India Today it ranks 10 th amongst the 20 big states of India.
Education and Skill Development	Rajasthan stands out to be the only state which took a huge leap in terms of improvement in literacy rates but the high dropout ratios and lower enrollment rate amongst females is the reason for a lower ranking in comparison to the other states in India. The state ranks 7 th in terms of Primary schools. But there is an altogether different scenario when we talk about the rank in primary education, it ranks 17 th amongst the big 20 states. Much has been done, but still much more can be done. <i>Skill development aspects shall be covered subsequently in the sections ahead.</i>
Health	The state government follows a three tier system of health services. Health indicators have improved overtime. It has shown improvement over time and has performed well in NRHM (National Rural Health Mission) too.

Housing	In Rajasthan the total housing shortage projected for 2011, 2012, 2017 and 2021 is 12.42 lakh, 12.82 lakh, 14.94 lakh and 17.06 lakh respectively ³ . Out of which 85% shortage is expected to be in EWS/LIG category. There have been efforts made towards providing affordable houses. Year 2010 was declared as the year of affordable housing. More over general housing schemes and schemes for slums have been initiated from time to time The Rajasthan Housing Board has been working actively in the state ever since it was established. Yet, some more efforts are needed, to strengthen its grounding and working.
Industry	The industrial sector is of pivotal importance to the state both in terms of its contribution to the state's GSDP as well as the employment it generates. IT and ITES industry has sparked the growth of the sector even more. Tourism is an asset to the state which it has been utilising really well. Endowed with minerals it has been capitalising on the mineral based industries too. According to the state competitiveness report it ranks 7 th in terms of New Enterprises/Industry and 10 th in growth of manufacturing employment. This shows that the state has been performing well in terms of industry. Moreover, with the recent efforts being taken up by the government it has brighter future ahead.
Infrastructure	The situation in terms of electricity generation, roads, railways, aviation has improved in the state. The government has formed various boards like RUIDP and BIDI in order to develop the urban infrastructure. Rajasthan ranks 11th among 20 big states which reflect the progress it has made over time, although there is much more scope to progress yet we cannot deny the efforts it has made. There have been efforts made towards involving private sector in the infrastructural activity.

Table 13 Performance of Rajasthan in six thrust areas

3.13 Problem Statement

In Rajasthan, the working population is 280 lakhs and growing at the rate of 2.2% per annum, which means that there is a net addition of 6 lakh persons in the workforce every year. Taking backlog of the unemployed persons, we need to create 7-8 lakh new livelihoods every year. Many of those employed are working at a subsistence level of existence due to emphasis on hiring of casual labour and risky and low income yielding agriculture. Although, about 2/3rd workforce in the state is employed in agriculture, their share in State Domestic Product (SDP) is about 30%. Non-farm occupations employ one-third workforce with 70% share in SDP. Share of agriculture is declining rapidly over time, but workforce in agriculture has shown only marginal decline of 9% between 1950 and 2011.

On a long term perspective, there is need to shift population involved in agriculture to non-farm activities as agriculture livelihoods are showing problems of acute shortage of water, fragmentation of holdings, low productivity and low price realization due to lack of agro processing. Skill constitutes most important component of non-farm livelihoods. Although, traditionally, the State has been the hub of a variety of skilled persons, viz., Weaver, Carpenter, Blacksmith, Goldsmith, Plumber, Painter, Stone carver, Barber, Musician, Singer, Potter, Tailor, etc through on-the-job training. These people have sustained their livelihoods, so far. But, with the rising cost and competition, these people are facing difficulty in meeting day to day expenditure. On the contrary, there is a group of people who are getting handsome packages to meet their needs. The gap is widening. Under these circumstances, it becomes essential for the State to upgrade the skills of existing workers, arrange new and advance

skills sets for unemployed youths, provide opportunities for training & retraining, develop a mechanism for life-long learning & training for the existing skilled workers by operationalizing proposed National Vocational Framework. Moreover, demand for a variety of workers in construction industry, tourism, automobile, trade and commerce, finance, information technology, textile, Gems and jewellery and security is growing in the state. Similarly, demand for number of items viz., textile products, stone/marble artifacts, Gems & jewellery, carpets & durries, handicrafts, etc is growing in the national and international markets. **Moreover, only about 1.5% of the state workforce in the age group of 16 to 20 years has obtained vocational skills through formal programmes/courses as against 5% of Indian Workforce and 60 to 90% of the workforce of developed countries.**

Only 11 districts have had some major initiatives moving in skill development and private partners (NGOs, private colleges etc.). If ranked as per rankings, the top five and the bottom five in terms of skilling initiatives shall be as follows:

Top Five	Bottom Five
Jaipur	Pratapgarh
Alwar	Tonk
Kota	Sawai Madhopur
Jhunjhunu	Jalore
Bharatpur	Rajsamand

Table 14 Districts in terms of skilling initiatives based on analysis and field survey

3.2 Current Employment Structure

Small scale industry forms the backbone of industrial activity and employment generation in Rajasthan. In fact, the small scale industry generates more employment than its large and medium counterparts.

No. of units	507	297403
Fixed Investments (Rs. Crore)	45700	7650

Source: Economic Survey 2008-09

Table 15 Industries & Employment in large, medium and small scale industries

Over **70 %** of Rajasthan's industrial output comes from four regions dominated by small scale industries: **Jaipur, Bhilwara, Udaipur and Ganganagar** account for **39%, 18%, 9% and 4%** of the State's industrial output, respectively. The key districts driving industrial growth are Ajmer, Alwar, Barmer, Bharatpur, Bhilwara, Bikaner, Bundi, Chittorgarh, Jaipur, Jodhpur, Kota and Udaipur.

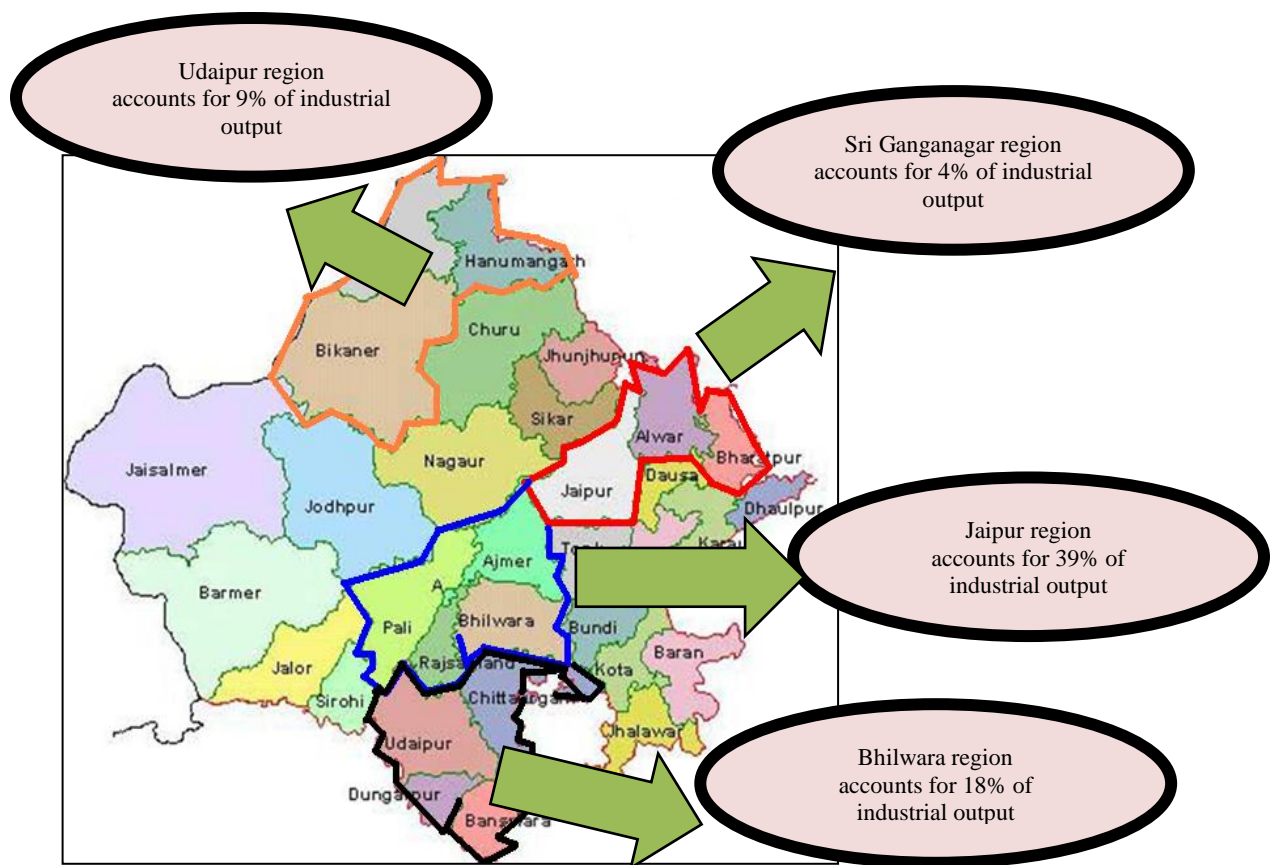


Figure 27 Rajasthan’s major industrial zones with industrial output

The informal sector contributes significantly to employment in Rajasthan; there are an estimated 1.84 million enterprises in the informal sector in the State, generating employment for 2.9 million workers. Also, over 70% of the enterprises in the informal sector are currently involved in activities related to manufacturing, trade, and repair activities.

For the identification of the growth sectors and the contributing industries of the state, the factor conditions, market condition, and value chain was analysed on the basis of the contributions made in terms of investment, employment and contribution to the state/ district economy. The parameters focused on while studying the industries were market linkage, historical presence of the industry in the State, supplier linkage, infrastructure adequacy, availability of trained manpower, availability and quality of training centre, time taken to train, and the employment opportunities. The industries identified on the basis of the above parameters were: **Auto & Engineering, Healthcare, Textiles, Repair servicing, Mines & Minerals, Oil & Gas, Food processing, Tourism and Hospitality, Handloom and Handicraft, Construction, and IT/ITES.**

3.3 Human Resource Requirement

Education Scenario: Currently, Rajasthan has over 90,000 schools, 64 engineering colleges, 40 polytechnics, 430 ITIs, 26 MCA institutes and 75 MBA institutes (source HDI data, 2008 updated). A shift system is followed in the polytechnics and ITIs. As for seats, the State has 20,755 graduate engineering seats, 6,890 diploma seats, and 43,824 ITI seats. These are much lesser than the number of seats in other States like Maharashtra, Tamil Nadu and Andhra Pradesh (AP). Also, Rajasthan's literacy rate is lower than the national average as discussed earlier.

Additionally, the high school dropout rate in Rajasthan makes the education scenario quiet vulnerable; it has a 50% dropout rate from the Primary to the Upper Primary Stage. Also, the pass percentage is low (50% in SSC examination and 68% in HSC examination). The level of unemployment is also an area of concern – currently there are over 7.5 lakh unemployed persons in the State, and around 24% of Engineering Degree Holders and 26% of Diploma Holders in the State are unemployable. It is also observed that graduates from Arts and Science Colleges are not geared for jobs in the industry, and also that the courses are not employment oriented. The primary reasons cited for the “unemployability” of students graduating from the State's formal education system are:

- Disconnect between academic curricula and industry requirements, resulting in deficiencies in specific functional skills, besides lack of practical training, market orientation, and “soft” skills of students graduating from the State's educational institutions
- Shortfall in appropriately trained faculty; this is a concern assuming increasing proportions. Shortfall in trained faculty results in inappropriately trained students, thereby increasing ‘unemployability’.

These issues, unless appropriately addressed, would widen the skill gaps that Rajasthan would then have to work on while seeking to realise its economic growth objectives.

The human resources requirement was estimated on the basis of the following parameters: historical growth rate of the industry; employment pattern; change in industry productivity; technology changes; change in customer preference; and changes in Government policy. Simultaneously, the availability of human resources was calculated on the basis of the following parameters: current education infrastructure of the ITIs, polytechnics, engineering colleges and arts & science colleges; students pass-out; and employability of human resources. In the demand section of the industries the regression model was used to calculate the overall estimate across major sectors and in supply side the workforce participation along with working population growth were factored in to get the supply of resources over a stipulated period of time. It's for the reader's information that the cumulating of district workforce across sectors was not followed to get the gaps.

Based on the above, it was estimated that Rajasthan will have an incremental human resource requirement of 62.47 lakh persons till 2017 across the mapped high priority sectors (includes the emerging sectors like ITES, retail, gems and jewelry etc.)

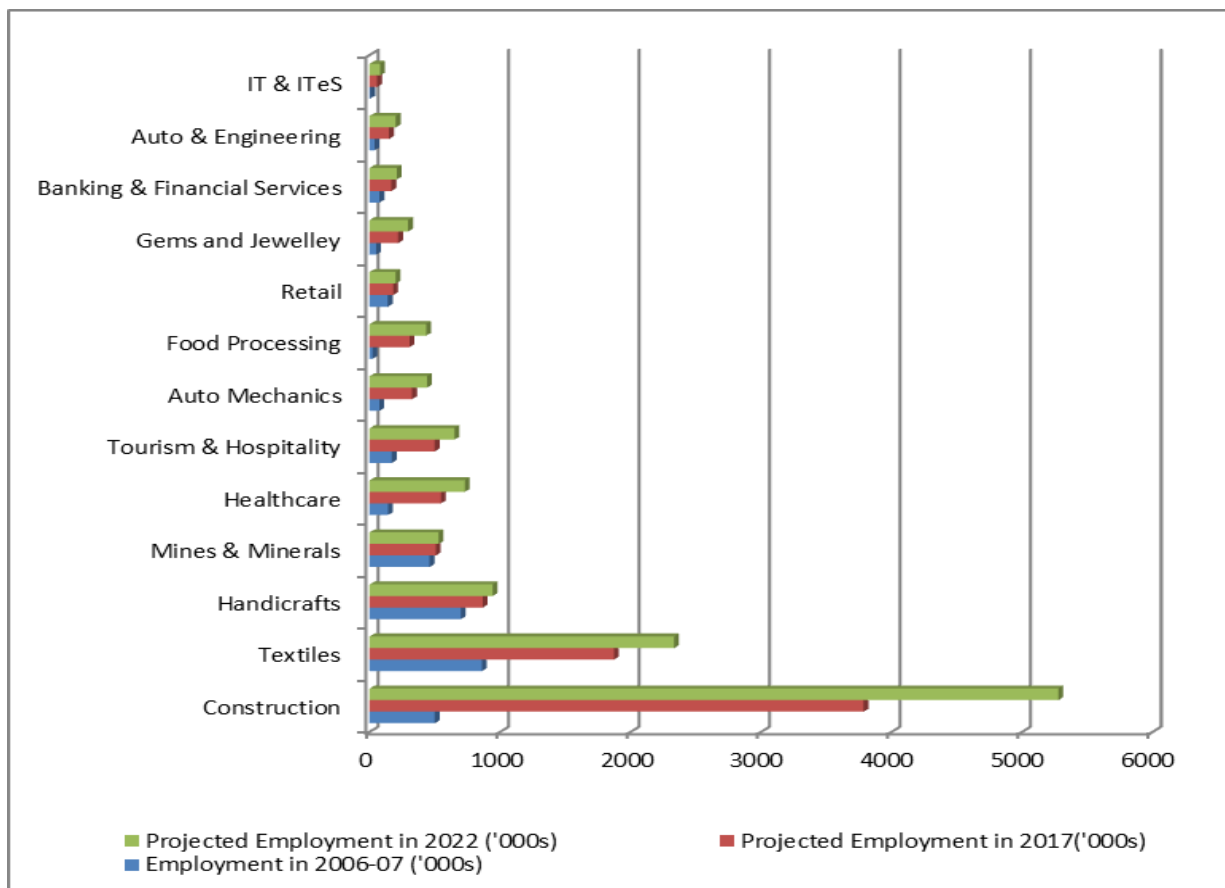


Figure 28 Incremental human resource requirement across Rajasthan’s high growth sectors by 2017

The maximum incremental requirement will be in the construction industry, followed by textiles, healthcare, tourism and hospitality, food processing, auto mechanics, gems and jewellery, handicrafts, auto and engineering, banking and financial services, IT/ITES, mines and minerals, and retail. The break-up for such job opportunities will emanate from various skill levels.

The primary data collected across 330 industries from various growth sectors in all the districts showcased the current scenario of the workforce and the demand as projected by these interviewed industries. A clear trend of engaging more skilled workforce was seen by an incremental demand of close to 20% (both semi-skilled and skilled workforce). This would be more of industrial take on workforce. As was evident that the low cost of operation and engagement of unskilled workforce existed majorly through the contract routes (to avoid labour laws), there needs to be a state or national perspective or say a neutral perspective of the workforce break up that needs to be targeted by 2017.

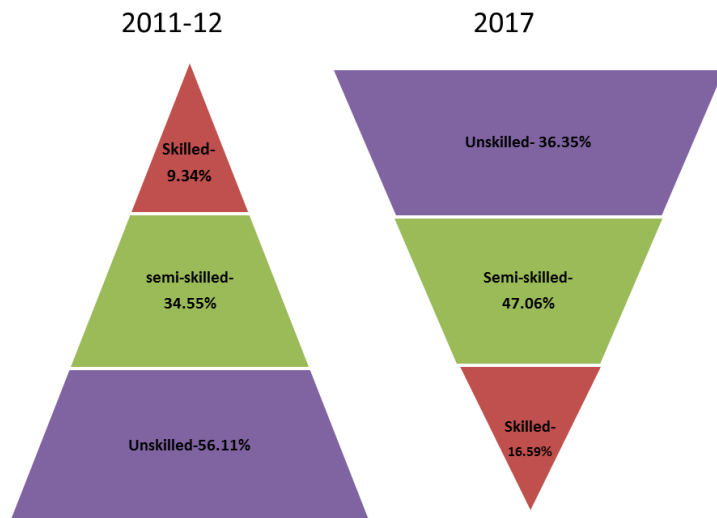


Figure 30 : Current and future demand of workforce across sectors, an analysis from primary survey conducted across industries of the state

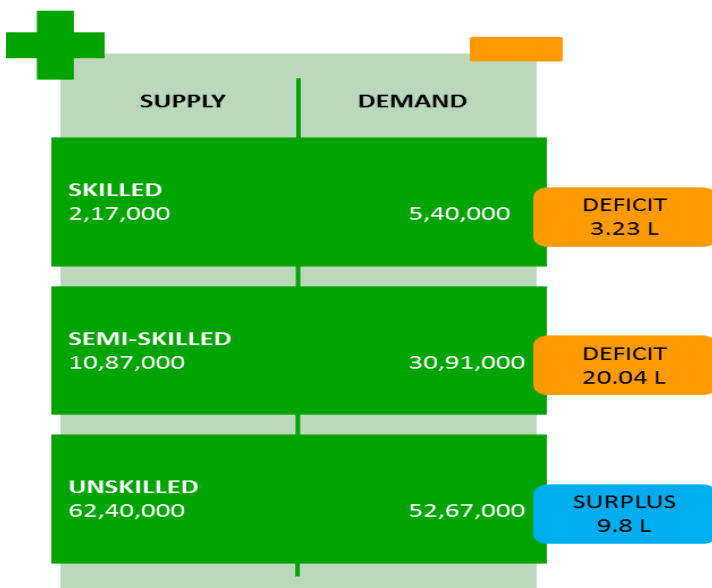


Figure 29 Projected workforce requirement in ideal circumstances to meet the growth targets of the state

The breakdown could be as shown in figure 24 which highlights the demand supply and the gap for the projected 2017.

This could be summed up by stating that the state would require additional 3.23 lakh and 20.04 lakh of skilled and semi-skilled workforce respectively by 2017 (which would be employable population in terms of skills). The unskilled workforce shows a surplus in terms of 9.8 lakh as the supply remains high of this category of workforce and the demand would reduce substantially (keeping in mind that the maximum unskilled workforce belong to the household level workers and agricultural labourers) over this period. As part of the overall workforce requirements, the demand for skilled workforce is estimated at 36.31 lakh persons till 2017- close to 25% of the overall workforce. The new employment opportunities would not only call for enhanced functional skills, and to an extent sector-specific, competencies across levels, but also several “soft” skills. The skill mapping which was carried out at various levels, depending on the nature of the industry concerned showed major gap in semi-skilled workforce requirements. However, the skill gaps predominantly existed in entry level positions which

the industrial bodies considered as semi-skilled workforce even though they had pre-requisite training.

The average wage structure of the skilled to unskilled workers for the state was calculated by taking into account the district representation of the sampled industries. The difference between a skilled and semi-skilled worker in terms of wage was quite low, i.e. just Rs.18/day in actuals. This may be due to the nature of workforce engaged in major growth sectors were primarily semi-skilled and engaged for a large number of years without much of incremental pay. Similarly, though the average wage of an

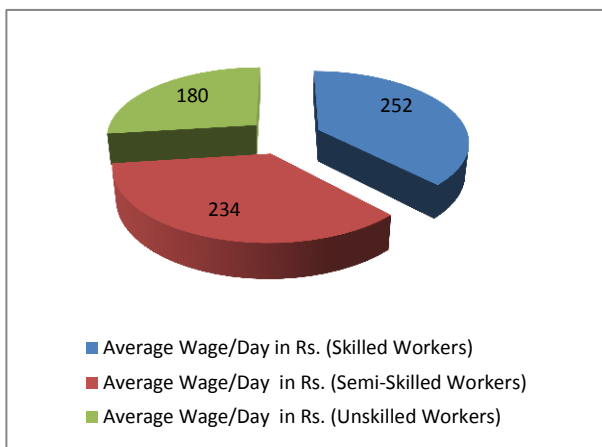


Figure 31 Average wage structure across sample industries of the state

unskilled worker shown was Rs 180/day but it remained quiet low in case of women working in particular sectors like handicrafts and other informal works in construction, gems and jewelry, textiles and mines.

The demand for some of the high priority service sectors in terms of workforce requirement could be observed with high demand and relatively low entry level remuneration which could be summarized as below:

Trades	Demand	Supply	Support	Remarks
Electrician	High	High	ITIs, ITCs	Self-employment; initial salary expected is Rs.4000
Computer Based Accountancy	High	Low	None (a few initiated- private training providers)	Requirement of TALLY accounting in malls, supermarkets, medicine shops; initial salary expected Rs.4500
Mobile Repairing	High	Low	Localized (on job training at shops)	Self-employment option with rise of mobility and accessibility; initial salary Rs.3500
Wiring & Repairing (domestic)	High	Low	ITIs, Polytechnics	Private providers exist in few numbers; self-employment; initial salary Rs.3500
Automobiles mechanic	High	Low	None	Engagement in two & four wheeler mechanic; self-employment; initial salary Rs.3500
Courier Delivery	High	Low	None	Upcoming requirement as per the market needs; initial salary Rs.3500
Sales & marketing	High	Low	None (far less than existing demand)	Potential in small scale set ups is high; formalized training in sales in absent; initial salary Rs.4000
Gems & Jewelry	High	Low	Localized & Low (trained in industry)	High potential in Jaipur, demand very high with initial salary of Rs. 4000
Handicrafts & Handloom	High	Medium	None (no specific support apart from MSME trg)	Skilling process is as per the trade and initial salary is Rs 3000

Table 16 High priority service sector demand, supply and support in the state of Rajasthan

These trades would majorly cater for the existing repair and services industries with the upcoming IT sector, industries in DMIC and Alwar region and the handicraft & handloom sector. Some of the most

common trades like gems and jewelry, local hotels (hospitality) and construction set-ups would continue to engage household workers or in other words the major portion of unorganized labour. Similarly the rural set-up of agriculture and allied industries would engage the unskilled unorganized labour with quick access to the resource pool in the villages.



4. Recommendations

This chapter gives a set of recommendations applicable to various stakeholders of the report. It outlines the strategies and action plans for skilling at the state level, with the participation of enablers such as the National Skill Development Corporation (NSDC), industry associations and various departments of the state. The recommendations impact the key players—the major stakeholders such as training partner, the youth and industries—and deliberate upon their interactions for a successful skill development plan.

Chapter 4. Recommendations and Action Plans

Accenture's suggestions for narrowing the existing gaps in Rajasthan's workforce, especially in terms of skilled manpower, by 2017 include the following:

- **Infrastructure enhancement:** Additional physical infrastructure—more higher educational institutes and training facilities to meet Rajasthan's enhanced skill requirements
- **Involvement of industry and industry associations:** Encouraging the participation of various stakeholders, including industry and industry associations, in sustainable skill development initiatives
- **Policy interventions:** Actions taken by various stakeholders to bridge Rajasthan's current and expected skilled manpower gaps, and the role played by apex bodies such as NSDC in addressing this issue

In order to understand the skill ecosystem of the state, one needs to understand who are the major players and the enablers of an environment that would enhance both the availability and sustainable engagement of the skilled workforce. Our action plan would have a proper representation of this unique ecosystem and the key stakeholders:

- **Key players:** The three key stakeholders of the skilling activities would be the employers or industries, the vocational training providers (both registered and unregistered) and the beneficiaries—mainly the state's youth.
- **Key enablers:** The enablers of the ecosystem would be RSLDC (state skill development body), NSDC (apex body for skilling), state industry and trade associations, and the state departments anchoring various skilling initiatives. They would provide the right environment for the key players to thrive.

The changing nature of work, and developments in some sectors of the state and a workforce with better efficiency and better skills have become a focal point for many industries as they plan for their future. Asked what would help improve their business the most over the next five years, a highly skilled and flexible workforce topped the list for a majority of the sampled industries, ahead of other factors such as learning and development, and aspirations for future growth. While the government has already spent significant effort and resources in skill development training, these recommendations highlight the efforts that stakeholders should consider in skilling the workforce to meet future demands of a skilled workforce, and to bridge current and future skill gaps.

The broad contours of a skill development plan for the state would be based on the following figure:-

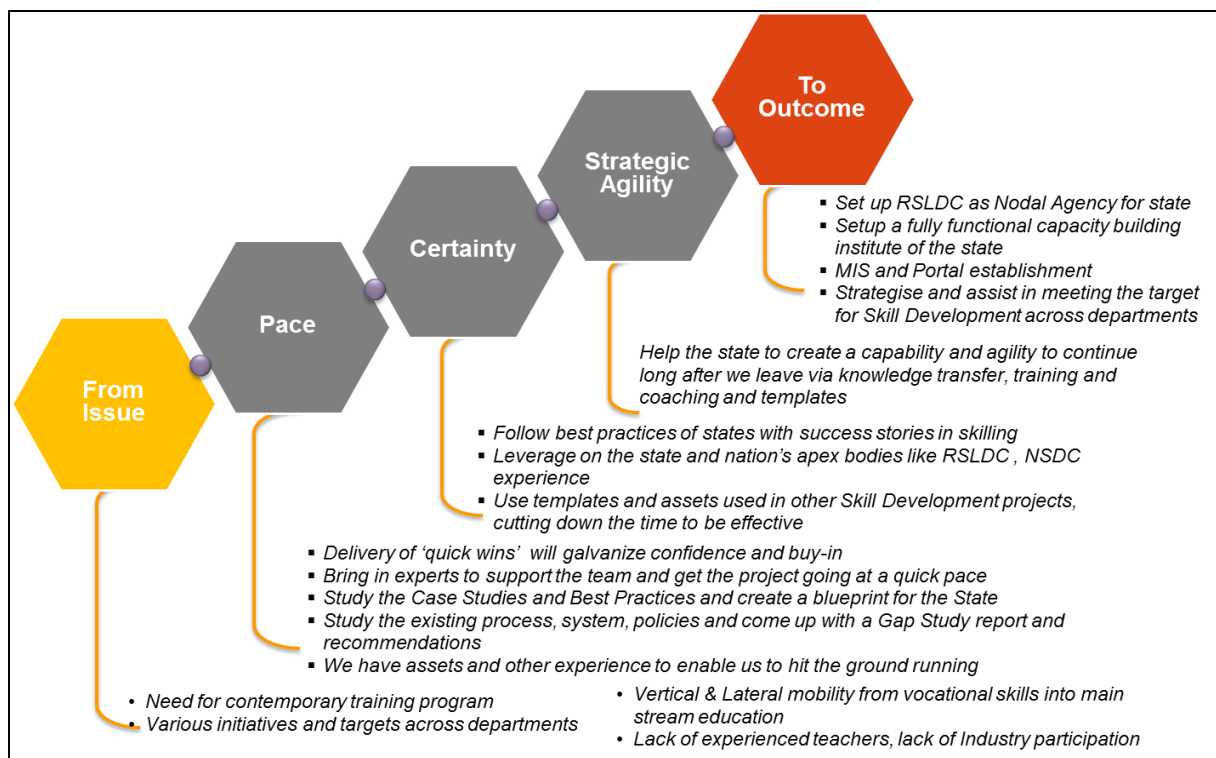


Figure 32. Skill scope in the state: From issue to outcome

To summarize the skill development scenario of the state from issues to outcome, one could build on few of the above (see the above figure) pointers. There is a clear lack of contemporary training program in the state and hence the gaps in the required infrastructure to anchor the skill initiatives. This could be addressed with certainty, pace and strategies built upon best practices, specific skilling intervention plans, robust implementation structures for execution and monitoring. This would culminate in enhanced employment of the youth, and more skilled workforce engagement in the state. The action points for the key players and enablers of skill development are shown in the figure below:

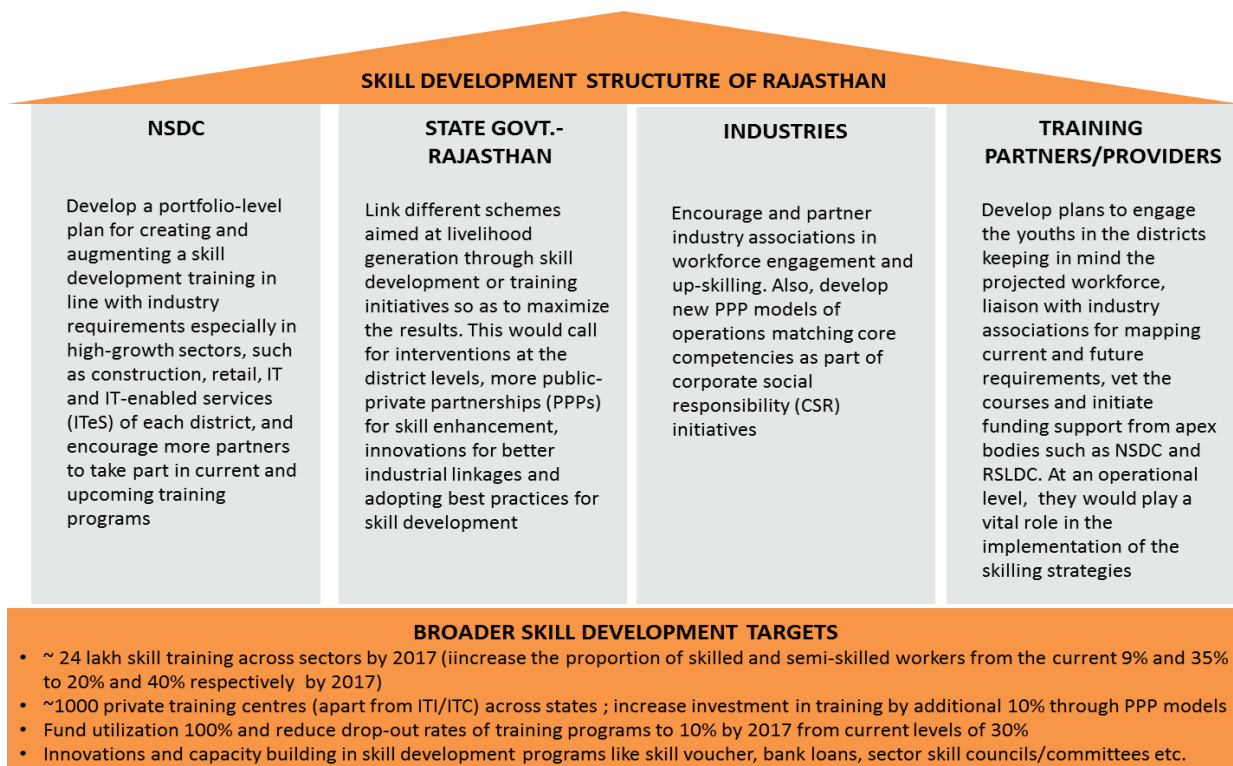


Figure 33 Action points for key players and enablers of the state

4.1 State-level Skill Development Plan

The state’s skill development initiatives would be more effective if it takes a united approach to the skilling interventions. Appointing a nodal agency for skilling such as RSLDC would enable better planning of initiatives across departments and give a more holistic approach. The recommended structure for skilling initiatives, with the nodal agency at the head, is given below.

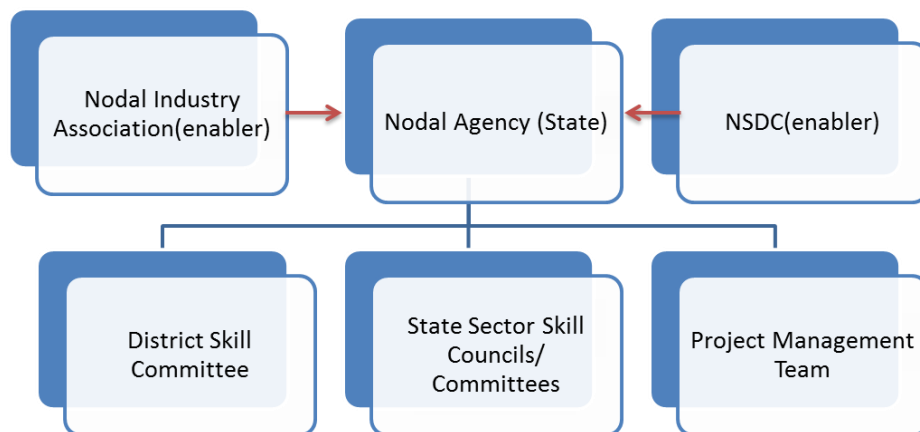


Figure 34. Recommended skilling organization structure led by a nodal agency

For effective planning and implementation of the skill development initiatives, the government could establish the following:

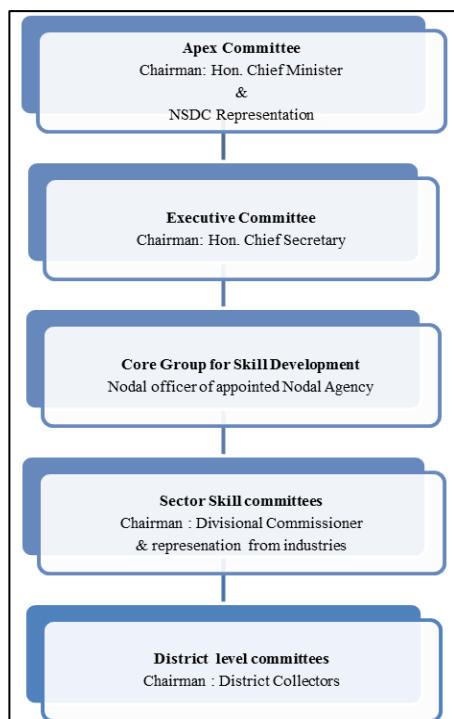


Figure 35 Recommended structure of the state for skill development

Apex Committee—Chaired by the chief minister and with representatives of NSDC, this could shape the skilling interventions of the state, visions for the future and organize international skilling forums

State Executive Committee—Chaired by the chief secretary; Mission Coordinator—Commissioner, Employment, Self-Employment & Skill Development

Core Group—Nodal officer of the designated nodal agency for skilling, with representatives of departments anchoring skilling initiatives and from the civil society as well

Sector Skill Committees—Chaired by the divisional commissioner and the heads or representatives of industry associations such as the Confederation of Indian Industry (CII) Federation of Indian Chambers of Commerce and Industry (FICCI) etc.

District-level Committees—Chaired by district collectors, with teams operating at the district level (refer to district skill committee structure)

4.1.1 District-level Committees

At the district level, it would be ideal to form a district skill committee under the district magistrate or collector to monitor look after some of the monitoring aspects of the skill development training programs under various departments and nongovernment organizations (NGOs) so as to maximize the targeted results. This optimization plan should ensure that all the ITIs, ITCs, polytechnics and technical

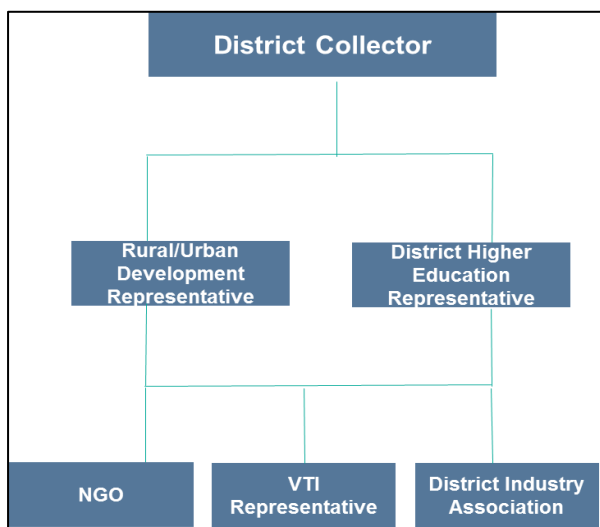


Figure 36. Recommended district skill committee structure

colleges offer the courses that are most in demand in and around the district. Some of the main aspects of effective skill development that the district skill committee can look into are as follows:

a) Optimum seat utilization at vocational training institutes (VTIs)—Counseling and various communications could be used to reach out to the youth and spread awareness about the benefits of skill training, including that of better placement prospects

b) Identifying nodal industry association in each district—Industry bodies would play a major role in engaging the skilled resources at the minimum skilled or semiskilled wages. The committee should identify the industry association to anchor the skill development initiatives

- c) Conducting district-level job fairs—Invite all the major employers in and around the district, involve all the VTIs in the district and also use this platform to mobilize the youth for training

A recommended structure of the district committee shall have representatives from higher education authorities, rural and urban development authorities, NGO representatives, ITIs and VTIs representative, led by the district collector. The representation of industry associations is key to sustainable solutions for the district skilling initiatives. The committee could meet once a month and conduct quarterly reviews of the district skilling initiatives.

4.1.2 Sector Skill Committees

It is proposed that sector skill councils or committees be established across the state with the help of NSDC (*refer to Sector Skill Council in NSDC level recommendations*), industries and institutions to facilitate focused skill development preferably for industry clusters. The objective is sector-specific skill development, in the target industries of construction, handcraft, automotive, engineering, textiles, IT and IT-enabled services (ITeS), repair and servicing, health care, gems and jewelry, banking and financial services, tourism and hospitality.



Figure 37. Possible sector skill committees or councils in Rajasthan

Each industry cluster will have a **Skill Development Center** which will be managed by a council of members representing key stakeholders. It will focus on bridging skill gaps by creating a faculty and industry managers’ forum to facilitate sharing of knowledge and upgrade of faculty skills, undertaking industrial visits, developing internship opportunities, organizing guest lectures and participating in live projects. Conducting a detailed sector-specific skill report and analysis for the state could be a start in this direction.

4.1.3 Project Management Team

The project management team would have professionals taking on various tasks of the nodal agency as their core responsibilities, and delivering solutions for an enabling environment for skill development initiatives. The project management team may be structured as given in the figure below:



Figure 38. Project Management structure and processes

The project management team would include a steering committee, with quality, management assistance (operations) and subject matter expert teams under it. At the operational level, the management assistance team would be supported by district-level teams in monitoring and capacity-building activities.

4.2 Implementation Structure

To ensure effective implementation of skill development initiatives, Accenture propose that RSLDC be made the nodal agency, with a separate working group focusing on the above recommendations.

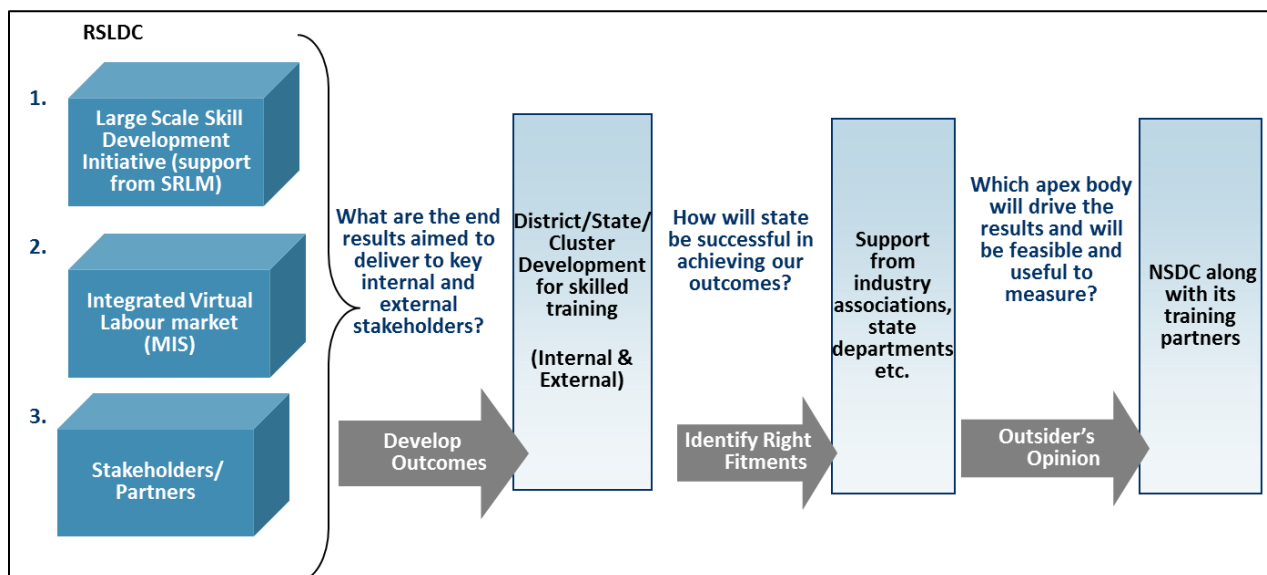


Figure 39. Recommended implementation structure for state skilling initiatives

The implementation plan for skill development would essentially address three basic questions:

- a) What are the end results to be delivered to key internal and external stakeholders?
- b) How can the state achieve the targeted outcomes?

- c) Which apex body will drive the initiatives for the state based on measurable parameters of skilling’?

The answers to these would address the skill development implementation issues and etch out the roles of the key players and enablers in establishing a sustainable skilling environment. These solutions have been laid out as a set of recommendations in the section ahead under three broad categories of infrastructure, policy and sector.

4.2.1 Recommendations for the State

A state-level skill development approach should include **skill-building initiatives to address growing requirements** in emerging and growth sectors. These should focus on the following:

- a. Curriculum restructuring to match industry needs with an emphasis on shorter courses with quick turnover periods; on-the-job training and practical exposures to industry, guest lectures and field visits to be part of the course.
- b. Soft skills such as effective communication should be an inherent part of all training, along with computer basics, financial literacy and time management.
- c. Industry participation at the training and placement level should be encouraged. Industry associations such as CII , FICCI etc. need to play a major role in engaging skilled workforce in industries for more efficient outputs.
- d. The state must identify a unique capacity-building and support agency which would cut across all the trades across various departments to deliver the best available training for the candidates.
- e. Certification courses must be recognized with better placement of certified candidates for standardization of skills in a cost-effective and speedy manner.

Our recommendations would help the state addressing the skill gaps in the state by setting specific, measurable, achievable, realistic, and time-bound objectives. The recommendations fall under three specific categories:

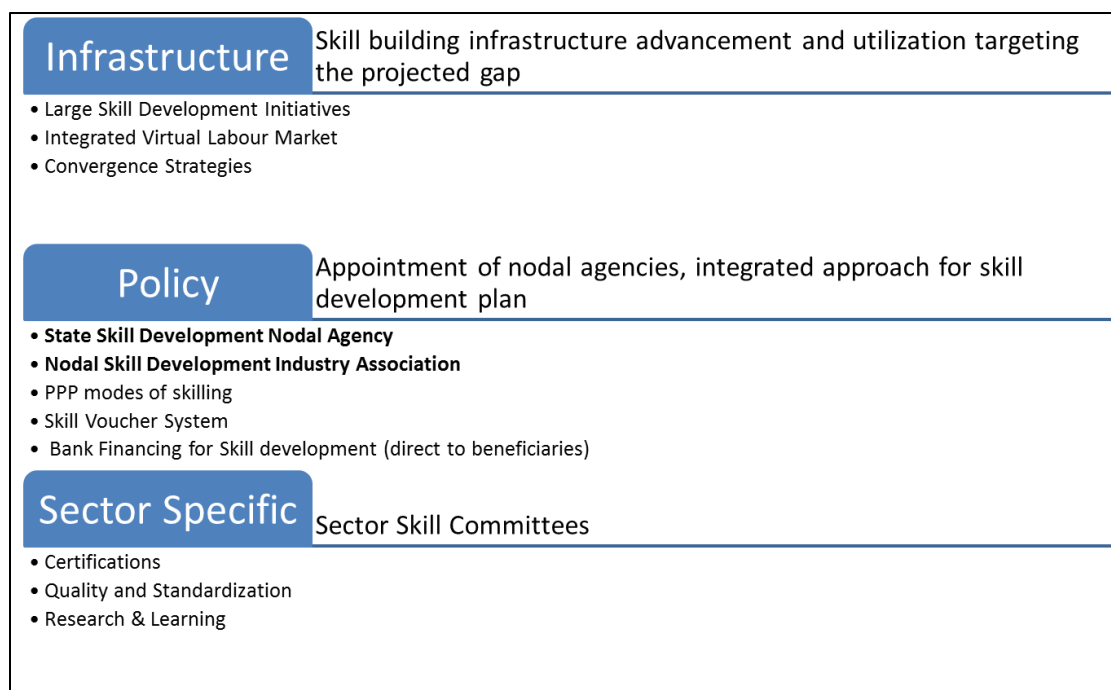


Figure 40. Recommended state-level skill development framework

- I- **Infrastructure:** Implementation structure, funding requirement and mechanism to scale up are key to the success of skill development initiatives in the state. A designated nodal agency could anchor the skill development initiatives in terms of guiding, mapping and supporting all the agencies, departments and institutes involved. This nodal agency should envisage setting up at least 750 to 1,000 training centers (by engaging partners) across the state by 2015–16. The nodal agency should provide solutions for:
- a. **Large-scale skill development initiative:** This is aimed at imparting basic as well as advanced training to manage migration of unskilled people to semi-skilled and skilled jobs in industries in a structured manner. This involves pre-employment training. Short industry-specific programs would provide exposure to general work culture—discipline, rules, safety as well as role expectations from the employee. The typical duration of the basic training program (specifically for construction and agro processing jobs) is four to eight weeks, and it will be delivered at the block level using the existing primary education infrastructure and projects sites. The target group comprises school dropouts, agricultural workers and the second generation of agricultural workers. The content for the training programs will be developed in association with VTIs and the industries concerned. VTIs would provide the necessary skill certification (advanced training program) to candidates at the end of the training. The pilot locations for this initiative could be the backward districts of Rajasthan. To ensure the effectiveness of the training program, the large-scale skill development initiatives should focus on standardization, forward and backward linkage, and scalability. The state rural development and agriculture departments can play a key role in this initiative to train the vast unskilled workforce of Rajasthan.

- b. **Integrated virtual labour market:** The focus here would be on employability by matching available skills (ITI students, and degree and diploma holders) with industry requirements. In order to achieve this, a common Web-based platform could be created. It would serve as a virtual platform that integrates the efforts of employers, job seekers, public agencies such as RSLDC, employment exchanges, state rural livelihoods mission (SRLM)-Rajasthan, job portals such as monster.com and naukri.com, and even local firms. This would essentially serve as a transparent platform to search for jobs, match profiles, and provide the state an estimate of the potential job market. The enabling environment for this market would be facilitated by industry associations, the state IT department, labor unions and other machineries either through a PPP or convergence model.

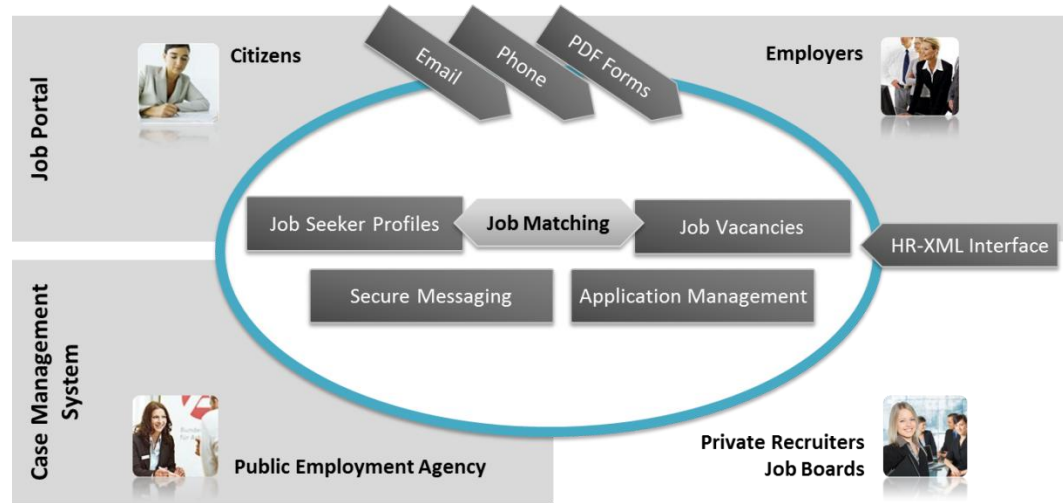


Figure 41. Recommended Integrated Virtual Labour Market

c. **Convergence strategies: Employment exchange-related initiative**

The objective of this initiative is to change the role of the employment exchange from that of a controller to that of a market facilitator of employment generation. The various initiatives proposed under this are:

- Training employment officers in customer-facing functions
- Establishing more career centers (offering assessment, apprenticeships, counselling, jobs and training)
- Giving incentives to employment officers for open positions that lead to closures of vacancies
- Incentivising employment exchange for clearing backlog
- Publishing employment exchange-wise annual calendar of job fairs
- Ensuring easy access to candidate pool by creating a digital format of candidate profiles

II- **Policy interventions:** The state-level initiatives could be specifically divided into two broad categories:

- a) **State skill development nodal agency:** In order to have a unified approach to skilling and development, the state should assign an organization such as RSLDC as the nodal agency to avoid duplication of efforts and “re-inventing wheels” in each department. The creation of a

state-level nodal agency will ensure a seamless integration of the various state departments, private players, training providers, beneficiaries and other stakeholders in the formulation of action plans and road maps for implementation of skilling initiatives. (Refer to section 4.2: Implementation structure)

The nodal agency could be the base for some of the innovative initiatives such as:

- **Skill voucher system**—this could be a unique system of empowering the youth by giving them the choice of opting for training courses. The nodal agency would create a system through which any department or organization (private or public) can get a “skill voucher” after paying for it. The skill vouchers shall be issued by the nodal agency in the name of the candidates and will be handed over to the sponsoring department or organization. The department or organization ensures its distribution to the candidates. The list of candidates would be based on the database of the registered youth (after mobilization and registration at various points). The vouchers can be used by the candidates for training at any eligible training institute willing to enroll them and in any course of their choice out of the courses covered by the scheme. The voucher would then be redeemed by the training institutes. They would get the amount specified in the skill voucher only after the candidate gets the National Council for Vocational training (NCVT) or Rajasthan Council for Vocational Training (RCVT), which in turn will be issued only when the candidate passes the assessment test conducted by the allotted assessment agency from among the assessment agencies empanelled by NCVT and RCVT. If the candidate fails the test, the sponsoring department or organization would get its money refunded. The nodal agency for the scheme would issue detailed guidelines from time to time for smooth and effective implementation of the scheme.
- **Bank financing for skill development training**—this system would largely work on the social microfinance models or as the funding of the training for the target segments. This special kind of intervention could be initiated by the nodal agency with certain banks and training partners by arranging for a tripartite agreement between the training agency, the nodal agency and the bank.

b) Nodal skill development industry association: It would be of foremost importance that industry associations anchor certain skilling initiatives and also have value proposition in terms of skilled workforce for future sectoral development. The state should identify industry associations such as CII, FICCI etc. in Rajasthan who would for active involvement in a number of skilling initiatives. The role of industry associations shall be as follows:

- Advocate the engagement of skilled workers in industries
- Encourage in policy formation to initiate more PPP interventions for skilling
- Create ideal resource centers in each district for skill training and placement
- Act as a medium of interface between the industrial requirements in terms of workforce and VTIs in terms of placement of trained youths

CASE STUDY: Project Swalambhan; District Rajsamand

Project Swalambhan is a comprehensive program to address the rural youth's need for a sustainable livelihood by imparting quality skill trainings, which are in accordance with industry demands and which will command assured employment. The model followed is by and large a ZERO-COST model, which is achieved by pro-active collaboration among the youth, district administration, rural development agencies, corporate houses, training partners, banks and potential employers.



RAJSAMAND KAUSHAL VIKAS KENDRA (RKVK) follows a Hub and Spoke Model in which it acts as the hub with support from Hindustan Zinc, NGOs and the district administration; the spokes are the training providers such as IL&FS and ITIs, employers such as GMR and ADECCO, banks such as Rajsamand Urban Cooperative Bank and the youths who have registered with RKVK and at job fairs. The courses are certified by IGNOU and MLS University, Udaipur. A total of 1,199 youths have registered for this program, with 494 placements till date.

III- **Sector specific committees**—these committees would primarily look after some of the high growth and emerging sectors of the state, with the divisional commissioner or a representative of a strong industry association as head of each sector committee. The structure may also include civil society representatives belonging to the specific sector in the cluster, and advisers specific to the structure. The broader guidelines of execution could be set from the existing and upcoming SSCs of NSDC. The main activities these committees would look after are:

- Certification: Certification of the courses prescribed, by laying down operational standards of training, grading and specific placement for which it can take the help of third party certifying agencies.
- Quality and Standards: Standardized courses and ideal centers for each sector would be crucial in keeping with market requirements. These centers would operationalize the procedures laid down to create ideal conditions for sectors to encourage more such training centres across state. Besides, these committees could innovate with capacity building of training providers, by aiding in course curriculum design and training of trainers.
- Research and Learning: The sector specific committees must bring in best practices from across the nation and the world, and encourage specific models (pilots or innovations). Local-level skill gap analysis (block level and cluster-specific level) in a periodic manner would help in giving a clear picture of the actual skill situation and show the way ahead.

Some of the sector-specific recommendations are as follows:

- **Textiles**

The recommendations for the textiles industry can be classified into three categories—industry-related, infrastructure-related and human resources-related. Recommendations include setting up of textile machinery service centers, textile labs or research centers and textile chemical hubs within the state. Increasing the number of seats for textile-related education and the industry’s awareness of textile institutes in the state, as well as training of existing employees, are also recommended.

- **Automotive and engineering**

The recommendations for this industry are also of three types—industry-related, infrastructure-related and human resources-related. Recommendations include formulation of measures to address the issue of availability of specific skills and knowledge required for the automotive and engineering sector (for instance, metallurgy, and ISO standards), improvement of infrastructure in the Alwar-Bhiwadi area (schools and colleges, access to good health care facilities, availability of public travel facilities), and increase in the number of diploma engineering seats, especially in automobile engineering.

- **Repair and servicing**

Rajasthan has a huge potential for the repair and servicing business given the state’s vast vehicle pool. Based on this, it is proposed that a tractor mechanic school be set up in Kota and a motor mechanic school be set up in Jaipur as a PPP initiative with select partners.

- **Service industry (IT/ITeS, retail, and banking and finance)**

Like in the rest of the country, the service industry is booming in Rajasthan. The skills required in the service sector are quite different from those required in other sectors. It is recommended that service training institutes (STC) be set up to see to this requirement. Basic STCs with a focus on entry-level skills, and advanced STCs with a focus on mid-level and high-end service sector skills have been proposed. STCs could make use of the classrooms at ITIs, or even schools and colleges, if required. STCs will require participation from all three major stakeholders—the government, industry and educational institutes.

- **Handicraft**

The handicraft skill development framework takes into consideration the market potential and the skills required for various handicraft clusters. Since the handicraft sector needs undivided attention and calls for a separate setup for efficient functioning, it is suggested that an artisan-based federation be set up in a participatory manner. It could help in skill development and production facilitation, and serve as market interface for artisan groups

Apart from these sectors, some of the other high-growth sectors such as construction, hospitality, tourism, gems and jewelry would need special focus as these sectors shall contribute in large-scale workforce engagement.

To summarize the state-level recommendations, the three focus areas for skill development are:

- a) Integrated approach to skill development across departments by appointing a nodal agency, and with a change in focus from process-oriented to result-oriented skilling programs by inviting more partners to anchor the initiatives across districts
- b) Following the PPP model for developing state infrastructure in terms of training centers that are attuned to the current market scenario. Involving more training partners with experience of working with NSDC would help in providing a standardised delivery mechanism for skilling and placement
- c) Innovation such as introduction of skill vouchers, convergence strategies, PPP modes of operations, loans from banks, formation of sector skill councils—are crucial for success in skill development plan

4.2.2 Recommendations for the State’s Industries

The industry associations should play the role of a catalyst by rapidly absorbing skilled manpower by industries and thus encouraging more skill training in the state. As the estimated demand-supply gap shows, the demand for skilled labour will be high especially in the emerging sectors

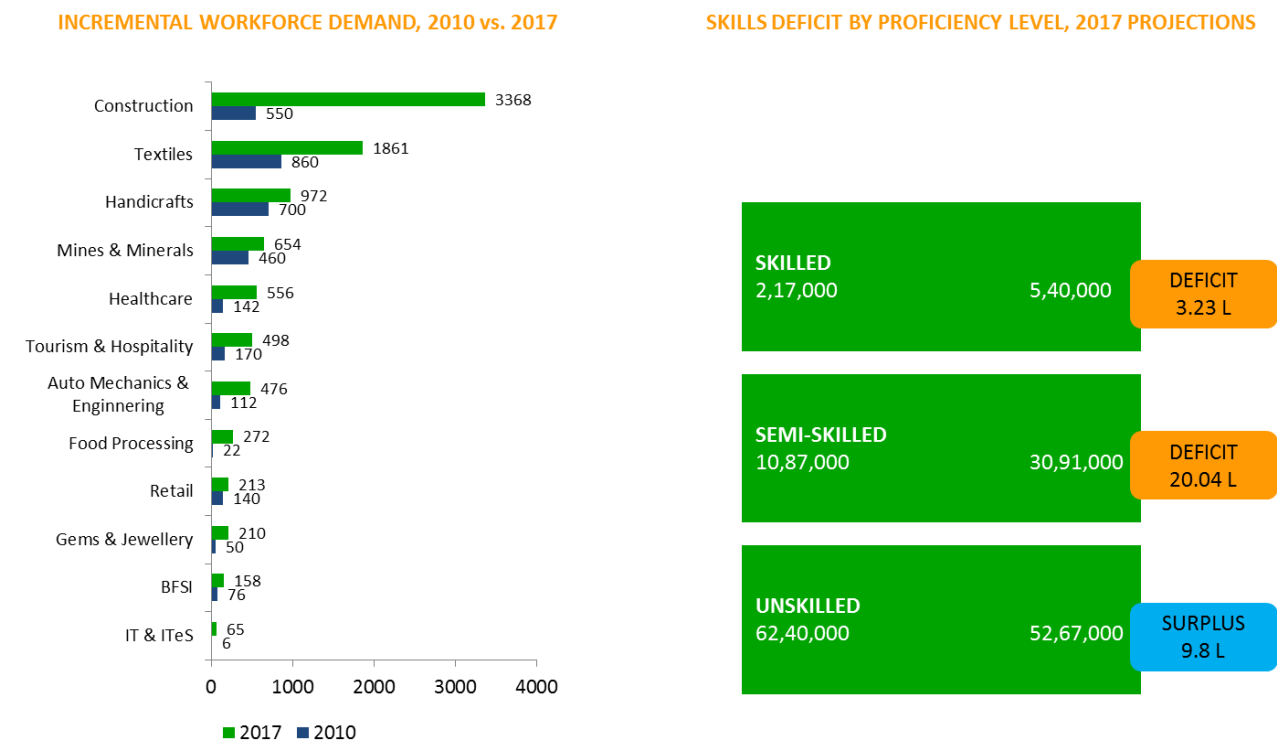


Figure 42. Incremental human resource requirement by 2017 in high-growth sectors; Skill deficit and surplus in 2017 as per projections

In Fig 9 earlier, industries would require close to 24 lakh skilled or semiskilled workforce by 2017 but the projected supply does not meet the demand. On the other hand, the unskilled workforce is projected to be a surplus of about 10 lakh. Therefore, the key would be utilization of the unskilled labor—after certain skilling programs—as semiskilled for higher efficiency in industries and services. Industry associations should advocate more skilled labor in industries and mandate industries with certain PPP-based skilling initiatives for sustainable corporate citizenship actions. Along with this,

industries could also engage its current workers in up-skilling programs, especially in sectors such as tourism, hospitality, textiles, mining and construction. The average wage for the workers after training needs to be adjusted as per the minimum wages law, especially in service-related industries. Also, the contracting models for engaging unskilled workers for an average maximum period of 11–14 days across industries needs to be revamped, not by eliminating the model but by making it an inclusive one. The wages of skilled workers should be increased by 20 percent on an average with a minimum 22 days of work without any gender bias. Industries could also play a proactive role in setting course curriculum (in line with current industry or market requirements) and also in formation of state sector skill councils by approaching NSDC with suitable proposals (related to skilling infrastructure, capacity and certification) for industry clusters.

4.2.3 Recommendations for Training Partners and Providers

Training providers are key to the success of skill development initiatives. More training providers should be invited for opening centers across districts with suitable funding mechanisms. Based on the growth projections for the districts, available resources and industry's capacity to absorb skilled manpower, the training partners could develop operational plans across districts. While infrastructure support and capacity-building efforts could be provided by RSLDC and NSDC, partnership with local industries and service providers would enable better placements after training. This would basically boil down to the development of **Institute-level Skill Development Initiative** aimed at improving the current infrastructure for skilling (additions and optimization), training designs and overall employability of students to meet industry standards. This initiative comprises the following sub-initiatives and activities:

i. **Strengthening employment market linkage**

The objective of this initiative is to strengthen employment market linkages by networking with staffing agencies and linking supply with demand. The target group for this initiative is engineering, arts and science graduates, polytechnic and ITI students, even class tenth and twelfth students. The activities under this initiative will cover identification of staffing solution providers, mapping of the current pool of target groups and the current skill gaps among them, orientation programs on the job market, employment opportunities and skills required, and target group-specific training. The state government could also provide the necessary financial assistance for evaluating the current pool of resources by bank linkages for vocational training and carrying out orientation programmes accordingly. Apart from this, it could also provide skill vouchers to youths interested in training, giving them the choice to opt for a training of their choice.

ii. **Improving course curriculum**

Focus on specialization

This will focus on the tourism, agro processing, construction, IT and ITeS, automotive, engineering, and textile industries. Specific specializations in each of the industries will be covered under this initiative. Examples of the industry-wise curriculum are as below:

- Tourism: Inter-state tour operations, focus on foreign tourists and ticketing.
- Agro processing: Quality control and lab management, food retailing and branding, and packaging.

- Construction: Project planning and scheduling, accounting and control systems, project proposals, cost estimation, tendering and contract management.
- IT and ITeS: Specialization in medical transcription, and focus on communication—spoken as well as written.
- Automotive and engineering: Manufacturing technology, CAD/CAM and industrial automation, CNC and ISO Quality/Six Sigma.
- Textiles: Design, textile chemistry, spinning and garmenting, market access knowledge, merchandising, pattern-making, finishing and quality control.

Focus on practical orientation

The objective of this program is to back theoretical concepts with extensive exposure to the industrial environment. It will cover advanced technical knowledge at the concept and machine level, study of physical models to back the theoretical concepts and exposure to the latest industrial equipment. The time allotted to the practical component of the training module will also be increased from the current 10–15 percent.

iii. Focus on shared education service

The objective of this initiative is to train students in highly specialized trades through a shared education service model. This initiative will cover a list of university-approved specialized courses. These highly specialized courses will be offered at select educational institutes with the necessary infrastructure and faculty. Students from other colleges can get trained and certified by the host institute and course credits can be transferred. The host institute can generate revenue by way of training fee. This initiative will ensure quality education, reduce pressure on duplicating infrastructure, encourage specialization and generate revenue.

iv. Encourage private training providers

The focus of this initiative is on the shared service model for better utilization of infrastructure and equipment. Private vocational training providers should be encouraged to set up base in the state. A detailed view would be discussed in subsequent section (NSDC level).

v. Improve the quality of training for trainers

The objective of this initiative is to provide cutting-edge training programs on knowledge-based industries to select faculty members. Under this initiative, faculty members would be selected for university-approved specialized courses on the basis of their educational background, experience, institute profile, student profile and training needs. Selected faculty members will undergo a structured training for a period of four weeks during the summer vacation. At the end of training programme, the faculty members will undergo another three to four weeks of training with the companies. This initiative will ensure transfer of knowledge from faculty to students, better utilization of educational infrastructure, and will also encourage industry-institute partnerships. The cost of the training will be borne by the educational institution.

vi. Improving ITIs

The recommendations related to improving ITIs include experience sharing, focus on new courses, and introduction of short-term courses and institutionalization of a performance management system.

It would be inevitable for new training partners to explore the scope of building the business model keeping Rajasthan in mind. Some of the emerging sectors which could be on the priority shall be:

- Life skills and communication skills (English as the focus)
- Computer science basics (for IT and ITeS)
- Retail and basic marketing (for sales, front-office jobs, insurance, agro product industries)
- Driving and mechanic work (automobile and repairing services, transport and logistics)
- White goods services and multiskill technician (wiring, fitting, electrical, mobile, plumbing)

Apart from these, the training partners could find good working ground in enterprise building in nonfarm sectors such as handicraft, wood work, metal and stone works. These would require special structures and models, and training providers would need specific proposals to address the target segments.

4.2.4 Recommendations for NSDC

NSDC can shoulder the responsibility of supporting the skill mission of the state by emphasizing on long-term capability building and stronger institutions (as partners). It should focus on:

- Building long-term capability of existing clusters
- Creating market awareness
- Building long-term capability of schools and colleges

The existing partners would primarily focus on the above listed points to make the best of their core competency to provide a win-win solution on the ground. As envisaged earlier, NSDC would be able to bring into the state the right kind of private players across sectors, and would also encourage local skill development institutes to come on board as partners.

i. Building capability of clusters

The objective of this initiative is to build long-term capability, ensure long-term availability of highly skilled human resources, and maintain the competitiveness of the resident industries. The focus should be on automotive, engineering, tourism and handicraft industries. Deployment of cluster development initiative for building long-term capability would be done by engaging the right kind of partners with proposals having a cluster perspective plan, preparing a skill development plan, and establishing a high-end training centre. As part of the New Industrial Policy in Rajasthan, the state government should encourage creation of centers of higher education and research for particular industry clusters, and companies establishing centers of higher education and research should be given training incentives.

The sector skill councils (SSC) would be an important enabling factor from which the state could leverage on the structure and the national occupational standards (NOS). In brief, the objective of the SSC is to complement the existing vocational education system and address skill gaps through research, improved delivery mechanism and building quality assurance. The National Skill Development Policy (NSDP), 2009, mandates the SSCs with the following functions:

- Setting up Labour Management Information System(LMIS) to assist in planning and delivery of training
- Identifying skill development needs and preparing a catalogue of skill types
- Developing a sector skill development plan and maintaining a skill inventory

- Developing skill competency standards and qualifications
- Developing a standardized affiliation and accreditation process
- Participating in affiliation, accreditation, standardization processes
- Planning and executing training of trainers
- Promoting academies of excellence

As of October, 2012, 18 SSCs have been approved by NSDC, and 14 approvals were in the pipeline or under due diligence. A snapshot of the SSCs (as per NSDC records) is given below:

Approved by NSDC	SSC Proposals under Diligence with NSDC	SSC Proposals in Pipeline
Auto	Domestic Workers	Mining
Security	Life Sciences	Power
Retail	Foundry	Hospitality
IT/ITES	Handicrafts	Pharmaceuticals
BFSI	Textiles	Beauty & Wellness
Media	Aerospace & Aviation	Steel
Healthcare		Oil & Gas
Gems & Jewelry		Education and skills
Rubber		
Leather		
Electronics Hardware		
Food Processing		
Telecom		
Agriculture		
Logistics & Transportation		
Plumbing		
Construction and Real Estate		
Capital Goods		
	Priority Sectors	
	Large Workforce	
	Informal Sector	

Table 17. Snapshot of SSCs (Source: NSDC, October 2012)

ii. Creating market awareness

Creating market awareness among the employable youth is critical for setting high standards. The objective of this initiative is to set high aspirations, create awareness about emerging trends and opportunities, and create role models. The target group will be engineering, arts and science graduates, ITI students and diploma holders. Key initiatives will include exchange programmes, counselling and training with leading partners in skilling in India, and participation in the World Skills Competition showcasing the skills available in Rajasthan.

iii. Skill assessment, capacity building and support

The objective of this initiative is to map the current skill levels of students against industry standards, with a specific focus on soft skills. The target group will be engineering, polytechnic and ITI students. Activities under this initiative will include a skill assessment of first-year students, an annual review of the process and obtaining feedback at regular intervals. Undertaking a specific skill development

program to address skill gaps will also be part of the initiative. Partners with experience in such initiatives would be facilitated to set up resource centers and ideal centers for each industry cluster/trade in every district.

To summarize, NSDC has a key role to play in building capacity for skilling in the state like the formation of state sector skill councils or committees, innovative PPP projects in some of the key growth sectors such as construction, textiles, automobiles, services, tourism, hospitality and mining. Some of the important industry clusters are automotive, stone and marbles, handicraft, gems and jewelry, oil and food processing.

To conclude, focus is needed in all the above mentioned areas to ensure the emergence of a skilled workforce, which is in the interest of all stakeholders—the government, industry, institutes and the society. The Government of Rajasthan will continue to play an active role in these initiatives and coordinate with all stakeholders in skills development and NSDC will be a catalyst for an enabling skill development environment. Thus, by transforming the skill landscape of the state, we would be preparing the state to face the challenges and opportunities of economic growth in the coming years.

Important facts and figures from the study related to projections of population and workforce:

Projected population of Rajasthan by 2022: ~887 lakh (provisional data)

Projected labour force of Rajasthan by 2022: ~ 469 lakh

Projected workforce of Rajasthan by 2022: ~362 lakh

Unemployment rate of Rajasthan in 2011-12: 1.4 (ranks 4th in overall national study by Labour Bureau, Ministry of Labour and Employment)

Skill Gap in Rajasthan by 2017: ~24 lakhs (as per the study)

% of workforce under various categories by 2017: Skilled- 16.59%, Semi-skilled- 46.07%

Incremental Human resource requirement across high growth sectors by 2017 & 2022: ~60 lakh & ~ 90 lakh (projected values; sectors from secondary and tertiary only used for this analysis)



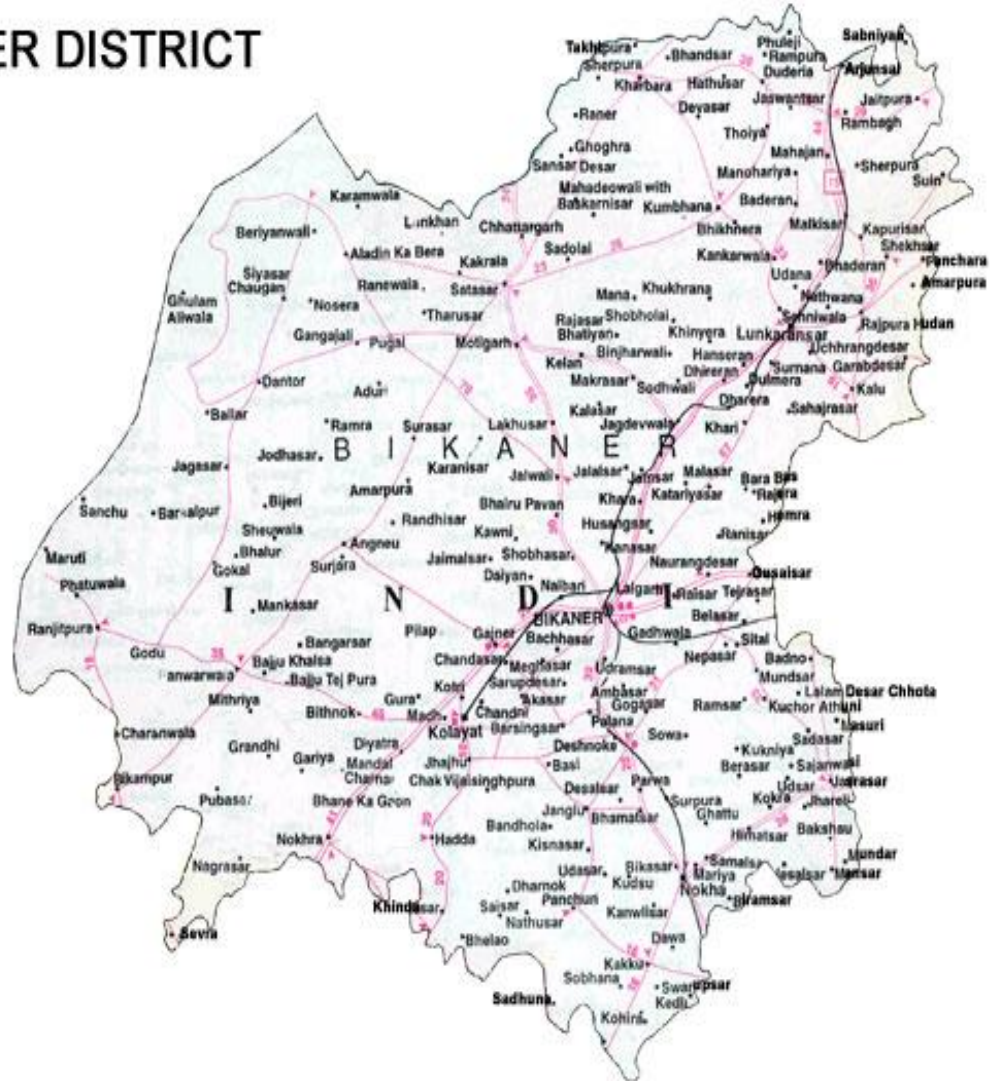
5. District wise Skill Gap Findings

This chapter outlines the overall District wise socio-economic analysis on workforce pattern, demography, and economic profile of district by industry, state of education. The main objective of this section is to bring out insight on the Skill patterns prevailing in districts and the expected skill requirements to match growth plans across various high impact industries.

Chapter 5: District wise Skill Gap Findings

5.1 District Bikaner

BIKANER DISTRICT



District Skill Workforce Face Sheet-2012								
District	Bikaner			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	8	No. of Villages	874	No. of Schools (elementary & Sec.)	3081			
Basic Data								
Population (in '000s)	2368	Overall Literacy (in %)	65.92	Sex Ratio	903			
Decadal growth rate(in %)	24.48	Female Literacy(in %)	53.77	HDI Ranking (2008)	3			
% Urban Population	33.95	Male Literacy(in %)	76.90	Per Capita Income (in Rs.)	18355			
Key Data				Source :Statistical Abstract,2011; Eco Review 2010-11; HD Report 2008; DIC 2009				
Workers participation rate (2001)	39.5	Share of primary sector (%)	61.4	Share of secondary & tertiary sector (%)	38.6			
No. of MSME/Industries	6788	Total Employment (in 000s)	35.3	Total Investment (in lakhs)	29535			
No. of colleges (PG & Graduation)	28	Total graduates (In '00s)	153	Total Post graduates (in '00s)	26			
No.of VTIs(registered ITI+Poly+ITC)			09	Total trainees trained (in '00s)	16			
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	53461	60236	60493	61874	59884	62591	61651	1.16 Lakh
Semi-skilled workforce	69208	73988	76186	79016	80198	83135	84693	

5.1.1 Demographic Profile:

Bikaner is situated in the northwest of the state of Rajasthan, about 330 kilometers from the capital Jaipur. It ranks as the third largest district of the state with the second lowest population density of the state with just 78 (Census, 2011-Provisional). It stands third on the Human Development Index (0.779) and 7th on gender development index (0.525). It lies in the arid, sparsely populated and vast Thar region, where livelihoods are traditionally dependent on millet crops (low intensity cropping), livestock, handicrafts, and extensive out-migration for labour. Socially orthodox and rigid caste and gender relations define the social fabric of the district. The school dropout rate is highest at elementary and secondary education stage (retention rate is just 57).

As per provisional census 2011 data, Bikaner accounts for population of 23.68 lakhs with sex ratio of 903 (compared to 2001 census figure of 896) which is on the lower side of the state ratio of 926. There was a decrease in the decadal growth of population of 13.23% showing trends of population stabilization.

S.no	Section	Unit	Quantity/
			Location
1	LOCATION		
	Latitude	degree min	27.11' to 29.03'
	Longitude	degree min	71.54' to 74.22'
2	AREA		
	Total geographical area	sq km	30247.9
3	ADMINISTRATION		
	Tehsil	number	8
	Villages	number	874
	Municipal Corporation	number	1
	Municipality	number	3
4	Land Use Pattern		
	Total Area	Hectares	30247.9
	Total Irrigated area	Hectares	228355
5	Population (census 2011)		
	Total population	number	2367745
	Men	Number	1243916
	Women	Number	1123829
	SC (2001)	Number	803736
	ST (2001)	Number	383566
6	Literacy (except 0-6 age group)		
	Total literate	percent	65.92
	Men	percent	76.9
	Women	percent	53.77
8	Energy		
	Electrified Villages	number	779
9	Industries		
	Registered Small scale	number	6876
	Employed persons	number	30175
12	Education (Primary)		
	Primary Schools	number	1459
	Middle Schools	number	648
	Aided	number	44
13	Education (Secondary)		
	Secondary Schools	number	220
	Senior Secondary Schools	number	69
	Aided	number	12
14	Higher Education / Others		
	Colleges	number	28
	I T I	number	4
	D I E T	number	1

Table 18 Bikaner District Profile- a snapshot

The worker participation rate in Bikaner is 39.5% (HDI, Rajasthan, 2008) with primary sector engaging close to 61.4% of the workforce and rest in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 17% (Urban- 28.7% & Rural- 45.4%). Agriculture is the main activity in the district providing employment to about 59.02 percent of the working population. The other occupation mainly comprise of artisans activity, in non –farm sector as well as “Bhujia” manufacturing (SSI).

The average literacy rate of Bikaner in 2011 is 65.92% compared to 57.36% of 2001 which is remarkable but still is lower than the state figure of 67.06%. According to Census 2011 provisional data, the male literacy figure stands at 76.90% (lower than state average). On the other hand, female literacy was at 53.77%, remains higher than the state average though is on the lower side in comparison to the male figures.

5.1.2 Education Infrastructure and Utilization

Bikaner status in literacy was marked below the state average. According to Census 2011 provisional Bikaner has a total of 3081 schools from pre-primary to senior secondary levels. Considering the density of population and the vast area, the school spread is average in comparison to the state average and across other districts. As mentioned earlier, the retention rate of students in schools of Bikaner is quiet low but the lack of infrastructure for informal education through polytechnics and ITIs, massive out-migration and social fabric results in lower results of technically skillful employees.

Education	Bikaner	Rajasthan
Pre Primary & Primary	1524	49546
Upper Primary	1068	38889
Sec/ Sr Sec	489	19135

Table 19 Bikaner vs. Rajasthan education status

At the Intermediate college level, courses are available in the area of science, arts and commerce. There are total of just five recognized vocational training institutes in Bikaner district out of which 03 are ITIs and 02 are polytechnics. The enrolment/ training of aspirants in these institutes are catering for just 3.5% in case of ITI scholars and 9.6% in case of polytechnic in comparison to the state. A total of just 1700 aspirants got trained in 2009-10 in the recognized training institutes.

As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 9 partners implementing skilling initiatives with 24 approved programs

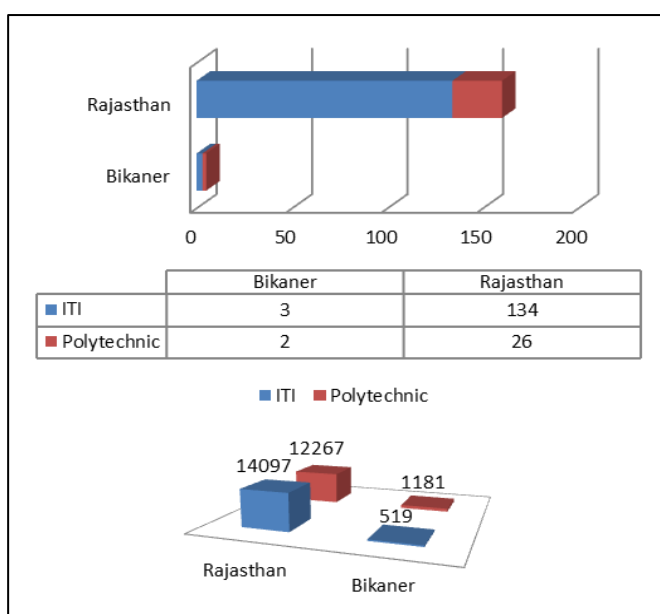


Figure 43 Number of ITI & Polytechnic, 2009-10- Bikaner

(3 out of which are completed and 5 are ongoing). A detailed view of the vocational training of Bikaner could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.1.3 VTI's demand across various trades in Bikaner district

The existing scenario of VTIs in Bikaner seems more dominant by the government initiatives of ITIs and polytechnics. Few of the private players have eventually emerged for catering the needs for skilling youths of the district. The government VTIs interviewed in the survey was five and four were from the private. The courses which were offered by the government VTIs were predominantly self-employment based or to cater the local market needs. In private VTIs the courses were more female oriented and 9 of the 11 courses offered were preferred by the women. The details of the courses offered in the VTIs of Bikaner are represented as follows:

Government. VTI Trades		Private VTI Trades	
Receptionist	Embroidery & ladies work	Ladies tailor	Dairy management
Web designing	Food preservation & vegetable processing	Children tailor	Animal husbandry
Makeup Artist	Hindi stenography	Handicraft	Readymade garments
Hair cutting	Ladies Tailor	Accounting on Computer	Fashion Designing
Coloring & Styling	Makeup Artist	Marketing & Selling	Office Assistant
Accounting on computer	Electrician		
Tree farming	Salt processing		
Vegetable processing	Cutting & swing		

Table 20 Trades offered in Bikaner district_sample study

The total 5 VTIs (government) covered in the sample out of which 2 were Women ITIs. The clear observation made was that these government VTIs provided a wide range of courses (16 courses) with each sanctioned batch strength of above 20 (either 25 or 21). Most of these courses were oriented towards self-employment training and dropout rate was low. Out of a total of 375 aspirants across various government VTIs, only 125 (33%) were females. The preferred courses of the women were tailoring, embroidery, receptionist, and web designing. The average age of males was ranging between 22- 25 (except for hair cutting- 30) and for females was 20-24. It could be observed from the age grouping that the acceptance of vocational training and realization of its relevance for earning livelihoods as an option was generally late keeping in mind the low literacy rates of Bikaner. More often the courses provided were less oriented for direct placement in the market rather introduced the aspirants for self-employment for males and as another home based know how for females. The selection of course design and other influencing factors for finalization of courses by the VTI functionaries were more or less determined by the availability of facilities and equipment. All the VTIs

claimed to have updated technologies, equipped labs, and space for conducting the training, electricity and water supply. Almost all of them did not have any hostel facility (except one for boys) or any commuting facility for the aspirants.

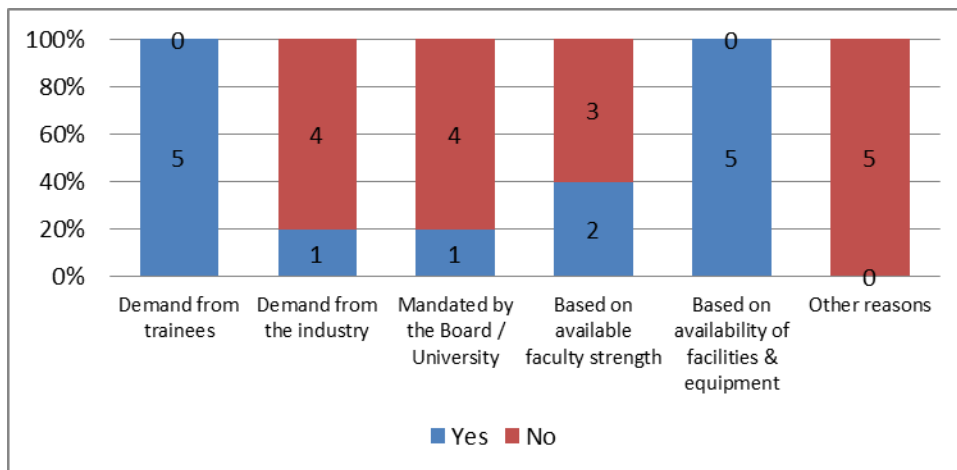


Figure 44 Factors influencing course selection and design- Government VTIs; Bikaner Sample

Interestingly the VTI functionalities claim that the courses on offer in these government VTIs are more demand driven as per the aspirations of the youths and less mandated from any university or board. The industry's role in

demanding courses favorable for its optimization was observed to be low and thus one could anticipate the less involvement of contemporary industries in course designing or structuring in these VTIs. No evidence of any kind of market research or study based course requirements were made across all the government VTIs.

On the other hand, the private VTIs (sample of four covered) offered 11 courses and nine out of these were female oriented trainings like tailoring, garment manufacturing, fashion and handicrafts. More than 55% of the total trainees in the current batches across all the courses were females and majority were absorbed in tailoring and handicraft making which were more or less informal/ unorganized sectoral engagements. The average age of the aspirants was also marked a low of 20-22 years only. Overall a few courses were observed related to imparting of technical know-how across the entire 9 sample VTIs. A similar trend in the demand for the VTIs was observed in case of private players as well. The demand from consecutive batches and facilities available, drive the course selection and design in all the private VTIs. It appears that there is no interaction with the industry to highlight the demand of the current demand of the industries of the district. Hostel facilities and commutation remains on the lower interest among all the private institutions.

5.1.4 Placement & Absorption Trend

The overall placement scenario remains more or less dominated by the factor of self-employment trend. Though Bikaner possesses a considerable small scale industrial base, engaging a substantial workforce; the interaction with the VTIs remains limited and thus, the placement remains far below expectations. Only electrician course trainees were employed and rest information could not be tracked, even in case of private players (may be due to newly introduced courses and agencies). The thrust of the VTIs (perhaps based on the market conditions) is more focused on developing trained manpower for the self-employment sector.

5.1.5 Industry Mapping

The Industrial Development movement in Bikaner can be traced to as early as in 1962. Though industrialization process started somewhat late but in a short span of time, the city's industrial growth is remarkable. In between 1967-70, the first industrial area was outlined and the Bikaner district association was formed. Thereafter, instead of moving to other regions for doing business, people preferred to stay at Bikaner to do business. Soon, favorable business conditions encouraged people to start industries in their home district. Not only residents of Bikaner but also people from neighboring areas started to participate in the eruption of industrial development of the city.

During early eighties, the small scale industries got the attention and the progress was achieved at the end of eighties (presently the numbers are close to 6780 SSI). During this period, Bikaner saw tremendous growth in the industries like wool, agricultural products and chemicals and ceramics. At present, Bikaner's industrial estate has 250 fully developed plots where industries are thriving greatly. In 1980, the Bikaner Industries Association proposed to set up a second industrial estate and for which a 250 acres area of land was allocated.

The most prosperous industries in Bikaner are:

Woolen Industry: Bikaner boasts of being the biggest Woolen Mart not only in India but also in Asia. Bikaner has been a center of wool business for more than 185 years. The wool is taken from Bikaner to Badhoi in Uttar Pradesh for making good quality carpets. Carpet weaving is also a famous industry at Bikaner.

Ceramic Industry: In and around Bikaner, Gypsum is found in good amount. Thus, industries based on gypsum, white clay and fullers-earth are quite abundant in Bikaner- close to 110 ceramic based industries.

Bhujiya and Namkeen Industry: Bikaner is famous for its Papad and Bhujias. There are hundreds of big and small units in Bikaner which are involved in making Papads and Bhujias of different varieties. Thousands of people are employed in these papad and namkeen industries. At present, there are about 425 units in Bikaner producing Bhujias. These units are located in the Bikaner district and nearby areas of Shri Dungargarh, Churu, Nagaur and Sri-Gaganagar. Except a few most of these units are small and cottage type industries.

There are total eight industrial areas in Bikaner, namely Bichhawal, Bikaner, Khajuwala, Loonkarsar, Napassar, Nokha, Karni, Khara. The main existing industries of Bikaner are Bathroom fittings, Bikaneri

EXISTING STATUS OF INDUSTRIAL –AREA AS ON
31.03.2009

S.No.	Location	Area in Acres	Plot planned	Plots allotted	Plots vacant
1.	I.G.C. Khara	726.91	503	500	03
2.	Rani Bazar	155.33	223	223	0
3.	Bichwal	282.37	325	325	0
4.	Karni I.A.Ph.I	113.81	144	144	0
5.	a) Karani I.A. Ph.II	160.60	216	208	08
	b) Agro & SSI Ind.Block	108.00	435	385	50
	c) Split Groth Centre (Karni Exp.)	374.75	509	NIL	509*
6.	Loonkaransar	81.71	156	96	60
7.	Napasar	42.13	149	103	46
8.	Nokha(DEV)	39.31	48	40	8
9.	Nokha(UNDEV)	30.75	25	25	0
10.	Khajuwala	41.56	96	45	51
11.	Shri Dungargarh	25.00	36	36	0

Source: RIICO, Bikaner

*-Area under Development

Table 21 Status of Industrial Areas-Bikaner, Rajasthan

Bhujia, carpet and shoddy yarn, cattle feed, cement, ceramic tiles, cotton (in bales) textiles, dairy products, groundnut oil, gypsum, ginding, handicraft items, leather footwear, machine tools and parts, mosaic tiles, mustard oil, oil extraction and refinery, papad and magori , plaster of paris, polyethene film and bags, PVC cables, rasagollas, textiles, woollen blankets and shawls, woollen carpets, cotton blankets, cable wire wood and wooden products.

Large & Medium Industries

There are only few large and medium scale industries in the district. According to DIC, Bikaner last updated on March, 2009 officially there were only 4 large and medium scale industries which are registered.

MSME in Bikaner

According to D.I.C data (March, 2009), there were around **10608 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of Rs.21,708.88 lakhs providing employment to **46,623 persons**. The growth of MSME over two decades has been phenomenal stating the industries grew by more than 51.8% and the investment by over 81%.

The small scale and cottage industries need a special mention and break up across various sectors as they cater for maximum contribution in the growth factors of the industries. A total of **6786** numbers of registered as on March 31, 2009 employing **30,175** persons with a total investment of Rs. 52,137.41 lakhs. (Includes the figures of cottage-tiny industries as well; source DIC Bikaner, March 2009)

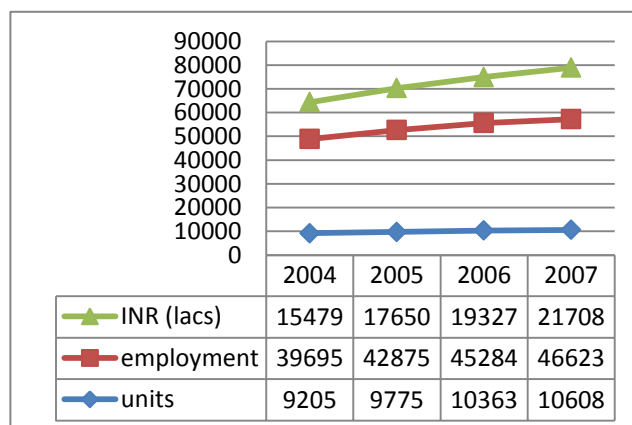


Figure 45 Employment in Industrial set up Bikaner

5.1.6 Sector wise mapping of industries in across Bikaner

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large and medium scale industries) and would also represent any new sector other than the listed sectors prevailing in Bikaner. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections** like **high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

Sectors	Units	Employment	Investment (Rs lakhs)
Agriculture & Allied			
Auto & Auto Components			
Chemical & chemical products	208	912	801
Construction Material & Building Hardware	11	35	18
Electronics & IT Hardware			
Food Processing	1187	5983	4407
Furniture & Furnshing	469	1727	782
Leather & leather goods	55	570	10
Gems & Jewellery			
Retail			
Textile	1923	8945	7224
Unorganized Sector	1343	2970	233
Building Construction & Real Estates	80	158	27
Education & Skill Development	12	49	3
Healthcare	16	51	66
IT & ITES			
Media & Entertainment			
Tourism, Travel, Hospitality & Trade	23	45	3
Transportation, Logistics, ware housing & packaging	11	88	104
Rubber & Plastic	120	750	286
Mines, Metals & Minerals	1122	7116	4740
Machinery, Electricals & Manufacturing	221	1049	1421
High	Units>200, investment>1000,emp>1000 – all applicable		
Medium	Units>100, investment>200, emp>750- all applicable		
Low	Units> 10, investment> 30, emp>30 – all applicable		
Emerging	Investment & demand based sectors of district-DIC		

Table 22 Sector wise mapping of industries in Bikaner

The total investment in the district summed up across sectors as per DIC report was Rs. 41238.77 lakhs. Some of the major contributors were Food Processing, textile, Minerals and metals along with unorganized sectors of bhujia making, etc.

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of senior level functionaries from 10 diverse industries located in Bikaner district of Rajasthan. These functionaries represented different levels of management as Partners, Directors, General Managers, HR Managers, etc.

Type of establishment	Major Product(s)
Single Ownership (2 firms)	Plaster of Paris (2 firms)
Private Ltd. (2 firms)	Threads, Carpets, Woolen Products (2 firms)
Partnership Firm (5 firms)	Cement (1 firm)
Multinational (1 firm)	Tiles & Dyes (1 firm)
	Food Products (4 firms)

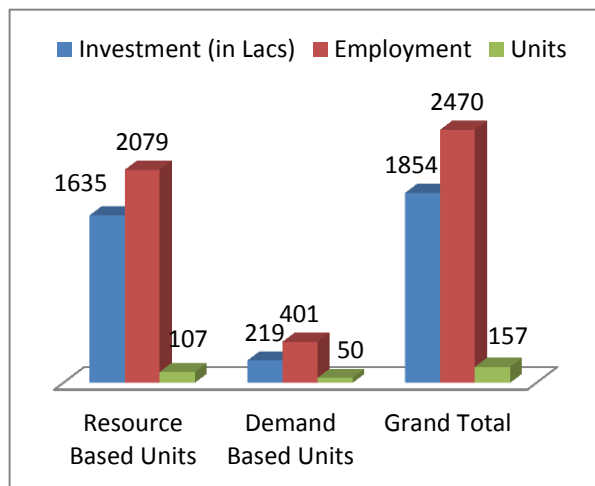


Table 23 Break-up of industries in Bikaner (Sample study)

Figure 46 Projected units across sectors, employment & investment (Bikaner)

These industries were selected as large (3), medium (4) and small (3) covering various growth sectors of the district like food processing, textiles, metals & minerals, and manufacturing. The industries like cement and Plaster of Paris were performing below their production capacity.

All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers. The oldest establishment (Raj Plaster Private Ltd.) dates back to 1969 while the youngest establishment (CH. Woolen Mill Private Ltd.) was established in 2002.

5.1.7 Workforce Demand and Supply

The major workforce participation observed in Bikaner district over a period of two decades has been engaged mainly as cultivators/ agricultural laborers even though with low productivity. The balance of the force close to 31% is engaged majorly in informal or small scale industries. There is declining trend observed in the workforce engaged as agricultural laborers & cultivators (close to 5%) where as an increase of 8% in the other workers group. Engagement in secondary and tertiary sector shows an increasing trend as per the industrial growth of the district. Looking at the present resources and skill set of the workforce, agro based industries, artificial jewelry, electrical and automobile should play a key in future. Development of water dependent industries would be difficult in present conditions.

The major demand in terms of expectations from the employers interviewed were skills and loyalty (3.3 on a scale of 5) in comparison to the relatively low priority of learning and development scope (2.2) of the worker. Productivity and efficiency was rated at 3.1. Clearly learning and development of workers takes a back seat in comparison to the skills, loyalty, productivity and efficiency etc.

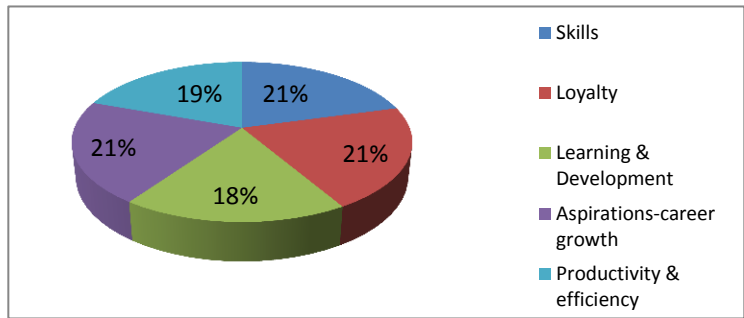


Figure 47 Employers demands in terms of expectations from workers (Bikaner sample)

5.1.8 Projected Workforce Demand

There has been considerable increase in the number of full time workers over a period of time by close

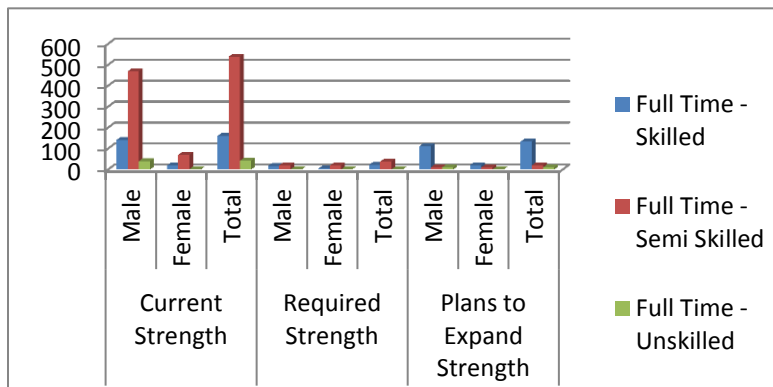


Figure 48 Present status of skilled workforce and demand for full time workers (Sample Bikaner)

to 62%, though majority of the industries interviewed still feel the requirement of semi-skilled workers over the skilled workers for their full time roles. Apparently the number of semi-skilled workers in female category has grown over five times. A clear distinction could be observed in the preference of only skilled workers for the contract and daily wage worker category.

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories where a need to expand their full time workers are concerned.

Further classifying into the staff roles of these industries, the demand for well qualified professionals could be observed for senior and middle level management. Similar responses were also found for office administration and accounting positions. In case of support staff the general yardstick followed was class 10th pass and not necessarily the skills possessed. There were marked differences in the wages of the fulltime workers and skilled fulltime workers. A significant gap is observed between the wages paid to male and female workers. More employers are willing to increase

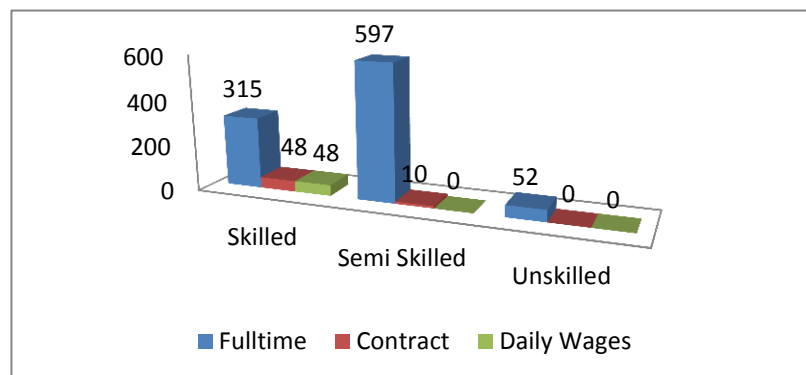


Figure 49 Requirement of skilled, semi-skilled and unskilled workers across sample industries in Bikaner

the wages of skilled male and female workers compared to the semi-skilled or unskilled categories. Male workers stand a significant chance of increase in wages as well.

The difference in the wage structure varies from Rs. 41 in semi-skilled category to Rs. 83 in unskilled. The skilled female workforce gets an amount with a difference of Rs. 72 in comparison with the skilled males. All these comparisons stand good for full time workers only. Contractual and daily wage workers' wages do not have any significant changes though the actual wages are too low.

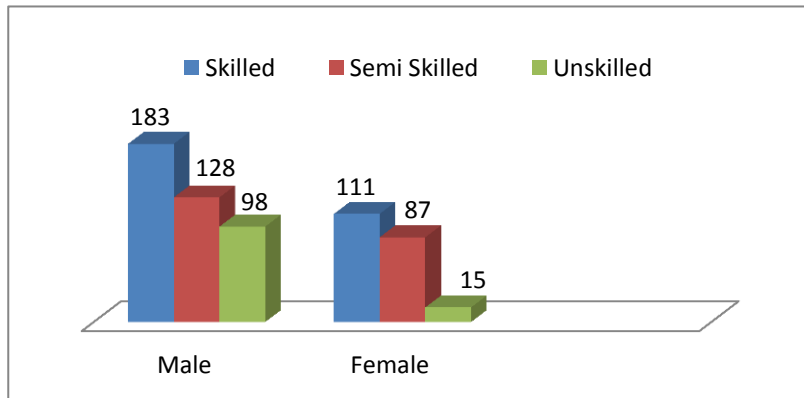


Figure 50 Wages of skilled, semi-skilled and unskilled workers (all full time) in the sample survey of Bikaner

The historical trends of the district and the projections made based on the inputs determined in the methodology for doing the projections provide certain figures of skilled and semi-skilled workforce and the gap between them. It is also important to highlight that the supply figures of the workforce do not necessarily determine the employable workforce of the district. It ranges

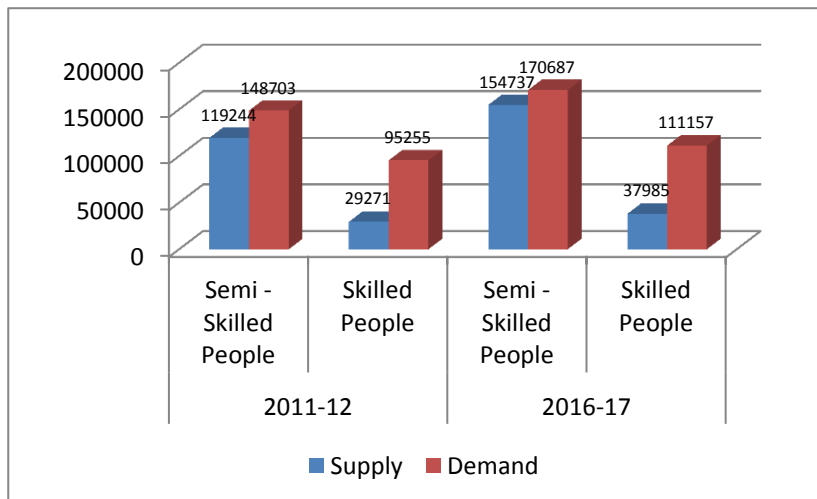


Figure 51 Workforce projections in skilled and semiskilled in 2011-12 & 2016-17

from just 3-5% of the supply in the skilled categories who are employable and from 12-15% in the semi-skilled who are employable at various sectors (figures determined by primary analysis of figures at the state level). As per the projections the existing gap between the semi-skilled workforces would gradually decrease keeping in mind the anticipated investment

with experience. The demand still remains on the higher side calling for higher degree of skilling initiatives for the district.

pattern, skilling initiatives and also the gradual on job skilling

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of total requirement
Agricultural Sector								
Unskilled	579640	646299	668949	678783	679060	717354	722687	
Semi-skilled	47253	52687	54534	55336	55358	58480	58915	
Skilled	3150	3512	3636	3689	3691	3899	3928	
Total demand	630043	702499	727119	737808	738109	779733	785530	70%
Industry Sector								
Unskilled	72894	77991	79033	83596	84923	87945	90046	
Semi-skilled	33643	35996	36477	38583	39195	40590	41560	
Skilled	5607	5999	6079	6430	6533	6765	6927	
Total demand	112144	119986	121590	128610	130651	135300	138533	12%
Services Sector								
Unskilled	24253	25723	26651	27700	28307	29365	30091	
Semi-skilled	56590	60020	62185	64634	66049	68518	70212	
Skilled	80843	85743	88836	92334	94355	97884	100303	
Total demand	161686	171486	177672	184667	188711	195767	200605	18%
All Sectors								
Unskilled	676786	750013	774634	790080	792290	834664	842825	
Semi-skilled	137486	148703	153196	158552	160602	167588	170687	
Skilled	89600	95255	98551	102453	104578	108547	111157	
Total Demand	903873.1	993971	1026381	1051085	1057470	1110800	1124668	100%

Table 24 Organized labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors - Bikaner

Basis on the inputs received from sector wise expansion plans the Workforce projections could be made across different categories. The methodology defined in the projections (refer section of methodology) shall was used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Gems & Jewellery			
Tourism, Hospitality & Travel			
Building & Construction			

Transportation/logistics/warehousing & packaging			
Organized Retail			
Real Estate			
Media, Entertainment, content creation, animation			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 25 Sectoral demand for skilled, semi-skilled and unskilled workforce by 2017 -Bikaner

The demand projections suggest that the unskilled labour requirement continues to dominate the structure of labour force of the district followed by semi-skilled workforce demand across various sectors over the next five years. 70% of the organized workforce may be demanded in agriculture and allied sectors of food processing, dairy etc. 18% in the services sector followed by industry engaging of 12% of the workforce.

5.1.9 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in Bikaner district on the basis of manpower absorption and production in high growth industries in the district. The analysis would factor in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging. The secondary research performed on the district indicated the demand and supply trends emerging in the major sectors creating the employment avenues for the workforce. Similarly, the projected shortfall of workforce for various categories as Skilled, Semi-Skilled & unskilled would be as follows:-

Workforce Demand & Supply Gap							
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	259833	333025	356958	370937	372108	413892	420850
Semi-skilled	69208	73988	76186	79016	80198	83135	84693
Skilled	53461	60236	60493	61874	59884	62591	61651

Table 26 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Industries were more concerned with the factor endowments like power and land. Water supply and labor was least on the priority as labor availability remains high and dependence on water for existing industrial base is low.

Categories		Initial strength		Current Strength		Required Strength		Attrition		Plans to Expand	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Full Time	Skilled	115	11	141	19	17	5	45	30	112	21
	Semi Skilled	137	12	469	70	20	18	0	0	10	10
	Unskilled	28	0	40	2	0	0	0	0	10	0
Contract	Skilled	0	0	10	8	5	5	50	50	10	10
	Semi Skilled	0	0	10	0	0	0	0	0	0	0
	Unskilled	0	0	0	0	0	0	0	0	0	0
Daily Wages	Skilled	0	0	10	8	5	5	50	50	10	10
	Semi Skilled	0	0	0	0	0	0	0	0	0	0
	Unskilled	0	0	0	0	0	0	0	0	0	0

Figure 52 Representation of Skilled/ Semi-skilled & Unskilled workforce trend (sample survey)

- The VTIs did not cater for the industry requirements and more customized practical courses were suggested by the industry group to better the condition of skilled manpower.
- Demand for skilled workforce would be increasing over next three to five years keeping in mind the increasing investment pattern of the state. Major employment would be perceived in the wool products, plaster of paris, and oil mills. Other emerging industries like PVC pipes, fibre goods, pulses mills, energy, manufacturing etc. look promising to enhance wage based livelihood generation.
- Scope of self-employment and entrepreneurship in the district remains on a high, and government programmes like Khadi Gramudyog Programme aid by providing 25% subsidy.
- Private skilling initiatives are need of the hour to provide training in some of the important segments like computer based accountancy, sales and marketing, repairing (mobile, home appliances, wiring etc.) and auto mobile (mechanic etc.). Services in courier was also considered to be upcoming trade in the industrial set ups.

5.1.10 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Bikaner district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (70 youths) and FGD with youths were used to draw inferences of their thought process. The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work.

The in-depth interactions were held with 70 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

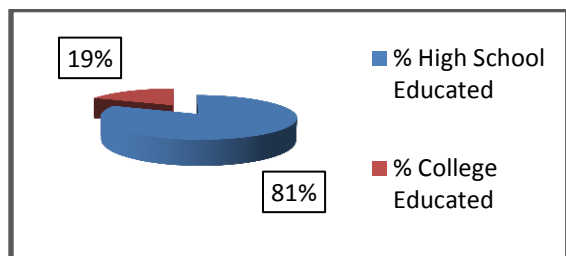


Figure 53 Youth Education Profile of sample

Youth Category	
Employed	9
Self employed	20
Unemployed	20
Trainees	21

Table 27 Youth Category in Bikaner-sample

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 19% of the youth covered were college educated and 81% had completed/drop out from high school education. All the respondents were covered from government VTIs as the private VTIs surveyed were comparatively new in their operations.

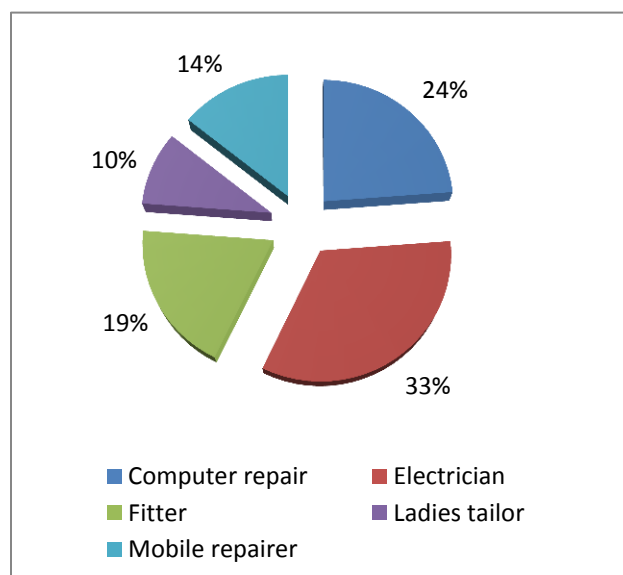


Figure 55 Profile of respondents (trainees) by trade in sample of Bikaner

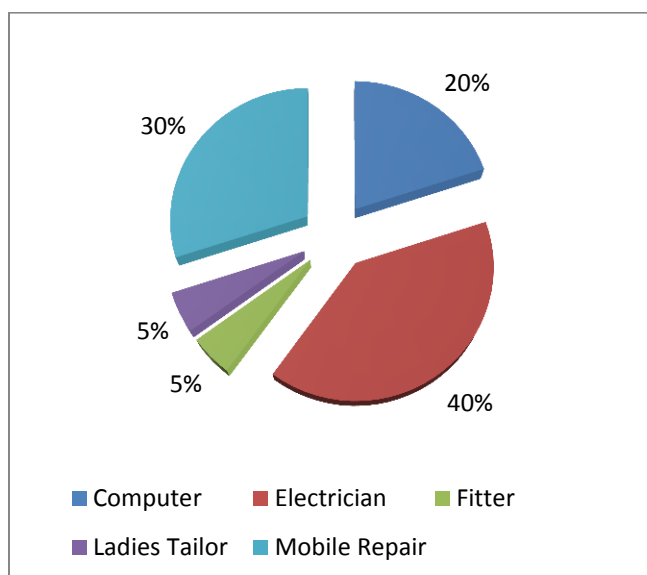


Figure 54 Profile of respondents (self-employed) by trade in sample of Bikaner

Among the respondents covered under the survey the course of electrician was one of the most preferred one followed by computer repair. Youths preference for self-employed courses in similar trades of electrician, computer applications, mobile repairer, fitter and ladies tailor was evident but in varying proportion. These trades appear to be the most popular trades as per the perceived demand in the market. There was general consensus regarding better self-employment opportunity in electrician and computer repairer. There were peer learning practices observed among the trainees in order to understand additional skill apart from the one they specialize on.

5.1.11 Youth's Perception

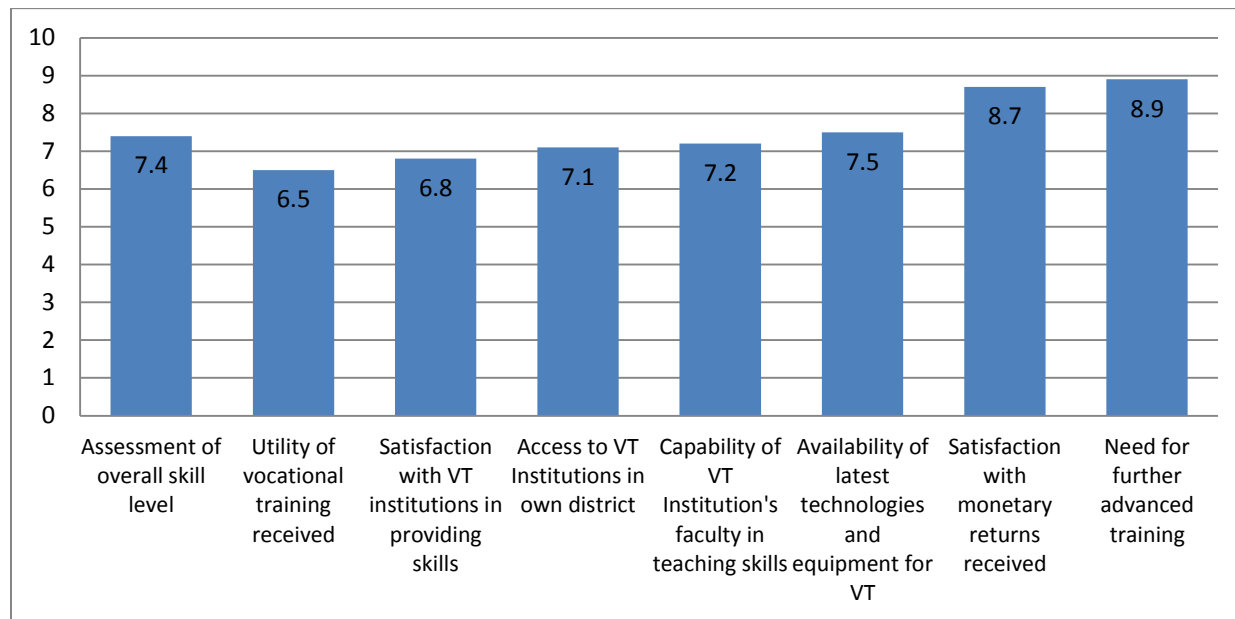


Figure 56 Bikaner Youth's perception, need and aspirations –Sample Group

There were pronounced needs for further advanced training provided for up-skilling and basic skilling in computer applications, as there were growing perception that the ability to operate computer better would aid in better employment opportunities. The satisfaction level for the entry level jobs and the compensation received initially was high. The most little rated was the utilization of the skills learned in the training institute across various fields of practical application and various walks of life (life skills and effective communication). All the respondents agreed on the use of good communicative English to be the key for working across the nation, quick promotion and enhance salary slabs. Though, many believed that all these were mandatory in the private jobs; not necessarily applicable for the government jobs.

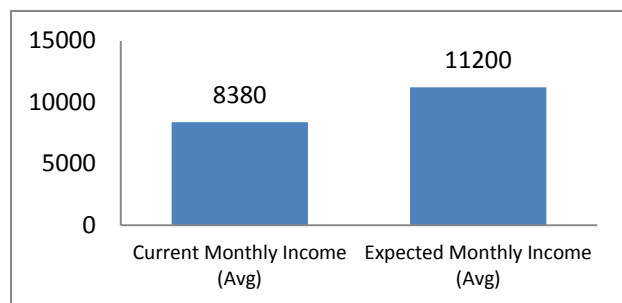


Figure 57 Income current and expected- sample group, Bikaner

Most of the trainees responded by mentioning that government jobs would be first preference even with limited salary slab and scope. This was very similar to the opinions their parents carried. In the worst case, self-employment would be sorted for. There was a feeling among the trainees that their ability to adapt to other skill requiring jobs was quiet limited and thus would prefer for self-assured livelihoods instead through self-employment. The expectation in terms of salary was about Rs. 8,000 expecting Rs. 3,000

hike after a year of work experience. The major aspiration from the entry level job remained work satisfaction, improved lifestyle, learning while applying the skills and family security. Families on the other hand wished for government jobs which were easy works with better salaries and job security.

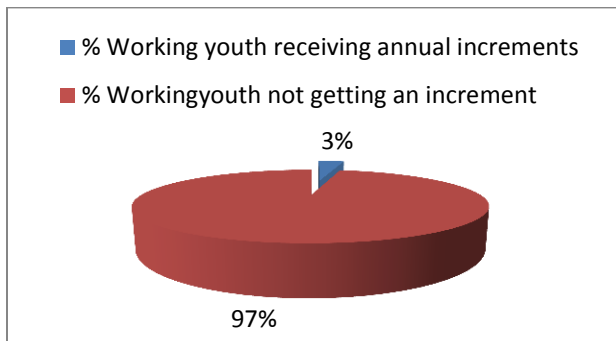


Figure 59 Sample youths increment status, Bikaner

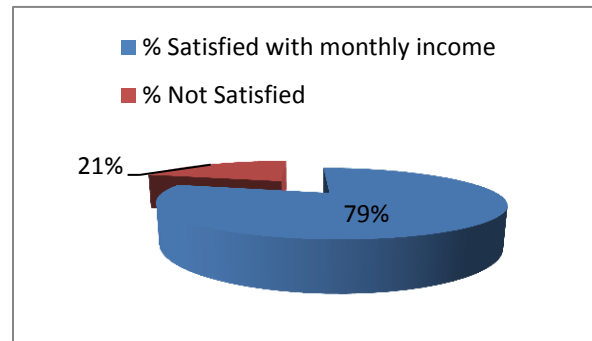


Figure 58 Sample group satisfaction levels with income, Bikaner

While a majority of respondent youth appears to be satisfied with the current remuneration received, around 21% respondents were clearly not satisfied with the present salaries. It was interesting to note that a large majority (around 96%) of the respondents reported that they do not receive any increment at their work place, which they expect after a year of experience. Preference for job locations had mixed response as few preferred self-employment over government jobs in order to avoid migration. This mindset did have marked changes in opinion once deliberated by the peer groups. Thus, it remained inconclusive regarding the option of migration seen as an opportunity or burden.

5.1.12 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 1.46 lakh of skilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more than double the number of institutes (from various training capabilities) at Bikaner district level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below. The overall scenario of the state would finally give major leads to apex bodies like NSDC for formulation of state specific portfolios to suit the requirements and address the future needs of the state in the skilled workforce.

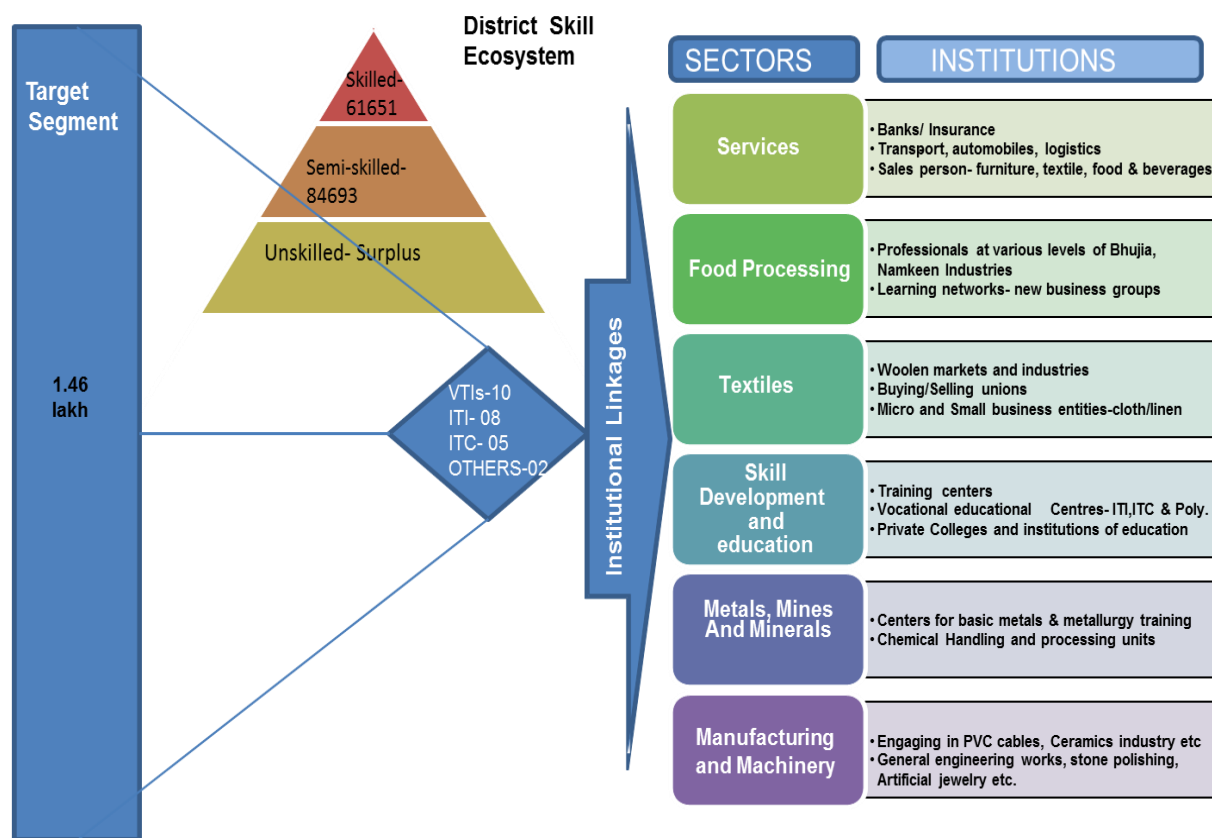


Figure 60 Optimization plan- Bikaner Skill Eco-System 2017

The key stakeholders' contribution in enabling to achieve the target (as shown in the figure) would be as follows:

- State: The state to target the skilled and semi-skilled segment for skilled training by creating additional 25 skill development centres (VTIs) in the district level of operations. It should encourage the private training partners to participate and operate in the district due to its large base of workers involved in secondary and tertiary sectors.
- Training Partners: The sectors for engaging more skilled workforce would be in food processing, textiles and services in the district. Course curriculum designed to cater for the institutions based in food processing, textiles, insurance (sales), education and training and engineering based institutions in metals and mining should be the focus. Along with these, specific course curriculum designed for communicative English, life skills and basics in computer would be the key areas of skill development training.
- Industries: The primary sectors of high human resource requirement would be food processing, textiles, leather, chemical and services and therefore would require increasing linkages with the related institutions for skilled workforce absorption

NSDC would be an enabler to lead the training partners in retail, textiles and food processing by encouraging specifically designed proposals with increasing the linkages in industry associations and PPP models.

5.2 District Jaipur

JAIPUR DISTRICT



District Skill Workforce Face Sheet-2012								
District	Jaipur			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	13	No. of Villages		2340	No. of Schools (elementary & sec.)		7170	
Basic Data								
Population (in '000s)	6664	Overall Literacy(in %)		76.44	Sex Ratio		909	
Decadal growth rate(in %)	26.91	Female Literacy(in %)		64.63	HDI Ranking (2008)		04	
% Urban Population	52.51	Male Literacy(in %)		87.27	Per Capita Income (in Rs.)		25130	
Key Data				<i>Source :Statistical Abstract,2011; Eco Review 2010-11; HD Report 2008; DIC 2009</i>				
Workers participation rate (2001)	35.50	Share of primary sector (%)		41.00	Share of secondary & tertiary sector (%)		59.00	
No. of MSME/Industries	28373	Total Employment (in 000s)		174	Total Investment (in lakhs)		173331	
No. of colleges (PG & Graduation)	202	Total graduates (In '00s)		614	Total Post graduates (in '00s)		65	
No.of VTIs(registered ITI+Poly+ITC)				65	Total trainees trained (in '00s)		154	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	271714	307060	327764	355376	372023	396259	414302	4.56 lakh
Semi-skilled workforce	208519	229356	230543	247232	248904	257521	261481	

5.2.1 Demographic Profile:

Jaipur is located at 26.92°N 75.82°E. It has an average elevation of 431 metres. The district is situated in the eastern part of Rajasthan. It is bound in the north by Sikar and Udaipur, in South by Tonk, Ajmer and Sawai Madhopur. Nagaur, Sikar and Ajmer in the west and in east by Bharatpur and Dausa districts. Jaipur sprawls over a magnificent area of 1766 km² in its Metro Region where as 725 km² in its Walled City.

Jaipur was ranked the 7th best place to visit in Asia and in another poll it was ranked third among twelve major Indian cities. Modern infrastructural facilities are developing fast. Jaipur has more than 60 Engineering colleges, 40 Business management institutes, 15 Pharmacy Institutes, 4 hotel management Institutes, 3 Medical colleges and 6 Dental colleges apart from more than 200 colleges in 8 universities.

It ranks as the largest district of the state with the highest density of population in the state of 598 (Census, 2011- Provisional). It stands fourth on the Human Development Index (0.778) and 4th on the GDI (0.547). As per provisional census 2011 data, Jaipur accounts for population of 66.6 lakhs (20% of the state population) with sex ratio of 909 (compared to 2001 census figure

of 897) which is on the lower side of the state ratio of 926. There was a decrease in the decadal growth of population of 8.15% showing trends of population stabilization.

S.no	Section	Unit	Quantity/
			Location
1	LOCATION		
	Latitude	degree min	26.55'N
	Longitude	degree min	75.52' E
2	AREA		
	Total geographical area	square km	11,117.8
3	ADMINISTRATION		
	Tehsil	number	13
	Villages	number	2340
4	Land Use Pattern		
	Total Area	Hectares	30247.9
	Total Irrigated area	Hectares	228355
5	Population (census 2011)		
	Total population		6663971
	Men		3490787
	Women		3173184
	SC (2001)		777574
	ST (2001)		412864
6	Literacy (except 0-6 age group)		
	Total literate	percent	76.44
	Men	percent	87.27
	Women	percent	64.63
8	Energy		
	Electrified Villages	number	779
9	Industries		
	Registered Small scale	number	6876
	Employed persons	number	30175
12	Education		
	Pre Primary & Primary Schools	number	2609
	Upper Primary	number	2428
	Secondary & Sr. Secondary	number	2133
13	Higher Education / Others		
	Colleges	number	202
	I T I	number	62
	Polytechnic	number	03

Table 28 Jaipur District Profile- a snapshot

The worker participation rate in Jaipur is 35.50% (HDI, Rajasthan, 2008) with primary sector engaging close to 41% of the workforce and rest in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 10% (Urban- 30.43% & Rural- 40.44%). The literacy rate of Jaipur in 2011 is 76.44 compared to 69.90 of 2001 which is remarkable and is higher than the state figure of 67.06. According to Census 2011 provisional data, the male literacy figure stands at 87.27 and female literacy was at 64.63, remains higher than the state average though is on the lower side in comparison to the male figures.

Some of the highlights of the capital city of the state of Rajasthan would be its emergence as an important destination for national and international cultural and economic conventions such as the annual Jaipur Literature Festival, and the Great Indian Travel Bazaar (GITB) 2008. Tourism contributes a large chunk to the city and state's GDP. Part of the world famous Golden triangle (Delhi-Jaipur-Agra), Jaipur has witnessed an annual tourist growth rate of 12%.

5.2.2 Education Infrastructure and Utilization

Jaipur's status in literacy was marked higher than the state average. According to Census 2011 provisional Jaipur has a total of 7170 schools from pre-primary to senior secondary levels. Considering the density of population and the vast area, the school spread is average in comparison to the state average and across other districts. The retention rate of students in schools of Jaipur is quiet high as well as the net enrolment ratio in close to 99.48(Rajasthan HDI report, 2009).

Education	Jaipur	Rajasthan
Pre Primary & Primary	2609	49546
Upper Primary	2428	38889
Sec/ Sr Sec	2133	19135

Table 29 Jaipur vs. Rajasthan education status

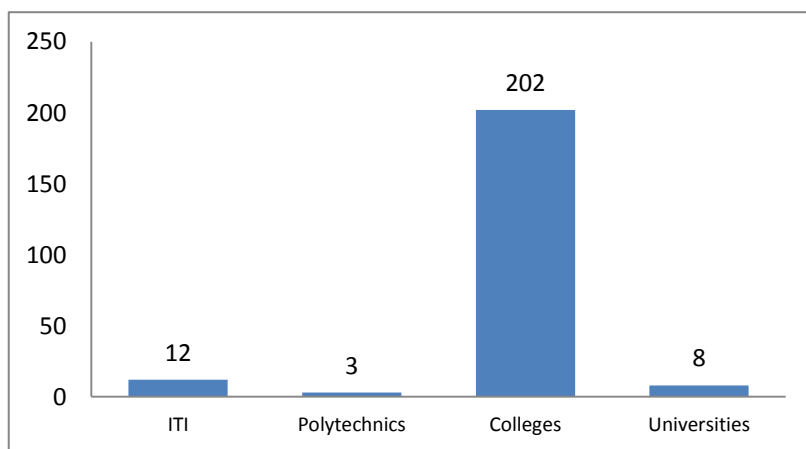


Figure 61 Number of ITI & Polytechnic, 2009-10- Jaipur

Education in Jaipur is increasing day by day because Jaipur is the capital of Rajasthan State. Education in Jaipur includes all kinds of education with fully facilitated colleges, schools and Institutes. Jaipur has its presence on globe as a big educational hub with world class educational infrastructure and facilities. Education in Rajasthan is growing rapidly. Education scenario of Rajasthan is completely changed

now in comparison of last few decades. Women education in Rajasthan is also promoted remarkably in rural areas. Awareness for education in Rajasthan is resulting in terms of migration of millions of students from small cities and rural areas of Rajasthan to Jaipur. There are many Universities in Jaipur which offer Undergraduate, Post-graduate, Diploma, and P.G. diploma, vocational and professional courses in wide range of subjects.

At the Intermediate college level, courses are available in the area of science, arts and commerce. There are total of just fifteen registered vocational training institutes in Jaipur district out of which 12 are ITIs and 03 are polytechnics. A total of just above 3000 aspirants got enrolled in 2009-10 in the registered training institutes. Apart from these, a number of private organizations have initiated the As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 39 partners (includes NGOs, ITIs, ITCs, private institutes) implementing skilling initiatives with 75 approved programs (65 out of which are completed and 10 are ongoing). A detailed view of the vocational training of Jaipur could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.2.3 VTI's demand across various trades in Jaipur district

The existing scenario of VTIs in Jaipur seems fairly balanced by the government initiatives of ITIs and polytechnics, ITCs, private institutions and NGOs. Private players have eventually emerged for catering the needs for skilling youths of the district in fields as follows:

- a) **Computer Based Accountancy:** With number of shops, shopping malls, retail stores and medical stores TALLY to maintain their financial data, growing fast in Jaipur there is a significant demand for skilled persons in Computer Based Accountancy. After VAT became effective in the state TALLY has become a necessity for all VAT paying shops.
- b) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is telecom or banks or insurance firms is growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field
- c) **Repair and maintenance of Refrigerators and ACs (electricians):** Jaipur faces extreme heat in summers and the homes and establishments are increasingly turning towards refrigerators and ACs for relief. The demand for technicians who can maintain and repair refrigerators and ACs is growing with the greater use of these equipment.
- d) **Hotel Management** The tourism industry is growing each year in Jaipur, thus bringing in a number of visitors to the city. The hospitality industry is growing as a result. There is a heavy demand of trained youth in this industry. Moreover, the youth of the area sampled have shown a lot of interest in following this trade.
- e) **Event Management** Jaipur is host to a lot of small and large medium events, whether they are high profile marriages or Hindi film shows. The need for persons who can anchor these events is being felt acutely. The salary levels in this trade are also expected to be high

The government VTIs interviewed in the survey was four and five were from the private. The courses which were offered by the government VTIs were predominantly self-employment based or to cater the local market needs. In private VTIs the courses were more male oriented and 1 of the 06 courses offered was preferred by the women. The details of the courses offered in the VTIs of Jaipur are represented as follows:

Government. VTI Trades		Private VTI Trades
Laser Graphics Making	Electrician	Electrician
Ladies Tailor	Fitter	Wireman
House Wiring	Electrical Mechanic.	Diesel Mechanic
Steno (Hindi)	Welder	Electronics
Steno (English)	Plumber	COPA
Radio / TV Mechanic	Diesel Mechanic	

Table 30 Jaipur district's (sample study) courses offered

The total 4 VTIs (government) covered in the sample. The clear observation made was that these government VTIs provided a wide range of courses (16 courses) with each sanctioned batch strength ranged from 18 to 63. Most of these courses were oriented towards self-employment training and dropout rate was low. Eight of the offered courses relate to the engineering stream of which diesel mechanic course, electrician course and house wiring course appear to be the most popular ones. Popularity and demand for basic engineering courses like electrician's, house wiring, and plumbing reflect the demand for these trades in synchrony with the construction boom observed in the state capital city of Jaipur.

More often the courses provided were less oriented for direct placement in the market rather introduced the aspirants for self-employment for males and as another home based know how for females. The employment exchange contributed for nil placements of the trained aspirants. The proactive industry participation and the placement through campus were the key factors for the

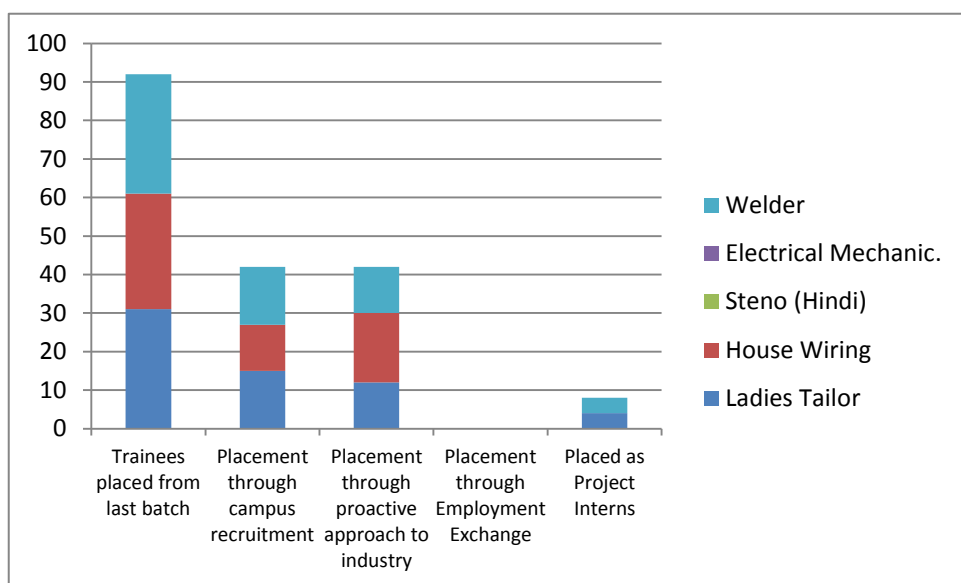


Figure 62 Major trades offering placement in Government VTIs (sample survey-Jaipur)

placement. Though the average placement observed was less than 50% for most of the trades offered. These trades majorly catered for the needs of more unorganized sectors. The selection of course design and other influencing factors for finalization of courses by the VTI functionaries were

more or less determined by the availability of facilities and equipment. All the VTIs claimed to have

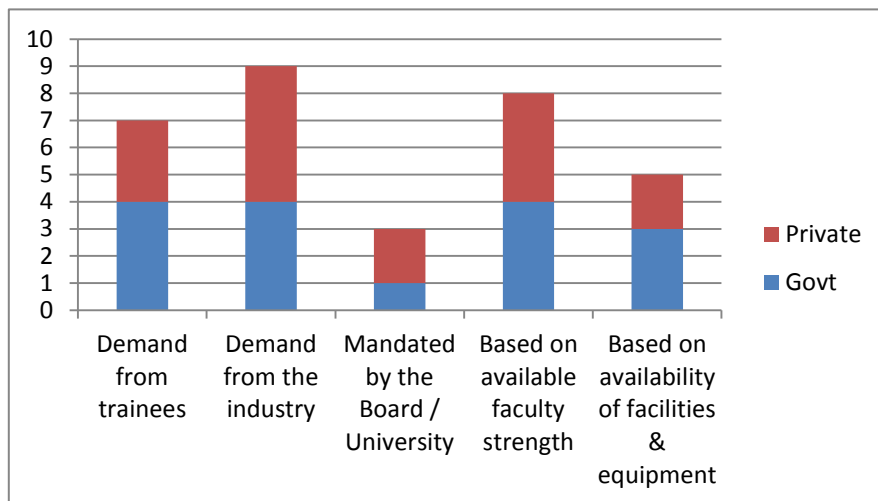


Figure 63 Factors influencing course selection and design- Government VTIs

updated technologies, equipped labs, and space for conducting the training, electricity and water supply. Almost all of them did have hostel facility for girls (none for boys) or any commuting facility for the aspirants both in private and government VTIs.

Interestingly the VTI functionaries claim that the courses on offer in

these government VTIs are more demand driven as per the aspirations of the youths and less mandated from any university or board. The industry’s role in demanding courses favorable for its optimization was observed to be high and thus one could anticipate the involvement of contemporary industries in campus placement in these VTIs. No evidence of any kind of market research or study based course requirements were made across all the government VTIs. But some of the private institutions which were the implementing partners of RSLDC did showcase some preliminary studies carried out to map the retail, ITES, hospitality and other skilling sectors like gems and jewellery, auto and transport etc.

5.2.4 Placement & Absorption Trend

The overall placement scenario remains more or less dominated by the factor of self-employment trend. Though Jaipur possesses a considerable small scale industrial base, engaging a substantial workforce; the interaction with the VTIs remains limited and thus, the placement remains far below expectations. Only few course trainees were employed and rest information could not be tracked, even in case of private players (may be due to newly introduced courses and agencies). The thrust of the VTIs (perhaps based on the market conditions) is more focused on developing trained manpower for the self-employment sector. Also there has been growing demand from the industrial houses for more updated training curriculums, i.e. ready to work skilled youth with less investment in terms of time and energy for induction and grooming.

5.2.5 Industry Mapping

Jaipur district is a center for both modern and traditional industries. The main industrial products include: acetylene gas, ACSR (Aluminum Conductor Steel Reinforced) cable, atta flour, ball bearings, ceramics, pottery, cold roll strips, corrugated boxes, deoiled cakes, durries, dyeing and printing, electronic items, engraving on brass items, ferrous and non-ferrous castings, gems and jewellery, general engineering and manufacturing, household electrical appliances, HT steel strips, lamps,

laminated springs for railways, marble statues, marble tiles & slabs, moulded plastic components for electronics, oxygen gas, perfumes, pigments, plastic containers, P.P. multifilament yarn, PVC doors, PVC footwear, canvas shoes, Steel fabrication, brass and lacquer work, enamel work, gems and jewellery, granite tiles. Real Estate business is flourishing well from last 2–3 years. Some of the companies already present here include MICO, Coca Cola, IBM, Ericsson and NEI popularly known as NBC Bearings. India's largest integrated IT SEZ Mahindra World City is located in Jaipur. There are total 43 industrial areas in Jaipur with four district offices of Jaipur.

Jaipur competes with Gurgaon, Hyderabad, Bangalore and Pune as a growing services hub. Growth of the services sector in the city can, in large measure, be attributed to the willingness of the state government to support private sector enterprises. The Resurgent Rajasthan Summit 2007 was part of the government's initiative to re-brand Rajasthan, is an example of government initiative.

During early eighties, the small scale industries got the attention and the progress was achieved at the end of eighties. Jaipur has a long history of entrepreneurship having crafts related work as well as industrial units. The most prosperous industries/ sectors in Jaipur which have the potential for foreign exchange are:

Tourism: Jaipur is in the tourist map of the State as well as the country. Large numbers of national and international tourists visit Jaipur throughout the year due to its historical importance, religious importance as well as archaeological importance. The hospitality as service industry and construction thrives majorly due to the contribution of tourism to the state economy.

Year	No. of India Tourist	No. of Foreigners	Total
2001	655715	172950	828665
2002	589414	81451	670868
2003	640130	105161	745291
2004	968123	206272	1174395
2005	1198000	387295	1585295
2006	1278603	441910	1720513
2007	1287072	464841	1751913
2008	1138859	456165	1595023

Table 31 Tourism Visit Chart in Jaipur, District Statistics Report, 09

Readymade Garments, Handicrafts & woolen carpets: Japan, Russia, Switzerland and some countries of Australian continent always opt more for Indian garment being the superior in quality and designs; Jaipur has become a very good manufacturing center of this products. Handicrafts have huge demand base in Jaipur including the hand knitted carpets and quilts.

Gems & Jewellery : Jaipur City emerged as one of the largest exporter of cut and polished semi-precious stones like garnet, jade, topaz, turquoise, zircon and also emerald.

Leather Goods: This field is also open and is having a very good export potential. Although district is not yet in position to earn more through this opportunity as there are very few manufacturers of leather exportable good, yet scope is very good. Germany, USA, Hongkong, Switzerland, Holland, Belgium, Australia etc. are the key export markets.

Granite Tiles: This export thrust area is not much older. During previous year's total export from India was four hundred crores and demand supply gap to the tune of 350 million sq. mtrs. It yet to be overcome, and the district has got very good potential for exports. As there are so many granite processing plants, necessity is to make this sector as qualitative producer so as to meet out the

requirements. This product can be exported in the form of grave stone facades, inner walls, floorings, table tops, craft work. Central Government have also liberalized its policy for export schemes for EQU's and EPZ have been stream lined. Goods manufactured by EQU/EPZ units may be exported through an export House/Trading House/Star Trading House, and also many more facilities have been provided to EQU's/EPZ units in the New Industrial and Import Export Policy.

MSME in Jaipur

According to D.I.C data (March, 2012), there were around **11659 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of Rs.173455.19 lakhs providing employment to **117039 persons**. There are 44 large units working in the district.

As on 31stMarch, 2009 the total registered units in the district were **28373** in numbers with employment numbers of **164929** persons with investment of **Rs. 157347.70 lakhs**. The types of industries registered were in leather, textile, handicrafts, mineral based, agro-food based, wood based, paper based, electrical based etc. Cottage and village industries included Gem and Jewellery, Brass and Lacquer Work, Leather Tanning, Shoe Making, Dyeing and Printing, Carpentry, Black-smithy, Spinning and Weaving on Handlooms etc. Cottage and Village industries play an important role as it provides employment to the rural population.

5.2.6 Sector wise mapping of industries in across Jaipur

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors prevailing in Jaipur. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Employment	Investment (Rs lakhs)
Agriculture & Allied	276	4491	8909.14
Auto & Auto Components			
Chemical & chemical products	2156	17206	28459.89
Construction Material & Building Hardware			
Electronics & IT Hardware			
Food Processing	438	13073	18573.64
Furniture & Furnshing	2388	10137	2401.80
Leather & leather goods	4375	13857	3826.45
Gems & Jewellery			
Retail			
Textile	4640	25100	11286.13
Unorganized Sector	2139	8782	3312.58

Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Media & Entertainment			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging	131	440	360.63
Paper Based	875	3985	5953.53
Mines, Metals & Minerals	5794	42313	52624.69
Machinery, Electricals & Manufacturing	3910	15196	9283.72
High	Units>200, investment>1000, emp>1000		
Medium	Units>100, investment>200, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 32 Sector wise mapping of industries in Jaipur

Jaipur has a very strong industrial base and caters for number of sectors. Every sector has its share in the district economics like construction, healthcare, education and tourism have large share similar to that of manufacturing industries and metals plus minerals. Since 2003, Jaipur has witnessed tremendous investment in education and training, tourism management, infrastructure, urban commercial and residential developments, IT/ITES and real estate. The 365-acre Export Promotion Industrial Park (EPIP) set up at Sitapura (Jaipur) provides manufacturing facilities to units in key sectors. The Mahindra World City (Jaipur) Ltd. (MWCJ), a multi-product SEZ offers ready to use infrastructure. The authorities are currently planning implementation of the Metro Rail project in Jaipur in consultation with the Delhi Metro Rail Corporation (DMRC).

Jaipur’s proximity to the National Capital Region is one of its biggest advantages. The nearby markets of Gujarat and Delhi have been both complementing and competing forces. With the development of the surrounding region of Udaipur-Neemrana-Bhiwadi; Jaipur is poised to transform into a city-region. The completion of the Delhi Mumbai Industrial Corridor (DMIC) will further strengthen Jaipur’s development as a regional economic hub.

CASE STUDY: DATA INFOSYS - TURNING ADVERSITY INTO OPPORTUNITY

Family-owned businesses have been the traditional mainstay of Jaipur’s economy. Many of these home-grown businesses, including industrial, manufacturing and food and drink companies have, over the years, grown into nationwide brands. Today, some of the young second and third generation entrepreneurs coming from a similar context have capitalized on their resource-rich economic and social heritage to drive the IT revolution in Jaipur. The story of Ajay Data – the 30-something CEO of Data Infosys, Jaipur’s leading Internet and web-based services provider – typifies this trend. Data, who hails from a family that has been dealing in edible oil for over 35 years, was expected to join his family business after completing his MBA in Computer Sciences and PhD in Electronic Data Processing. Data’s small efforts to modernize operations in the family-run business were met with resistance. So much so,

that getting an additional Internet connection installed in 1999 signaled a big victory for him! However, given the under-developed state of ICT, not just in Jaipur but across India at the time, the connection hardly ever worked properly. Not only would the slow dial-up modem take up to half an hour to connect, it would also only detect a connection late at night. This frustrated Data to a point that he decided to pursue a partnership with Satyam, just to be able to access a decent internet connection. But the Satyam deal did not work out for Data. After this setback, Data focused on leveraging family resources such as land and capital to enter IT -- a non-robust sector in Jaipur at the turn of the century. For the first two years, the ride was tough. Without a company structure in place, in a city lacking basic IT infrastructure, Data was pushed to put in up to 20-hour work days. By 2008, Data Infosys provided 250,000 Internet connections in Jaipur. According to the Telecom Regulatory Authority of India (TRAI) the company is the 6th largest internet services provider in the country. Now, the enterprising Data has decided to explore international markets and is in the process of setting up marketing hub. Today, the potential for growth of the IT sector is now recognized and encouraged by the State Government through the provision of new IT infrastructure and the development of industrial projects and IT parks.

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of senior level functionaries from 10 diverse industries located in Jaipur district of Rajasthan. These functionaries represented different levels of management as Partners, Directors, General Managers, HR Managers, etc.

These industries were selected as large (4), medium (1) and small (5) covering various growth sectors of

Type of establishment	Major Product(s)
Single Ownership	Wooden & Packaging
Private Ltd.	Metals & Mineral Products
Partnership Firm	Wires & Steel
	Tiles & Dyes
	Food Products

Table 33 Break-up of industries in Jaipur (Sample study)

the district like food processing, metals & minerals, logistics and manufacturing. The industries sampled were performing without any gap in production except the packaging industry which was running short of skilled manpower.

All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme,

PF scheme, Housing scheme and provision of food for their workers. The oldest establishment (Sri Ram Oil & Chemical.) dates back to 1984 while the youngest establishment (HPC Packing) was established in 2010.

5.2.7 Workforce Demand and Supply

The major workforce participation observed in Jaipur district over a period of two decades has been a paradigm shift from cultivators/ agricultural laborers to service providers. There has been declining trend of workforce share in primary sector from 53.5% to 41% from 1991-2001. Parallel to this there has been an increase of over 12% in tertiary and secondary sector workforce participation over the same period. This workforce has been

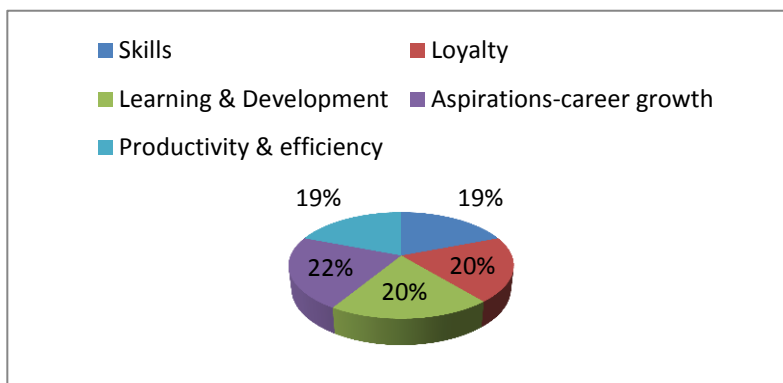


Figure 64 Employers demands in terms of expectations from workers (Jaipur)

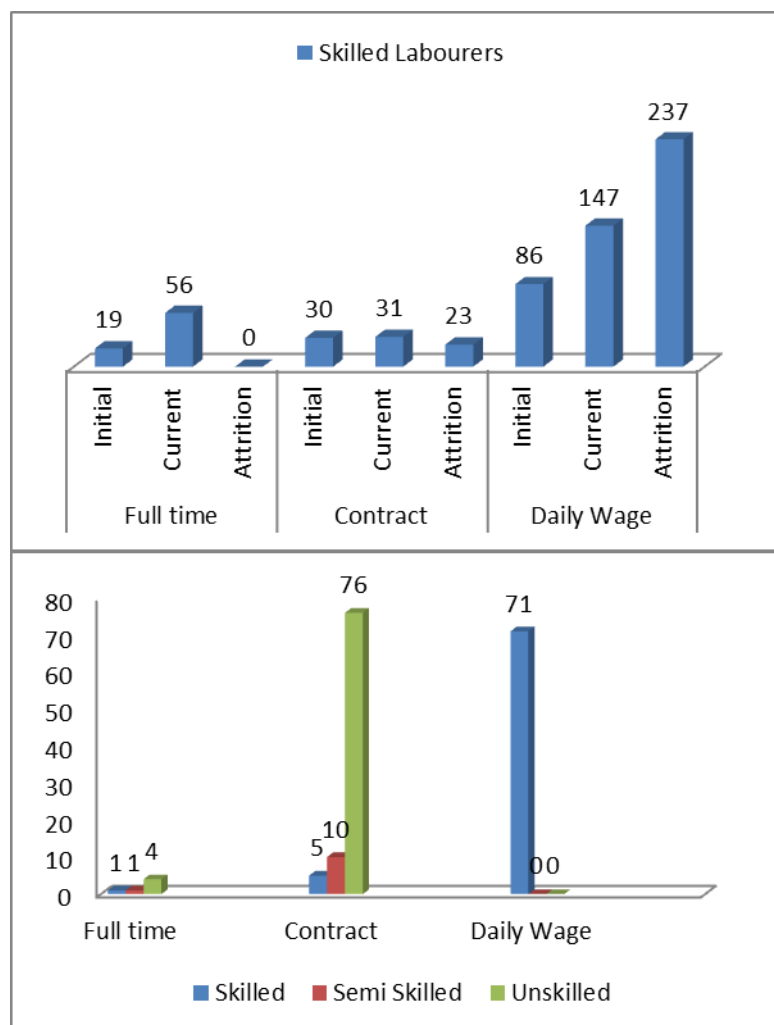


Figure 65 Skilled workforce composition at various stages of the industries & Requirement of skilled, semi-skilled and unskilled workers across sample industries in Jaipur

majorly engaged in informal or small scale industries. There is declining trend observed in the workforce engaged as agricultural laborers & cultivators (close to 12%) where as an increase of 10% in the other workers group. Engagement in secondary and tertiary sector shows an increasing trend as per the industrial growth of the district. Looking at the present resources and skill set of the workforce, tourism based industries, gems and jewelry, electrical and automobile, IT/ ITES should play a key in future.

In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were aspirants with aspiring career growth (3.8 on a scale of 5). Other parameters were closely rated as shown in the figure showing the employer's expectations.

5.2.8 Projected Workforce Demand

There has been certain increase in the number of full time workers over a period of time by close to 30%, though majority of the industries interviewed still feel the requirement of unskilled workers over the skilled workers for their full time roles. Apparently the number of semi-skilled workers category has grown over two times but the need for unskilled contract/ daily wage laborers was phenomenally very high. A clear distinction could be observed in the preference of only skilled workers for the contract and daily wage worker category as the industries felt the low cost module works better in a capital scenario and incurs less cost in on job training.

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers. One could observe a similar requirement in the skilled daily wage labor requirement and unskilled contract based requirements. This clearly validates the mindset of the industry houses to engage less skilled workers.

Another observation which could be made from the attrition levels of skilled workers was that being very high in case of daily wage earners and nil in case of skilled fulltime workers. Therefore, the industries engage maximum number of daily wage skilled laborers who are floating in nature and the attrition levels observed was almost 60% of the current strength.

Further classifying into the staff roles of these industries, the demand for well qualified professionals could be observed for senior and middle level management. Similar responses were also found for office administration and accounting positions. In case of support staff the general yardstick followed was class 10th pass and not necessarily the skills possessed.

There were marked differences in the wages of the fulltime workers and skilled fulltime workers. A significant gap is observed between the wages paid to male and female workers. More employers are willing to pay more to the semiskilled or unskilled women workforce than the males of similar category. The wages of semi-skilled or unskilled male and female workers compared to the skilled categories were suggesting the inclination to engage more semi-skilled or unskilled women workforce in the industries. Male workers stand a significant chance of increase in wages as per the above comparisons made.

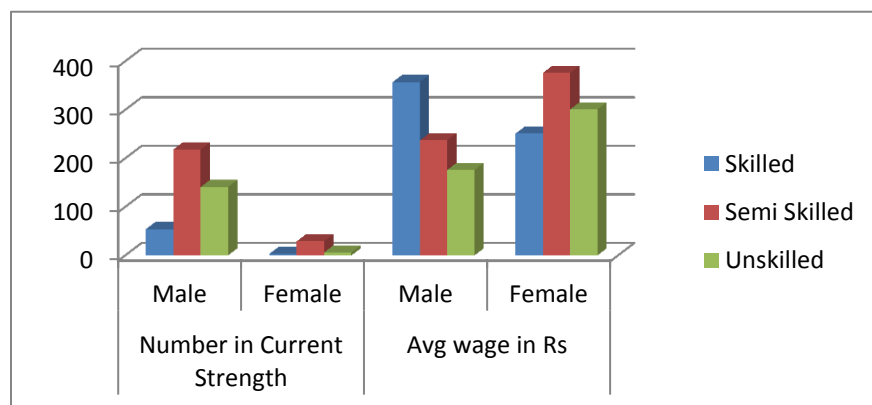


Figure 66 Wages of skilled, semi-skilled and unskilled workers (all full time) in the sample survey of Jaipur

The difference in the wage structure varies from Rs. 120 in semi-skilled category to Rs. 180 in unskilled in comparison with the skilled male average wage. The skilled female workforce gets an amount which is lesser than the semi-skilled

and unskilled workforce with a minimum margin of

Rs. 50 (in case of unskilled to skilled) and maximizes the difference in case of semi-skilled to skilled by over Rs. 120. All these comparisons stand good for full time workers only. Contractual and daily wage workers' wages do not have any significant changes though the actual wages are too low.

The projected demand for the workforce shows 32% requirement in agriculture sector, 25% requirement in industrial sector and 43% requirement in services of the total workforce required by 2017. The skilled, semi-skilled requirement in the services sector would be the major thrust for the district to employ more and more skilled workforce. The workforce demand for skilled in industries would be far less than the services as service sector would demand for more number of educated and experienced people at various level to lead and supplement the skilled workforce. There would comparatively less semi-skilled people required for the services sector as majority of them who would be employed get skilled status within a period of one year or two post job experience.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% manpower
Agricultural Sector								
Unskilled	973631	971345	962824	959902	953842	948997	944024	
Semi-Skilled	79372	79186	78491	78253	77759	77364	76958	
Skilled	5291	5279	5233	5217	5184	5158	5131	
Total demand	1058294	1055810	1046548	1043372	1036784	1031519	1026113	32%
Industry Sector								
Unskilled	419008	446023	447690	472167	480719	494713	505518	
Semi-Skilled	193388	205857	206626	217923	221870	228329	233316	
Skilled	32231	34309	34438	36321	36978	38055	38886	
Total demand	644628	686189	688755	726410	739568	761098	777720	25%
Services Sector								
Unskilled	154524	165549	173043	182041	187970	196154	202577	
Semi-Skilled	360556	386281	403766	424762	438598	457692	472679	
Skilled	515080	551830	576809	606803	626568	653845	675256	
Total demand	1030160	1103659	1153618	1213606	1253136	1307691	1350513	43%
All Sectors								
Unskilled	1547163	1582917	1583557	1614110	1622531	1639864	1652119	
Semi-Skilled	633316	671323	688884	720938	738227	763385	782954	
Skilled	552603	591418	616479	648340	668730	697058	719273	
Total Demand	2733082	2845658	2888921	2983388	3029488	3100307	3154345	100%

Table 34 Labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors -Bikaner

Basis on the inputs received from sector wise expansion plans the Workforce projections shall be made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			

Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Gems & Jewellery			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Organized Retail			
Real Estate			
Media, Entertainment, content creation, animation			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 35 Workforce across various sectors by 2017- Jaipur

5.2.9 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in Jaipur district on the basis of manpower absorption and production in high growth industries in the district. The analysis would factor in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	538239	573909	572885	599886	605794	621699	631043
Semi-skilled	208519	229356	230543	247232	248904	257521	261481
Skilled	271714	307060	327764	355376	372023	396259	414302

Table 36 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The gap between the semi-skilled and skilled shall be area of focus for the district to address its skilling requirements in future. Skilled manpower gap is more than semi-skilled in this case. Inference could be drawn that the services industries requirement of skilled workforce in sectors like IT/ITES, hospitality, supply chain, retail, health and education, banking and insurance would bulge over a period of time if not properly addressed by skill development solutions. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Industries were more concerned with the factor endowments like power and land. Water supply and labor was least on the priority as labor availability remains high and dependence on water for existing industrial base is low.
- The VTIs did not cater for the industry requirements and more customized practical courses were suggested by the industry group to better the condition of skilled manpower.
- Demand for skilled workforce would be increasing over next three to five years keeping in mind the increasing investment pattern of the state. Major employment would be perceived IT/ITES, wooden products, agri-based food processing units etc. Other emerging industries like PVC pipes, textile goods, engineering based manufacturing industries etc. look promising to enhance wage based livelihood generation.
- Scope of self-employment and entrepreneurship in the district remains on a high, and government programmes like Khadi Gramudyog Programme aid by providing 25% subsidy.
- Skilled training targeting some of the important clusters of Jaipur would be necessary like skill training on Leather industries, handicrafts and textiles etc.

5.2.10 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Jaipur district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (70 youths) and FGD with youths were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 70 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 30% of the youth covered were college educated and 70% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

Youth Category	
Employed	12
Self employed	18
Unemployed	20
Trainees	20

Table 37 Youth Profile of sample in Jaipur

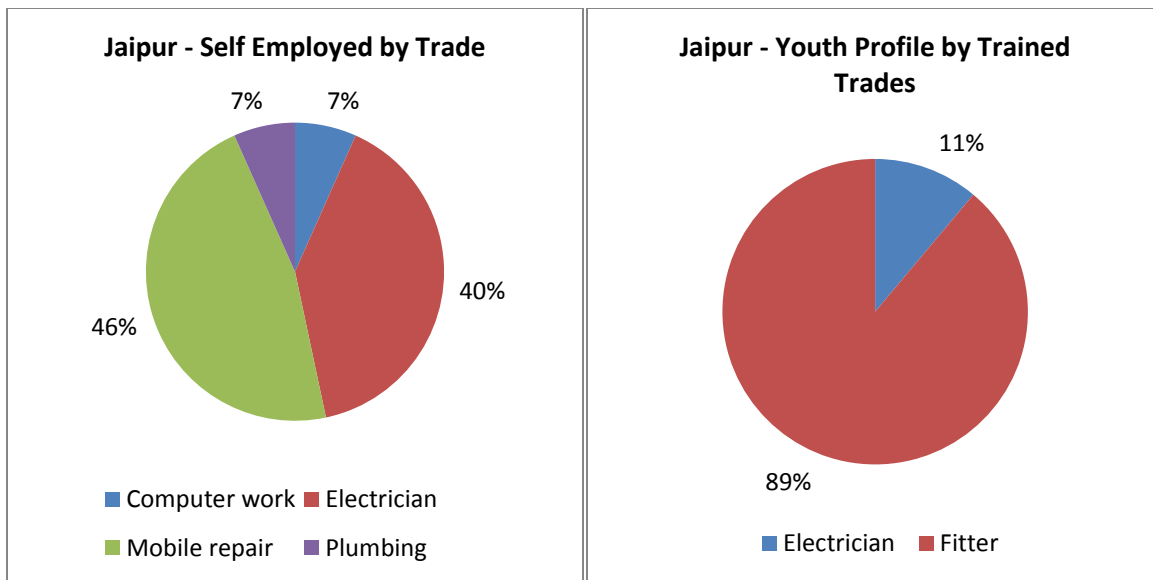


Figure 67 Profile of respondents (self-employed and trained) by trade in sample of Jaipur

Among the respondents covered under the survey the course of electrician was one of the most preferred one followed by fitter in sample of youths under training. Youths preference for self-employed courses in similar trades of electrician, computer applications, mobile repairer, fitter and plumbing was evident but in varying proportion. These trades appear to be the most popular trades as per the perceived demand in the market. There was general consensus regarding better self-employment opportunity in electrician and mobile repairer. There were peer learning practices observed among the trainees in order to understand additional skill apart from the one they specialize on.

5.2.11 Youth's Perception

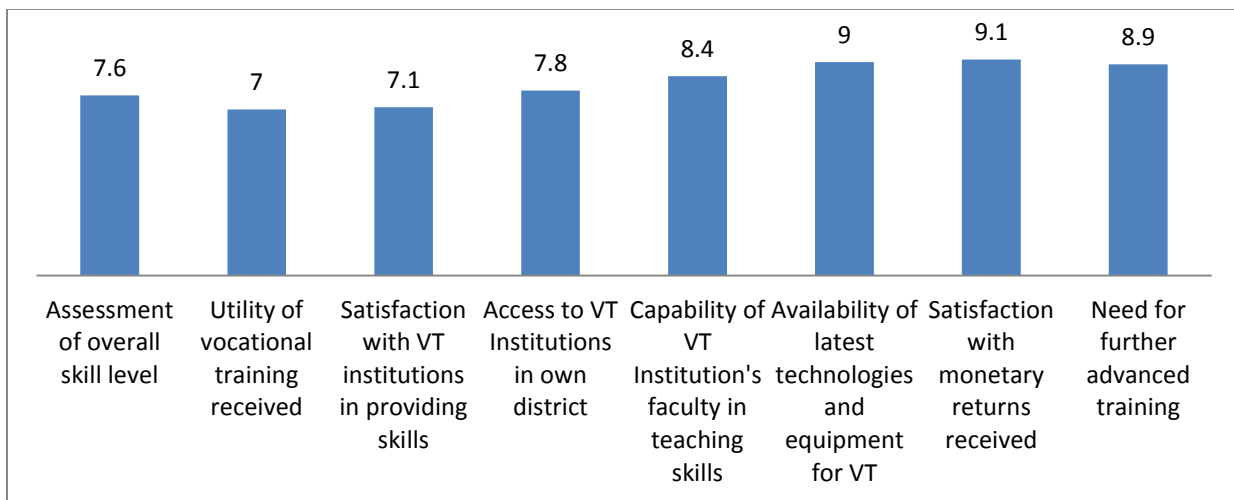


Figure 68 Jaipur Youth's perception, need and aspirations –Sample Group

Satisfaction with current monetary returns and availability of updated technologies for vocational training emerged as the two leading factors identified by the respondents as the key to better skilling initiatives of the district. The usefulness of the training received and its utility was least ranked as the

youth felt that it was more the on job training and the experience from industries that has helped them.

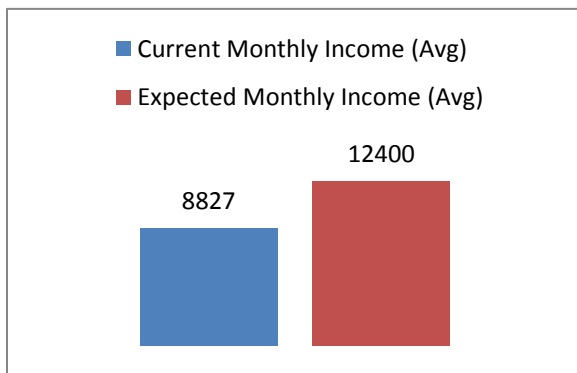


Figure 69 Income current and expected- sample group, Jaipur

There were pronounced needs for further advanced training provided for up-skilling and basic skilling in computer applications, as there were growing perception that the ability to operate computer better would aid in better employment opportunities. The satisfaction level for the entry level jobs and the compensation received initially was high. All the respondents agreed on the use of good communicative English to be the key for working across the nation, quick promotion and enhance salary slabs. Similar feedback was provided by the industry associations in terms good communication and life skills for skilled workforce.

Most of the trainees responded by mentioning that government jobs would be first preference even with limited salary slab and scope. This was very similar to the opinions their parents carried. In the worst case, self-employment would be sorted for. There was a feeling among the trainees that their ability to adapt to other skill requiring jobs was quiet limited and thus would prefer for self-assured livelihoods instead through self-employment. The expectation in terms of salary was about Rs. 8,000 expecting Rs. 3,000 hike after a year of work experience. The major aspiration from the entry level job remained work satisfaction, improved lifestyle, learning while applying the skills and family security. Families on the other hand wished for government jobs which were easy works with better salaries and job security. 84% of the interviewed youths either working or self-employed were satisfied with the monthly income. There were 64% of the youths did not get any increment for past two years of work.

The youths showed their willingness towards trainings because they would be enhancing their skills resulting in a better opportunity and surely will strengthen their negotiation position as far as salary and the quality of job that they can apply for. In Jaipur, most of the candidates showed their interest mainly for computer based courses, Electrical repairing, Mobile repairing and Girls mainly opted for courses like hospitality and beautician. Other trades which came into observation are repair of refrigerators and ACs, Motor winding and two wheeler repairing. Mainly candidates have high expectations for salaried jobs. The students are willing to learn, but due to lack of improper guidance, they are not able to study or lean any technical course. It was also observed while interacting with youths that both male and females were forced to change their jobs frequently due to low salary, exploitation by the employers and variation in working hours again and again. This also relates with the industrial inclination to engage more of floating semi-skilled or unskilled workforce in the district.

5.2.12 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and

the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 6.75 lakh of skilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at Jaipur district level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

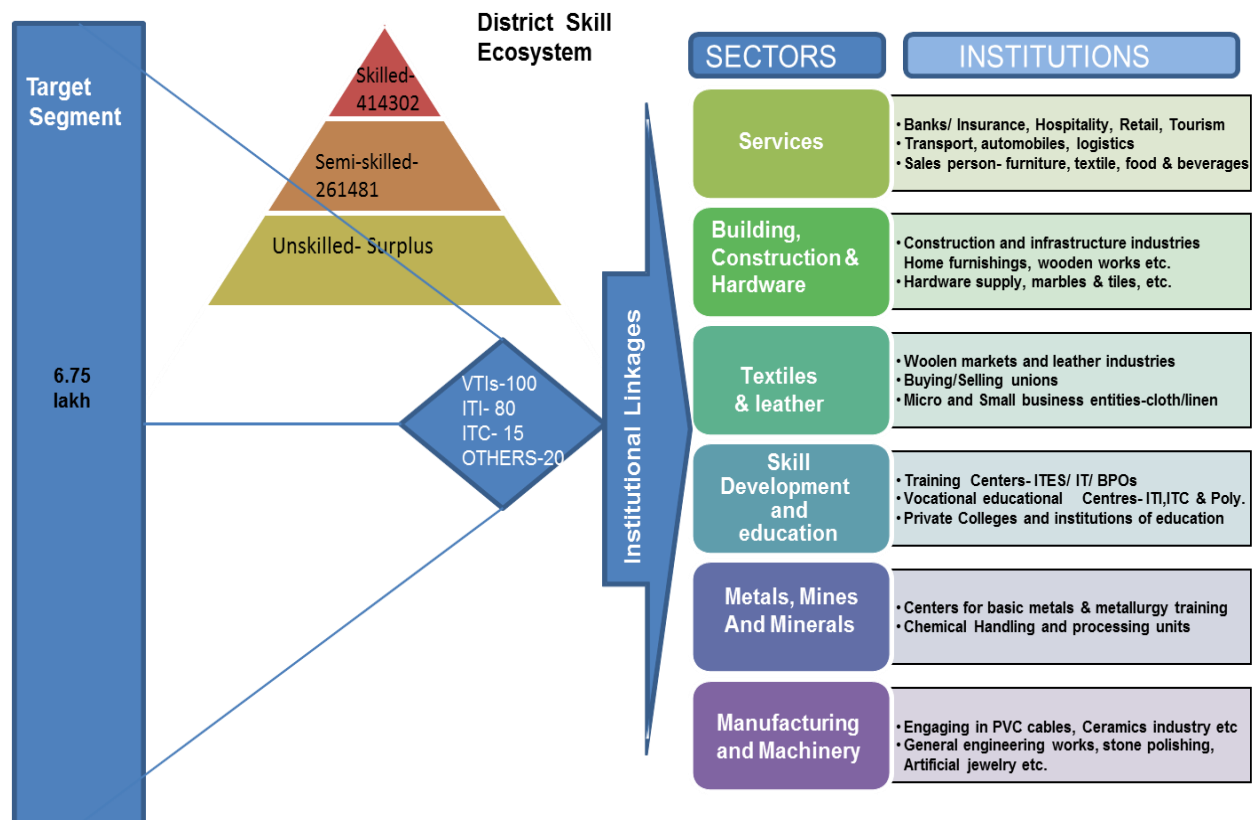


Figure 70 Optimization plan- Jaipur

The key stakeholders' contribution in enabling to achieve the target (as shown in the figure) would be as follows:

- State: The state to target the skilled and semi-skilled segment for skilled training by creating additional 200 skill development centres (VTIs) in the district level of operations by 2017. It should encourage the private training partners to participate and operate in the district due to its large base of workers involved in secondary and tertiary sectors.
- Training Partners: The sectors for engaging more skilled workforce would be in construction, textiles, leather, gems and jewellery and services in the district. Course curriculum designed to cater for the institutions based on the sectors mentioned should take a priority while designing the operational plan. Along with these, specific course curriculum designed for communicative English, life skills and basics in computer should also be the key areas of skill development.
- Industries: The primary sectors of high human resource requirement would be tourism and hospitality, IT/ITeS services, sales in the textile, insurance, education and other marketing opportunities, ancillary industries related to manufacturing, transport and logistics etc. and therefore would require increasing linkages with the related institutions for skilled workforce absorption

NSDC would be an enabler to lead the training partners in retail, textiles and services by encouraging specifically designed proposals with increasing the linkages in industry associations and PPP models. It would also play a vital role in state capital to build capacity for the state by anchoring specific roles (through partners or associations) in the overall state skill development plan.

5.3 District Udaipur

UDAIPUR DISTRICT



District Skill Workforce Face Sheet-2012								
District	Udaipur			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	10	No. of Villages		2339	No. of Schools (elementary & sec.)		5488	
Basic Data								
Population (in '000s)	3068	Overall Literacy(in %)		62.74	Sex Ratio		958	
Decadal growth rate(in %)	23.68	Female Literacy(in %)		49.10	HDI Ranking (2008)			
% Urban Population	19.85	Male Literacy(in %)		75.91	Per Capita Income (in Rs.)		18523	
Key Data				<i>Source :Statistical Abstract,2011; Eco Review 2010-11; HD Report 2008; DIC 2009</i>				
Workers participation rate (2001)	41.81	Share of primary sector (%)		63.80	Share of secondary & tertiary sector (%)		36.20	
No. of MSME/Industries	1866	Total Employment (in 000s)		23	Total Investment (in lakhs)		43241	
No. of colleges (PG & Graduation)	106	Total graduates (In '00s)		183	Total Post graduates (in '00s)		18	
No.of VTIs(registered ITI+ Poly.+ ITC)				7	Total trainees trained (in '00s)		0.86	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population 1.52 lakh
Skilled workforce	90657	95176	94896	96816	98225	99446	99969	
Semi-skilled workforce	266463	284896	311980	330646	348649	372127	393208	

5.3.1 Demographic Profile:

Udaipur district is the 7th largest district of Rajasthan, situated in the southern tip adjoining Gujarat and is oval in shape with a very narrow strip stretching towards the north. It is bound in the north by Rajsamand and Pali districts, in the south by Dungarpur and Banswara, in the east by Bhilwara and Chittorgarh and on the west by Pali and Sirohi districts and Sabarkantha district of Gujarat. It spread on 17,279 sq. kms i.e. 5.05 per cent of the State. Distance from major Cities Jaipur - 435 kms. Delhi - 635 kms. Ahmedabad - 240 kms. Mumbai - 791 kms. Udaipur falls under the southern region (Bhilwara, Rajsamand, Banswara, Udaipur, Chittorgarh, Dungarpur and Sirohi) which is hilly, was thickly forested in the past, and to an extent inhabited by people of indigenous communities, now classified as scheduled tribes (ST). It receives higher rainfall compared to most other regions in the state.

Agriculture, particularly in the uplands, is of low intensity and low value. One reason for the

backwardness of the region is the social and geographic isolation of the ST communities here. Next, the terrain itself is sub-mountain and in the absence of transport, its markets are less developed and links to the outside world comparatively restricted.

S.no	Section	Unit	Quantity/
			Location
1	LOCATION		
	Latitude	degree min	24'35'N
	Longitude	degree min	73'41'E
2	AREA		
	Total geographical area	square km	13419
3	ADMINISTRATION		
	Tehsils	number	10
	Villages	number	2339
4	Land Use Pattern		
	Total Area	Hectares	1388255
	Total cropped area	Hectares	303486
5	Population (census 2011)		
	Total population		3067549
	Men		1566781
	Women		1500768
	SC (2001)		158257
	ST (2001)		1260432
6	Literacy (except 0-6 age group)		
	Total literate	percent	62.74
	Men	percent	75.91
	Women	percent	49.10
8	Energy		
	Electrified Villages	number	2333
9	Industries (DIC, 2009)		
	Registered MSME units	number	7460
	Employed persons	number	66260
10	Education		
	Pre Primary & Primary Schools	number	3275
	Upper Primary	number	1616
	Secondary & Sr. Secondary	number	597
11	Higher Education / Others		
	Colleges	number	95
	I T I	number	06
	Polytechnic	number	02

Table 38 Udaipur District Profile- a snapshot

Udaipur was ranked the 20th district in the HDI for Rajasthan, 2008. It has significantly behind in the education, health and income index (13th, 27th & 20th respectively) index. The literacy rates of the district especially female literacy which went up by just 4% in one decade. The GDI of Udaipur was 0.465 and was ranked at 25th in the state profile (as per 2002 figures). The per capita income has increased substantially by over four times (Rs.4038 to Rs.17925 in 2004-05; as per HDI-Rajasthan, 09). It ranks as the 7th largest district of the state with 3.92% of total area and 15th highest density of population in the state of 242 (Census, 2011- Provisional).

The worker participation rate in Udaipur is 41.81% (HDI, Rajasthan, 2009) with primary sector engaging close to 63.8% of the workforce and rest in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 13% (Urban- 31.57% & Rural- 44.15%). The literacy rate of Udaipur in 2011 is 62.74 compared to 59.77 of 2001 which is lower than the state figure of 67.06. According to Census 2011 provisional data, the male literacy figure stands at 75.91 and female literacy was at 49.10. Udaipur has witnessed high dropout rates and low conversion rates in education. The school infrastructure (one room school) remains on a high which enumerates the education standards of the district. Udaipur has a high percentage of ST population (47.86%). The sex ratio is 958 which have reduced from 969 in 2001. Udaipur is a popular tourist destination in India. The lakes, palaces and lively workspaces and culture attract foreign and domestic visitors. It is a favourite marriage destination. Many celebrities, including film stars, business families, and politicians chose Udaipur to hold marriage ceremonies and parties. Udaipur is also known as the city of lakes. It is a famous rural tourism location.

5.3.2 Education Infrastructure and Utilization

Udaipur's status in literacy was marked below than the state average. According to Census 2011 provisional Udaipur has a total of 5488 schools from pre-primary to senior secondary levels (registered) and a total of 9760 schools in the district (as per DIC, 2009). Considering the density of population and the vast area, the school spread is average in comparison to the state average and across other districts. The retention rate of students in schools of Udaipur is quiet low (Rajasthan HDI report, 2009).

Education	Udaipur	Rajasthan
Pre Primary & Primary	3275	49546
Upper Primary	1616	38889
Sec/ Sr Sec	597	19135

Table 39 Udaipur vs. Rajasthan education status

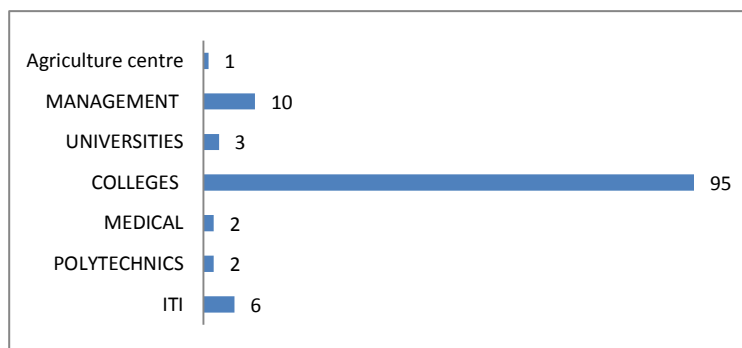


Figure 71 Number of institutes for higher education in Udaipur, 2009

Education in Udaipur includes 3 universities, 95 colleges, 2 medical colleges, none engineering colleges, 06 ITIs, 02 Polytechnics, 1 agriculture research centre and 10 management institutes (IIM, Udaipur being one of them from 2009). At the Intermediate college level, courses are available in the area of science, arts and

commerce. There just 07 registered vocational training partners in Udaipur district with RSLDC with 33 approved training programmes. A total of just above 840 aspirants got enrolled in 2009-10 in the registered training institutes. Apart from these, a number of private organizations have initiated skill training in the region. As per the updated report available on RSLDC the training partners (includes NGOs, ITIs, ITCs, private institutes, RUDSETI) implementing skilling initiatives have completed 26 out of 33 approved training programmes and 7 are ongoing. A detailed view of the vocational training of Udaipur could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.3.3 VTI's demand across various trades in Udaipur district

The existing scenario of VTIs in Udaipur seems inadequate keeping in mind the rate of growth happening in the region due to tourism and industries. Private players and NGOs have eventually come up for catering the needs for skilling youths of the district in fields as follows:

- a) **Computer Based Accountancy:** With number of shops, shopping malls, retail stores and medical stores TALLY to maintain their financial data, growing fast in Udaipur there is a significant demand for skilled persons in Computer Based Accountancy. After VAT became effective in the state TALLY has become a necessity for all VAT paying shops.
- b) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is telecom or banks or insurance firms is growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field
- c) **Repair and maintenance (electricians/wiring/plumbers):** With the advent of new industrial areas and the expansion of the present industrial areas the scope in this trades have grown enormously over last five years. Private organizations and local contractors have sprung up who require skilled and trained manpower for ready deployment. Also with industrialization, the district grows in related spheres of business, construction and building etc.
- d) **Hospitality & Hotel Management:** Udaipur is host to a number of events of all magnitudes. It is also a major tourist attraction. There is a well-developed hospitality industry which is growing further. Hence the demand for skilled persons in hospitality industry is huge.
- e) **Desktop Publishing:** The requirement of persons proficient in computers is growing. The numbers of potential employers are large and they recruit a number of employees according to their requirement. The local newspapers are often flooded with such advertisements requiring computer professionals.
- f) **Plumbers & Gardeners:** The requirement of these would increase keeping in mind the industrial growth and the rural tourism coming up in a major way for the district. The official requirements across block headquarters and district bodies seem to be very high.

The courses offered by the government VTIs covered a wide range of sectors; predominantly self-employment based or to cater the local market needs. In private VTIs the courses were fewer in number and specifically catered for placement. The details of the courses offered in the VTIs of Udaipur are represented as follows:

Government. VTI Trades			Private VTI Trades
Electrical	Elec & ECM	Diesel Mechanic	Electrician
Fitter	COPA	Carpenter	Electronics
Mechanical	Cutting & Sewing	Draftmen	COPA
Welder	Data Entry Operator	Turner	
Wiremen	Mobile Repair	House Keeping	

Table 40 Udaipur district's (sample study) courses offered

The total 4 (government) and 3 (private) VTIs were covered in the sample. The clear observation made was that these government VTIs provided a wide range of courses (15 courses) with each sanctioned batch strength ranged from 15 to 100 (depending on the trades' training offered). Most of these courses were running below the actual capacity and oriented towards self-employment training. Eight of the offered courses relate to the engineering stream of which diesel mechanic course, fitter course and house wiring course appear to be the most popular ones among males and skin care, COPA, and cutting & sewing among females. Popularity and demand for the courses offered by the women's VTI was in synchrony with the growing demand for new emerging requirements such as body care and interior designing that are of interest to women and among males it could be attributed to the construction boom. The average age of males was 20 years and females were 22 years substantiating the early joining of these trainings for livelihoods option was lacking keeping in mind the low literacy and high dropout rates.

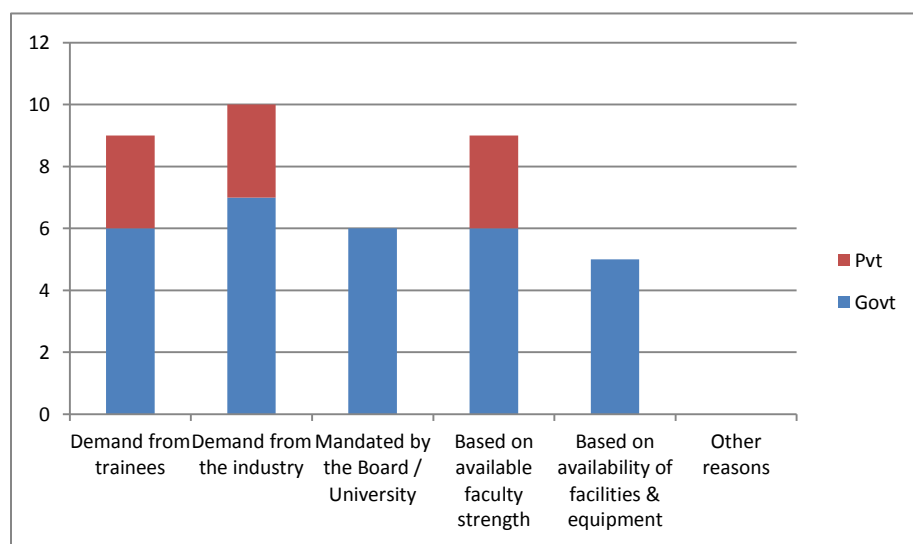


Figure 72 Factors influencing course selection and design of VTIs (Udaipur Sample Survey)

More often the courses provided were less oriented for direct placement in the market rather introduced the aspirants for self-employment and as another home based know how for females. These trades majorly catered for the needs of more unorganized sectors. The selection of course design and other influencing factors for

finalization of courses by the VTI functionalities were more or less determined by the availability of facilities and equipment, demand in the industries and on the mandate of funding agencies or apex organizations. All the VTIs claimed to have updated technologies, equipped labs, and space for conducting the training, electricity and water supply. Almost all of them did not have hostel facilities for trainees; but have arrangements for commuting for the aspirants both in private and government VTIs.

Interestingly the VTI functionalities claim that the courses on offer in these government VTIs are more demand driven as per the aspirations of the youths but also mark the mandated curriculum of the funding partner or universities. The industry’s role in demanding courses favorable for its optimization was observed to be high but the scope of participation or involvement of contemporary industries was limited to the campus placement in these VTIs only. No evidence of any kind of market research or study based course requirements were made across all the government VTIs.

As per the industry association Udaipur Chambers of Commerce and Industries; hospitality and tourism would call for the most skilled workforce for the district along with trades of marble (stone) and handicrafts (backward-forward linkages). As per the association, for small and medium industries the requirement of skilled workers is somewhat less and could well be managed by semi- skilled workers (trainees/newly recruits from VTIs). However, in large industries, the requirement was high, but there seems quite a shortage of skilled workers.

5.3.4 Placement & Absorption Trend

The overall placement scenario remains more or less dominated by the factor of self-employment trend. Though Udaipur possesses a considerable service base, engaging a substantial workforce; the interaction with the VTIs remains limited and thus, the placement remains far below expectations. The

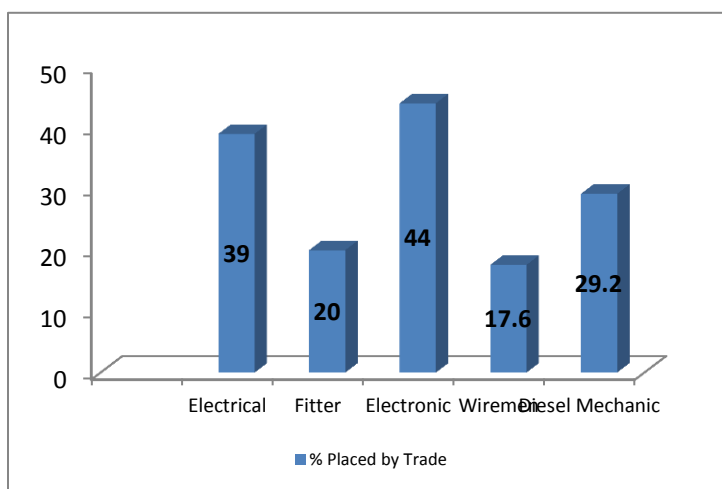


Figure 73 Major trades offering placement in VTIs (Udaipur Sample Survey)

sectors like marble trades, handicrafts have far less engaged with skilled workforce and majorly depend on the semi-skilled or household workers. The VTIs have had success in placement in fields like electrician, fitter, wiremen and mechanic. The thrust of the VTIs (perhaps based on the market conditions) is more focused on developing trained manpower for the self-employment sector or less importance has been given towards placement of the trainees. Also there has been growing demand from the industrial houses for more updated

training curriculums, i.e. ready to work skilled youth with on job training experience.

5.3.5 Industry Mapping

At present there are eight industrial areas in Udaipur district. There are 35 large scale industrial units and **7460 MSME** units in the district employing more than **66,000** people. Most of them are located in various industrial area of Udaipur district. Industries established in Udaipur district are exporting wide range of products like Woolastonite, Nilacin USP, Nicotinic Acid BP, Plastic, Moulded Articles, LLDPE Garbage, LDPE Tubing in roll form and HDPE Plastic Moulded Household articles. Udaipur is fairly rich in mineral wealth. It produces lime stone, steatite, wallastonite, zinc and lead concentrates, phosphorite, ochre etc.

The main existing industries registered were in Alum, Agglomerated Marble Slabs & tiles, Automotive Butyl Tubes and flaps, Computer Floppy Diskettes, Cotton Yarn, Cotton Sewing Thread, Crippled Polypropylene Texturising, Drugs, Edible Oil, Electrical items, HDPE /PP Woven Fabric & Socks, IMFL, Jacket for Floppies, Marble Polished, Marble Slabs & tiles, Moulded Plaster Articles, Orange Phosphorous Compounds, Phosphoric Acid, Polyester Texturised Yarn, Polished Granite Slabs, Portland Cement, Pesticides Formulation, Polypropylene Multifilament Yarn, P.V.Blended, Refined Oil, Single Super Phosphate, Silver, Solvent Extracted Oil & Refining, Solvent Extracted Raw Oil, Sulphuric Acid, Synthetic Blended Yarn, Synthetic Yarn, U.P.Twister, Wooden Toys, Zinc Ingots, Zinc Unwrought.

Sector wise mapping of industries in across Udaipur

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors prevailing in Udaipur. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	69	1819	516
Auto & Auto Components			
Chemical & chemical products	125	11600	2430
Construction Material & Building Hardware			
Electronics & IT Hardware			
Food Processing (beverages & tobacco)	1	27	8
Furniture & Furnshing	199	2996	857
Leather & leather goods	75	328	256
Gems & Jewellery			
Retail			
Textile & Handloom	217	1003	539
Unorganized Sector	443	2825	1791
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			

IT & ITES			
Media & Entertainment			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing &			
Paper Based	31	1922	322
Mines, Metals & Minerals	392	14261	3591
Machinery, Electricals & Manufacturing	265	459	2045
High	Units>100, investment>400,emp>500 –max applicable		
Medium	Units>50, investment>200, emp>250- max applicable		
Low	Units> 10, investment> 30, emp>10 – all applicable		
Emerging	Investment & demand based sectors of district-DIC		

Table 41 Sector wise mapping of industries in Udaipur

Udaipur has a very strong base for minerals, textile, marble and related industries, handicrafts and unorganized sectors. Tourism is a major contributor for the district economy and services form a major thrust in the unorganized sector. Apart, there are certain emerging trends of retail, manufacturing, cement and construction based industries were in categorized under the demand based industries by the DIC, Udaipur. Major employers were the chemical, mineral and machinery based industries though a sizeable population of the workforce was also found to be engaged in handlooms, handicrafts, services and other household based livelihood activities.

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of senior level functionaries from 10 diverse industries located in Udaipur district of Rajasthan. These functionaries represented different levels of management as director, managing director and managers.

A total of 10 industries were sampled for the survey to represent 4 major sectors that are prominent in

Type of establishment	Major Product(s)
Single Ownership (3 firms)	Chemical & Pharmaceuticals (5 firm)
Private Ltd. (2 firms)	Metal & Mineral Products (3 firms)
Partnership (5 firms)	Engineering & Manufacturing (1 firm)
	Building & Construction (1 firms)

Table 42 Break up of industries in Udaipur (Sample study)

the district. These industries were selected as large (3), medium (5) and small (2) covering various growth sectors of the district like metals & minerals products and manufacturing, chemical and pharmaceuticals, building and construction. All the sampled firms had some popular worker welfare schemes such as ESI scheme (8 firms), PF scheme (6 firms), and Housing scheme (8 firms). The oldest establishment (Khicha Phoschem Ltd.) dates back to 1980 while the youngest establishment (National Plastic) was established in 2011. One of the chemical industries interviewed was running below capacity in terms of production and attributed it to the shortage of power supply.

5.3.6 Workforce Demand and Supply

The major workforce participation observed in Udaipur district over a period of two decades has been a predominantly influenced by cultivators/ agricultural laborers and majorly engage in primary sector in rural areas. There has been declining trend of workforce share in primary sector from 73% to 63.8% from 1991-2001, and the change in secondary and tertiary sector is close to 10%. The engagement in services and manufacturing sectors has observed a rise due to the industrialization and retail sector

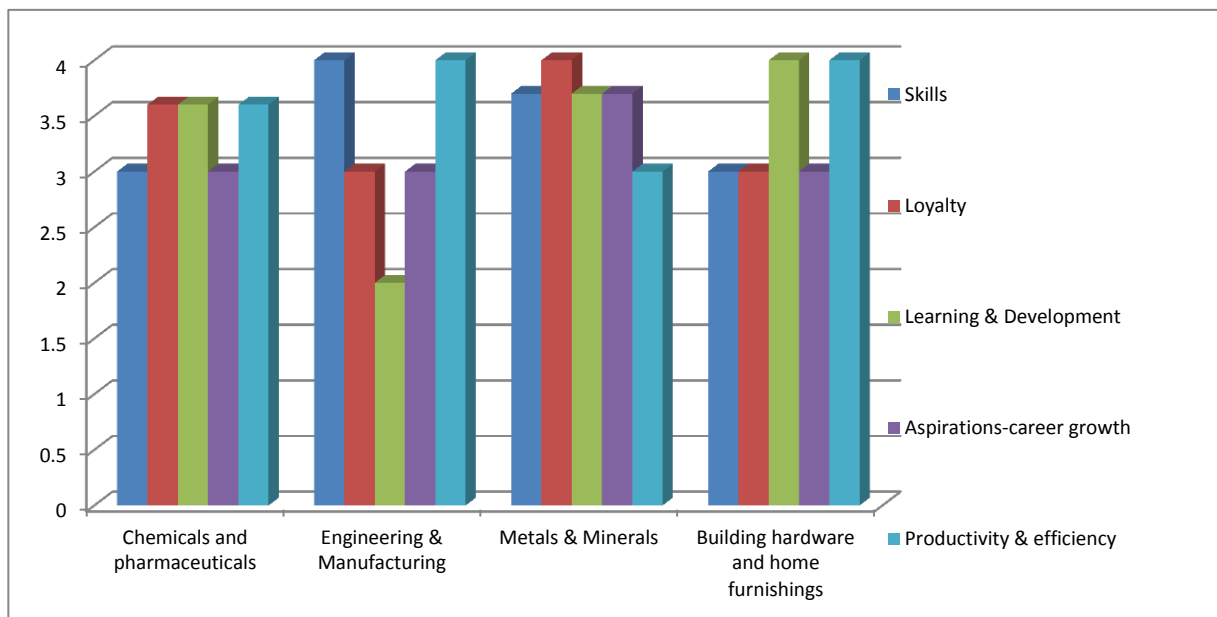


Figure 74 Employers demands in terms of expectations from workers (Sample Udaipur)

penetrating into the towns of Udaipur and increasing rural tourism. The workforce has been majorly engaged in informal or small scale industries either in registered industries or in the household livelihoods activities.

In terms of industries' requirements and the market trends from the primary survey the major demand in terms of expectations from the employers were very high on productivity and efficiency parameter (on a scale of 5). A clear cut requirement of skilled and trained resources was observed across all the sectors though the current trend in the industries engaging skilled workforce was too low and largely depended on the semi-skilled workers and unskilled contractual laborers.

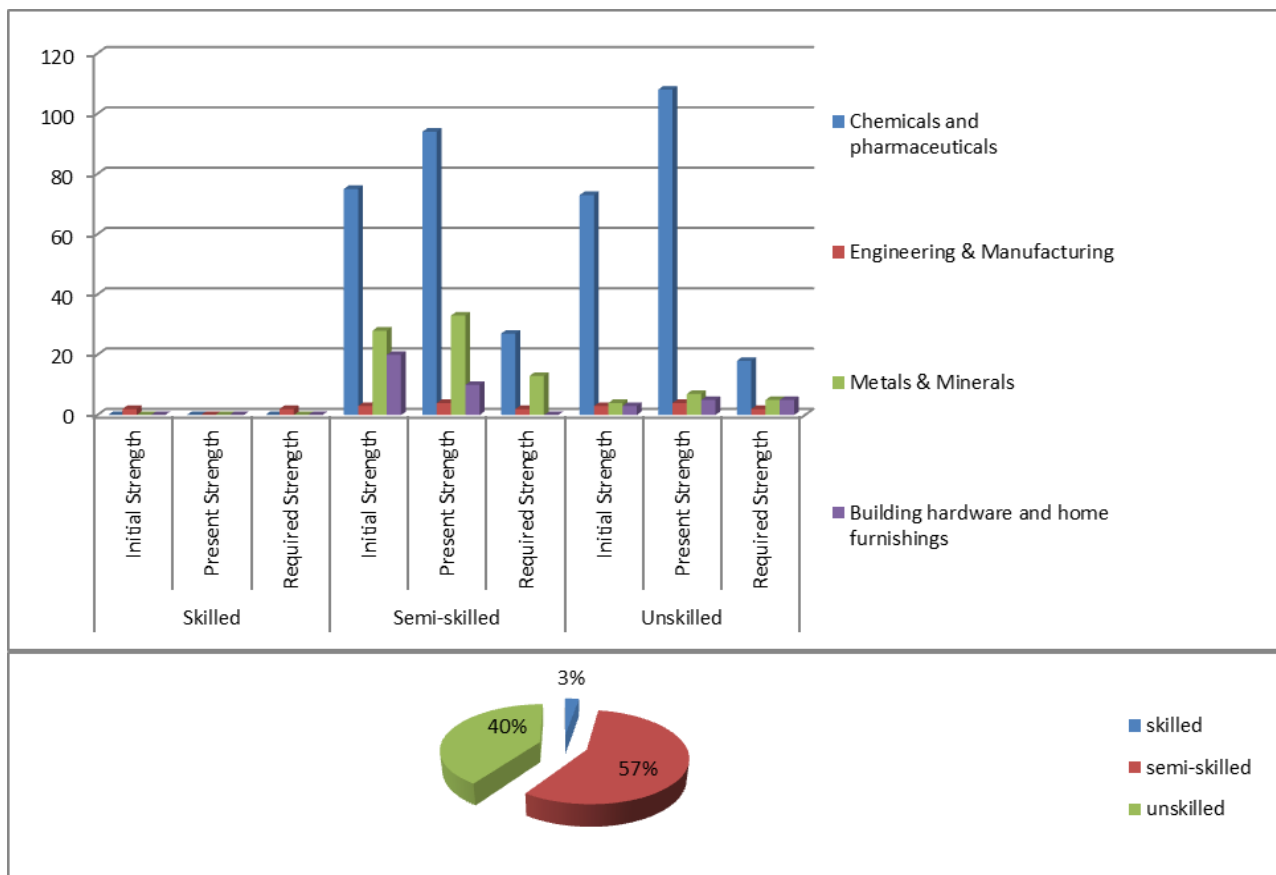


Figure 75 Workforce composition across industries at various stages & the Present status of skilled workforce and attrition across workers (Sample Udaipur)

5.3.7 Projected Workforce Demand

There has been very low increase in the number of full time workers over a period of time whereas the semi-skilled workers present and required strength combined shows an increase of 69% in the sampled industry. The sample industries relate skilled laborers with expertise of over substantial period with high qualification. This rationale seems more on the basis of highly skilled workers rather than skilled workers. Though majority of the industries interviewed still feel the requirement of unskilled workers over the skilled workers for their full time roles. Apparently the number of semi-skilled workers category has grown even after high attrition rate. The need for unskilled contract/ daily wage laborers was also phenomenally very high and the attrition rate was even manageable as per the industries' feedback. A clear distinction could be observed in the preference of semi-skilled and unskilled workers for the full time category as the industries felt the low cost module works better in a capital scenario and incurs less cost in on job training. Also they referred that employees with on job training and rising within the set up would be preferred in long runs.

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in unskilled full time workers. One could observe a similar requirement in the semi-skilled requirement and unskilled full time based requirements. This clearly validates the mindset of the industry houses to engage less skilled workers.

Further classifying into the staff roles of these industries, the demand for well qualified professionals could be observed for senior and middle level management. Similar responses were also found for office administration and accounting positions. In case of support staff the general yardstick followed was class 10th pass and not necessarily the skills possessed.

There were marked differences in the wages of the skilled workers and semi-skilled workers. A significant gap is observed between the average wages paid to male and female workers (3.5 times) under the semi-skilled and unskilled categories. More employers are willing to increase the wages of

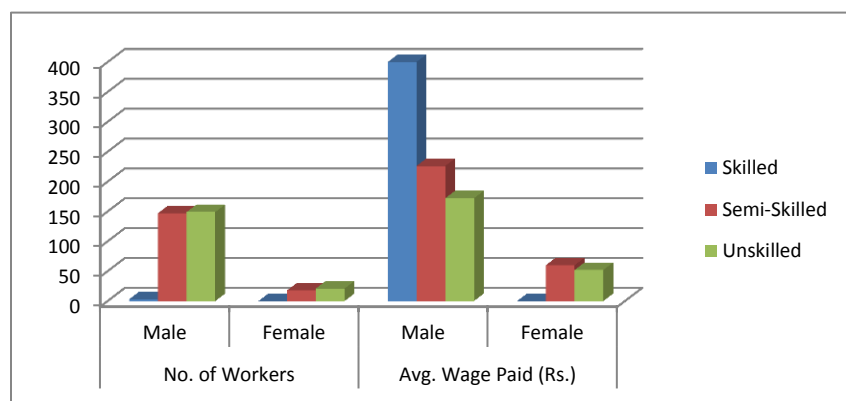


Figure 76 Wages of skilled, semi-skilled and unskilled workers (all full time) in the sample survey of Udaipur

full time skilled, semi-skilled and unskilled male workers compared to the part time category workers.

The difference in the wage structure varies from Rs. 180 in semi-skilled category to Rs. 230 in unskilled in comparison with the male average wage structure. The skilled female workforce gets an amount which is far below the desired rates and at least three times

lesser than the male counterparts. There is not much difference in the wages of semi-skilled and unskilled female workers (just Rs.8). All these comparisons stand good for full time workers only in the sampled industries. Contractual and daily wage workers' wages do not have any significant changes though the actual wages are too low.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of workforce requirements
Agricultural Sector								
Unskilled	808128	809628	757178	746311	763799	732577	719428	
Semiskilled	65880	66002	61726	60841	62266	59721	58649	
Skilled	4392	4400	4115	4056	4151	3981	3910	
Total demand	878400	880030	823020	811208	830216	796279	781987	63%
Industry Sector								
Unskilled	98510	102136	99449	102275	103554	103922	104583	
Semiskilled	45466	47140	45899	47204	47794	47964	48269	
Skilled	7578	7857	7650	7867	7966	7994	8045	
Total demand	151553	157132	152998	157346	159313	159880	160898	13%
Services Sector								
Unskilled	36860	38698	39475	40700	41678	42757	43604	
semiskilled	86006	90295	92109	94967	97249	99766	101742	
Skilled	122866	128993	131585	135667	138927	142523	145346	
Total demand	245732	257986	263169	271333	277853	285047	290691	24%
All Sectors								

Unskilled	943498	950461	896102	889286	909031	879256	867615	
SemiSkilled	197352	203437	199735	203011	207309	207451	208660	
Skilled	134836	141250	143350	147590	151043	154499	157300	
Total Demand	1275686	1295148	1239187	1239887	126738	1241206	123357	100%

Table 43 Labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors Udaipur

Basis on the inputs received from sector wise expansion plans the Workforce projections shall be made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Gems & Jewellery			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Organized Retail			
Real Estate			
Media, Entertainment, content creation, animation			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 44 Workforce across various sectors by 2017- Udaipur

5.3.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in Udaipur district on the basis of manpower absorption and

production in high growth industries in the district. The analysis would factor in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	330331	337244	281873	272899	291116	260473	247064
Semi-skilled	266463	284896	311980	330646	348649	372127	393208
Skilled	90657	95176	94896	96816	98225	99446	99969

Table 45 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local medium industries was not well pronounced. Some of the important findings were as follows:-

- Industries were more concerned with the factor endowment of power. Water supply, land, investment and labour was least on the priority
- Shortage of skilled manpower was observed though less pronounced by the industries. Many semi- skilled workers were available, but not the skilled ones to be readily engaged in industries. There was no provision for the training of semi- skilled workers and to make them skilled and fit for industries. Skilled workforce engagement in large scale industries and service sectors would determine the scale of VTI operations
- The VTIs did not cater for the industry requirements and more customized practical courses were suggested by the industry group to better the condition of skilled manpower
- Skilled training targeting some of the important sectors of Udaipur would be marble craft, handicrafts, tourism including hospitality business. Emerging sectors are gems and jewellery, IT & ITES, retail and sales (basically catering the services and unorganized sectors). A more targeted approach with training curriculum more suitable as per the needs of the industry would be the need of the hour.
- The majority of population is either working as casual labour or is surviving on marginal farming and sitting idle for a large part of the year. The lack of skills is clearly visible among these youths and if the proper vocational trainings will be imparted, these youths can be easily converted into good human resource for the demanding markets. The requirement of trained employee is huge and there is hardly any such training institute that is providing trained manpower. The requirements and problems of employers of each trade are different.

5.3.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Udaipur district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (70 youths) and FGD with youths were used to draw inferences of their thought process.

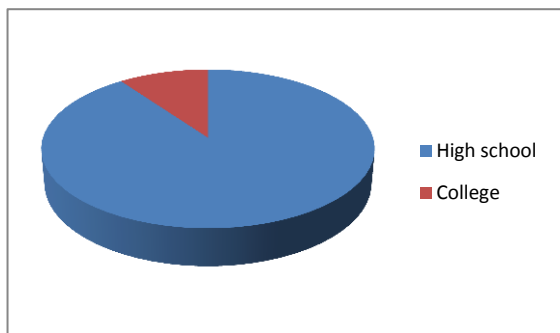


Figure 77 Youth Education Profile of sample in Udaipur

Youth Category	
Employed	04
Self employed	22
Unemployed	23
Trainees	21

Table 46 Youth Category in Udaipur-sample

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 70 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above) with an average age group of 25 years. Only 10% of the youth covered were college educated and 90% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

As with other areas studied the youth in Udaipur were also interested in training which would prepare them for a salaried job. The youth are willing to learn, but due to lack of improper guidance, they are not able to study or lean any technical course. During the time of study, it is found that the youths are engaged in the following activities mainly:

- Agricultural labour work
- Auto mechanic repair
- Masonry work
- Hotel Management
- Automobile driving
- Electrician Repair of Refrigerators and AC
- Diesel Engine Mechanics

Few youths were found self-employed in the trades like vendors, home appliances repair, cycle repair shops. Reasons for discontinuity in work was more related to the exploitation and difficult work hours

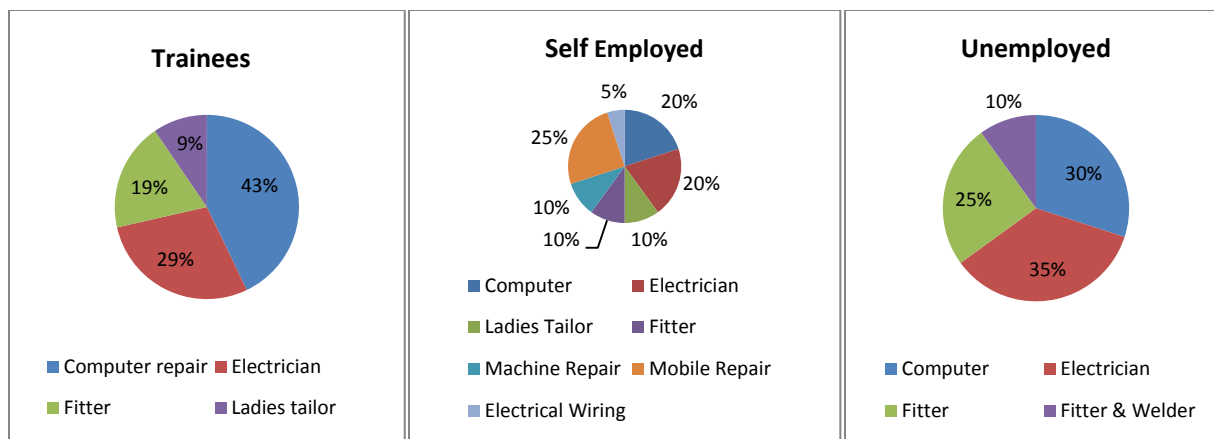


Figure 78 Profile of respondents (self-employed, unemployed and trained) by trade in sample of Udaipur

Among the respondents covered under the survey, the course of computer and electrician were the most preferred ones in sample of youths under training. Youth's preferences for the choice of trades selected for self-employment were distributed in number of trades. The trades of computer and electrician also showcased the maximum number of unemployed youth (30% and 35% respectively) with alternative choices like fitter & welder. There was general consensus regarding better self-employment opportunity in electrician and fitter. There were peer learning practices observed among the trainees in order to understand additional skill apart from the one they specialize on and support systems developed to engage in sustainable livelihoods among trainees.

5.3.10 Youth's Perception

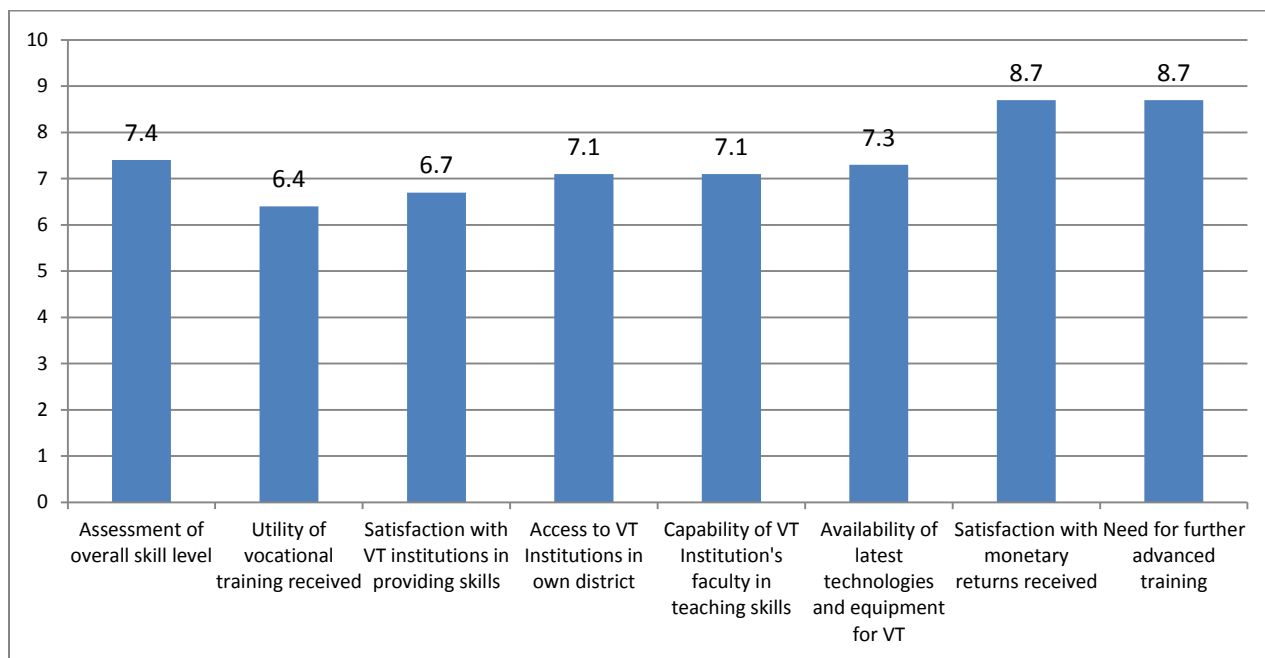


Figure 79 Udaipur Youth's perception, need and aspirations –Sample Group

Satisfaction with current monetary returns after training emerged as the major overwhelming factor among the respondents. Incidentally satisfaction with training institutions was rated the lowest (rated 6.4 on a scale of 10) as majority of the youth realized the utility of these courses imparted to be more just need to know basis and in depth understanding would only be possible on job.

There seems to be no increment received or perceived by the youths for the work carried out/ to be a carried out. The perception that the first year shall also be hands on experience for the true understanding of the sector and so the initial starting salaries of Rs. 3000- Rs. 3500 was acceptable.

5.3.11 Optimization Plan

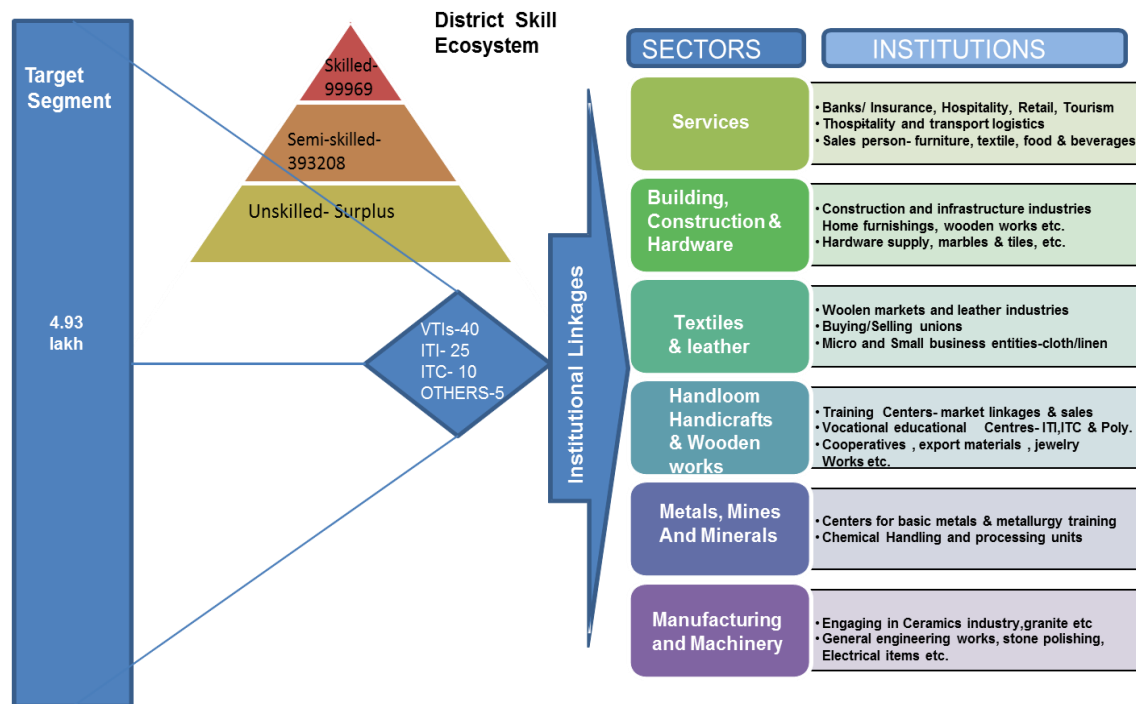
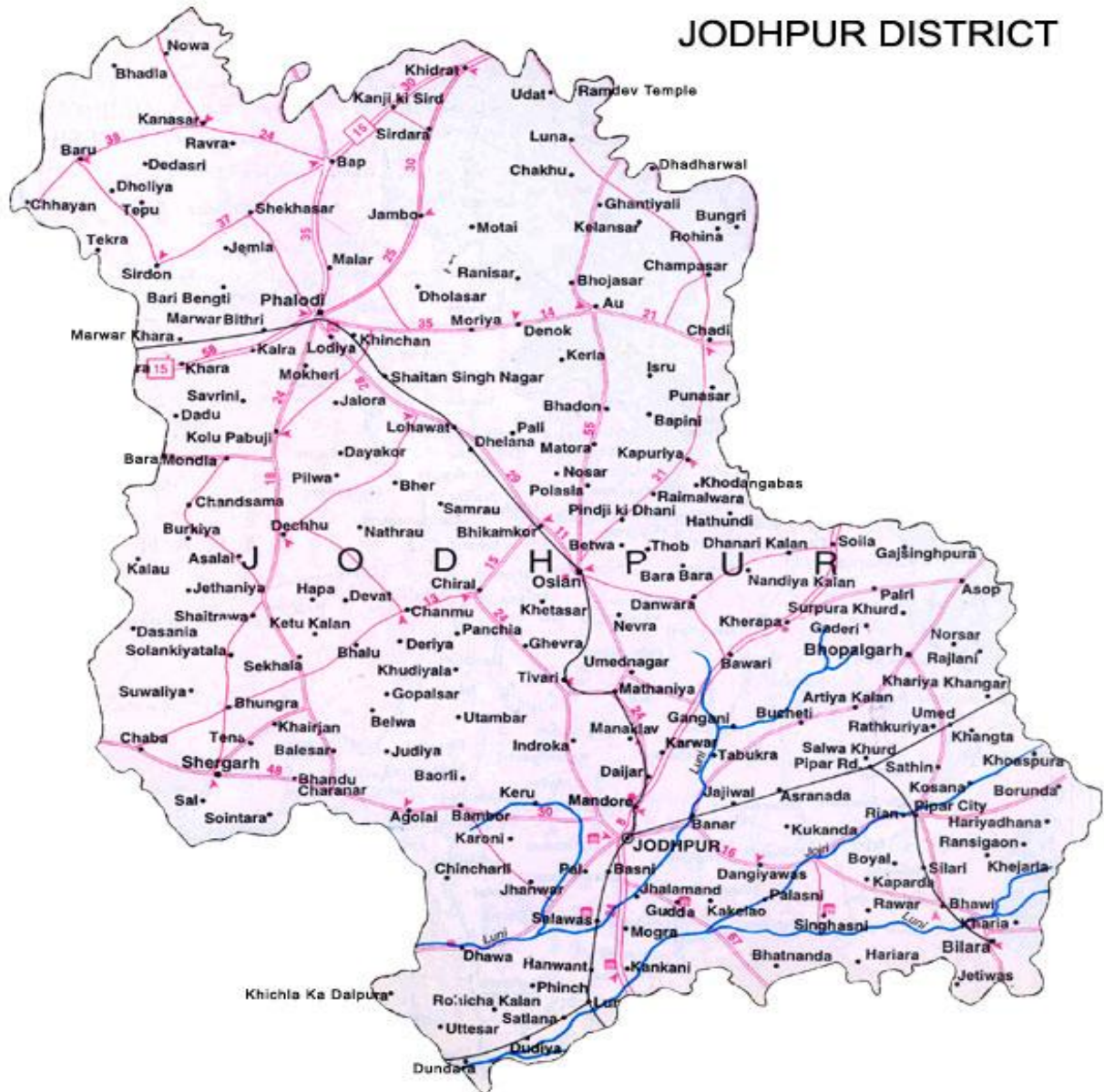


Figure 80 Optimization plan- Udaipur

The district would require to train close to 2 lakh youths to meet the demand of close to 5 lakh skilled and semi-skilled workforces. Keeping in mind the very demographic condition of Udaipur and its predominance of ST population (47.86%), sustainable tribal skill development plans would be required to upscale the handloom and handicrafts base on new marketing and development strategies. Along with this the share of services would only grow with retail and other financial, educational and health sectors emerging slowly. The training partners could look for designing business models on the lines of training youths on tourism, communicative English and basic computers, construction (for unskilled workforce), specific up-skilling in enterprise building and market linkages, engineering based multi-skilled technicians for ancillary industries in metal, mining etc. The industries would require majority of workforce in the sectors like construction, handicrafts & textiles, leather and engineering based.

5.4 District Jodhpur



District Skill Workforce Face Sheet-2012173								
District	Jodhpur			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils		No. of Villages			No. of Schools (elementary & sec.)		6174	
Basic Data								
Population (in '000s)	3686	Overall Literacy(in %)		67.09	Sex Ratio		915	
Decadal growth rate(in %)	27.69	Female Literacy(in %)		52.57	HDI Ranking (2008)		9	
% Urban Population	34.30	Male Literacy(in %)		80.46	Per Capita Income (in Rs.)		18271	
Key Data				Source :Statistical Abstract,2011; Eco Review 2010-11; HD Report 2008; DIC 2009				
Workers participation rate (2001)	38.28	Share of primary sector (%)		59.30	Share of secondary & tertiary sector (%)		40.70	
No. of MSME/Industries	1777	Total Employment (in 000s)		23.3	Total Investment (in lakhs)		41861	
No. of colleges (PG & Graduation)	33	Total graduates (In '00s)		64	Total Post graduates (in '00s)		21	
No.of VTIs(registered ITI+Poly+ITC)				15	Total trainees trained (in '00s)		22	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	67101	77840	84618	93093	98551	106172	112033	1.06 Lakh
Semi-skilled workforce	25879	36292	39371	45936	48541	53803	56656	

5.4.1 Demographic Profile:

Jodhpur, fourth largest district of Rajasthan state is centrally situated in Western region of the State, having geographical area of 22850 km². It has population of 36.85 lacs as per 2011 provisional census. The district stretches between 2600' and 27037' at north Latitude and between 72 55' and 73 52' at East Longitude. This district is situated at the height between 250-300 meters above sea level. Jodhpur is bound by Nagaur in East, Jaisalmer in west, Bikaner in North and Barmer as well as Pali in the South. The length of the district from North to South and from East to West is 197 km. & 208 km. respectively.

This district comes under arid zone of the Rajasthan state. It covers 6.68% of total area of arid zone of the state. Some of the area of Great Indian Desert THAR also comes with in the district.

Jodhpur was ranked the 9th district in the HDI for Rajasthan, 2009 and 13th in the GDI rankings of the state. It has significant increase in the literacy rates of the district especially female literacy which went up by 15.4% in one decade. The per capita income has increased substantially by over five times (Rs.16,791 in 2004-05; as per HDI-Rajasthan, 09). It ranks as the 4th largest district of the state with density of population being 161 (29th) with second highest population of the state (Census, 2011- Provisional).

The worker participation rate in Jodhpur is 38.27 (HDI, Rajasthan, 2009) with primary sector engaging close to 59.30% of the workforce and rest in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 12%. The literacy rate of Jodhpur in 2011 is 67.09 compared to 66.67 of 2001 which is improving and is just higher than the state figure of 67.06.

S.no	Section	Unit	Quantity/
			Location
1	LOCATION		
	Latitude	degree	26.28'N
	Longitude	degree	73.02'E
2	AREA		
	Total geographical area	Sq km	22850
3	ADMINISTRATION		
	Tehsil	number	07
	Villages	number	1869
4	Land Use Pattern		
	Total Area	Hectares	2256405
	Total Irrigated area	Hectares	131752
5	Population (census 2011, provisional)		
	Total population		3685681
	Men		1924326
	Women		1761355
	SC (2001)		456363
	ST (2001)		79540
6	Literacy (except 0-6 age group)		
	Total literate	percent	67.09
	Men	percent	80.46
	Women	percent	52.57
7	Energy		
	Electrified Villages	number	1058
8	Industries (DIC, 2009)		
	Registered MSME units	number	1763
	Employed persons	number	20583
9	Education		
	Pre Primary & Primary Schools	number	2737
	Upper Primary	number	2654
	Secondary & Sr. Secondary	number	873
10	Higher Education / Others		
	Colleges	number	32
	IT I	number	07
	Polytechnic	number	02

Table 47 Jodhpur District Profile- a snapshot

According to Census 2011 provisional data, the male literacy figure stands at 80.46 and female literacy was at 52.57, shown considerable improvement than the figures of 2001 census.

5.4.2 Education Infrastructure and Utilization

Jodhpur's status in literacy was marked just higher than the state average. According to Census 2011 provisional Jodhpur has a total of 6772 schools from pre-primary to senior secondary levels (includes aided schools). Considering the density of population and the vast area, the school spread is above average in comparison to the state average and across other districts but that does not reflect on the current literacy rate. The retention rate of students in schools of Jodhpur is quiet low and it ranks 19th in the education index of the state. (Rajasthan HDI report, 2009)

Education	Jodhpur	Rajasthan
Pre Primary & Primary	2737	49546
Upper Primary	2654	38889
Sec/ Sr Sec	873	19135

Table 48 Jodhpur vs. Rajasthan education status

Education in Jodhpur has received due attention and has resulted in the overall numbers of following education institutes of the district:-

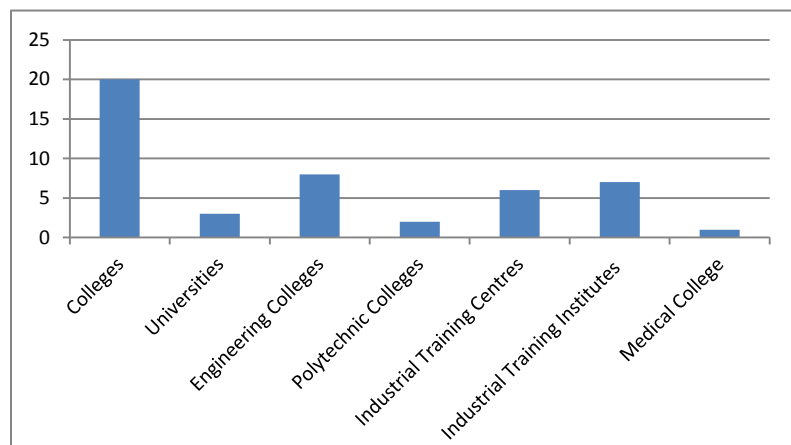


Figure 81 Number of institutes for higher education in Jodhpur

6722 schools are available in the district and 32 colleges offering intermediate college level courses in the area of science, arts and commerce. There are total of just 13 registered vocational training institutes in Jodhpur district. A total of just above 2000 aspirants got enrolled in 2009-10 in the registered training institutes. Apart from these, a number of private organizations have initiated skill training in the region. As per the updated report available on

Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 09 partners (includes NGOs, ITIs, ITCs, private institutes) implementing skilling initiatives with 34 approved programs (22 out of which are completed and 12 are ongoing). A detailed view of the vocational training of Jodhpur could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.4.3 VTI's demand across various trades in Jodhpur district

The existing scenario of VTIs in Jodhpur seems inadequate keeping in mind the rate of industrial growth happening in the region due to NCR factors and nearness to the capital of the state. Private players have eventually emerged for catering the needs for skilling youths of the district in fields as follows:

1. **Computer Based Accountancy:** With number of shops, shopping malls, retail stores and medical stores TALLY to maintain their financial data, growing fast in Jodhpur there is a significant demand for skilled persons in Computer Based Accountancy. After VAT became effective in the state TALLY has become a necessity for all VAT paying shops.
2. **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is telecom or banks or insurance firms is growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field
3. **Repair and maintenance (electricians/wiring/plumbers):** With the advent of new industrial areas and the expansion of the present industrial areas the scope in this trades have grown enormously over last five years. Private organizations and local contractors have sprung up who require skilled and trained manpower for ready deployment. Also with industrialization, the district grows in related spheres of business, construction and building etc.

The courses offered by the government VTIs covered a wide range of sectors; predominantly self-employment based or to cater the local market needs. In private VTIs the courses were fewer in number and specifically catered for placement. The details of the courses offered in the VTIs of Jodhpur are represented as follows:

VTI Trades		
Makeup Artist	COPA	Welder
Ladies Tailor	IT & ESM	DLT
Computer Tally Accounting	Electrician	Fitter
House Wiring	Diesel mechanic	Welder
Receptionist	RAC	

Table 49 Jodhpur district's (sample study) courses offered

The total 5 (private) VTIs were covered in the sample. The clear observation made was that these VTIs provided a wide range of trades (06 courses) with each sanctioned batch strength ranging between 20 to 100. Most of these courses were oriented towards self-employment training and dropout rate was low and most of the offered courses relate to the engineering stream of which diesel mechanic course, electrician course and house wiring course appear to be the most popular ones. Popularity and demand for the courses offered by the women's VTI was in synchrony with the growing demand for new

emerging sectors such as body care and tailoring that are of interest to women. The average age of males was 23 years and females were 20 years substantiating the early joining of these trainings for livelihoods option was quiet late.

More often the courses provided were less oriented for direct placement in the market rather

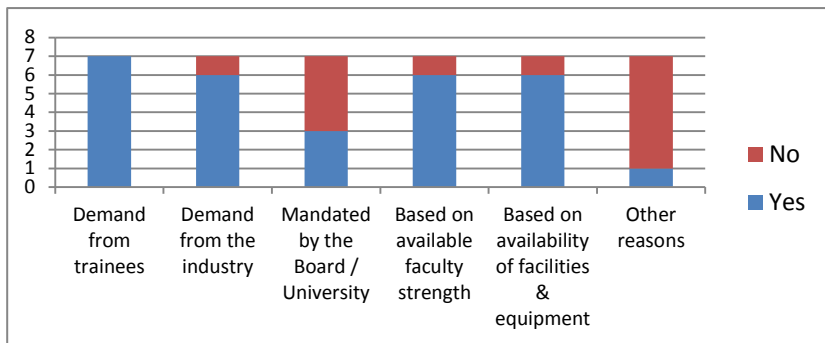


Figure 82 Factors influencing course selection and design of VTIs (Sample Survey)

introduced the aspirants for self-employment and as another home based know how for females. These trades did cater for unorganized sectors and services.. The selection of course design and other influencing factors for

finalization of courses by the VTI functionaries were more or less determined by

the availability of facilities and equipment, demand in the industries and not on the mandate of funding agencies or apex organizations. All the VTIs claimed to have updated technologies, equipped labs, and space for conducting the training, electricity and water supply. Almost all of them did not have hostel facilities for trainees; but have arrangements for commuting for the aspirants both in private and government VTIs.

5.4.4 Placement & Absorption Trend

The overall placement scenario was more encouraging though the trend of self-employment could also

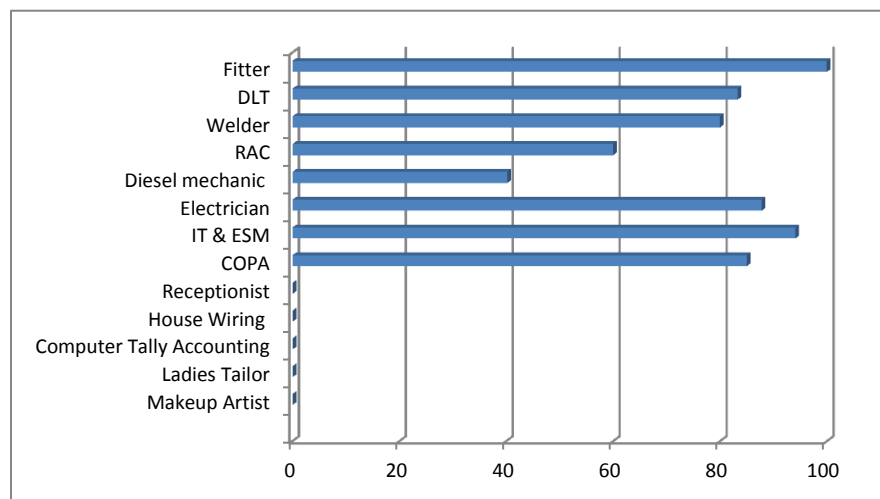


Figure 83 Major trades offering placement in VTIs (Jodhpur Sample Survey)

be seen. Jodhpur possesses limited industrial base and largely engaged in handicrafts and services. The placement was above 80% for trades like COPA, Lab technician, welder-fitter, and electrician and data entry operator. The courses like makeup artist, ladies tailor, house wiring, receptionist were more or less oriented towards self-employment.

5.4.5 Industry Mapping

On account of its location and availability of better in-factural facilities, industrial growth is noticeable in the district. It is centrally located and is one of the important cities of the state. It is well connected with Ahmedabad, Lucknow, Delhi, Bombay and other important towns of Rajasthan. A sizeable number of engineering industries have been set up in the district. There are other industrial units engaged in manufacture of Cement, Industrial Gases, Textiles, Derivatives of Gaur Gum, Chemicals, Plastics, Electronics, Electrical, Mineral based, S.S. Utensils etc. . There are 100 rolling mills engaged in processing of stainless steel Sheets/Patta.

As on 31.03.2009 there are 15 units in the district have large scale unit status after MSMED act 2006 (w.e.f. 1-10-2006) in the district and **21263 units** registered with District industries center, Jodhpur with a total fixed investment of **Rs. 63046.619 Lacs** and providing employment to **94261** persons as small or cottage industries. In Jodhpur there are five main industrial clusters namely **Textile, Handicraft, Guar Gum, Stainless Steel patta-patti / Utensils, Stone processing**. There are 21 Industrial Areas at different places which have been developed and managed by RIICO. The total number of plots available in those Industrial areas is 4782 out of which 4352 have been allotted till 31-03-2009.

Minerals have been playing an important role in development of Jodhpur district for last many decades. District is mainly rich in non-metallic minerals like Sandstone, Rhyolite, Dolomite, Limestone, Jasper, Granite & Clay, Murram, Kankar, Brick earth, Bajri and other minor minerals.

5.4.6 Sector wise mapping of industries in across Jodhpur

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors prevailing in Jodhpur. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	188	6586.66	1753
Chemical & chemical products	8	207.00	96
Construction Material & Building Hardware			
Electronics & IT Hardware			
Food Processing (beverages & tobacco)	13	256.30	106
Furniture & Furnishings	322	5651.07	3854
Leather & leather goods	97	40.08	347
Handicrafts			
Retail			
Textile & Handloom	141	345.03	772
Unorganized Sector	60	467.66	371
Building Construction & Real Estates			
Education & Skill Development			

Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing &	33	554.53	420
Paper Based	17	176.27	130
Mines, Metals & Minerals	158	3842.58	2054
Machinery, Electricals & Manufacturing	721	22573.75	10439
High	Units>150, investment>500, emp>500		
Medium	Units>50, investment>200, emp>250		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 50 Sector wise mapping of industries in Jodhpur

the furniture export segment is a \$200 million industry, directly or indirectly employing as many as 200,000 people. Other items manufactured include textiles, metal utensils, bicycles, ink and sporting goods. A flourishing cottage industry exists for the manufacture of such items as glass bangles, cutlery, carpets and marble products. After handicrafts, tourism is the second largest industry of Jodhpur.

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of senior level functionaries from 10 diverse industries located in Jodhpur district of Rajasthan. These functionaries represented different levels of management as Partners, Directors, General Managers, HR Managers, etc.

Type of establishment	Major Product(s)
Single Ownership	Handloom & Handicrafts
Private Ltd.	Agro-based
Partnership	Engineering & Manufacturing
	Chemicals and pharmaceuticals
	Minerals & Metals

These industries were selected as large (3), medium (3) and small (4) covering various growth sectors of the district like metals & minerals products and manufacturing, handloom and agro-based industries. All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers.

Table 51 Breakup of industries in Jodhpur (Sample study)

5.4.7 Workforce Demand and Supply

The major workforce participation observed in Jodhpur district over a period of two decades has been a predominantly influenced by cultivators/ agricultural laborers. There has been declining trend of workforce share in primary sector from 63% to 59% from 1991-2001. Parallel to this there has been an increase of over 4% in tertiary and secondary sector workforce participation over the same period. The engagement in services and manufacturing sectors has observed a sharp rise due to the tourism, new

industrialization policies, plans, residential towns and other logistics. This workforce has been majorly engaged in informal or small scale industries. Engagement in secondary and tertiary sector shows an

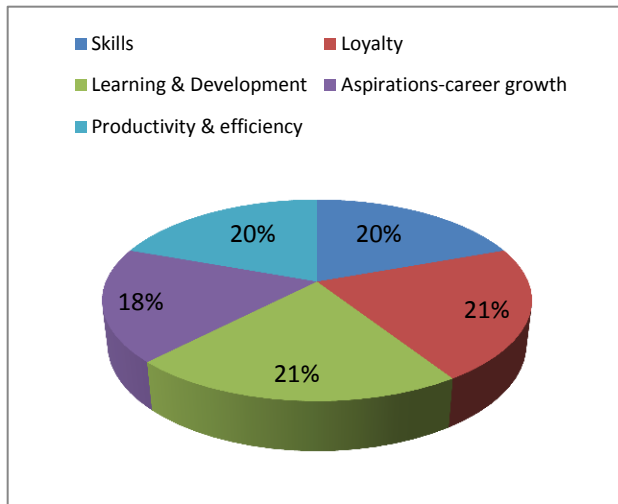


Figure 84 Employers demands in terms of expectations from workers (Jodhpur)

increasing trend as per the industrial growth of the district. Looking at the present resources and skill set of the workforce, manufacturing & engineering based industries, electrical and electronics, metal based industries should play a key in future. The handicraft cluster shall play a vital role in revamping the entire market scenario if rightly tapped in terms of exports and internal business, thus providing abundant employment opportunities.

In terms of industries' requirements and the market trends from the primary survey the major demand in terms of expectations from the employers were very high on all the rated parameters (on a scale of 5). A clear cut

demarcation was difficult but overall requirement of skilled and trained resources was observed.

5.4.8 Projected Workforce Demand

There has been certain marginal increase in the number of full time workers over a period of time but

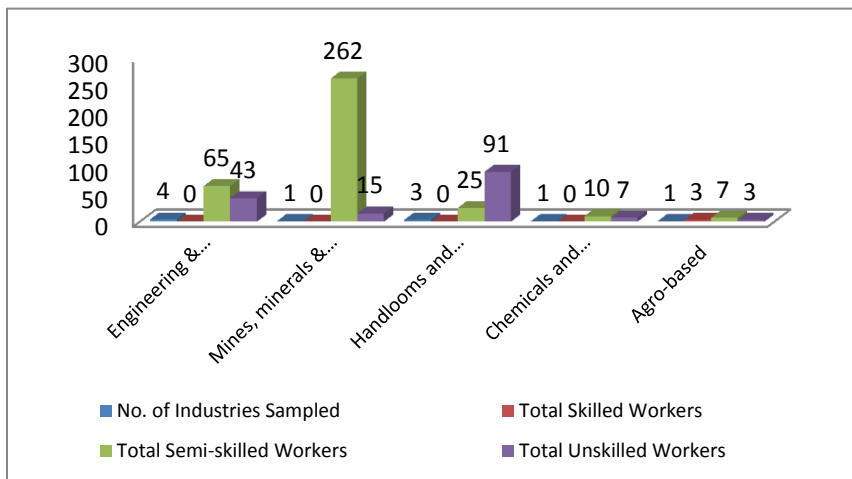


Figure 85 Present status of workforce composition across industries (Sample Jodhpur)

currently is running with less skilled workers. Though majority of the industries interviewed still feel the requirement of semi-skilled workers over the skilled workers for their full time roles. Apparently the number of semi-skilled workers category has grown even after high attrition rate. A clear distinction could be

observed in the preference of semi-skilled and unskilled workers for the full time category as the industries felt the low cost module works better in a capital scenario and incurs less cost in on job training. Also they referred that employees with on job training and rising within the set up would be preferred in long runs.

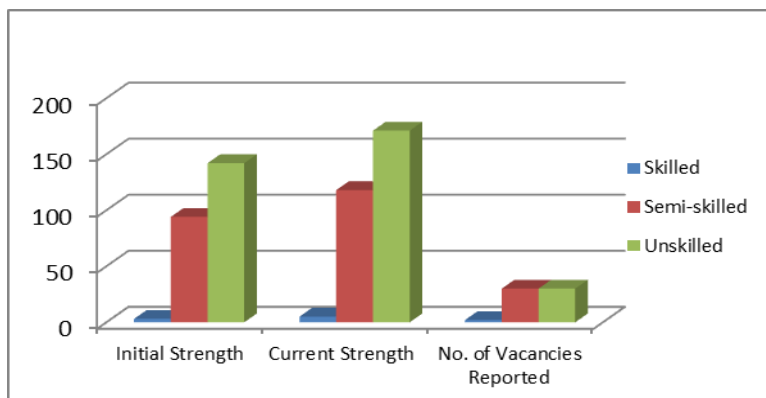


Figure 86 Requirement of skilled, semi-skilled and unskilled workers across sample industries in Jodhpur

The sampled industries demonstrate their intentions to expand the worker base across semi-skilled and unskilled categories majorly in unskilled full time workers. One could observe a similar requirement in the semi-skilled requirement and unskilled full time based requirements. This clearly

validates the mindset of the industry houses to engage less skilled

workers. Further classifying into the staff roles of these industries, the demand for well qualified professionals could be observed for senior and middle level management. Similar responses were also found for office administration and accounting positions. In case of support staff the general yardstick followed was class 10th pass and not necessarily the skills possessed.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	824299	891345	940282	971203	1012614	1060672	1095250	
Semi-skilled	67198	72664	76653	79174	82550	86468	89287	
Skilled	4480	4844	5110	5278	5503	5765	5952	
Total demand	895978	968853	1022045	1055655	1100667	1152904	1190489	63%
Industry Sector								
Unskilled	153715	163532	164611	173826	176887	182271	186424	
Semiskilled	70945	75476	75974	80227	81640	84125	86042	
Skilled	11824	12579	12662	13371	13607	14021	14340	
Total demand	236484	251587	253247	267424	272133	280417	286806	15%
Services Sector								
Unskilled	49074	52124	54259	56740	58417	60695	62499	
Semiskilled	114505	121623	126605	132394	136306	141621	145830	
Skilled	163579	173747	180864	189134	194723	202316	208328	
Total demand	327158	347493	361729	378268	389445	404631	416657	22%
All Sectors								
Unskilled	1027088	1107001	1159152	1201769	1247917	1303638	1344172	
Semiskilled	252649	269763	279233	291795	300496	312214	321158	
Skilled	179883	191170	198637	207784	213833	222101	228621	
Total Demand	1459620	1567934	1637021	1701348	1762246	1837953	1893951	100%

Table 52 Labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors Jodhpur

Basis on the inputs received from sector wise expansion plans the Workforce projections shall be made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Gems & Jewellery			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Organized Retail			
Real Estate			
Media, Entertainment, content creation, animation			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 53 Workforce across various sectors by 2017- Jodhpur

5.4.9 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in Jodhpur district on the basis of manpower absorption and production in high growth industries in the district. The analysis would factor in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	364519	444377	495435	535721	580218	635000	673624
Semi-skilled	67101	77840	84618	93093	98551	106172	112033
Skilled	25879	36292	39371	45936	48541	53803	56656

Table 54 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

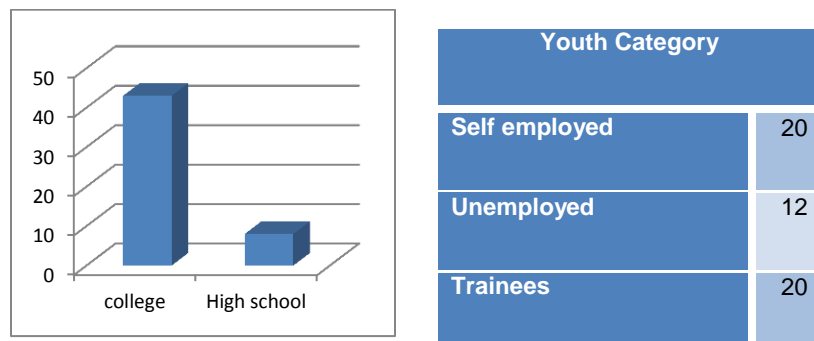
- The situation in Jodhpur is not conducive enough to support industrial growth. Though investments are not a problem, availability of suitable land is a major problem. Water resources are also not sufficient to support industrial growth, and preference is expressed for less water- consuming projects. Availability of power is just optimal to support industries. But the major problem is the availability of skilled manpower to run the industries. In Jodhpur, most of the labour force is available only on a seasonal basis.
- The current number of Vocational Training Institutes is not meeting the requirement of industries. If we examine the trades for which manpower is immediately required, it is observed that skilled manpower such as plumbers, fitters, and carpenters are very few and not sufficient to meet the industry demands. Also, it is observed that VTIs in the district are not laying much emphasis on practical training. All the trades require good practical training for acquiring qualified manpower. Given the present scenario; neither the government VTIs, nor the private VTIs are suitably providing the required practical training.
- Skilled manpower for good finishing in handicrafts business and furniture making is not available. Thus, availability of need based skilled workers is required in the district, but so far no efforts have been made to meet this demand. Skilled training targeting some of the important clusters of Jodhpur would be necessary like skill training to train the support staff for the 22,000 plus industries existing in small and cottage industries and service sector. A more targeted approach with training curriculum more suitable as per the needs of the industry would be the need of the hour.
- Modern handicrafts, home furnishing, antiques, ready- made garments and construction are emerging as promising sectors in the district. These sectors appear to be sustainable enough to provide employment for trained people on a long- term basis.

5.4.10 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Jodhpur district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (52 youths) and FGD with youths were used to draw inferences of their thought process. The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 52 respondents

across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

The youth were covered from the categories of self-employed, unemployed and trainees (as shown in the table above) with an average age group of 28 years. 81% of the youth covered were college going/drop outs and 19% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.



Youth Category	
Self employed	20
Unemployed	12
Trainees	20

Figure 87 Youth Education Profile of sample **Table 55 Youth Category in Jodhpur-sample**

Among the respondents covered under the survey, the course of fitter and electrician were the most preferred ones in sample of youths under training. Youths preference for the choice of trades selected for self-employment were in synchrony with the market demand with contract work (40%) and own business for ancillary parts trading (50%) emerging as leading choices. The trades of fitter and electrician also showcased the maximum number of unemployed youth (40% and 20% respectively) with alternative choices like wireman, computer operation, diesel mechanic as alternative trades. There was general consensus regarding better self-employment opportunity in electrician and fitter. There were peer learning practices observed among the trainees in order to understand additional skill apart from the one they specialize on and support systems developed to engage in sustainable livelihoods among trainees.

5.4.11 Youth's Perception

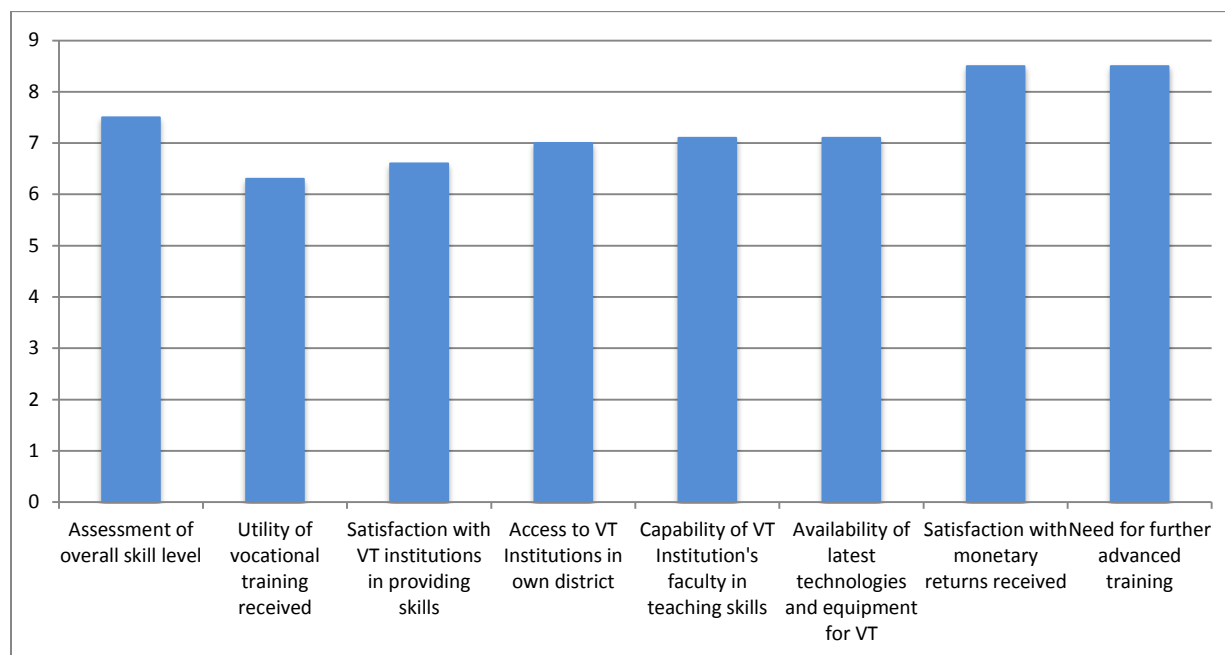


Figure 88 Jodhpur Youth's perception, need and aspirations –Sample Group

Satisfaction with current monetary returns and felt need for further advanced training emerge as the two leading factors by the respondents. However, utility of vocational training received gets the lowest rating of 6.3 on a scale of 10.

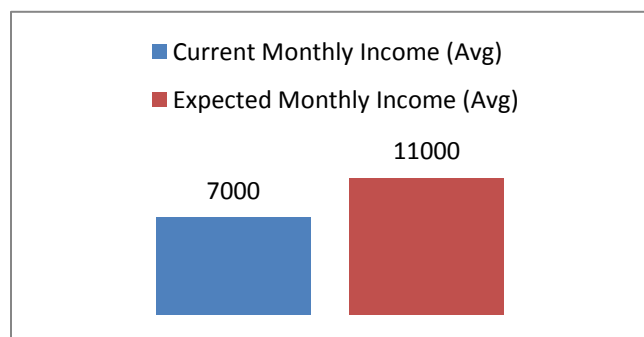


Figure 89 Income current and expected- sample group, Jodhpur

Most of the youths are engaged in daily wages. Some youths are unemployed because they didn't get any work opportunity after skilling. Due to lack of awareness and low family income, the drop out ratio among youths has been high in some of the training programmes. During the FGD it emerged that more than 70% candidates wanted a salaried job with less preference to government jobs and more preference to better initial salary.

There was a feeling among the trainees that their ability to adapt to other skill requiring jobs was quiet limited and thus would prefer for self-assured livelihoods instead through self-employment. The expectation in terms of salary was about Rs. 7,000 expecting Rs. 3,000 hike though it could be after a year of work experience. The major aspiration from the entry level job remained work satisfaction, improved lifestyle, learning while applying the skills and family security. Families on the other hand wished for government jobs which were easy works with better salaries and job security. 80% of the interviewed youths either working or self-employed were satisfied with the monthly income. There were 90% of the youths did not get any increment for past two years of work. The youths were averse

of some of the exploitative modes of engagement in the industrial set ups like odd working hours, less security and wished to avoid these by gaining better financial negotiation after skilling.

5.4.12 Optimization Plan

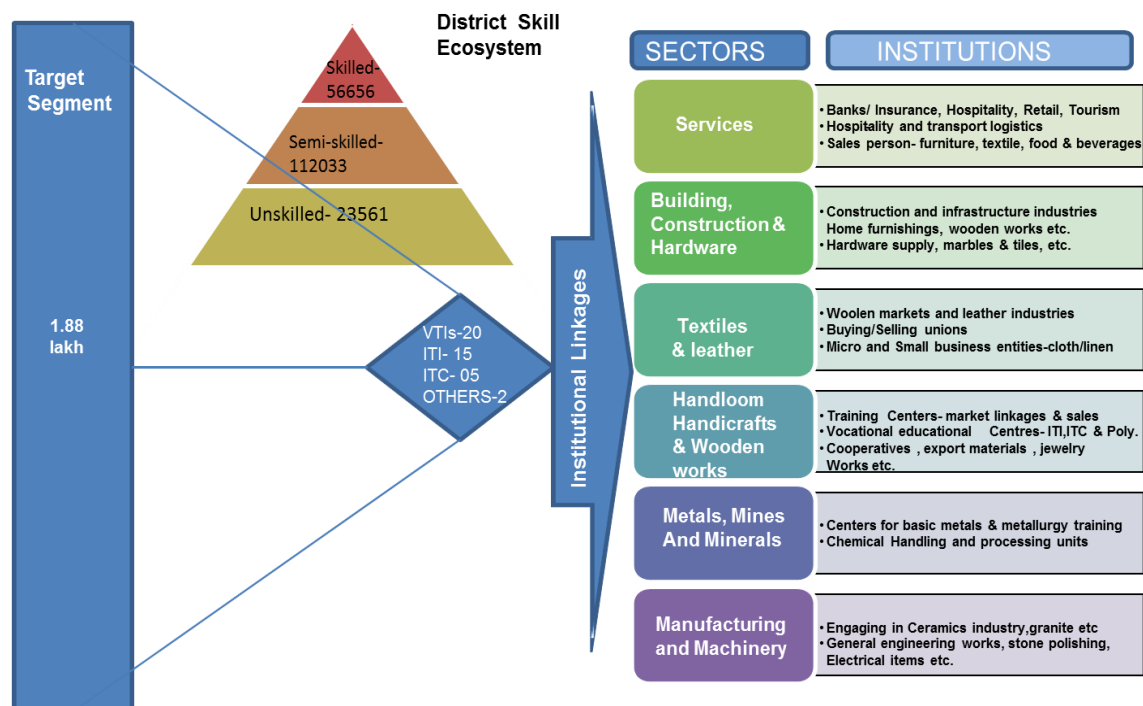


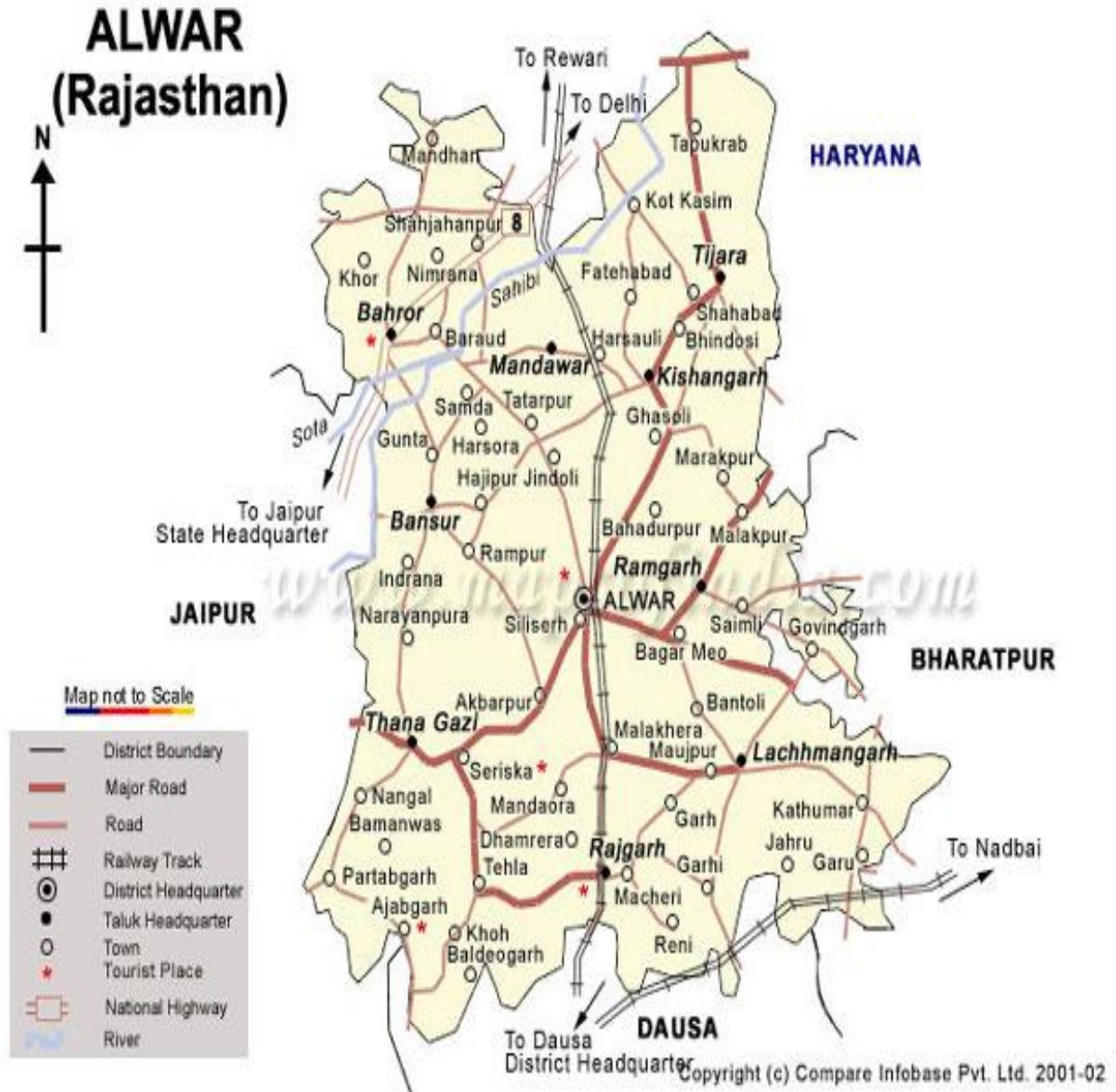
Figure 90 Optimization plan- Jodhpur

The key stakeholders' contribution in enabling to achieve the target (as shown in the figure) would be as follows:

- State: The state to target the skilled and semi-skilled segment for skilled training by creating additional 35 skill development centres (VTIs) in the district level of operations. It should encourage the private training partners to participate and operate in the district due to its considerable base of workers involved in secondary and tertiary sectors.
- Training Partners: The sectors for engaging more skilled workforce would be in tourism, construction, metal works, leather, textile and handlooms, and services in the district.. Along with these, specific course curriculum designed for communicative English, life skills and basics in computer would be the key areas of skill development training.
- Industries: The primary sectors of high human resource requirement would be tourism, transport and logistics, construction, textiles, handicrafts (wooden and textiles), leather, and therefore would require increasing linkages with the related institutions for skilled workforce absorption

NSDC would be an enabler to lead the training partners in retail, textiles and food processing by encouraging specifically designed proposals with increasing the linkages in industry associations and PPP models.

5.5 District Alwar



District Skill Workforce Face Sheet-2012								
District	Alwar			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	12	No. of Villages	1946	No. of Schools (elementary & sec.)	5075			
Basic Data								
Population (in '000s)	3672	Overall Literacy (in %)	71.68	Sex Ratio	894			
Decadal growth rate(in %)	22.75	Female Literacy(in %)	56.78	HDI Ranking (2008)	6			
% Urban Population	17.82	Male Literacy(in %)	85.08	Per Capita Income (in Rs.)	19145			
Key Data <i>Source :Statistical Abstract,2011; Eco Review 2010-11; HD Report 2008; DIC 2009</i>								
Workers participation rate (2001)	48.7	Share of primary sector (%)	70.9	Share of secondary & tertiary sector (%)	29.1			
No. of MSME/Industrie s	22224	Total Employment (in 000s)	94	Total Investment (in lakhs)	85496			
No. of colleges (PG & Graduation)	86	Total graduates (In '00s)	291	Total Post graduates (in '00s)	25			
No.of VTIs(registered ITI+Poly+ITC)			23	Total trainees trained (in '00s)	31			
Indicators (cumulative)								Employabl e population
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	
Skilled workforce	84957	92453	87350	90907	88286	88768	86661	2.1lakh
Semi-skilled workforce	12726 2	13574 0	13804 0	14280 5	14491 5	14930 0	15154 7	

5.5.1 Demographic Profile:

Alwar is located at 27.57°N 76.6°E. It has an average elevation of 271 metres (889 feet). Also known as the gateway to Rajasthan, Alwar district is situated in the North-Eastern part of Rajasthan. It is bounded in the North by Gurgaon of Haryana, Bharatpur district on North-East and Mahendragarh of Haryana. Jaipur lies in the South-West and Dausa in the south. The district has a dry climate with hot summer, a cold winter and a short monsoon season.

Alwar, Behror, Rajgarh and Kishangarhbas are four sub-divisions in the district. The district consists of twelve tehsils, seven sub-tehsils and six Nagar Palikas.

Alwar was ranked the 6th district in the HDI for Rajasthan, 2009 and 5th in the GDI ranking (0.546). It has significant increase in the literacy rates of the district especially female literacy which went up by 13.4% in one decade. The per capita income has increased substantially by over four times (Rs.1954 in 2004-05; as per HDI-Rajasthan, 09). It ranks as the 16th largest district of the state 4th highest density of population in the state of 438 (Census, 2011- Provisional).

The worker participation rate in Alwar is 48.7% (HDI, Rajasthan, 2009) with primary sector engaging close to 70.9% of the workforce and rest in secondary & tertiary sectors. In rural areas the participation

S.no	Section	Unit	Quantity
			Value
1	LOCATION		
	Latitude	degree	27.4'NE
	Longitude	degree	76.9'E
2	AREA		
	Total geographical area	sq km	8380
3	ADMINISTRATION		
	Tehsil	number	12
	Villages	number	1946
4	Land Use Pattern		
	Total Area	Hectares	783281
	Total Irrigated area	Hectares	451546
5	Population (census 2011)		
	Total population		3671999
	Men		1938929
	Women		1733070
	SC (2001)		539036
	ST (2001)		239905
6	Literacy (except 0-6 age group)		
	Total literate	percent	71.68
	Men	percent	85.08
	Women	percent	56.78
8	Energy		
	Electrified Villages	number	1873
9	Industries (DIC, 2009)		
	Registered MSME units	number	22160
	Employed persons	number	89907
10	Education		
	Pre Primary & Primary Schools	number	2036
	Upper Primary	number	2397
	Secondary & Sr. Secondary	number	1272
11	Higher Education / Others		
	Colleges	number	86
	I T I	number	21
	Polytechnic	number	2

Table 56 Alwar District Profile- a snapshot

rate is higher than the urban by close to 20% (Urban- 31.8% & Rural- 51.6%). The literacy rate of Alwar in 2011 is 71.68 compared to 61.70 of 2001 which is remarkable and is higher than the state figure of 67.06. According to Census 2011 provisional data, the male literacy figure stands at 85.08 and female literacy was at 56.78, remains higher than the state average though is on the lower side in comparison to the male figures.

Alwar has an important place in Agriculture production in Rajasthan. Total geographical area of the district is 7,83,281 hectares which is about 2.5 percent of the State. In 2010–2011 the net cultivated area is 5,07,171 hectares from which about 83 percent area viz. – 4,51,546 is irrigated and remaining 17 percent area viz. – 82,903 is un-irrigated. Double cropped area is 2,52,049 hectares of which 32,230 hectares (12%) area is irrigated and remaining 2,19,819 hectares (88%) area is unirrigated. Thus, the total cropped area of the district is 8, 12,873 hectares.

5.5.2 Education Infrastructure and Utilization

Alwar’s status in literacy was marked higher than the state average. According to Census 2011 provisional Alwar has a total of 5705 schools from pre-primary to senior secondary levels. Considering the density of population and the vast area, the school spread is average in comparison to the state average and across other districts. The retention rate of students in schools of Alwar is quiet high (Rajasthan HDI report, 2009).

Education	Alwar	Rajasthan
Pre Primary & Primary	2036	49546
Upper Primary	2397	38889
Sec/ Sr Sec	1272	19135

Table 57 Alwar vs. Rajasthan education status

Education in Alwar is increasing day by day because Alwar is coming close to the NCR region and also to the state capital. Education in Alwar includes 7 engineering colleges, 13 ITCs, 8 ITIs, 2 Polytechnics, 1 agriculture research centre and 9 management institutes.

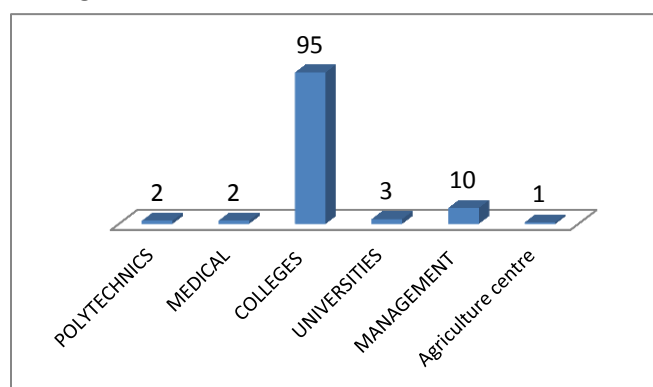


Figure 91 Number of institutes for higher education in Alwar, 09

At the Intermediate college level, courses are available in the area of science, arts and commerce. There are total of just 23 registered vocational training institutes in Alwar district. A total of just above 2000 aspirants got enrolled in 2009-10 in the registered training institutes. Apart from these, a number of private organizations have initiated skill training in the region. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 18

partners (includes NGOs, ITIs, ITCs, private institutes) implementing skilling initiatives with 42 approved programs (32 out of which are completed and 11 are ongoing). A detailed view of the vocational

training of Alwar could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.5.3 VTI's demand across various trades in Alwar district

The existing scenario of VTIs in Alwar seems inadequate keeping in mind the rate of industrial growth happening in the region due to NCR factors and nearness to the capital of the state. Private players have eventually emerged for catering the needs for skilling youths of the district in fields as follows:

- a) **Computer Based Accountancy:** With number of shops, shopping malls, retail stores and medical stores TALLY to maintain their financial data, growing fast in Alwar there is a significant demand for skilled persons in Computer Based Accountancy. After VAT became effective in the state TALLY has become a necessity for all VAT paying shops.
- b) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is telecom or banks or insurance firms is growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field
- c) **Repair and maintenance (electricians/wiring/plumbers):** With the advent of new industrial areas and the expansion of the present industrial areas the scope in this trades have grown enormously over last five years. Private organizations and local contractors have sprung up who require skilled and trained manpower for ready deployment. Also with industrialization, the district grows in related spheres of business, construction and building etc.
- d) **Hotel Management:** Alwar is famous for "Sariska Sanctuary" and this brings a lot of tourists to the district giving a fillip to the hospitality industry. As such the demand for skilled persons in hotel management is large.

The courses offered by the government VTIs covered a wide range of sectors; predominantly self-employment based or to cater the local market needs. In private VTIs the courses were fewer in number and specifically catered for placement. The details of the courses offered in the VTIs of Alwar are represented as follows:

Government. VTI Trades			Private VTI Trades
COPA	Fitter	Fashion Tech.	Electrician
Dress Making	Hair & Skin care	Tool & Die Making	Fitter
EIE & PT	Interior Designing	Turner	COPA
Electrical	Motor Mechanic	Welder	Mechanic (Diesel)
Electronics	Steno (English)		

Table 58 Alwar district's (sample study) courses offered

The total 3 (government) and 5 (private) VTIs were covered in the sample. The clear observation made was that these government VTIs provided a wide range of courses (15 courses) with each sanctioned batch strength ranged from 27 to 273. Most of these courses were oriented towards self-employment training and dropout rate was low. Eight of the offered courses relate to the engineering stream of which diesel mechanic course, electrician course and house wiring course appear to be the most popular ones. Popularity and demand for the courses offered by the women's VTI was in synchrony with the growing demand for new emerging sectors such as body care and interior designing that are of

interest to women. The average age of males was 18 years and females were 20 years substantiating the early joining of these trainings for livelihoods option.

More often the courses provided were less oriented for direct placement in the market rather introduced the aspirants for self-employment and as another home based know how for females. These trades majorly catered for the needs of more unorganized sectors. The selection of course design and other influencing factors for finalization of courses by the VTI functionalities were more or less

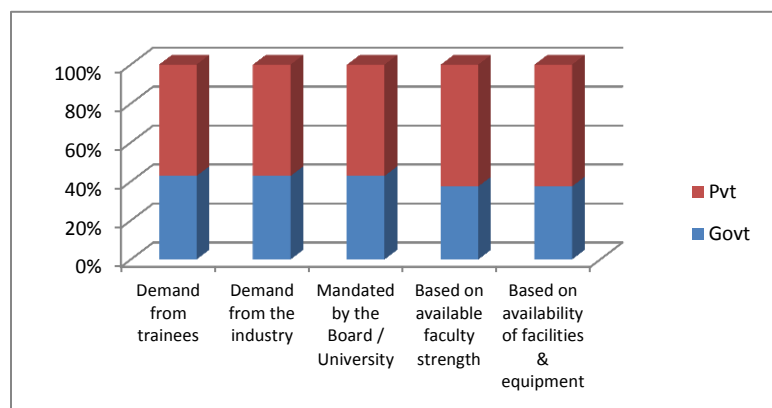


Figure 92 Factors influencing course selection and design of VTIs (Alwar Sample Survey)

determined by the availability of facilities and equipment, demand in the industries and not on the mandate of funding agencies or apex organizations. All the VTIs claimed to have updated technologies, equipped labs, and space for conducting the training, electricity and water supply. Almost all of them did not have hostel facilities for trainees; but have arrangements for commuting for the aspirants both in private and government VTIs.

Interestingly the VTI functionalities claim that the courses on offer in these government VTIs are more demand driven as per the aspirations of the youths and less mandated from any university or board. The industry’s role in demanding courses favorable for its optimization was observed to be high and thus one could anticipate the involvement of contemporary industries in campus placement in these VTIs. No evidence of any kind of market research or study based course requirements were made across all the government VTIs.

As per the industry association (Bhiwadi Manufacturers Association) there are around 3000 industrial set-ups either existing or coming up in the Bhiwadi region and would require large number of skilled workers for their set ups plus support staffs in terms of gardeners, drivers, plumbers, housekeeping etc. The current courses provided are less equipped or do not directly address the concern. This existing gap needs skilling infrastructure to be nearly doubled to address the cause.

5.5.4 Placement & Absorption Trend

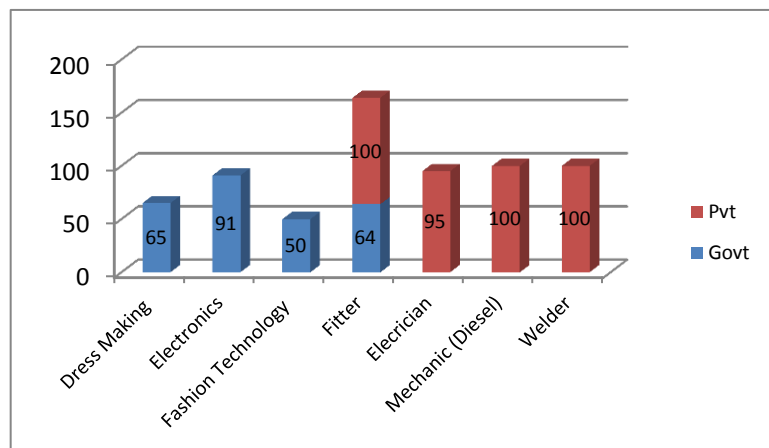


Figure 93 Major trades offering placement in VTIs (Alwar Sample Survey)

The overall placement scenario remains more or less dominated by the factor of self-employment trend. Though Alwar possesses a considerable industrial base, engaging a substantial workforce; the interaction with the VTIs remains limited and thus, the placement remains far below expectations. The private VTIs have had success in placement in fields like electrician, fitter, welder and mechanic and some partial

achievements in placement for government VTIs in fields of electronics, dress making, fashion technology and fitter. The thrust of the VTIs (perhaps based on the market conditions) is more focused on developing trained manpower for the self-employment sector. Also there has been growing demand from the industrial houses for more updated training curriculums, i.e. ready to work skilled youth with less investment in terms of time and energy for induction and grooming.

5.5.5 Industry Mapping

At present there are twenty two industrial areas developed by RIICO at Alwar district. There are 87 large scale industrial units and 22160 MSME units in the district. Most of them are located in various industrial area of Alwar district. Industries established in Alwar district are exporting wide range of products like shaving blade, hand tools, alu extruded product, surgical blade, synthetic blended fabrics, empty hard gelatin capsules, leather shoes, subscriber carrier system, tyre-tube, picture tube, Chemicals, sanitary items, crockery, suiting, slate tile, different chemicals like calcium cyanide, alkalis salt, moped. PVC cable sanitary ware, readymade garments. Alwar is fairly rich in mineral wealth. It produces marble, granite, felspar, dolomite, quartz, lime stone, soap stone, barites.

MSME in Alwar

According to D.I.C data (March, 2009), there were around **22201 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of Rs.131398.35 lakhs providing employment to **89907 persons**. There are **87 large units** working in the district.

The type of industries registered were in leather, textile, handicrafts, mineral based, agro-food based, wood based, paper based, electrical based etc. Demand based, resource based and ancillary industries included automobiles, engineering based industries, packaging and services, textiles and leather, cement, food processing industries.

5.5.6 Sector wise mapping of industries in across Alwar

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors prevailing in Alwar. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Employment	Investment (Rs lakhs)
Agriculture & Allied	773	3135	7038.24
Auto & Auto Components			
Chemical & chemical products	481	5028	17604.79
Construction Material & Building Hardware			
Electronics & IT Hardware			
Food Processing (beverages & tobacco)	9	218	1021.58
Furniture & Furnshing	3022	5332	2321.26
Leather & leather goods	1807	3206	807.56
Gems & Jewellery			
Retail			
Textile & Handloom	2833	2790	9405.03
Unorganized Sector	4607	10300	5988.46
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing &	64	728	1794.71
Paper Based	100	925	2203.00
Mines, Metals & Minerals	5054	15810	38642.04
Machinery, Electricals & Manufacturing	2185	18010	35833.25
High	Units>200, investment>1000,emp>1000 – all applicable		
Medium	Units>100, investment>200, emp>750- all applicable		
Low	Units> 10, investment> 30, emp>30 – all applicable		
Emerging	Investment & demand based sectors of district-DIC		

Table 59 Sector wise mapping of industries in Alwar

Alwar has a very strong industrial base and caters for number of sectors. Manufacturing, automobiles and ancillary industries, mineral and metals etc. form the major chunk of industrial output and thus employment.

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of senior level functionaries from 10 diverse industries located in

Alwar district of Rajasthan. These functionaries represented different levels of management as Partners, Directors, General Managers, HR Managers, etc.

These industries were selected as large (2), medium (5) and small (3) covering various growth sectors of

Type of	Major Product(s)
Single Ownership	Packaging (1 firm)
Private Ltd.	Metals & Mineral Products
Partnership	Wires & Steel
	Hospitality
	Automotive

Table 60 Break-up of industries in Alwar (Sample study)

the district like metals & minerals products and manufacturing, automotive, packaging and hospitality. All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers. The oldest establishment (Hariom Precision Private Ltd. & Imperial Hotel) dates back to 1982 while the youngest establishment (Motherson

Automotive Technologies & Engineering) was established in 2012.

5.5.7 Workforce Demand and Supply

The major workforce participation observed in Alwar district over a period of two decades has been a predominantly influenced by cultivators/ agricultural laborers. There has been declining trend of workforce share in primary sector from 73% to 71% from 1991-2001. Parallel to this there has been an increase of over 2% in tertiary and secondary sector workforce participation over the same period. The engagement in services and manufacturing sectors has observed a sharp rise due to the industrialization in Bhiwadi region and coming up of new industrial plans, residential towns and other logistics. This workforce has been majorly engaged in informal or small scale industries. Engagement in secondary and tertiary sector shows an increasing trend as per the industrial growth of the district. Looking at the present resources and skill set of the workforce, manufacturing & engineering based industries, automotive, electrical and electronics, metal based industries should play a key in future.

In terms of industries' requirements and the market trends from the primary survey the major demand in terms of expectations from the employers were very high on all the rated parameters (on a scale of 5). A clear cut demarcation was difficult but overall requirement of skilled and trained resources was observed.

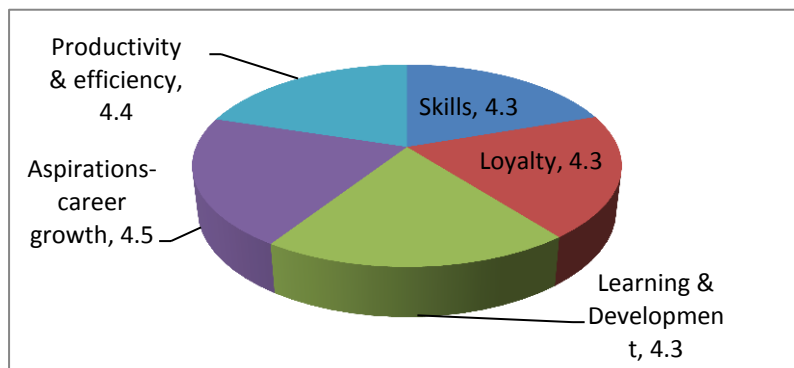


Figure 94 81 Employers demands in terms of expectations from workers (Alwar)

5.5.8 Projected Workforce Demand

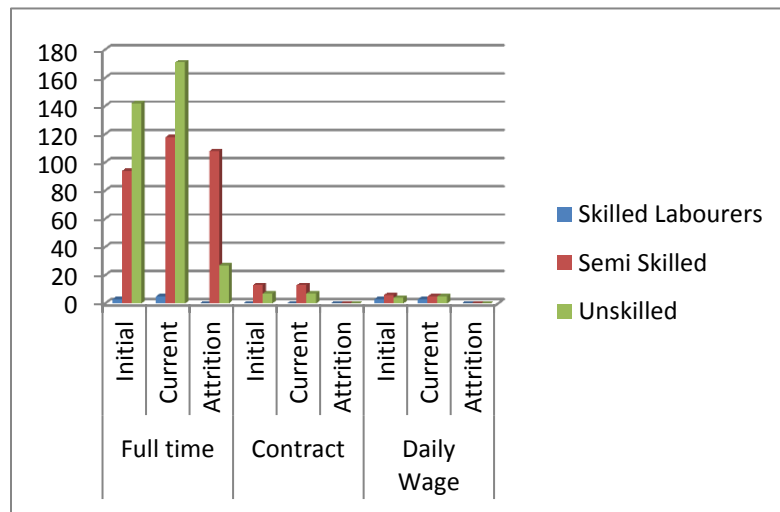


Figure 95 Present status of skilled workforce and attrition across workers (Sample Alwar)

There has been certain increase in the number of full time workers over a period of time but currently is running with less skilled workers. Though majority of the industries interviewed still feel the requirement of unskilled workers over the skilled workers for their full time roles. Apparently the number of semi-skilled workers category has grown even after high attrition rate. The need for unskilled contract/ daily wage laborers was phenomenally very high and the attrition rate was even manageable as per the industries'

feedback. A clear distinction could be observed in the preference of semi-skilled and unskilled workers for the full time category as the industries felt the low cost module works better in a capital scenario and incurs less cost in on job training. Also they referred that employees with on job training and rising within the set up would be preferred in long runs.

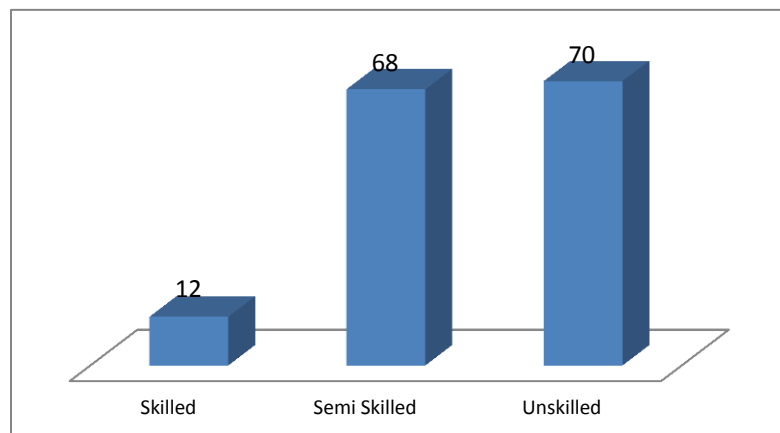


Figure 96 Requirement of skilled, semi-skilled and unskilled workers across sample industries in Alwar

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in unskilled full time workers. One could observe a similar requirement in the semi-skilled requirement and unskilled

full time based requirements. This clearly validates the mindset of the industry houses to engage less skilled workers.

Further classifying into the staff roles of these industries, the demand for well qualified professionals could be observed for senior and middle level management. Similar responses were also found for office administration and accounting positions. In case of support staff the general yardstick followed was class 10th pass and not necessarily the skills possessed.

There were marked differences in the wages of the fulltime workers and skilled fulltime workers. A significant gap is observed between the average wages paid to male and female workers under the semi-skilled and unskilled categories. More employers are willing to increase the wages of full time



Figure 97 : Wages of skilled, semi-skilled and unskilled workers (all full time) in the sample survey of Alwar

skilled, semi-skilled and unskilled male workers compared to the part time category workers.

The difference in the wage structure varies from Rs. 120 in semi-skilled category to Rs. 160 in unskilled in comparison with the male average wage structure. The skilled female workforce gets an amount which is higher than the semi-skilled and unskilled workforce with a minimum margin of Rs. 30 (in case of semi-skilled to skilled) and maximizes the difference in case of unskilled to

skilled by over Rs. 50. All these comparisons stand good for full time workers only. Contractual and daily wage workers' wages do not have any significant changes though the actual wages are too low.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of Job requirement
Agricultural Sector								
Unskilled	980364	1036616	1041883	1085920	1112373	1142448	1166470	
Semi-skilled	79921	84507	84936	88526	90683	93134	95093	
Skilled	5328	5634	5662	5902	6046	6209	6340	
Total demand	1065613	1126757	1132482	1180348	1209101	1241791	1267903	66%
Industry Sector								
Unskilled	155456	167875	167937	176402	178379	184274	187365	
Semi-skilled	71749	77481	77509	81416	82329	85049	86476	
Skilled	11958	12913	12918	13569	13721	14175	14413	
Total demand	239164	258269	258364	271388	274429	283498	288254	15%
Services Sector								
Unskilled	44937	47615	48938	50728	51825	53560	54739	
Semi-skilled	104854	111102	114190	118366	120925	124973	127725	
Skilled	149792	158717	163128	169094	172751	178533	182465	
Total demand	299583	317435	326256	338188	345501	357066	364930	19%
All Sectors								
Unskilled	1180758	1252106	1258758	1313051	1342577	1380282	1408575	
Semi-skilled	256524	273090	276635	288308	293937	303157	309294	
Skilled	167078	177265	181709	188565	192517	198917	203217	
Total Demand	1604360	1702461	1717102	1789924	1829031	1882355	1921086	100%

Table 61 Projected Workforce demand across sectors in the district Alwar

Alwar shows a dramatic decrease by more than 4% in the workforce engaging in primary sector and could be credited with the upcoming of Bhiwadi and NCR region for the growing workforce participation in secondary and service sectors. Basis on the inputs received from sector wise expansion plans the Workforce projections shall be made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT/ITES or software			
Chemical & Pharmaceuticals			
Gems & Jewellery			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Organized Retail			
Real Estate			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 62 Workforce across various sectors by 2017- Alwar

5.5.9 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in Alwar district on the basis of manpower absorption and production in high growth industries in the district. The analysis would factor in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	425208	496494	501899	553532	581176	617811	643925
Semi-skilled	127262	135740	138040	142805	144915	149300	151547
Skilled	84957	92453	87350	90907	88286	88768	86661

Table 63 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Industries were more concerned with the factor endowment of labour. Water supply, land and electricity was least on the priority as labour availability remains low and dependence on migrated workers from states like Bihar and Odisha remains high for existing industrial base.
- The VTIs did not cater for the industry requirements and more customized practical courses were suggested by the industry group to better the condition of skilled manpower.
- The automobile sector is the predominant and emerging sector in this district. It is in a booming position. Currently, 200 plus automobile and ancillary industries are existing here. Gradually, iron industries are also progressing. This sector is sustainable enough to absorb huge new manpower.
- Skilled training targeting some of the important clusters of Alwar would be necessary like skill training to train the support staff for the 3000 plus industries coming up or existing in Bhiwadi etc. A more targeted approach with training curriculum more suitable as per the needs of the industry would be the need of the hour.
- A large percentage of the population works as casual labour in capacities ranging from cleaners to semiskilled mechanics, assistants in garages or as casual help while another major chunk survive on marginal farming or are sitting idle. The lack of skills is clearly visible among these youths and if the proper vocational trainings will be imparted, these youths can be easily converted into good human resource for the demanding markets. Advocacy of skilled programmes and the outreach remains an obstacle which needs to be deterred by engaging major private training organizations.

5.5.10 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Alwar district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

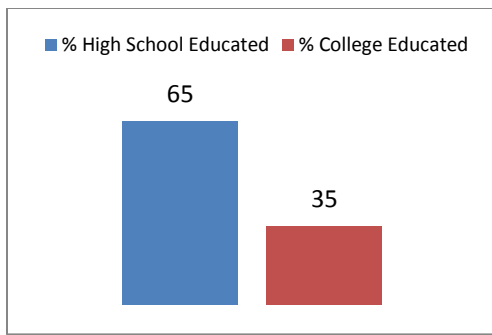


Figure 98 Youth Education Profile of sample in Alwar

Youth Category	
Employed	18
Self employed	10
Unemployed	10
Trainees	22

Table 64 Youth Category in Alwar-sample

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above) with an average age group of 27 years. 35% of the youth covered were college educated and 65% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

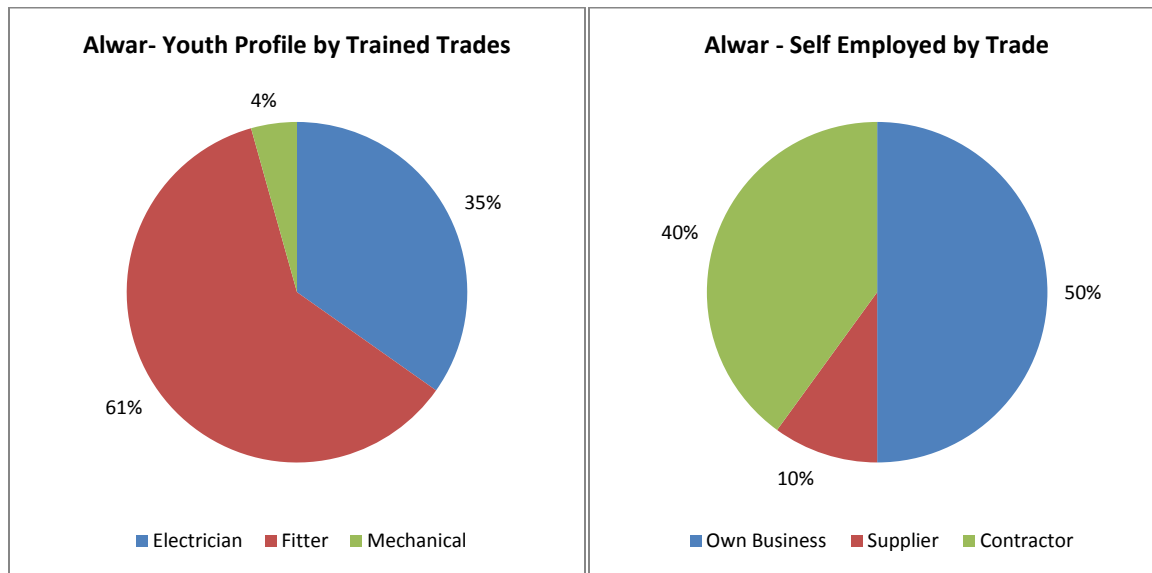


Figure 99 Profile of respondents (self-employed and trained) by trade in sample of Alwar

Among the respondents covered under the survey, the course of fitter and electrician were the most preferred ones in sample of youths under training. Youths preference for the choice of trades selected for self-employment were in synchrony with the market demand with contract work (40%) and own business for ancillary parts trading (50%) emerging as leading choices. The trades of fitter and electrician also showcased the maximum number of unemployed youth (40% and 20% respectively) with alternative choices like wireman, computer operation, diesel mechanic as alternative trades. There was general consensus regarding better self-employment opportunity in electrician and fitter. There were peer learning practices observed among the trainees in order to understand additional skill apart from the one they specialize on and support systems developed to engage in sustainable livelihoods among trainees.

5.5.11 Youth's Perception

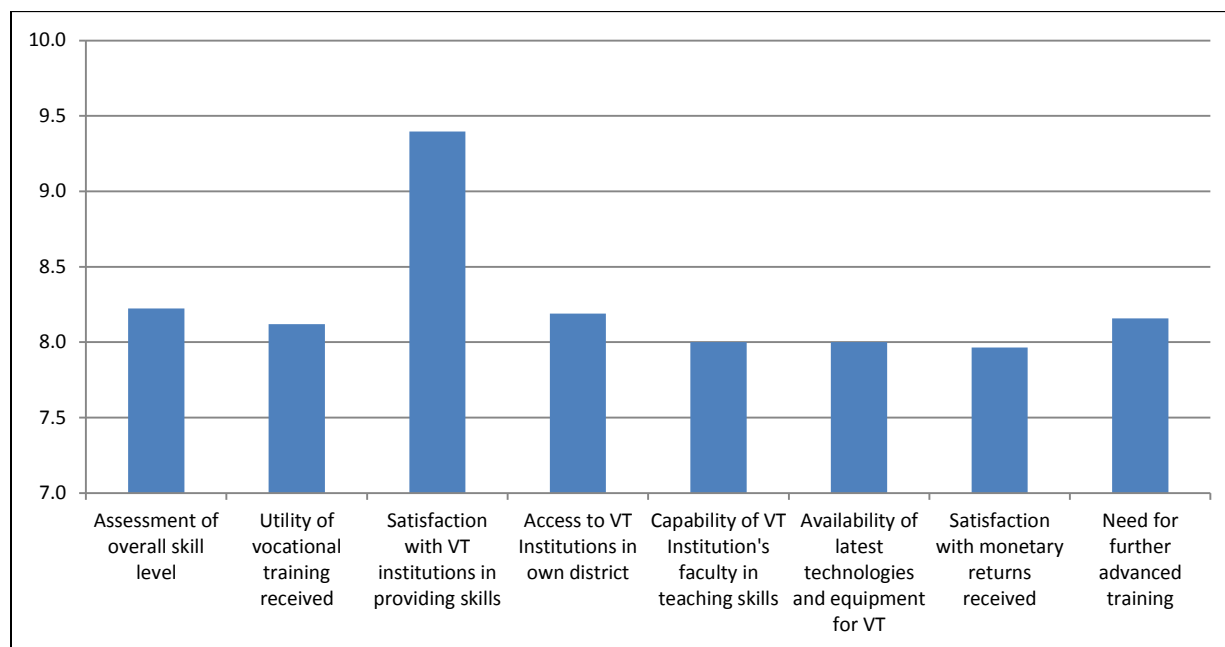


Figure 100 Alwar Youth's perception, need and aspirations –Sample Group

Low satisfaction with current monetary returns after training emerged as the major concerning factor among the respondents. Incidentally satisfaction with training institutions was rated the highest (rated 9.4 on a scale of 10) though majority of them also felt the need for upgrading the technology and delivery of lessons by faculty for addressing the growing skilling needs.

Most of the youths are engaged in daily wages. Some youths are unemployed because they didn't get any work opportunity after skilling. Due to lack of awareness and low family income, the drop out ratio among youths has been high in some of the training programmes. During the FGD it emerged that more than 70% candidates wanted a salaried job with less preference to government jobs and more preference to better initial salary.

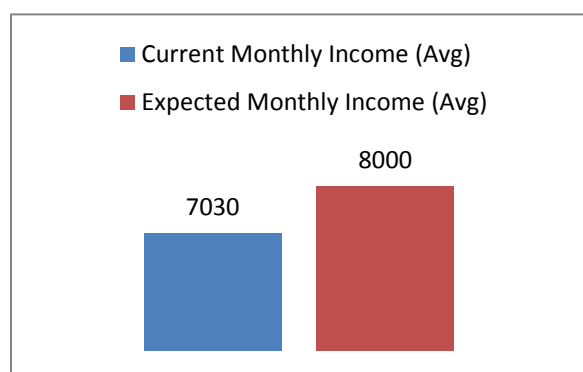


Figure 101 Income current and expected- sample group, Alwar

There was a feeling among the trainees that their ability to adapt to other skill requiring jobs was quiet limited and thus would prefer for self-assured livelihoods instead through self-employment. The expectation in terms of salary was about Rs. 7,000 expecting Rs. 1,000 hike though it could be after a year of work experience. The major aspiration from the entry level job remained work satisfaction, improved lifestyle, learning while applying the skills

and family security. Families on the other hand wished for government jobs which were easy works with better salaries and job security. 60% of the interviewed youths either working or self-employed were satisfied with the monthly income. There were 25% of the youths did not get any increment for

past two years of work. The youths were averse of some of the exploitative modes of engagement in the industrial set ups like odd working hours, less security and wished to avoid these by gaining better financial negotiation after skilling.

5.5.12 Optimization Plan

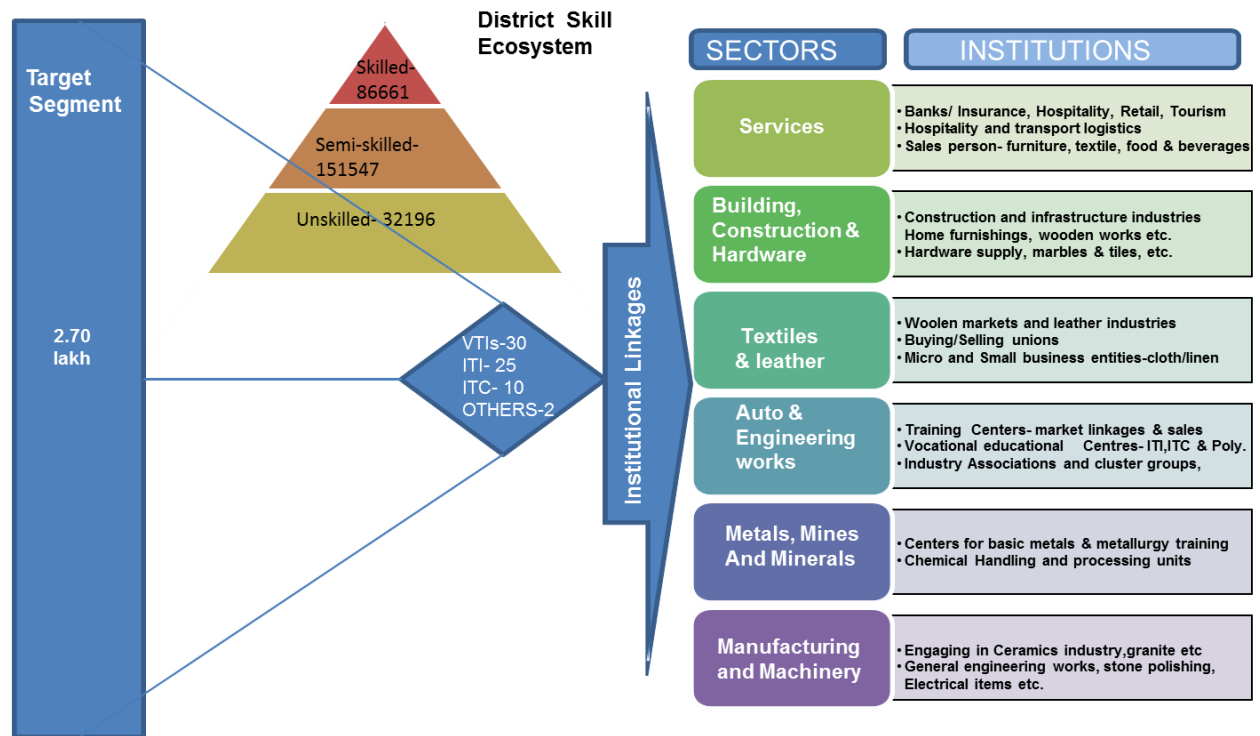
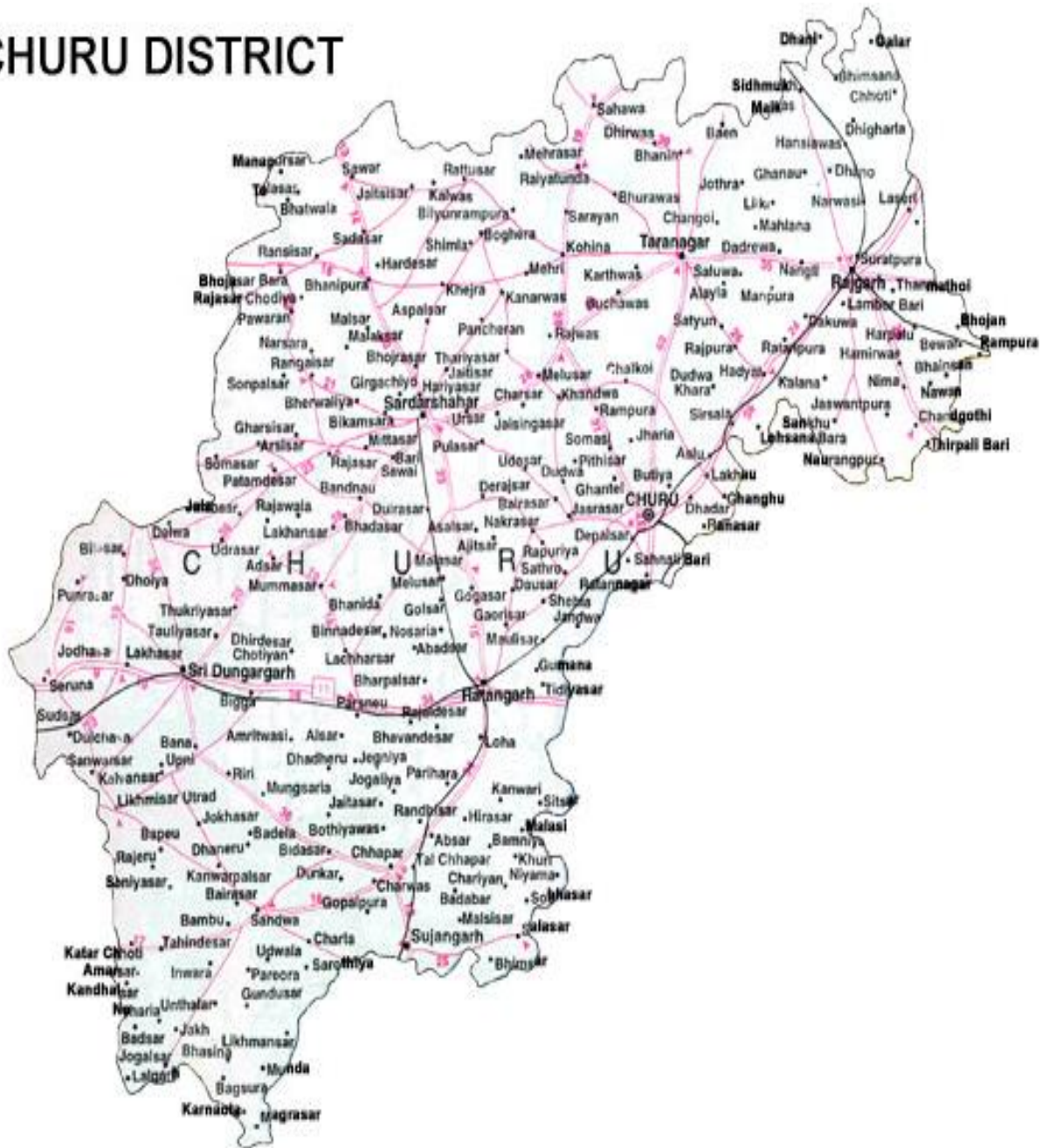


Figure 102 Optimization plan- Alwar

In order to keep the industrial area of Alwar on its consistent growth path, it would be important to maintain the skill workforce supply as per industries requirements. Customized training schedules and industry linkages would enable the VTIs to provide a more ready to be deployed workforce. Apart, the services sector shall require skilled workforce of education qualification of higher nature. In order to meet these requirements aspirants could be trained across various domains of service industry. Keeping in mind the readiness to migrate to NCR regions, the youths stand a good chance to earn a sustainable livelihood and skilling would provide them with better financial negotiation power. So training partners with life skills, communicative courses, and computer based courses should be encouraged along with mechanical (auto-related) courses by NSDC; also keeping in mind the high requirement of up-skilling in current industrial base.

5.6 District Churu

CHURU DISTRICT



District Skill Workforce Face Sheet-2012								
District	Churu			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	12	No. of Villages	899	No. of Schools (elementary & sec.)	2561			
Basic Data								
Population (in '000s)	2041	Overall Literacy (in %)	67.46	Sex Ratio	938			
Decadal growth rate(in %)	20.35	Female Literacy (in %)	54.25	HDI Ranking (2008)	0.606 (18 th position)			
% Urban Population	27.87	Male Literacy(in %)	79.95	Per Capita Income (in Rs.)	1111			
Workers participation rate (2001)								
Workers participation rate (2001)	44.3	Share of primary sector (%)	76.9	Share of secondary & tertiary sector (%)	23.1			
No. of MSME/Industries	1596	Total Employment (in 000s)	9881	Total Investment (in lakhs)	6811.63			
No. of colleges (PG & Graduation)	33	Total graduates (In '00s)	11686	Total Post graduates (in '00s)	1269			
No.of VTIs(registered ITI+Poly+ITC)			4	Total trainees trained (in '00s)	472			
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	21425	25954	26217	27543	27183	28864	28691	1.08 lakhs
Semi-skilled workforce	47873	51749	53330	55198	56079	58286	59310	

5.6.1 Demographic Profile:

Churu is a district of Rajasthan state of western India and also known to be the gateway to the Thar Desert. The town of Churu is the administrative headquarters of the district. Churu lies in the Jangladesh region of northern Rajasthan. Churu lies in 28°18' N latitude and 74°58' E longitude. It is bounded by Hanumangarh District to the north, Haryana state to the east, Jhunjhunun and Sikar districts to the southeast, Nagaur District to the south, and Bikaner District to the west. Churu, the headquarters of the largest desert district, is a part of the frescoland of Shekhawati. A major centre for trade and commerce, Churu has marked its position among the painted towns of the Shekhawati region. The town is literally a living mural that has expressed itself on the walls of the havelis (mansions) of the rich trading classes. It is really an heirloom of the rich traditional art of Rajasthan.

S.no	Section	Unit	Quantity/
			Location
1	LOCATION		
	Latitude	degree min	28°18' N
	Longitude	degree min	74°58' E
2	AREA		
	Total geographical area	sq km	16830
3	ADMINISTRATION		
	Tehsil	number	6
	Villages	number	899
4	Land Use Pattern		
	Total Area	Hectares	1385898
	Total Irrigated area	Hectares	88987
5	Population (census 2011)		
	Total population	number	2041172
	Men	number	1053375
	Women	number	987797
	SC (2001)	number	357883
	ST (2001)	number	9752
6	Literacy (except 0-6 age group)		
	Total literate	percent	67.46
	Men	percent	79.95
	Women	percent	54.25
8	Energy		
	Electrified Villages	number	850
9	Industries		
	Registered MSME Industries	number	1596
	Employed persons	number	9881
12	Education		
	Pre Primary & Primary Schools	number	843
	Upper Primary	number	1048
	Secondary & Sr. Secondary	number	670
13	Higher Education / Others		
	Colleges	Number	33
	IT I	Number	3
	Polytechnics	Number	1

Table 65 Churu District Profile- a snapshot

It has an average elevation of 292 m (958 ft). Churu is a district with an enchanting topography amidst the Thar Desert. The Churu City is encircled by large shifting sand dunes. The area is scanty in vegetation. Phoge and Kair bushes and Khejra, Royara and Babul trees are to be mainly found on the

sand dunes. In the towns Neem and Peepal and Sira trees can also be noticed. One can find Sand dunes all over the area with a couple of small limestone hills. The region boasts record temperatures ranging from below freezing point in the winters to over 50 degrees in the summer afternoons.

It ranks as the 6th largest district of the state covering 4.92 % of the area of the state. With just 148 the density of population in the state ranks at 30 (Census, 2011- Provisional). It stands 18th on the Human Development Index (0.606) and 20th on the GDI (0.476). It was observed that though the district fares quiet high on education and health index (5th & 7th respectively), its due to the income index (32nd) which pulls the district on overall HDI ranking. As per provisional census 2011 data, Churu accounts for population of 20.41 lakhs (2.97% of the state population) with sex ratio of 938 (compared to 2001 census figure of 248) which still is on the higher side of the state ratio of 926. There was a decrease in the decadal growth of population of 3.2% showing trends of population stabilization.

The worker participation rate in Churu is 44.38% (HDI, Rajasthan, 2008) with primary sector engaging close to 76.9% of the workforce and rest 23.1% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 23% (Urban- 50.86% & Rural- 27.62%). The literacy rate of Churu in 2011 is 67.46 compared to 67.59 of 2001 which just higher than the state figure of 67.06. According to Census 2011 provisional data, the male literacy figure stands at 79.95% and female literacy was at a low of 54.25 and it was due the declining trends in the female and male literacy from 2001 which has brought down the literacy rates from 2001 to 2011 by 0.13%.

5.6.2 Education Infrastructure and Utilization

Churu’s status in literacy was marked higher than the state average but also marked by a dip than the previous census figure. There was dip in the male and female literacy rates and reports of DISE, 2011 state that there have been significant decline in the girls’ enrolment. Churu has also been among the districts with high drop-out rates as per HDI, 2008 According to Census 2011 provisional Churu has a total of 2561 schools from pre-

Education	Churu	Rajasthan
Pre Primary & Primary	843	49546
Upper Primary	1048	38889
Sec/ Sr Sec	670	19135

Table 66 Churu vs. Rajasthan education status

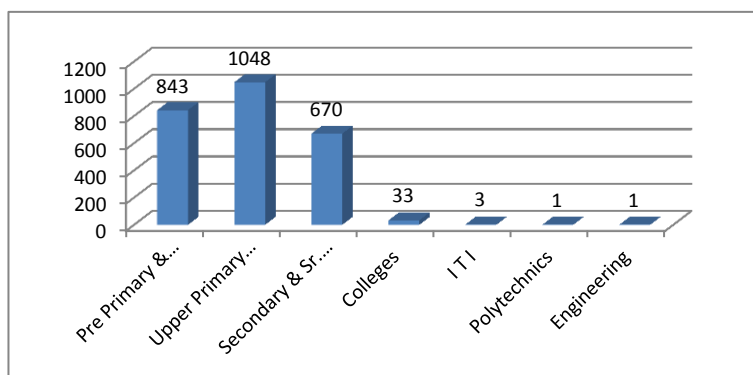


Figure 103 Number of Schools, Colleges, ITI & Polytechnic, 2009-10-Churu

primary to senior secondary levels. Considering the density of population and the vast area, the school spread is average in comparison to the state average and across other districts. The retention rate of students in schools of Jaipur is quiet low which also contributes to the drop in literacy rates and status of education. The supply constraint in

case of education infrastructure was evident as per reports of Rajasthan HDI report, 2008.

A total of over 13,000 students enroll in various institutes at colleges ITI & polytechnic. At the intermediate college level, courses are available in the area of science, arts and commerce. Some of the private institutes have come up with PG diploma and management courses even. There are total of four registered vocational training institutes in Churu district out of which 03 are ITIs and 01 polytechnic. A total of just above 450 aspirants got enrolled in 2009-10 in the registered training institutes. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 04 partners (includes NGOs, ITIs, government college) implementing skilling initiatives with 07 approved programs (all are completed). A detailed view of the vocational training of Churu could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.6.3 VTI's demand across various trades in the district

The existing scenario of VTIs in Churu on the lower side considering the number of youths passing out; and seeking employment as skilled workforce. Private players have not yet ventured in a big way eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields as follows:

- a) **Computer Based Accountancy:** With number of shops, shopping malls, retail stores and medical stores TALLY to maintain their financial data, growing fast in Jaipur there is a significant demand for skilled persons in Computer Based Accountancy. After VAT became effective in the state TALLY has become a necessity for all VAT paying shops.
- b) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is telecom or banks or insurance firms is growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field
- c) **Household wiring and repair of domestic appliances (wireman & electrician):** Houses in the Churu are well equipped with various kinds of electrical home appliances to make our work easier. This has created huge demand for repair and maintenance of home appliances as well as house hold wiring. Keeping in view the growing customer demand for Home Appliances, besides the relatively attractive earnings, training in Home Appliances is strongly recommended.
- d) **Diesel Engine Repair:** Due to heavy use of diesel engines in Churu for irrigation and in automobiles the demand for skilled mechanics in this trade is very high. There is a huge requirement of mechanics that can repair diesel engines used in generators, vehicles and irrigation equipment.
- e) **Two Wheeler Repair:** The number of two wheelers in Churu is on the rise. The owners of these vehicles are in need of economical, efficient easy access to repair and maintenance

The government VTIs interviewed in the survey was four and five were from the private. The courses which were offered by the government VTIs were predominantly self-employment based or to cater the local market needs. In private VTIs the courses were more male oriented and 1 of the 06 courses offered was preferred by the women. The details of the courses offered in the VTIs of Jaipur are represented as follows:

Government. VTI Trades	Private VTI Trades	
COPA	Electrical	Instrumentation
Wireman	Fitter	IT
Electrical	Diesel Mechanic	COPA
Electronics	Electronics	

Table 67 Churu district's (sample study) courses offered

The total 07 VTIs (02 government+0 5 private) covered in the sample. The government VTIs sampled for the study offer 4 different trades for training while the private VTIs offer 7 trades. It appears that there is uniformity in popularity of trades in government VTIs (as the difference between the sanctioned and actual seats in the existing batches was low) whereas electrical is the most popular trade in private VTIs (210 seats sanctioned across VTIs). Electrical is most preferred trade in Churu as private VTIs are offering around 5 times seats in electrical trade as compare to government VTIs and the government VTI batches shows running to optimum strength. It appears in the Government. VTIs, the number of actual trainees compared to the number of approved number of trainees is more or less same across all most all the trades except COPA whereas the difference is a bit high as compare to other trade. On the other hand, gap between the actual and approved strengths of trainees is significant for diesel mechanic, instrumentation and IT trades in private VTIs which infers to the over emphasizing of electrical course and less importance to COPA & IT courses though the present market conditions show potentials for such trades.

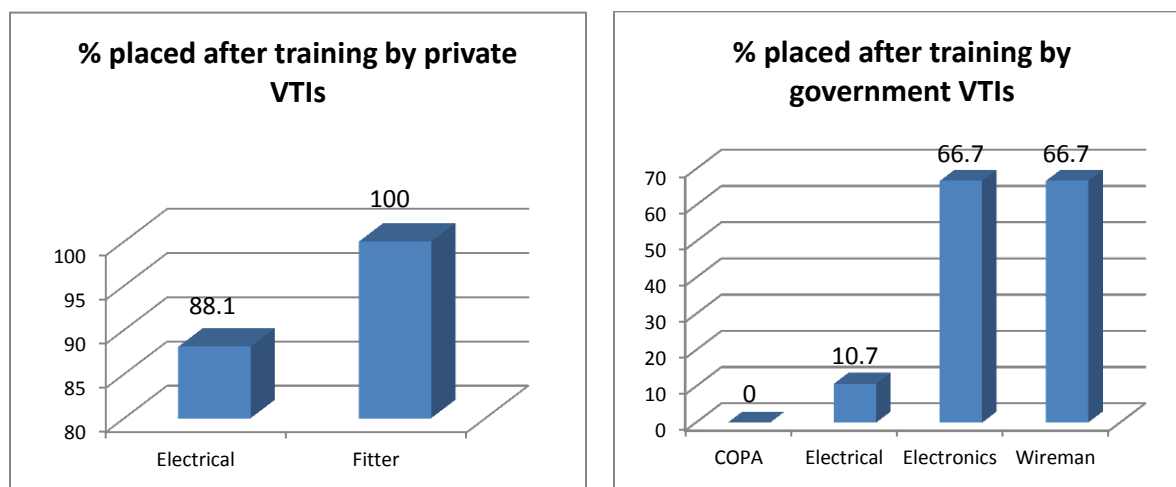


Figure 104 Churu district's (sample study) courses offered placements in government and private VTIs

An overview of placement records by trade in the government and private VTIs indicate moderate prospects in all most all of the trades with the exception of Diesel Mechanic trade in private VTIs. It may be due to the fact that most of the Diesel Mechanic trade trainees seek self-employment. The COPA course though shows high potential in the market but placements from the institutes were nil (on records). Average salary/trainee indicated good prospect for electronics trade as government VTIs have reported that their trainee got placement of Rs. 8,000/month from their institute. In case of

private VTIs the highest paid placement was in electrical trade. While placements of trainees from the government and private VTIs was more through a proactive approach to the industry by the VTIs and the trainees themselves. Though some of the trainees from private VTI got their placement through employment exchanges but overall its role is more or less nullified over the years of non-function.

More often the courses provided were less oriented for direct placement in the market rather introduced the aspirants for self-employment for males and as another home based know how for females. Though the average placement observed in case of fitter course was more than 95% but it majorly catered for the needs of more unorganized sectors. The selection of course design and other influencing factors for finalization of courses by the VTI functionaries were more or less determined by the availability of facilities and equipment. All the VTIs claimed to have updated technologies, equipped labs, and space for conducting the training, electricity and water supply. Almost all of them did not have hostel facility for girls (one for boys in private VTI). Commuting facility for the aspirants in all private VTIs was a good initiative and different from many other districts surveyed. The staffing in these institutes were marked understaffed in aspects dealing in academics & managerial positions (both in government and private).

Interestingly the VTI functionaries claim that the courses on offer in these government VTIs are more demand driven as per the aspirations of the youths and less mandated from any university or board. The industry's role in demanding courses favorable for its optimization was observed to be high and thus one could anticipate the involvement of contemporary industries in campus placement in these VTIs.

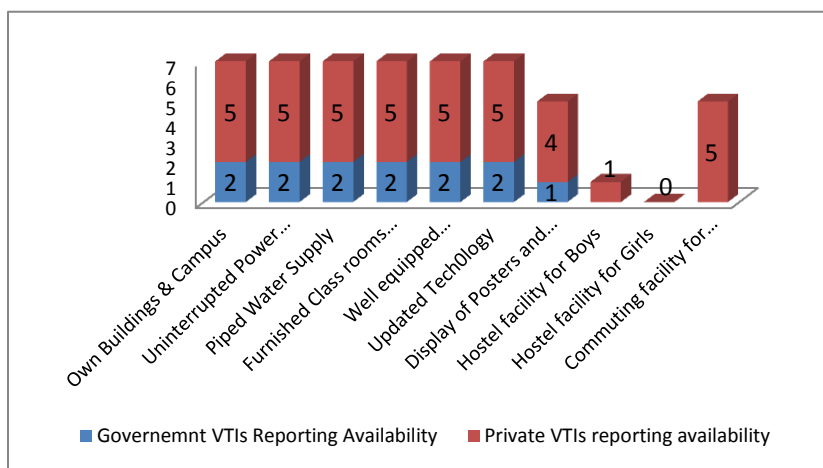


Figure 105 Facilities and Infrastructure availability in sampled VTIs, Churu district

5.6.4 Industry Mapping

Cultivation is the main occupation of the population which is monsoon dependent. Irrigation is also scarce. Migration is a common phenomenon though efforts were being made to put Churu on the industrial map of the state by DIC. Churu has seven industrial areas and boasts of close to 7000 MSME and two large and medium scale industries.

The main produce of the district includes aluminum utensils, blanket weaving, cement, churan and chatni, guar gum, handicraft items on sandal wood, handloom cloth, iron and steel fabrication, oil mills, papad and mangori, polythene films and bags, salt, sand lime bricks, steel furniture, toilet and washing soap, woolen yarn.

The industrial set up and their main produce in Churu are as follows:

- **Churu:** The Wooden and Iron handicraft, Flour mill, P.V.C. wire, Cable, Condiments, Stone Door Frames, Mosaic Tiles, Cold Drinks and Mineral Water, Washing Soap, Namkeen and Bhujia industries are established here.
- **Sardarshahar:** Plaster of Paris, Wooden Furniture, Gwar Gum, Papad, Namkeen, Oil Mill etc.
- **Ratangarh:** Wooden Handicraft, P.V.C. Pipe, Stone Door Frames, Mosaic Tiles etc.
- **Sujangarh:** Oil Mill, Water Cooler Body, Mosaic Tiles etc.
- **Taranagar:** Plaster of Paris.
- **Rajgarh:** Oil Mill, Gwar Gum, Dal Mill, Agricultural Tools, Iron and Steel, Fabrication, Welding Work and Washing Soap.
- **Bidasar:** Newly established industrial area.

MSME in Churu

According to D.I.C data (March, 2012), there were around **7315 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.13951.54 lakhs** providing employment to **29609 persons**.

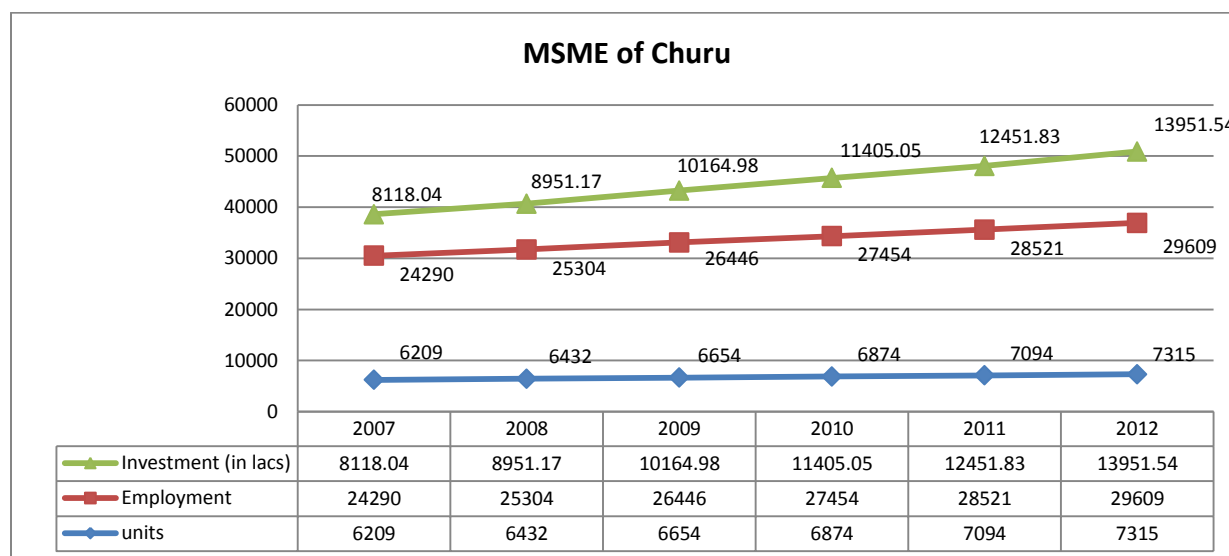


Figure 106 MSME trend analysis of the district Churu

There has been a constant increasing trend in the investment of industries, employment and thus, the number of units as well. The main existing industries are wooden handicraft & furniture, guar gum, plaster of paris and wooden handicraft and guar gum having export potential. One of the handloom clusters of Rajasthan is at Dariba (Bindsar) of Churu district.

5.6.5 Sector wise mapping of industries in across Jaipur

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Churu. Against the mapped sectors **sector wise analysis shall be**

made on the labour growth projections like high/ medium/ low and emerging basis on the demand in that particular sector on the triggings like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	238	547.31	974
Auto & Auto Components			
Chemical & chemical products	82	1425.01	674
Construction Material & Building Hardware			
Food Processing	17	2.67	204
Furniture & Furnshing	376	2045.54	2938
Leather & leather goods	26	50.79	109
Textile	231	511.42	1256
Unorganized Sector	233	386.74	801
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging	68	40.73	304
Mines, Metals & Minerals	382	2105.89	3215
Machinery, Electricals & Manufacturing	239	277.35	877
High	Units>200, investment>1000,emp>1000		
Medium	Units>100, investment>200, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 68 Sector wise mapping of industries in Churu as per DIC report, 2007

There have been many MSME coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of mines and minerals, handloom and textiles, furniture and manufacturing sector. A substantially good number of workforce (60%) form the services backbone of the district and are engaged in various industries, households etc. as daily wagers. There has been an increase of close to 18% of MSME from 2007-2012 with an increase in investment close to 71%. But the employment fold has just risen by 22% which suggests the nature of operations largely depends engaging less human resources.

Some of the demand and resource based industries which have come up in the district were as follows:-

Demand Based	Resource Based
Wooden furniture	Papadbari
Iron gate, Grill	Grain grinding
Cement Jali	Masala grinding
Data Processing	Bhujia
Steel Furniture	Stone grit
Photo state	Plaster of paris
Washing Soap	Marble tiles
Vehicle Repair	Dal polishing

Table 69 Potential industries providing employment to the semi-skilled workforce in Churu

CASE STUDY: Self-employment & Entrepreneurship would be the need of the hour

Some of the views stated by one of the government's ITI principal and that of the GM, DIC Churu had striking similarity. One stated that *'Scope for self-employment and entrepreneurship in the district is very good. The district authorities are not making efforts in this direction except providing the loan for the self-employment. RMOL has monitoring one self-employment schemes called Aksaht Kaushal that helping graduates people to get the self-employments'* and the other statement recorded was *'Scope for self-employment and entrepreneurship in the district is very good. The district authorities were not making many efforts in this direction except providing the loan for the self-employment'*.

But keeping in mind the present context of wage laborers of the district and industries demand for skilled workforce, the VTIs present infrastructure fall short of infrastructure and similarly the feeling of building entrepreneurship practices in the district development agenda does not find the required space.

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of senior level functionaries from 10 diverse industries located in Jaipur district of Rajasthan. These functionaries represented different levels of management as Partners, Directors, General Managers, HR Managers, etc.

Sectors covered under sample survey
Construction material & building hardware- 03
Furniture & Furnishings- 05
Machinery, Electricals & Manufacturing-01
Tourism, Travel & Hospitality- 01

Table 70 Break-up of industries in Churu (Sample study)

These industries were selected from large, medium and small industries covering various growth sectors of the district as shown in the table. The industries sampled were performing without any gap in production except the packaging industry which was running short of skilled manpower. All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers.

5.6.6 Workforce Demand and Supply

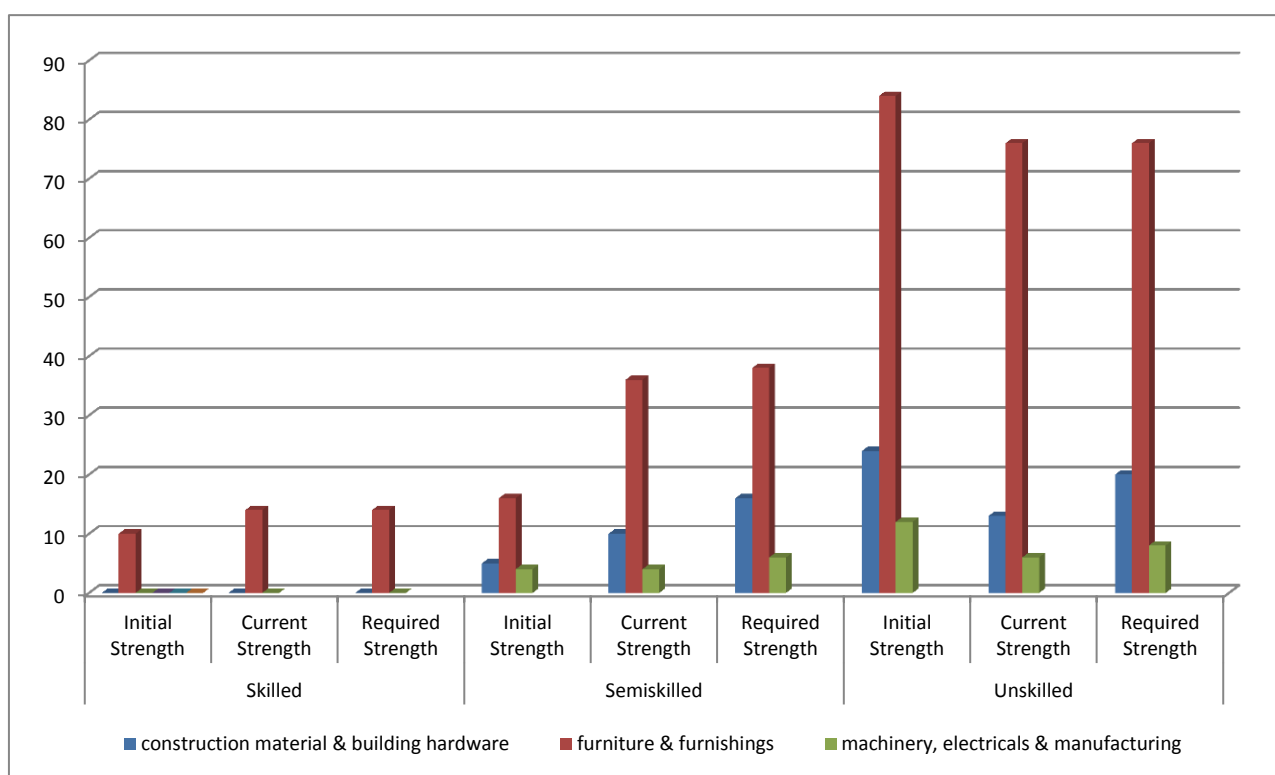


Figure 107 Status of skilled, semi-skilled workforce and unskilled workforce across sectors (Sample Churu) at various stages (initial, current and required)

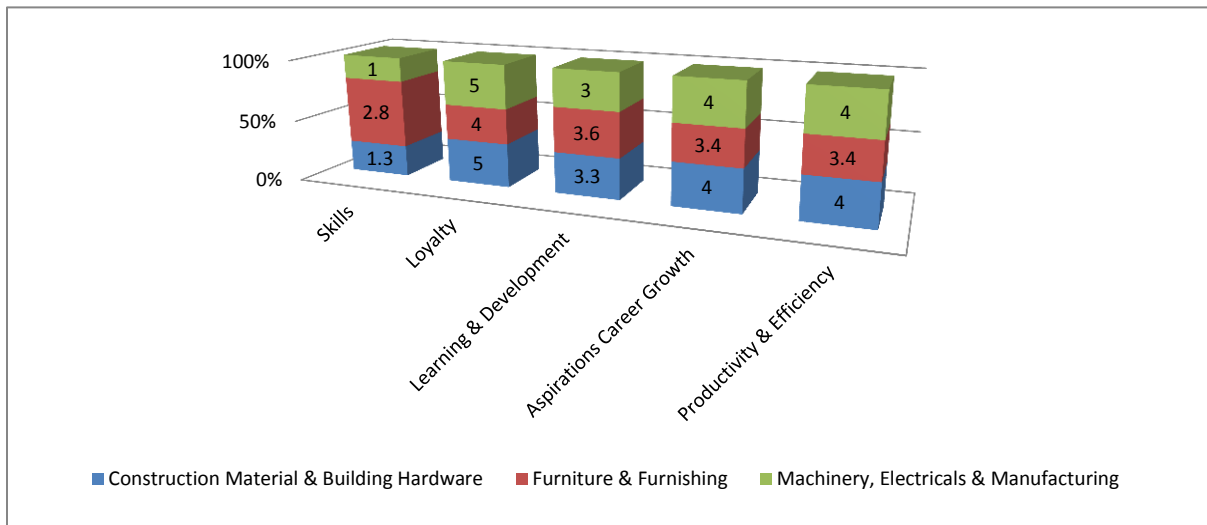


Figure 108 Employers demands in terms of expectations from workers (Churu)

The major workforce participation observed in Churu district over a period of two decades has been majorly as cultivators/ agricultural laborers and has had a decline of 0.2% over a period. There has been declining trend of workforce share in primary sector from 77.1% to 76.9% from 1991-2001. Therefore, the increase in the share of secondary and tertiary has been quiet insignificant for the same period. Majority of the workforce has been engaged in subsistence agriculture and remains idle for the bulk period of the year. There is distinct trend observed in the workforce engaged as laborers & wage earners (close to 31% of the secondary & tertiary workforce) who get engaged as helpers, cleaners, semi-skilled mechanics etc. Engagement in secondary and tertiary sector shows an increasing trend as per the industrial growth of the district though very marginal in nature. Looking at the present resources and skill set of the workforce furniture, computer based knowledge, electrical and automobile, tiles and stones, textiles and guargum hold the key to future employment for the district Churu in near future. The requirement for semi-skilled workforce was higher than the skilled workforce. The furniture sector's demand for unskilled workforce more than double of that of semi-skilled workforce requirement clearly illustrating the model of low-cost unorganized form of labour utilization in the sector.

In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were loyalty towards work and least scaled was importance of enhancing skills. Other parameters were closely rated as shown in the figure showing the employer's expectations.

5.6.7 Projected Workforce Demand

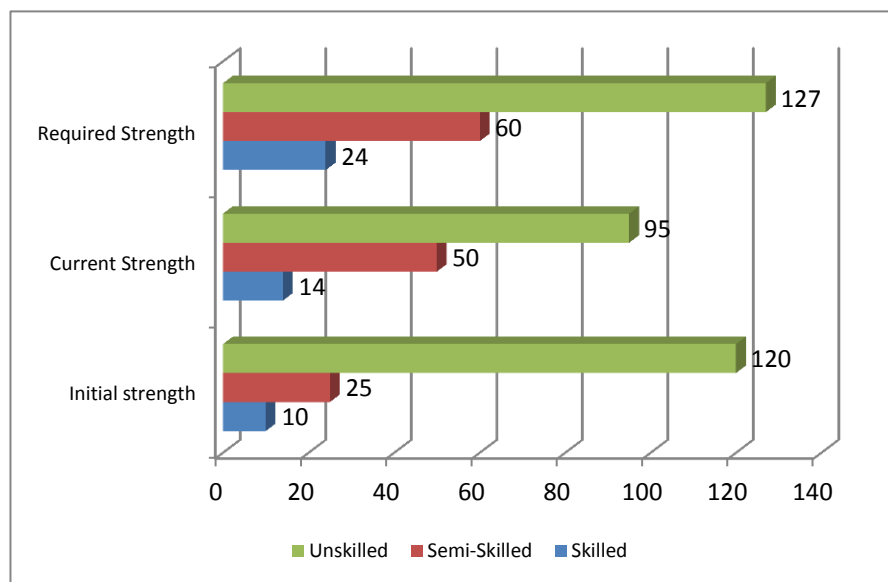


Figure 109 Status of workforce in terms of initial, current and required strength across sample industries of Churu

There has been certain increase in the number of full time skilled workers over a period of time by close to 4%, though majority of the industries interviewed still feel the requirement of unskilled workers over the skilled workers for their full time roles. Apparently the number of semi-skilled workers category has grown over two times but the need for unskilled contract/ daily wage laborers was phenomenally very high. A

clear distinction could be observed in the preference of only skilled workers for the contract and daily wage worker category as the industries felt the low cost module works better in a capital scenario and incurs less cost in on job training.

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers. One could observe a similar requirement in the skilled daily wage labor requirement and unskilled contract based requirements. This clearly validates the mindset of the industry houses to engage less skilled workers.

The number of vacancies reported by the sampled employers for the skilled, semi-skilled and unskilled categories of workers indicated unequal proportion and reflected that skilled workforce had least demand and unskilled workforce had maximum demand; also indicated high potential for absorption of workers in this category. In semi-skilled workforce had witnessed rise in engagement since industry inception.

As reported by industries since industry establishment, they were mainly relying on unskilled workforce as this category had the largest workforce and high potential to absorb unskilled workers in the near future. The difference in the wage structure in semi-skilled category to unskilled and semi-skilled to skilled was considerably high. The skilled female workforce gets an amount which is lesser than the semi-skilled and unskilled workforce of males.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of Manpower Requirements
Agricultural Sector								
Unskilled	464751	520990	553154	583440	610525	649545	675343	
semiskilled	37887	42472	45094	47563	49771	52952	55055	
Skilled	2526	2831	3006	3171	3318	3530	3670	
Total demand	505164	566293	601254	634174	663614	706027	734069	70%
Industry Sector								
Unskilled	45806	48502	48471	50350	50731	51991	52671	
semiskilled	21141	22385	22371	23239	23414	23996	24310	
Skilled	3524	3731	3729	3873	3902	3999	4052	
Total demand	70470	74618	74570	77462	78048	79986	81032	14%
Services Sector								
Unskilled	17658	18886	19584	20320	20768	21596	22109	
semiskilled	41202	44067	45695	47413	48458	50390	51587	
Skilled	58859	62953	65279	67733	69226	71986	73696	
Total demand	117719	125907	130558	135466	138452	143971	147392	16%
All Sectors								
Unskilled	528214	588378	621208	654111	682024	723131	750123	
semiskilled	100230	108925	113160	118215	121644	127338	130952	
Skilled	64909	69516	72014	74777	76447	79515	81418	
Total Demand	693353	766818	806382	847103	880114	929984	962492	100%

Table 71 Labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors Churu

The district continues to be pro-agrarian in nature and shall engage close to 70% of the workforce in primary sector followed by services sector (16%) and then industries engaging 14% of the total workforce. These projections account till 2017 of the district. Basis on the inputs received from sector wise expansion plans the Workforce projections made across different categories highlight these distribution pattern. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			

Chemical & Pharmaceuticals			
Gems & Jewellery			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Organized Retail			
Real Estate			
Media, Entertainment, content creation, animation			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 72 Workforce across various sectors by 2017- Churu

5.6.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis would factor in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging. The situation of skill gap for the district for 2010-11 to 2016-17 based on projections is represented in the table below (assumptions set in the annexure _ Projection Model):-

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	189193	249328	281599	313308	340377	381004	407018
Semi-skilled	47873	51749	53330	55198	56079	58286	59310
Skilled	21425	25954	26217	27543	27183	28864	28691

Table 73 Representation of project & Unskilled workforce trend 2011-2017ted Skilled/ Semi-skilled

As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation was conducive enough to support industrial growth in Churu. All the resources were easily available like the land, water, power and investment but some shortage in skilled manpower was observed.
- The VTIs are not fulfilling the needs of the industries. The trained person does not meet the requirement of the industries since they have lack of practical experience as VTIs have more theoretical classes and less practical training which is sufficient for getting the certificate and enter the government services only but private organization requires more practical experienced people. Private VTIs even lacked the basic course quality post training.
- Demand for skilled workforce (semi-skilled) would be increasing over next three to five years keeping in mind the increasing investment pattern of the district in the MSME for last five years. Major employment would be perceived IT/ITES (COPA), wooden products, agri-based food processing units etc. Other emerging industries like PVC pipes, textile goods, engineering based manufacturing industries etc. look promising to enhance wage based livelihood generation.
- Scope of self-employment and entrepreneurship in the district remains on a high, and government programmes like Khadi Gramudyog Programme and called Aksaht Kaushal aid by providing subsidy.
- Skilled training targeting some of the important clusters of Churu would be necessary like skill training on handloom industries, handicrafts and textiles etc. Knowledge of market networks, forward and backward linkages, financial training along with basic life skills would be the key differentiators.

5.6.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Jaipur district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth

interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 60% of the youth covered were college educated and 40% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government. The average age of the respondents was 26 years with majority (60%) interviewed at private centres and 40% at goveremnt VTIs.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 74 Youth Profile of sample in Churu

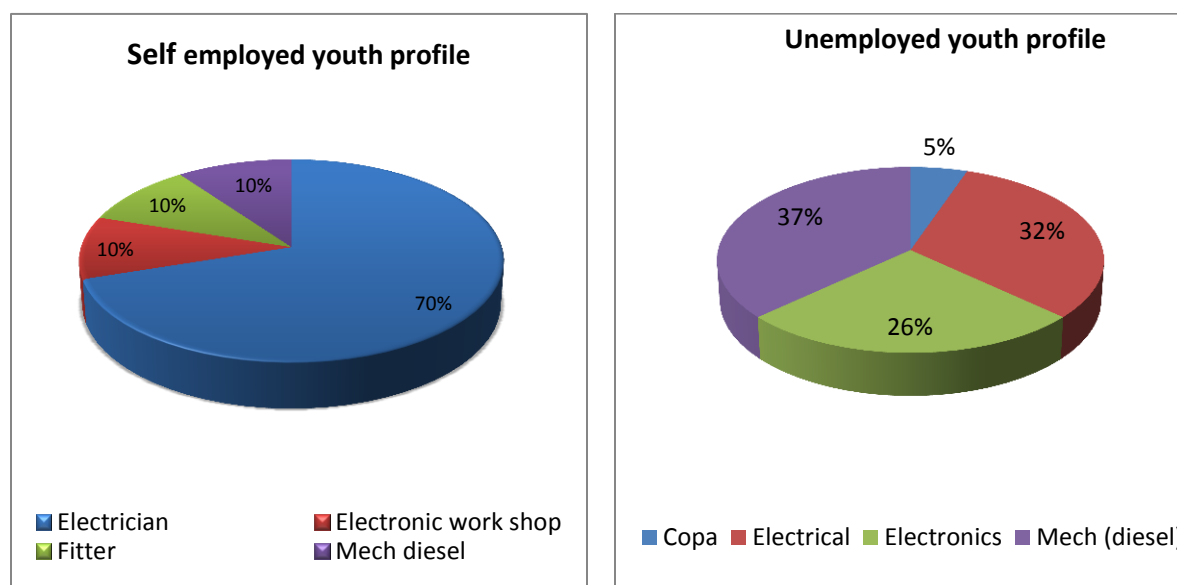


Figure 110 Profile of respondents (self-employed and unemployed) by trade in sample of Churu

Among the respondents covered under the survey the course of electrician was one of the most preferred one followed by COPA in sample of youths under self employed and unemployed categories. Youths preference for self-employed courses in similar trades of electrician, computer applications, mobile repairer, fitter and mechanic was evident but in varying proportion. These trades appear to be the most popular trades as per the perceived demand in the market. There was general consensus regarding better self-employment opportunity in electrician and mobile repairer. There were peer learning practices observed among the trainees in order to understand additional skill apart from the one they specialize on.

5.6.10 Youth's Perception

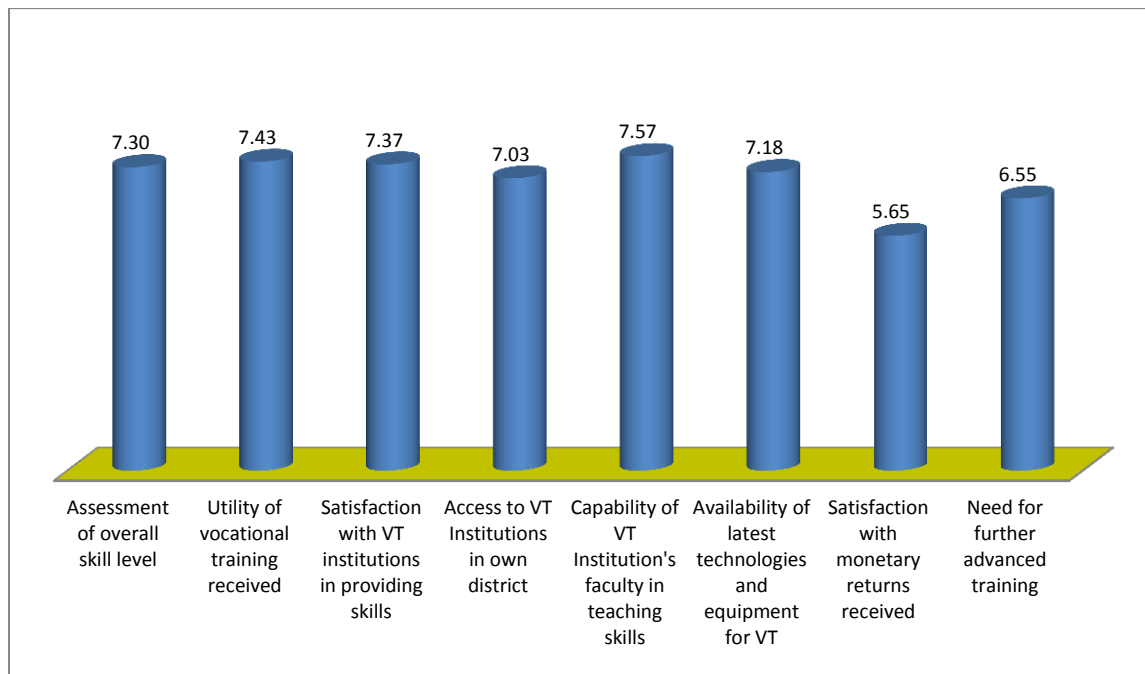


Figure 111 Churu Youth's perception, need and aspirations –Sample Group

Satisfaction with current monetary returns and need for advanced training emerged as the two leading factors identified by the respondents as the key to better skilling initiatives of the district. The capability of VTIs faculty members and the utility of these training were among the most perceived thoughts among the group of youths.

There were pronounced needs for further advanced training provided for up-skilling and basic skilling in computer applications. Expected monthly salaries required a change of at least Rs. 4000/month as skilled workforce among 60% of the sampled youth. 60% of the respondents did not receive any increment.

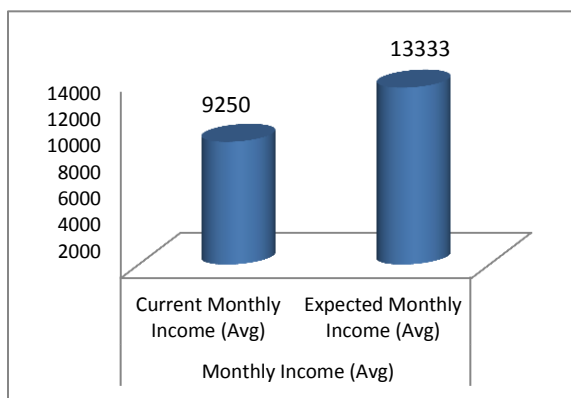


Figure 112 Income current and expected- sample group, Churu

5.6.11 Optimization Plan

The optimization plan would be structured at three tier level of district, state and NSDC. The preliminary gap finding, projection and analysis would be presented at every district level which would in turn determine the action plan of the state as represented in the below diagram. The overall scenario of the state would finally give major leads to apex bodies like NSDC for formulation of state specific portfolios to suit the requirements and address the future needs of the state in the skilled workforce.

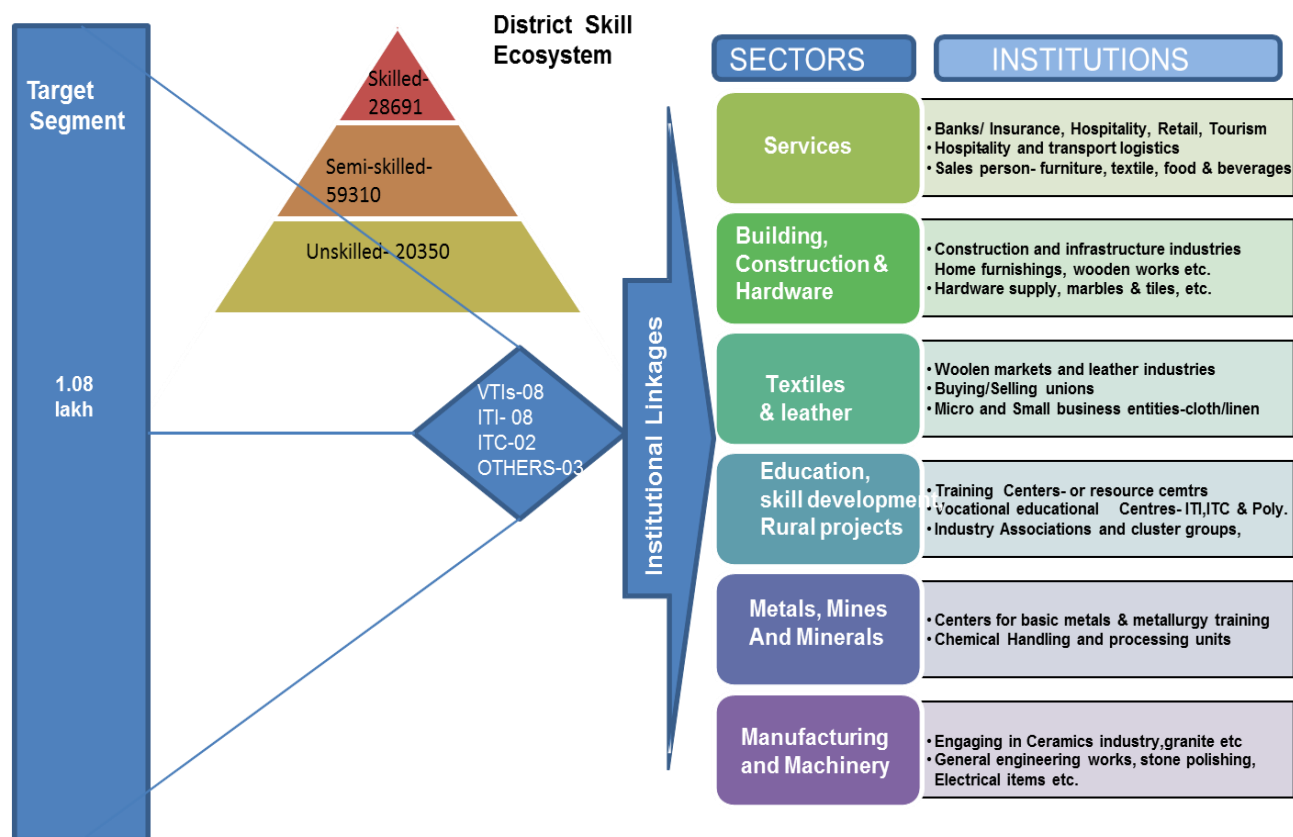
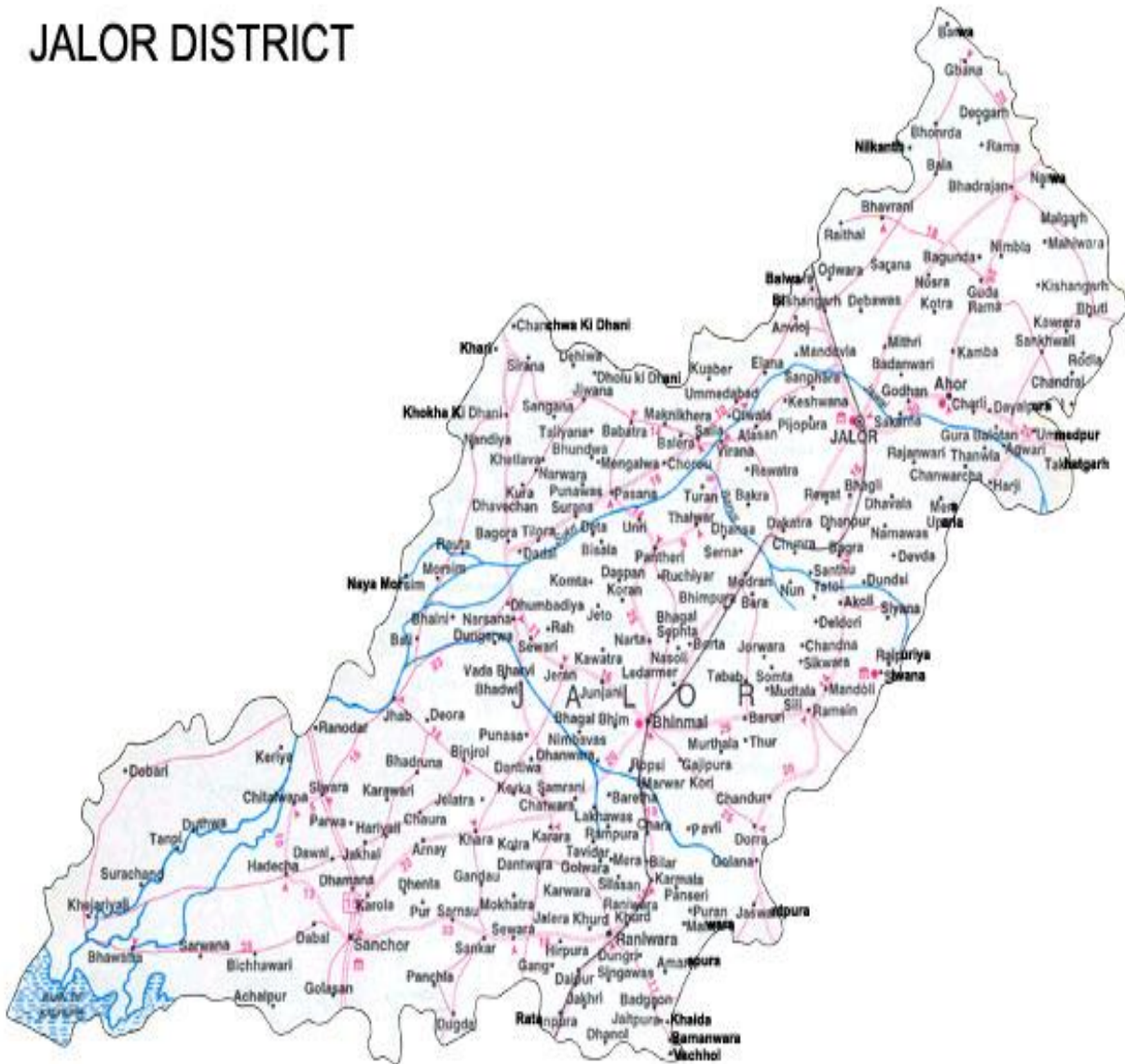


Figure 113 Optimization plan- Churu Skill Eco-system 2017

The high priority sector which shall need maximum number of semi-skilled workforce and less of skilled shall be the resource based industries of the district. This shall include the marble and stone polishing, food processing, and plaster of paris etc. industries. The demand based industries shall engage more of skilled resources in data processing, wooden and furniture industries cement, repair industries etc. The semi-skilled workforce shall be the backbone of the district by getting engaged in large number of SSIs of the district. Training partners from specific experience in food processing and wooden based enterprise building (linkages) should be encouraged for dedicated proposals by NSDC with incentives.

5.7 District Jalore

JALOR DISTRICT



District Skill Workforce Face Sheet-2012								
District	Jalore			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	15	No. of Villages		801	No. of Schools (elementary & sec.)		3050	
Basic Data								
Population (in '000s)	1830	Overall Literacy(in %)		55.58	Sex Ratio		951	
Decadal growth rate(in %)	26.31	Female Literacy(in %)		38.73	HDI Ranking (2008)		0.527 (29 th position)	
% Urban Population	7.59	Male Literacy(in %)		71.83	Per Capita Income (in Rs.)		13050	
Workers participation rate (2001)								
Workers participation rate (2001)	50.19	Share of primary sector (%)		77.50	Share of secondary & tertiary sector (%)		22.50	
No. of MSME/Industries	4130	Total Employment (in 000s)		18860	Total Investment (in lakhs)		2549.15	
No. of colleges (PG & Graduation)	8	Total graduates (In '00s)		3840	Total Post graduates (in '00s)		208	
No.of VTIs(registered ITI+Poly+ITC)				2	Total trainees trained (in '00s)		105	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Semi-Skilled workforce	31889	30183	31956	32353	31505	31862	32331	0.71 lakhs
Skilled workforce	19981	20333	21101	21623	21711	22266	22667	

5.7.1 Demographic Profile:

Jalore district is surrounded by Barmer on the North-West, Sirohi on the South-East, Pali on the North-East and Banaskantha district of Gujarat on the South-Western part of Rajasthan. The total area of the district is 10,640 km² (4,108 sq mi). The altitude is 268 meters, latitude is 25.48 N and longitude is 75.58 E. The main river of the district is Sukri, a tributary of Luni river. It has an average elevation of 292 m (958 ft). The climate of the district is of extremes with average temperature difference of 35.1 degrees Celsius and rainfall of just 41.9mm.

It ranks as the 12th largest district of the state covering 3.11 % of the area of the state. With just 172 the density of population in the state ranks at 27 (Census, 2011- Provisional). It stands 29th on the Human Development Index (0.527) and 28th on the GDI (0.430). It was observed that though the district fares quiet low on education, health and income index (31st, 22nd and 21st respectively) which pulls the district on overall HDI ranking to the lower side of the state. As per provisional census 2011 data, Jalore accounts for population of 18.30 lakhs (2.67% of the state population)

S.no	Section	Unit	Quantity
			Value
1	LOCATION		
	Latitude	degree	25°48' N
	Longitude	degree	75°58' E
2	AREA		
	Total geographical area	sq km	10640
3	ADMINISTRATION		
	Tehsil	number	07
	Villages	number	801
4	Land Use Pattern		
	Total Area	Hectare	1056602
	Total Irrigated area	Hectare	290809
5	Population (census 2011, provisional)		
	Total population	number	1830151
	Men	number	937918
	Women	number	892233
	SC (2001)	number	261315
	ST (2001)	number	126799
6	Literacy (except 0-6 age group)		
	Total literate	percent	55.58
	Men	percent	71.83
	Women	percent	38.73
8	Energy		
	Electrified Villages	number	706
9	Industries (DIC, 2009)		
	Registered MSME units	number	4130
	Employed persons	number	18860
10	Education		
	Pre Primary & Primary Schools	numbe	1646
	Upper Primary	numbe	1078
	Secondary & Sr. Secondary	numbe	326
11	Higher Education / Others		
	Colleges	numbe	08
	I T I	numbe	2
	Polytechnic	numbe	0

Table 75 Jalore District Profile- a snapshot

with sex ratio of 951 (compared to 2001 census figure of 964) which still is on the higher side of the state ratio of 926. There was a marginal decrease in the decadal growth of population (26.31 for 2001-11) showing trends of population stabilization.

The worker participation rate in Jalore was 50.19% (HDI, Rajasthan, 2008) with primary sector engaging close to 77.50% of the workforce and rest 22.5% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 20% (Urban- 51.73% & Rural- 31.47%). The literacy rate of Jalore in 2011 is 55.58 which is far lower than the state figure of 67.06. According to Census 2011 provisional data, the male literacy figure stands at 71.83% and female literacy was at a low of 38.73. Jalore district therefore was rated as one of the lowest literate districts of the state and at nation as well.

5.7.2 Education Infrastructure and Utilization

Jalore’s status in literacy was marked lower than the state average but also marked as the lowest for the state with just 55.58 and female literacy marking the lowest as 38.73. Jalore faces real time constraints in terms of basic schooling infrastructure, teachers and enrolment. Jalore has also been among the districts with high drop-out rates as per HDI, 2008 According to Census 2011 provisional Jalore has a total of 3050 schools from pre-primary to senior secondary levels

Education	Jalore	Rajasthan
Pre Primary & Primary	1646	49546
Upper Primary	1078	38889
Sec/ Sr Sec	326	19135

Table 76 Jalore vs. Rajasthan education status

with DISE reports stating that close to 50% remain less functional for major portions of academic year due to various reasons. The retention rate of students in schools of Jalore is quiet low which also contributes to the drop in literacy rates and status of education. The supply constraint in case of education infrastructure was evident as per reports of Rajasthan HDI report, 2008.

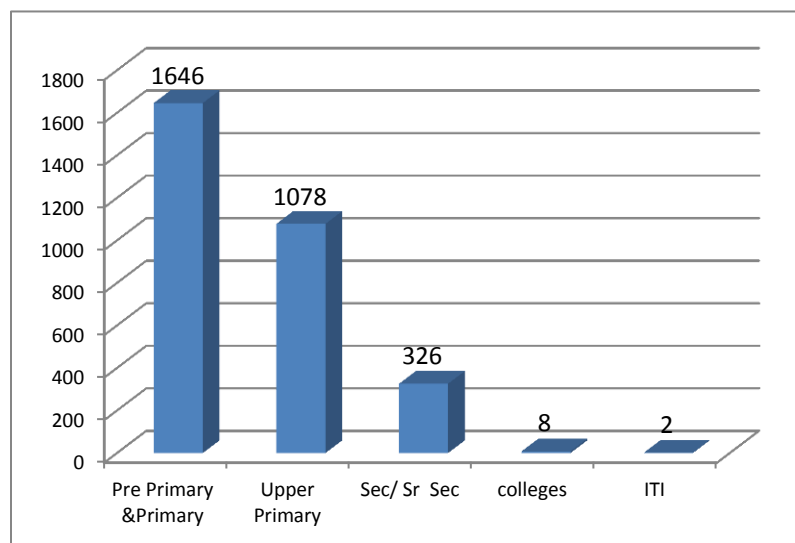


Figure 114 Number of Schools, Colleges, ITI & Polytechnic, 2009-10- Jalore

A total of over 3200 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There were just a total of two registered vocational training institutes in Jalore district (02 ITI). A total of just above 150 aspirants got enrolled in 2009-10 in the registered training institutes.

As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 02 partners (includes 01 ITI and 01 KVK) implementing skilling initiatives with 04 approved programs (03 are completed). A detailed view of the vocational training of Jalore could be seen in the next section of the report which highlights on the

various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.7.3 VTI's demand across various trades in Jalore district

The existing scenario of VTIs in Jalore was certainly on the lower side considering the number of youths passing out and the existing vocational training institutes in the district. Private players have not yet ventured in a big way eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields as follows:

- a) **Computer Based Accountancy and computer operators:** With number of small scale industries coming up in the region the educated youth having the basic education levels could be engaged in computer courses for accountancy (VAT & TALLY) and data entry operators for industries and government development projects.
- b) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is cement, banks/insurance or agro based products firms which are growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field
- c) **Repair Services:** The numbers of electronic and electrical based equipment are on a rise in Jalore. Also, the wiring and fitting of household electric equipment is on the rise. The owners of these are in need of economical, efficient easy access to repair and maintenance which can be easily produced in local economy through skilling

The government VTIs interviewed in the survey was two and one was from the private. The courses which were offered by the government VTIs were predominantly self-employment based or to cater the local market needs. In private VTIs the courses were more male oriented and 1 of the 04 courses offered was preferred by the women. The details of the courses offered in the VTIs of Jalore are represented as follows:

Government. VTI Trades	Private VTI Trades
COPA	Electrical
Fitter	Mechanic (Diesel)
Welder	Wireman
Wireman	Housekeeping

Table 77 Details of Courses offered in the Government. & Private VTIs (Sample)- Jalore

The total 03 VTIs (02 government+0 1 private) were covered in the sample as there were only three available for the survey. The government VTIs and private VTIs sampled for the study offer 4 different trades for training. Wireman trade was the common trade and therefore a total of just 07 trades were on offer from the sampled institutes. It appears popularity of trades like wireman in government VTIs

(as the difference between the sanctioned and actual seats in the existing batches was low in both the government and private VTIs). It appears in the government and private VTIs, the number of actual trainees compared to the number of approved number of trainees is more or less same across all most all the trades. A quick reference could be drawn on the infrastructure and availability of vocational training to the youth of Jalore was far too limited.

An overview of placement records by trade in the government and private VTIs indicate moderate prospects in all most all of the trades with the exception of COPA in government and housekeeping trades in private VTIs. The COPA course though shows high potential in the market but enrolment from the institutes was nil (on records). Average salary/trainee indicated good prospect for diesel mechanic followed by electronics trade as VTIs have reported that their trainee got placement of Rs. 8,000/month and Rs. 6500/month respectively. While placements of trainees from the government and private VTIs was more through a proactive approach to the industry by the VTIs and the trainees themselves, no significant role was played by employment exchange. Though some of the trainees from private VTI got their placement through employment exchanges but overall its role is more or less nullified over the years of non-function.

More often the courses provided were less oriented for direct placement in the market rather introduced the aspirants for self-employment for males and as another home based know how for females. The highest placement percentage recorded was for Electrical course.

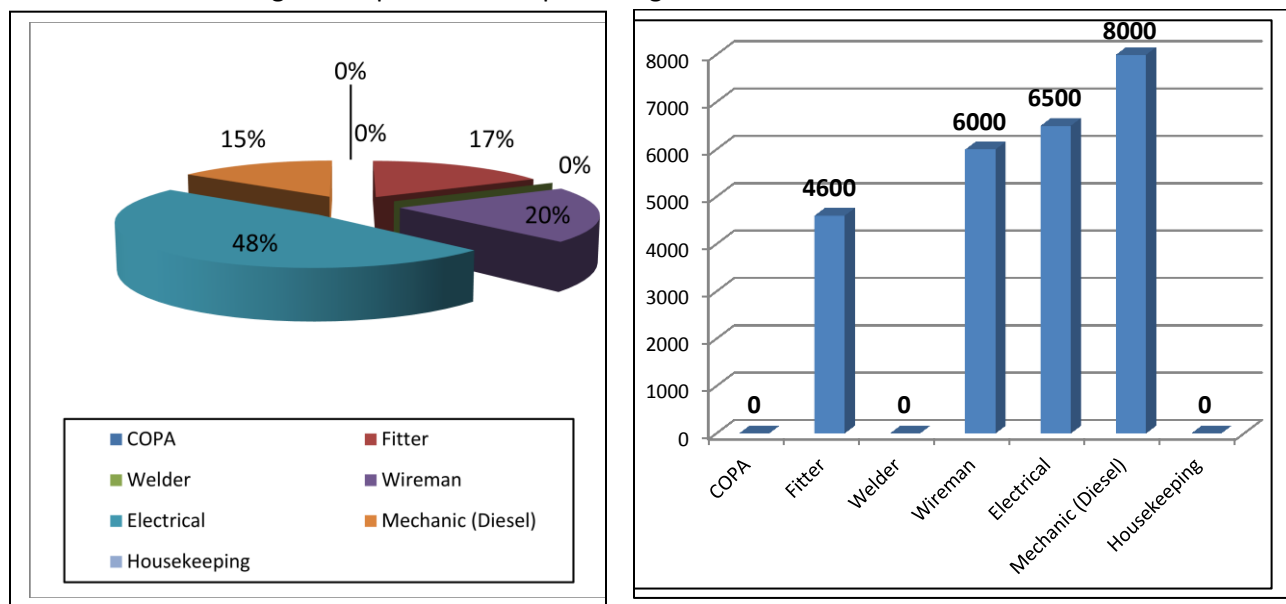


Figure 115 Jalore district's (sample study) courses offered placements in government and private VTIs

Most of these trades majorly catered for the needs of more unorganized sectors. The selection of course design and other influencing factors for finalization of courses by the VTI functionaries were more or less determined by the availability of facilities, faculties and equipment. All the VTIs claimed to have updated technologies, equipped labs, and space for conducting the training, electricity and water supply. Almost all of them did not have hostel facility for girls (one for boys in private VTI). Commuting facility for the aspirants in all private and government VTIs was a good initiative and different from many other districts surveyed. The staffing in these institutes were marked understaffed in aspects

dealing in academics & managerial positions in government set-ups whereas, the private VTIs were well staffed.

5.7.4 Industry Mapping

Jalore is called Granite Capital of Rajasthan, it is famous for its high quality lakhaa granite. The Granite industry has developed significantly over a period. Granite stone is finished here. In Jalore to help and guide new industrial units District Industry Centre, Rajasthan Finance Corpn(RFC), RIICO, and Rajasthan Khadi Gramodyog Board offices were established. RIICO has developed 4 industrial areas in Jalore district viz Jalore, Bishangadh, Sanchore and Bhinmal. In Jalore City RIICO has established 3 phase industrial areas. And fourth phase is been proposed at Bagra, 900 Bighaa of land area has been under planning. This area may accommodate nearly 500 new industrial units.

Handloom work is done at Leta, Jelatara, Degaon, Pur, Vodha, Vasandevda, Lalpura, Bhatip, Khara, Gundau. Bhinmal is famous for its **Leather traditional footwear (Juti)**. District has only one Medium Scale Industry, **Jalore-Sirohi Milk Cooperative Society Ltd**. Also has a dairy to its credit, Raniwara Dairy.

Jalore has a wide potential in industrial sector that has to be exploited properly. The following resource based industries have a good potential:-

Granite based Industry – Arawali mountain range is spread throughout the district giving a wide range of granite stone. District has developed 7 industrial areas. Here nearly 400 granite units working, where colorful granite Tiles of 20 types are produced.

Agro Based Industry- Jalore is also an agriculture based area, here Mustard (Raida), Tomato, Arandi, Isabgol, Matira Mungfali are produced. These crops are grown in Bhinma, Sayla and Sanchore area mostly. Here Arandi Oil Mill, Isabgol processing unit and tomato Ketchup units can be created.

Engineering Units – Due to availability of granite concrete and raw material and availability of labor Iron based mechanical big-small units can be developed. Cement Industry is also feasible here.

Other Industry – Sanchore tehsil is connected with national highway and nearer to Gujarat state. Here industry and commercial activities were encouraged; gypsum, guar gum etc. were available here in ample amounts. Plaster of Paris based industry, guar gum process industry could also be established. Animal husbandry and forest produce are also feasible.

MSME in Jalore

According to D.I.C data (March, 2012), there were around **5282 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.12353.91 lakhs** providing employment to **17258 persons**.

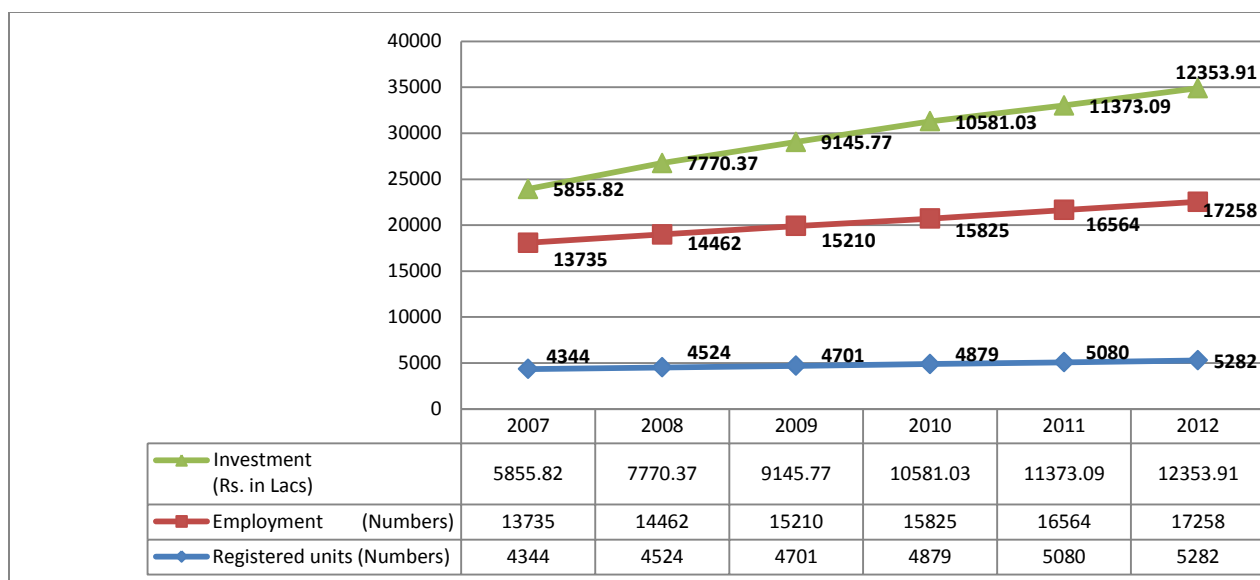


Figure 116 MSME trend analysis of the district Jalore

There has been a constant increasing trend in the investment of industries, employment and thus, the number of units as well. The main existing industries are leather based, agri based, metals and minerals and manufacturing. One of the leather clusters of Rajasthan is at Bhinmal of Jalore district.

5.7.5 Sector wise mapping of industries in across Jalore

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Jalore. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	232	2322.35	987
Auto & Auto Components			
Chemical & chemical products			
Construction Material & Building Hardware			
Food Processing			
Furniture & Furnishing	480	15.72	3837
Leather & leather goods	1808	39.96	2120
Textile & Handloom	250	2.84	526
Unorganized Sector	220	10.10	1600
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			

Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging			
Mines, Metals & Minerals	812	139.21	7016
Machinery, Electricals & Manufacturing	328	18.95	2194
High	Units>200, investment>1000, emp>1000		
Medium	Units>100, investment>200, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 78 Sector wise mapping of industries in Jalore as per DIC report, 2007

There have been many MSME coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of metals, mines & minerals, leather and textiles, furniture and manufacturing sector. A substantially good number of workforce (15%) form the services backbone of the district and are engaged in various industries, households etc. as daily wagers.

There has been an increase of close to 21.5% of MSME from 2007-2012 with investment doubling itself but the employment fold has just risen by 25% which suggests the nature of operations of the industries set up largely engage less human resources.

In order to understand the trend in the existing market and industrial set up stratified sample of 14 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in Jalore district of Rajasthan. These functionaries represented different levels of management as Partners, Directors, General Managers, HR Managers, etc.

Sectors covered under sample survey
Leather & Leather Goods
Machinery, Electricals & Manufacturing
Stone Querying, Cutting & Polishing
Textile & Handloom
Tourism, Travel, Hospitality & Trade

Table 79 Break-up of industries in Jalore (Sample study)

These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table. The industries sampled were performing without any gap in production except the packaging industry which was running short of skilled manpower.

All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers.

5.7.6 Workforce Demand and Supply

The major workforce participation observed in Jalore district over a period of two decades has been majorly as cultivators/ agricultural laborers and has had a decline by 7% over a period. There has been declining trend of workforce share in primary sector from 84.80% to 77.50% from 1991-2001. Therefore, the increase in the share of secondary and tertiary has been quiet insignificant for the same period. Majority of the workforce has been engaged in subsistence agriculture and remains idle for the bulk period of the year. Jalore lies in arid Thar region. There is distinct trend observed in the workforce engaged as laborers & wage earners who get engaged as land labourers, helpers, cleaners, semi-skilled mechanics etc. Engagement in secondary and tertiary sector shows an increasing trend as per the industrial growth of the district though very marginal in nature but the industrial plan looks more promising for the years to come. Looking at the present resources and skill set of the workforce tiles and stones, textiles and leather hold the key to future employment for the district Jalore. The requirement for semi-skilled workforce was higher than the skilled workforce. The granite related

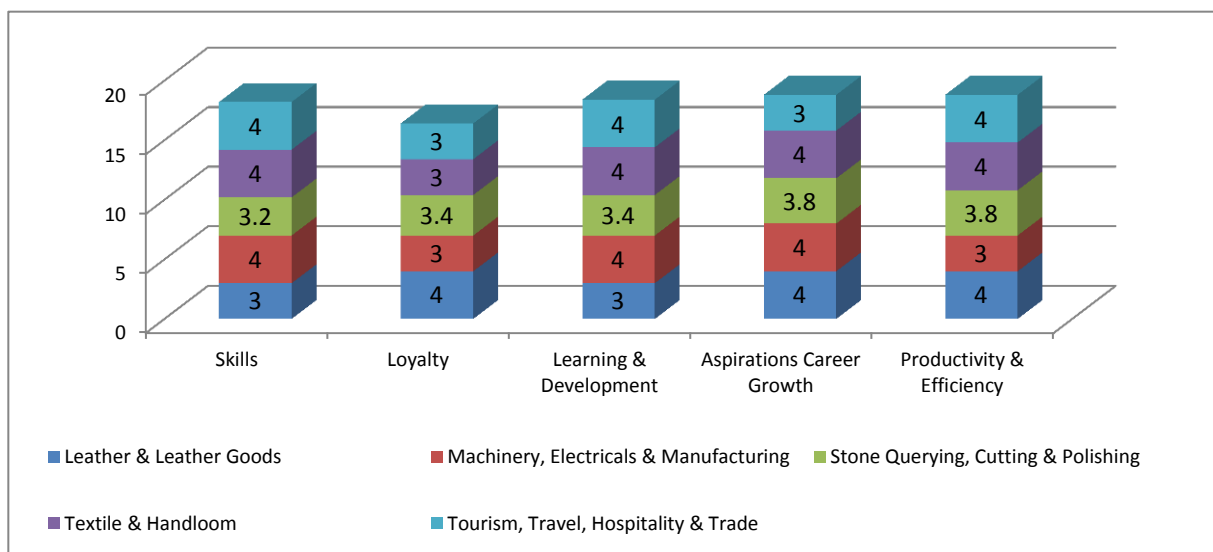


Figure 117 Employers demands in terms of expectations from workers (Jalore)

industries demand for unskilled workforce more than double of that of semi-skilled workforce requirement clearly illustrating the model of low-cost unorganized form of labour utilization in the sector. In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were loyalty towards work and least scaled was importance of enhancing skills. Other parameters were closely rated as shown in the figure showing the employer's expectations.

5.7.7 Projected Workforce Demand

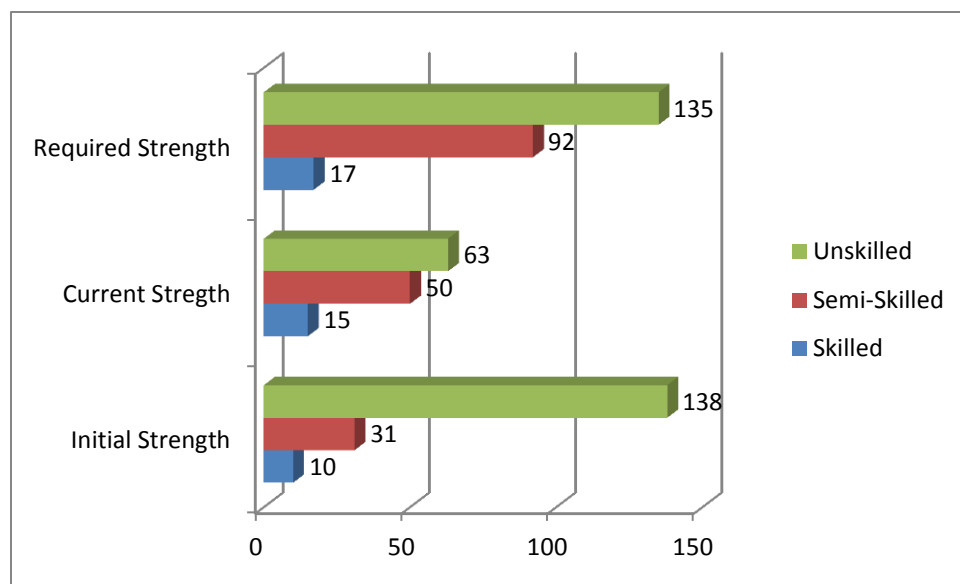


Figure 118 Status of workforce in terms of initial, current and required strength across sample industries of Jalore

There has been certain increase in the number of full time skilled workers over a period of time by close to 25%, though majority of the industries interviewed still feel the requirement of unskilled workers over the skilled workers for their full time roles. Apparently the number of semi-

skilled workers category has grown by 66% but the need for unskilled contract/ daily wage laborers was phenomenally very high. A clear distinction could be observed in the preference of only skilled workers for the contract and daily wage worker category as the industries felt the low cost module works better in a capital scenario and incurs less cost in on job training. The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers. One could observe a similar requirement in the skilled daily wage labor requirement and unskilled contract based requirements. This clearly validates the mindset of the industry houses to engage less skilled workers and increase the intake of semi-skilled workers.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower Requirement
Agricultural Sector								
Unskilled	418024	419185	402679	407915	424931	415311	418451	
SemiSkilled	34078	34173	32827	33254	34641	33857	34113	
Skilled	2272	2278	2188	2217	2309	2257	2274	
Total demand	454374	455636	437694	443386	461881	451425	454838	72%
Industry Sector								
Unskilled	39207	41655	41802	43501	44080	45253	45978	
SemiSkilled	18096	19225	19293	20077	20345	20886	21220	
Skilled	3016	3204	3216	3346	3391	3481	3537	
Total demand	60319	64085	64311	66925	67816	69621	70735	11%
Services Sector								
Unskilled	13308	13984	14327	14823	15188	15621	15966	
SemiSkilled	31052	32630	33429	34588	35438	36449	37254	
Skilled	44360	46614	47755	49411	50626	52070	53219	
Total demand	88720	93229	95511	98822	101252	104139	106439	17%

All Sectors								
Unskilled	470539	474825	458808	466240	484199	476185	480394	
SemiSkilled	83226	86028	85549	87919	90424	91192	92587	
Skilled	49648	52097	53159	54974	56326	57808	59030	
Total Demand	603413	612950	597516	609133	630949	625185	632011	100%

Table 80 Labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors- Jalore

Basis on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components		Yellow	Red
Food processing	Red	Red	Red
Electronics Hardware	Red	Red	
Handloom & Handicrafts (includes wooden & paper)	Yellow	Green	Green
Textile & Garments	Yellow	Green	Green
Building, Hardware & Home Furnishings		Green	Red
Leather & Leather Goods	Yellow	Green	
IT or software	Yellow	Orange	
ITES- BPO	Yellow	Yellow	
Chemical & Pharmaceuticals	Green	Green	Yellow
Tourism, Hospitality & Travel		Green	Yellow
Building & Construction	Yellow	Green	Green
Transportation/logistics/warehousing & packaging		Green	Yellow
Education/ Skill Development	Green	Yellow	
Banking, Insurance & Finance	Yellow	Green	Red
Healthcare	Yellow	Yellow	Red
Machinery, Electricals & Manufacturing	Green	Green	Green
Mining, Minerals & Metals (includes stone quarrying)	Green	Green	Green
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 81 Workforce across various sectors by 2017- Jalore

5.7.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill

requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	154668	133365	155250	158008	150917	155251	161889
Semi-skilled	31889	30183	31956	32353	31505	31862	32331
Skilled	19981	20333	21101	21623	21711	22266	22667

Table 82 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 2 lakh. Keeping in mind the high rate of workforce participation from unskilled masses; the significance would be to target training to atleast 55,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation is conducive enough to support industrial growth in Jalore. Investments are good. Land for establishment of industries is not a problem. Currently lands allocations are handled by RIICO. There are three industrial areas named Phase-I, Phase-II & Phase-III and one Industrial area under development. Water is sufficient & supply of power is also uninterrupted. Availability of skilled man power is a major problem so many of the local industries does not get required skilled manpower.
- The VTIs are not fulfilling the needs of the industries. The trained person does not meet the requirement of the industries since they have lack of practical experience as VTIs have more theoretical classes and less practical training which is sufficient for getting the certificate and enter the government services only but private organization requires more practical experienced people. Private VTIs even lacked the basic course quality post training.
- Demand for skilled workforce (semi-skilled) would be increasing over next three to five years keeping in mind the increasing investment pattern of the district in the MSME for last five years. Major employment would be perceived in stones, granites & Plaster of Paris industries. Stone cutting & polishing shall be considered as the emerging sectors. Manpower requirement of government establishments would also be providing sustainable livelihoods if addressed properly.
- Scope of self-employment and entrepreneurship in the district remains on a high. MGNREGA contributes to the skill gap and availability of workforce for the industries.

5.7.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Jaipur district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 60% of the youth covered were college educated and 40% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 83 Youth Profile of sample in Jalore

The average age of the respondents was 26 years with 36.7% were college educated and 63.3% attended high school education.

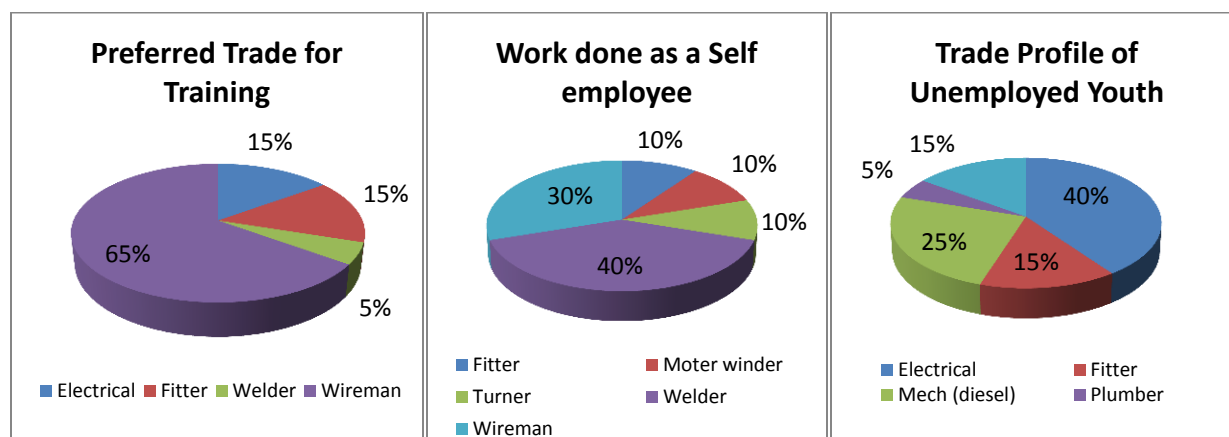


Figure 119 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Jalore

Among the respondents, inclination towards wiremen course was found very high as around 65% of the youth reported that they had chosen wiremen as a preferred trade during his/her training at VTI. The reason for the same seems to be the demand for this course in the market. Second, most sought, trade was fitter and electrical i.e. 15%. Similarly, welder and electrical were the courses most sought by the self-employed and unemployed youth.

5.7.10 Youth's Perception

Satisfaction with current monetary returns and need for advanced training emerged as the two least important factors identified by the respondents as the key to better skilling initiatives of the district. The capability of VTIs faculty members and the utility of these training were among the most perceived thoughts among the group of youths.

There were higher points given for assessment of the overall skill levels attained post training and it was evident by the average salary which stands out to be Rs. 10,400/ month. The supply stricken area of skilled workforce may also be a leading cause for the better initial average salary post training.

5.7.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.75 lakh of skilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at Jalore district level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

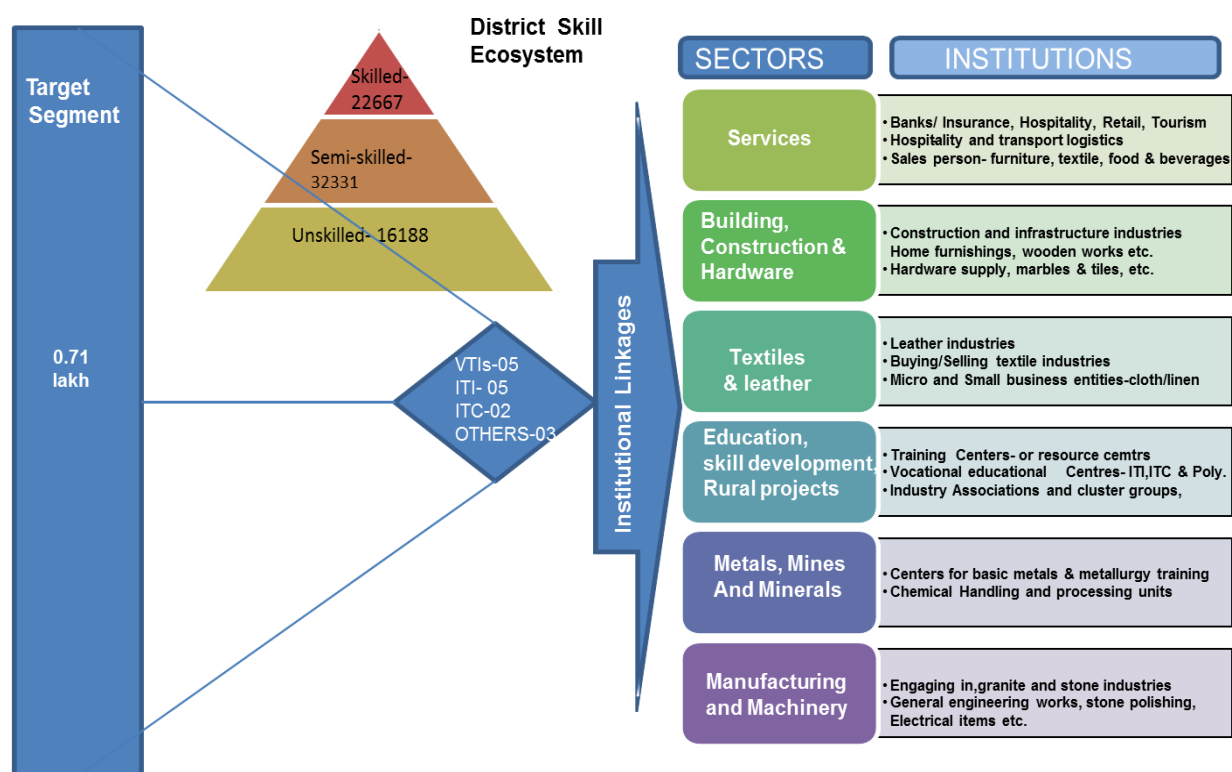


Figure 120 Optimization plan- Skill Development Eco System-Jalore

The key stakeholders' contribution in enabling to achieve the target (as shown in the figure) would be as follows:

- State: The state to target the skilled, semi-skilled and unskilled segment of the workforce requirement across sectors for skilled training by creating additional 15 skill development centres (VTIs) in the district level of operations by 2017. It should encourage the private training partners to participate and operate in the district due to its large base of workers involved in secondary and tertiary sectors.

- b) Training Partners: The sectors for engaging more skilled workforce would be in construction, services (more generic services in logistics, transport, small restaurants, insurance and grameen banks) and textiles in the district. The requirement of trained professionals for educational institutes and rural development state projects could also be explored. Along with these, specific course curriculum designed for communicative English, life skills and basics in computer should also be the key areas of skill development.
- c) Industries: The primary sectors of high human resource requirement would be services and hospitality, sales in the textile, insurance, education and other marketing opportunities, ancillary industries related to manufacturing, mines and minerals, transport and logistics etc. and therefore would require increasing linkages with the related institutions for skilled workforce absorption

NSDC would be an enabler to lead the training partners in textiles and services by encouraging specifically designed proposals with increasing the linkages in industry associations and PPP models. It could also play an important role in leading the training models financed by banks (local banks) for sustainable development.

5.7 District Kota

KOTA DISTRICT



District Skill Workforce Face Sheet-2012								
District	Kota			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	10	No. of Villages	874	No. of Schools (elementary & sec.)	2348			
Basic Data								
Population (in '000s)	1950	Overall Literacy(in %)	77.48	Sex Ratio	906			
Decadal growth rate(in %)	24.34	Female Literacy(in %)	66.32	HDI Ranking (2008)	0.787 (2 nd position)			
% Urban Population	53.46	Male Literacy(in %)	87.63	Per Capita Income (in Rs.)	21264			
Workers participation rate (2001)								
Workers participation rate (2001)	34.51	Share of primary sector (%)	41.60	Share of secondary & tertiary sector (%)	58.40			
No. of MSME/Industries	8251	Total Employment (in 000s)	26951	Total Investment (in lakhs)	10008			
No. of colleges (PG & Graduation)	32	Total graduates (In '00s)	11709	Total Post graduates (in '00s)	3329			
No. of VTIs(registered ITI+Poly+ITC)			8	Total trainees trained (in '00s)	1876			
Indicators (Cumulative)								Employable population
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	
Semi-Skilled workforce	67049	69400	67876	67896	68283	67651	66841	1.01lakh
Skilled workforce	14521	19628	22593	25499	28437	31198	34921	

5.8.1 Demographic Profile:

Kota is located 240 kilometers south of state capital, Jaipur. Situated on the banks of Chambal River, and has been identified as a counter-magnet city for the National Capital Region to attract migrants and develop as an alternative centre of growth to Delhi. The city is the trade centre for an area in which millet, wheat, rice, pulses, coriander and oilseeds are grown; industries include cotton and oilseed milling, textile weaving, distilling, dairying, manufacture of metal handcrafts, fertilizers, chemicals and engineering equipment.

The city of Kota is situated at a center of the southeastern region of Rajasthan a very region widely known as Hadoti the land of the Hadas. Kota lies along the banks of the Chambal river. The historical places and temples are getting surrounded with signs of modern development. Kota is on a high sloping tableland forming a part of the Malwa Plateau. Kota is one of the industrial hubs in northern India, with chemical, engineering and power plants based there. It has an average elevation of 271 m (889 ft).

S.no	Section	Unit	Quantity/
			Value
1	LOCATION		
	Latitude	degree	25°18' N
	Longitude	degree	75°83' E
2	AREA		
	Total geographical area	square	5198
3	ADMINISTRATION		
	Tehsil	number	5
	Villages	number	874
4	Land Use Pattern		
	Total Area	Hectares	521324
	Total Irrigated area	Hectares	252536
5	Population (census 2011, provisional)		
	Total population	number	1950491
	Men	number	1023153
	Women	number	927338
	SC (2001)	number	300555
6	Literacy (except 0-6 age group)		
	Total literate	percent	77.48
	Men	percent	87.63
	Women	percent	66.32
8	Energy		
	Electrified Villages	number	841
9	Industries (DIC, 2009)		
	Registered MSME units	number	8251
	Employed persons	number	26951
10	Education		
	Pre Primary & Primary Schools	number	721
	Upper Primary	number	965
	Secondary & Sr. Secondary	number	662
11	Higher Education / Others		
	Colleges	number	32
	I T I	number	06
	Polytechnic	number	02

Table 84 Kota District Profile- a snapshot

It ranks as the 24th largest district of the state covering 1.52 % of the area of the state. With 374 the density of population in the state ranks at 07 (Census, 2011- Provisional). It stands 02nd on the Human Development Index (0.787) and 03rd on the GDI (0.570). It was observed that the district fares quiet high on education and income index (01st & 04th

respectively), its due to the health index (11th) which pulls the district on overall HDI ranking to second. As per provisional census 2011 data, Kota accounts for population of 19.5 lakhs (2.84% of the state population) with sex ratio of 906 (compared to 2001 census figure of 896) which still is on the lower side of the state ratio of 926. There was a decrease in the decadal growth of population of 4.2% showing trends of population stabilization.

The worker participation rate in Kota is 34.51% (HDI, Rajasthan, 2008) with primary sector engaging close to 41.60% of the workforce and rest 58.40% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 12% (Urban- 28.97% & Rural- 40.88%). The literacy rate of Kota in 2011 is 77.48 which is the highest for the state and higher than the state figure of 67.06. According to Census 2011 provisional data, the male literacy figure stands at 87.63% and female literacy was at a state highest of 66.32.

5.8.2 Education Infrastructure and Utilization

Kota's status in literacy was marked the highest and higher than the state average but also marked by the highest female literacy. Education has become a major part of the city's economy. It has become a hub for coaching for Engineering and Medical Entrance examinations, attracting hundreds of thousand students every year. Students from all over India come to study in Kota and prepare particularly for the IIT-JEE and AIPMT. Kota has three major universities:

- Rajasthan Technical University
- University of Kota
- Vardhman Mahaveer Open University;

Education	Kota	Rajasthan
Pre Primary & Primary	721	49546
Upper Primary	965	38889
Sec/ Sr Sec	662	19135

Table 85 Kota vs. Rajasthan education status

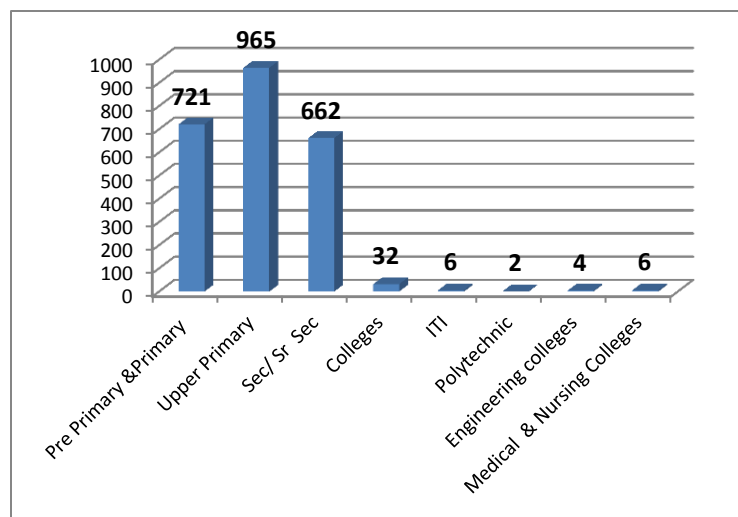


Figure 121 Number of Schools, Colleges, ITI & Polytechnic, 2009-10- Kota

The private institutes have come up with PG diploma and management courses in a major way. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 14 partners (includes NGOs, ITIs, government college) implementing skilling initiatives with 28 approved programs (20 are completed). A detailed view of the vocational

It also has one government medical college, one private dental collage, six engineering colleges, 15 general colleges, a number of MBA Institutes, and a medical college. The Government College of Kota is the largest government-run college in the state of Rajasthan under University of Kota. A total of over 21,000 students enroll in various institutes at colleges ITI & polytechnic. At the intermediate college level, courses are available in the area of science, arts and commerce.

The private institutes have come up with PG diploma and management

training of Kota could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.8.2 VTI's demand across various trades

The existing scenario of VTIs in Kota is on the higher side considering the number of youths passing out; and seeking employment as skilled workforce. Private players have ventured in a big way but occupied the formal education (coaching) space for the state and even cater for the nation as well. As observed from the secondary data, the number of graduates and aspirants from ITI & polytechnics are also on the higher side compared to other districts of the state. Therefore, the scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields of requirement and demand as per market shall be the need of the hour to address the skill shortage.

The survey was carried out in 10 sample VTIs (5 ITI & 5 ITC). The government VTIs/ ITI provided 14 different courses in training whereas; it was 05 courses in the ITC. These courses were predominantly self-employment based or to cater the local market needs. In private VTIs the courses were more male oriented and 1 of the 06 courses offered was preferred by the women. The details of the courses offered in the VTIs of Jaipur are represented as follows:

Private VTI Trades (ITC)	Government VTI Trades (ITI)		
COPA	COPA	Steno Hindi	HSC (Health & Skin Care)
Fitter	Cutting & Sewing	Welder	Fashion Technology
Electrical	Fitter	Wireman	Food & Vegetables Processor
Electronics	Mechanic (Diesel)	Turner	Embroidery & Needle Work
Mechanic (Diesel)	Motor Mechanic	COE (Chemical)	

Table 86 Kota district's (sample study) courses offered

The total 10 VTIs (05 government+0 5 private) were covered in the sample. The government VTIs sampled for the study offer 14 different trades for training while the private VTIs offer 05 trades. It appears that COE (Chemical) was the most popular trade in ITIs whereas electrical in ITCs. In the ITIs, the difference between actual trainees compared to the number of approved number of trainees was varying from 0 to 38 across various courses. On the other hand, the gap between the actual and approved strengths of trainees was more or less same across all trades in private VTIs. Electrical is most

preferred trade in Kota as private VTIs are offering around 5 times seats in electrical trade as compare to batches of other courses provided running to optimum strength.

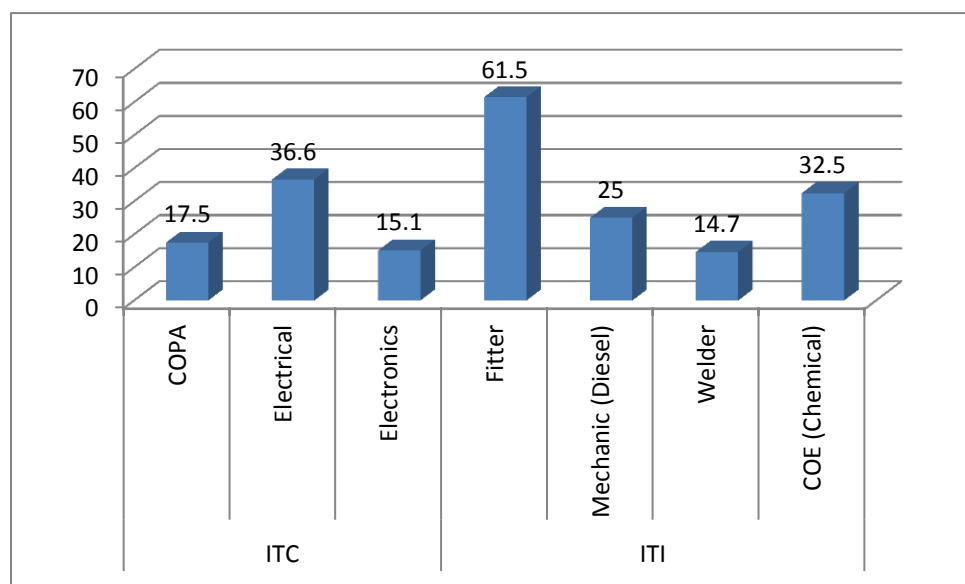


Figure 122 Kota district's (sample study) courses offered placements (in %) in government and private VTIs

An overview of placement records by trade in the government and private VTIs indicate moderate prospects in few of the trades. Electrical and fitter courses provided the maximum placement percentage but overall the placement scenario

was very poor as just 07 courses out of a total of 19

courses had placement potential. It may be due to the fact that most of the other trade trainees seek self-employment. The COPA course though shows high potential in the market but placements from the institutes were nil (on records). Average salary/trainee indicated a range of Rs. 5,000- Rs. 6,000/month as the startup salary.

The poor placement percentage was also due to the fact that the enrolment of aspirants in some of the courses of the ITI was nil in the last year (10 out of 14 trades in government VTIs, had no enrolment last year). While placements of trainees from the ITIs were more through a proactive approach to the industry and the trainees themselves, the private VTIs depended on both campus interviews and through a proactive approach to the industry for placement. Though some of the trainee got their placement through employment exchange but it seems that employment exchanges are not playing a major role in placements.

ITI					
COPA	36	33	37	39	0
Cutting & Sewing	29	27	30	35	0
Fitter	26	29	27	17	0
Mechanic (Diesel)	44	50	43	32	0
Motor Mechanic	17	11	14	0	0

Steno Hindi	19	12	15	14	0
Welder	34	29	28	21	0
Wireman	40	43	41	37	0
Turner	13	9	11	0	0
COE (Chemical)	123	158	110	118	0
HSC (Health & Skin	16	15	11	17	0
Fashion Technology	17	19	17	15	0
Food & Vegetables	8	6	4	6	0
Embroidery & Needle Work	4	0	6	0	0
ITC					
COPA	40	38	38	39	40
Electrical	202	145	126	149	154
Electronics	53	50	52	53	53
Fitter	18	14	0	0	0
Mechanic (Diesel)	14	14	14	14	12

Table 87 Kota district's (sample study) various trade's aspirant strength over a period in ITI & ITC

The trends across all the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the ITI & ITCs. ITCs increased maximum seats in electrical trade due to the fact that this trade was unavailable in ITIs and the demand for electrical skilled persons was high. Only one government VTI had hostel facility for boys as well as for girls whereas none of the private VTIs had the hostel facility for boys or girls. Transport facilities to trainees were present and were well equipped with upgraded technologies in ITI & ITCs. Government and private VTIs appear to be well equipped in terms of academic, managerial and support manpower to run the VTIs.

5.8.4 Industry Mapping

The city is the trade centre for an area in which cotton, millet, wheat, coriander and oilseeds are grown; industries include cotton and oilseed milling, textile weaving, distilling, dairying, and the manufacture of metal handcrafts. Kota also has an extensive industry of stone-polishing of a stone called Kota Stone. Kota stone is blue in colour and is used for the floor and walls of residential and business buildings. It is a cheap alternative to marble. Kota's economy today is driven by the all-India fame of its coaching classes; it is regarded as a largest coaching hub in India. The major industries include DCM Sriram Consolidated Limited (DSCL), Instrumentaion Limited, Multimetals Limited, Samtel Glass Limited, Birla Cement, CFCL Chambal Fertilizers and Chemicals Limited[disambiguation needed], Sriram Fertilizers and Metal India (in agricultural sector), Shriram Rayons(DCM Shriram industries

limited). Kota is the only city in India which have 3 power stations – thermal, hydro and nuclear. Kota has one of the India's largest cluster industry of welding rods.

MSME in Kota

According to D.I.C data (March, 2012), there were around **17107 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.42985.86 lakhs** providing employment to **63817 persons**. It also has **29** registered large and medium industries engaging **7279** persons with an annual turnover of **Rs. 443955. 45**.

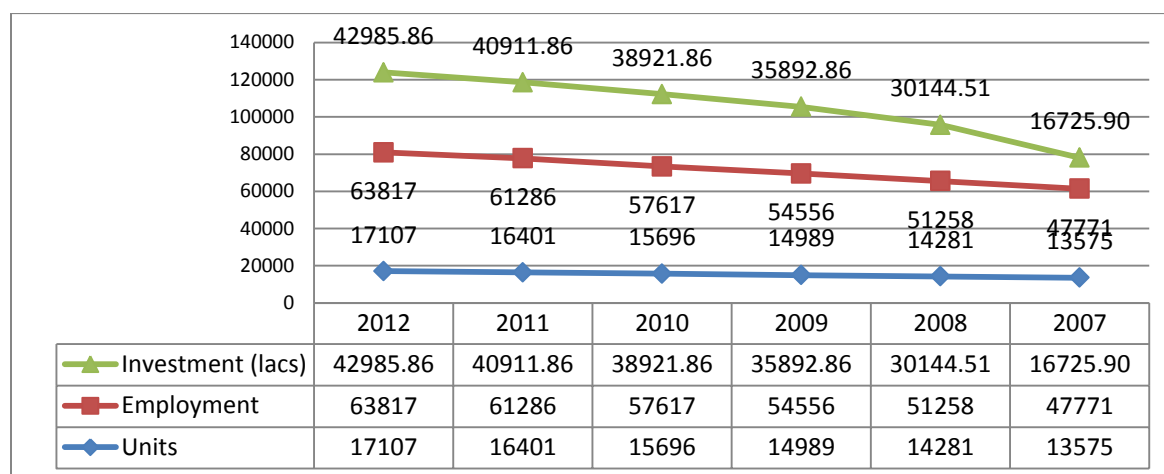


Figure 123 MSME trend analysis of the district-Kota

There has been a constant increasing trend in the investment of industries, employment and thus, the number of units as well. There exists 19 industrial areas with one of the cluster named Kota Doria at Keathun. Kota Doria sarees are known for the fine quality and exclusive design patterns that have an internationally acclaimed status. The locally available Kota stone is used for a variety of purpose and earns large revenue for the state. The well-known NTPC and Kota Super Thermal Power Plant generate and supply electricity to almost the entire state of Rajasthan as also to the neighboring state of Madhya Pradesh. The industry of Chambal Fertilizers of Kota is known for producing good quality fertilizers that would help to enhance the agricultural production of the state.

The several industries in Kota have maintained a harmonious balance between the traditional handicrafts and the modern technological innovations that has helped in the rapid progress of Rajasthan. While adopting new values and techniques from the world of science, the local inhabitants of Kota have not forgotten their indigenous art and craft, and have thus enabled the state to strengthen its economy.

Kota is famous for its coaching industry with having 30 plus of major coaching institutes, mainly imparting the coaching for engineering and medical entrance examination for under graduates courses, having approximate 3000 number of employment and about 50,000 students is studying in these

institutes. From this industry other allied industry is also working like hostels, laundry, mess, printing, transportation and packaged food industry.

5.8.5 Sector wise mapping of industries in the district

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Kota. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	702	1772.06	2815
Auto & Auto Components			
Chemical & chemical products	340	866.04	1664
Construction Material & Building Hardware			
Food Processing	14	24.89	100
Furniture & Furnshing	952	265.18	2718
Leather & leather goods	867	72.33	2117
Textile	46	21.41	147
Handloom	1193	121.35	1416
Unorganized Sector	1168	542.14	3191
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging			
Mines, Metals & Minerals	2205	4914.08	9570
Machinery, Electricals & Manufacturing	914	1499.6	3513
High	Units>200, investment>1000,emp>1000		
Medium	Units>100, investment>200, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 88 Sector wise mapping of industries in Kota as per DIC report, 2007

There have been many MSME coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of mines and minerals, handloom and leather, furniture and manufacturing sector. There has been an increase of MSME from 2007-2012 with an increase in investment and employment.

Some of the demand and resource based industries which have come up in the district were as follows:-

Demand Based	Resource Based
Forging Units	Solvent Extraction
Corrugated Boxes	Dal Mill
Agriculture Implements	Ground & Processed Spices
General Engineering & Fabrication Works	Bakery & confectionary
Rolling Shutters	Cattle Feed
Repairing & Servicing Centre	Fish Meal & Fish Processing
Electric Transformer	PVC Chappal
Data Processing	Leather Shoes & Other Item
Screen & Offset Pringing	Tyre Retreading
Sanitary Items	Rubber Moulded Items
Readymade Garments	Paints
Electronic Items	Stone Grits, Splitting, Cutting &
	Wooden Furniture

Table 89 Potential industries providing employment to the semi-skilled workforce in Kota

In order to understand the trend in the existing market and industrial set up stratified sample of 14 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of senior level functionaries from 14 diverse industries located in the district. These functionaries represented different levels of management as Partners, Directors, General Managers, HR Managers, etc.

These industries were selected from large, medium and small industries covering various growth sectors of the district as shown in the table.

While the five out of eight industries sampled under the building and construction sector could not provide details of their skilled worker strengths, in three of the sectors (Machinery, Electricals &

Manufacturing, Textile & Handloom and Tourism, Travel, Hospitality &

Trade sector), there was no increase in worker in-take is reported by the industries.

Sectors covered under sample survey
Construction Material & Building Hardware
Education/Skill Development
Food Processing & Products
Furniture & Furnishing
Handlooms & Handicrafts
Machinery, Electricals & Manufacturing
Textile & Handloom
Tourism, Travel, Hospitality & Trade

Table 90 Breakup of industries in Kota (Sample study)

Demand for skilled worker in future was also not noticeable across all industries. Across the industries, the overall trend observed was that the requirement for skilled and semi-skilled labour was very low. The dependence for semi-skilled labour was reducing and need for unskilled labour also saw similar trends as shown in the figure. All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers.

5.8.6 Workforce Demand and Supply

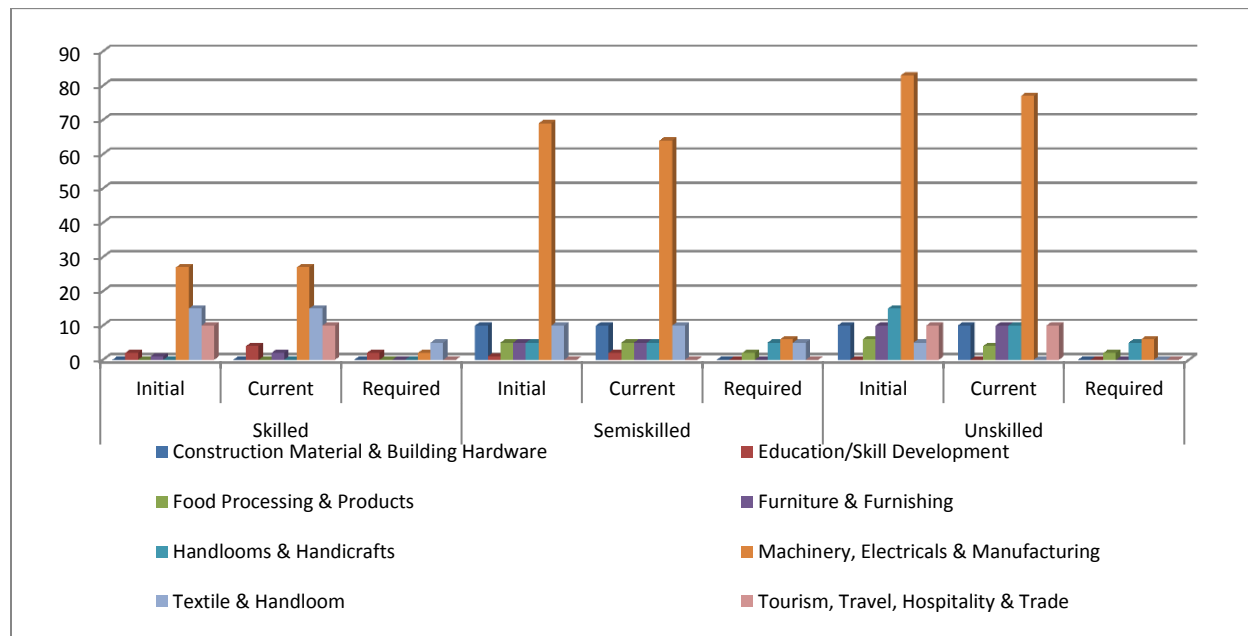


Figure 124 Status of skilled, semi-skilled workforce and unskilled workforce across sectors (Sample Kota) at various stages (initial, current and required)

The major workforce participation observed in Kota district over a period of two decades has been majorly engaged in secondary and tertiary sectors and contrary to other districts of Rajasthan low in engagement as cultivators. There has been declining trend of workforce share in primary sector from even. Therefore, the increase in the share of secondary and tertiary has been quite significant for some

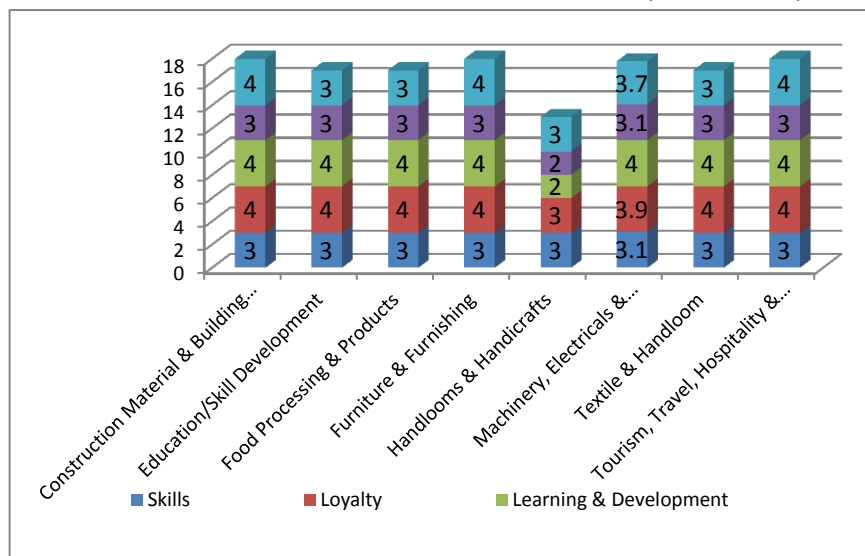


Figure 125 Employers demands in terms of expectations from workers (Kota)

period of two decades now. Engagement in secondary and tertiary sector shows an increasing trend as per the industrial growth of the district and the educational sector provides the major structure to engage the majority of the unorganized sector. Looking at the present resources and skill set of the workforce furniture, computer based knowledge, electrical and leather, tiles and stones, textiles and the key to future employment for the district Kota in near future. The requirement for semi-skilled workforce was higher than the skilled workforce in the overall industries though a very marginal requirement was mentioned.

In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were loyalty towards work and least scaled was aspirations for career growth. Other parameters were closely rated as shown in the figure above showing the expectations of the employer.

5.8.7 Projected Workforce Demand

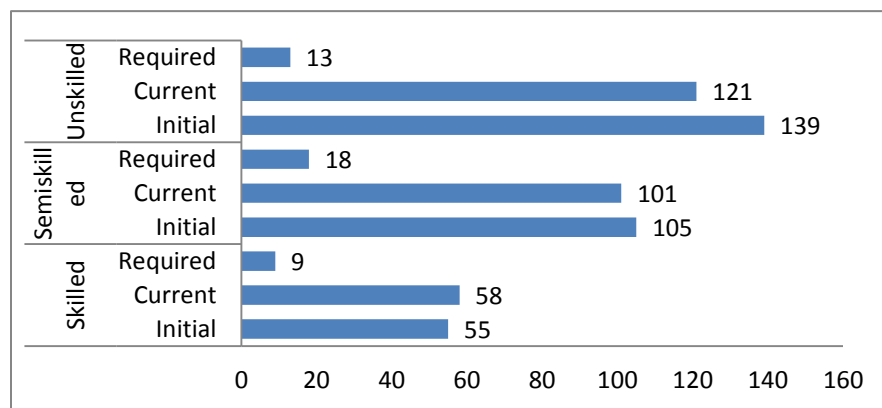


Figure 126 Status of workforce in terms of initial, current and required strength across sample industries of Kota

There has been marginal increase in the number of full time skilled workers over a period of time though majority of the industries interviewed still feel the requirement of unskilled workers over the skilled workers for their full time roles. Apparently the number of semi-skilled workers category has not grown but the need for

unskilled contract/ daily wage laborers was also low. A clear distinction could be observed in the preference of only skilled workers for the contract and daily wage worker category as the industries felt the low cost module works better in a capital scenario and incurs less cost in on job training.

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers to address the current shortage and not with the intentions to expand.

The number of vacancies reported by the sampled employers for the skilled, semi-skilled and unskilled categories of workers indicated unequal proportion and reflected that skilled workforce had least demand and unskilled workforce had maximum demand; also indicated high potential for absorption of workers in this category. In semi-skilled workforce had witnessed rise in engagement since industry inception.

As reported by industries since industry establishment, they were mainly relying on unskilled workforce as this category had the largest workforce and high potential to absorb unskilled workers in the near future. The difference in the wage structure in semi-skilled category to unskilled and semi-skilled to skilled was considerably low.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of Manpower Requirement
Agricultural Sector								
Unskilled	167217	172670	174954	179247	180125	186736	195346	
semiskilled	49904	51089	52137	52375	54722	55220	56287	
Skilled	5327	5406	5876	6092	6348	6681	6752	
Total demand	222448	229165	232967	237714	241195	248637	258385	39%
Industry Sector								
Unskilled	60688	64025	62619	64695	64818	65759	66084	
semiskilled	32625	34165	33516	34475	34532	34965	35116	
Skilled	5438	5694	5586	5746	5755	5828	5853	
Total demand	98751	103884	101721	104915	105105	106552	107053	25%
Services Sector								
Unskilled	9283	10022	11008	11203	12066	12225	123082	
semiskilled	68328	72384	74686	77475	79488	82191	84191	
Skilled	67612	71406	75694	80678	84554	887416	92273	
Total demand	195223	206813	213389	221356	227109	234832	240547	36%
All Sectors								
Unskilled	237188	246716	248581	255145	257010	264720	384512	
semiskilled	150858	157639	160340	164325	168741	172377	175594	
Skilled	78376	82507	87156	92515	96658	99925	104878	
Total Demand	466422	486862	496077	511985	522409	537022	664985	100%

Table 91 Labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors- Kota

The district shall continue to engage close to 61% of the workforce in secondary and tertiary sector with services sector (36%) and then industries engaging 25% of the total workforce. These projections account till 2017 of the district. Basis on the inputs received from sector wise expansion plans the Workforce projections made across different categories highlight these distribution pattern. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Gems & Jewellery			

Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Organized Retail			
Real Estate			
Media, Entertainment, content creation, animation			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 92 Workforce across various sectors by 2017-Kota

5.8.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis would factor in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging. The situation of skill gap for the district for 2010-11 to 2016-17 based on projections is represented in the table below (assumptions set in the annexure _ Projection Model):-

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	132536	139122	146093	153305	159374	166189	174656
semiskilled	67049	69400	67876	67896	68283	67651	66841
Skilled	14521	19628	22593	25499	28437	31198	34921

Table 93 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The conducive industrial and service sector environment has made Kota an important centre of the state. The skilled workforce requirement also shows comparatively very low requirement and just addressing the optimum utilization of current infrastructure and steady rate of inputs in education shall be resolving all the skill deficits of the district in all terms.

5.8.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Kota district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table). 73% of the youth covered were college educated and 27% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government. The average age of the respondents was 24 years with majority (75%) interviewed at ITI and 25% at ITC.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 94 Youth Profile of sample in Kota

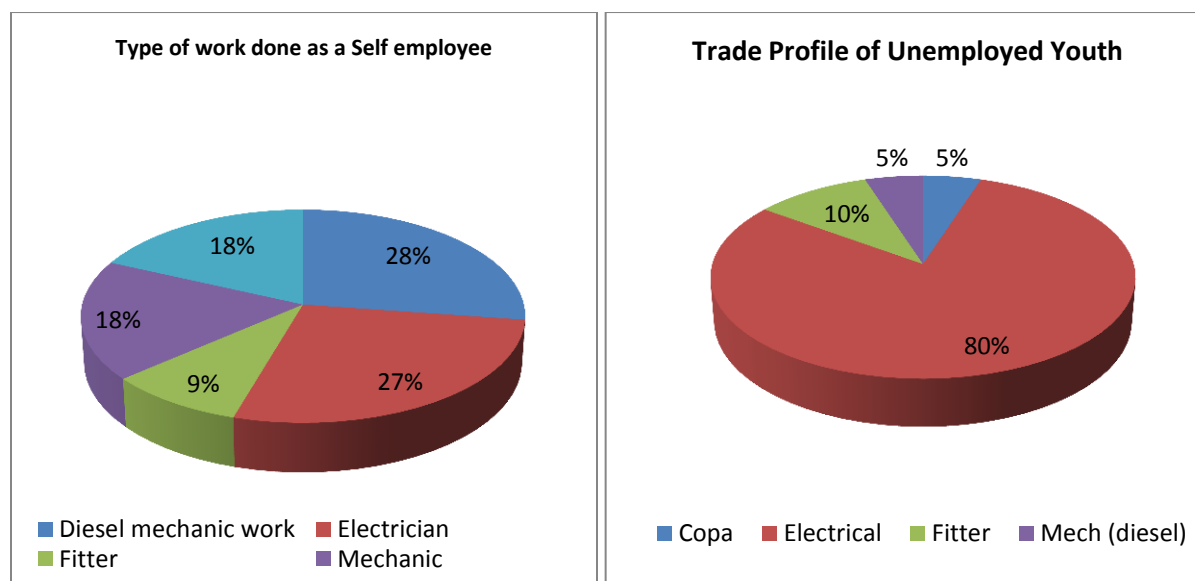


Figure 127 Profile of respondents (self-employed and unemployed) by trade in sample of Kota

Among the respondents covered under the survey the course of electrician (15%) was one of the most preferred one followed by COPA, Health and skin care, mechanic in sample of youths under trainees category. Youths preference for self-employed courses in similar trades of electrician, computer applications, mobile repairer, fitter and mechanic was evident but in varying proportion. But electrician

(27%) was the preferred trade. These trades appear to be the most popular trades as per the perceived demand in the market. But due to the surplus of electrician or improper market linkage of the supply of trained workers, about 80% of the unemployed youth also belonged from the electrical trade.

5.8.10 Youth's Perception

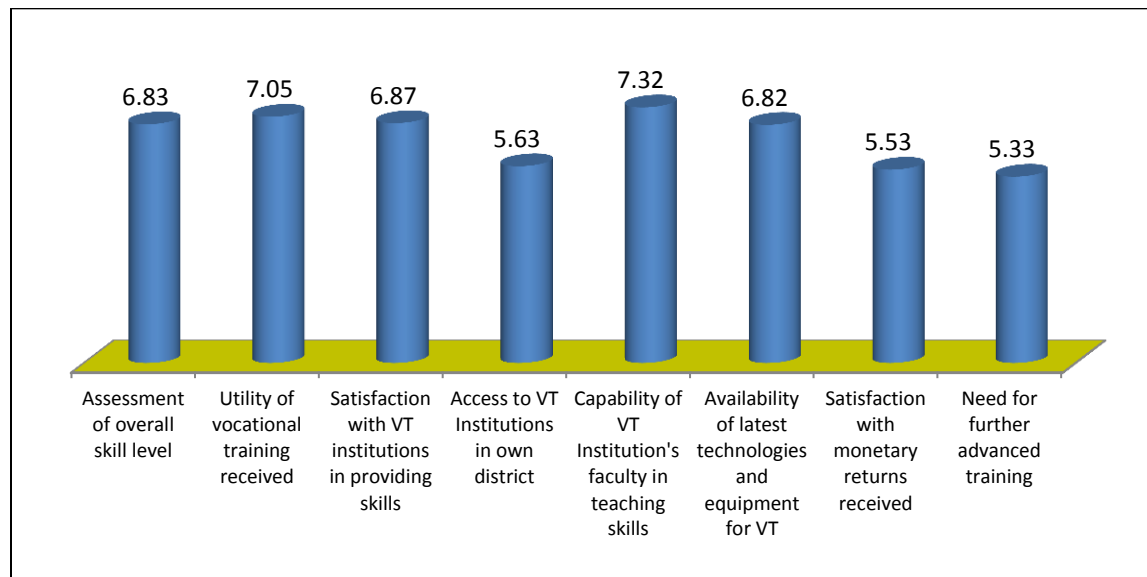


Figure 128 Kota Youth's perception, need and aspirations –Sample Group

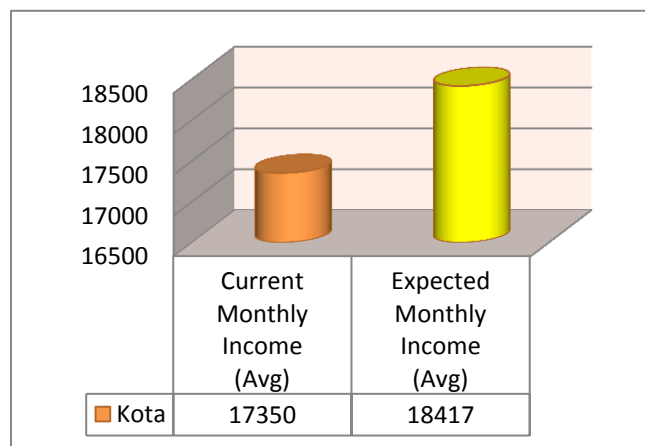


Figure 129 Income current and expected- sample group, Kota

Satisfaction with current monetary returns and need for advanced training emerged as the two deterring factors identified by the respondents as the basic need to be addressed by the government and industry requirements. Better skilling initiatives of the district do relate with the capabilities of the faculty and the utility of the vocational training as an important success factor.

There were pronounced needs for further advanced training provided for up-skilling and basic skilling in computer applications.

Expected monthly salaries required a change of atleast Rs. 1000/month approximately as skilled workforce among 60% of the sampled youth. 95% of the respondents did not receive any increment. The pay scale after skilling and few months of work experience enables for netter financial negotiations among the youth. Youth expected to join a job, either government or private. Power grids and factories, railways, fertilizers etc. were the preferred sectors. Need for communicative English was realized for interviews and formal documentation only.

5.8.11 Optimization Plan

The optimization plan would be structured at three tier level of district, state and NSDC. The preliminary gap finding, projection and analysis would be presented at every district level which would in turn determine the action plan of the state as represented in the below diagram. The overall scenario of the state would finally give major leads to apex bodies like NSDC for formulation of state specific portfolios to suit the requirements and address the future needs of the state in the skilled workforce.

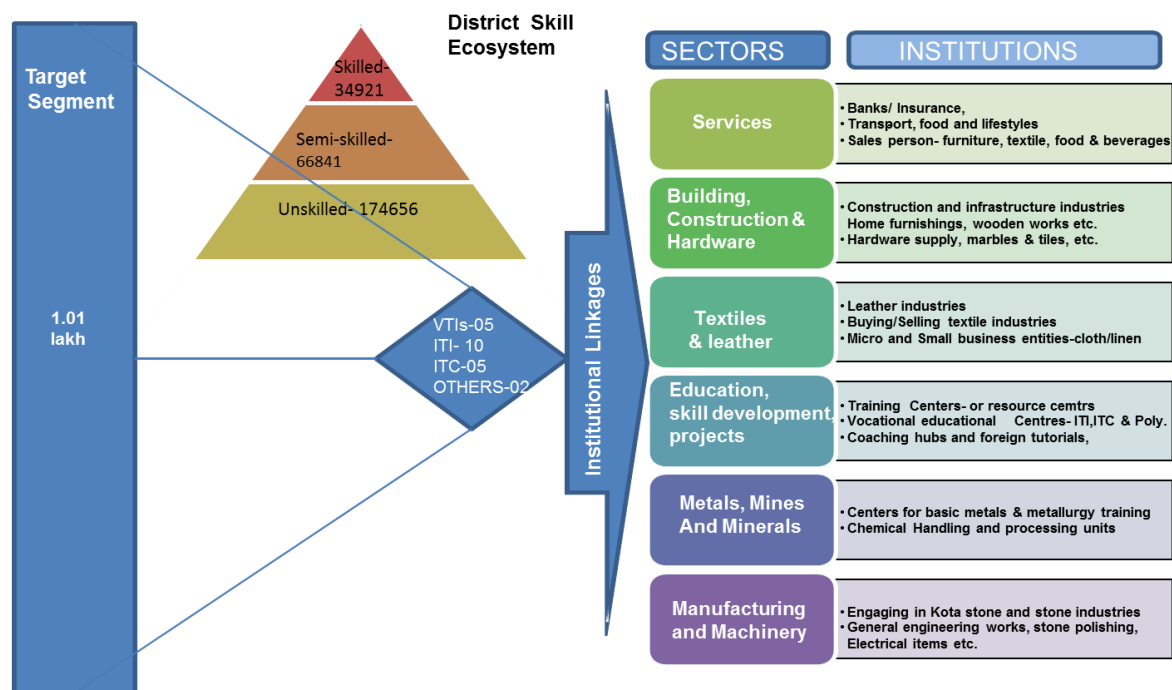
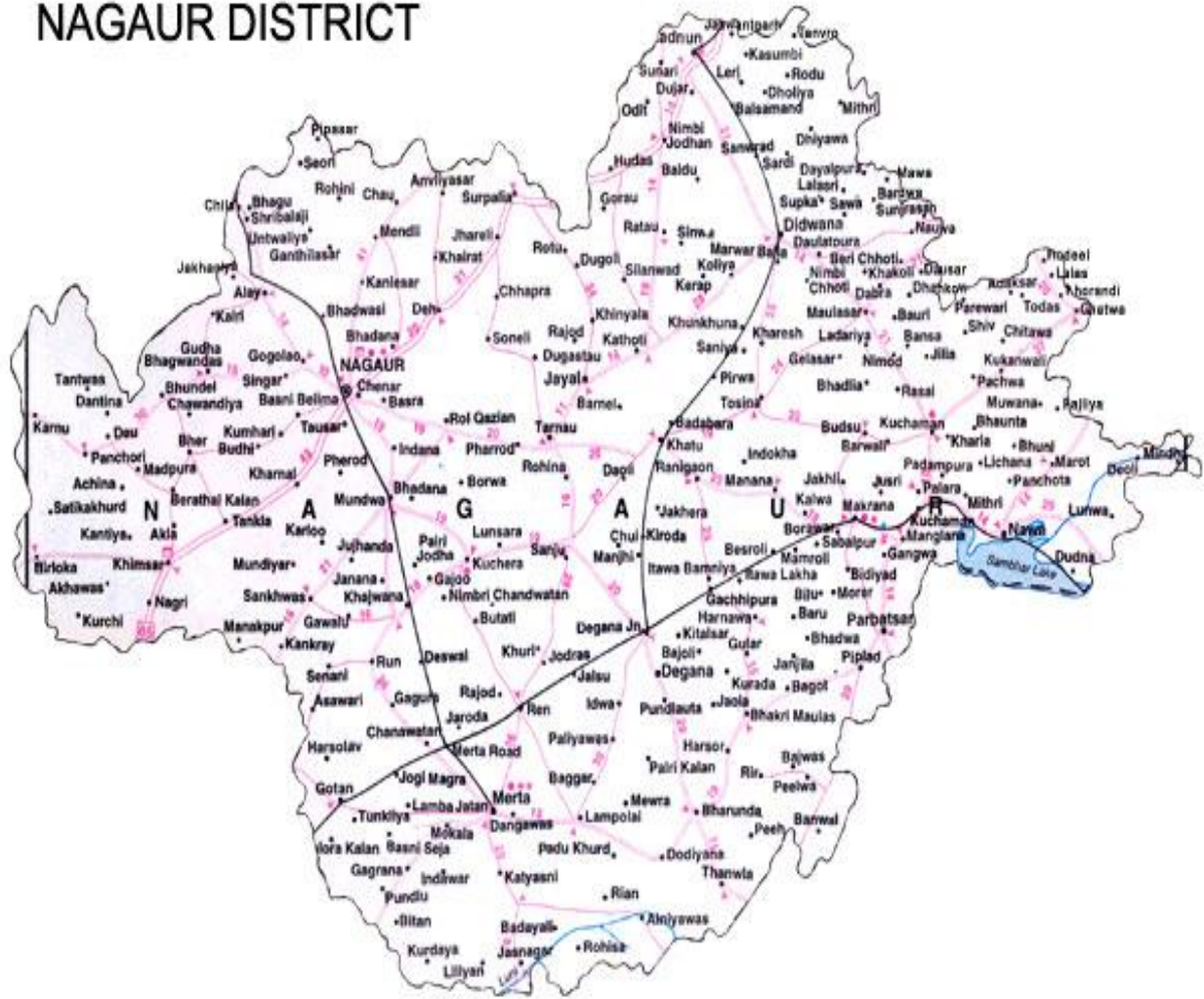


Figure 130 Optimization plan- Kota Skill Eco-system 2017

The high priority sector which shall need maximum number of semi-skilled workforce and less of skilled shall be the resource based industries of the district. This shall include the Kota stone polishing, leather processing, and education sector (allied with the unorganized sectors along) etc. The demand based industries shall engage more of skilled resources in data processing, transport and logistics, cement, repair industries etc. The semi-skilled workforce shall be the backbone of the district by getting engaged in large number of SSIs of the district and eventually catering for the biggest coaching hub of the nation as various work groups. One of the most important sector which could be enhanced for the overall skill development of the state would be the education and training institutes imparting coaching and recognized at national level. The training partners could leverage on this and bring innovative project proposals for inclusive skill development, training of trainer academies/universities etc. NSDC could plan along with state skill development agencies to develop PPP models to project Kota at international level as skill training and development hub.

5.9 District Nagaur

NAGOUR DISTRICT



District Skill Workforce Face Sheet-2012								
District	Nagaur			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	21	No. of Villages		1589	No. of Schools (elementary & sec.)		6146	
Basic Data								
Population (in '000s)	3309	Overall Literacy(in %)		64.08	Sex Ratio		948	
Decadal growth rate(in %)	19.25	Female Literacy(in %)		48.63	HDI Ranking (2008)		0.610 (17 th position)	
% Urban Population	17.20	Male Literacy(in %)		78.90	Per Capita Income (in Rs.)		13045	
Workers participation rate (2001)								
Workers participation rate (2001)	40.70	Share of primary sector (%)		72.20	Share of secondary & tertiary sector (%)		27.70	
No. of MSME/Industries	1807	Total Employment (in 000s)		7206	Total Investment (in lakhs)		11706	
No. of colleges (PG & Graduation)	30	Total graduates (In '00s)		12175	Total Post graduates (in '00s)		2184	
No. of VTIs(registered ITI+Poly+ITC)				3	Total trainees trained (in '00s)		320	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Semi-skilled workforce	3788	5004	6203	7873	8911	10059	10412	0.51lakhs
Skilled workforce	1731	2000	2235	2524	2844	3108	3362	

5.9.1 Demographic Profile:

Nagaur is located at 27.12°N 73.44°E. It has an average elevation of 302 metres (990 feet). Nagaur is situated amidst seven districts namely Bikaner, Churu, Sikar, Jaipur, Ajmer, Pali, Jodhpur. Nagaur is the fifth largest district in Rajasthan with a vast terrain spreading over 17,718 sq. km. Its geographical spread is a good combine of plain, hills, sand mounds & as such it is a part of the great Indian Thar Desert. Nagaur has a dry climate with a hot summer. Sand storms are common in summer. The climate of the district is conspicuous by extreme dryness, large variations of temperature & highly variable rainfall. The mercury keeps on rising intensely from March till June.

It ranks as the 05th largest district of the state covering 5.18 % of the area of the state. With just 187 the density of population in the state ranks at 23 (Census, 2011- Provisional). It stands 17th on the Human Development Index (0.61) and 18th on the GDI (0.483). It was observed that though the district fares quiet low on education, and income index (17th and 25th respectively) which

pulls the district on overall HDI ranking to the lower side of the state. As per provisional census 2011 data, Nagaur accounts for population of 33.09 lakhs (4.82% of the state population- 4th highest) with sex ratio of 938 (compared to 2001 census figure of 948) which still is on the higher side of the state

S.no	Section	Unit	Quantity/
			Value
1	LOCATION		
	Latitude	degree	27°12' N
	Longitude	degree	73°44' E
2	AREA		
	Total geographical area	Sq km	17718
3	ADMINISTRATION		
	Tehsil	number	10
	Villages	number	1589
4	Land Use Pattern		
	Total Area	Hectares	1763821
	Total Irrigated area	Hectares	338952
5	Population (census 2011, provisional)		
	Total population	number	3309234
	Men	number	1698760
	Women	number	1610474
	SC (2001)	number	545229
6	Literacy (except 0-6 age group)		
	Total literate	percent	64.08
	Men	percent	78.90
	Women	percent	48.63
8	Energy		
	Electrified Villages	number	1480
9	Industries (DIC, 2009)		
	Registered MSME units	number	1807
	Employed persons	number	7206
10	Education		
	Pre Primary & Primary Schools	number	2517
	Upper Primary	number	2644
	Secondary & Sr. Secondary	number	985
11	Higher Education / Others		
	Colleges	number	30
	I T I	number	03
	Polytechnic	number	0

Table 95 Nagaur District Profile- a snapshot

ratio of 926. There was a significant decrease in the decadal growth of population (10% approximately) showing trends of population stabilization.

The worker participation rate in Nagaur was 40.70% (HDI, Rajasthan, 2008) with primary sector engaging close to 72.20% of the workforce and rest 27.70% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 16% (Urban- 27.14% & Rural- 43.52%). The literacy rate of Nagaur in 2011 is 64.08 which were lower than the state figure of 67.06. According to Census 2011 provisional data, the male literacy figure stands at 78.90 and female literacy was at a low of 48.63.

5.9.2 Education Infrastructure and Utilization

Nagaur's status in literacy was marked lower than the state average with just 64.08 and female literacy marking the low of 48.63. Nagaur faces real time constraints in terms of basic schooling infrastructure, teachers and enrolment. Nagaur has also been among the districts with high drop-out rates as per HDI, 2008. According to Census 2011 provisional Nagaur has a total of 6146 schools which as per state comparisons stands at better positions. The retention rate of students in schools of Nagaur is quiet low which also contributes to the drop in literacy rates and status of education.

Education	Nagaur	Rajasthan
Pre Primary & Primary	2517	49546
Upper Primary	2644	38889
Sec/ Sr Sec	985	19135

Table 96 Nagaur vs. Rajasthan education status

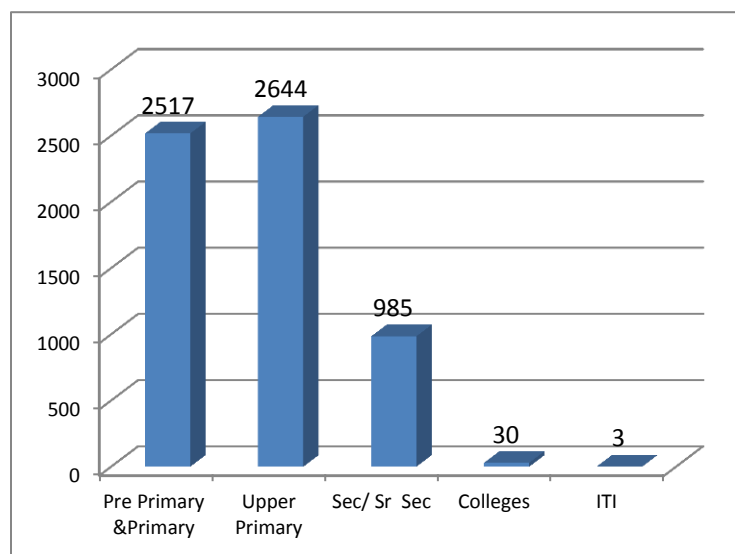


Figure 131 Number of Schools, Colleges, ITI & Polytechnic, 2009-10- Nagaur

A total of over 8500 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There were just a total of three registered vocational training institutes in Nagaur district. A total of just above 320 aspirants got enrolled in 2009-10 in the registered training institutes with an average of just 106/institute/year. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 02 partners (includes 01 private institute and 01 NGO) implementing skilling initiatives with 08 approved

programs (05 are completed). A detailed view of the vocational training of Nagaur could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.9.3 VTI's demand across various trades in Nagaur district

The existing scenario of VTIs in Nagaur was certainly on the lower side considering the number of youths passing out and the existing vocational training institutes in the district. Private players have not yet ventured in a big way eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields as follows:

- a) **Computer Based Accountancy and computer operators:** With number of small scale industries coming up in the region the educated youth having the basic education levels could be engaged in computer courses for accountancy (VAT & TALLY) and data entry operators for industries and government development projects.
- b) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is cement, banks/insurance or agro based products firms which are growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field

The government VTIs interviewed in the survey was three and seven was from the private. The courses which were offered by the government VTIs were predominantly self-employment based or to cater the local market needs. In private VTIs the courses were more male oriented and 1 of the 04 courses offered was preferred by the women. The details of the courses offered in the VTIs of Nagaur are represented as follows:

Government. VTI Trades	Private VTI Trades
Electrical	COPA
Fitter	Electrical
Motor Mechanic	Fitter
Welder	Mechanic (Diesel)
Wireman	Motor Mechanic
Carpenter	Welder
	Wireman

Table 97 Nagaur district's (sample study) courses offered

The government VTIs and private VTIs sampled for the sample study offer 05 different trades in common for training. The government VTIs sampled for the study offer 6 different trades for training while the private VTIs offer 7 trades. It appears that Electrical was the most popular trade in Government and Private VTIs as this trade had the maximum batch strength. Preference of this trade can be seen by the fact that Private VTI offered more than 3 times seats as compared to Government VTI. In the Government VTIs, the number of actual trainees compared to the number of approved number of trainees was same across all the trades. On the other hand, gap between the actual and approved strengths of trainees was more or less same across all trades in private VTIs.

An overview of placement records by trade in the Government. VTIs indicates poor prospects in almost all of the trades. Motor Mechanic, Wiremen and Carpenter trade registered no placement last year. In contrast to the government VTI, the job prospects in private VTIs was very promising as a significant

number of trainees got job from the institutes with 100% placement in COPA and Welder trade. In terms of average salary/trainee from Government VTIs, the highest paid trade was Fitter (Rs.4,500/month) and in Private VTIs, the highest paid trade was Wiremen with Rs. 5,000/month. While placements of trainees from the government VTIs was through campus interviews, the private VTIs placed their trainees through campus interviews as well as through a proactive approach to the industry. It seems that employment exchanges are not playing any role in placements. More often the courses provided were less oriented for direct placement in the market rather introduced the aspirants for self-employment for males and as another home based know how for females. Most of these trades majorly catered for the needs of more unorganized sectors. The selection of course design and other influencing factors for finalization of courses by the VTI functionaries were more or less determined by

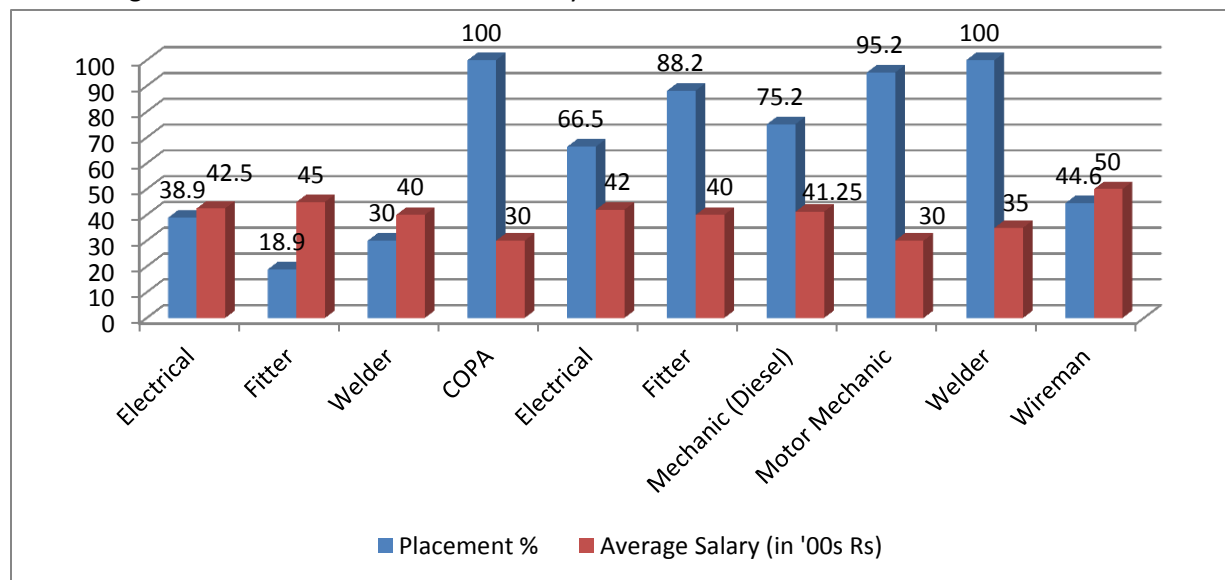


Figure 132 Nagaur district's (sample study) courses offered placements in government and private VTIs

the availability of facilities, faculties and equipment. All the VTIs claimed to have updated technologies, equipped labs, and space for conducting the training, electricity and water supply. Almost all of them did not have hostel facility for girls (one for boys in private VTI). Commuting facility for the aspirants in all private and government VTIs was a good initiative and different from many other districts surveyed. The staffing in these institutes were marked understaffed in aspects dealing in academics & managerial positions in government set-ups whereas, the private VTIs were well staffed.

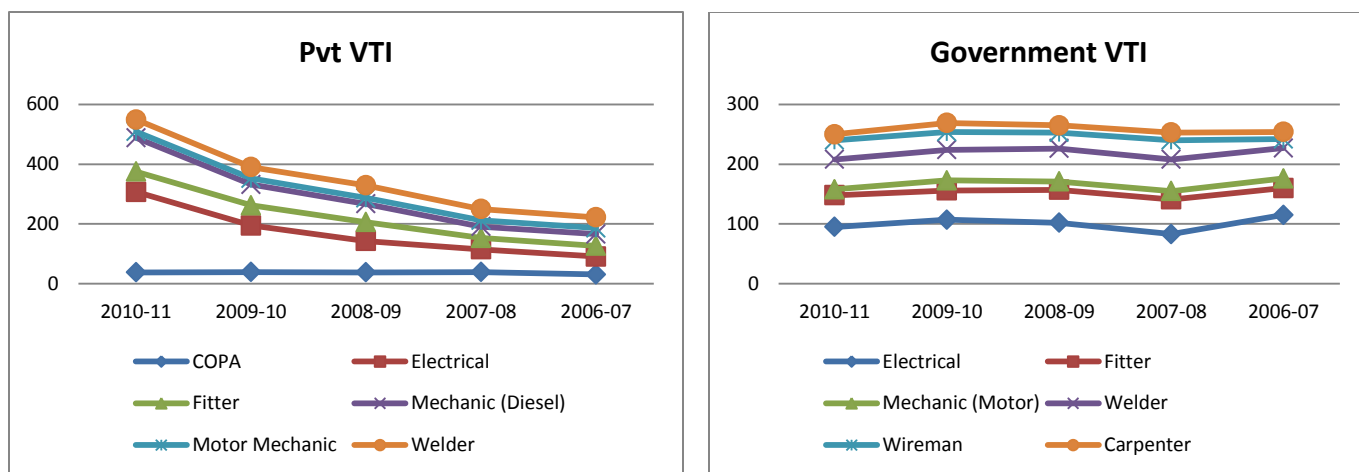


Figure 133 Nagaur district's (sample study) courses enrolment status of government and private VTIs

There has been steady increase for all the courses offered in terms of students enrolment but a dip was seen in almost all the courses of the government VTIs and thus optimum utilization of the available seats was an issue in skilling.

5.9.4 Industry Mapping

Since historical times there were minor manufacturers having market in the neighbouring areas for trading. For the rest of the trades there were hereditary artisans like carpenters, blacksmiths, potters, goldsmiths & other artisans to meet the local demands. Even after independence, Nagaur district has been practically industrially backward on account of the lack of exploitation of natural resources and under developed infrastructural facilities. Now the industrial climate is changing and a number of incentives and concessions are being offered to prospective entrepreneurs and they are looking forward to establish their units in the district. Nagaur has a wide potential in industrial sector that has to be exploited properly. The following resource based industries have a good potential:-

SALT INDUSTRY

Nagaur district is also an important salt producing area, Nawa & Deedwana tehsils being the major salt producing zones. Moreover, the Sambhar area (although forming part of the Jaipur district) is quite close to the salt belt of the Nagaur district. The industries based on common salt area local resources could sustain inter-alia the following kind of plants:

- Caustic Soda Plant
- Soda ash plant
- Chlorine gas plant
- Sodium sulphate plant
- Iodised salt & refinery

GYPSUM

Nagaur district is very rich in gypsum deposits with Nagaur, Bhadwasi, Bhadana and Manglod as particularly the best Gypsum bearing areas in the district. The reserves were estimated to be 952 million tones with 81% content and above by the Geographical Survey of India. A substantial part of the gypsum produced here has been supplied to the Sindri fertilizer factory in Bihar. It has also found its way to Haryana, after primary grinding. An industrial complex in Nagaur, based on gypsum, along with ancillaries could be a major employment provider for the local population.

Gypsum based industries are as follows:

- (i) Cement plant (Portland)
- (ii) Fertilizer plant
- (iii) Plaster of paris plant
- (iv) Potteries and moulds plant
- (v) Sulphuric acid plant

LIME STONE

Best grade lime stone is found at Gotan, Mundwa, Kathoti and Ambali in the Nagaur district. Lime stone is also available in the Nagaur district in abundant quantity & the quality is reasonably good. Large reserves amounting to about 33 Million tons of high grade lime stone are found near Gotan. The deposit near Mundwa contains a reserve of about 1.19 million tons of high grade lime stone.

The industries based on limestone as a resource are as follows :

- Quick Lime
- Hydrated Lime
- Precipitated chalk plants
- Mineral Grinding plants
- Cement plant

WOLFRAMITE TUNGESTEN

Wolfram (Wolframite) deposits are found in the Renwat hill at Degana. In this mineral, the tungstate of iron and manganese, occurs, in the veins or lodes of granite and phillites especially. Tungsten is specially suitable for use in the production of alloy steels and high speed cutting steels which retain hardness even when they are red hot. However for small quantities generally low grade material have been mined. A reserve of the order of 3,400 tones has been established. Other minerals available in Nagaur district including sandstone. It is available almost everywhere in the district, but the best grades are available at Khatu in Deedwana tehsil where as many as 150 quarries already exists. Fairly good deposits of white clay are found of near the village of Suradhana, Khajawana, Mundwa, Dhadhariya Khurd and at a number of other places in Merta Tehsil.

MSME in Nagaur

According to D.I.C data (March, 2012), there were around **21099 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.50903.63 lakhs** providing employment to **21099 persons**.

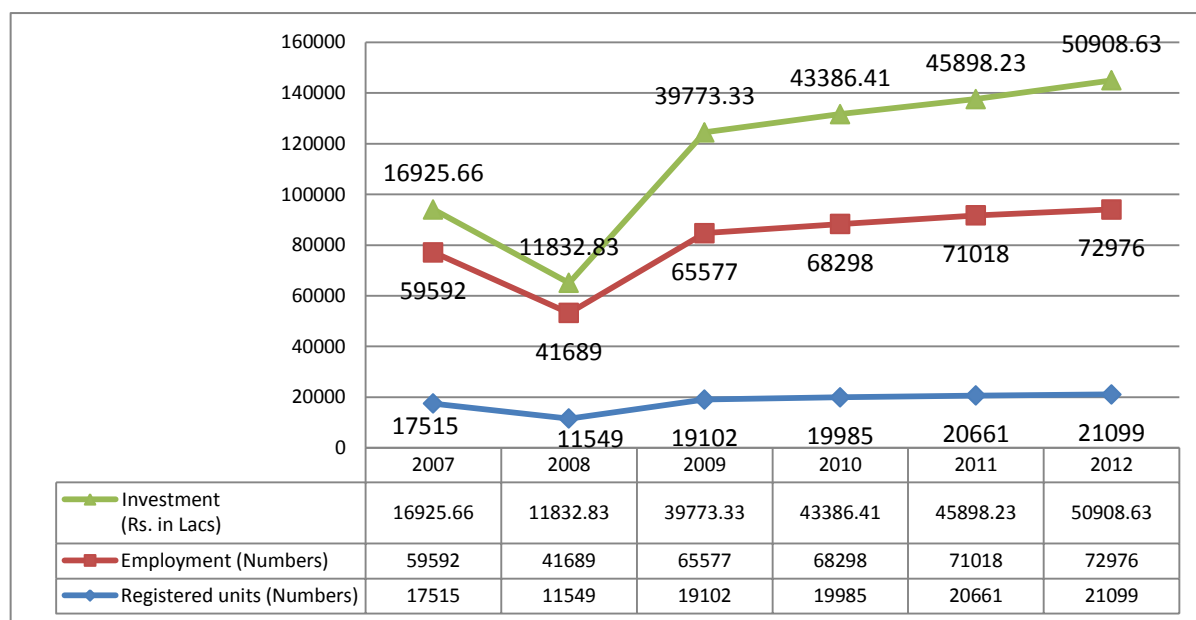


Figure 134 MSME trend analysis of the district Nagaur

There has been a constant increasing trend in the investment of industries, employment post 2008 and thus, the number of units as well. There were 09 industrial areas for growth realization of the district. Apart from the industries, a number of families depend on the following trades and are generally marked under the Khadi & village industries:

- Jatu Saree of Ren
- Bronze industry
- Leather (mozari)
- Durries of Tankla

Nagaur claims its superiority in hand-tools. Hand-tools Industry has flourished in & around Nagaur over the years. The industry peers into the past dating back 600 years. It is worth-seeing how iron is moulded & made use of for different sections of the society. In fact, hand-tools are so well-designed as if they are additional hands for human beings. About 300 types of hand-tools are manufactured catering to the requirements from gold-smiths to aeroplane engineers. Though the iron industry has undergone drastic changes, the hand-tools industry remained unchallenged & unmatched. The demand of these handmade tools always witnessed growing trend. Hand Tools Design, Development & Training Centre (HTDDTC) is engaged in motivating more units to come up.

5.9.5 Sector wise mapping of industries in across Nagaur

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Nagaur. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	76	3265.26	621
Auto & Auto Components			
Chemical & chemical products	74	1056.93	683
Construction Material & Building Hardware			
Food Processing			
Furniture & Furnshing	82	209.20	214
Leather & leather goods	499	318.71	986
Textile & Handloom	256	508.21	575
Unorganized Sector (services & repairing)	41	81.87	104
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging			
Mines, Metals & Minerals	229	3873.9	2040
Machinery, Electricals & Manufacturing	550	2399.24	1983
High	Units>200, investment>1000,emp>1000		
Medium	Units>100, investment>200, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 98 MSME trend analysis of the district Nagaur

There have been many SSI coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of agro based-forest based products, mineral based, cloth based, engineering based and chemical based sectors. A substantially good number of workforce form the backbone of the district and are engaged in various industries, households etc. as daily wagers.

Details of Registered SSI Unit in District Nagaur							
S. No.	Type of Industries	SSI Unit			Artisan Unit		
		No.	Invest (in lacs)	Empoyment	No.	Invest (in lacs)	Empoyment
1	Agro Based	2250	5532.82	13188	162	16.74	52
2	Forest Based	286	138.88	1078	1798	14.06	254
3	Mineral Based	2031	4928.2	12707	391	114.74	820
4	Cloth Based	461	94.4	1023	2416	48.42	3412
5	Engineering Based	1373	1456.88	7114	301	5.14	469
6	Chemical Based	164	206.38	475	4	1.01	9
7	Animal Based	3	0.36	9	2751	94.11	3880
8	Other	1212	858.25	3503	0	0	0
	Total	7780	13216.17	39097	7823	294.22	11703

Table 99 Break up of industries in Nagaur (Sample study)_SSI & Artisan unit

In order to understand the trend in the existing market and industrial set up stratified sample of 12 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in the Nagaur district of Rajasthan. These functionaries represented different levels of management as Partners, Directors, General Managers, HR Managers, etc.

Sectors covered under sample survey
Agriculture & Allied
Food Processing & Products
Machinery, Electricals & Manufacturing
Stone Querying, Cutting & Polishing
Tourism, Travel, Hospitality & Trade

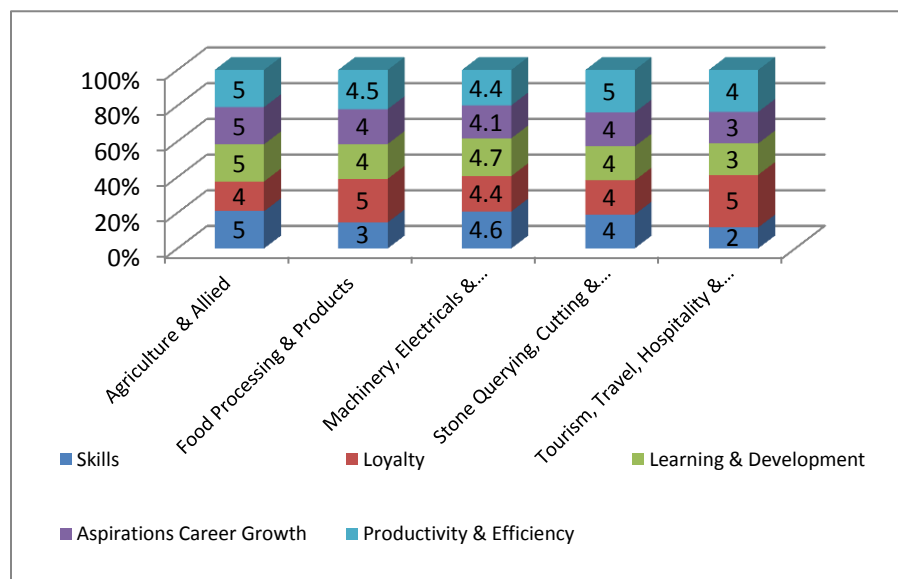
Table 100 -Break up of industries in Nagaur (Sample study)

These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table. A total of 12 industries were sampled for the survey to represent 5 major sectors that are prominent in the district. Availability of skilled, semi-skilled and unskilled workers according to their numbers in the sampled industries (segregated under specific sectors) at the time of

the establishment of the industry, their present strength and their required strength as projected by the industries was evaluated (shall be discussed in sections ahead). While the two industries sampled (Agriculture & Allied sector and Tourism, Travel, Hospitality & Trade) could not provide details of their skilled worker strengths. In remaining three sectors, the in-take of workers at present increased or was static as compare to the workers' strength to industry establishment.

5.9.6 Workforce Demand and Supply

The major workforce participation observed in Nagaur district over a period of two decades has been majorly as cultivators/ agricultural laborers and has had a decline by 6% over a period. There has been declining trend of workforce share in primary sector from 78.50% to 72.20% from 1991-2001. Therefore, the increase in the share of secondary and tertiary has been quiet significant for the same period keeping the context of the district in mind. Majority of the workforce has been engaged in subsistence agriculture and remains idle for the bulk period of the year. Nagaur lies in arid Thar region. There is distinct trend observed in the workforce engaged as laborers & wage earners who get engaged as land labourers, helpers, cleaners, semi-skilled mechanics etc. Engagement in secondary and tertiary sector shows an increasing trend as per the industrial growth of the district though very marginal in nature but the industrial plan looks more promising for the years to come. Looking at the present resources and skill set of the workforce tiles and stones, textiles and leather hold the key to future employment for the district Nagaur. The requirement for semi-skilled workforce was higher than the skilled workforce. The stone related industries demand for unskilled workforce more than double of that of semi-skilled workforce requirement clearly illustrating the model of low-cost unorganized form of labour utilization in the sector.



In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were loyalty towards work and least scaled was importance of enhancing skills. Other parameters were closely rated as shown in the figure showing the employer's expectations.

Figure 135 Employers demands in terms of expectations from workers-Nagaur

5.9.7 Projected Workforce Demand

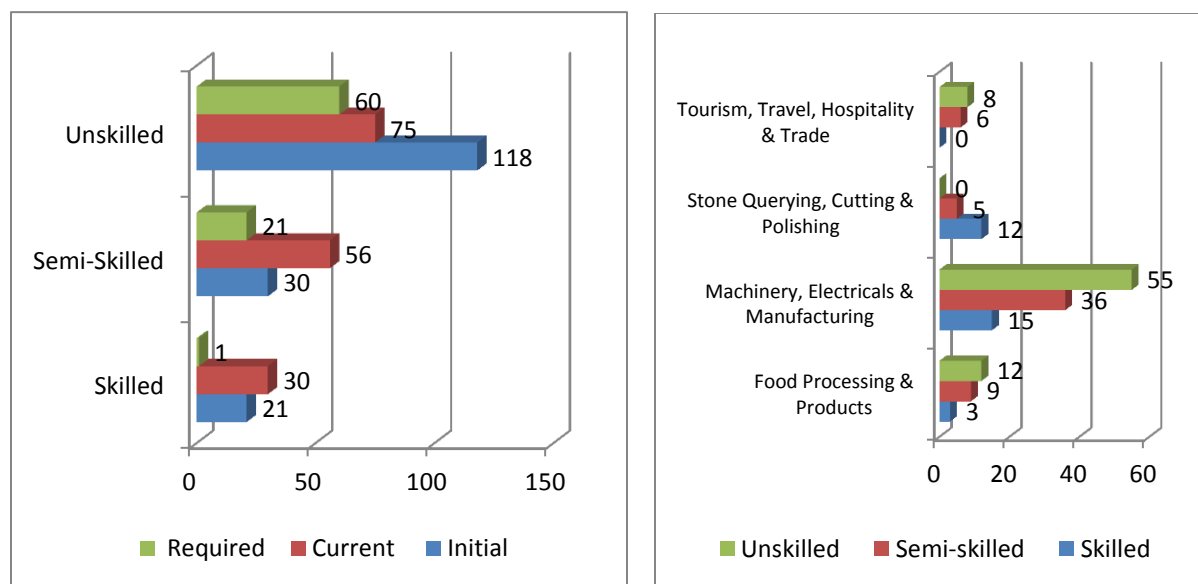


Figure 136 Status of workforce in terms of initial, current and required strength & sectors across sample industries of Nagaur

As reported by industries for semiskilled workforce, all the industries have increased the workers strength over the years. It was observed that there has been potential to absorb semiskilled workers in the recent past and in near future for the sectors food Processing & products, machinery, electricals & manufacturing and tourism, travel, hospitality & trade. There has been a continuous decline in unskilled worker strength over the period of time. Also, two industries sampled in agriculture & allied sector and stone querying, cutting & polishing sector could not provide details of their unskilled worker strengths. the potential to absorb unskilled workers in rest three sectors was seemingly high from the data provided. Apparently the number of skilled workers category has grown by close to 90% but the need for skilled contract/ daily wage workers was very low. A clear distinction could be observed in the preference of only semi-skilled workers for the contract and daily wage worker category as the industries had increased the absorption of semi-skilled by close to 86.8% and the incremental requirement of close to 70%. The clear observation made was in the engagement of workers at the time industry establishment which had huge disparity in skilled and unskilled workforce. Earlier industries were more dependent on unskilled workforce for their day to day operation. Slowly the shift was to the semi-skilled and the reduction of unskilled. It continues in the present context as well for the district. The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers. One could observe a similar requirement in the skilled daily wage labor requirement and unskilled contract based requirements. This clearly validates the mind-set of the industry houses to engage less skilled workers and increase the intake of semi-skilled workers.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	714427	739240	768934	784305	787221	813991	827755	
SemiSkilled	58241	60264	62685	63938	64176	66358	67480	
Skilled	3883	4018	4179	4263	4278	4424	4499	
Total demand	776551	803522	835798	852505	855675	884772	899734	72%
Industry Sector								
Unskilled	80848	85335	84886	88204	88961	90896	92045	
SemiSkilled	37314	39385	39178	40710	41059	41952	42482	
Skilled	6219	6564	6530	6785	6843	6992	7080	
Total demand	124381	131285	130594	135699	136863	139840	141608	11%
Services Sector								
Unskilled	27080	28535	29442	30425	30988	32022	32707	
SemiSkilled	63187	66581	68698	70992	72305	74719	76316	
Skilled	90267	95116	98140	101418	103293	106742	109022	
Total demand	180534	190232	196279	202836	206585	213483	218045	17%
All Sectors								
Unskilled	822355	853110	883262	902934	907170	936909	952507	
SemiSkilled	158742	166231	170561	175640	177539	183029	186278	
Skilled	100369	105698	108848	112465	114414	118158	120601	

Table 101 Projected labor percentage of workforce demand requirement till 2017 across sectors- Nagaur

Basis on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			

Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 102 Workforce across various sectors by 2017- Nagaur

5.9.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	76415	69734	64065	59556	54439	49906	42912
Semi-skilled	3788	5004	6203	7873	8911	10059	10412
Skilled	1731	2000	2235	2524	2844	3108	3362

Table 103 Representation of projected Skilled/ Semi-skilled & Unskilled workforce gap 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.5 lakh. Keeping in mind the growth rate of the district and the workforce participation from unskilled masses; the significance would be to target training to atleast 25,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation is conducive enough to support industrial growth in Nagaur except some shortage of skilled manpower due to MNREGA
- The VTIs are fulfilling the needs of the industries but some latest training equipment is needed to provide perfect knowledge of trades and NCVT should revise their trades that can compete the day to day requirement of the industries (a similar agreement was also found with the ITI representative)

- Marbles and cement industries are predominant in the district. Food processing like bhujija, namkin products and solar energy plant were the emerging sectors noticed in the districts.
- Scope of self-employment and entrepreneurship in the district remains on a high. Scope of informal sector employment is high and the government positions for class C & D employees remains a requirement

5.9.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Nagaur district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 104 Youth Profile of sample in Nagaur

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 46.7% of the youth covered were college educated and 53.3% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government. All the respondents who were trained through vocational courses and interviewed, it was found that 85% youth were trained through government VTI and only 15% of youth were trained though private VTIs.

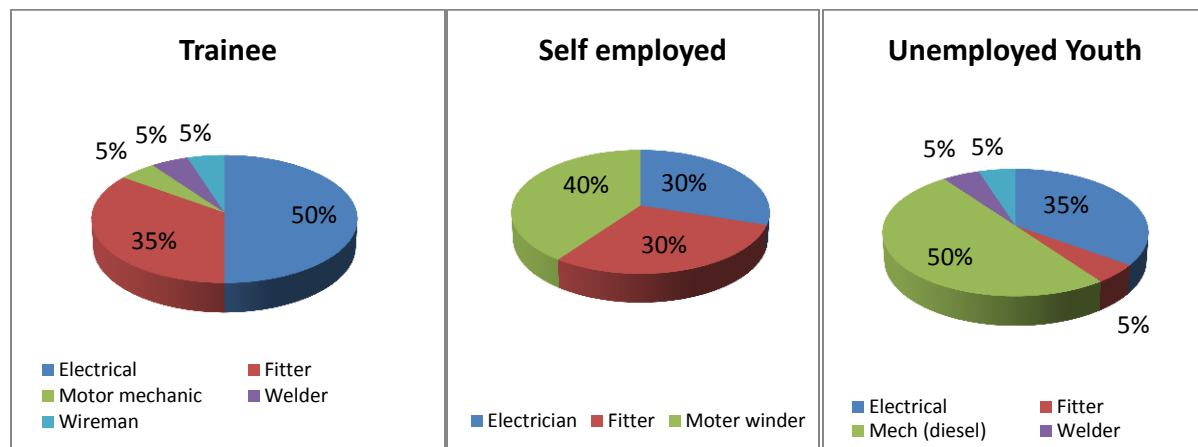


Figure 137 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Nagaur

Inclination towards electrical course was found high as around 50% of the youth reported that they had preferred electrical trade during his/her training at VTI. The reason for the same seems to be the demand for this course in the market. Second, most sought, trade was Fitter i.e. 35% and similar trends also seen in self-employed group. The unemployed group had majorly been trained as mechanic followed by electrical.

5.9.10 Youth's Perception

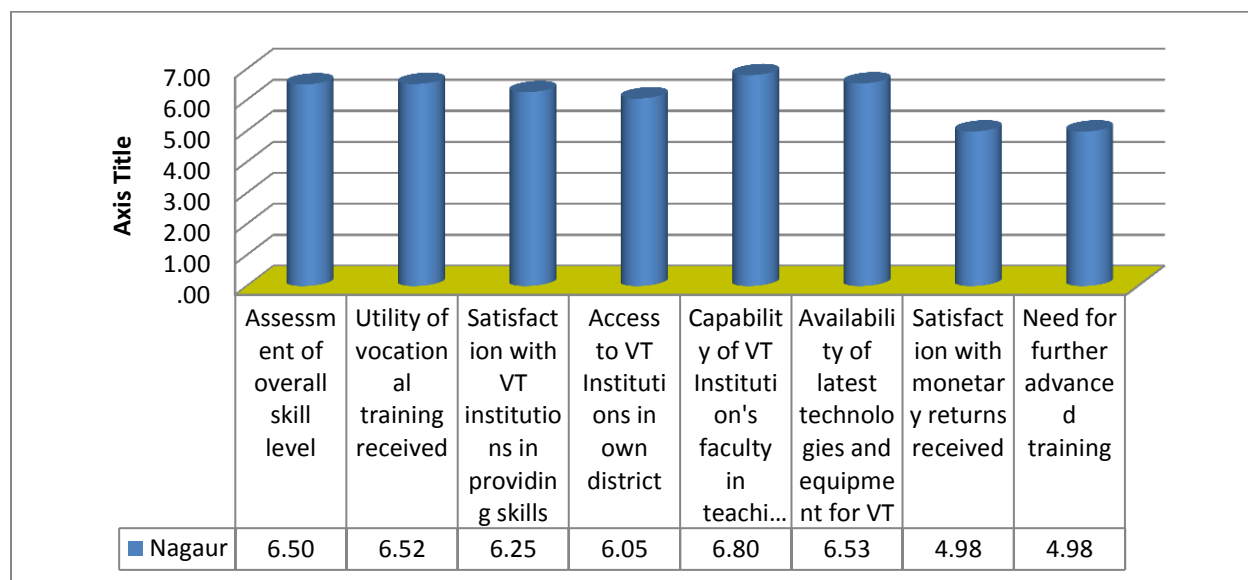


Figure 138 Nagaur Youth's perception, need and aspirations –Sample Group

The capabilities of VTIs' faculties were the most rated in favour of the skilling capabilities of the VTIs (6.8 on a scale of 10) and the least rated was the satisfaction with the monetary returns post training. (4.98 on a scale of 10). Though the satisfaction level seemed to be lower than expected but the average monthly income was Rs. 10647 which was quiet good as per industry standards. The expected hike was another Rs 4700/ per month on an average across trades; which remains very high as per the existing market. About 58.8% of the surveyed youths therefore remained dissatisfied with the monthly salary.

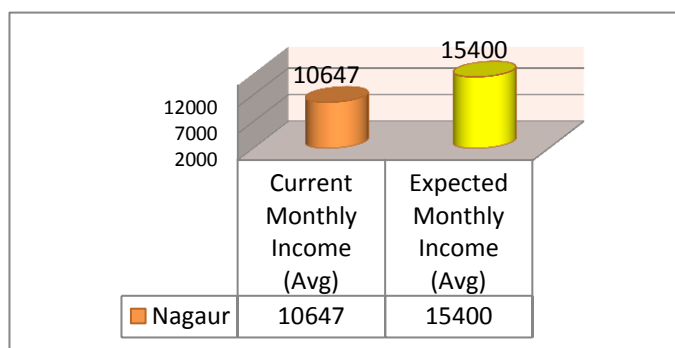


Figure 139 Income current and expected- sample group, Nagaur

5.9.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.5 lakh of skilled, semi-skilled and unskilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at Nagaur district level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

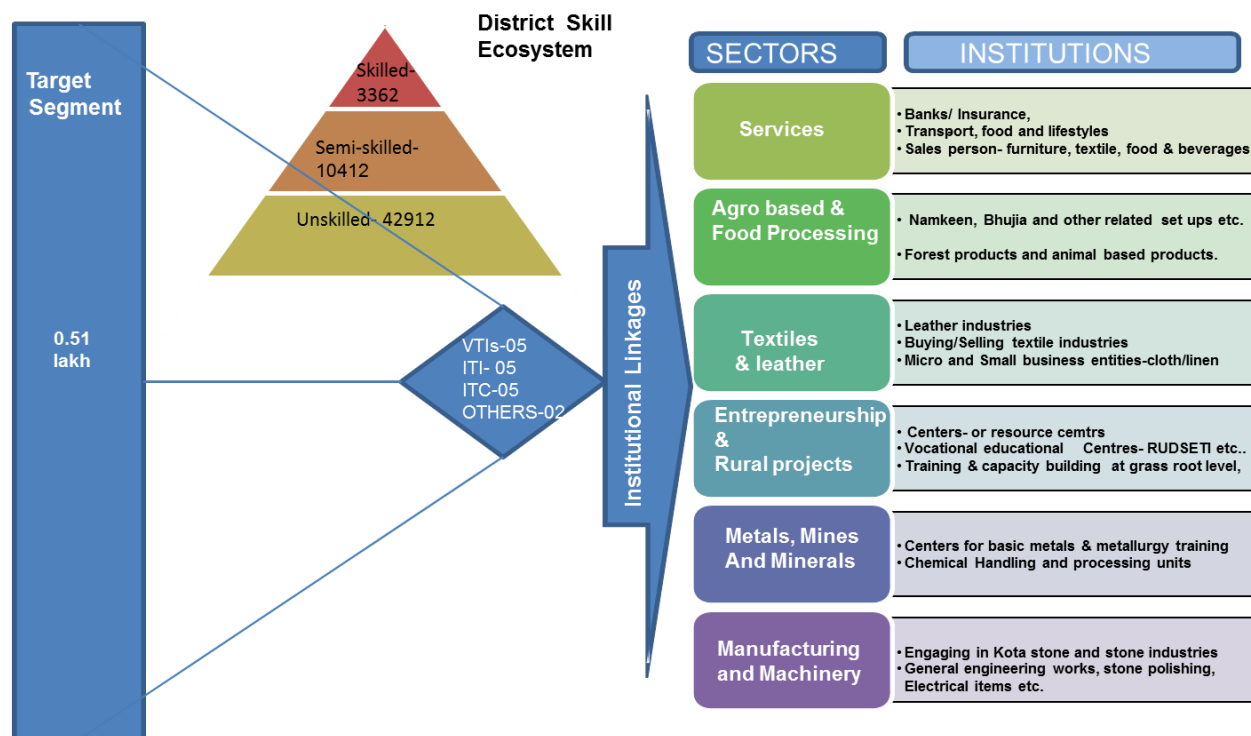


Figure 140 Optimization plan- Skill Development Eco System-Nagaur

In order to keep the industrial area of Nagaur (manufacturing and cement) on its consistent growth path, it would be important to maintain the skill workforce supply as per industries requirements by creating additional 15 VTIs by 2017. Customized training schedules and industry linkages would enable the VTIs to provide a more ready to be deployed workforce. Apart, the services sector shall require skilled workforce of education qualification of higher nature in hand drill machines services and sales. In order to meet these requirements aspirants could be trained across various domains of manufacturing and service industry. Keeping in mind the artisan units and the gems and jewelry cluster, the specific training in the gems and jewelry segment should be provided by training partners. Also, the scope of agro based industries provides better scope for the youths to earn a sustainable livelihood and skilling would provide them with better financial negotiation power. Training partners with life skills, communicative courses, and computer based courses should also be encouraged along with mechanical/ engineering courses by NSDC.

5.10 District Rajsamand

RAJSAMAND DISTRICT



District Skill Workforce Face Sheet-2012								
District	Rajsamand			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	14	No. of Villages	1050	No. of Schools (elementary & sec.)	2239			
Basic Data								
Population (in '000s)	1158	Overall Literacy(in %)	63.93	Sex Ratio	988			
Decadal growth rate(in %)	17.89	Female Literacy(in %)	48.44	HDI Ranking (2008)	0.578 (22 nd position)			
% Urban Population	13.04	Male Literacy(in %)	79.52	Per Capita Income (in Rs.)	17355			
Workers participation rate (2001)								
Workers participation rate (2001)	40.71	Share of primary sector (%)	54.30	Share of secondary & tertiary sector (%)	45.70			
No. of MSME/Industries	7107	Total Employment (in 000s)	15015	Total Investment (in lakhs)	12342			
No. of colleges (PG & Graduation)	11	Total graduates (In '00s)	3140	Total Post graduates (in '00s)	572			
No. of VTIs(registered ITI+Poly+ITC)			4	Total trainees trained (in '00s)	555			
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Semi-skilled workforce	63768	66901	67570	71015	73817	75385	77527	1.33 lakh
Skilled Workforce	45769	48242	49484	51434	52769	54348	55638	

5.10.1 Demographic Profile:

Rajsamand district was constituted on 10th April, 1991, and named after the famous lake "Rajsamand" built by Maharana Raj Singh. The district has an area of 4,768 km². The Aravalli Range forms the northwestern boundary of the district, across which lies Pali District. Ajmer District lies to the north, Bhilwara District to the northeast and east, Chittorgarh District to the southeast, and Udaipur District to the south. The district lies in the watershed of the Banas River and its tributaries. Some other rivers are: Ari, Gomati, Chandra and Bhoga. It has an average elevation of 292 m (958 ft). Administratively Rajsamand is divided in to 7 Sub-divisions, 7 Tehsils and 7 blocks. There are 205 Gram Panchayats, 236 Patwar Circles and 1025 inhabited villages.

It ranks as the 29th largest district of the state covering 1.24 % of the area of the state. With 302 the density of population in the state ranks at 12th (Census, 2011-Provisional). It stands 22nd on the Human Development Index (0.578) and 16th on the GDI (0.486). It was observed that the district fares quiet low on education, income and health index (21st, 18th & 26th respectively). As per provisional census 2011 data, Rajsamand accounts for population of 11.58

lakhs (1.69% of the state population) with sex ratio of 988 (compared to 2001 census figure of 1000) which still remains is on the higher side of the state ratio of 926. There was a decrease in the decadal growth of population (17.89% for 2011) showing trends of population stabilization.

The worker participation rate in is 40.71% (HDI, Rajasthan, 2008) with primary sector engaging close to 54.30% of the workforce and rest 45.70% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 12% (Urban- 30.03% & Rural- 42.32%). The

S.no	Section	Unit	Quantity/
			Value
1	LOCATION		
	Latitude	degree	25°03' N
	Longitude	degree	73°53' E
2	AREA		
	Total geographical area	sq km	4768
3	ADMINISTRATION		
	Tehsil	number	07
	Villages	number	1050
4	Land Use Pattern		
	Total Area	Hectares	452938
	Total Irrigated area	Hectares	29730
5	Population (census 2011, provisional)		
	Total population	number	1158283
	Men	number	582670
	Women	number	575613
	SC (2001)	number	122502
	ST (2001)	number	129198
6	Literacy (except 0-6 age group)		
	Total literate	percent	63.93
	Men	percent	79.52
	Women	percent	48.44
8	Energy		
	Electrified Villages	number	973
9	Industries (DIC, 2009)		
	Registered MSME units	number	7107
	Employed persons	number	15015
10	Education		
	Pre Primary & Primary Schools	number	1149
	Upper Primary	number	827
	Secondary & Sr. Secondary	number	263
11	Higher Education / Others		
	Colleges	number	11
	I T I	number	04
	Polytechnic	number	03

Table 105 Rajsamand District Profile- a snapshot

literacy rate of Rajsamand in 2011 is 63.93 compared to 55.73 of 2001 which remains lower than the state figure of 67.06. According to Census 2011 provisional data, the male literacy figure stands at 79.52% and female literacy was at a low of 48.44%. Though there has been significant progress in the literacy rates over a period but the overall scenario is still on the lower side and affects the overall performance of the state as well.

5.10.2 Education Infrastructure and Utilization

Rajsamand’s status in literacy was marked lower than the state average. There was an increase in the male and female literacy rates and reports of DISE, 2011 state that there have been significant increases in the girls’ enrolment. Rajsamand has also been among the districts with high drop-out rates as per HDI, 2008 and maximum number of one room schools with high absenteeism (pupil & teacher) due to geographically difficult terrain and ST habited regions. According to Census 2011 provisional Rajsamand has a total of 2293 schools from pre-primary to senior secondary levels. Considering the density of population and the vast area, the school spread is average in comparison to the state average and across other districts. The supply constraint in case of education infrastructure was evident as per reports of Rajasthan HDI report, 2008.

Education	Rajsamand	Rajasthan
Pre Primary & Primary	1149	49546
Upper Primary	827	38889
Sec/ Sr Sec	263	19135

Table 106 Rajsamand vs. Rajasthan education status

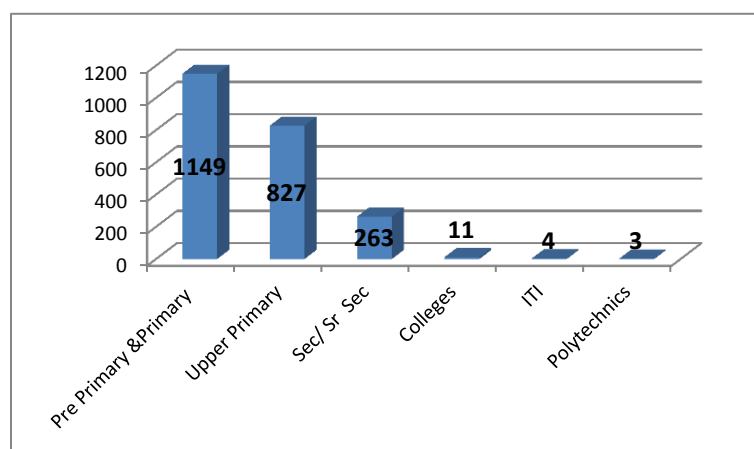


Figure 141 - Number of Schools, Colleges, ITI & Polytechnic, 2009-10- Rajsamand

A total of over 3,681 students enroll in various institutes at colleges ITI & polytechnic. At the intermediate college level, courses are available in the area of science, arts and commerce. There are total of seven registered vocational training institutes in Rajsamand district out of which 04 are ITIs and 03 polytechnics. A total of just above 550 aspirants got enrolled in 2009-10 in the registered training institutes. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total

of 02 partners (includes 1KVK and 1NGO) implementing skilling initiatives with 07 approved programs (all are completed). A detailed view of the vocational training of the district could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.10.3 VTI’s demand across various trades in Rajsamand district

The existing scenario of VTIs in the district depicts on the lower side of the supply considering the number of youths passing out; and seeking employment as skilled workforce. Private players have not

yet ventured in a big way eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district.

The government VTIs interviewed in the survey was three and four were from the private. The courses which were offered by the government VTIs were predominantly self-employment based or to cater the local market needs. The details of the courses offered in the VTIs of Jaipur are represented as follows:

Govt. VTI Trades		Pvt. VTI Trades
COPA	Welder	COPA
Electrical	Refrigeration	Electrical
Fitter		Fitter
Radio & T.V.		Mechanic (Diesel)

Table 107 Rajsamand district's (sample study) courses offered

In the total of 07 VTIs (03 government+04 private) covered in the sample, the government VTIs sampled for the study offered 06 different trades for training while the private VTIs offer 04 trades. Electrical was the most preferred trade in Rajsamand as maximum number of seats in both the VTIs was from this trade. The maximum variance in seats utilization was also observed for this trade as private VTIs had a difference of maximum 47 as in the number of seats allotted and number of seats filled.

The difference between actual trainees and approved trainees in government VTI varied from 1 to 21 in number though suggesting the over utilization across trades and the demand-supply gap. Refrigeration trade had the max difference (nearly double the number of approved strength was the actual strength). In case of private VTIs, the difference was varying from 0 to 47 seats marking on the underutilization contrary to what was observed in the government VTIs. COPA trade had no difference whereas electrical trade had max difference of 47 seats. An inference drawn was that though the electrical course COPA & IT courses had significant market potentials, the supply side catered far less for such trades than demanded for.

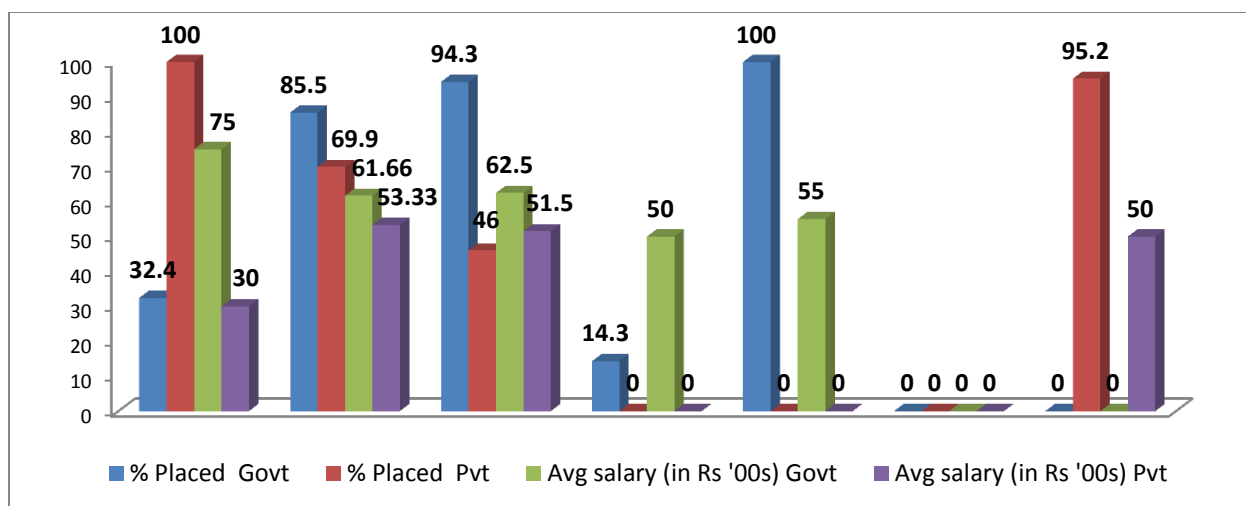


Figure 142 Rajsamand district's (sample study) courses offered placements in government and private VTIs

An overview of placement records by trade in the government and private VTIs indicate moderate prospects in all most all of the trades with the exception of refrigeration trade in government VTIs. It may be due to the fact that most of the trainees seek self-employment from refrigeration trade. The COPA course though shows high potential in the market but placements from the institutes were low (on ITI records; as ITC strength was low and placement recorded was 100%). Electrical and fitter courses offered good placement scope with an average salary of Rs. 5500. While placements of trainees from the government and private VTIs was more through a proactive approach to the industry by the government VTIs and the campus recruitment at the private VTIs, the contribution of the employment exchanges were almost nil.

		COPA	Electrical	Fitter	Radio & T.V.	Welder	Refrigeration	Mechanic (Diesel)
2010-11	Govt	37	55	35	7	9	8	na
	Pvt	37	55	35	NA	NA	NA	21
2009-10	Govt	35	38	28	8	2	16	na
	Pvt	10	30	20	NA	NA	NA	0
2008-09	Govt	19	28	31	0	9	9	na
	Pvt	18	55	27	NA	NA	NA	0
2007-08	Govt	25	27	13	9	5	13	na
	Pvt	5	15	15	NA	NA	NA	0
2006-07	Govt	14	21	1	1	3	0	na
	Pvt	0	15	15	NA	NA	NA	0

Table 108 : Year wise intake of aspirants across sectors in the sampled VTIs (Rajsamand)

The trends across most of the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the government VTIs whereas for refrigeration trade the demand declined over the years. In contrary, the private VTIs increased the strength of trainees over the years. Electrical trade indicated step rise suggesting the demand of this trade over the years.

All the VTIs claimed to have updated technologies, equipped labs, and space for conducting the training, electricity and water supply. Almost all of them did not have hostel facilities. Commuting facility for the aspirants in all government VTIs was a good initiative. The staffing in these institutes were marked understaffed in aspects dealing in academics (both in government and private).

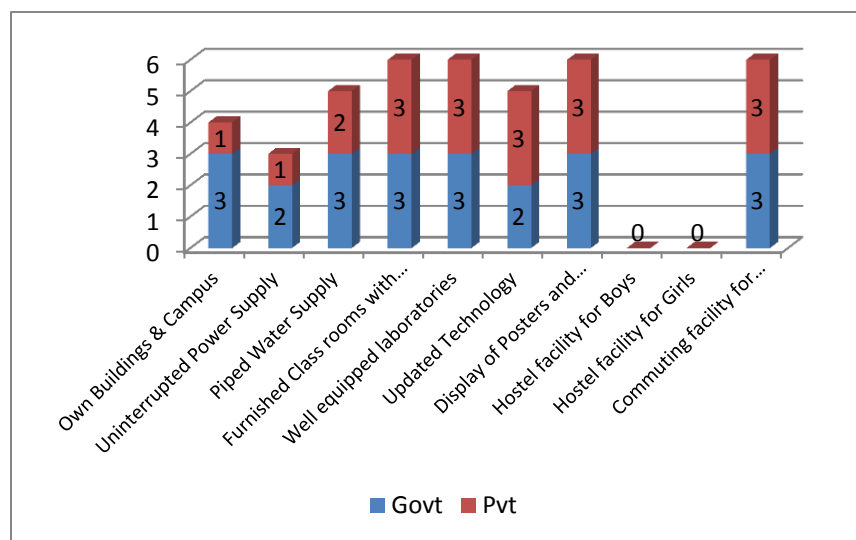


Figure 143 : Facilities and Infrastructure availability in sampled VTIs, Rajsamand

Interestingly the VTI functionaries claim that the courses on offer in these government VTIs are more demand driven as per the aspirations of the youths and less mandated from any university or board. The industry's role in demanding courses favorable for its optimization was observed to be high and thus one could anticipate the involvement of contemporary industries in campus placement in these VTIs.

5.10.4 Industry Mapping

The primary sector has substantially reduced participation over last decade and close to 45% of the workforce in Rajsamand engages in the secondary and tertiary sector. Major industries in the Rajsamand district were marble slabs and tiles, marble chips and powders, marble articles , general engineering workshop, hand loom, marble cutting, miniature silver meenakari, oil Mills, pichwai painting, terracotta items, tyres and tubes. There are two industrial areas of RIICO in the district and two clusters named:

Industrial Area	Clusters
RIICO Industrial Area, Raj Nagar	Meenakari Cluster- Nathdwara
RIICO Industrial Area, Dholnd	Mollela Cluster- Mollela

Table 109 Rajsamand's cluster and industrial area(DIC)

MSME in Rajsamand

According to D.I.C data (March, 2012), there were around **6015 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.23398.5 lakhs** providing employment to **21195 persons**.

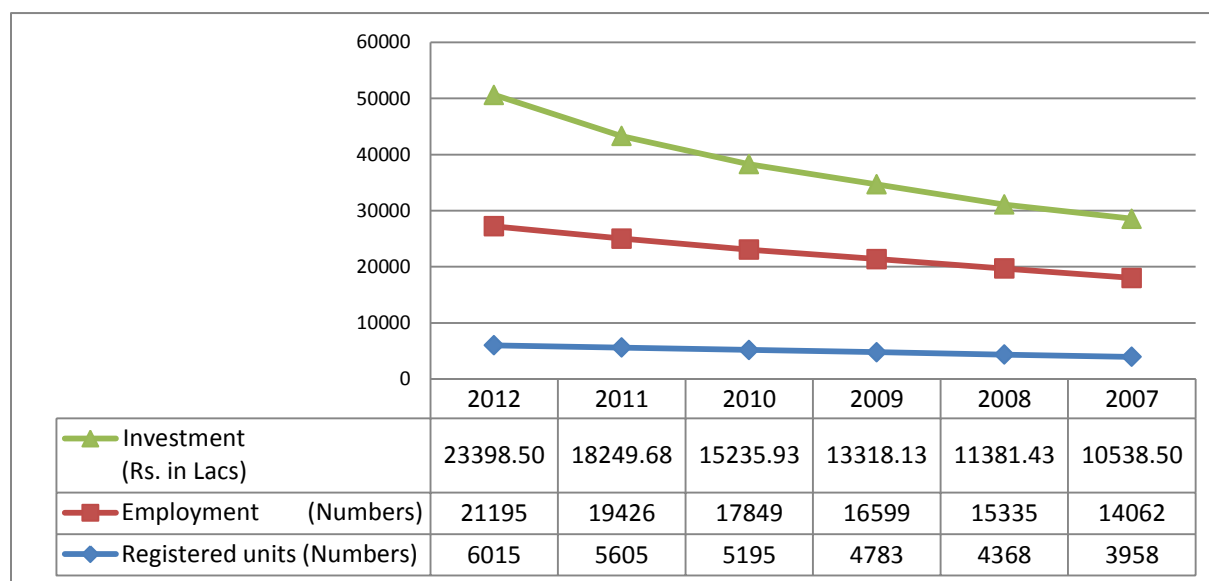


Figure 144 MSME trend analysis of the district Rajsamand

There has been a constant increasing trend in the investment of industries, employment and thus, the number of units as well. Also, the medium and large scale industries are 03 in number engaging close to 4000 persons with an investment of Rs. 320.39 crore. Rajsamand has the marble and allied industries as the major industrial contribution apart from production of minerals like copper ore, lead, zinc, stealite dolomite etc.

5.10.5 Sector wise mapping of industries in across Rajsamand

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of MSME as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Rajsamand. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections** like **high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	7	14.80	19
Auto & Auto Components			
Chemical & chemical products	5	8.5	21
Construction Material & Building Hardware			
Food Processing	26	127.77	1200
Furniture & Furnshing	192	25.24	198

Leather & leather goods			
Textile			
Unorganized Sector	1830	1464.00	2176
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging			
Mines, Metals & Minerals	1334	8449.85	6241
Machinery, Electricals & Manufacturing	3713	2252.78	5160
High	Units>200, investment>1000, emp>1000		
Medium	Units>100, investment>200, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 110 Sector wise mapping of industries in Rajsamand as per DIC report, 2007

There have been many MSME coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of mines and minerals, furniture and manufacturing sector. A substantially good number of workforce (14%) form the services backbone of the district and are engaged in various industries, households etc. as daily wagers etc. forming the unorganized sector. Sectors like tourism, transportation and logistics and construction were engaging more of semi-skilled workforce in the district. The mines and minerals were the only demand based industry of the district.

Sectors covered under sample survey
Construction Material & Building Hardware
Tourism, Travel, Hospitality & Trade
Food Processing & Products
Service & Repairing
Stone Querying, Cutting & Polishing
Wooden Products, Handicrafts

Table 111 Break up of industries in Rajsamand (Sample study)

These industries were selected from large, medium and small industries covering various growth sectors of the district as shown in the table. All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers.

In order to understand the trend in the existing market and industrial set up stratified sample of 14 industries was selected (depending on the availability of respondents' of the employer group set up).

These industries were selected from large, medium and small industries

5.10.6 Workforce Demand and Supply

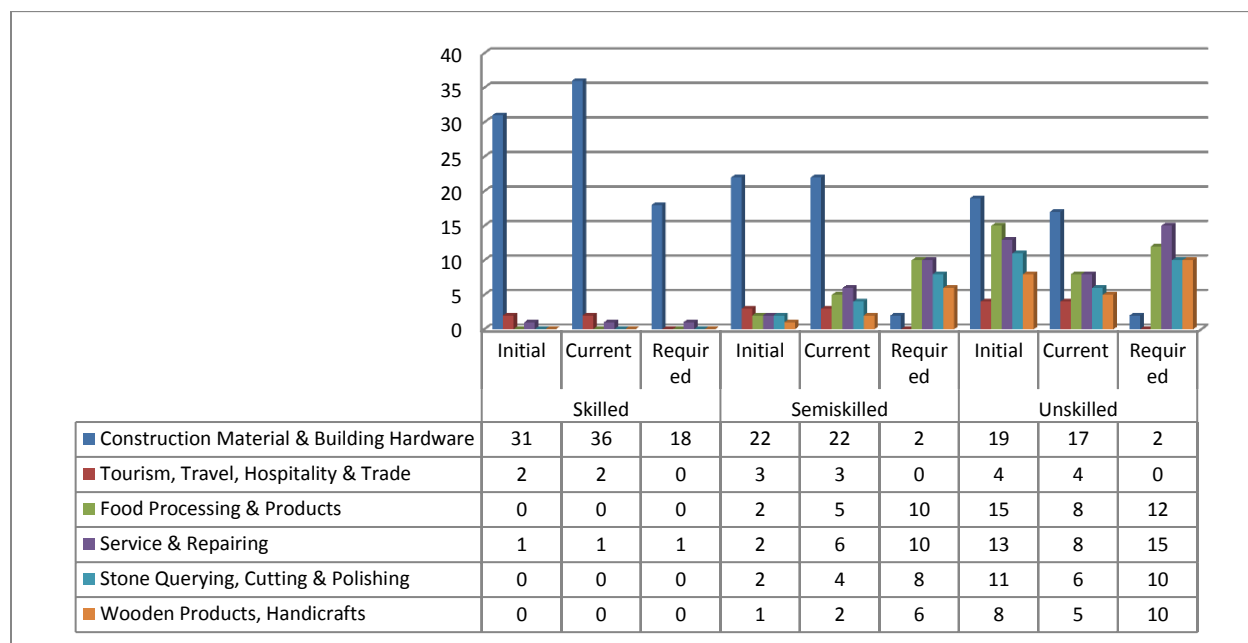


Figure 145 Status of skilled, semi-skilled workforce and unskilled workforce across sectors (Sample Rajsamand) at various stages (initial, current and required)

The major workforce participation observed in Rajsamand district over a period of two decades has been majorly as cultivators/ agricultural laborers but with significant reduction in the participation and shift to secondary and tertiary sector (mines, minerals, manufacturing etc.). Therefore, the increase in the share of secondary and tertiary has been quiet insignificant for the same period. Majority of the workforce has been engaged in subsistence agriculture and the geographical conditions also have reduced the sustainable agricultural options.

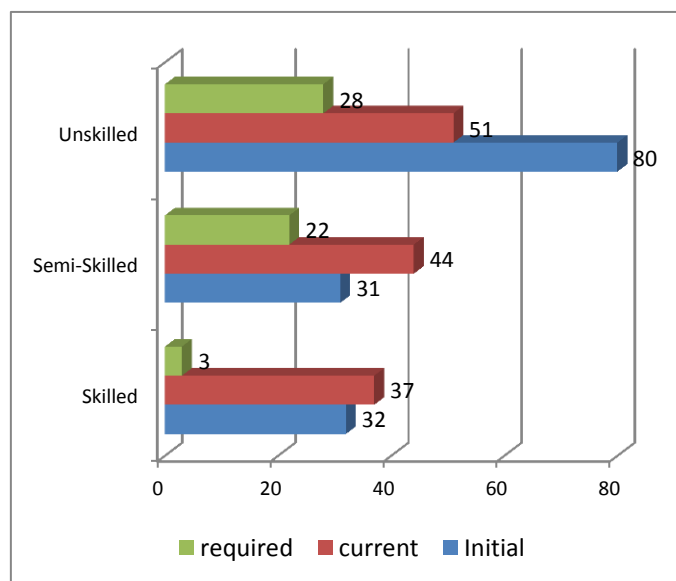


Figure 146 Status of skilled, semi-skilled and unskilled across sectors (Sample Rajsamand) at various stages (initial, current and required)

Skilled workforce data indicate marginal increase in the workforce at present since establishment of construction material & building hardware industries whereas static workforce for tourism, travel, hospitality & trade and service & repairing sector. In stone, quarrying and related industries (marble) the demand for semi-skilled and unskilled workers was on a high. Demand for skilled worker in future was not very high. As reported by industries for semiskilled workforce, there was marginal increase of workers who were engaged in the all the industries over the period of time since industries established. Though most of the sector had reduced their workers strength since

establishment but potential to absorb unskilled worker in the industry was found to be higher in Rajsamand.

In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were loyalty towards work and least scaled was

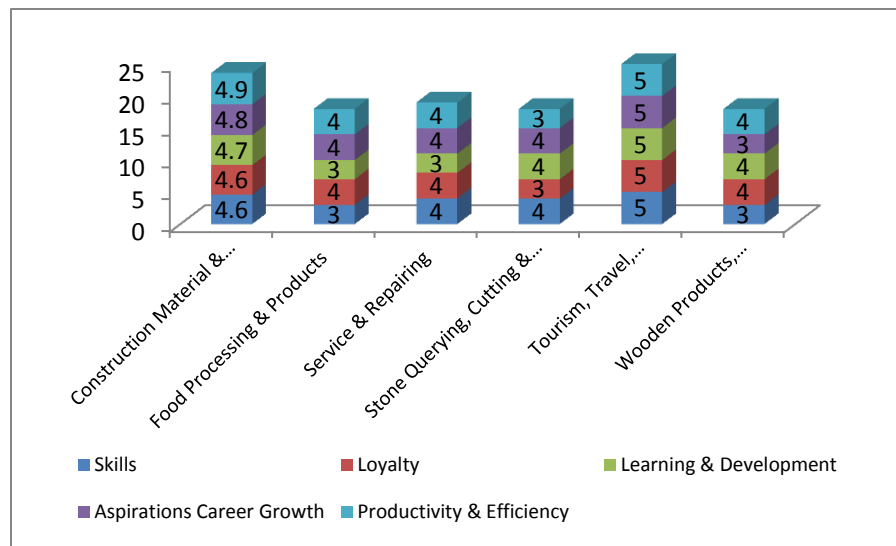


Figure 147 : Employers demands in terms of expectations from workers (Rajsamand)

importance of enhancing skills and learning and development. Other parameters were closely rated as shown in the figure showing the employer's expectations.

The employers were asked to rate their expectation from their workers on a scale of 5, employers from tourism, travel, and hospitality & trade sector reflected a high desire for all the

characteristics that were used for rating, followed closely by the employers from construction material & building hardware sector.

5.10.7 Projected Workforce Demand

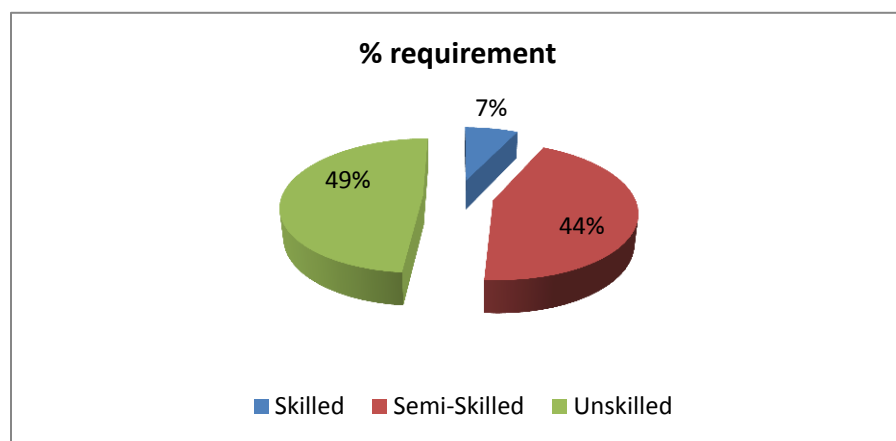


Figure 148 Requirement of skilled, unskilled and semiskilled workers in survey (Rajsamand)

There has been certain increase in the number of skilled and semi-skilled workers over a period of time and reduction in unskilled sector. Though majority of the industries interviewed still feel the requirement of unskilled workers over the skilled

or semi-skilled workers for their full time roles.

Apparently the number of semi-skilled workers category has grown and the requirement shows another 44% in comparison to just 7% for skilled. A clear distinction could be observed in the preference of only skilled workers for the contract and daily wage worker category as the industries felt the low cost module works better in a capital scenario and incurs less cost in on job training.

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers. One could observe a similar requirement in the semi-skilled daily wage labor requirement and unskilled contract based requirements (44% & 49% respectively). This clearly validates the mindset of the industry houses to engage less skilled workers.

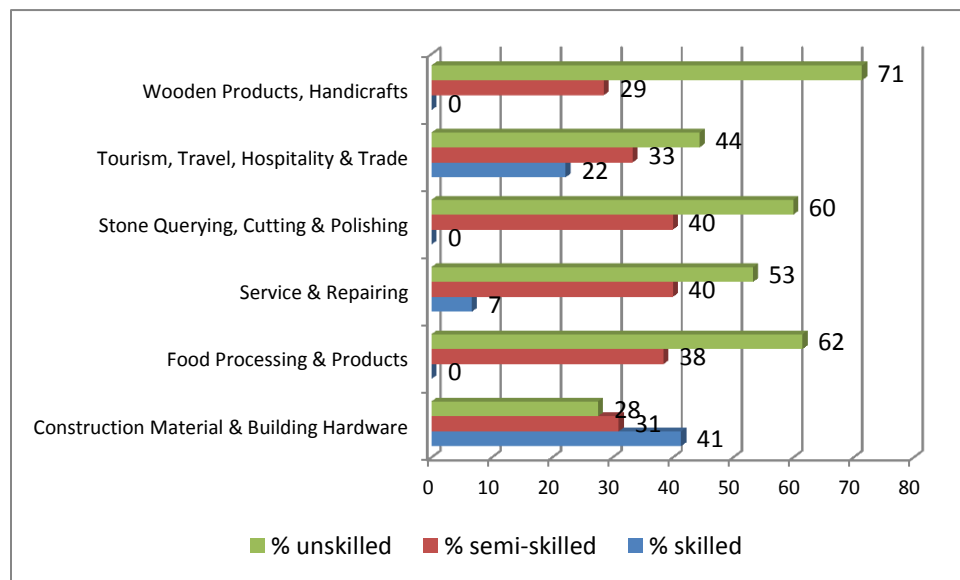


Figure 149 Current percentage of skilled, unskilled and semi-skilled works across sectors in sample survey (Rajsamand)

The number of vacancies reported by the sampled employers for the skilled, semi-skilled and unskilled categories of workers indicated unequal proportion and reflected that skilled workforce had least demand and unskilled workforce had maximum demand; also indicated high potential for absorption of

workers in this category. In current scenario too the percentage of unskilled and semi-skilled remains on the higher side except for the construction materials and building hardware sector.

As reported by industries since industry establishment, they were mainly relying on unskilled workforce as this category had the largest workforce and high potential to absorb unskilled workers in the near future. There has been a declining trend and the semi-skilled workforce has come up. The difference in the wage structure in semi-skilled category to unskilled and semi-skilled to skilled was considerably high.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower requirement
Agricultural Sector								
Unskilled	272092	295829	309776	341480	377123	393883	320564	
SemiSkilled	38486	40421	41558	44142	47048	48414	50589	
Skilled	2566	2695	2771	2943	3137	3228	3373	
Total demand	313143	338945	354105	388565	427307	445525	374527	43%
Industry Sector								
Unskilled	146910	146373	145660	145245	143658	144097	142221	
SemiSkilled	129487	130352	130550	130882	131074	131403	131651	
Skilled	3248	3392	3358	3480	3512	3567	3608	

Total demand	279644	280117	279568	279607	278244	279067	277480	33%
Services Sector								
Unskilled	13500	14224	14666	15242	15645	16152	16561	
SemiSkilled	61499	73190	84221	95565	106505	117687	128641	
Skilled	44999	47415	48887	50807	52150	53838	55202	
Total demand	119998	134830	147773	161615	174300	187677	200404	24%

Table 112 Projected labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors Rajsamand

Basis on the inputs received from sector wise expansion plans the Workforce projections made across different categories highlight these distribution pattern. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Chemical & Pharmaceuticals			
Gems & Jewellery			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Unorganized sectors			
Real Estate			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 113 Workforce across various sectors by 2017- Rajsamand

5.10.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis would factor in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging. The situation of skill gap for the district for 2010-11 to 2016-17 based on projections is represented in the table below (assumptions set in the annexure _ Projection Model):-

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	496236	469144	451428	415429	382215	368572	342249
Semi-skilled	63768	66901	67570	71015	73817	75385	77527
Skilled	45769	48242	49484	51434	52769	54348	55638

Table 114 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; some of the important findings were as follows:-

- Situation seems conducive enough to support industrial growth in Rajsamand. Investments are good since government provided 15% subsidiary on loan for investing here. Land for establishment of industries was not a problem. Currently lands allocations are handled by RIICO. Water & supply of power was also uninterrupted. Availability of skilled man power remains to be a continuous problem and so many of the local industries did not get required skilled manpower and faced scarcity of skilled manpower.
- Scope for self-employment and entrepreneurship in the district is not very good. The district authorities were not found making any concrete efforts in this direction. Some self-employment programs running like Akshat Kaushal Program help people get self-employment. Districts authority should take some necessary steps in this regards.
- Sand Stone, Lime Stone, Marbles industry is predominant in the district .Marbles machineries tools and handlooms are emerging sectors noticed in the districts.
- Compared to the informal sector, formal sector ventures were bound by some limitations in employing persons as they required more trained people. On the other hand, the informal sector is free to employ even a semi-skilled person and provide him the required skills later over a period of time. Getting job in informal sectors had been very easy so it attracts number of skilled and semi-skilled manpower.

5.10.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Rajsamand district to understand what the youth think, why they think the way they do and how does

society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions. The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 15% of the youth covered were college educated and 85% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 115 Youth Profile in Rajsamand-sample

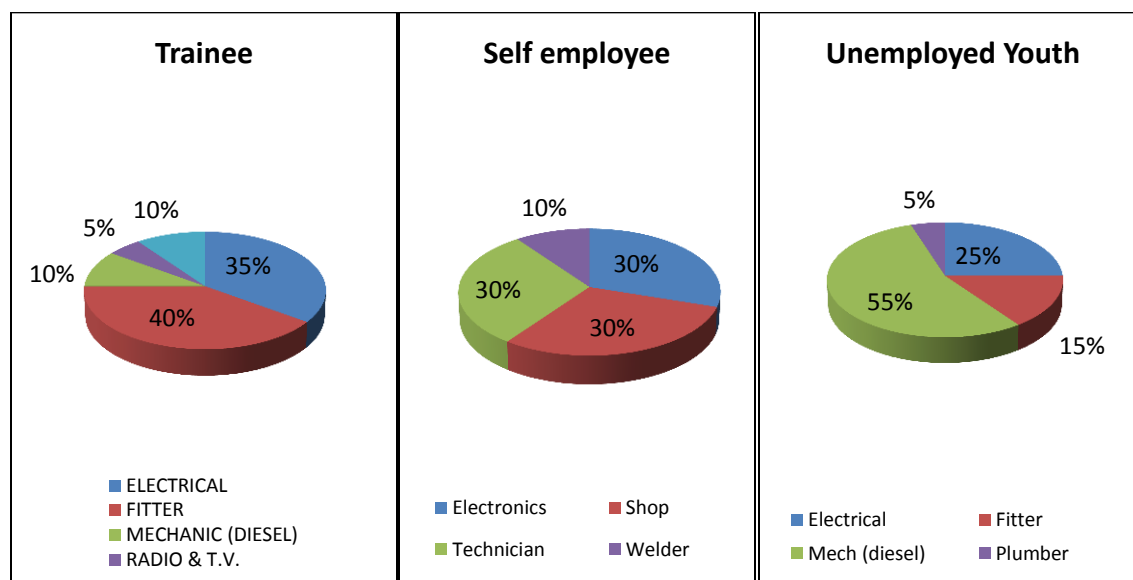


Figure 150 Profile of respondents (trainees, self-employed and unemployed) by trade in sample of Rajsamand

Among the respondents covered under the survey the course of fitter was one of the most preferred one followed by electrician in sample of youths under training. Similarly in the self-employed category electronics, technician and welder were the trades which were basically the fall off of either no placement or lack of continuous job opportunities. Electrical and fitter trades also featured in the unemployed category of the survey suggesting the competition among trainees from the same trade. These trades appear to be the most popular trades as per the perceived demand in the market. There was general consensus regarding better self-employment opportunity in electrician and technician.

5.10.10 Youth's Perception

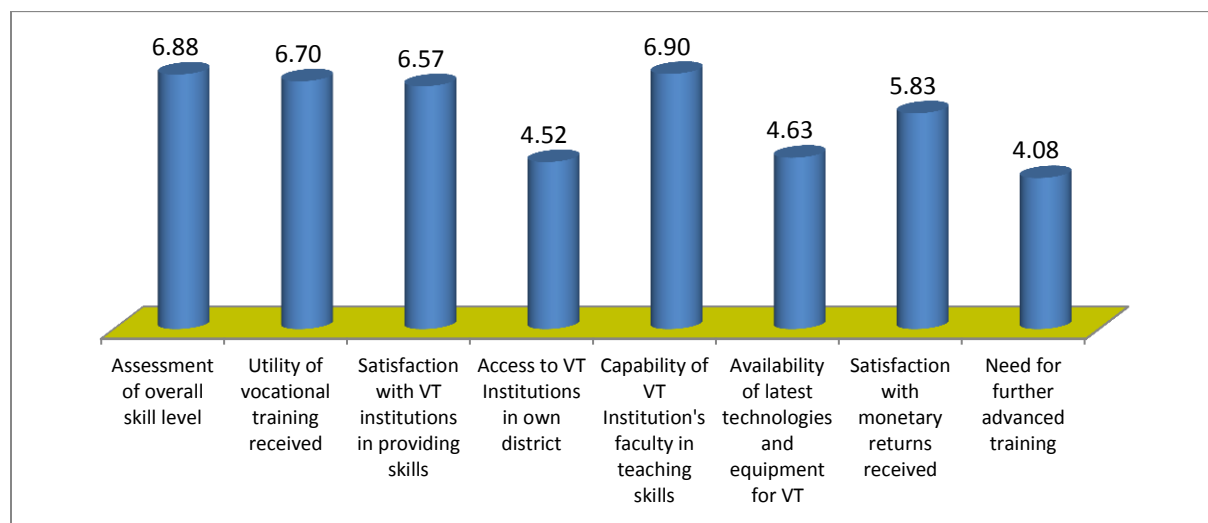


Figure 151 Rajsamand Youth's perception, need and aspirations –Sample Group

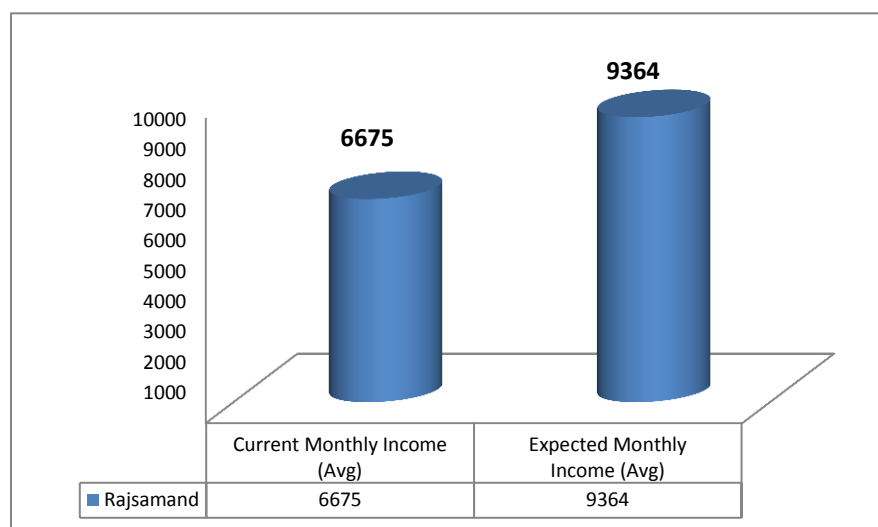


Figure 152 Rajsamand Youth's expectation as salary- Sample Group

Capability of VTI faculty teaching skills was rated the highest (6.9 on a scale of 10) by the sample group followed by skill level assessments. Need for further advanced training was the least rated and similarly low rated were access to VTI and the latest technological inputs in the VTIs. Though 45% of the

sample youth feel satisfied with the salary but an expectation across all the trades provides an average raise in salary structure by Rs. 6800 (approximately). Similarly the scope of increment was not well pronounced nor was any such requirement followed by the interviewees.

5.10.11 Optimization Plan

The optimization plan would be structured at three tier level of district, state and NSDC. The preliminary gap finding, projection and analysis would be presented at every district level which would in turn determine the action plan of the state. The overall scenario of the state would finally give major leads to apex bodies like NSDC for formulation of state specific portfolios to suit the requirements and address the future needs of the state in the skilled workforce. The district skill development eco-system

(diagram below) would enable to look at the possible sectors, targets (projected) and support systems required for the district.

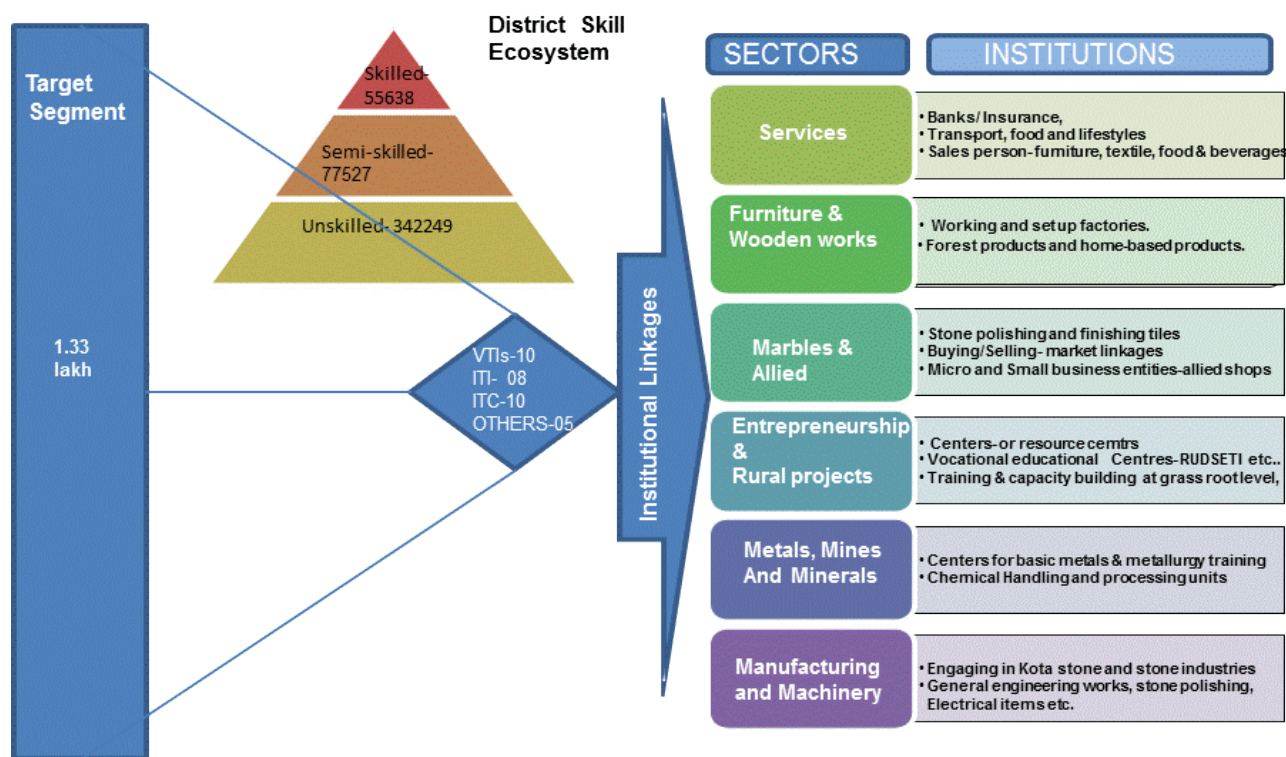


Figure 153 Optimization plan- Rajsamand Skill Eco-system 2017

The high priority sector which shall need maximum number of semi-skilled workforce and less of skilled shall be the resource based industries of the district, i.e. the mines and minerals, marble and stone polishing, food processing, and unorganized sectors of services and repairs etc. The key stakeholders' contribution in enabling to achieve the target (as shown in the figure) would be as follows:

- State: The state to target the skilled and semi-skilled segment for skilled training by creating additional 33 skill development centres (VTIs) in the district level of operations. It should encourage the private training partners to participate and operate in the district due to its large base of workers involved in secondary and tertiary sectors.
- Training Partners: The sectors for engaging more skilled workforce would be in services, mining and minerals, rubber and chemical based industries and handicrafts. Course curriculum designed to cater for the institutions based in construction, building hardware; stone related enterprise building and linkages etc. should be the focus. Along with these, specific course curriculum designed for communicative English, life skills and basics in computer would be the key areas of skill development training for the growing service base in the district with some of the potential service sector areas of interventions being:
 - Accountant
 - Computer related enterprises

3. Printing press
4. Packaged food
5. Coaching centers
6. Data processing
7. Radio and TV Repairing
8. Dynamo repairing
9. Photography
10. Dry-cleaning
11. Photostat

NSDC would be an enabler to lead the training partners in services, construction, food processing by encouraging specifically designed proposals with increasing the linkages in industry associations and PPP models.

5.11 District Dungarpur

DUNGARPUR DISTRICT



District Skill Workforce Face Sheet-2012								
District	Dungarpur			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils		No. of Villages			No. of Schools (elementary & sec.)		2803	
Basic Data								
Population (in '000s)	1389	Overall Literacy(in %)		60.78	Sex Ratio		990	
Decadal growth rate(in %)	25.39	Female Literacy(in %)		46.98	HDI Ranking (2008)		0.409 (32 nd position)	
% Urban Population	7.30	Male Literacy(in %)		74.66	Per Capita Income (in Rs.)		12474	
Workers participation rate (2001)								
Workers participation rate (2001)	47.97	Share of primary sector (%)		75.70	Share of secondary & tertiary sector (%)		24.40	
No. of MSME/Industries	3232	Total Employment (in 000s)		11647	Total Investment (in lakhs)		2759.79	
No. of colleges (PG & Graduation)	13	Total graduates (In '00s)		3530	Total Post graduates (in '00s)		587	
No.of VTIs(registered ITI+Poly+ITC)				2	Total trainees trained (in '00s)		303	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Semi-Skilled workforce	27463	29125	29274	29752	30081	30682	30829	0.34 lakh
Skilled workforce	6258	7208	10629	12584	13669	16347	18585	

5.11.1 Demographic Profile:

Dungarpur is situated in the southernmost with coordinates of 23.8°N and 73.7°E. River Mahi provides the boundary with Banswara district on the east and south with districts of Gujarat on its west. On north it has been bounded by Udaipur with river Som forming boundary for major parts. It is one of the smallest districts of the state covering just 1.10% (30th ranked) of the area of the state. Most of the district is hilly and has a majority of population as rural (92.7%) and of this more than 70% as tribals (Bhils).

With 368 the density of population in the state ranks at a high of 08 (Census, 2011-Provisional). It stands 32nd on the Human Development Index (0.409) and 30th on the GDI (0.420). It was observed that the district fares quiet low on education, health and income index (30th, 32nd and 30th respectively) which pulls the district on overall HDI ranking to the lower side of the state. As per provisional census 2011 data, Dungarpur accounts for population of 13.88 lakhs (1.96% of the state population) w

S.no	Section	Unit	Quantity/
			Value
1	LOCATION		
	Latitude	degree	23°8' N
	Longitude	degree	73°7' E
2	AREA		
	Total geographical area	Sq. km	3770
3	ADMINISTRATION		
	Tehsil	number	04
	Villages	number	976
4	Land Use Pattern		
	Total Area	Hectares	385593
	Total Irrigated area	Hectares	19868
5	Population (census 2011, provisional)		
	Total population	number	1388906
	Men	number	698069
	Women	number	690837
	SC (2001)	number	45986
	ST (2001)	number	721487
6	Literacy (except 0-6 age group)		
	Total literate	percent	60.78
	Men	percent	74.66
	Women	percent	46.98
8	Energy		
	Electrified Villages	number	854
9	Industries (DIC, 2009)		
	Registered MSME units	number	3232
	Employed persons	number	11647
10	Education		
	Pre Primary & Primary Schools	number	1850
	Upper Primary	number	719
	Secondary & Sr. Secondary	number	234
11	Higher Education / Others		
	Colleges	number	13
	I T I	number	02
	Polytechnic	number	00

Figure 154 Dungarpur District Profile- a snapshot

ch still is on the higher side of the state ratio of 926. There was a decrease in the decadal growth of population (26.65 to 25.39 for 2001-11) showing trends of population stabilization.

The worker participation rate in Dungarpur was 47.97% (HDI, Rajasthan, 2008) with primary sector engaging close to 75.70% of the workforce and rest 24.4% in secondary & tertiary sectors. In rural areas

the participation rate is higher than the urban by close to 17% (Urban- 32.19% & Rural- 49.22%). The literacy rate of Dungarpur in 2011 is 60.78% which is far lower than the state figure of 67.06%. According to Census 2011 provisional data, the male literacy figure stands at 74.66% and female literacy was at a low of 46.98%. One of the most important features of the district is the higher incidence of SC (4.2%) & ST (65.1%) population as per 2001 census.

5.11.2 Education Infrastructure and Utilization

Dungarpur's status in literacy was marked lower than the state average even though there has been recorded improvement in the literacy among males (8%) and also in females (15%) as decadal improvement. Dungarpur faces real time constraints in terms of basic schooling infrastructure, teachers and enrolment (rated as one of the districts with high dropout rates). Dungarpur has also been among the districts with high one room schools and with more than 30% of schools with single teacher (HDI, 2008). According to Census 2011 provisional Dungarpur has a total of 3050 schools from pre-primary to senior secondary levels with DISE reports stating that close to 50% remain less functional for major portions of academic year due to various reasons. The retention rate of students in schools of Jalore is quiet low which also contributes to the drop in literacy rates and status of education. The supply constraint in case of education infrastructure was evident as per reports of Rajasthan HDI report, 2008.

Education	Dungarpur	Rajasthan
Pre Primary & Primary	1850	49546
Upper Primary	719	38889
Sec/ Sr Sec	234	19135

Figure 155 Dungarpur vs. Rajasthan education status

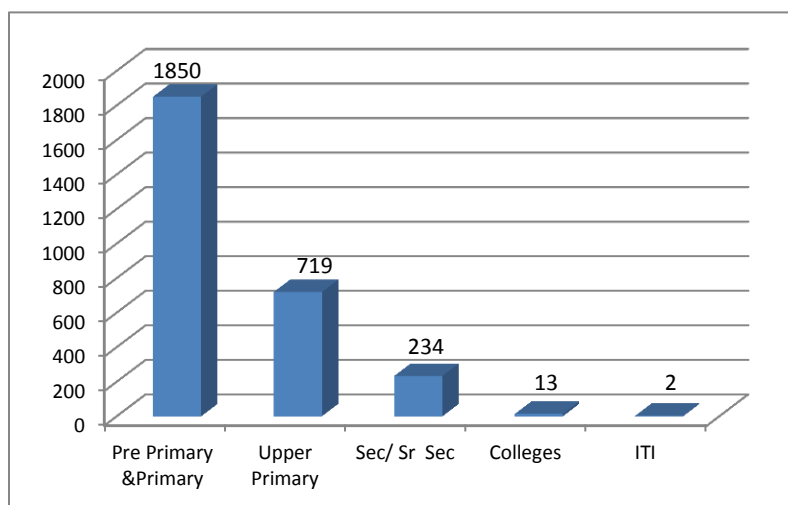


Figure 156 Number of Schools, Colleges, ITI & Polytechnic, 2009-10- Dungarpur

A total of over 6000 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There were just a total of two registered vocational training institutes in Dungarpur district (02 ITI). A total of just above 3000 aspirants got enrolled in 2009-10 in the registered training institutes. As per the updated report available on

Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 04 partners (includes 02 NGO, 01 mobile unit and 01 KVK) implementing skilling initiatives with 18 approved programs (16 are completed). A detailed view of the vocational training of Dungarpur could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.11.3 VTI's demand across various trades in Dungarpur district

The existing scenario of VTIs in Dungarpur was certainly on the lower side considering the number of youths passing out and the existing vocational training institutes in the district. Private players have not yet ventured in a big way eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields as follows:

- a) **Computer Based Accountancy and computer operators:** With number of small scale industries coming up in the region the educated youth having the basic education levels could be engaged in computer courses for accountancy (VAT & TALLY) and data entry operators for industries and government development projects.
- b) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is cement, banks/insurance or agro based products firms which are growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field
- c) **Repair Services:** The numbers of electronic and electrical based equipment are on a rise. Also, the wiring and fitting of household electric equipment is on the rise. The owners of these are in need of economical, efficient easy access to repair and maintenance which can be easily produced in local economy through skilling
- d) **Agriculture & Allied:** In the areas of agriculture, fisheries, food processing, dairy etc. a high potential of self-employment could be found. It would demand for a more skilled workforce and hence the skilling opportunities remain high

The government VTIs interviewed in the survey was two and one was from the private. The courses which were offered by the government VTIs were predominantly engineering based or to cater the local market needs. In private VTIs the courses were more male oriented. The details of the courses offered in the VTIs of Dungarpur are represented as follows:

Govt. VTI Trades		Pvt. VTI Trades
Cutting & Sewing	Welder	Electrical
Electrical	Wireman	Fitter
Fitter	Turner	
Mechanic (Diesel)		

Figure 157 Courses offered in government and private VTIs

The total 03 VTIs (02 government+0 1 private) were covered in the sample as there were only three available for the survey. The government VTIs and private VTIs sampled for the study offer 7 and 2 trades for training (respectively). It appears that electrical and fitter is the most popular trade in VTIs as private VTIs were offering only these two trades. It appears that in government as well as in private VTIs, the number of actual trainees compared to the number of approved number of trainees is more or less same across all most all the trades except cutting & sewing trade in government VTI where the difference was a bit high (under-utilized) as compare to other trade.

An overview of placement records by trade in the government VTIs indicates stronger prospects in all most all of the trades with the exception of welding trade. It may be due to the fact that most of the welding trade trainees seek self-employment. The placement in private VTI is not very attractive as only

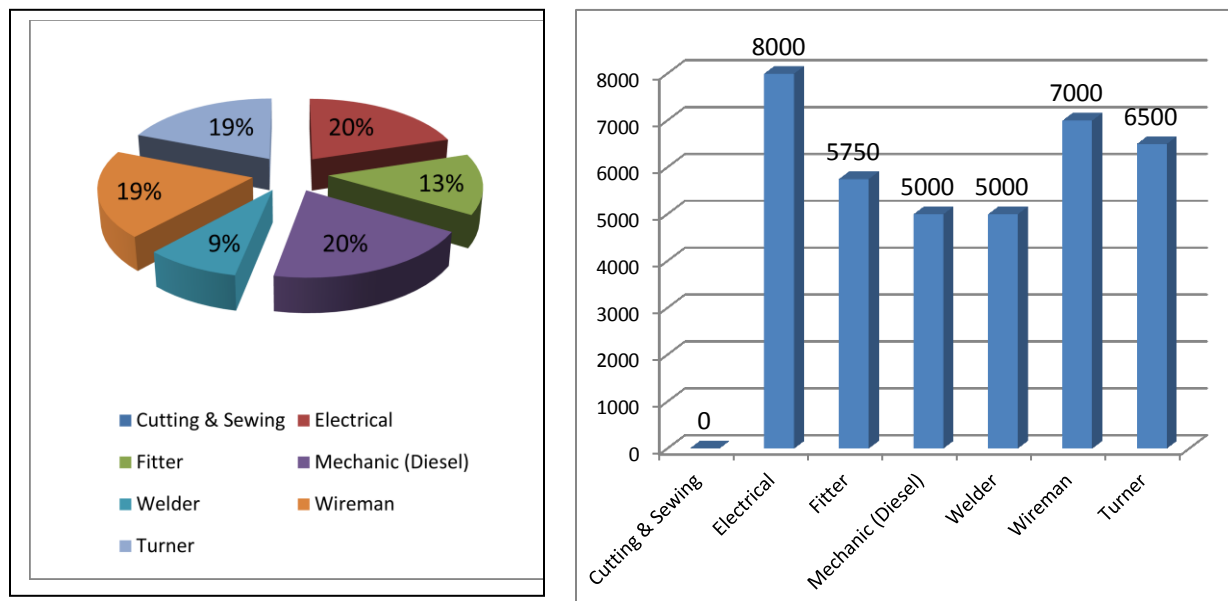


Figure 158 Dungarpur district's (sample study) courses offered placements in government VTIs

4 out of 20 trainees got placed post completion of training. Average salary/trainee indicates towards good prospect in electrical trade as government VTIs had reported that the trainee from this trade got the highest placement of Rs. 8,000/Month from their institute. Placements of trainees from the government VTIs was more through campus interviews but they had also done placement through proactive approach to the industry by the VTIs and the trainees themselves while the placements in private VTIs was through proactive approach to the industry. It seems that employment exchanges were not playing any role in placements. More often the courses provided were less oriented for direct placement in the market rather introduced the aspirants for self-employment for males (private VTI) and as another home based know how for females (tailoring in government VTI).

The trends across all the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the government VTIs whereas private VTIs had started their operation last year only. The governments VTIs were well equipped with upgraded technologies while the private VTI lacked the basic infrastructure.

5.11.4 Industry Mapping

Dunagarpur has a rich assemblage of minerals. The important ones were Soapstone, Fluorite, Green marble, base metal like copper etc. Apart from the minerals the main existing industries were from the following groups of industries:-

- Acrylic and blended yarns,
- Chemical based units,
- General engineering
- Marble chips and powder,
- Oil and dal mills,
- Printing press,

- Workshops,
- Handloom cloth,
- Rice
- Milling
- Masala grinding,
- Marble slabs and tiles,
- Spun yarn
- Textiles

MSME in Dungarpur

According to D.I.C data (March, 2012), there were around **3968 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.4425.79 lakhs** providing employment to **13755 persons**.

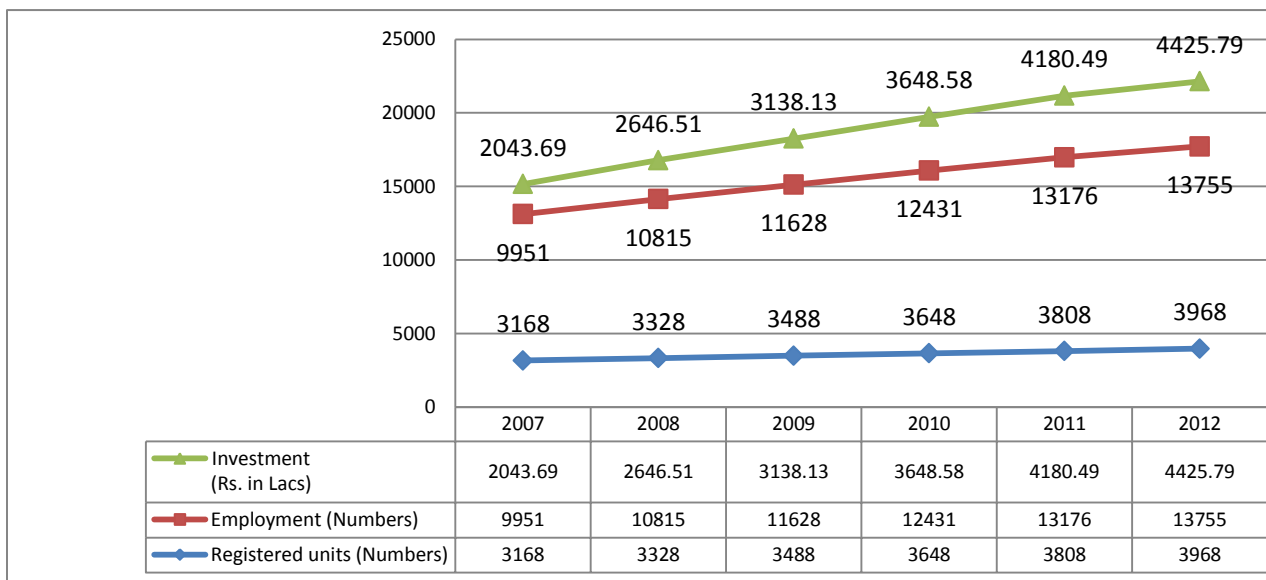


Figure 159 MSME trend analysis of the district Dungarpur

There has been a constant increasing trend in the investment of industries, employment and thus, the number of units as well. The main existing industries are leather based, agri based, metals and minerals and wooden based. One of the stone clusters of Rajasthan is at Salatwara of Dunagapur district. Apart from these, there were 03 large and medium scale industries engaging close to 2941 employees with an investment of Rs 230.18 crore.

5.11.5 Sector wise mapping of industries

District wise the existing sectors were mapped against the high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Dungarpur. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	459	183.14	1616
Auto & Auto Components			
Chemical & chemical products	22	90.27	76
Construction Material & Building Hardware			
Food Processing			
Furniture & Furnishing	411	233.90	1420
Leather & leather goods	495	190.07	1380
Textile & Handloom	220	103.66	952
Unorganized Sector			
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Stones & Quarrying	414	495.09	1593
Mines, Metals & Minerals	478	746.01	2545
Machinery, Electricals & Manufacturing	733	717.65	2065
High	Units>200, investment>180,emp>1000		
Medium	Units>100, investment>100, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 116 Sector wise mapping of industries in Dungarpur as per DIC report, 2007

Sectors covered under sample survey
Construction Material & Building Hardware
Food Processing & Products
Machinery, Electricals & Manufacturing
Stone Querying, Cutting & Polishing
Textile & Handloom

Table 117 Break up of industries in Dungarpur (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries were selected (depending on the `employer group set up). The sample of employers consisted of functionaries from diverse industries

located in Dungarpur district of Rajasthan.

These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table. The 10 industries were sampled for the survey to represent 5 major sectors that are prominent in the district as shown in the table.

All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers.

5.11.6 Workforce Demand and Supply

Of the salient features of the workforce in the district were as follows:-

- The overall participation of population in economic activities was 47.97 % (dependency ratio of almost 1:1); with higher rate of male participation. There is steep decline in the main workers and increase in marginal workers showing the changing workforce engagement in the district.
- Rural employment could be majorly seen engaged in agricultural related jobs (75.5% engaged in primary sector), animal husbandry and fisheries followed by service sector engaging in repairs and electrical services.
- The workforce categorized under skilled, semi-skilled and unskilled showed the following trend in the sampled industries (as shown in the figure)

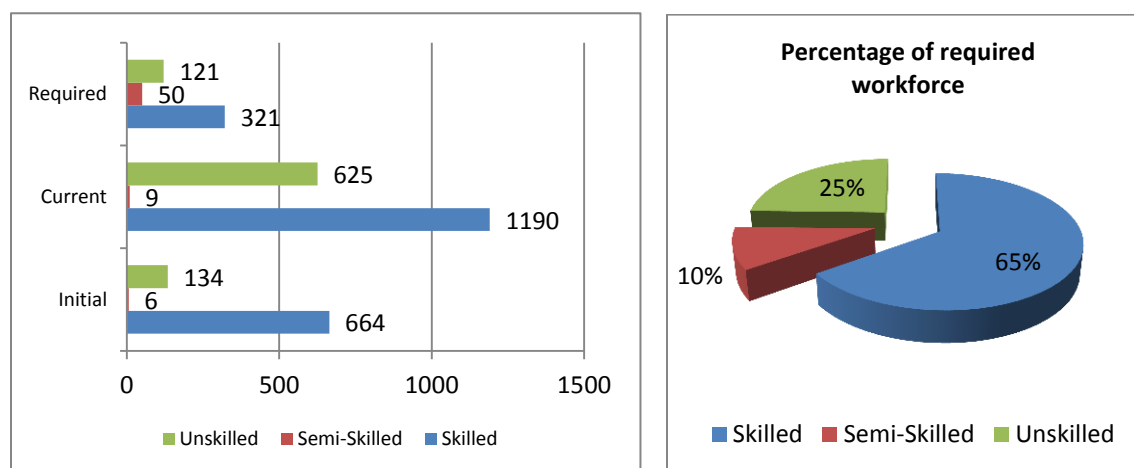


Figure 160 Workforce engagement under various stages and the percentage of required strength of workers (Dungarpur sample)

The demand for skilled workers continued to be on the higher side especially in textile industries and stone and quarrying industries. Incidentally, the demand and the current absorption of semi-skilled workers were lower than the skilled workers and similar was the requirement trend as well (just 10% required across industries).

- In the sample data on skilled workforce indicate a little increase in the workforce at present since establishment of industries across all the sectors except Textile & Handloom sector industries. Two industries covered under Textile & Handloom sector were very big and these industries have expanded their operation over the period of time. Expansion lead to more and more worker and this resulted to increase in workers' strength. Demand for skilled worker was also reported in these sector industries only.
- In case of unskilled workforce, Textile & Handloom sector industries have increased the current in-take of worker to almost six fold as compare to workers' count at the time of industry establishment. For all other sector industries, there is no rise in workers' count. Moreover, demand for more unskilled workforce was reported by Textile and Handloom sector only.

In terms of industries' requirements and the market trends the primary survey provides the major

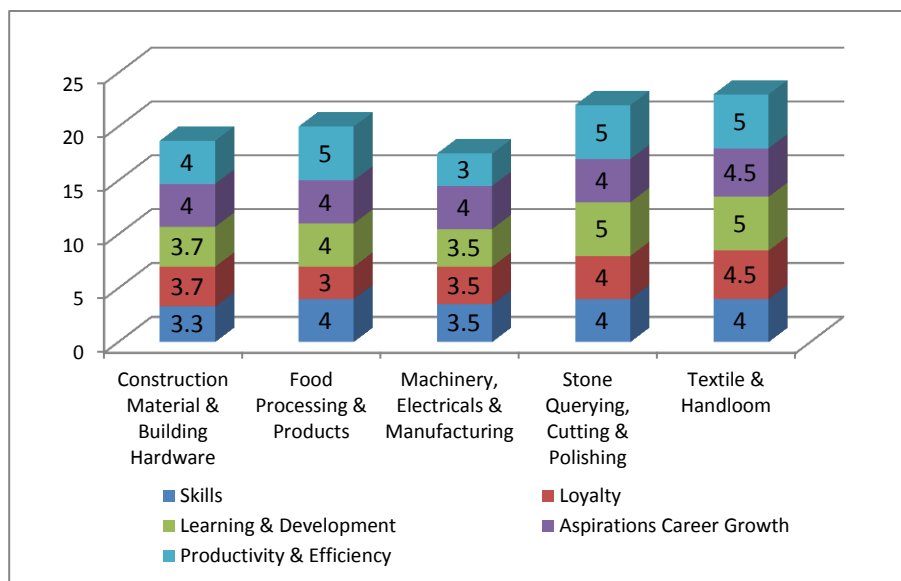


Figure 161 Employers demands in terms of expectations from workers (Dungarpur)

demand in terms of expectations from the employers were skills and learning and development. Overall the employers were above average ranked across all the parameters showing the expectations set were high for the workers and so the need for engaging skilled professional workforce was substantiated.

Recruitment of required workers was done from known sources such as own workers which appeared to be the most reliable method of recruitment for most of the industries apart from textile & handloom sector industries who recruit the people from VT institutions and through employment exchange only.

5.11.7 Projected Workforce Demand

It has been observed that the percentage of skilled workers have multiplied over the years in small establishments but in large and medium there have been marginal increase in comparison. In general, the emerging occupations and new establishments demand for workers on year on year basis could be something on following lines:

Electrical & Electronics	750
IT & computer	160
Wooden work	240
Workshops & Auto	510
Marble & stone work	210
Service Sector	2000
Manufacturing & Allied	2300
Textile & Handloom	2700

Table 118 Expected year wise requirement in selected sectors as suggested by industrial bodies in Dungarpur

The survey brought out a yearly requirement of close to 25,000 workforces (including agriculture & allied) across various sectors engaged in industries. The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers. One could observe a similar requirement in the skilled daily wage labor requirement and unskilled contract based requirements. This clearly validates the mindset of the industry houses to engage less skilled workers and increase the intake of semi-skilled workers.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	238820	239962	233007	231943	248144	241514	244369	
Semiskilled	19469	19562	18995	18908	20229	19689	19921	
Skilled	1298	1304	1266	1261	1349	1313	1328	
Total demand	259587	260828	253269	252112	269722	262515	265618	67%
Industry Sector								
Unskilled	28351	30333	29828	30776	31053	31664	31871	
Semiskilled	13085	14000	13767	14204	14332	14614	14710	
Skilled	2181	2333	2294	2367	2389	2436	2452	
Total demand	43617	46667	45890	47348	47773	48714	49033	13%
Services Sector								
Unskilled	10257	10839	11071	11356	11563	11895	12087	
Semiskilled	23932	25291	25833	26496	26980	27755	28204	
Skilled	34189	36130	36905	37852	38543	39650	40292	
Total demand	68378	72260	73809	75704	77086	79299	80583	20%
All Sectors								
Unskilled	277428	281134	273907	274075	290759	285074	288327	
Semi-skilled	56486	58853	58595	59609	61541	62058	62835	
Skilled	37668	39767	40465	41480	42280	43398	44071	
Total Demand	371582	379754	372968	375164	394581	390529	395234	100%

**Table 119 Labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors-
Dungarpur**

There exists difference in the projections of semi-skilled workforce from the surveyed response due to the difference in defining skilled workforce as per the local industries and that of the standard practice. Appreciable workforce trends showcase the need of workforce in the services and industries increasing to 33% in secondary and tertiary sectors by 2017.

Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			

ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 120 Workforce across various sectors by 2017- Dungarpur

5.11.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	14642	18327	10666	9909	25939	19881	22377
Semiskilled	27463	29125	29274	29752	30081	30682	30829
Skilled	6258	7208	10629	12584	13669	16347	18585

Table 121 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.34 lakh. Keeping in mind the high rate of workforce participation from unskilled masses and the existing demand of skilled workforce; the significance would be to target training to atleast 40,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and

observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation is not conducive enough to support industrial growth in Dungarpur. Investments are not good though growing at slower pace. Land for establishment of industries remained a problem. Water supply was not sufficient but supply of power was good. Availability of skilled manpower was also one of the pronounced problems.
- The less number of VTIs are not fulfilling the needs of the industries. The trained person does not meet the requirement of the industries since they have lack of practical experience in the particular industrial knowledge.
- Demand for skilled workforce (skilled) would be increasing over next three to five years keeping in mind the increasing investment pattern of the district in the MSME for last five years. Major employment would be perceived in stones, marbles & textile industries. Cement & PVC- Plastic shall be considered as the emerging sectors. Manpower requirement of government establishments would also be providing sustainable livelihoods if addressed properly.
- Scope of self-employment and entrepreneurship in the district remains on a relatively lower side. MGNREGA contributes to the skill gap and availability of workforce for the industries.

5.11.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Dungarpur district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth to provide deep insight on their aspirations and perceptions; of self and people associated/related with them.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 122 Youth Profile of sample in Dungarpur

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 38% of the youth covered were college educated and 62% had completed/drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

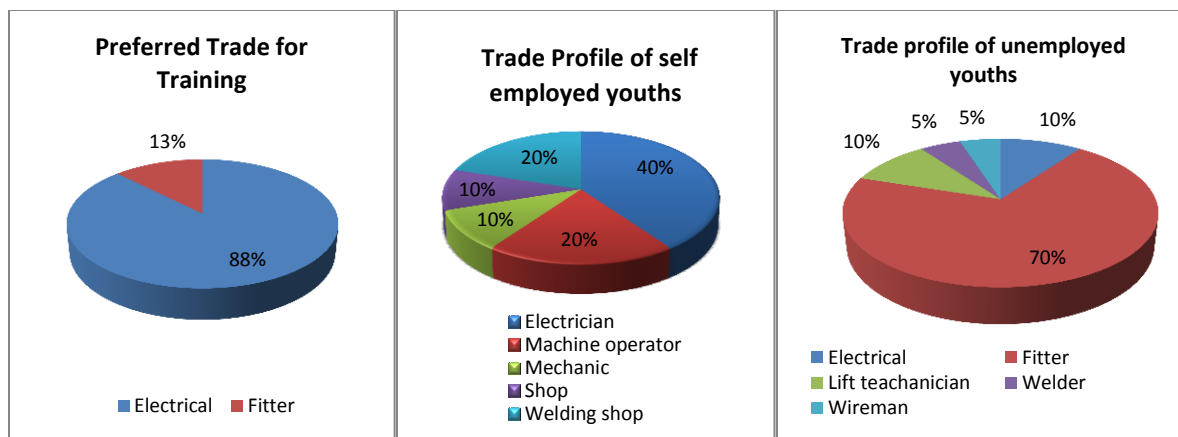


Figure 162 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Dungarpur

Among the respondents, inclination towards electrical and fitter courses was found very high as around 88% of the youth surveyed had chosen electrical as a preferred trade during his/her training at VTI. The reason for the same seems to be the demand for this course in the market. Second, most sought, trade was fitter and electrical i.e. 13%. Similarly, welder and mechanic were the courses most sought by the self-employed after electrical. The maximum numbers of unemployed youth (70% of sample) were from fitter clearly highlighting the surplus supply followed by electrical and technicians (10% each).

5.11.10 Youth's Perception

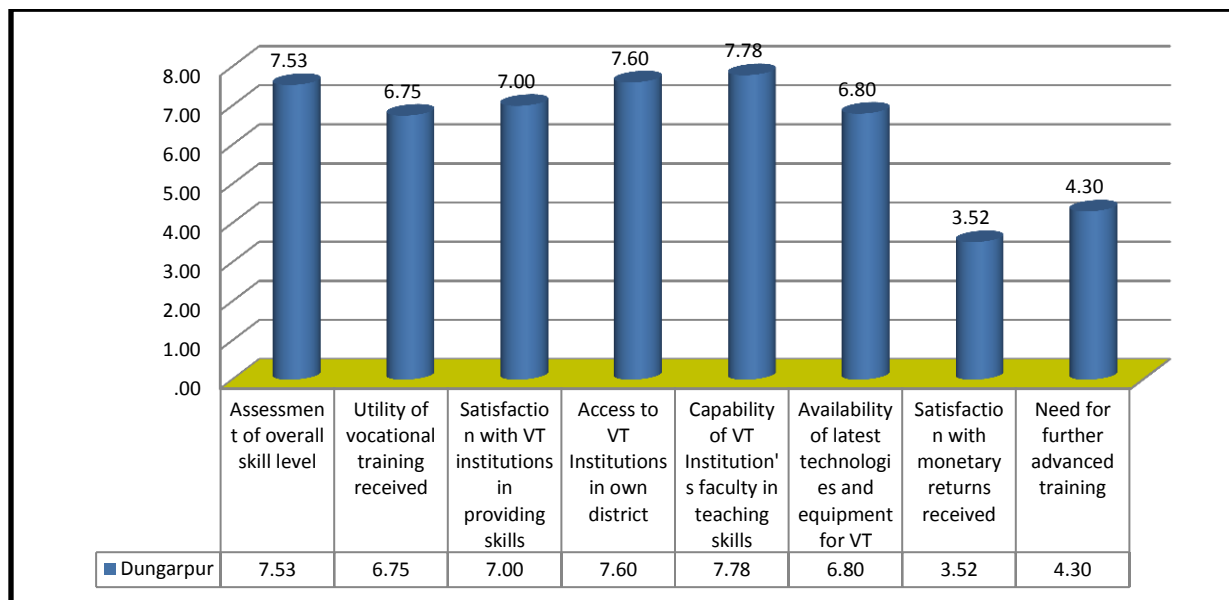
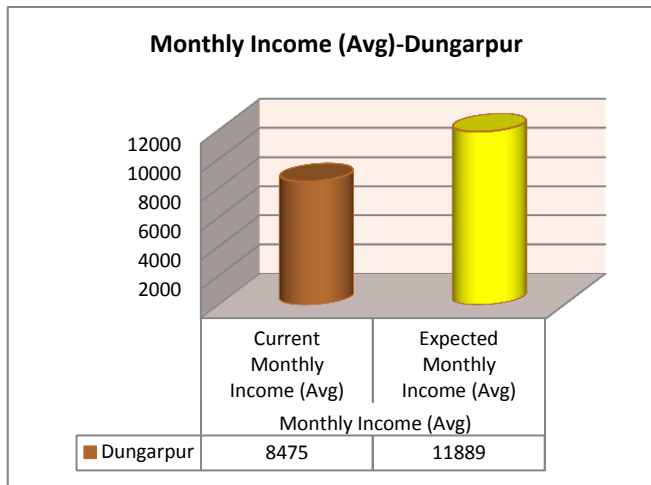


Figure 163 Dungarpur Youth's perception, need and aspirations –Sample Group

Satisfaction with current monetary returns and need for advanced training emerged as the two least rated factors on a scale of 10. As identified by the respondents, the satisfaction with VTI was overall rated 7 and above. The capability of VTIs faculty members and the utility of these training were among the most highly rated parameters among the group of youths. A minimum wage hike of Rs 3500 was expected among youths across various trades.



The general aspirations were mapped by conducting FGDs with the youths from various categories and the following responses were evidently represented by the group:

- a) Better salaries, work satisfaction, family security and learning new technologies (respective trades) were the desires and expectations of the youth from the employment
- b) Families expected from them to get engaged in government jobs or well-paid jobs in big firms
- c) Families supported the cause of getting vocational training in all the cases and no support was evidently provided by the banks, government etc.
- d) Communicative English and computer training were generally undertaken by local training centres for better job opportunities
- e) ITI training were more to get government jobs as 6 out of 10 felt that self-employment had least scope in terms of secured future and sustainable growth
- f) Most of the youths find difficulties taking up other trades post training and the adaptability remains low in terms of acceptance of other trades

5.11.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights

the requirement of 0.34 lakh of skilled, unskilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of

institutes (from various training capabilities) at district and block level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

Figure 164 . Income current and expected- sample group, Dungarpur

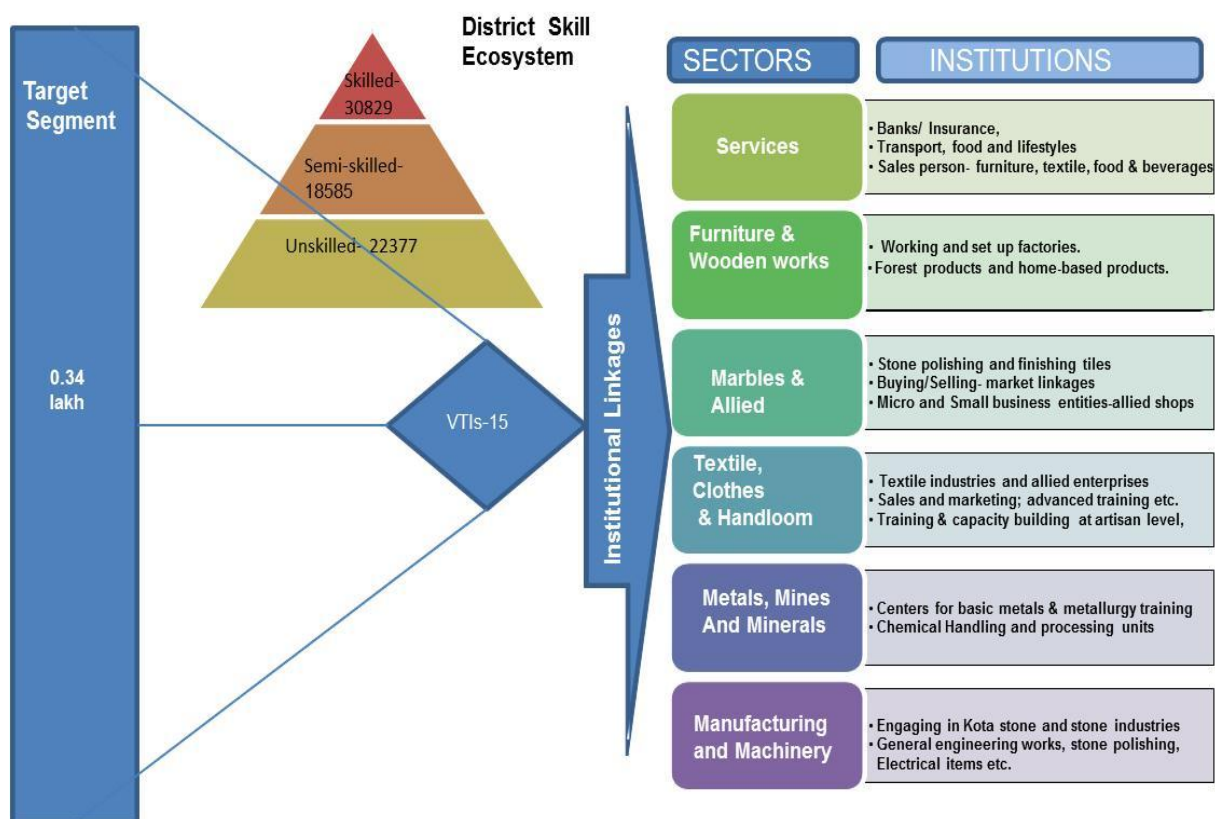


Figure 165 Optimization plan- Skill Development Eco System-Dungarpur

The key stakeholders' contribution in enabling to achieve the target (as shown in the figure) would be as follows:

- State:** The state to target the skilled and semi-skilled segment for skilled training by creating additional 15 skill development centres (VTIs) in the district level of operations. It should encourage the private training partners to participate and operate in the district due to its large base of workers involved in secondary and tertiary sectors.
- Training Partners:** The sectors for engaging more skilled workforce would be in services, furniture and wooden works, marbles and allied textile based and mineral based industries in the district. Course curriculum designed to cater for the institutions functions in these segments should be the focus. Along with these, specific course curriculum designed for communicative English, life skills and basics in computer would be the key areas of skill development training.
- Industries:** The primary sectors of high human resource requirement would be agriculture and livestock based, mineral based including marble handicrafts, textiles, chemical and services and therefore would require increasing linkages with the related institutions for skilled workforce absorption

NSDC would be an enabler to lead the training partners specifically in textiles and food processing by encouraging specifically designed proposals with increasing the linkages in industry associations and PPP models. The stone based clusters could be encouraged through advocacy to engage more skilled wage labourers by designing end to end solutions for engaging skilled workforce and highlighting the benefits to the industries.

5.12 District Bundi

BUNDI DISTRICT



District Skill Workforce Face Sheet-2012								
District	Bundi			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	10	No. of Villages		873	No. of Schools (elementary & sec.)		1989	
Basic Data								
Population (in '000s)	1113	Overall Literacy(in %)		62.31	Sex Ratio		922	
Decadal growth rate(in %)	15.7	Female Literacy(in %)		47.00	HDI Ranking (2008)		0.649 (13 th position)	
% Urban Population	18.65	Male Literacy(in %)		76.52	Per Capita Income (in Rs.)		1142	
Workers participation rate (2001)								
Workers participation rate (2001)	47.47	Share of primary sector (%)		72.00	Share of secondary & tertiary sector (%)		28.00	
No. of MSME/Industries	1437	Total Employment (in 000s)		5785	Total Investment (in lakhs)		5579.03	
No. of colleges (PG & Graduation)	9	Total graduates (In '00s)		5463	Total Post graduates (in '00s)		899	
No.of VTIs(registered ITI+Poly+ITC)				4	Total trainees trained (in '00s)		332	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	37407	36533	34873	34931	33967	32741	31902	0.88lakhs
Semi-skilled workforce	34063	35471	36019	37063	37485	38305	38829	

5.12.1 Demographic Profile:

The district is situated in the south-eastern part of Rajasthan. It is bound in the north by Tonk, in the west by Bhilwara and on the south-west by Chittorgarh districts. The river Chambal forms the southern and eastern boundaries separating the Bundi and Kota territories. The southern tehsils of Bundi forms a wedge between Bhilwara and Kota and also touches Chittorgarh district. It is located at 25.44°N 75.64°E and an average elevation of 268 metres (879 feet). The city lies near a narrow gorge, and is surrounded on three sides by hills of the Aravalli Range. A substantial wall with four gateways encircles the city. The town of Indragarh and its nearby places is famous for the renowned temples of Kali and Kamleshwar. The Indargarh step well is considered as one of the most attractive places in the Bundi district, especially during the rainy season. The district Bundi is known as the Queen of Hadoti; the land of the Hadas.

It ranks as the 22nd largest district of the state covering 1.68 % of the

area of the state. With 193 the density of population in the state

ranks at 22 (Census, 2011- Provisional). It stands 13th on the Human Development Index (0.649) and 10th on the GDI (0.504). It was observed that the district fares quiet high on income index (10th), but its due to the education and health index (22nd and 20th respectively) which pulls the district on overall HDI ranking to second. As per provisional census 2011 data, Bundi accounts for population of 11.13 lakhs (1.68% of the state population and ranked 30th) with sex ratio of 922 (compared to 2001 census figure of 907) which was on the lower side of the state ratio of 926. There was a decrease in the decadal

S.no	Section	Unit	Quantity/
			Value
1	LOCATION		
	Latitude	degree	25°44' N
	Longitude	degree	75°64' E
2	AREA		
	Total geographical area	sq km	5776
3	ADMINISTRATION		
	Tehsil	number	5
	Villages	number	873
4	Land Use Pattern		
	Total Area	Hectares	581938
	Total Irrigated area	Hectares	263345
5	Population (census 2011)		
	Total population	number	1113725
	Men	number	579385
	Women	number	534340
	SC (2001)	number	174346
	ST (2001)	number	194851
6	Literacy (except 0-6 age group)		
	Total literate	percent	62.31
	Men	percent	76.52
	Women	percent	47.00
8	Energy		
	Electrified Villages	number	828
9	Industries (DIC, 2009)		
	Registered MSME units	number	1437
	Employed persons	number	5785
10	Education		
	Pre Primary & Primary Schools	number	1040
	Upper Primary	number	679
	Secondary & Sr. Secondary	number	270
11	Higher Education / Others		
	Colleges	number	09
	I T I	number	04
	Polytechnic	number	0

Table 123 Bundi District Profile- a snapshot

growth of population of about 9% showing trends of population stabilization (15.70 decadal growths for provisional 2001-11 data).

The worker participation rate in Bundi was 47.47% (HDI, Rajasthan, 2008) with primary sector engaging close to 72.00% of the workforce and rest 28% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 21% (Urban- 30.33% & Rural- 51.40%). The literacy rate of Bundi in 2011 is 62.31% which remained on the lower side of the state though with an increase of more than 6% than 2001 census results. Both the male and female literacy rates were below the state figures (76.52% & 47% respectively) with growing trends of literacy among them.

5.12.2 Education Infrastructure and Utilization

Bundi's status in literacy was marked on the lower side than the state average but also marked by the low male and female literacy. Though literacy has improved over the years but the overall figure as shown in the census 2011 (provisional) does not seem to do good for the state. There are good educational facilities in Bundi district, which serve both townspeople and inhabitants of surrounding villages and towns in the hinterland. There are 1040 pre-primary and primary schools, 679 upper primary schools and 270 secondary and senior secondary schools. Also it has 09 general degree colleges, and 04 industrial training institutes (ITI). The retention rate as per DISE, 2009-10 is just 53.4% from primary to upper primary suggesting that the drop outs are high and maximum youths of 10th or below are available for skilled training.

Education	Bundi	Rajasthan
Pre Primary & Primary	1040	49546
Upper Primary	679	38889
Sec/ Sr Sec	270	19135

Table 124 Bundi vs. Rajasthan education status

A total of over 6400 students enroll in various institutes at colleges and ITIs. At the intermediate college level, courses are available in the area of science, arts and commerce. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 07 partners (includes ITC, ITIs, government colleges & KVK) implementing skilling initiatives with 11 approved programs (07 are completed). A detailed view of the vocational training of Bundi could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.12.3 VTI's demand across various trades

The existing scenario of VTIs in Bundi is on the lower side considering the number of youths passing out; and seeking employment as skilled workforce. Private players have not yet penetrated in a big way but started with the formal education (private schools) space and few ITCs as well. As observed from the secondary data, the number of graduates and aspirants from ITI & polytechnics are also on the higher side compared to the number of training providers existing in the district. Therefore, the scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields of requirement and demand as per market shall be the need of the hour to address the skill shortage.

The primary survey was carried out in 10 sample VTIs (3 ITI & 7 ITC). The government VTIs/ ITI provided 05 different courses in training whereas it was 04 courses in the ITC. These courses were predominantly

engineering and self-employment based or to cater the local market needs. The details of the courses offered in the VTIs of Bundi are represented in the below table:

Private VTI Trades (ITC)	Government VTI Trades (ITI)
Fitter	Electrical
Electrical	Fitter
Electronics	Mechanic (Diesel)
Mechanic (Diesel)	Welder
	Wireman

Table 125 Bundi district's (sample study) courses offered

An analysis of the primary survey suggested the following results:

- Fitter was the most popular trade in ITI whereas electrical in ITCs as private VTIs offered more than 10 times seats in electrical trade as compare to ITI.
- In the ITIs, the number of actual trainees compared to the number of approved number of trainees was more or less same across all most all the trades except electrical and fitter where the difference is a bit high as compare to other trade.

On the other hand, gap between the actual and approved strengths of trainees was significantly high for electrical and diesel mechanic trades in private VTIs. Popularity of electrical trade applications was the highest but still the seats went unutilised.

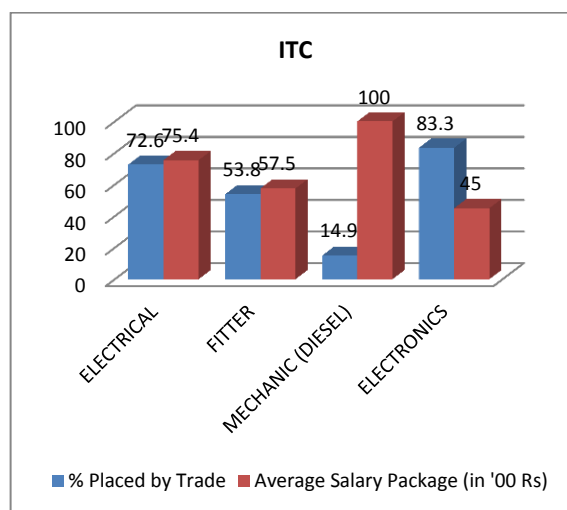
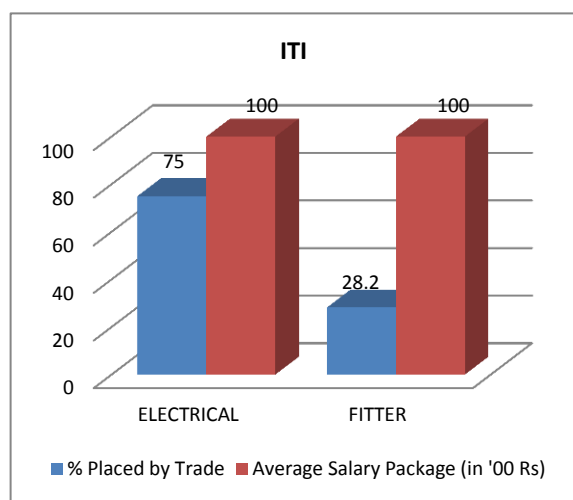


Figure 166 Bundi district's (sample study) courses offered placements in government and private VTIs

An overview of placement records by trade in the VTIs surveyed indicated stronger prospects in most of the trades with the exception of diesel Mechanic trade. It was due to the fact that most of the diesel mechanic trade trainees seek self-employment. Electrical trade was most promising in terms of placement as it accounted for more than 70% of placement in the VTIs. Electronics trade clicked the highest placement percentage though with low average salary (Rs. 4500/month). ITCs had better placement scenario as most of the trades provided placement from the institute directly in the market.

Average salary/trainee indicates towards good prospect in electrical trade as ITIs have reported that their trainee got placement Rs. 10,000/month from their institute. While placements of trainees from the VTIs was more through a proactive approach to the industry by the VTIs and the trainees themselves, the private VTIs had adopted to the more contemporary approach of conducting campus interviews for placement by prior liaison with the industries. Though some of the trainee from private VTIs got their placement through employment exchange but it seems that employment exchanges were not playing a major role in placements.

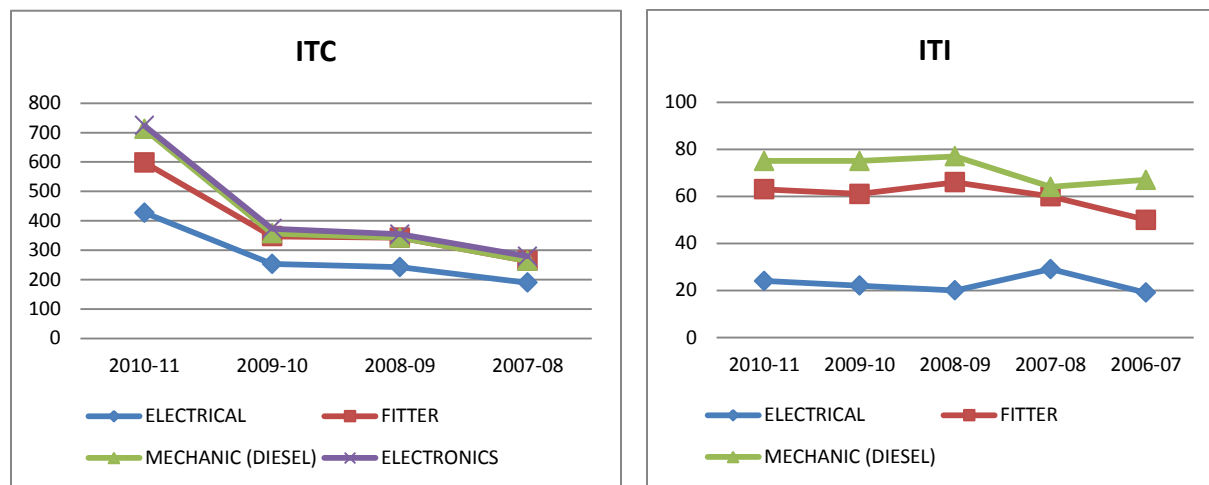


Figure 167 Bundi district's (sample study) various trade's aspirant strength over a period in ITI & ITC

The trends across all the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the ITI whereas in ITCs the seats have increased considerably. ITCs increased maximum seats as the demand for electrical skilled persons was high. Diesel mechanic trade was a recent inclusion in the ITCs though it has not performed as expected in the ITI. Trades like welder and wireman did not have students registered for past four years in the ITI.

In terms of infrastructure all the government VTI had hostel facility for boys but none for girls whereas none of the private VTIs had any hostel facility for boys or girls. Transport facilities to trainees were absent in the ITI & ITCs. These VTIs were well upgraded with basic minimum standards of facilities available. Government VTIs appear to be under staffed in managerial academic fields whereas private VTIs were well staffed.

5.12.4 Industry Mapping

The most important mineral resources of Bundi are limestone and sandstone. The limestone deposits cater to one of the oldest cement plant of state at Lakheri. However most of the deposits are marginal cement grade and also fall in forest. Other minerals include silica sand, marble, iron, clay etc. It has 06 industrial areas with some of the main existing industries and services as :

Rice mill	Oil mill	Brick kiln	Lime kiln	Artificial jewelry
Readymade garments	Stone cutting & polishing	Hand loom	Wooden furniture	Agriculture Implements
Cement & cement products	Sheet metal Fabrication	Iron Fabrication	Lacquer work	Painting
Leather work	Earthen ware	Wheat processing & grading	Printing press	Stone carving
Computer data processing	Trator Repairing	Electrical Item Servicing	Auto mobile work shop	Mobile work shop
Motor rewinding	Electronics Item repairing center	Cycle repairing	Beauty parlor	

Figure 168 Industries in services and other sectors of the district, DIC-2008

MSME in Bundi

According to D.I.C data (March, 2012), there were around **5680 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.12918.15 lakhs** providing employment to **18627 persons**. It also has **07** registered large and medium industries engaging **1629** persons with production value of **Rs. 1590.10 crore**.

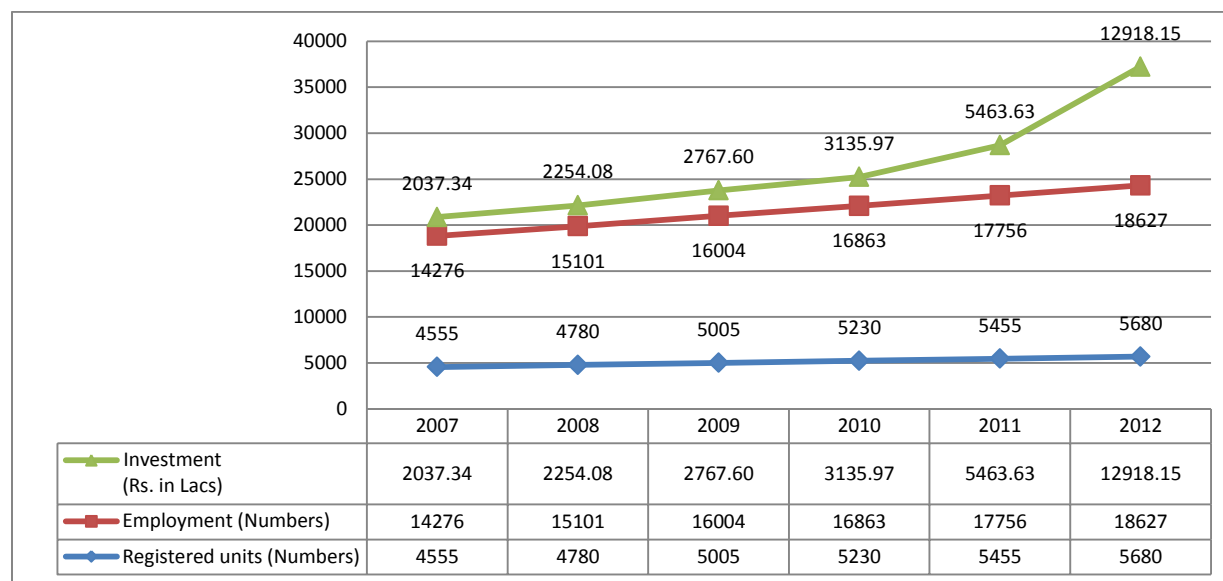


Figure 169 MSME trend analysis of the district Bundi, DIC 2012

There has been a constant increasing trend in the investment of industries, units and thus, the number of employment as well. The large scale industries existed mainly in cement (ACC), edible oil (Adani, Ruchi & Bunge India). Major exportable items were rice, edible oils, sandstone (slabs & blocks). It has two clusters in Bundi and Roteda of rice and handloom respectively.

In the district rice industries have shown 15-20% annual growth due to their strategic location and adoption of the modern technologies. Rice gets exported to U.A.E. and Germany. Similarly oil industries have shown 10-12% annual growth due to their strategic location and technology. Mustard DE oiled Cake, Soya DE oiled Cake, Packed fortune Oil and Fatty Acid Distillate were exported to Singapore, Pakistan, Birgang-China. Also, the stone industries have registered 5-8% growth due to availability of raw material and advance technology. The Bundi district does not have any ancillary industry. The main reason for this is Kota an industrial city is only 35 Kms. from Bundi.

In the district many service enterprises were working like hotels & restaurants, laundry, marriage halls, decoration, tent house, auto mobile workshop, cold storage, offset printing, printing press, transportation packaging industry and packaged food industry etc.

5.12.5 Sector wise mapping of industries in the district

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Bundi. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	53	2063.60	3949
Chemical & chemical products	90	205.91	418
Construction Material & Building Hardware			
Food Processing			
Furniture & Furnshing	518	187.21	1128
Leather & leather goods	289	5.78	867
Textile	847	174.20	2133
Service Sector	554	526.55	1774
Building Construction & Real Estates			
Education & Skill Development			
Handloom	55	27.5	220
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging			
Mines, Metals & Minerals	821	1807.3	3475
Machinery, Electricals & Manufacturing	1237	348.63	3367
High	Units>500, investment>200,emp>400		
Medium	Units>100, investment>100, emp>200		
Low	Units> 10, investment> 10, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Figure 170 Sector wise mapping of industries in Bundi as per DIC report, 2007

There have been many MSME coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of mines and minerals, handloom and leather, agri and allied, furniture and manufacturing sector. There has been an increase of MSME from 2007-2012 with an increase in investment and employment.

Some of the demand and resource based industries which have come up in the district were as follows:-

Demand Based	Resource Based
Spices	Rise mill
Wooden furniture	Pulse mill
Iron fabrication	Oil mill
Steel metal	Stone crusher
Engg. Work shop	Lime kiln
stone cutting	Animal fodder/ Cattle feed
Hotel	Bricks kiln
Automobile work shop	Stone cutting & polishing
Mineral water	Flour mill
Rice Flakes	Cement pipe plants
Motor body	Fruit juce
Card board boxes	Dairy product
Paper cones	Garlic pearls
Aluminum fitting/ Readymade garment	

Table 126 Potential industries providing employment to the semi-skilled workforce in Bundi

Sectors covered under sample survey
AGRICULTURE & ALLIED
BUILDING & CONSTRUCTION
CONSTRUCTION MATERIAL & BUILDING HARDWARE
STONE QUERING, CUTTING & POLISHING
TEXTILE & HANDLOOM
TOURISM, TRAVEL, HOSPITALITY & TRADE
AGRICULTURE & ALLIED
BUILDING & CONSTRUCTION

Table 127 Break-up of industries in Bundi (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 13 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of senior level functionaries from 13 diverse industries located in the district. These industries were selected from large, medium and small industries covering various growth sectors of the district as shown in the table.

5.12.6 Workforce Demand and Supply

The major workforce participation observed in Bundi district over a period of two decades has been majorly engaged in primary sector and majorly has been an agrarian district. There has been declining trend of workforce share in primary sector, close to 7% and a gradual shift to secondary and tertiary sectors. Engagement in secondary and tertiary sector shows an increasing trend as per the industrial growth of the district and the educational sector provides the major structure to engage the majority of the unorganized sector. Looking at the present resources and skill set of the workforce furniture, computer based knowledge, electrical and leather, tiles and stones, textiles and the key to future employment for the district Kota in near future. The requirement for semi-skilled workforce was higher than the skilled workforce in the overall industries though a very marginal requirement was mentioned.

As observed in the primary survey the, the demand for semi-skilled workforce was high in stone cutting and construction and lowest in hospitality and tourism. Skilled workforce was more required by the stone quarrying and related industries, and textile industries. Unskilled workers were more or less engaged in stone related industries, construction and tourism. The below figure depicts the workforce requirements of the different sectors of the district in various phases of the industry:

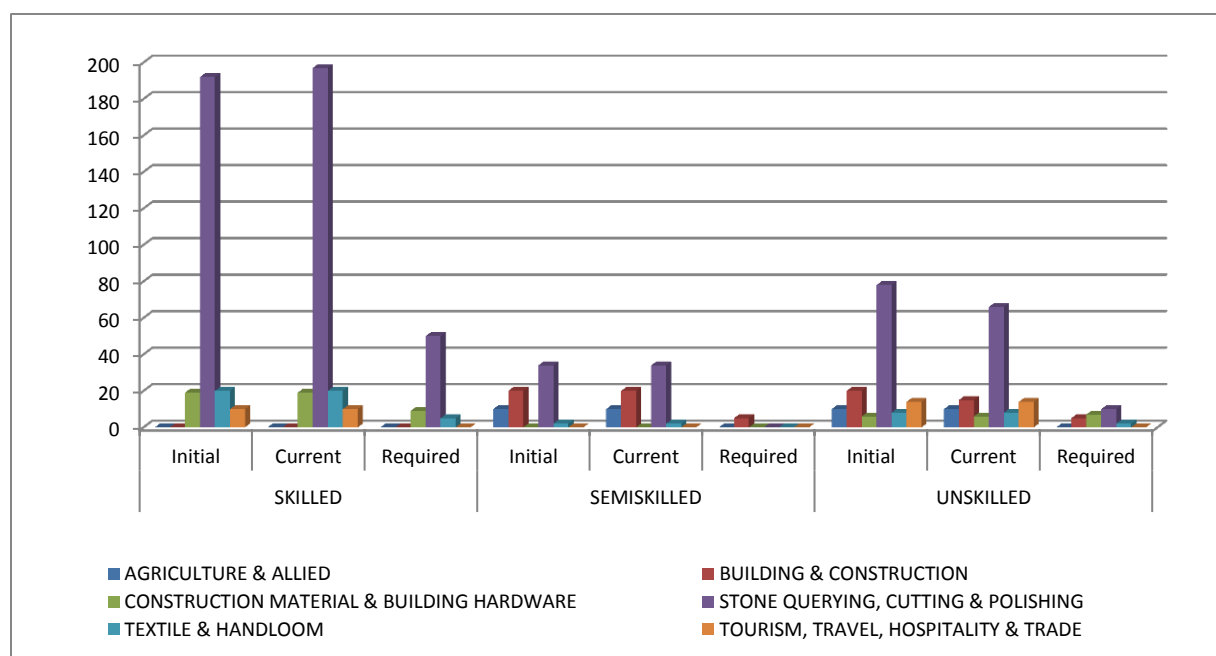


Figure 171 Status of skilled, semi-skilled workforce and unskilled workforce across sectors (Sample Bundi) at various stages (initial, current and required)

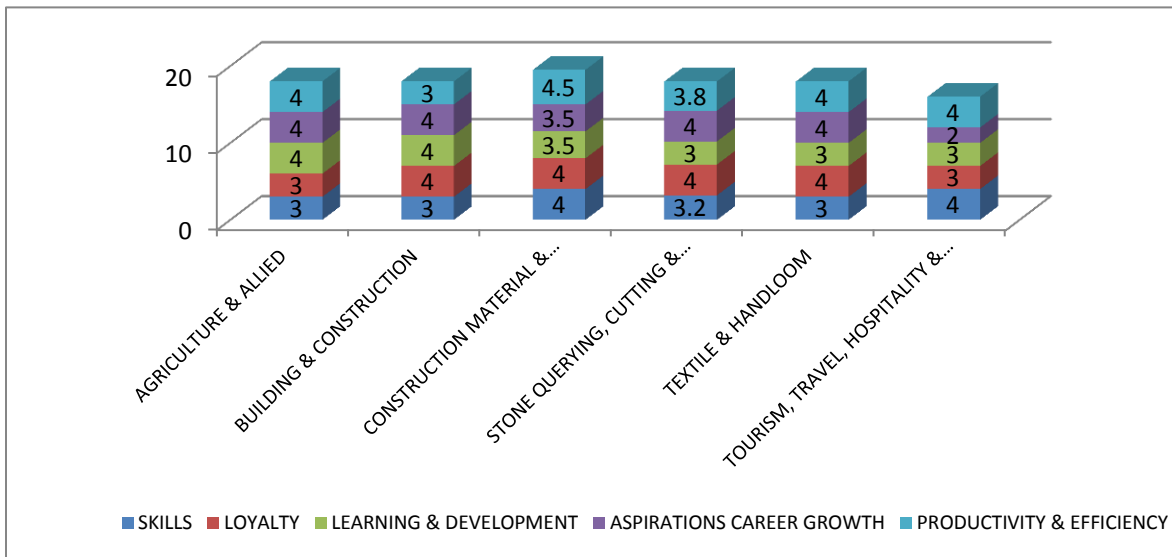


Figure 172 Employers demands in terms of expectations fom workers (Bundi)

In terms of industries' requirements and the employer's expectations the trends of the primary survey provides the major demand in terms of expectations from the employers were loyalty towards work and productivity/efficiency. On a scale of 5 the least scaled were skills and learning & development aspect of the employee. The figure showcases the employer's ranking of expectations on a scale of 5 across the various sectors.

5.12.7 Projected Workforce Demand

There has been marginal increase in the number of full time skilled workers over a period of time though majority of the industries interviewed feel the requirement of skilled workers over the semi-skilled workers for their full time roles. Apparently the number of semi-skilled workers category has not grown but the need for unskilled contract/ daily wage laborers was also low. A clear distinction could be observed in the preference of only skilled workers as the industries felt the imperative need to engage more of skilled workforce over the semi-skilled and unskilled.

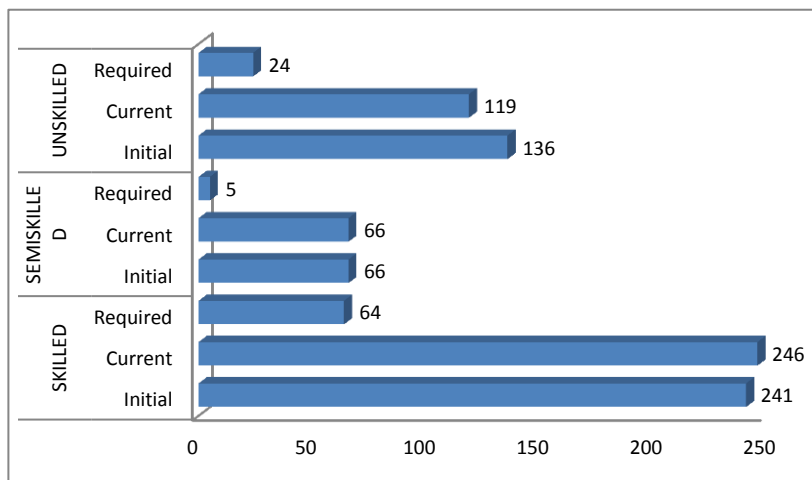


Figure 173 Status of workforce in terms of initial, current and required strength across sample industries of Bundi

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers to address the current shortage and not with the intentions to expand.

The secondary analysis of the projected workforce for the district under the three major segments of agriculture, industries and services would be as follows:

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	284322	286321	288432	290388	292311	294453	296465	
SemiSkilled	41716	41244	41060	41663	42113	41905	42300	
Skilled	2781	2750	2737	2778	2808	2794	2820	
Total demand	328819	330315	332229	334829	337232	339152	341585	67%
Industry Sector								
Unskilled	36174	36654	37579	38713	38950	39635	40042	
SemiSkilled	12080	12764	12729	13252	13362	13678	13866	
Skilled	16013	16827	17621	18329	18927	19502	19982	
Total demand	64267	66245	67929	70294	71239	72814	73890	15%
Services Sector								
Unskilled	13567	14084	14404	14825	15067	15442	15726	
SemiSkilled	26990	28197	28943	29926	30489	31364	32026	
Skilled	38557	40281	41347	42752	43555	44806	45752	
Total demand	79113	82562	84695	87503	89110	91611	93504	18%
All Sectors								
Unskilled	334063	337060	340415	343926	346328	349529	352233	
SemiSkilled	80786	82205	82732	84841	85964	86947	88192	
Skilled	57351	59858	61706	63858	65290	67101	68554	
Total Demand	472199	479122	484853	492625	497581	503577	508979	100%

Figure 174 Labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors Bundi

The district shall continue to engage close to 33% of the workforce in secondary and tertiary sector with services sector close to 18% and then industries engaging 15% of the total workforce. These projections account till 2017 of the district based on the growth of service sectors as projected by DIC reports. Basis on the inputs received from sector wise expansion plans the workforce projections made across different categories highlight these distribution pattern. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			

Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Gems & Jewellery			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Organized Retail			
Real Estate			
Media, Entertainment, content creation, animation			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Figure 175 Workforce across various sectors by 2017-Bundi

5.12.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis would factor in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging. The situation of skill gap for the district for 2010-11 to 2016-17 based on projections is represented in the table below :

Workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	351026	347223	344877	353133	358637	356864	361827
Semiskilled	37407	36533	34873	34931	33967	32741	31902
Skilled	34063	35471	36019	37063	37485	38305	38829

Figure 176 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

This upcoming conducive industrial and service sector environment would make Bundi an important centre of the state industrialization keeping in mind the skilled requirement of the district. The skilled workforce requirement also shows comparatively very high requirement and just addressing the optimum utilization of current infrastructure and steady rate of inputs in education shall not resolving all the skill deficits of the district in all terms. Therefore, more dedicated skilling interventions shall be required. Looking at the current trends, the requirement of skilled workforce shall be almost equal to that of semi-skilled by keeping in mind the sectoral growth and the future of service industries. Some of the important aspects to be kept in mind would be the following:-

- a) The current situation was not conducive enough to support industrial growth in Bundi. **Investments** were not good because **power** and **water** were major problems of the district.
- b) The VTIs were fulfilling the needs of the industries, not completely though.
- c) Scope for self-employment and entrepreneurship in the district was found to be low. The government encouraged self-employment by providing subsidy on loan for self-employment & for establishing the small scale industries
- d) The extent of skilled labour migrating to nearby areas like Kota and effect of MGNREGA schemes have impacted the district's workforce.
- e) **Basmati Rice & Rice processing** and **Marbles and stone quarrying sector** may absorb maximum skilled manpower in the near future
- f) In terms of service sector few of the important segments engaging skilled labour shall be
 - Off Set printing and printing press
 - Hotel and Restaurants
 - Transportation
 - Catering Service
 - Laundry
 - Video & Photography
 - Motor winding & Pump Repairing
 - Motor Vehicle repairing (Two Wheeler & Four Wheeler etc.)
 - Mobile and Computer Repairing
 - Call Centre and Data processing
 - Automobile workshop
 - Cold Storage

5.12.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Bundi district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table). 68% of the youth covered were college educated and 32% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government. The average age of the respondents was 26 years with majority (70%) interviewed at ITC and 30% at ITI.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Figure 177 Youth Profile of sample in Bundi

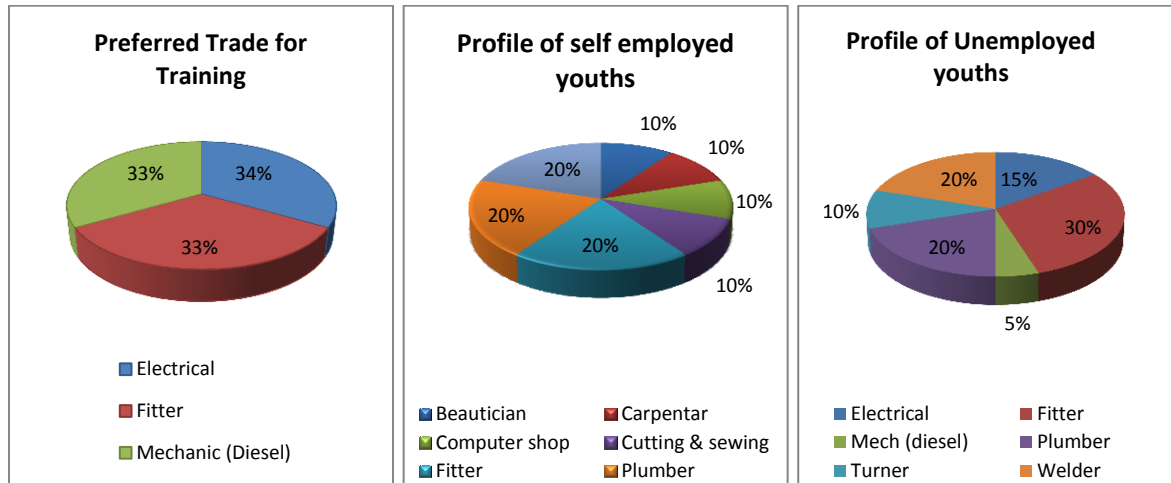


Figure 178 Profile of respondents (self-employed and unemployed) by trade in sample of Bundi

Electrician, fitter and mechanic courses were the most popular trades as per the perceived demand in the market. The choice of trades selected for self-employment were in synchrony with the market demand as plumbing(20%), welding(20%) and fitting(20%) emerged as leading choices among the youths. Unemployed youths majorly were from fitter trade followed by plumber and welder. The relevance of these courses in terms of placement remained low as stated earlier.

5.12.10 Youth's Perception

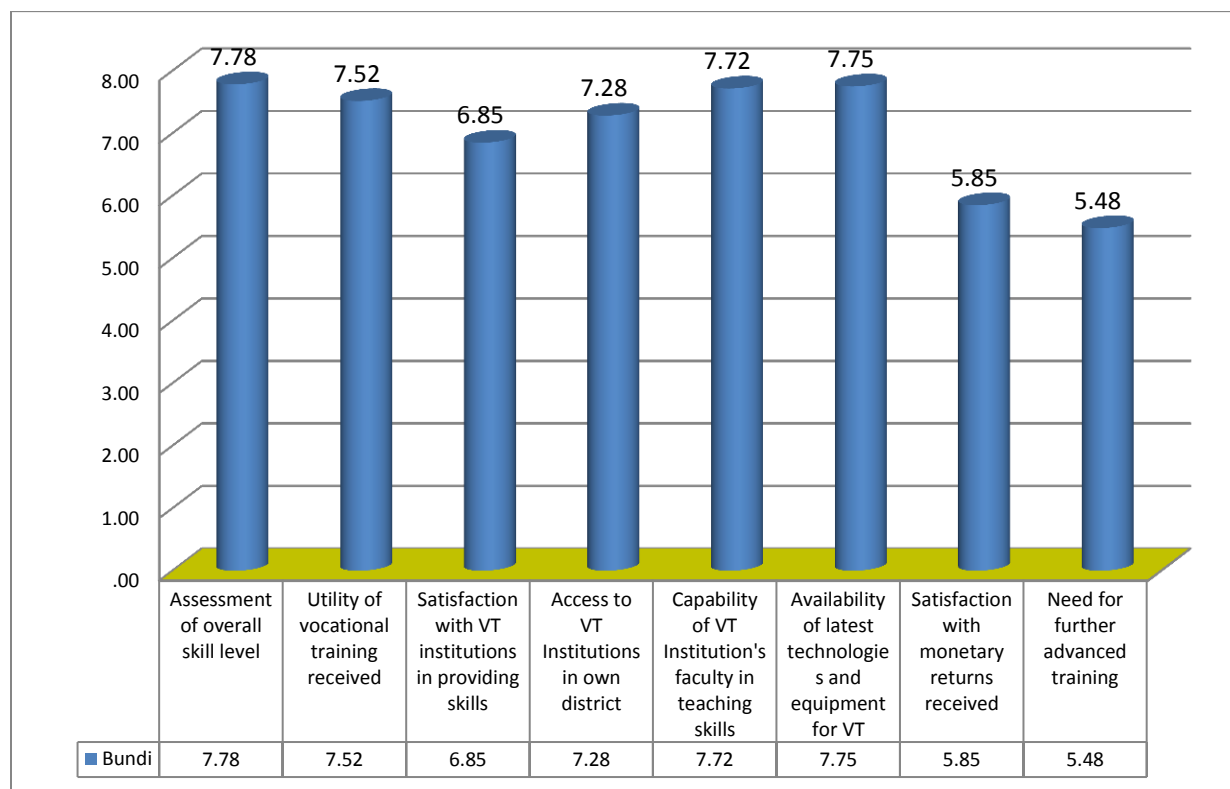


Figure 179 Bundi Youth's perception, need and aspirations –Sample Group

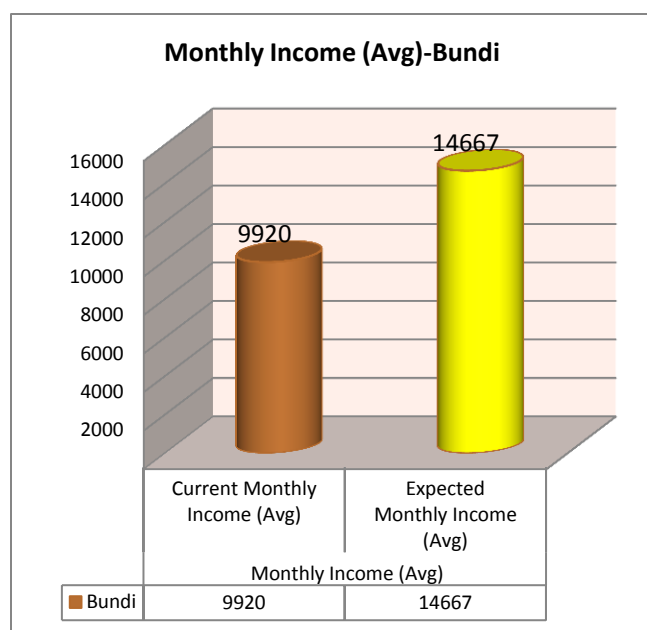


Figure 180 Income current and expected- sample group, Bundi

Satisfaction with current monetary returns and need for advanced training emerged as the two deterring factors identified by the respondents as the basic need to be addressed by the government and industry requirements. Better skilling initiatives of the district do relate with the capabilities of the faculty and the utility of the vocational training as an important success factor.

There were pronounced needs for further advanced training provided for up-skilling and basic skilling in computer applications. Expected monthly salaries required a change of at least Rs. 4500/month approximately as skilled workforce among 80% of the

sampled youth. 65% of the respondents did not receive any increment. The pay scale after skilling and few months of work experience enables for better financial negotiations among the youth. Youth

expected to join a job, either government (preferred) or private. Electricity boards, thermal power station, railways, etc. were the preferred sectors. Need for communicative English was realized for interviews and formal documentation only. Self-employment meant risk taking and less support from banks further accentuates the difficulties. Lack of awareness programs was evident in terms of commodity risk and competitive market scenario.

5.12.11 Optimization Plan

The optimization plan would be structured at three tier level of district, state and NSDC. The preliminary gap finding, projection and analysis would be presented at every district level which would in turn determine the action plan of the state as represented in the below diagram. The overall scenario of the state would finally give major leads to apex bodies like NSDC for formulation of state specific portfolios to suit the requirements and address the future needs of the state in the skilled workforce.

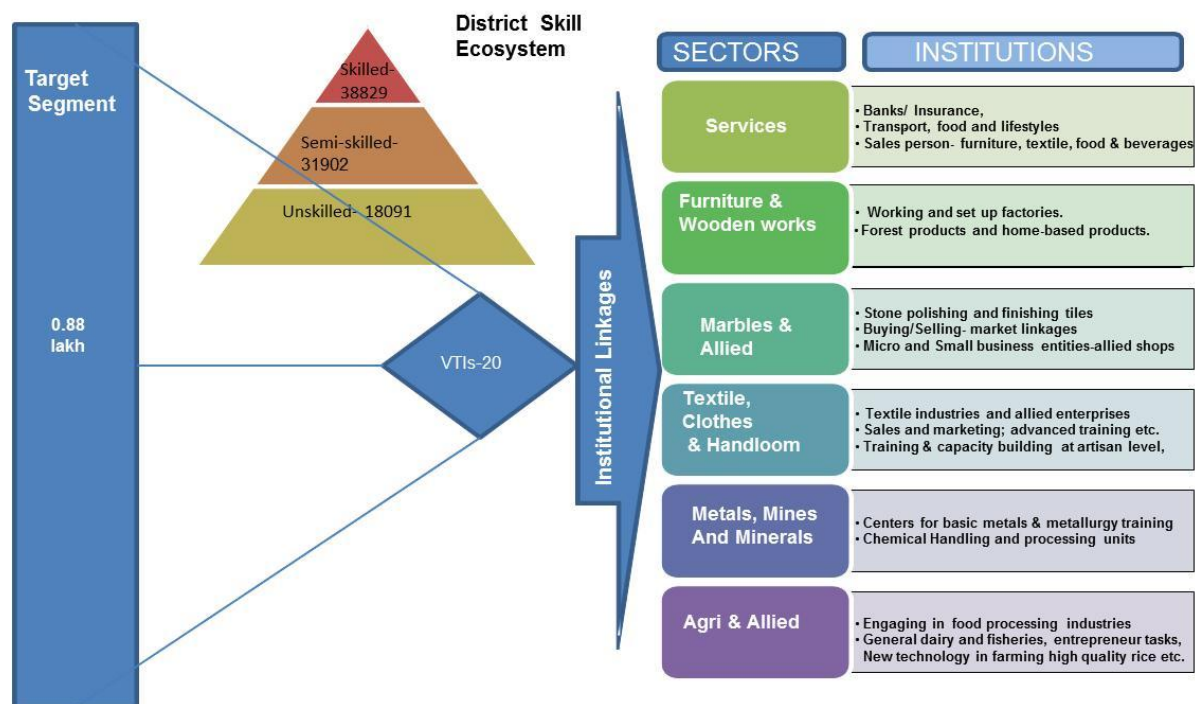
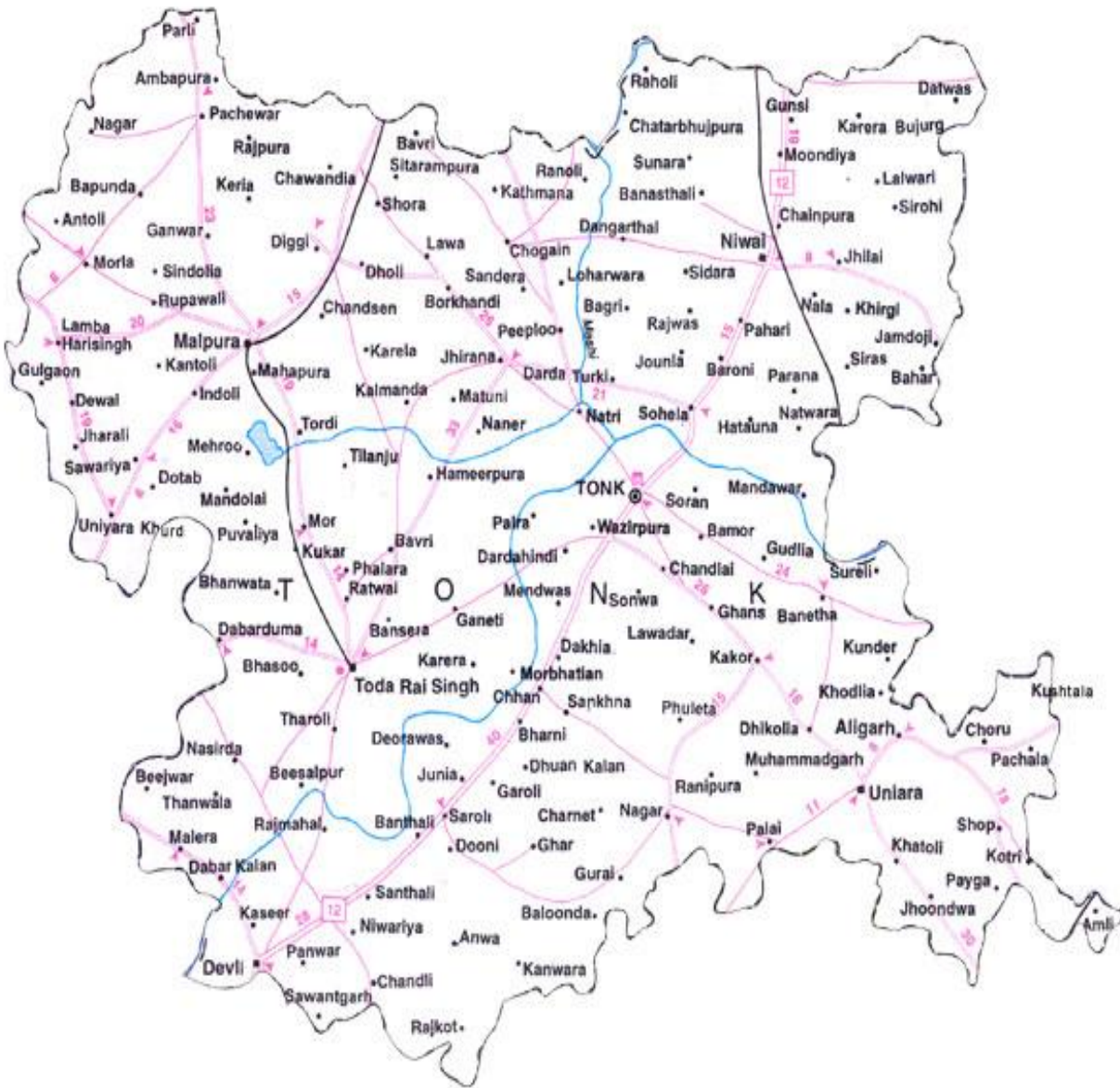


Figure 181 Optimization plan- Bundi Skill Eco-system 2017

The high priority sector which shall need maximum number of skilled workforce and less of semi-skilled workers shall be required in the resource based industries of the district. The demand based industries shall engage more of skilled resources in data processing, transport and logistics, cement, repair industries etc. The health and education sector would primarily engage the more highly skilled workforce. The training partners should target the skilling requirements of industries of the wooden and furnitures, services and textiles. Also, they should take into account the scope of enaging skilled workforce in marketing and direct employment in large scale industries in agro base and cement.

5.13 District Tonk

TONK DISTRICT



District Skill Workforce Face Sheet-2012								
District	Tonk			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	13	No. of Villages		1183	No. of Schools (elementary & sec.)		2431	
Basic Data								
Population (in '000s)	1421	Overall Literacy(in %)		62.46	Sex Ratio		949	
Decadal growth rate(in %)	17.33	Female Literacy(in %)		46.01	HDI Ranking (2008)		0.571 (24 th position)	
% Urban Population	20.89	Male Literacy(in %)		78.27	Per Capita Income (in Rs.)		16043	
Workers participation rate (2001)								
Workers participation rate (2001)	39.27	Share of primary sector (%)		47.80	Share of secondary & tertiary sector (%)		52.20	
No. of MSME/Industries	7867	Total Employment (in 000s)		26840	Total Investment (in lakhs)		7252	
No. of colleges (PG & Graduation)	24	Total graduates (In '00s)		9720	Total Post graduates (in '00s)		1334	
No.of VTIs(registered ITI+Poly+ITC)				2	Total trainees trained (in '00s)		120	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Semi-Skilled workforce	11683	13832	14106	13906	13164	13875	13320	0.58lakh
Skilled workforce	8795	9020	9278	9443	9643	9844	10713	

5.13.1 Demographic Profile:

Tonk District is a district of the state of Rajasthan in western India with its administrative headquarters as Tonk city. The district is bordered with Jaipur district on the north , Sawai Madhopur district on the east , Kota district on the southeast, Bundi district on the south, by Bhilwara district on the southwest and by Ajmer district on the west. Tonk was also the capital city of the princely state of British India from 1817 to 1947.

In 2006 the Ministry of Panchayati Raj named Tonk one of the country's 250 most backward districts (out of a total of 640). It is one of the twelve districts in Rajasthan currently receiving funds from the Backward Regions Grant Fund Programme (BRGF). In 2011, Tonk had population of 1,421,711 of which male and female were 7,29,390 and 692,321 respectively. Tonk district population constituted 2.07 percent of total state population. There was change of 17.33 percent in the population compared to population as per 2001.

S.no	Section	Unit	Quantity/
			Value
1	LOCATION		
	Latitude	degree	26°24' N
	Longitude	degree	76°16' E
2	AREA		
	Total geographical area	sq km	7194
3	ADMINISTRATION		
	Tehsil	number	7
	Villages	number	1183
4	Land Use Pattern		
	Total Area	Hectares	717958
	Total Irrigated area	Hectares	186198
5	Population (census 2011, provisional)		
	Total population	number	1421711
	Men	number	729390
	Women	number	692321
	SC (2001)	number	233084
	ST (2001)	number	145891
6	Literacy (except 0-6 age group)		
	Total literate	percent	62.46
	Men	percent	78.27
	Women	percent	46.01
8	Energy		
	Electrified Villages	number	984
9	Industries (DIC, 2009)		
	Registered MSME units	number	7867
	Employed persons	number	26840
10	Education		
	Pre Primary & Primary Schools	number	1077
	Upper Primary	number	944
	Secondary & Sr. Secondary	number	410
11	Higher Education / Others		
	Colleges	number	24
	I T I	number	04
	Polytechnic	number	0

Table 128 Tonk District Profile- a snapshot

It ranks as the 18th largest district of the state covering 2.10 % of the area of the state. With just 198 the density of population in the state ranks at 20th (Census, 2011- Provisional). It stands 24th on the Human Development Index (0.571) and 21st on the GDI (0.475). It was observed that though the district fares quiet low on education, and health index (28th and 25th respectively) which pulls the district on overall HDI ranking to the lower side of the state. As per provisional census 2011 data, Tonk stood at 949 in sex ratio

(compared to 2001 census figure of 934) which still is on the higher side of the state ratio of 926. The worker participation rate in Tonk was 43.96% (HDI, Rajasthan, 2008) with primary sector engaging close to 68.70% of the workforce and rest 31.30% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 16% (Urban- 31.02% & Rural- 47.38%). The average literacy rate of Tonk in 2011 was 62.46 compared to 51.97 of 2001. Gender wise, male and female literacy were 78.27 and 46.01 respectively in the provisional census data.

5.13.2 Education Infrastructure and Utilization

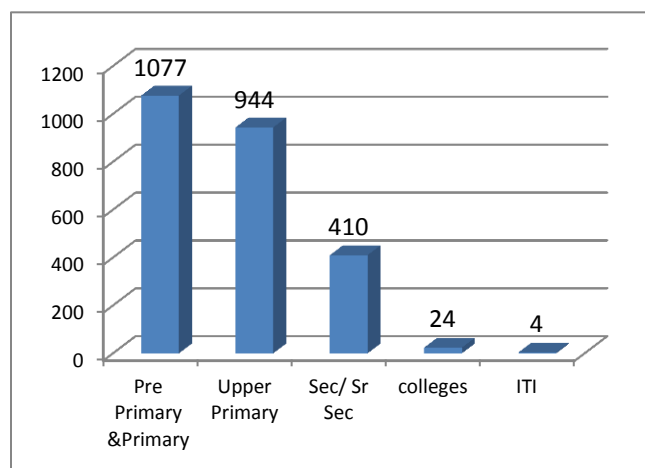
Tonk's status in literacy was marked lower than the state average with just 62.46 and female literacy marking the low of 46.01. One of the major challenges in education in the area, like in other parts of the state, has been universalization of education especially for the girl child and other socially deprived communities.

Education	Tonk	Rajasthan
Pre Primary & Primary	1077	49546
Upper Primary	944	38889
Sec/ Sr Sec	410	19135

Tonk has also been among the districts with high drop-out rates as per HDI, 2008. According to Census 2011

Table 129 Tonk vs. Rajasthan education status

provisional Tonk has a total of 2431 schools which as per DISE reports have low retention rates and high drop outs. The enrolment rate of students, especially girl children in schools of Tonk was quiet low which also contributes/reflects to the drop in literacy rates and current status of education.



A total of over 7250 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. A private management college caters for the business administration knowledge. There were just a total of four registered vocational training institutes in Tonk district. A total of just above 220 aspirants got enrolled in 2009-10 in the registered training institutes with an average of just 68/institute/year. As per the updated report available on Rajasthan Mission on Skill

Figure 182 Number of Schools, Colleges, ITI -2009-10, Tonk

and Livelihoods (RSLDC) a total of 02 partners (includes 01 government school and 01 NGO) implementing skilling initiatives with 05 approved programs (03 are completed). A detailed view of the vocational training of Tonk could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.13.3 VTI's demand across various trades in Tonk district

The existing scenario of VTIs in Tonk was certainly on the lower side considering the number of youths passing out and the existing vocational training institutes in the district. Private players have not yet

ventured in a big way eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields as follows:

- a) **Computer Based Accountancy and computer operators:** With number of small scale industries coming up in the region the educated youth having the basic education levels could be engaged in computer courses for accountancy (VAT & TALLY) and data entry operators for industries and government development projects.
- b) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is cement, banks/insurance or agro based products firms which are growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field
- c) **Agriculture & Allied services:** The scope in dairy, veterinary staff, cane products, livestock etc. would engage good number of youths in rural context. Apart from these, artisans for carpet making, embroidery, art works, leather, jewellery making would engage a substantial workforce who needs to be skilled.
- d) **Driving, Repair and Services:** With the increase in electric goods, electricians, mechanics and drivers in workshops and formal drivers would be the need. Good number of services would require hands skilled in transport and logistics, courier services and fashion designing/ ladies beauticians etc.

The government VTIs interviewed in the survey was zero and ten were from the private. The courses which were offered by these VTIs were predominantly self-employment engineering based largely to cater the local market needs. The details of the courses offered in the VTIs of Tonk are represented as follows:

Pvt. VTI Trades
Electrical
Fitter
Mechanic (Diesel)
Instrument Mechanic
Mechanical

Table 130 Tonk district's (sample study) courses offered

The private VTIs sampled for the sample study offer 05 different trades in for training. Electrical trade was the most popular trade in VTIs as it had the highest batch strength. The difference between actual trainees and approved trainees, in VTI, was varying from 0 to 107 in number, highest difference being

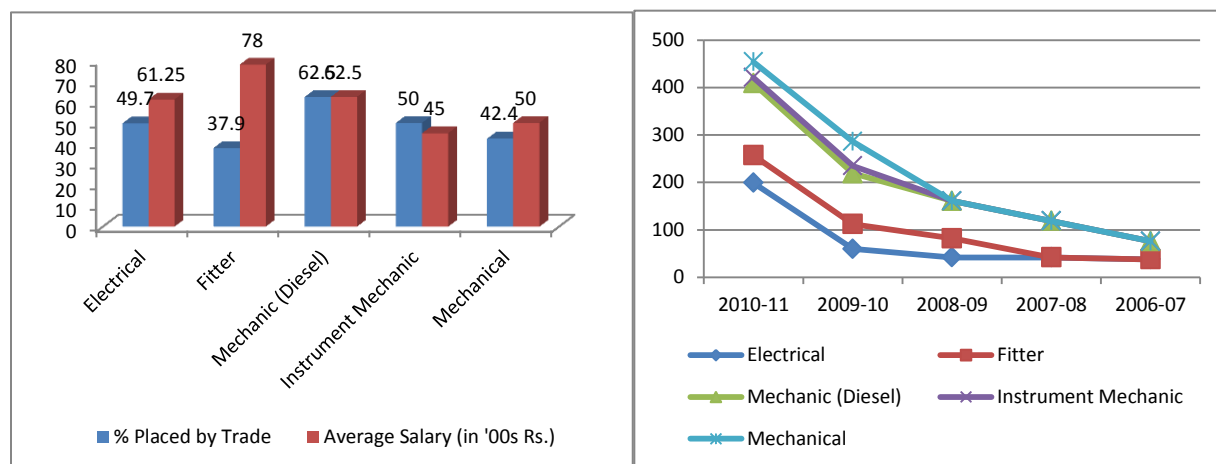


Figure 183 - Tonk district's (sample study) courses placement percentage and average salary; enrolment status in the sampled VTIs

registered in case of electrical course. So, the case of high preference was more infused by the running VTIs as the seats still were unutilized in electrical trade. Instrument mechanic and mechanical trade had no difference. An overview of placement records by trade in the VTIs indicates poor prospects in almost all of the trades as the highest placement percentage was for the trade mechanic (diesel) with 62.5% and the lowest was for fitter with 37.9% only. Around 52% of the total batch strength across all the trades got placed through their institutes. In terms of average salary/trainee, the highest paid trade was Fitter (Rs.7,800/month) and the lowest was for the trade instrument mechanic with Rs 4500/month. Placements of trainees were more because of the proactive approach to the industry by the VTIs trainees and a major strength got placed through campus interviews. No role could be seen being played by employment exchange.

There has been steady increase for all the courses offered in terms of students enrolment. The courses like mechanical and instrument mechanic were more recent additions by the VTIs. These VTIs were adequately staffed and had equipped with the upgraded facilities of training.

5.13.4 Industry Mapping

Tonk's significant population has been engaged in non-farm activities. Construction and mining & manufacturing have been the major propellers. Share of income from primary sector has been due to the livestock sector. Apart from agriculture, sub sectors like dairy, wool and fisheries have contributed in major terms.

Tonk has six industrial areas marked by RIICO. Tonk district endowed with a number of non-metallic of which garnet, Silica sand, quartz and soap are found in abundance. Besides these minerals, felspar, mica and corundum are also found but in small quantities. In addition to these major minerals, the minor minerals viz. bricks clay masonry stone, patti-Katla etc. are also mined in Tonk district.

MSME in Tonk

According to D.I.C data (March, 2012), there were around **10291 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.15063.31 lakhs** providing employment to **41770 persons**. Also Tonk has **06** large and medium industries employing over **1700** persons with the production value of **Rs 195.66 crores**.

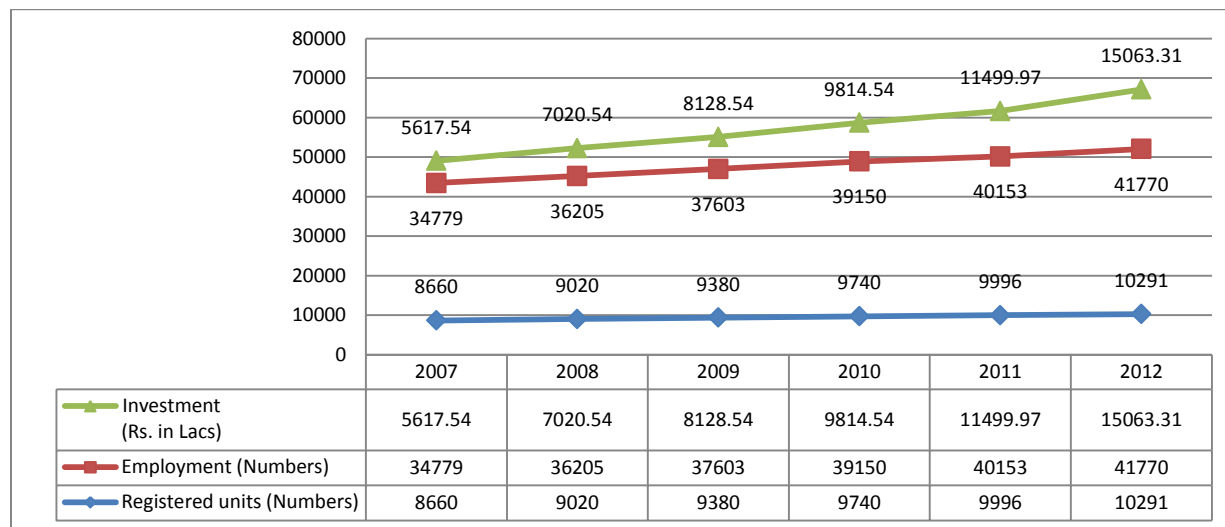


Figure 184 MSME trend analysis of the district Tonk

There has been a constant increasing trend in the investment of industries, units post 2007 and thus, the number of employees as well. Apart from the industries, a number of families depend on the following trades and are generally marked under the Khadi & village industries. These provide subsidiary employment and supplementary income to the villagers.

Slate stone is available in ample quantity in the district. Based on Slate stone some other industries like quartz grinding PCC Poles, RCC Pipes are coming up. Tomato ketchup, woolen carpet, readymade garments, animal feeds, masala, engineering work, tire retreading, washing shop industries were developing. Steel ball bearing, readymade garments, carpets were the major exports from the district. The major clusters of the district were:

- Namda Cluster, Tonk
- Edible Oil Cluster, Newai
- Edible Oil Cluster, Ind. Area, Tonk
- Slate Stone Cluster, Deoli
- Stone murtikala , Todaraisingh

As per DIC Tonk, the upcoming potential for service industries shall be in stone dressing, food processing, auto repair and maintenance, printing and press.

5.13.5 Sector wise mapping of industries in across Tonk

Tonk is considered to be industrially backward district. District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large

scale industries) and would also represent any new sector other than the listed sectors existing in Tonk. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections** like **high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	862	3909.56	3097
Forest Based	1338	816.09	4665
Animal Husbandry	2000	817.2	4240
Auto & Auto Components			
Chemical & chemical products	59	189.40	315
Construction Material & Building Hardware	98	190.81	698
Food Processing			
Furniture & Furnishing	1215	354.19	4298
Leather & leather goods	1966	654.80	4141
Textile & Handloom	1260	1409.03	6502
Unorganized Sector (services & repairing included)	1142	2840.01	6105
Building Construction & Real Estates			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging			
Mines, Metals & Minerals	1277	2162.45	4641
Machinery, Electricals & Manufacturing	742	2038.39	2204
High	Units>200, investment>1000,emp>1000		
Medium	Units>100, investment>200, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 131 Sector wise mapping of industries in Nagaur as per DIC report, 2007

Sectors covered under sample survey
Agriculture & Allied
Food Processing & Products
Leather & Leather Goods
Textile & Handloom

Table 132 Sectors covered under sample survey

There have been many SSI coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of agro based-forest based products, mineral based, cloth based, engineering based and service sectors. A substantially good number of service providers form the backbone of the district and are engaged in various industries, households etc. as daily wagers.

In order to understand the trend in the existing market and industrial set up stratified sample of 13 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in the Tonk district of Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table above. A total of 13 industries were sampled for the survey to represent 04 major sectors that are prominent in the district. Availability of skilled, semi-skilled and unskilled workers according to their numbers in the sampled industries (segregated under specific sectors) at the time of the establishment of the industry, their present strength and their required strength as projected by the industries was evaluated (shall be discussed in sections ahead).

5.13.6 Workforce Demand and Supply

The major workforce participation observed in Tonk district over a period of two decades has been majorly as cultivators/ agricultural laborers and has had a decline by 8% over the period. There has been declining trend of workforce share in primary sector from 76.20% to 68.70% from 1991-2001. Therefore, the increase in the share of secondary and tertiary has been quiet significant for the same period keeping the context of the district in mind. In 2001, Tonk had 1,37,443 main workers other than cultivators and agricultural labourers. Majority of them were engaged in crafts and related trades (27.36%) followed by service workers (17.57%), elementary occupations (mining, manufacturing and transport- 14.91%). The demand for the skilled craftsmen and service providers was seemingly high keeping the secondary and tertiary sectors demands. In industrial outfits the need of skilled and semi-skilled workforce could be seen across the sectors as per the primary survey results as well as shown the figure below:-

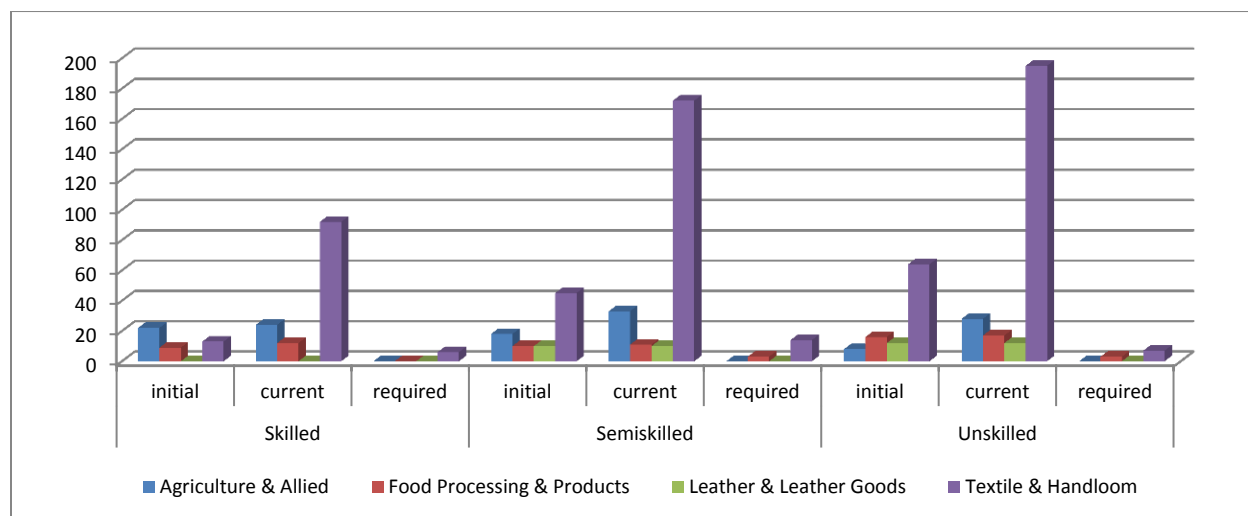
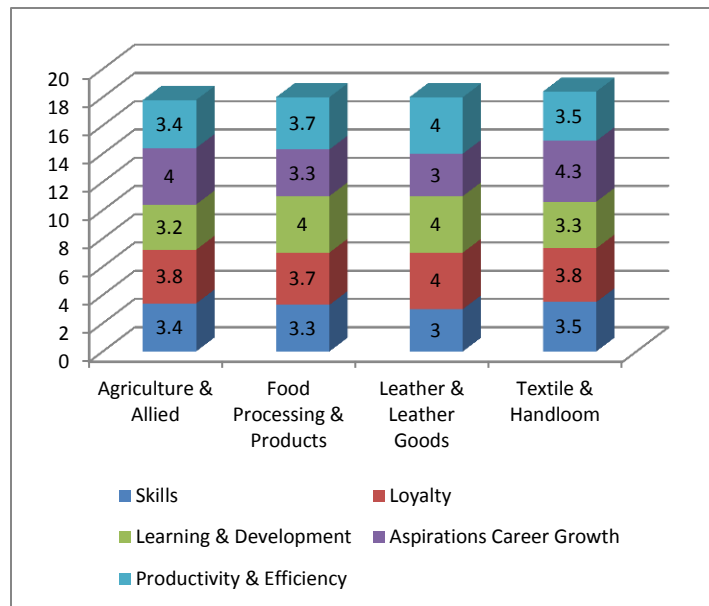


Figure 185 Workforce engagement in the industries across sectors categorized at various stages of the industry life cycle (Sample survey- Tonk)

While leather & leather goods sector industries could not provide details of their skilled worker strengths, in three of the other sectors (Agriculture & Allied, Food Processing & Products and Textile), a substantial increase in worker in-take was reported by the industries. Though these sectors have expanded well in terms of worker absorption but the future requirements of skilled workers was

marginal. As reported by industries semiskilled workforce of textile & handloom sector saw steep increase in workers strength over the years whereas other sector also saw a substantial increase in current in-take of semiskilled workers. The unskilled worker base and future requirement for unskilled workers was very much in line with skilled and semiskilled workers category.



In terms of industries' requirements and the employers' expectations from its workforce, market trends the primary survey productivity and efficiency and learning and development of the employees were the two leading parameters as per the ranking (scale of 5). The leather sector was more demanding in terms of expectations from the workers considering all the parameters of a skilled/ semi-skilled workforce. Other sectors also rated their expectations above average in most of the traits showcasing the interest to engage more professional workforce.

Figure 186 Employers demands in terms of expectations from workers-Tonk

5.13.7 Projected Workforce Demand

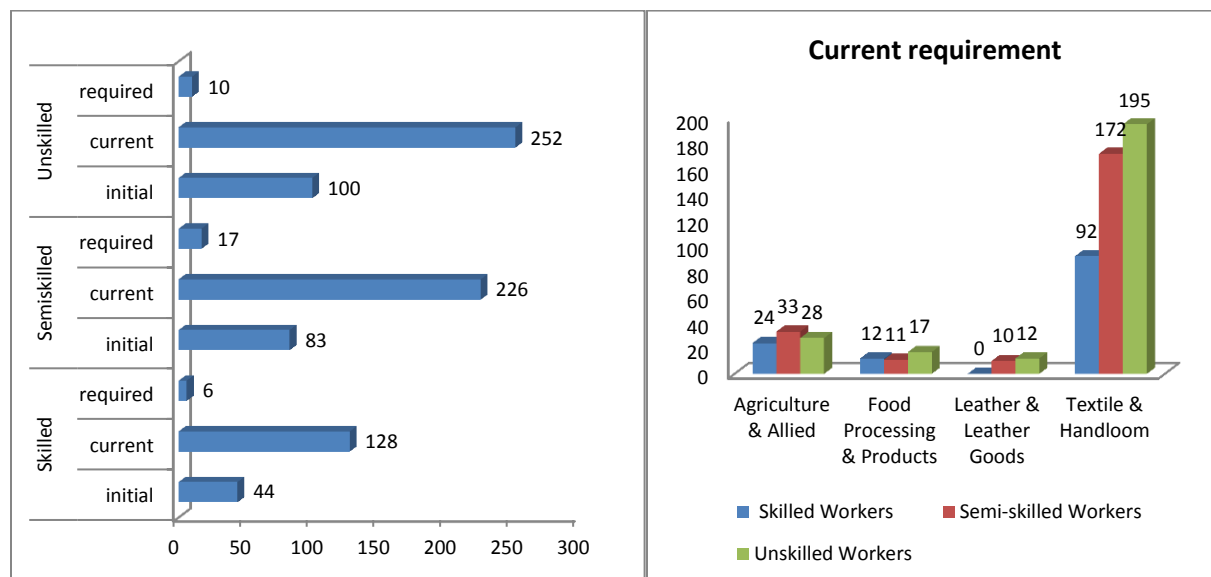


Figure 187 Status of workforce in terms of initial, current and required strength & sectors across sample industries of Tonk

As reported by industries for semiskilled workforce, across all the industries there has been increased engagement of the workers in all the categories of skilled, semi-skilled and unskilled workers. The current strength over the years has atleast doubled across all the segments of skilled to unskilled and the future requirement presently showcases a marginal increase (only to fulfil the current gap). Therefore, plans of expansion could not be high in terms of worker absorption. In current scenario, industries employ 21% of skilled workforce, 37% of semi-skilled workforce and 42% on unskilled workforce, as per the data from the primary survey. This varies from sector to sector as shown in the figure above.

A clear distinction could be observed in the preference of only semi-skilled workers for the contract and daily wage worker category as the industries had increased the absorption of semi-skilled by close to 76.8% and the incremental requirement of close to 60%. The clear observation made was in the engagement of workers at the time industry establishment which had huge disparity in skilled and unskilled workforce. Earlier industries were more dependent on semi-skilled workforce for their day to day operation. Slowly the shift was to the skilled and the reduction of unskilled workers as well. It continues in the present context as well for the district.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	353255	367551	379939	377178	378155	388278	389872	
SemiSkilled	28798	29963	30973	30748	30828	31653	31783	
Skilled	1920	1998	2065	2050	2055	2110	2119	
Total demand	383973	399512	412977	409976	411038	422041	423774	67%
Industry Sector								
Unskilled	34100	36072	35779	36963	37406	38122	38530	
SemiSkilled	15739	16649	16513	17060	17264	17595	17783	
Skilled	2623	2775	2752	2843	2877	2932	2964	
Total demand	52462	55496	55045	56866	57547	58649	59277	12%
Services Sector								
Unskilled	13420	14225	14706	15176	15440	15995	16324	
SemiSkilled	31313	33193	34314	35410	36027	37322	38090	
Skilled	44733	47418	49020	50586	51466	53317	54414	
Total demand	89465	94836	98041	101172	102933	106635	108829	21%
All Sectors								
Unskilled	400775	417849	430424	429316	431000	442395	444726	
SemiSkilled	75849	79805	81801	83218	84118	86570	87656	
Skilled	49276	52190	53837	55479	56399	58360	59497	
Total Demand	525900	549844	566063	568013	571518	587325	591880	100%

Figure 188 Projected labor percentage of workforce demand requirement till 2017 across sectors-Tonk

Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Agriculture and Allied			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Figure 189 Workforce across various sectors by 2017- Tonk

5.13.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	8349	10406	22639	20801	21968	33069	34803
Semiskilled	11683	13832	14106	13906	13164	13875	13320
Skilled	8795	9020	9278	9443	9643	9844	10713

Figure 190 Representation of projected Skilled/ Semi-skilled & Unskilled workforce gap 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.5 lakh. Keeping in mind the growth rate of the district and the workforce participation from unskilled masses; the significance would be to target training to atleast 25,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced in future but more would depend upon the upcoming service industries to absorb the semi-skilled workforce.

Case Study: Situational Analysis of Industries and Association

- Situation is not conducive enough to support industrial growth in Tonk. Investments are not good here since there are no transportation facilities here and no any railway stations also. Land for establishment of industries is not a problem. Supply of water is sufficient but supply of power is not. Availability of skilled man power is a major problem.
- The VTIs train to fulfil the demand of labour for the industries but most of the trained person prefers to get the government services that creates the gap between the demand and supply
- As of now, the situation looks positive for both private as well as the government sectors, with sufficient manpower available to supply the industry needs.

5.13.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Tonk district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 71.7% of the youth covered were college educated and 28.3% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 133 Youth Profile of sample in Tonk

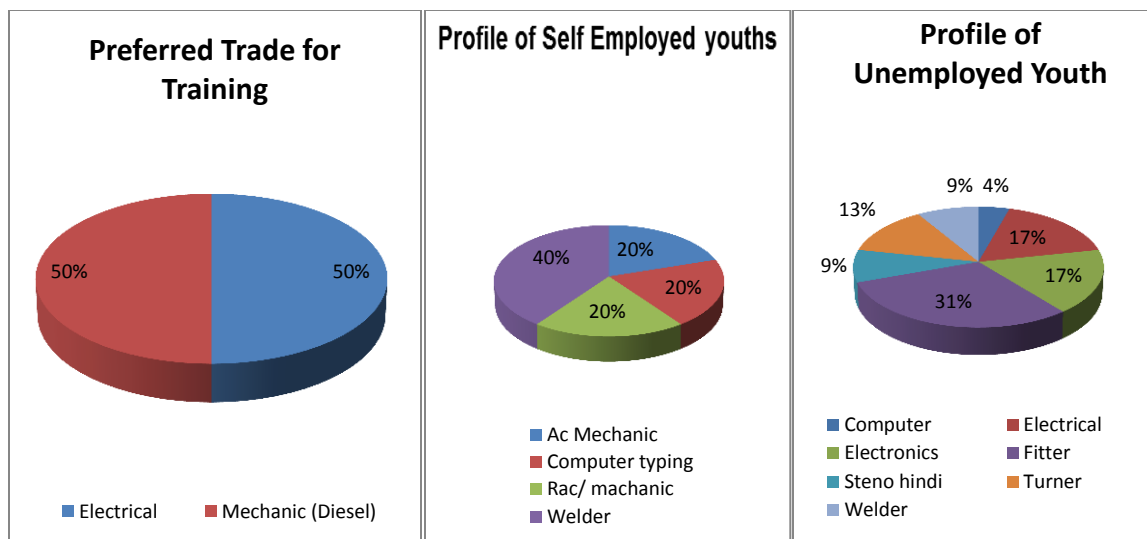


Figure 191 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Tonk

Inclination towards electrical course was found high as around 50% of the youth reported that they had preferred electrical trade during his/her training at VTI. The reason for the same seems to be the demand for this course in the market. Similarly, mechanic (diesel) was another of the most preferred trade. The trade profile of self-employed youth basically consisted of welder (40%) and other trades like mechanic, computer typing (20% each). The unemployed group had majorly been trained as fitter followed by electrical suggesting that the fitter course was either not as per industry requirements or the overall demand lacked for this trade (could be floating demands).

5.13.10 Youth's Perception

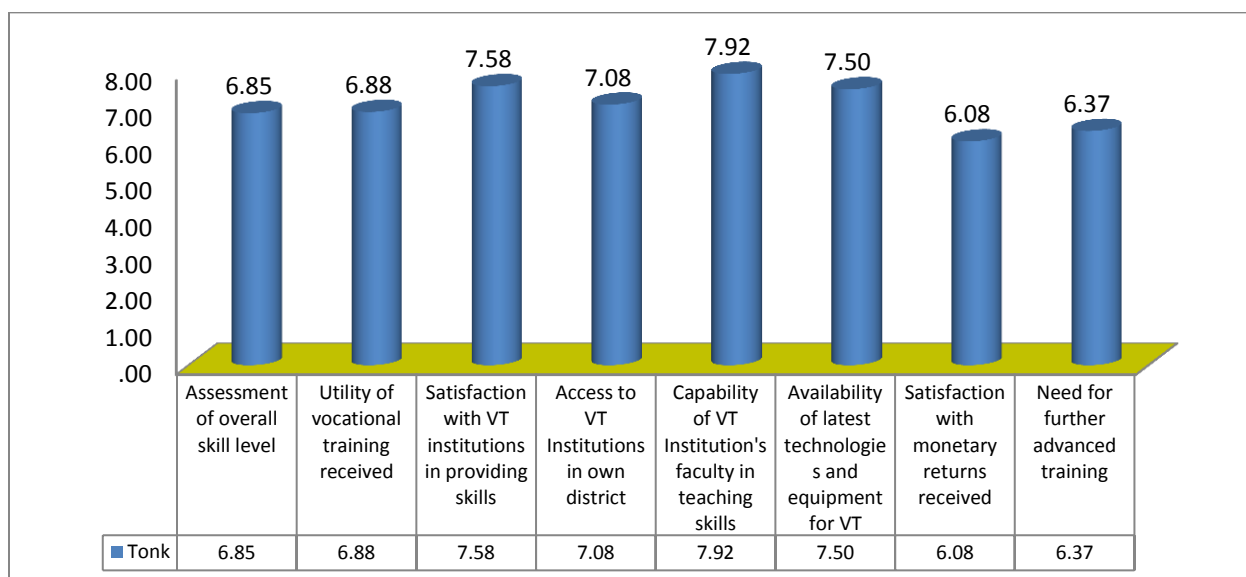


Figure 192 Tonk Youth's perception, need and aspirations –Sample Group

The capabilities of VTIs' faculties were the most rated in favour of the skilling capabilities of the VTIs (7.9 on a scale of 10) and the least rated was the satisfaction with the monetary returns post training. (6.08 on a scale of 10). The youths considered training to be an important facet of their life and career

and appreciated the VTI efforts. Though the average salary was above Rs.6000/month (for the working population in the sample of youths), all wished to earn close to Rs.15000/month with advanced skill sets and working experience. More than 70% of the youth were not satisfied with the initial salary offered post training.

5.13.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.5 lakh of skilled, semi-skilled and unskilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at Tonk district level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

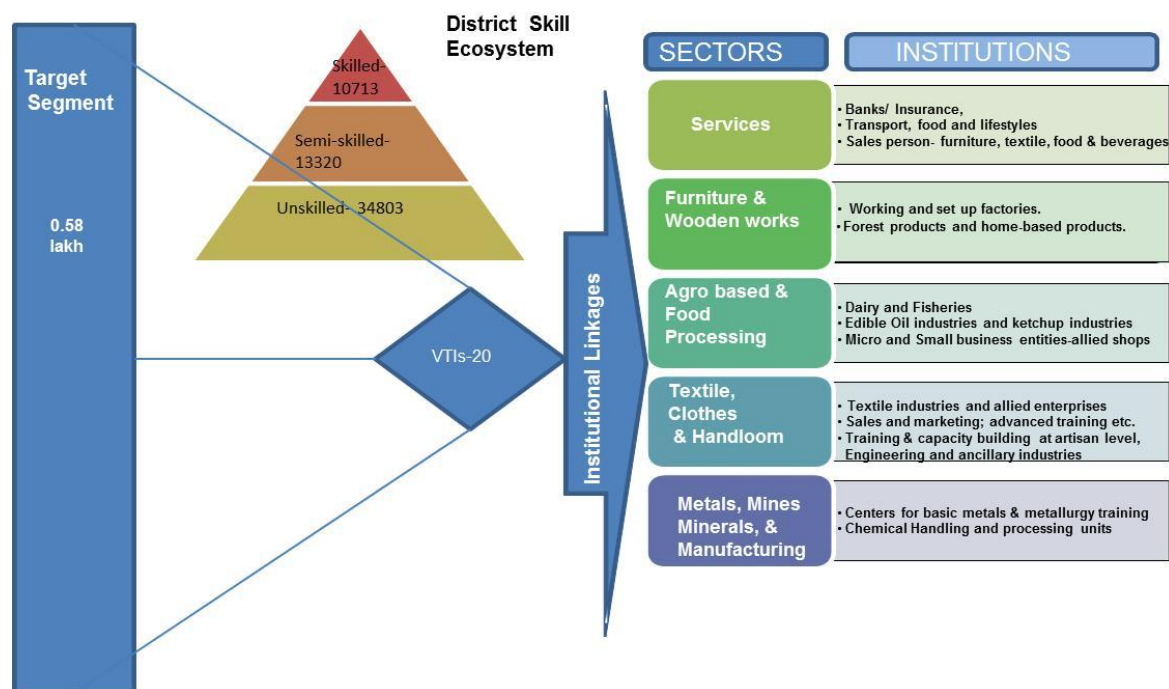
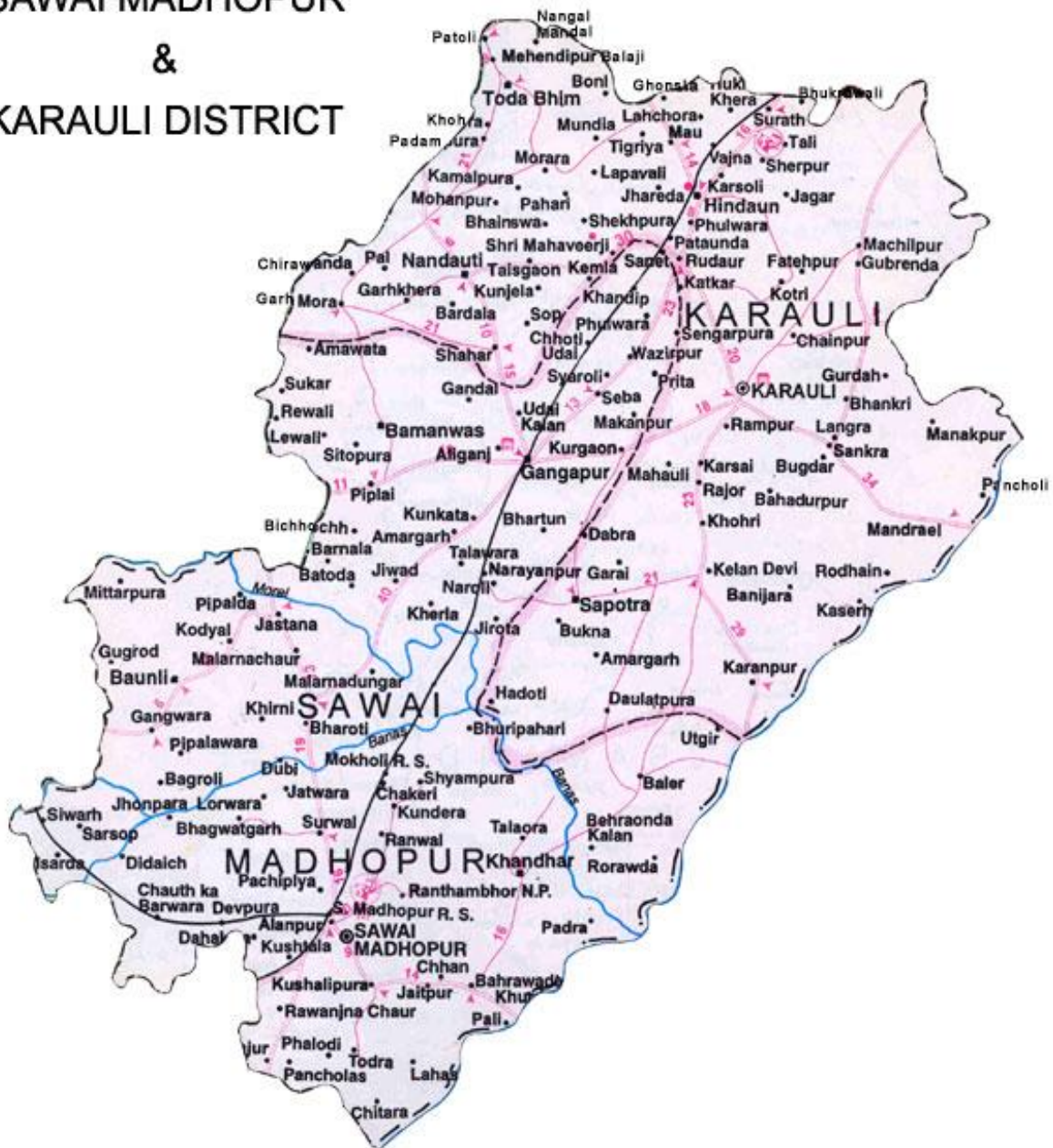


Figure 193 Optimization plan- Skill Development Eco System-Tonk

The district should look at training close to 23,000 youths by 2017 to address the needs of skilled and semi-skilled workforce across the major sectors especially to provide skilled workforce to the service sector. Also keeping in mind the close proximity to Jaipur, the future need of positive migration by skilled workforce could be a higher probability.

5.14 District Sawai Madhopur

SAWAI MADHOPUR & KARAU LI DISTRICT



District Skill Workforce Face Sheet-2012								
District	Sawai Madhopur			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	10	No. of Villages		814	No. of Schools (elementary & sec.)		2160	
Basic Data								
Population (in '000s)	1338	Overall Literacy(in %)		66.19	Sex Ratio		894	
Decadal growth rate(in %)	19.79	Female Literacy(in %)		47.80	HDI Ranking (2008)		0.561 (26 th position)	
% Urban Population	19.04	Male Literacy(in %)		82.72	Per Capita Income (in Rs.)		15337	
Workers participation rate (2001)								
Workers participation rate (2001)	42.00	Share of primary sector (%)		72.30	Share of secondary & tertiary sector (%)		27.70	
No. of MSME/Industries	356	Total Employment (in 000s)		1122	Total Investment (in lakhs)		1033	
No. of colleges (PG & Graduation)	16	Total graduates (In '00s)		11116	Total Post graduates (in '00s)		609	
No.of VTIs(registered ITI+Poly+ITC)				3	Total trainees trained (in '00s)		512	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Semi-skilled workforce	17022	17605	18155	18725	19223	19838	20426	0.40 lakhs
Skilled workforce	2435	2759	3038	3332	3687	3907	4295	

5.14.1 Demographic Profile:

Sawai Madhopur district is located in the South-eastern region of Rajasthan bound by Dausa district in the north, Kota and Bundi districts in the south, Bharatpur and Dhaulpur district in the north east and by Tonk & Jaipur in west and north-west respectively. Sawai Madhopur is a city and a municipality in Sawai Madhopur District in the Indian state of Rajasthan. It is the administrative headquarters of Sawai Madhopur District. The district has a dry climate except during the short rainy season. The normal annual rainfall in the district is 70.92 cms. The mean daily maximum temperature in May is 41 degree Celsius and the mean daily minimum temperature is 8 degree Celsius in January. The district is presently composed of four sub-divisions viz., Sawai Madhopur, Gangapur, Hindaun and Karauli and ten Panchayat Samities/Tehsils. There are also five sub-tehsils.

The district covers an area of 5043 km² 1.31% of the total area of the state. It has a total population of 13.38 lakh which was 1.95% of the state population. The decreasing trend of decadal rate in the population shows signs of population stability. (less by 6% from '91-01 census). It was placed low on HDI at 26th rank (HDI, 2008 updated). It stands 19th in education index, 24th in health and 20th on the income index of the Human Development Index. It ranks 22nd on the GDI (0.503). It was observed that the district fares quiet low on education, health and income index which pulls the district on overall HDI ranking to the lower side of the state. As per provisional census 2011 data, the sex ratio of the district remains at 894 (compared to 2001 census figure of 889) which still is on the lower side of the state ratio of 926.

S.no	Section	Unit	Quantity/
			Value
1	LOCATION		
	Latitude	degree min	26°48' N
	Longitude	degree min	74°30' E
2	AREA		
	Total geographical area	sq km	5043
3	ADMINISTRATION		
	Tehsil	number	7
	Villages	number	814
4	Land Use Pattern		
	Total Area	Hectares	497947
	Total Irrigated area	Hectares	196486
5	Population (census 2011, provisional)		
	Total population	number	1338114
	Men	number	706558
	Women	number	631556
	SC (2001)	number	223224
	ST (2001)	number	241078
6	Literacy (except 0-6 age group)		
	Total literate	percent	66.19
	Men	percent	82.72
	Women	percent	47.80
8	Energy		
	Electrified Villages	number	711
9	Industries (DIC, 2009)		
	Registered MSME units	number	356
	Employed persons	number	1122
10	Education		
	Pre Primary & Primary Schools	number	1044
	Upper Primary	number	706
	Secondary & Sr. Secondary	number	410
11	Higher Education / Others		
	Colleges	number	16
	I T I	number	02
	Polytechnic	number	01

Table 134 District profile –a Snapshot- Sawai Madhopur

The worker participation rate was 42.00% (HDI, Rajasthan, 2008) with primary sector engaging close to 72.30% of the workforce and rest 27.7% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 19% (Urban- 26% & Rural- 45%). The literacy rate of the district in 2011 is 66.19% which is lower than the state figure of 67.06%. According to Census 2011 provisional data, the male literacy figure stands at 82.72% and female literacy was at a low of 47.8%, which is on the lower side of the female state literacy rate of 52. 66%.

5.14.2 Education Infrastructure and Utilization

Sawai Madhopur’s status in literacy has seen marked changes in the number of colleges which has grown to 16 from 05 over a period of three years. The primary and secondary education report still shows a dismal performance in retention rate, enrolment of girl children, and drop out ratio.

Sawai Madhopur faces real time constraints in terms of basic schooling infrastructure, teachers and quality education (rated as one of the districts with high dropout rates). Sawai Madhopur has also been among the districts with high one room schools and with more than 30% of schools with single teacher (HDI, 2008). According to Census 2011 provisional Sawai Madhopur has a total of 2160 schools from pre-primary to senior secondary levels with DISE reports stating that close to 53% as the retention rate.

Education	Sawai Madhopur	Rajasthan
Pre Primary & Primary	1044	49546
Upper Primary	706	38889
Sec/ Sr Sec	410	19135

Table 135 Sawai Madhopur vs. Rajasthan primary education scenario

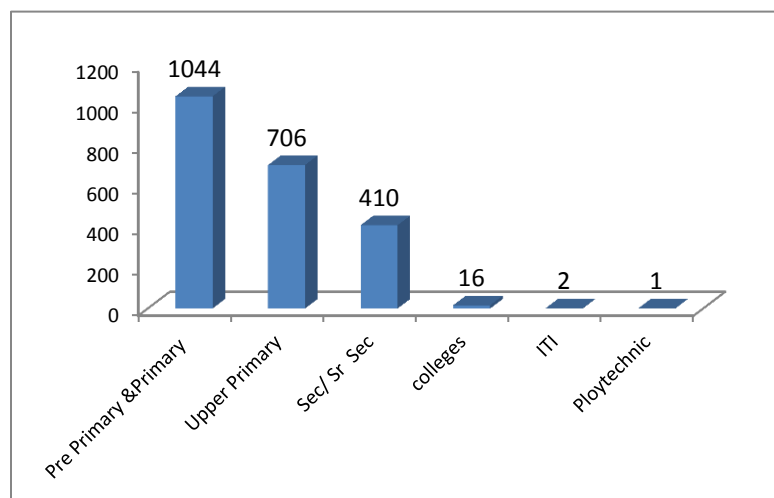


Figure 194 Number of Schools, Colleges, ITI & Polytechnic, 2009-10- Sawai Madhopur

A total of over 8400 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There were just a total of two registered vocational training institutes in Sawai Madhopur district (02 ITI) and one polytechnic. A total of just above 500 aspirants got enrolled in 2009-10 in the registered training institutes. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 02 partners (includes 01 KVK and 01 ITC) implementing skilling

initiatives with 03 approved programs (all completed). A detailed view of the vocational training of Sawai Madhopur could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.14.3 VTI's demand across various trades in Sawai Madhopur district

The existing scenario of VTIs in Sawai Madhopur was certainly on the lower side considering the number of youths passing out and the existing vocational training institutes in the district. Private organizations working in this sphere have a vast scope for initiating skilled interventions of the district and catering the needs for skilling youths of the district. The primary survey conducted in the district to understand the present scenario of skilled intervention of the district. The government VTIs interviewed in the survey were two and eight were from the private. The courses which were offered by the government VTIs were predominantly engineering based or to cater the local market needs. In private VTIs the courses taken up were almost same. The details of the courses offered in the VTIs of Sawai Madhopur are represented as follows:

Government VTI Trades	Pvt. VTI Trades
Electrical	Electrical
Electronics	Electronics
Fitter	Fitter
Steno Hindi	Mechanic (Diesel)
Turner	Steno Hindi
Mechanic (Diesel)	

Table 136 Courses offered in government and private VTIs (sample)

Electrical trade was most preferred trade in Sawai Madhopur as maximum number of seats in both Government and Private VTIs were from this trade. Even, private VTIs offered more than two times of seats as compare to Government VTIs for this trade.

The difference between actual trainees and approved trainees, in government VTI, was varying from 1 to 21 as these seats went unutilized. Steno Hindi trade had the max difference as the preference for this course was low in government VTI whereas the difference in Turner trade was least. In case of Private VTIs, the difference was varying from 2 to 47 seats. Steno Hindi trade had least difference whereas Electrical trade had max difference of 47 seats.

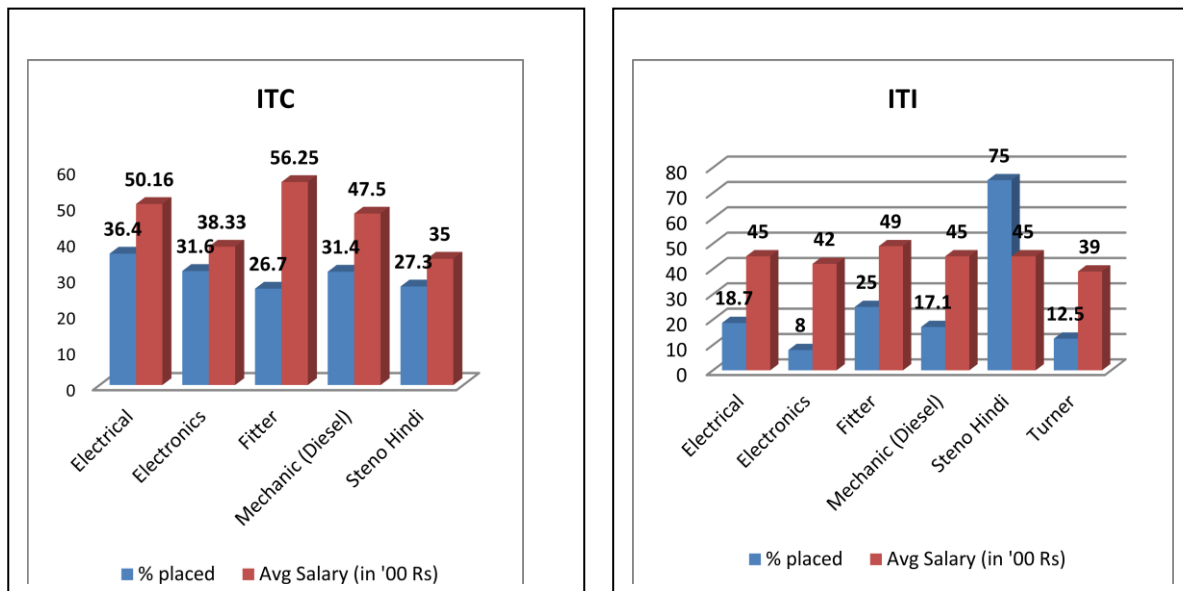


Figure 195 Sawai Madhopur district's (sample study) courses offered placements in VTIs and average (avg) salary offered

An overview of placement records by trade in the government and private VTIs indicate poor prospects in all most all of the trades. It may be due to the fact that trainees after completing the course seek self-employment and also because of the fact that less industrial participation was informed. The highest paid average salary/trainee was for fitter trade both form government (Rs 4900/month) and private (Rs 5625/month) VTIs. While placements of trainees from the government VTIs was more through a proactive approach to the industry by the VTIs and the trainees themselves whereas the private VTIs more depend on campus interviews and also place their student through proactive approach to the industry. Though some of the trainee from government and private VTIs got their placement through employment exchange but it seems that employment exchange were not playing a major role in placements.

The trends across all the trades show an increasing demand from the data on number of trainees by trade over time in the government VTIs as well as private VTIs. Trades like electrical and electronics, fitter have increased the strength of trainees over the years by over four times since inception of the particular trade. Data from the survey also indicate that private VTIs were established before the government VTIs.

In terms of infrastructure support commutation support was made available all the VTIs surveyed. None of them had hostel facilities. Staffing was an issue in the administrative aspects but was up to the mark from academics and support point for all the VTIs.

5.14.4 Industry Mapping

Sawai Madhopur has a rich assemblage of minerals. The district is enrolled with a variety of mineral resources both metallic and nonmetallic. The metallic minerals include lead, copper and iron ore whereas the nonmetallic minerals include limestone, clays, silica sand and slate. Among other mineral found in the district are laterite, red-oxide, bentonite, barite, manganese sand and bricks clay etc. There existed three industrial areas for the district with main existing industries as:

- Oil Mill/Expeller (Mustard Oil)
- Cotton Cloth (Raji)
- Bidi Making

It has two clusters, leather and marble, making leather footwear and marble carving as the major tasks performed. The leather cluster has constraints of supply of raw materials and marketing (forward). Technological and process improvements are the thrust areas for the leather cluster. In the marble cluster, the artisans mainly engaged in traditional murtikala and temple architecture. The need to use modern machines and the training to use them would be the major thrust areas.

MSME in Sawai Madhopur

According to D.I.C data (March, 2012), there were around **8272 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.6341.66 lakhs** providing employment to **24794 persons**.

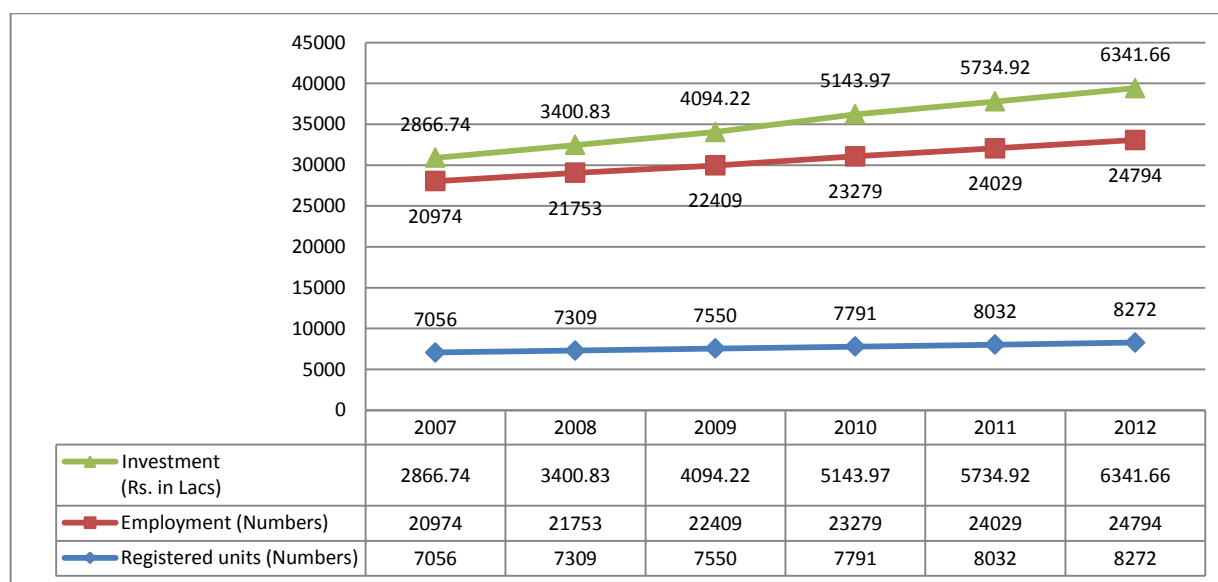


Figure 196 MSME trend analysis of the district Sawai Madhopur

There has been a constant increasing trend in the investment of industries and units; thus, the number of employment as well. The main existing industries are leather based, agri based and wooden based with large existence of services and repair.

5.14.5 Sector wise mapping of industries

District wise the existing sectors were mapped against the high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Sawai Madhopur. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections** like **high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	726	5311.91	1764
Auto & Auto Components			
Chemical & chemical products	73	36.61	233
Construction Material & Building Hardware			
Food Processing			
Furniture & Furnishing	417	50.73	870
Leather & leather goods	631	69.36	1147
Textile & Handloom	815	1406.78	2282
Repair & Servicing	314	2385.66	648
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Mines, Metals & Minerals	61	188.67	197
Machinery, Electricals & Manufacturing	232	2080.60	562
High	Units>200, investment>180,emp>1000		
Medium	Units>100, investment>100, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Figure 197 Sector wise mapping of industries in Sawai Madhopur as per DIC report, 2007

The most important sectors contributing to the economy of the district and providing employment opportunities were agriculture and allied sector, leather, wooden and furniture, repair and services, engineering based manufacturing sector. The future scopes of industries were in the emerging sectors like the computer applications, trade and hospitality, auto workshops, construction etc.

Sectors covered under sample survey
Food Processing & Products- 02
Handlooms & Handicrafts- 02
Machinery, Electricals & Manufacturing-02
Mines, Metals & Minerals-01
Stone Querying, Cutting & Polishing-03

Table 137 Break up of industries in Sawai Madhopur (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries were selected (depending on the availability of respondents' of the employer group set up). The sample cated in Sawai Madhopur district of

Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table above. The 10 industries were sampled for the survey to represent 5 major sectors that are prominent in the district as shown in the table above. Food processing and products catered for the agriculture and allied sector as well. Similarly wooden industries were clubbed with handicrafts and handlooms.

5.14.6 Workforce Demand and Supply

Of the salient features of the workforce in the district were as follows:-

- f) The overall participation of population in economic activities was just 42.00 % (dependency ratio of more than 1:1); with rate of female participation at 35.55%. There is steep decline in the main workers and increase in marginal workers showing the changing workforce engagement in the district.
- g) Rural employment could be majorly seen engaged in agricultural related jobs (72.00% engaged in primary sector), animal husbandry and dairy followed by service sector engaging in repairs and electrical services.
- h) The workforce categorized under skilled, semi-skilled and unskilled showed the following trend in the sampled industries (as shown in the figure)



Figure 198 Workforce engagement under various stages and required strength of workers across sectors surveyed (Sawai Madhopur sample)

The demand for semi-skilled workers continued to be on the higher side especially in handicrafts and handloom industries and stone and quarrying industries. Incidentally, the demand and the current absorption of unskilled workers were higher than the skilled and semi-skilled workers and similar was the requirement trend as well (just 10% required across industries).

- i) While the nine industries sampled across five sectors could not provide details of their skilled worker strengths, wooden products and handicrafts sector industry has not increased the workers’ in-take and were working with the same number as at the start of operations. Demand for skilled worker in future was reported zero by this industry

- j) As reported by industries for semiskilled workforce, none of the sector has increased its worker base and also no plans to expand further except handloom and manufacturing. In case of unskilled workforce, there was no further expansion and in fact two of the sectors have reduced their unskilled workforce.

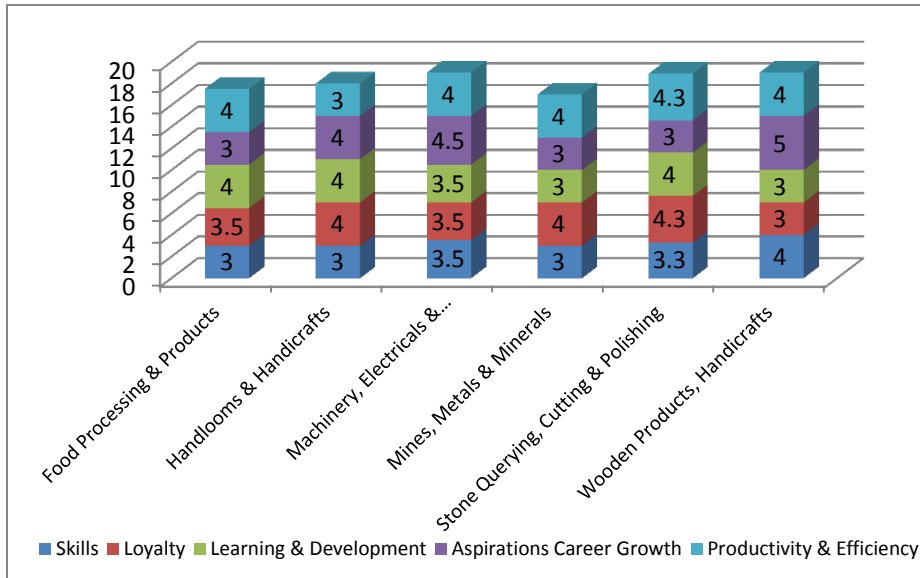


Figure 199 Employers demands in terms of expectations from workers (Sawai Madhopur)

In terms of industries' requirements and the expectation of the employers from its workers the primary survey provides the major demand to be productivity and efficiency followed by loyalty. Stone quarrying, cutting and polishing emerged as the most demanding sector in terms of the set parameters (ranked on a scale of 5)

Recruitment of required workers was done from known sources such as own workers which appeared to be the most reliable method of recruitment for most of the industries. The contractors were engaged for daily wage workers and no such interaction was evident with the VTIs to get the semi-skilled trained workers.

5.14.7 Projected Workforce Demand

It has been observed in the primary survey that the percentage of skilled workers have been almost static over the years and similar was the semi-skilled. In contemporary scenario the engagement of unskilled labor (51% of the total workforce) was high followed by semi-skilled (40%) and skilled (9%). In general, the emerging occupations and new establishments demand for workers could be the new areas of interest for the workers in the near future.

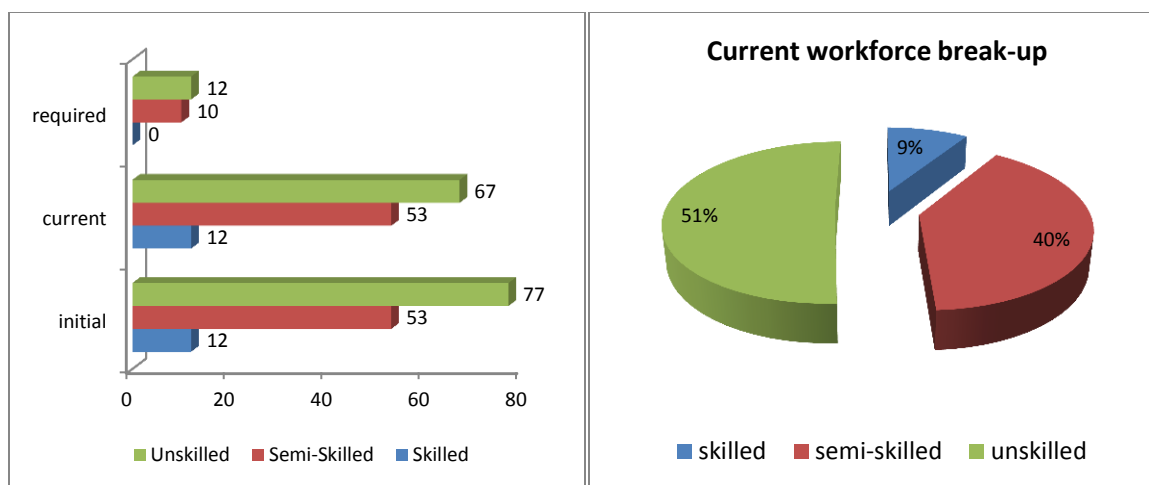


Figure 200 Expected year wise requirement of workforce and current break up of workforce across industries surveyed (Sample)- Sawai Madhopur

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of mampower
Agricultural Sector								
Unskilled	348210	349641	350377	355245	352486	355162	356496	
Semiskilled	28387	28503	28563	28960	28735	28953	29062	
Skilled	1892	1900	1904	1931	1916	1930	1937	
Total demand	378490	380045	380844	386136	383137	386046	387495	72%
Industry Sector								
Unskilled	29511	30911	30645	31664	32105	32597	32986	
Semiskilled	13621	14267	14144	14614	14818	15045	15224	
Skilled	2270	2378	2357	2436	2470	2507	2537	
Total demand	45402	47555	47146	48713	49392	50149	50748	9%
Services Sector								
Unskilled	12370	13010	13401	13877	14113	14578	14890	
Semiskilled	28864	30357	31269	32380	32929	34014	34743	
Skilled	41234	43367	44670	46256	47042	48592	49633	
Total demand	82467	86734	89340	92513	94084	97184	99266	19%
All Sectors								
Unskilled	390092	393562	394423	400785	398704	402336	404372	
Semiskilled	70871	73127	73976	75954	76482	78012	79030	
Skilled	45396	47645	48931	50623	51427	53030	54108	
Total Demand	506359	514334	517330	527362	526614	533378	537509	100%

Figure 201 Projected percentage of workforce (demand) requirement till 2017 across primary, secondary and tertiary sectors-Sawai Madhopur

There exists not much difference in the projections of the workforce from the current scenario. Scope of secondary and tertiary to engage workers would be around 28% with some minor changes accounting for increase in services sector growth.

Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Agriculture and allied			
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Figure 202 Workforce across various sectors by 2017- Sawai Madhopur

5.14.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	80335	83788	84302	89926	87322	90658	92088
Semiskilled	17022	17605	18155	18725	19223	19838	20426
Skilled	2435	2759	3038	3332	3687	3907	4295

Table 138 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.40 lakh (employable working population). Keeping in mind the high rate of workforce participation from unskilled masses and the existing demand of skilled workforce to be low; the significance would be to target training to atleast 40,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation was conducive enough to support industrial growth in Sawai Madhopur except some shortage of power.
- The VTIs were fulfilling the needs of the industries but industries need to pay more. Demand across the sector and size for skilled worker was good in some of the emerging sectors but small and medium sectors concentrated on pooling of semi-skilled and unskilled workers only.
- Scope for self-employment and entrepreneurship in the district is good.
- Stone cutting & polishing and machinery were predominant in the district with Tourism and handicrafts Industries emerging in the district sustainable enough to absorb new manpower.
- Establishments of more VTIs to enable the growing needs and industry specific requirements

5.14.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Sawai Madhopur district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth to provide deep insight and understanding on their aspirations and perceptions; of self and people associated/related with them.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 139 Youth Profile of sample in Sawai Madhopur

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 25% of the youth covered were college educated and 75% had completed/

drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

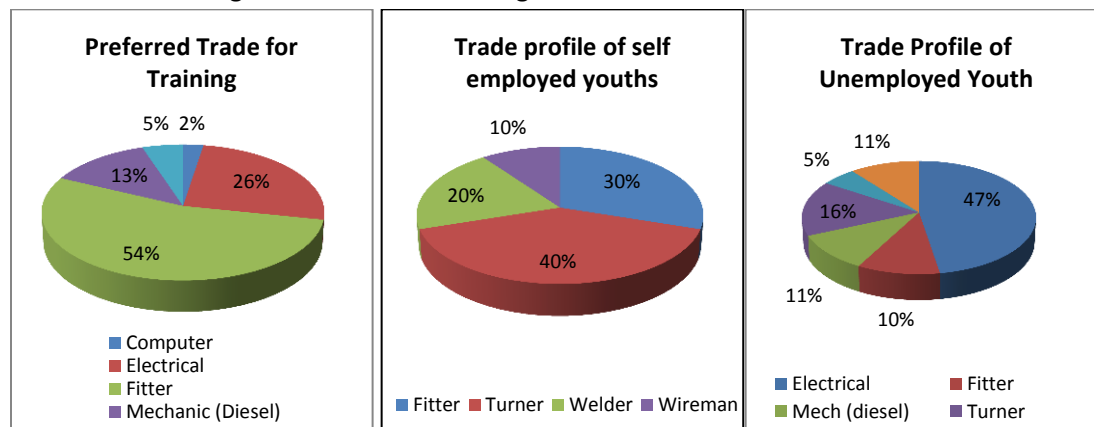


Figure 203 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Sawai Madhopur

Inclination towards Fitter course was found high (54% of the youth reported their preference) followed by electrical trade (26%). The reason for the same seems to be the demand for this course in the market. As self-employment turner and fitter were the chosen trades of the youths. High percentage of trained electricians remained unemployed followed by turners. Supply of the electrical trainees in the market has increased and may be inferred to be the reason of unemployment of this trade trainee.

5.14.10 Youth's Perception

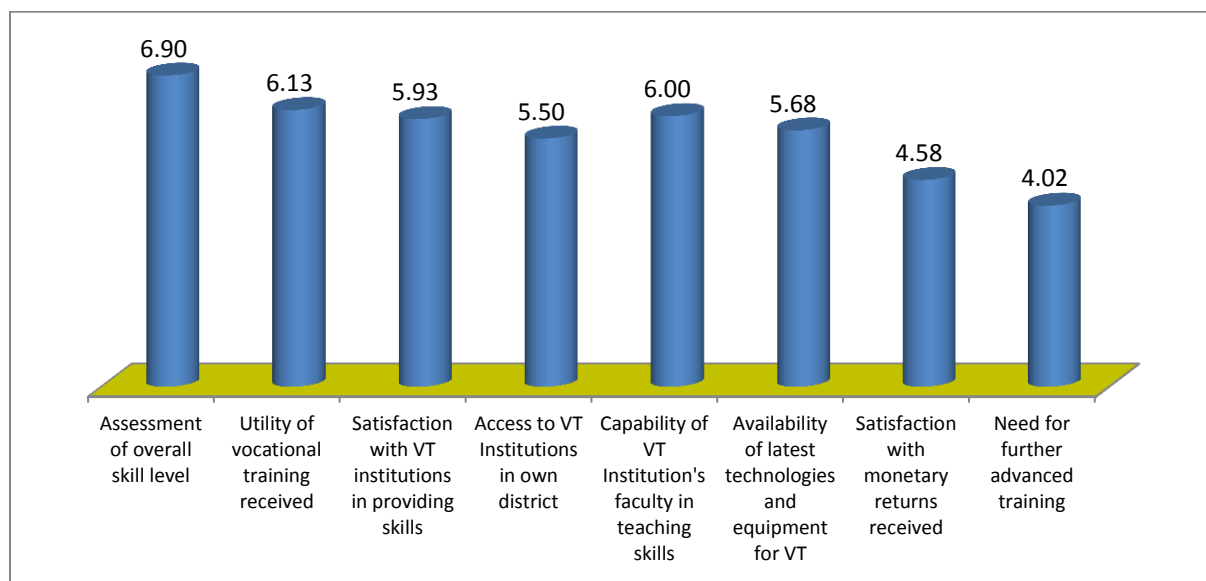


Figure 204 Sawai Madhopur Youth's perception, need and aspirations –Sample Group

Satisfaction with current monetary returns and need for advanced training emerged as the two least rated factors on a scale of 10. As identified by the respondents, the satisfaction, utility of the training and skill acquired from the VTI was overall rated higher than other parameters. A minimum wage hike of Rs 6000 was expected among youths across various trades.

The general aspirations were mapped by conducting FGDs with the youths from various categories and the following responses were evidently represented by the group:

- g) Better salaries, work satisfaction, family security and learning new technologies (respective trades) were the desires and expectations of the youth from the employment
- h) Families expected from them to get engaged in government jobs or well-paid jobs in big firms
- i) Less opportunities of on job training being provided and the less number of ITI make the overall skilling scenario very specific to the training manuals without much choice
- j) Communicative English and computer training were generally undertaken by local training centres for better job opportunities
- k) ITI training were more to get government jobs as 8 out of 10 felt that self-employment had least scope in terms of secured future and sustainable growth
- l) Most of the youths find difficulties taking up other trades post training and the adaptability remains low in terms of acceptance of other trades

5.14.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.4 lakh of skilled, unskilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at district and block level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

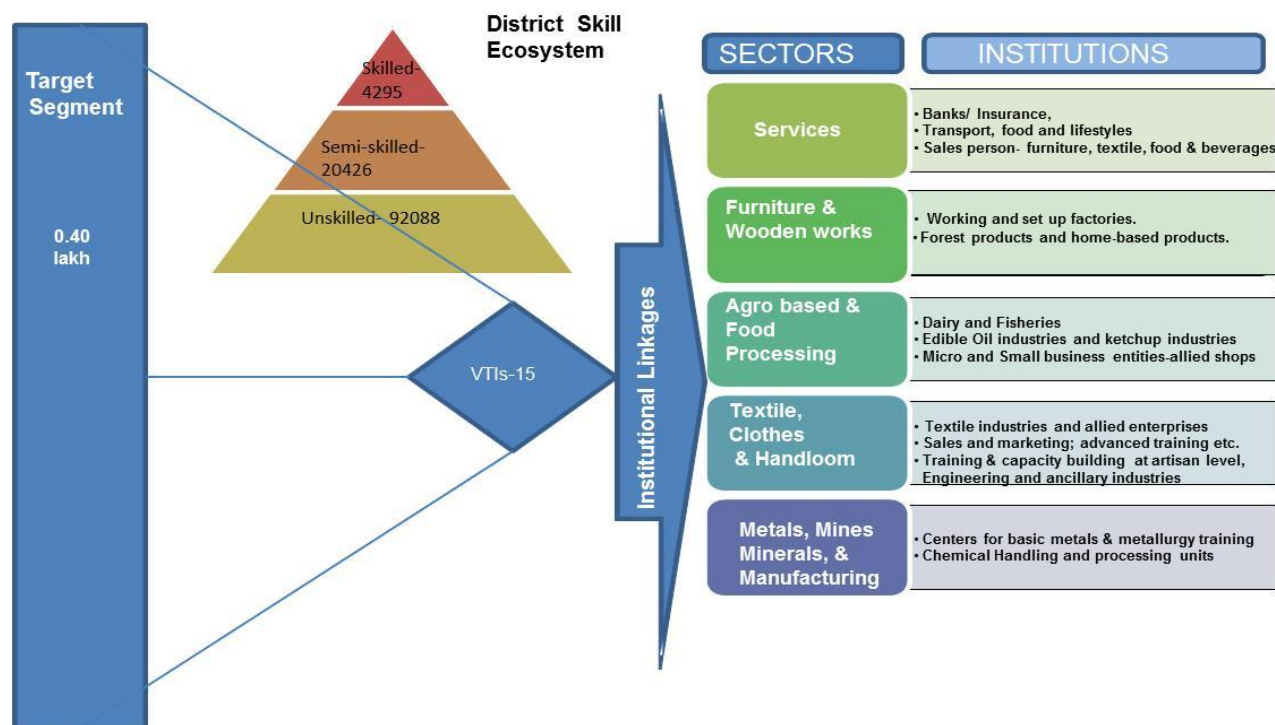
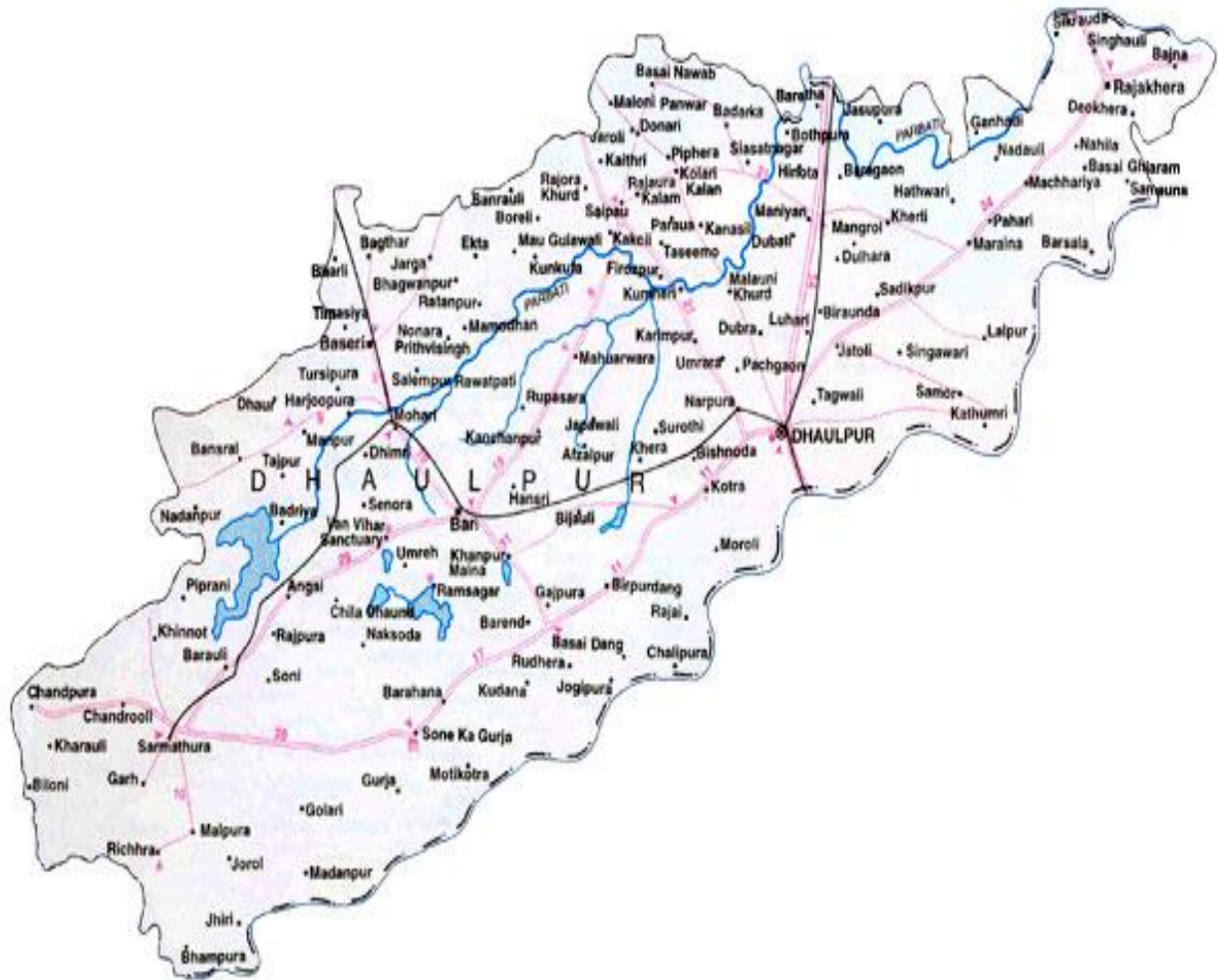


Figure 205 Optimization plan- Skill Development Eco System-Sawai Madhopur

The district would require more dedicated approach to advocate the usefulness of skilled workers in the industries and also need to target the service sector employment (emerging sectors). VTIs should be vital in getting the work ready repairers and mechanics. The interface between the VTIs and the industrial bodies would be essential for the mutual benefit. As the district lacks the basic infrastructure of skill development, the key would be to increase the number of institutes with short term courses and assured placements in some of the high priority sectors within the district. The large base of unskilled workforce to be engaged in training related to fields like construction, agriculture related activities etc. NSDC could improve the skill scenario of the district by encouraging PPP mode of training implementation through advocacy and encouraging new partners from districts of Rajasthan.

5.15 District Dhaulpur

DHAULPUR DISTRICT



District Skill Workforce Face Sheet-2012								
District	Dhaulpur			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	9	No. of Villages	819	No. of Schools (elementary & sec.)	1748			
Basic Data								
Population (in '000s)	1207	Overall Literacy(in %)	70.14	Sex Ratio	845			
Decadal growth rate(in %)	22.78	Female Literacy(in %)	55.45	HDI Ranking (2008)	0.497 (30 th position)			
% Urban Population	17.96	Male Literacy(in %)	82.53	Per Capita Income (in Rs.)	1089			
Workers participation rate (2001)								
Workers participation rate (2001)	43.6	Share of primary sector (%)	56.4	Share of secondary & tertiary sector (%)	43.7			
No. of MSME/Industries	865	Total Employment (in 000s)	5441	Total Investment (in lakhs)	5741.65			
No. of colleges (PG & Graduation)	18	Total graduates (In '00s)	4402	Total Post graduates (in '00s)	955			
No. of VTIs(registered ITI+Poly+ITC)			4	Total trainees trained (in '00s)	201			
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Semi-skilled workforce	17022	17605	18155	18725	19223	19838	20426	0.40 lakhs
Skilled workforce	2435	2759	3038	3332	3687	3907	4295	

5.15.1 Demographic Profile:

Situated on the North-east border of Rajasthan, Dhaulpur district was formed in 1982 by merging 4 former tehsils of district Bharatpur – Dhaulpur, Rajakhera, Bari and Baseri. On the district's north lies Bharatpur and the Uttar Pradesh border. On the south-east is the border with Madhya Pradesh and on the west is the district of Sawai Madhopur. Dholpur is a junction of the Central Railways and is served by regular bus services of the Rajasthan, Madhya Pradesh and Uttar Pradesh roadways.

Dhaulpur has a dry climate, facing extremes of summer and winter. The monsoon hits the district in July and lasts till mid-September. The rainfall observed in the district a continuous decline in past few years. There is one perennial river, the Chambal, in the southeast of the district and a seasonal river in the north-west, the Parvati.

The district covers an area of 3, 033 square kilometers and is at a height of 183 metres above sea level. It is one of the smallest districts (0.89%) of the state catering for 1.76% of the

total state population. The total population was 12.07 lakhs with sex ratio as 845 (one of the lowest in the state) and lowered decadal growth rate in population at 22.78%.

In a resource scarce economy, population and demography of the region are closely related to the aspects of human development. One, population stabilization achieved through a health demographic

S.no	Section	Unit	Quantity/
			Value
1	LOCATION		
	Latitude	degree	26°42' N
	Longitude	degree	77°54' E
2	AREA		
	Total geographical area	Sq km	3034
3	ADMINISTRATION		
	Tehsil	number	05
	Villages	number	819
4	Land Use Pattern		
	Total Area	Hectares	300913
	Total Irrigated area	Hectares	112791
5	Population (census 2011, provisional)		
	Total population	number	1207293
	Men	number	654344
	Women	number	552949
	SC (2001)	number	197895
6	Literacy (except 0-6 age group)		
	Total literate	percent	70.14
	Men	percent	82.53
	Women	percent	55.45
8	Energy		
	Electrified Villages	number	704
9	Industries (DIC, 2009)		
	Registered MSME units	number	865
	Employed persons	number	5441
10	Education		
	Pre Primary & Primary Schools	number	786
	Upper Primary	number	640
	Secondary & Sr. Secondary	number	322
11	Higher Education / Others		
	Colleges	number	18
	I T I	number	10
	ITC	number	03

Table 140 District profile –a Snapshot- Dholpur

transition reflects good health and a good nutritional status of people, particularly of women. This becomes all the more important in a region where people still derive over 85 per cent of employment through land and livestock based activities. Secondly, demographic changes reflect gender equality and the care given to the mothers and children; an important component of human development.

The worker participation rate (WPR) was 43.6% (HDI, Rajasthan, 2008) with primary sector engaging close to 56.4% of the workforce and rest 43.7% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 16% (Urban- 30.9% & Rural- 46.4%). A significant proportion of the district was engaged in the secondary and tertiary highlighting the paradigm shift from primary over a decade as WPR in primary drastically reduced from close to 80% to 56% in a decade. The literacy rate of the district in 2011 is 70.14% which is higher than the state figure of 67.06%. According to Census 2011 provisional data, the male literacy figure stands at 82.53% and female literacy was at a 55.45%, which is on the higher side of the female state literacy rate of 52.66%.

5.15.2 Education Infrastructure and Utilization

While government aims to provide educational facilities across all the villages and habitations private schools are beginning to grow in numbers and enrollment particularly at the upper primary level (ASER, Annual Status of Education Report). Of the total 1612 schools in Dholpur district (2006), 386 or 24% schools were private schools in 2006. However share of teachers in private schools was 36% while the share of students in private schools was 26%. Number of primary government schools in Dholpur was 1226 in 2006. Most of the villages in the district have lower primary schools. 61 Villages were without any school. Highest number of villages without any school was observed in Rajakhera and in Baseri, on the other hand, no village was without a school. The Pratham report (2005) shows Dholpur in a rather poor light. Accordingly, 62 per cent of the class 3 to 5 students cannot read class 2 text. 42% of such students could not solve subtraction problem.

Education	Dholpur	Rajasthan
Pre Primary & Primary	786	49546
Upper Primary	640	38889
Sec/ Sr Sec	322	19135

Table 141 Dholpur vs. Rajasthan primary education scenario

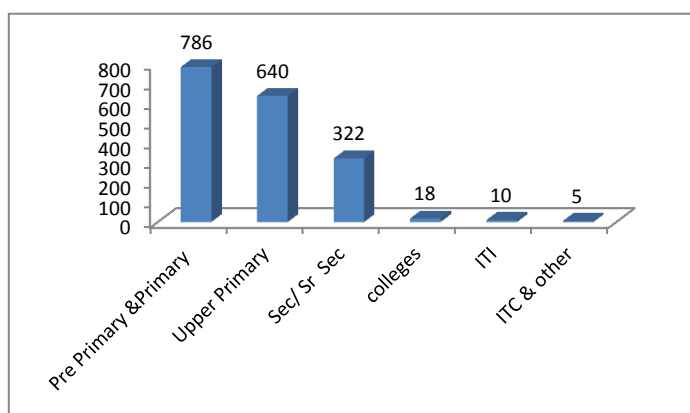


Figure 206 Number of Schools, Colleges, ITI & Polytechnic, Dholpur

Dholpur observes a healthier trend in enrollment rates, when compared to the state average. While the ST population is increasing faster in Dholpur, the SC population maintains parity with the non-SC/ST population in terms of decadal growth during the nineties. One of the reflections may be observed in the ratio of SC/ST enrollment to the non-SC/ST

population. One of the reasons for the good performance of SC/ST students, both in terms of growing literacy rates as well as enrollment, was the monetary incentives in the form of scholarships given to

the children of these social groups besides the proximity of government schools to the locality of backward castes.

A total of over 3000 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There are two nursing colleges, one Law College and a military school. There were total of ten registered vocational training institutes in Dholpur district (10 ITI). A total of just above 400 aspirants got enrolled in 2009-10 in the four government training institutes. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 06 partners (includes KVK and ITC) implementing skilling initiatives with 16 approved programs (14 completed). A detailed view of the vocational training of Dholpur could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.15.3 VTI's demand across various trades in Dhaulpur district

The existing scenario of VTIs in Dhaulpur was certainly on the better side considering the number of institutes or VTIs in other districts of the state. Private organizations working in this sphere have a vast scope for initiating skilled interventions of the district and catering the needs for skilling youths of the district. The primary survey conducted in the district to understand the present scenario of skilled intervention of the district. The government VTIs interviewed in the survey was three and seven were from the private. The courses which were offered by the government VTIs were predominantly engineering based and to cater the local market needs. In private VTIs the courses taken up were almost same. The details of the courses offered in the VTIs of Dholpur are represented in the table.

Government VTI Trades	Pvt. VTI Trades
Civil	Electrical
Electrical	Electronics
Electronics	Fitter
Fitter	Mechanic (Diesel)
Welder	
Wireman	

Table 142 Courses offered in government and private VTIs (sample), Dholpur

Electrical trade was most preferred trade in Dholpur as maximum number of seats in both Government and Private VTIs were from this trade. Even, private VTIs offered more than two times of seats as compare to Government VTIs for this trade. The difference between actual trainees and approved

trainees, in government VTI, was varying from 7 to 16 as these seats went unutilized. Electrical trade had the max difference In case of Private VTIs, the difference was maximum in case of electrical trade (varying by 26 seats).



Figure 207 Dholpur district's (sample study) courses offered placements in VTIs and average (avg) salary offered

An overview of placement records by trade in the government and private VTIs indicate moderate prospects in all most all of the trades with the exception of welding trade in government VTI. It may be due to the fact that most of the welding trade trainees seek self-employment. Average salary/trainee indicates towards good prospect in fitter trade as government VTIs have reported that the trainee from this trade got the highest placement of Rs. 5,500/month from their institute. In case of private VTIs the highest paid placement was in diesel mechanic trade. While placements of trainees from the government VTIs was by campus interviews and through proactive approach to the industry by the VTIs and the trainees themselves. The trainee from private VTIs had secured their job through proactive approach to the industry. Though only few trainees from private VTI got their placement through employment exchange but it seems that employment exchanges are not playing any role in placements.

The trends across all the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the government VTIs over the years. Only in Electronics trade the strength had gone down over the years. Data on the number of trainees for civil trade in government VTIs was not available as there is no demand for these trades over the years. Trends, regarding private VTIs' trainee strength, indicate towards gradual increase over the years.

In terms of infrastructure support commutation support was made available all the VTIs surveyed. Staffing was not an issue in any of the VTIs. A hostel facility was available only in one private VTI for boys.

5.15.4 Industry Mapping

Dhaulpur is an industrially backward district of the state. There are however, signs of change. Share of registered manufacturing sector in the district has increased from 0.5 per cent during triennium ending 1993-94 to 1.3 per cent during triennium ending 2004-05. The share of unregistered manufacturing sector has marginally increased from 4.7 per cent during triennium ending 1993-94 to 5.7 per cent

during triennium ending 2004-05. Largest growth has occurred in the construction sector, which increases its share from 6.7 to 11.6 per cent during this period. The district has 3484 registered small-scale industrial units till 2011-12, employing 12504 persons. These include agricultural based units producing mustard oil and mustard cake; dairy products and units processing masonry stones etc. Mining is an important activity of the district but the activity is largely restricted to non-metal minerals mainly the masonry stones including 'Dhaulpur/Karouli Stone'.

The district headquarters has 2 glass factories and an ammunition factory. RIICO has developed 2 industrial centers in Dhaulpur and Bari. Since most of the district is rocky and full of Kachchar, there is abundance of building stone, sandstone and limestone. The excise duty on these items has been the chief source of revenue for the State Government from here. The bajri, found all over the Chambal valley, is also a source for generating employment, trading in this construction material is lucrative for the people. Dhaulpur's location on a major railway junction also helps these trades flourish. Dhaulpur and Bari are the main trading centers of the district besides being agricultural marts. The district has seven industrial areas, one cluster and the main existing industries were as follows:

- Cattle feed
- Cast iron foundry
- Dal mills
- Handloom cloth
- Hi-tech glass manufacturing
- Iron and steel fabrication
- Leather footwear
- Oil mill

A major investment in terms of power was under implementation and had been announced earlier were (as per Bureau of Investment Promotion) as follows:

Company / Ownership Project	Location	Industry / Type of Project	Cost (Rs.Crore)	Progress of Implementation
Tata Group	Dhaulpur	Thermal electricity	4000.00	Announcement
Dhaulpur Power Project	Dhaulpur	New Unit	-	Announcement
State Govt. - Commercial	Dhaulpur	Gas based thermal electricity	1175.00	Under Implementation
Dhaulpur Combined Cycle Gas Power	-	-	-	Under Implementation
Gas Based Project	-	-	-	Under Implementation
Total Investment			5175.00	

Figure 208 Investment in terms of power in Dhaulpur region of Rajasthan

MSME in Dhaulpur

According to D.I.C data (March, 2012), there were around **3484 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.13983.86 lakhs** providing employment to **12504 persons**.

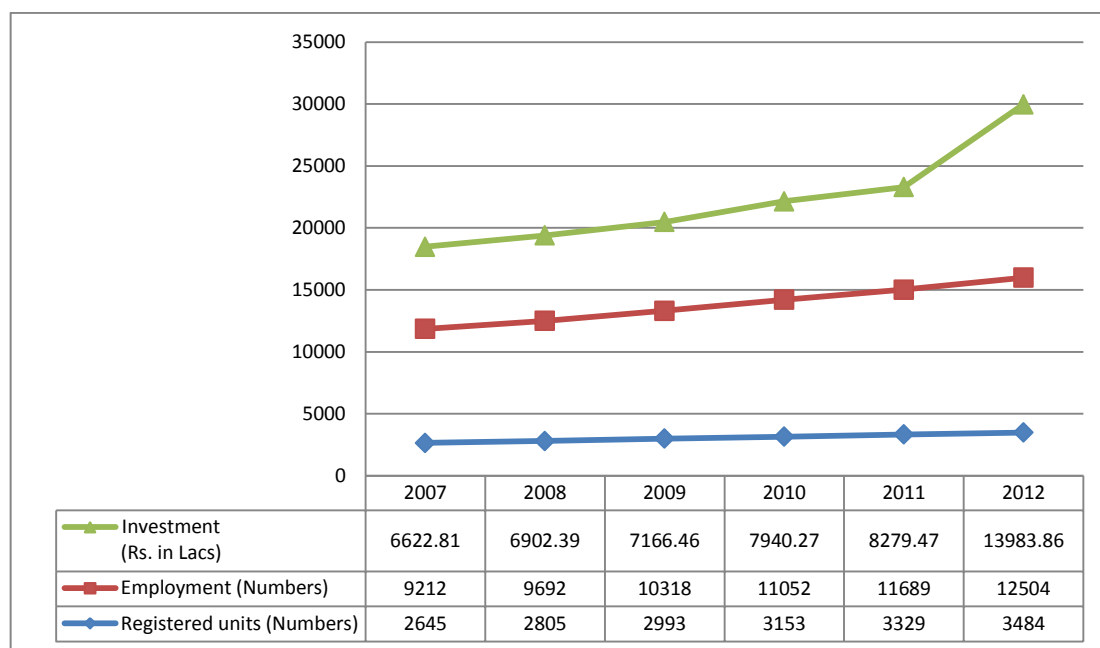


Figure 209 MSME trend analysis of the district Dhaulpur

There were three large- scale industries in the district namely, the High-tech Precision Glass factory, Dhaulpur; Dhaulpur Glass Works Ltd., Dhaulpur and Rajasthan Explosives Limited Dhaulpur with an investment of about **Rs 36 crores** employing **900 workers**.

Quarrying of building stone was one of the major activities which provided employment to the comparatively large number of persons. Traditionally people were engaged in cotton industries, weaving, pottery, leather tanning, carpentry, black smithy, rope making etc. Village ghanis, moodha industry, sugar cane-crushers, khas distillation are the other units, which kept persons employed and provided opportunity to local crafts men and artists to come forward.

5.15.5 Sector wise mapping of industries

District wise the existing sectors were mapped against the high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Dhaulpur. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections** like **high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	127	722.60	718
Auto & Auto Components			
Chemical & chemical products	11	82.4	52
Construction Material & Building Hardware			
Food Processing			
Furniture & Furnishing	69	49.15	281
Leather & leather goods	66	64.25	251
Textile & Handloom			
Repair & Servicing	82	1002.45	553
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Transport & Logistics	10	11.53	24
Mines, Metals & Minerals (includes quarrying)	277	3447.5	2985
Machinery, Electricals & Manufacturing	225	361.7	705
High	Units>100, investment>300, emp>700		
Medium	Units>50, investment>40, emp>250		
Low	Units> 10, investment> 30, emp>20		
Emerging	Investment & demand based sectors of district-DIC		

Figure 210 Sector wise mapping of industries in Dhaulpur as per DIC report, 2007

Sectors covered under sample survey
Chemical & Chemical Products
Construction Material & Building Hardware
Food Processing & Products
Mines, Metals & Minerals
Textile & Handloom

Table 143 Break up of industries in Dholpur (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries were selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of

functionaries from diverse industries located in Dhaulpur district of Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table above. The 10 industries were sampled for the survey to represent 5 major sectors that are prominent in the district as shown in the table above along with representation of unorganized sectors. Construction and minerals (stone quarrying) formed the major thrust of the district in terms of employment.

5.15.6 Workforce Demand and Supply

The economy of the district which has undergone some transition over a period from agriculture base to more wage based forms due to uncertainty and decline in agricultural production (difficult climatic conditions could be a reason). This impact the WPR of the women and the Female WPR increased significantly in the year 2001. At the district level Female WPR has increased from 6.6 per cent in 1991

to 34 per cent in 2001 implying an increase of 27.4 per cent points. Across various blocks increase in female WPR varies between 21 per cent in Dhaulpur Tehsil to 38 per cent in Bari. Two thirds of the increase in workers in Dhaulpur is contributed by the marginal workers.

It was significant that the number of main workers dependent on agriculture was below 60 per cent in Dhaulpur. Other workers representing the non-farm sector along with workers engaged in household industry add up to 40.2 per cent of the main workers in the district. Similar structure of the work force was observed across all the Tehsils in Dhaulpur.

The primary data during the survey focused on the diversified sectors of the district capturing the workforce structure in terms of skilled, semi-skilled and unskilled workers at various stages of the industries as shown in the below figure.

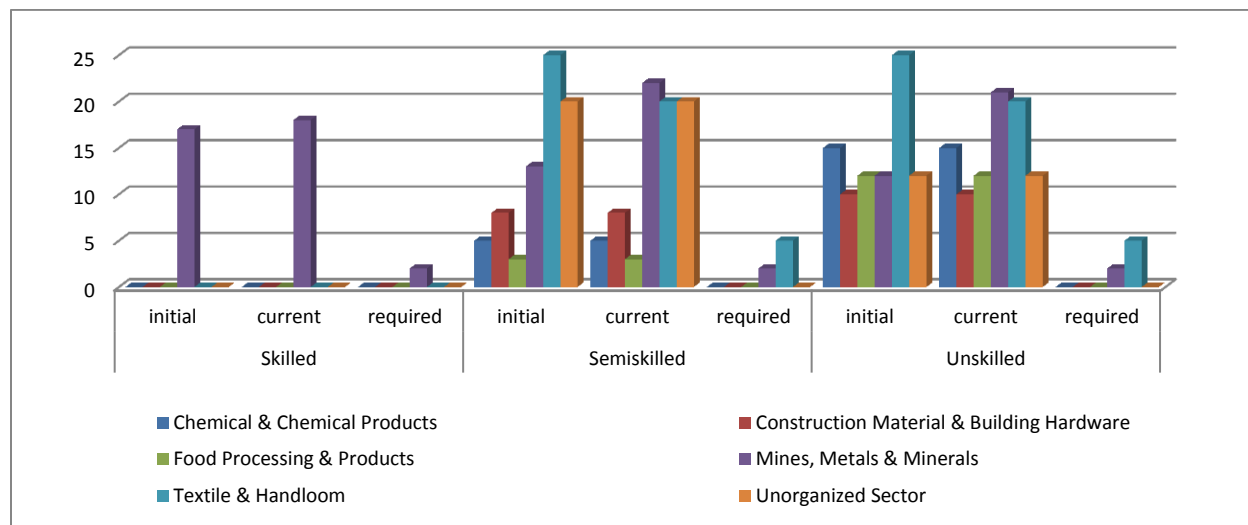
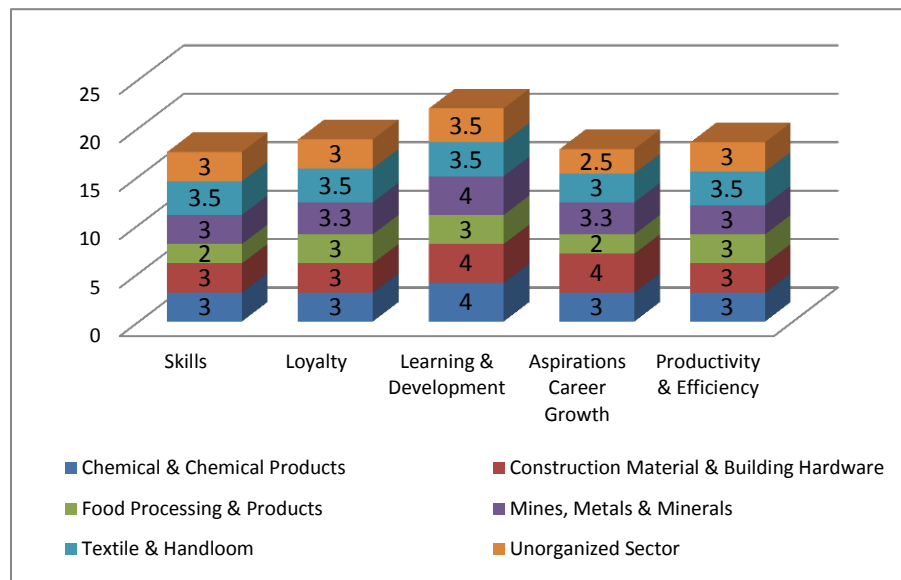


Figure 211 . Workforce engagement under various stages and required strength of workers across sectors surveyed (Dhaulpur sample)

- While the majority of the industries covered in the sample could not provide details of their skilled worker strengths, it was in Mines, Metals & Minerals sector that the industries have not increased their workers’ base since industry established. Moreover demand for skilled worker was not observed across all the industries.
- Except Textile & Handloom sector industries all other sector industries have either increased their semiskilled workers’ base or keeping same worker strength as at the start of the industries. Potential to absorb semiskilled workers in various industries.
- In case of unskilled workforce the situation is very similar as described for semiskilled workers. Textile & Handloom sector have reduced their unskilled workforce whereas Mines, Metals & Minerals sector industries have increased their workers’ strength and all other industries have maintained same number of workers since industry establishment. The demand for unskilled worker was found low.

In terms of industries' requirements and the expectation of the employers from its workers the primary survey provides the major demand to be learning and development attitude of the employee followed by loyalty, productivity and efficiency. Stone quarrying, construction and mining emerged as the demanding sectors in terms of the set parameters (ranked on a scale of 5).



Recruitment of required workers was done from known sources such as own workers which appeared to be the most reliable method of recruitment for most of the industries. The VTI trained workers were only engaged by the mining industries but in very few in number.

Figure 212 Employers demands in terms of expectations from workers (Dholpur)

Recruitment of required workers was done from known sources such as own workers which appeared to be the most reliable method of recruitment for most of the industries. The VTI trained workers were only engaged by the mining industries but in very few in number.

5.15.7 Projected Workforce Demand

It has been observed in the primary survey that the percentage of skilled workers have been almost static over the years and similar was the semi-skilled. In contemporary scenario the engagement of unskilled labor (51% of the total workforce) was high followed by semi-skilled (40%) and skilled (9%). In general, the emerging occupations and new establishments demand for workers could be the new areas of interest for the workers in the near future.

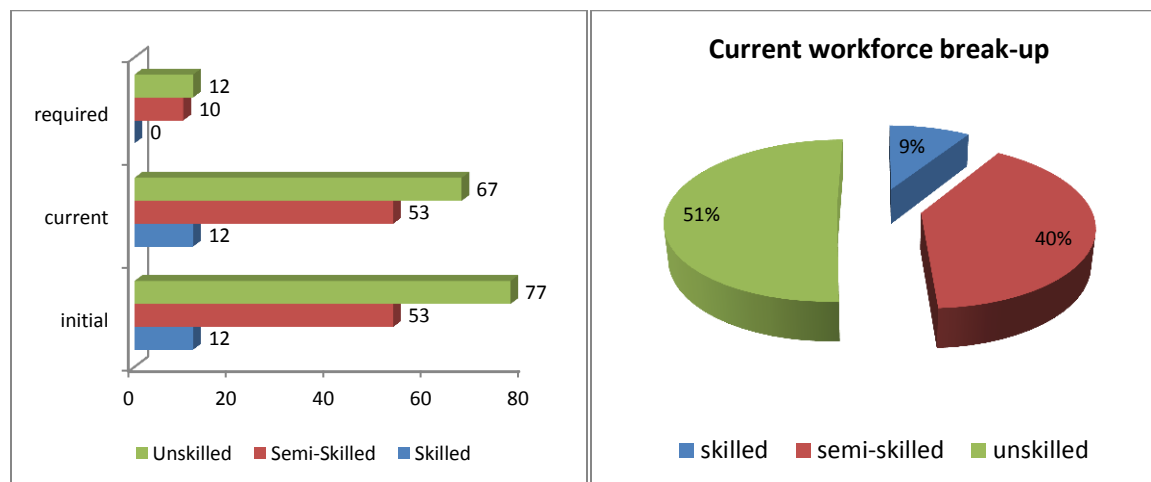


Figure 213 : Expected year wise requirement of workforce and current break up of workforce across industries surveyed (Sample)- Dhaulpur

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	348210	349641	350377	355245	352486	355162	356496	
Semiskilled	28387	28503	28563	28960	28735	28953	29062	
Skilled	1892	1900	1904	1931	1916	1930	1937	
Total demand	378490	380045	380844	386136	383137	386046	387495	72%
Industry Sector								
Unskilled	29511	30911	30645	31664	32105	32597	32986	
Semiskilled	13621	14267	14144	14614	14818	15045	15224	
Skilled	2270	2378	2357	2436	2470	2507	2537	
Total demand	45402	47555	47146	48713	49392	50149	50748	9%
Services Sector								
Unskilled	12370	13010	13401	13877	14113	14578	14890	
Semiskilled	28864	30357	31269	32380	32929	34014	34743	
Skilled	41234	43367	44670	46256	47042	48592	49633	
Total demand	82467	86734	89340	92513	94084	97184	99266	19%
All Sectors								
Unskilled	390092	393562	394423	400785	398704	402336	404372	
Semiskilled	70871	73127	73976	75954	76482	78012	79030	
Skilled	45396	47645	48931	50623	51427	53030	54108	
Total Demand	506359	514334	517330	527362	526614	533378	537509	100%

Figure 214 Projected percentage of workforce (demand) requirement till 2017 across primary, secondary and tertiary sectors-Dhaulpur

There exists not much difference in the projections of the workforce from the current scenario. Scope of secondary and tertiary to engage workers would be around 28% with some minor changes accounting for increase in services sector growth.

Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Agriculture and allied			
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			

ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Figure 215 Workforce across various sectors by 2017- Dhaulpur

5.15.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	80335	83788	84302	89926	87322	90658	92088
Semiskilled	17022	17605	18155	18725	19223	19838	20426
Skilled	2435	2759	3038	3332	3687	3907	4295

Figure 216 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.40 lakh (employable working population). Keeping in mind the high rate of workforce participation from unskilled masses and the existing demand of skilled workforce to be low; the significance would be to target training to atleast 40,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for

skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation was conducive enough to support industrial growth in Dhaulpur except some shortage of power.
- The VTIs were fulfilling the needs of the industries but industries need to pay more. Demand across the sector and size for skilled worker was good in some of the emerging sectors but small and medium sectors concentrated on pooling of semi-skilled and unskilled workers only.
- Scope for self-employment and entrepreneurship in the district is good.
- Stone cutting & polishing and machinery were predominant in the district with Tourism and handicrafts Industries emerging in the district sustainable enough to absorb new manpower.
- Establishments of more VTIs to enable the growing needs and industry specific requirements

5.15.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Dhaulpur district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth to provide deep insight and understanding on their aspirations and perceptions; of self and people associated/related with them.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 25% of the youth covered were college educated and 75% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

Table 144 Youth Profile of sample in Dholpur

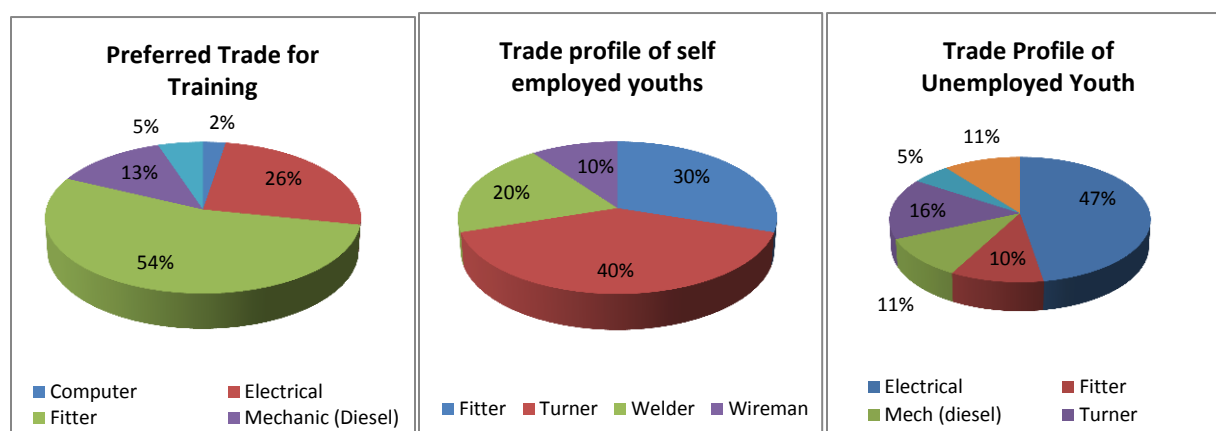


Figure 217 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Dhaulpur

Inclination towards Fitter course was found high (54% of the youth reported their preference) followed by electrical trade (26%). The reason for the same seems to be the demand for this course in the market. As self-employment turner and fitter were the chosen trades of the youths. High percentage of trained electricians remained unemployed followed by turners. Supply of the electrical trainees in the market has increased and may be inferred to be the reason of unemployment of this trade trainee.

5.15.10 Youth's Perception

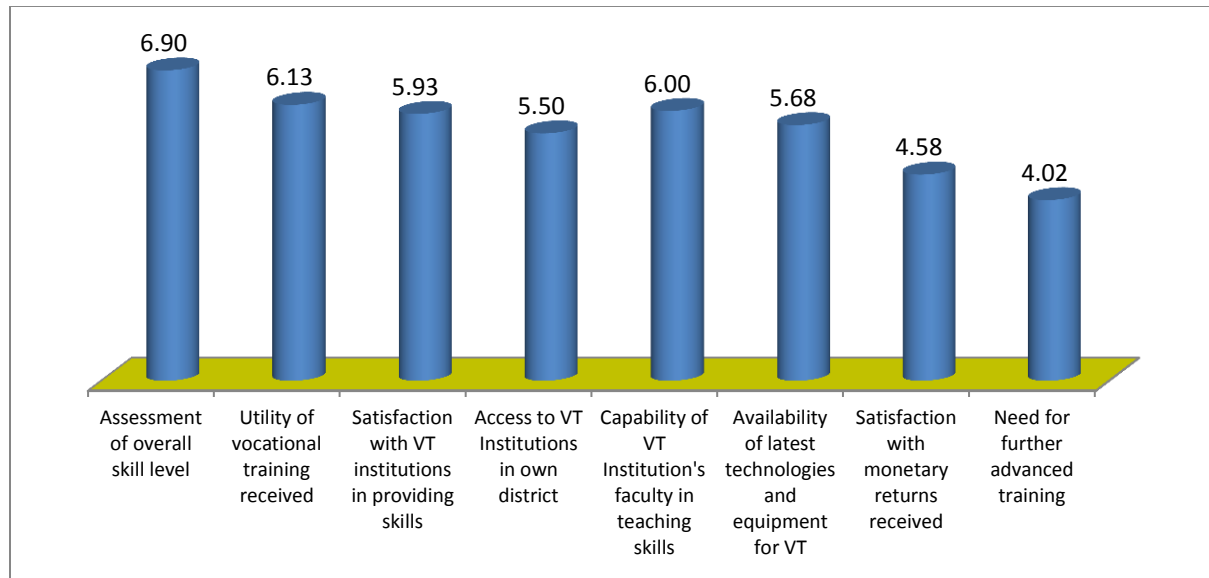


Figure 218 Dhaulpur Youth's perception, need and aspirations –Sample Group

Satisfaction with current monetary returns and need for advanced training emerged as the two least rated factors on a scale of 10. As identified by the respondents, the satisfaction, utility of the training and skill acquired from the VTI was overall rated higher than other parameters. A minimum wage hike of Rs 6000 was expected among youths across various trades.

The general aspirations were mapped by conducting FGDs with the youths from various categories and the following responses were evidently represented by the group:

- Better salaries, work satisfaction, family security and learning new technologies (respective trades) were the desires and expectations of the youth from the employment
- Families expected from them to get engaged in government jobs or well-paid jobs in big firms
- Less opportunities of on job training being provided and the less number of ITI make the overall skilling scenario very specific to the training manuals without much choice
- Communicative English and computer training were generally undertaken by local training centres for better job opportunities
- ITI training were more to get government jobs as 8 out of 10 felt that self-employment had least scope in terms of secured future and sustainable growth

- f) Most of the youths find difficulties taking up other trades post training and the adaptability remains low in terms of acceptance of other trades

5.15.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.4 lakh of skilled, unskilled and semi-skilled demand.

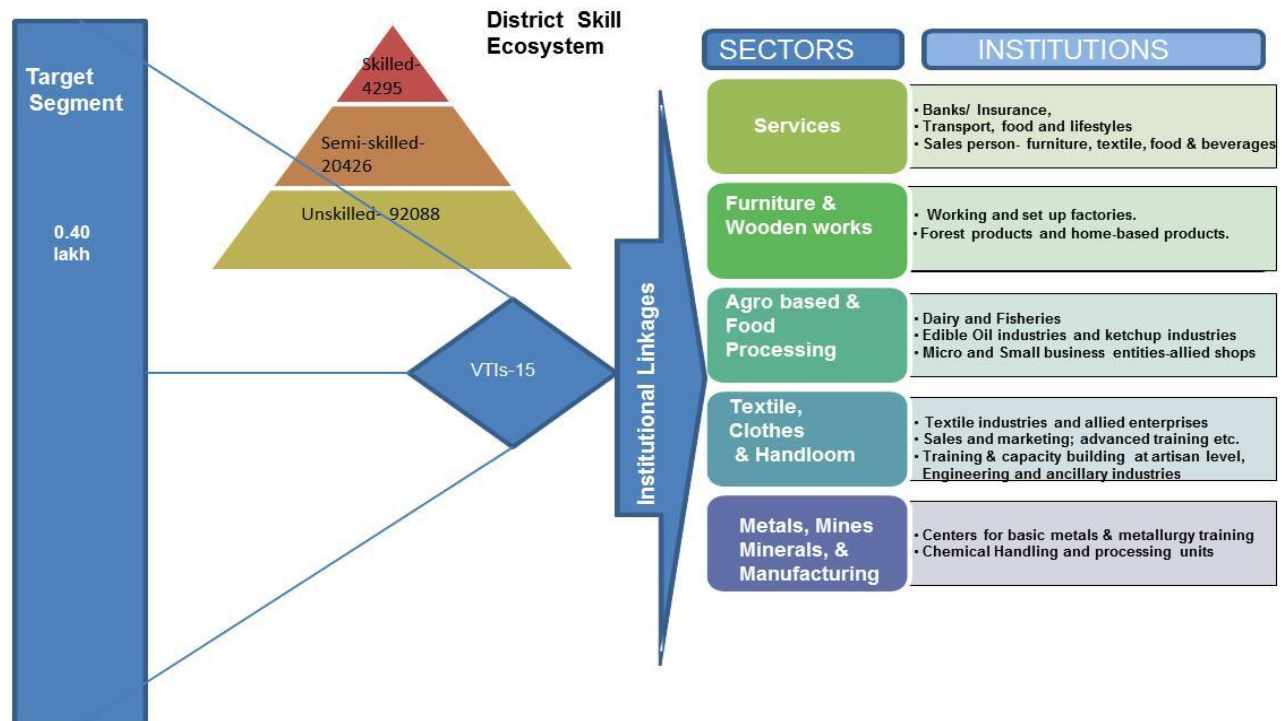


Figure 219 Optimization plan- Skill Development Eco System-Dhaulpur

The district would require more dedicated approach to advocate the usefulness of skilled workers in the industries and also need to target the service sector employment (emerging sectors). VTIs should be vital in getting the work ready repairers and mechanics. The interface between the VTIs and the industrial bodies would be essential for the mutual benefit. The key stakeholders' contribution in enabling to achieve the target (as shown in the figure) would be as follows:

- State: The state to target the skilled and semi-skilled segment for skilled training by creating additional 15 skill development centres (VTIs) in the district level of operations. It should encourage the private training partners to participate and operate in the district due to its large base of workers involved in secondary and tertiary sectors.
- Training Partners: The sectors for engaging more skilled workforce would be in food processing, textiles, furniture and services in the district. Special courses to be designed to cater for the institutions based in power generation after mapping of the requirements at various levels of

operations. Along with these, specific course curriculum designed for communicative English, life skills and basics in computer would be the key areas of skill development training.

- c) Industries: The primary sectors of high human resource requirement would be food processing, textiles, power, furniture and services and therefore would require increasing linkages with the related institutions for skilled workforce absorption

NSDC would be an enabler to lead the training partners in retail, textiles and food processing by encouraging specifically designed proposals with increasing the linkages in industry associations and PPP models.



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District wise skill gap study for the State of Rajasthan

PART II



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5.16 District Sri Ganaganagar

GANGANAGAR DISTRICT



District Skill Workforce Face Sheet-2012								
District	Sri Ganganagar			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	17	No. of Villages		3018	No. of Schools (elementary & sec.)		3262	
Basic Data								
Population (in '000s)	1969	Overall Literacy (in %)		70.25	Sex Ratio		887	
Decadal growth rate(in %)	10.06	Female Literacy (in %)		60.07	HDI Ranking (2008)		0.809 (1 st position)	
% Urban Population	25.34	Male Literacy (in %)		79.33	Per Capita Income (in Rs.)		20322	
Workers participation rate (2001)								
Workers participation rate (2001)	40.22	Share of primary sector (%)		60.70	Share of secondary & tertiary sector (%)		39.30	
No. of MSME/Industries								
No. of MSME/Industries		Total Employment (in 000s)			Total Investment (in lakhs)			
No. of colleges (PG & Graduation)								
No. of colleges (PG & Graduation)	66	Total graduates (In '00s)		8107	Total Post graduates (in '00s)		2256	
No. of VTIs(registered ITI+Poly+ITC)								
No. of VTIs(registered ITI+Poly+ITC)				5	Total trainees trained (in '00s)		1030	
Indicators (Cumulative)								
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Semi-skilled workforce	18235	22567	34176	40274	46001	51841	56380	1.74 lakhs
Skilled workforce	6907	7197	7319	7591	7825	8054	8455	

5.16.1 Demographic Profile:

Sri Ganganagar is the northern most district of Rajasthan State of western India. Sri Ganganagar is situated at the point where the Satluj Waters enter Rajasthan. The Gang Canal laid down in 1927 is the life line of the district (89 miles of lined canal). Sri Ganganagar is one of the well planned cities of India. Bagri and Punjabi languages are spoken by majority of population. The climate of Sri Ganganagar varies to extreme limits. The Summer Temperature reaches up to 50° Celsius and Winter Temperature dips just around 0° Celsius. The average annual rainfall is only 20cms. Ganganagar district was also known as "the food basket of Rajasthan".

The district Sri Ganganagar is located at 29.92°N 73.88°E in the northern most part of Rajasthan and occupies an area of approximately 10978 square kilometer catering for 3.2% of the state area. It has an average elevation of 164 meters (538 feet). It is surrounded by the state of Haryana in the northeastern side, Bikaner in the south, Hanumangarh in the east and Pakistan in the northwest and west.

As per Census of India 2011, Sri Ganganagar has a population of 19.69 lakhs, in which males are 10.43 lakhs and females are 9.25 lakhs. Males constitute approximately 53% of the population and females constitute approximately 47% of the total population. Sex ratio is 887 and the density (persons per sq.

S.no	Section	Unit	Quantity/
			Value
1	LOCATION		
	Latitude	degree	29°55' N
	Longitude	degree	73°52' E
2	AREA		
	Total geographical area	sq km	10978
3	ADMINISTRATION		
	Tehsil	number	09
	Villages	number	3018
4	Land Use Pattern		
	Total Area	Hectares	1093352
	Total Irrigated area	Hectares	891333
5	Population (census 2011, provisional)		
	Total population	number	1969520
	Men	number	1043730
	Women	number	925790
	SC (2001)	number	603371
	ST (2001)	number	14744
6	Literacy (except 0-6 age group)		
	Total literate	percent	70.25
	Men	percent	79.33
	Women	percent	60.07
8	Energy		
	Electrified Villages	number	2896
9	Industries (DIC, 2009)		
	Registered MSME units	number	867
	Employed persons	number	26067
10	Education		
	Pre Primary & Primary Schools	number	1411
	Upper Primary	number	1234
	Secondary & Sr. Secondary	number	617
11	Higher Education / Others		
	Colleges	number	66
	I T I	number	04
	Polytechnic	number	01

Table 145 District profile –a Snapshot- Sri Ganganagar

km.) is 179. In Ganganagar, 12.81 % (252376) of the population is under 6 years of age. From Census 2001 to 2011 apart from Sri Ganganagar district, all the other districts of Rajasthan have reported a dip in Sex ratio (0-6 year's age group). Sri Ganganagar District has minimum Population growth rate which is 10.06%. In between the census of 2001 and 2011 "the maximum dip" in Population growth rate is recorded in Sri Ganganagar District which is 17.53%. Sri Ganganagar has an average literacy rate of 70.25%, male literacy is 79.33%, and female literacy is 60.07% (best in terms of female literacy rates for the state). Majority of the population are Hindus and Sikhs, while only a few people constituting other sects stay here. The main languages spoken in the town are Hindi, Punjabi, Baagri or Marwari.

Economy of Sri Ganganagar District is dependent on agriculture. The city has Cotton Ginning and Pressing factories, Mustard Oil mills and Sugar Mills Ltd. It also has spinning and textile factories. Because of its prosperity from agriculture, Sri Ganganagar District also has a large number of automobiles and it becomes one of the largest automobile markets in India. The worker participation rate (WPR) was 40.22% (HDI, Rajasthan, 2008) with primary sector engaging close to 60.7% of the workforce and rest 39.3% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 13%. A significant proportion of the district was engaged in the secondary and tertiary highlighting the paradigm shift from primary over a decade as WPR in primary by 12% in a decade.

5.16.2 Education Infrastructure and Utilization

Ganganagar has the highest value of the Human Development Index at 0.809. It also ranks 7th on education index, 5th in health and 1st in income index. Sri Ganganagar observes a healthier trend in enrollment rates, when compared to the state average. One of the reasons for the good performance in education was the early importance on education since historical days and the success of primary sector providing enabling environment for education.

Education	Sri Ganganagar	Rajasthan
Pre Primary & Primary	1411	49546
Upper Primary	1234	38889
Sec/ Sr Sec	617	19135

Table 146 Sri Ganganagar vs. Rajasthan primary education scenario

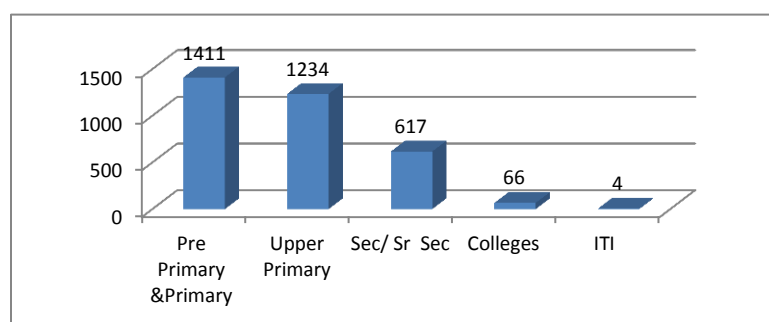


Figure 220 Number of Schools, Colleges, ITI & Polytechnic, Sri Ganganagar

A total of over 26000 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There are five professional colleges in the district providing courses in health, management, nursing etc. There were total of five registered vocational training institutes in Sri Ganganagar district (05 ITI) with a

total of above 1000 aspirants enrolled in 2009-10. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 04 partners (includes KVK, ITC and NGO)

implementing skilling initiatives with 13 approved programs (10 completed). A detailed view of the vocational training of Sri Ganganagar could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.16.3 VTI's demand across various trades in Sri Ganganagar district

The existing scenario of VTIs in Sri Ganganagar was certainly on the better side considering the number of educational institutes and VTIs. Private organizations working in this sphere have a vast scope for initiating skilled interventions of the district and catering the needs for skilling youths of the district. The primary survey conducted in the district to understand the present scenario of skilled intervention of the district. The government VTIs interviewed in the survey was one and nine were from the private. The courses which were offered by the government VTIs were predominantly engineering based and to cater the local market needs. In private VTIs the courses taken up were almost same with some courses on computer and IT. The details of the courses offered in the VTIs of Sri Ganganagar are represented in the table.

Government VTI Trades	Private VTI Trades
Electrical	COPA
Fitter	Cutting & Sewing
Motor Mechanic	Craftsman
Welder	Electrical
Wireman	Fitter
Turner	IT & ESM
	Mechanic (Diesel)

Table 147 Courses offered in government and private VTIs (sample), Sri Ganganagar

Electrical was most preferred trade in Sri Ganganagar as maximum number of seats in both government and private VTIs were from this trade. In addition to that the number of seats in electrical trade in private VTIs was more 2.5 times than to government VTIs. There was no difference between actual trainees and approved trainees in Government VTI across all the trades whereas in

Private VTIs the difference was varying from 1 to 65 seats. IT & ESM trade had least difference and Electrical trade had max difference of 65.

Based on the needs and requirement of the area following trade has been identified:

a) Computer Based Accountancy: With number of shops, and other establishments using TALLY to maintain their financial data, growing in number in almost all places including Sri Ganganagar there is a significant demand for persons skilled in Computer Based Accountancy. After VAT became effective in the state TALLY has become a necessity for all VAT paying shops.

b) Sales Persons: Sales and Marketing has emerged as one of the trades where the demand from industry whether it is telecom or banks or insurance firms is growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field.

c) Repair and maintenance of Refrigerators and ACs: Sri Ganganagar faces extreme heat in summers and the demand for technicians who can maintain and repair refrigerators and ACs was growing with the greater use of these equipments.

d) Diesel Engine Repairing: Due to heavy use of diesel engines in the Sri Ganganagar for irrigation and in automobiles the demand for skilled mechanics in this trade was very high

e) Computer Hardware: The use of computer in the district has proliferated. There is a high demand for persons who can repair and maintain computers as well assemble new ones.

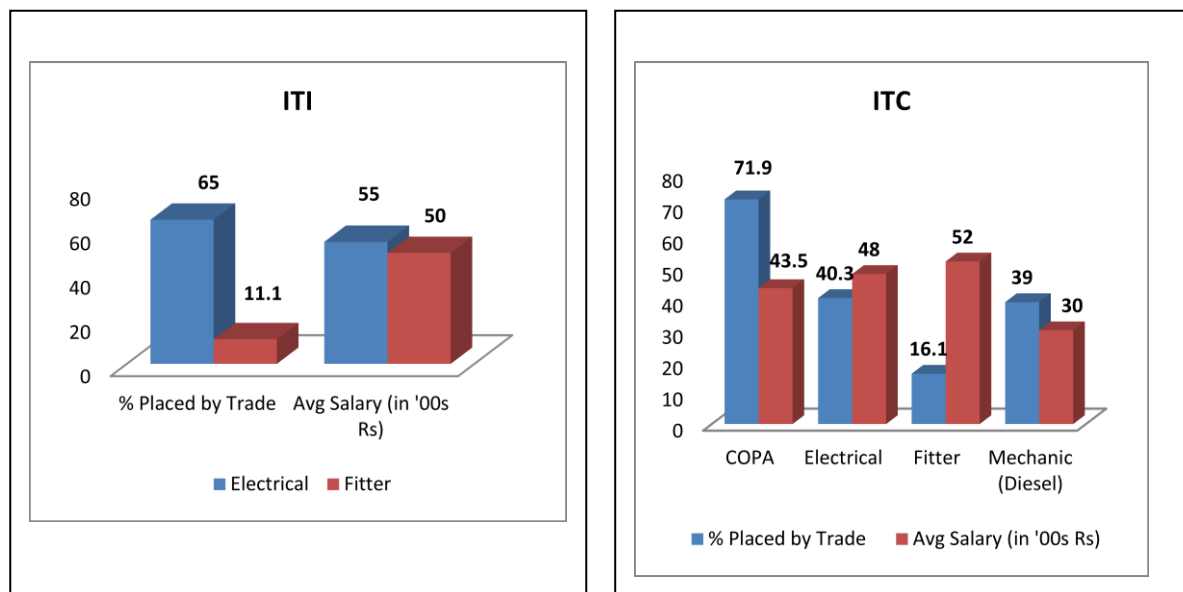


Figure 221 Sri Ganganagar district’s (sample study) courses offered placements in VTIs and average (avg) salary offered

An overview of placement records by trade in the government VTIs indicated very poor prospects in all the trades. Not even a single trainee from Motor Mechanic, Welder, Wireman and Turner trade got placed in the last year’s passed out numbers. The placement in private VTIs was better than government institutions but not at all promising as only 34.7% of the total trainee strength got placed across all the trades. In terms of average salary/trainee from government VTIs, the highest paid trade was Electrical (Rs. 5,500/month) and in private VTIs, the highest paid trade was fitter with Rs. 5,200/month. While placements of trainees from the government VTIs was more through campus Interviews, the private VTIs depended more on proactive approach with the industry for placements. Employment exchanges had no role in the placements of the trained youths.

The trends across most of the trades showed marginal increase in demand for trades over time in the government VTIs apart from Wireman and Turner trade where the demand declined over the years. In contrast, Private VTIs had significant increase in the strength of trainees over the years across all trades. Data on the number of trainees for craftsman trade in Private VTIs highlighted no preference for this trade. All the VTIs were under staffed.

5.16.4 Industry Mapping

Economy of Sri Ganganagar District is dependent on agriculture and animal husbandry. Horticulture is also becoming popular among farmers; “KINNU” (a citrus family fruit) is a popular horticultural produce, and other fruits of citrus family are also grown. Although agriculture and animal husbandry are the main economic activities of the district, there are a large number of small and large scale industries too. Industries in Sri Ganganagar District are based on agriculture. As major industries, the district has Cotton Ginning and Pressing factories, Mustard Oil mills and Wheat Flour mills and of course the famous Rajasthan State Ganganagar Sugar Mills Ltd., which is known for its Royal Heritage Liqueurs. It also has Cotton spinning and textile factories such as J C T Mills. Apart from these industries, many IT and outsourcing companies are establishing here. Most of the factories are located in and around Sriganganagar City. Because of its prosperity from agriculture, Sri Ganganagar District also has a large number of automobiles which includes tractors and MUVs and because of the large population of automobiles in the district; Sri Ganganagar has become one of the largest automobile markets in India

MSME in Sri Ganganagar

According to D.I.C data (March, 2012), there were around **10132 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.32412.96 lakhs** providing employment to **61086 persons**. Apart from these, there were **02** large and **06** medium scale industries employing close to **4260** persons. There were 14 industrial areas mapped by RIICO in the district.

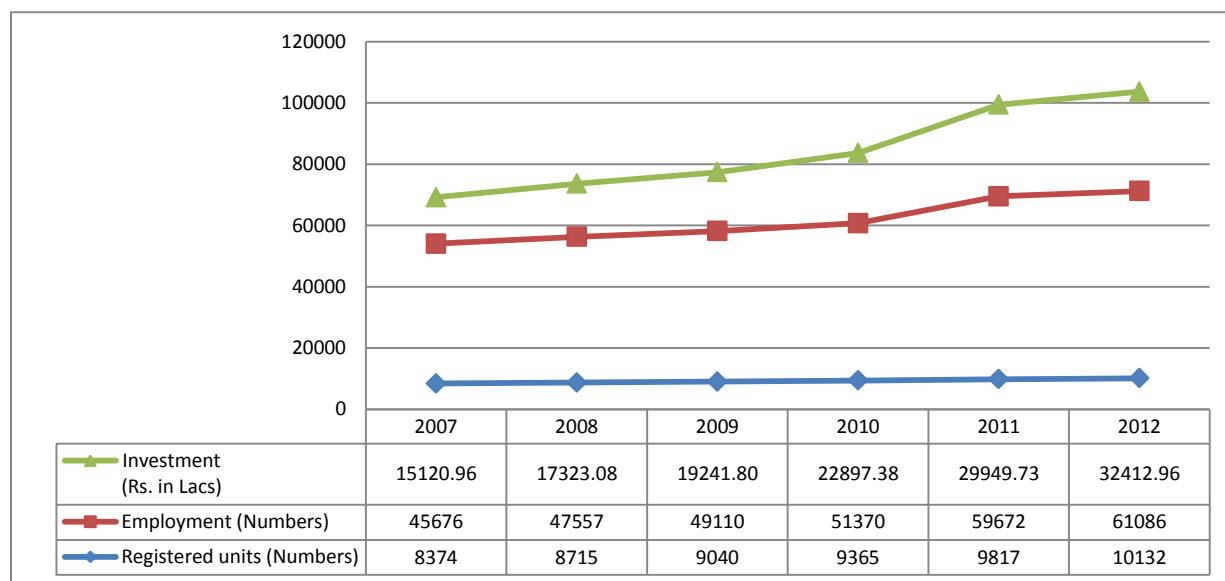


Figure 222 MSME trend analysis of the district Sri Ganganagar

The major industries existing in the district were as follows:

- Cotton Ginning & Pressing
- Oil Mill
- Plaster of Paris
- Agro Waste Brequettes
- Guar Gum
- Solvent Extraction Plant
- Roller Flour Mill

5.16.5 Sector wise mapping of industries

District wise the existing sectors were mapped against the high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Sri Ganganagar. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	102	5330.30	1675
Auto & Auto Components			
Chemical & chemical products	68	376.42	526
Construction Material & Building Hardware			
Food Processing	1	5.00	4
Furniture & Furnishing	46	410	332
Leather & leather goods	76	225.6	230
Textile & Handloom	112	145	352
Repair & Servicing	220	582.64	586
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
Transport & Logistics			
Mines, Metals & Minerals	120	911.35	1469
Machinery, Electricals & Manufacturing	122	18.4	394
High	Units>100, investment>300,emp>500		
Medium	Units>50, investment>40, emp>250		
Low	Units> 10, investment> 30, emp>20		
Emerging	Investment & demand based sectors of district-DIC		

Figure 223 Sector wise mapping of industries in Sri Ganganagar as per DIC report, 2007

Sectors covered under sample survey
Agriculture & Allied
Machinery, Electricals & Manufacturing
Mines, Metals & Minerals
Transportation, Logistics, Ware Housing & Packaging

Table 148 Breakup of industries in Sri Ganganagar (Sample study)

functionaries from diverse industries located in Sri Ganganagar district of Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table above. The 10 industries were sampled for the survey to represent 4 major sectors that are prominent in the district as shown in the table above. Agriculture and allied sector was the largest segment for the district engaging maximum number of workforce followed by mines, metals and minerals.

5.16.6 Workforce Demand and Supply

The economy of the district which has undergone some transition over a period from agriculture base to more wage based forms due to growing of the secondary and the tertiary sectors in the district. This impacted the WPR of the women and the Female WPR increased significantly in the year 2001 by close to 5%. It was significant that the number of main workers dependent on agriculture was just 60 per cent in Sri Ganganagar. Other workers representing the non-farm sector along with workers engaged in household industry add up to 39 per cent of the main workers in the district who were primarily engaged in allied activities. Similar structure of the work force was observed across all the tehsils in Sri Ganganagar.

The primary data during the survey focused on the diversified sectors of the district capturing the workforce structure in terms of skilled, semi-skilled and unskilled workers at various stages of the industries as shown in the below figure.

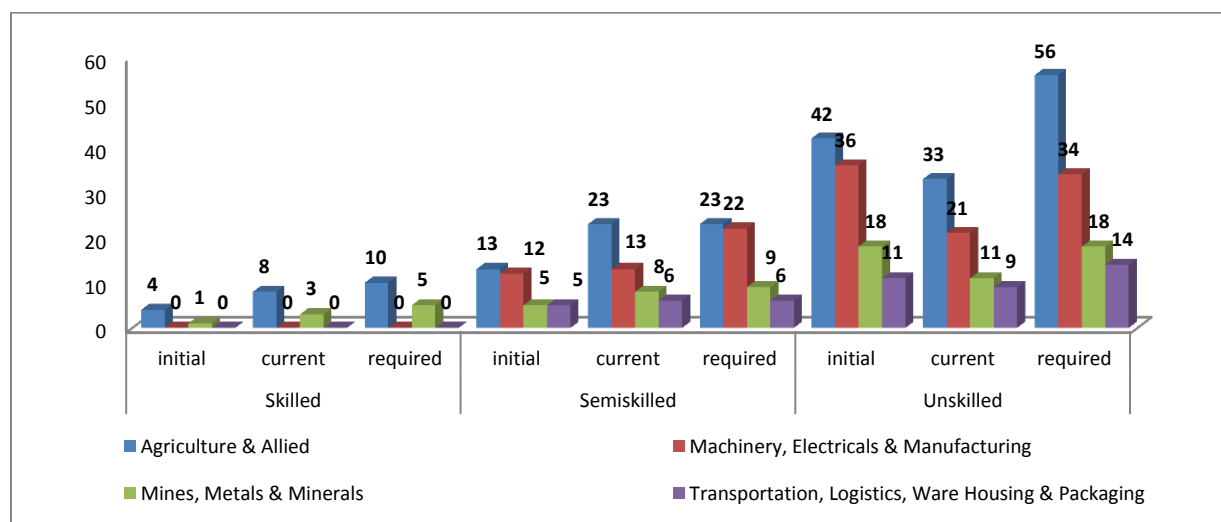


Figure 224 Workforce engagement under various stages and required strength of workers across sectors surveyed (Sri Ganganagar sample)

Availability of skilled, semi-skilled and unskilled workers according to their numbers in the sampled industries (segregated under specific sectors) at the time of the establishment of the industry, their present strength and their required strength as projected by the industries is shown in above figure. While the two industries sampled from two different sectors (Machinery, Electricals & Manufacturing and Transportation, Logistics, Ware Housing & Packaging sector) could not provide details of their skilled worker strengths, for remaining two sector (mining and agricultural), industries had a marginal increase in skilled worker in-take. Demand for skilled worker in future was not very high and reported by Agriculture & Allied and Mines, Metals & Minerals sector industries. All the industries have expanded their semiskilled workforce since industry establishment and reported potential to absorb more semiskilled workforce across different industries in near future. Though most of the sectors have reduced their unskilled workers' strength since establishment but potential to absorb more unskilled

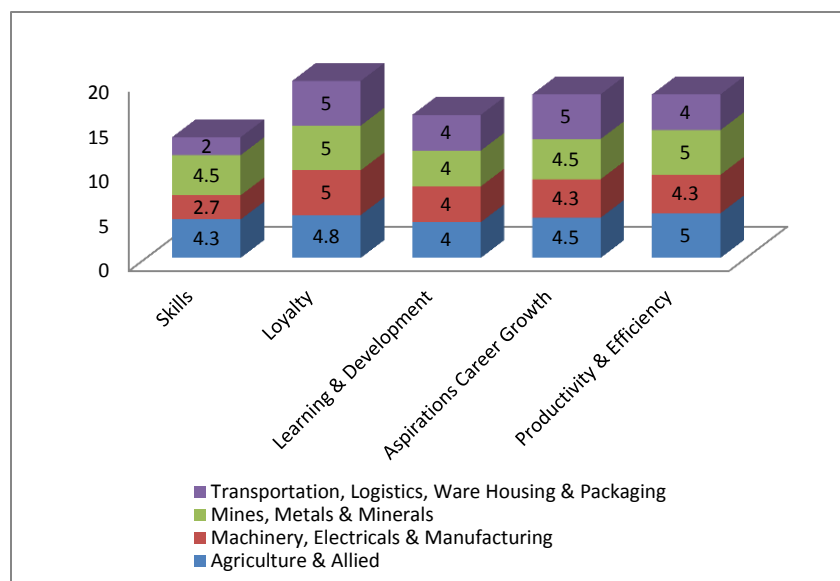


Figure 225 Employers demands in terms of expectations from workers (Sri Ganganagar)

It could be inferred that these sectors also employed skilled workforce.

Recruitment of required workers was done from known sources such as own workers which appeared to be the most reliable method of recruitment for most of the industries. The VTI trained workers were only engaged by the mining and agriculture industries.

5.16.7 Projected Workforce Demand

It has been observed in the primary survey that the percentage of skilled workers have been almost doubled over the years and had 70% increase in the semi-skilled and decrease in unskilled workforce. In contemporary scenario the engagement of unskilled labor (55% of the total workforce) was quiet high followed by semi-skilled (37%) and was just 8% for skilled. In general, the emerging occupations and new establishments demand for workers could be the new areas of interest for the workers in the near future as skilled and semi-skilled workforce.

worker in different industries was still there; clearly showing the low cost model of operation preferred by the industries.

In terms of industries' requirements and the expectation of the employers from its workers the primary survey provided the major demand to be loyalty followed by aspirations for career growth, productivity and efficiency. Agriculture and mining emerged as the demanding sectors in terms of the set parameters (ranked on

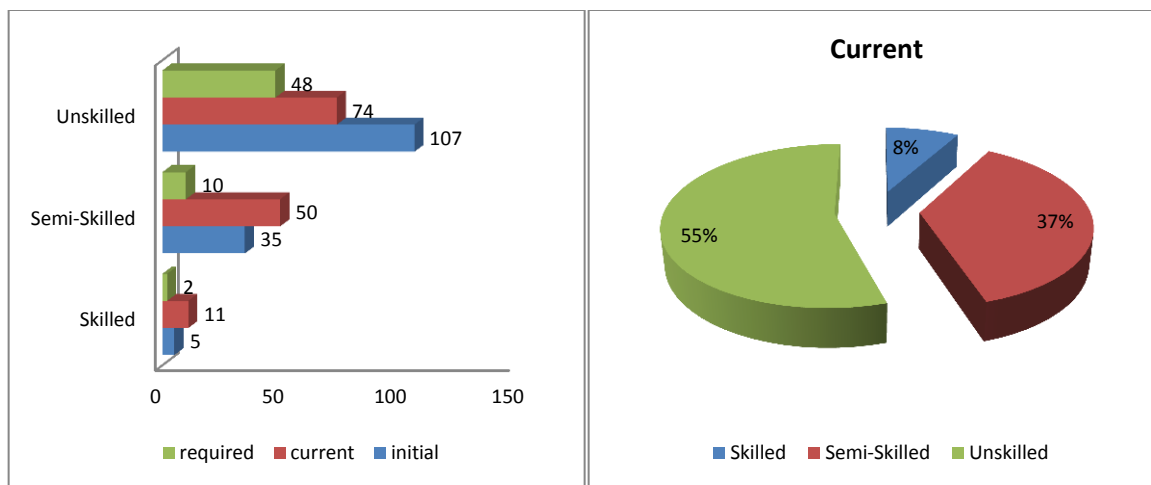


Figure 226 : Expected year wise requirement of workforce and current break up of workforce across industries surveyed (Sample)- Sri Ganganagar

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	73562	98056	113317	131133	151820	177991	198258	
Semiskilled	8443	8809	9237	9875	9931	10434	10808	
Skilled	5629	5872	6158	6583	6621	6956	7205	
Total demand	87634	112737	128713	147592	168372	195381	216271	49%
Industry Sector								
Unskilled	59076	63410	63116	65807	66158	68072	68879	
Semiskilled	27266	29266	29131	30372	30534	31418	31790	
Skilled	4544	4878	4855	5062	5089	5236	5298	
Total demand	90886	97554	97102	101241	101781	104727	105967	24%
Services Sector								
Unskilled	27182	28584	29371	30480	30988	31995	32685	
Semiskilled	63425	66695	68532	71121	72305	74655	76264	
Skilled	9061	9527	9790	10161	10330	10665	10895	
Total demand	99668	104806	107694	111762	113622	117314	119844	27%
All Sectors								
Unskilled	159820	190050	205805	227421	248966	278058	299821	
Semiskilled	99134	104770	106900	111369	112770	116507	118862	
Skilled	19234	20278	20804	21806	22039	22857	23398	
Total Demand	1397852	1462587	1524550	1621127	1632503	1709253	442082	100%

Table 149 Projected percentage of workforce (demand) requirement till 2017 across primary, secondary and tertiary sectors-Sri Ganganagar

There exists not much difference in the projections of the workforce from the current scenario. Scope of secondary and tertiary to engage workers would be increasing with primary sector engaging around

49% with some major changes accounting for increase in services sector growth. There would be 51% of the workforce engaged in the secondary and tertiary sectors with major shares in service sector. Mainly the services of sales, automobiles & workshop and computer/IT related services. Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Agriculture and allied			
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 150 Workforce across various sectors by 2017- Sri Ganganagar

5.16.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with

vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	79087	84140	89395	97482	98170	104589	109221
Semiskilled	18235	22567	34176	40274	46001	51841	56380
Skilled	6907	7197	7319	7591	7825	8054	8455

Table 151 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 1.74 lakh (employable working population). Keeping in mind the high rate of workforce participation from unskilled masses and the existing demand of skilled and semi-skilled workforce to be high; the significance would be to target training to atleast 80,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation is conducive enough to support industrial growth in Sri Ganganagar but Power has a major problem. Land, Water and availability of skilled manpower is not a problem and all resources are available except uninterrupted power supply
- The VTIs are not completely fulfilling the needs of the industries. Demand across the sectors for skilled workers was good but small and medium sectors only pooled semi-skilled and unskilled workers
- Scope for self-employment and entrepreneurship in the district was good, but the risk taking ability lacked in general. Loans were made available on subsidy and provided by the bank linkages in this regards. But lot needs to be done in terms of grooming and proper guidance
- Rod, Iron Tar and Atta industries are predominant in the district .Iron and tools Industries were the emerging sectors in the district which could sustainably absorb new manpower. Compared to the informal sector, formal sector ventures were bound by some limitations in employing persons as they require trained people only. On the other hand, the informal sector was free to employ even a semi-skilled person and provide him the required skills later over a period of time. Getting job in informal sectors was therefore easier and attracted number of skilled and semi-skilled manpower.

5.16.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Sri Ganganagar district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth to provide deep insight and understanding on their aspirations and perceptions; of self and people associated/related with them.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 51.7% of the youth covered were college educated and 48.3% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

Table 152 Youth Profile of sample in Sri Ganganagar

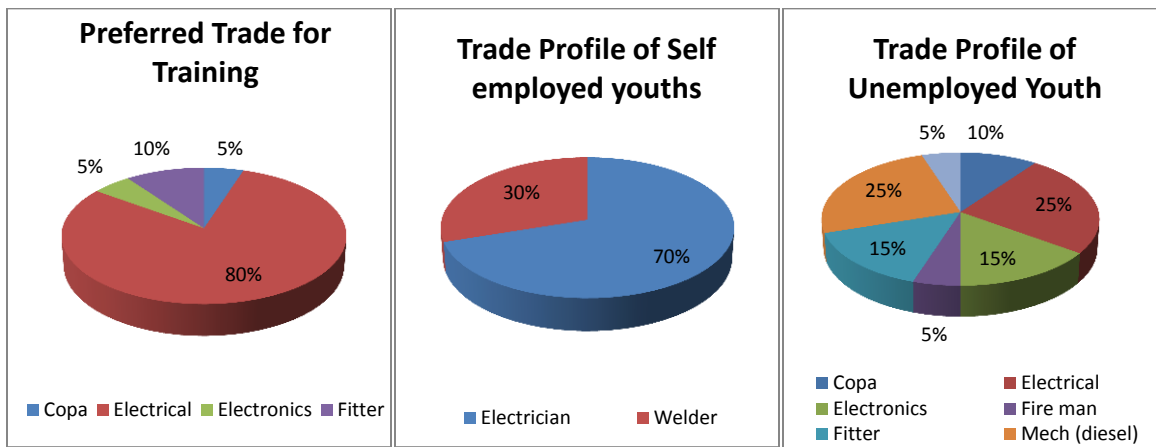


Figure 227 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Sri Ganganagar

Inclination towards Electrical course was found high (82% of the youth reported their preference) followed by fitter trade (10%). The reason seems to be the demand for this course in the market. As self-employment electrical and welder were the chosen trades of the youths keeping in mind the manufacturing sector, automobiles and the ancillary industries coming up in the district. High percentage of trained electricians and mechanics formed part of the unemployed youths in the survey (25% and 25% respectively) which highlights the demand supply imbalance and highlights the major gap in the placement of the youths.

5.16.10 Youth's Perception

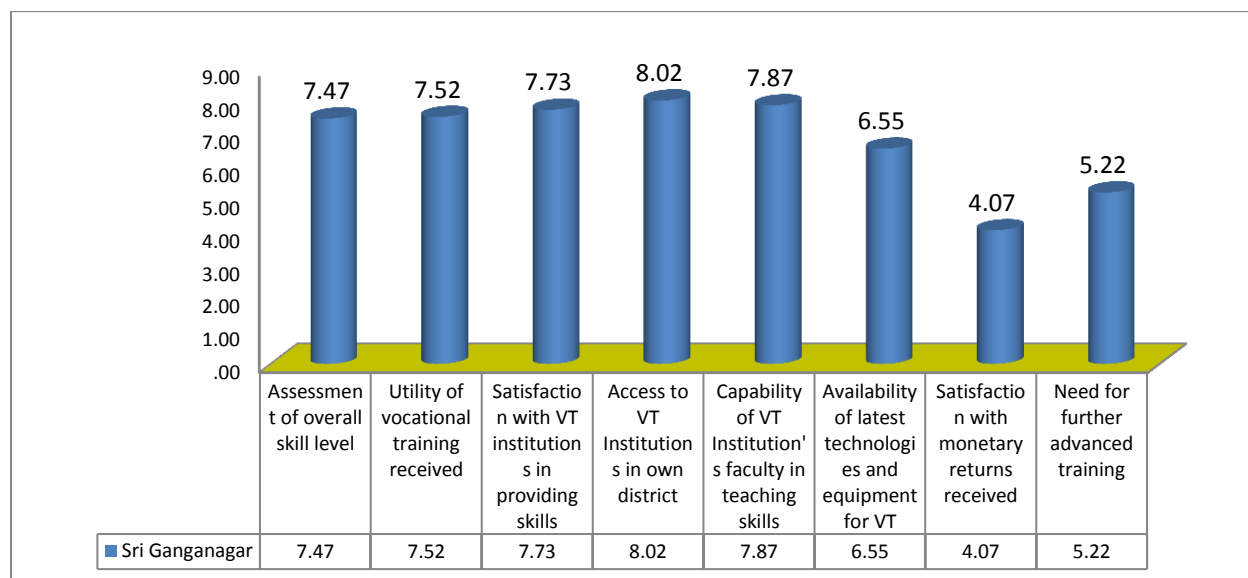


Figure 228 Sri Ganganagar Youth's perception, need and aspirations –Sample Group

The major dissatisfaction of the surveyed youths was the current monetary returns followed by the less opportunities of further training (especially in computers and English communication). On a scale of 10 youths rated importance of access to VTIs and the capacity of VTIs providing training at the highest.

The general aspirations were mapped by conducting FGDs with the youths from various categories and the following responses were evidently represented by the group:

- Better salaries, work satisfaction, family security and learning new technologies (respective trades) were the desires and expectations of the youth from the employment
- Families expected from them to get engaged in government jobs or well-paid jobs in big firms
- Preference to join the government jobs has made maximum number of youths to pursue training in the ITI
- Communicative English and computer training were generally undertaken by local training centres for better job opportunities
- 50% of the youths felt that self-employment had least scope in terms of secured future and sustainable growth. Also there were no encouragement by the family members to encourage the self-employment or enterprising
- The minimum salary expected after training by most of the youths was between Rs. 8000-10000/month. Though many were not comfortable with the entry level jobs with less pay in private sectors, but as an option they would prefer to get engaged

5.16.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 1.74 lakh of skilled, unskilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at district and block level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

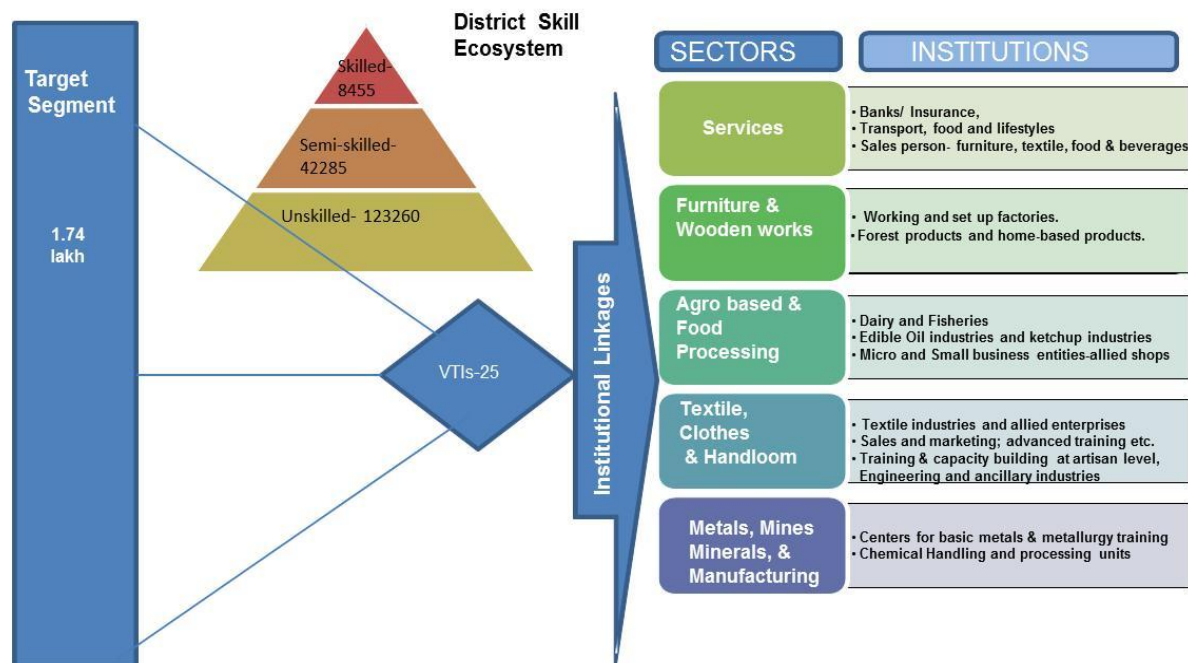


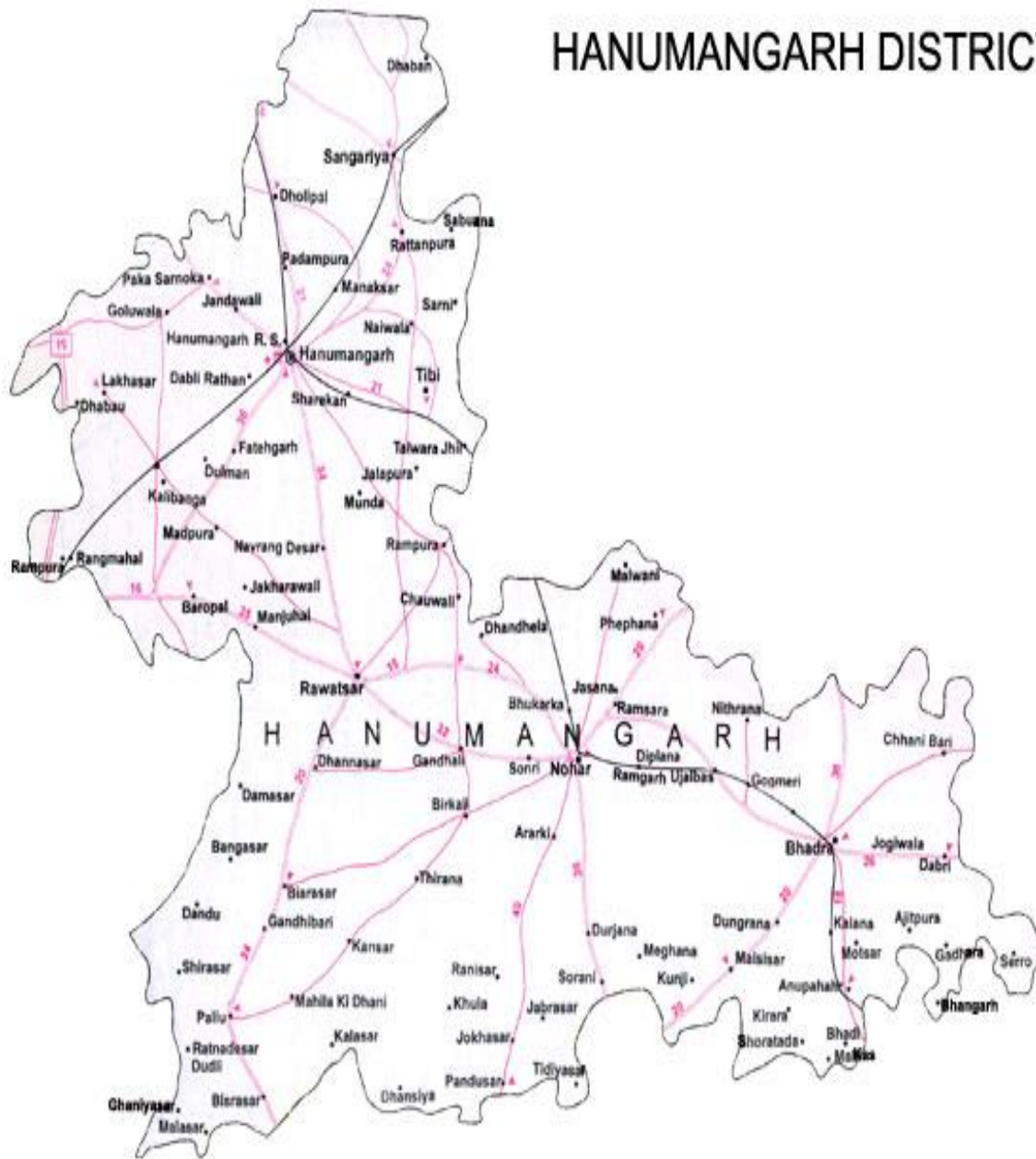
Figure 229 Optimization plan- Skill Development Eco System-Sri Ganganagar

The key stakeholders' contribution in enabling to achieve the target (as shown in the figure) would be as follows:

- State:** The state to target the skilled and semi-skilled segment for skilled training by creating additional 25 skill development centres (VTIs) in the district level of operations. It should encourage the private training partners to participate and operate in the district due to its large base of workers involved in secondary and tertiary sectors.
- Training Partners:** The sectors for engaging more skilled workforce would be in food processing, textiles and services in the district. Along with these, specific course curriculum designed for communicative English, life skills and basics in computer would be the key areas of skill development training.
- Industries:** The primary sectors of high human resource requirement would be food processing, textiles, and services and therefore would require increasing linkages with the related institutions for skilled workforce absorption

5.17 District Hanumangarh

HANUMANGARH DISTRICT



District Skill Workforce Face Sheet-2012								
District	Hanumangarh			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	14	No. of Villages		1907	No. of Schools (elementary & sec.)		2320	
Basic Data								
Population (in '000s)	1779	Overall Literacy(in %)		68.37	Sex Ratio		906	
Decadal growth rate(in %)	17.24	Female Literacy(in %)		56.91	HDI Ranking (2008)		0.761 (5 th position)	
% Urban Population	20.00	Male Literacy(in %)		78.82	Per Capita Income (in Rs.)		18940	
Workers participation rate (2001)								
Workers participation rate (2001)	41.39	Share of primary sector (%)		75.90	Share of secondary & tertiary sector (%)		24.00	
No. of MSME/Industries	2342	Total Employment (in 000s)		15086	Total Investment (in lakhs)		13445.9	
No. of colleges (PG & Graduation)	45	Total graduates (In '00s)		6726	Total Post graduates (in '00s)		730	
No.of VTIs(registered ITI+Poly+ITC)				1	Total trainees trained (in '00s)		184	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Semi-skilled workforce	15629	16117	16378	16751	16745	17085	17230	1.20 lakhs
Skilled workforce	5649	5983	6164	6398	6513	6727	6864	

5.17.1 Demographic Profile:

The district is located in the extreme north of Rajasthan. Carved out from Sriganganagar district and formally created on 12th day of July, 1994 as 31st district of Rajasthan state. Hanumangarh district, situated at 29° 5' to 30° 6' North and 74° 3' to 75° 3' east, shares its boundaries with Haryana state in the east, Sriganganagar district in the west, Punjab state in the North and Churu district in the South. The geographical area of the district is 9656.09 Sq. Km. The climate of the district is semi-dry, extremely hot during the summer and extremely cold during winter. The maximum average temperature remains 18° to 48° and minimum average is 2° to 28° celcius. The average rainfall during the year is 225 to 300 mm. This is the 31st district of Rajasthan. It occupies an area of approximately 2.82% of the state area and ranks 14th in the size of the districts.

As per Census of India 2011, Hanumangarh has a population of 17.79 lakhs, in which males are 9.33 lakhs and females are 8.45 lakhs. Males constitute approximately 52.4% of the population and females

constitute approximately 47.6% of the total population. Sex ratio is 906 and the density (persons per sq. km.) is 184. Hanumangarh district has decadal population growth rate which is at 17.24%. Hanumangarh has an average literacy rate of 68.73% (just higher than state average of 67.06%), male

S.no	Section	Unit	Quantity/
			Value
1	LOCATION		
	Latitude	degree	29°5' N
	Longitude	degree	74°3' E
2	AREA		
	Total geographical area	Sq km	9656
3	ADMINISTRATION		
	Tehsil	number	07
	Villages	number	1907
4	Land Use Pattern		
	Total Area	Hectares	970359
	Total Irrigated area	Hectares	676127
5	Population (census 2011, provisional)		
	Total population	number	1779650
	Men	number	933660
	Women	number	845990
	SC (2001)	number	396646
	ST (2001)	number	10029
6	Literacy (except 0-6 age group)		
	Total literate	percent	68.37
	Men	percent	78.82
	Women	percent	56.91
8	Energy		
	Electrified Villages	number	1754
9	Industries (DIC, 2009)		
	Registered MSME units	number	593
	Employed persons	number	18127
10	Education		
	Pre Primary & Primary Schools	number	585
	Upper Primary	number	1081
	Secondary & Sr. Secondary	number	654
11	Higher Education / Others		
	Colleges	number	45
	I T I	number	01
	Polytechnic	number	00

Table 153 Hanumangarh District Profile- a snapshot

literacy is 78.82% (lower than the state average of 80.51%), and female literacy is 56.91% (higher than the average female literacy rates for the state).

The economy of the district and surrounding area is mainly based on agriculture and animal husbandry. The oilseeds especially mustard seed is the predominant crop. Jawar , Ground nut , Sugarcane, wheat , Barle , Rice , Gram, mustard and cotton , Kharif pulses (pearl millet), Bajara and guar are other produces. Farming is the main activity that is carried out in the Hanumangarh district. Crops likes millet, wheat, cotton and rice are grown here. The livelihood of the rural sector totally based either on rainfed crops and animal husbandry or on the artesian trade industries especially leather crafts, dying, wood, wool and Bardi crafts established in all the blocks of the districts. The rearing of livestock was at large scale i.e. each household had two to three mulching animals. In general, each household had its own transport facilities i.e. rearing of camel. Livelihood of the rural sector was comparatively better. At district headquarter; there was a big domestic market and agriculture Produce Market Committee.

The worker participation rate (WPR) was 41.39% (HDI, Rajasthan, 2008) with primary sector engaging close to 75.90% of the workforce and rest 24.1% in secondary & tertiary sectors. In rural areas the participation rate was higher than the urban by close to 16% showing the major engagement of workers in primary sector. A significant proportion of the district was engaged in the primary sector and in fact had a rising trend in the workforce percentage in a decade's period.

5.17.2 Education Infrastructure and Utilization

Hanumangarh ranks as 5th in the Human Development Index at 0.761. It also ranks 10th on education index, 3rd in health and 9th in income index. Hanumangarh observes a healthier trend in enrollment rates, when compared to the state average. One of the reasons for the good performance in education was also the higher retention rates along with the early importance on quality of education in the primary level of education. The health indicators also highlight the status of females in the society and the healthier rate of enrolment of the girl child for formal education. The out of school and drop outs have been lower for the girl child in

Education	Hanumangarh	Rajasthan
Pre Primary & Primary	585	49546
Upper Primary	1081	38889
Sec/ Sr Sec	654	19135

Table 154 Hanumangarh vs. Rajasthan primary education scenario

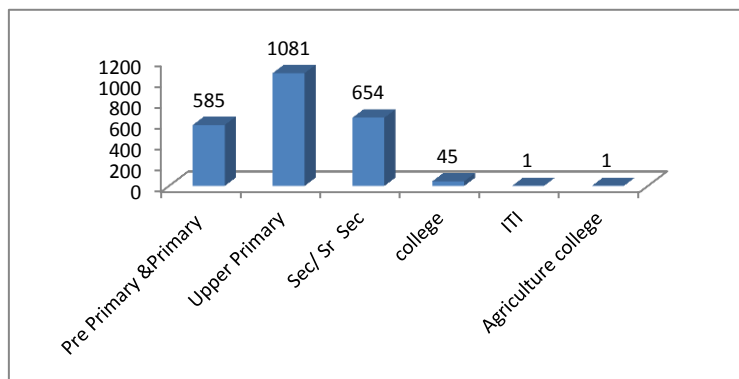


Figure 230 Number of Schools, Colleges, ITI & Polytechnic, Hanumangarh

comparison to some of the other northern districts of the state.

A total of over 13500 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There exists a professional agriculture college as well. A notable aspect was the female enrolment in the college education was

quiet high and almost equal to that of males. There was only one registered vocational training institutes in Hanumangarh district (01 ITI) with a total of above 180 aspirants enrolled in 2009-10. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 04 partners (includes KVK, ITC and NGO) implementing skilling initiatives with 17 approved programs (13 completed). A detailed view of the vocational training of Hanumangarh could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.17.3 VTI's demand across various trades in Hanumangarh district

The existing scenario of VTIs in Hanumangarh was certainly on the lower side considering the number of educational institutes and the number of VTIs currently present. Private organizations working in this sphere have a vast scope for initiating skilled interventions of the district and catering the needs for skilling youths of the district keeping in mind the ratio of female literates to that of males in the higher education and the progressive nature of the district in terms of HDI. The primary survey conducted in the district to understand the present scenario of skilled intervention of the district. The government VTIs interviewed in the survey was one and nine were from the private. The courses which were offered by the government VTIs and the private VTIs were same and were predominantly engineering based to cater the local market needs and address self-employment. The details of the courses offered in the VTIs of Hanumangarh are represented in the table.

Government VTI Trades	Pvt. VTI Trades
COPA	COPA
Electrical	Electrical
Electronics	Electronics
Fitter	Fitter
Mechanic (Diesel)	Mechanic (Diesel)

Electrical was most preferred trade in Hanumangarh as maximum number of seats in both government and private VTIs were from this trade. All the private VTIs had successful running of the electrical courses. There was no difference between actual trainees and approved trainees in

Table 155 Courses offered in government and private VTIs (sample), Hanumangarh

Government VTI across all the trades whereas in Private VTIs the difference was varying from 12 to 46 seats for the trades like COPA (maximum) followed by fitter and mechanic.

Based on the needs and requirement of the area the major five trades that emerged for the first phase of vocational training after using Porters Method are **Computer Based Accountancy, Sales & Marketing, Household wiring and repair of domestic appliances, Repair & Maintenance of Diesel Engine, and Hotel Management.** Two upcoming trades – Four-Wheeler Mechanic and Courier Delivery have been identified.

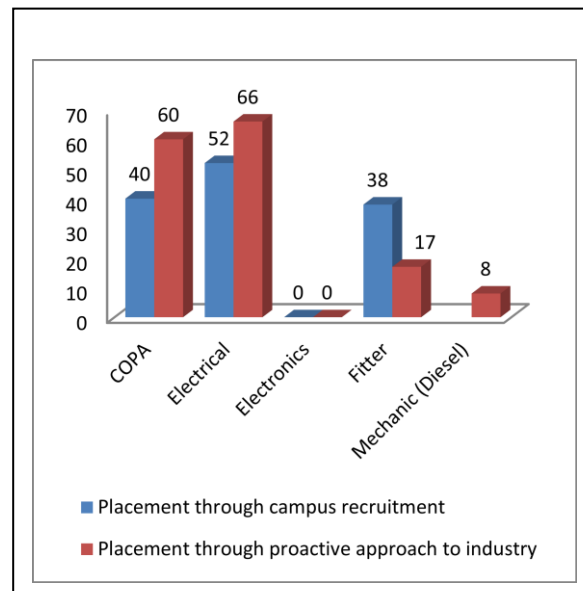


Figure 231 Hanumangarh district's (sample study) courses offered placements in VTIs and average (avg) salary offered

There was no placement so far across all the trades in government VTIs through the efforts of the institutes whereas overview of placement records by trade in private VTIs indicates moderate prospects in all most all of the trades with the exception of electronics trade. Average salary/trainee indicated towards good prospect in electrical and COPA trade as the trainee of this trade got highest remuneration of Rs. 6,500/month from private institute. Placements of trainees from the private VTIs were mainly through campus interviews and through proactive approach to the industry by the VTIs and the trainees themselves. The employment exchanges were not playing any role in the placements of the candidates.

The trends across most of the trades showed marginal increase in demand for trades over time in the government VTIs. In the private VTIs there were increasing trends in the number of trainees passing out from the various trades with very few gaps in utilization of the sanctioned seats. In the electrical trade the number of trainees passing out has almost increased by three times in the private VTIs due to increased private VTI numbers as well.

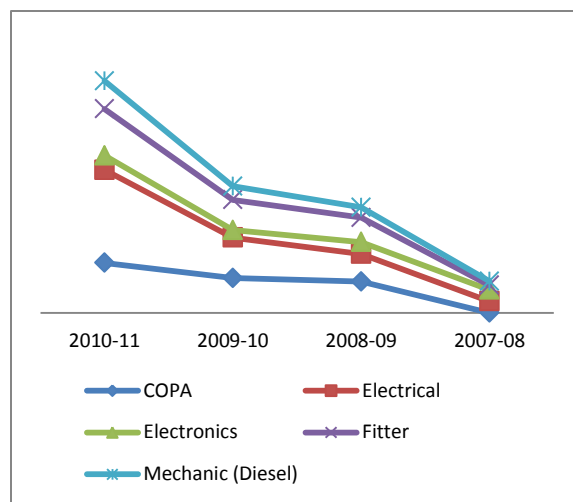


Figure 232 -Number of trainees from private VTIs (year wise)- Hanumangarh Sample

5.17.4 Industry Mapping

Economy of Hanumangarh District is dependent on agriculture and animal husbandry. Although agriculture and animal husbandry are the main economic activities of the district, there are a large

number of small and large scale industries too. Industries in Hanumangarh District are based on agriculture, wood, leather, cotton and jute. The district is not rich in respect of mineral resources. Gypsum is the main mineral which is found in Rawatsar and Pilibanga Tehsils. Gypsum used in manufacturing of fertilizer, Portland cement & Plaster of paris. About 90% of the total production of Gypsum is send to outside the district. Sweetlime and Kalmi Shora is also found in the district.

MSME in Hanumangarh

According to D.I.C data (March, 2012), there were around **2342 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.13445.91 lakhs** providing employment to **15086 persons**. Apart from these, there were **02** large and medium scale industries employing close to **1470** persons with an investment of **Rs 18.98 crores**. There were 08 industrial areas mapped by RIICO in the district. There exists two clusters – leather (artisan based) and Plaster of Paris (micro based) in the district.

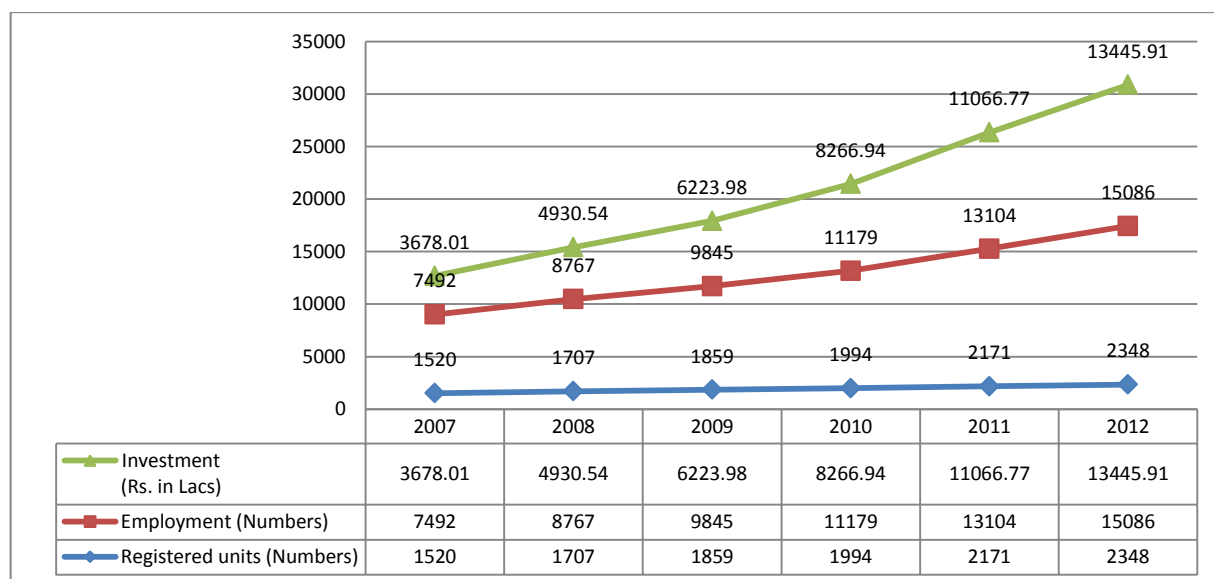


Figure 233 MSME trend analysis of the district Hanumangarh

5.17.5 Sector wise mapping of industries

District wise the existing sectors were mapped against the high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Hanumangarh. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections** like **high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	334	2712.52	3250
Forest Based	128	463.79	690
Auto & Auto Components			
Chemical & chemical products	112	1444.56	287
Construction Material & Building Hardware			
Food Processing			
Furniture & Furnishing	227	27.66	473
Leather & leather goods	612	178.34	1142
Textile & Handloom	732	199.01	1621
Jute & jute based	29	14.11	52
Repair & Servicing	166	837.56	556
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
Unorganized (artisan/leather/services etc.)	319	1026.19	1360
Transport & Logistics			
Mines, Metals & Minerals (includes quarrying)	329	2659.35	6906
Machinery, Electricals & Manufacturing	260	1067.03	1170
High	Units>300, investment>300,emp>700		
Medium	Units>100, investment>40, emp>250		
Low	Units> 10, investment> 30, emp>20		
Emerging	Investment & demand based sectors of district-DIC		

Table 156 Sector wise mapping of industries in Hanumangarh as per DIC report, 2007

Sectors covered under sample survey
Agriculture & Allied
Chemical & Chemical Products
Construction Material & Building Hardware
Machinery, Electricals & Manufacturing
Tourism, Travel, Hospitality & Trade

Table 157 Break-up of industries in Hanumangarh (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries were selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in Hanumangarh district of

Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table above. The 10 industries were sampled for the survey to represent 5 major sectors that are prominent in the district as shown in the table above along with representation of unorganized sectors. Though the mines and minerals sector employed major workforce in the small scale industries, but due to the less mineral deposits in the district it had become more static over the years with marginal rise. Sectors like leather and textiles were considered to be the major thrust sectors for the district's industrial growth.

5.17.6 Workforce Demand and Supply

Most of the workforce in the sample areas was either unemployed or engaged in various skilled and unskilled trades such as agricultural workers, wage labourer, small tea shop owners, contract and casual labourers, working in garage, and retail shops etc. The average wage of the unskilled workers varies from Rs50/- to Rs80/- and the average duration of working hours per day varies from 10 to 12 hours. Many of them are working in ball bearing factories as skilled labour on machines- making hole, polishing vis-à-vis as loaders and un loaders. Females are mostly working in pharmaceutical manufacturing units or chocolate manufacturing units as packaging labourer. Male candidates are bound to work after they have turned 16 because their upbringing happens in deficiency of basic needs. Majority of the interviewed among youths have left their education because they were forced to earn money for supporting themselves and their families.

The primary data during the survey focused on the diversified sectors of the district capturing the workforce structure in terms of skilled, semi-skilled and unskilled workers at various stages of the industries as shown in the below figure.

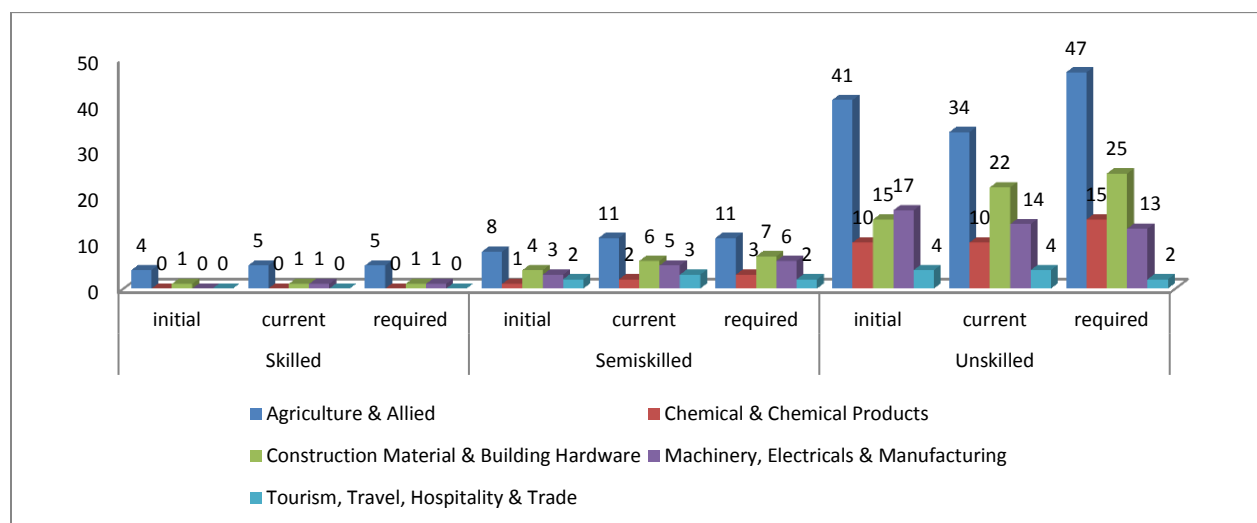


Figure 234 Workforce engagement under various stages and required strength of workers across sectors surveyed (Hanumangarh sample)

- While the two out of 5 sector industries sampled sector could not provide details of their skilled worker strengths, in three of the sectors (Agriculture & Allied, Construction Material & Building Hardware and Machinery, Electricals & Manufacturing sector), no significant increase in worker in-take was reported by the industries. Demand for skilled worker in future was also not very high across all sector industries.
- As reported by industries for semiskilled workforce, all industries across six sectors have increased their workers strength over the years and also have the potential to absorb more semiskilled workforce across the industries.
- Two out of five sectors (Agriculture & Allied and Tourism, Travel, Hospitality & Trade) have reduced their unskilled workforce whereas Construction Material & Building Hardware sector

industries have increased their workers' strength and all other industries have kept same number of worker since industry establishment. The potential to absorb more unskilled workforce across the industries was found high.

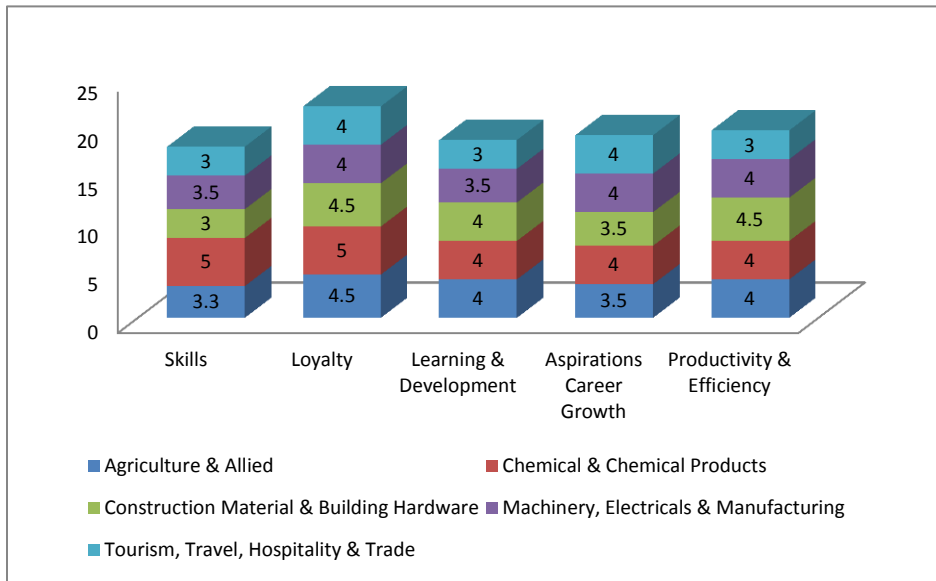


Figure 235 Employers demands in terms of expectations from workers (Hanumangarh)

In terms of industries' requirements and the expectation of the employers from its workers the primary survey provided that the major demand was loyalty followed by productivity and efficiency from its workforce. The least considered was the skills and learning and development of the workers. The chemical and construction

sector industries had topped the demand expectations from its workers (on a scale of 5).

Recruitment of required workers was done from known sources such as own workers which appeared to be the most reliable method of recruitment for most of the industries. The contractors were mainly engaged to get the industries the unskilled workforce on demand basis.

5.17.7 Projected Workforce Demand

It has been observed in the primary survey that the percentage of skilled workers have been almost static over the years and had marginal increase in the semi-skilled workforce. The demand for unskilled workforce was still high and followed by semi-skilled workers requirement. In contemporary scenario the engagement of unskilled labor (71% of the total workforce) was quiet high followed by semi-skilled (23%) and skilled (06%).

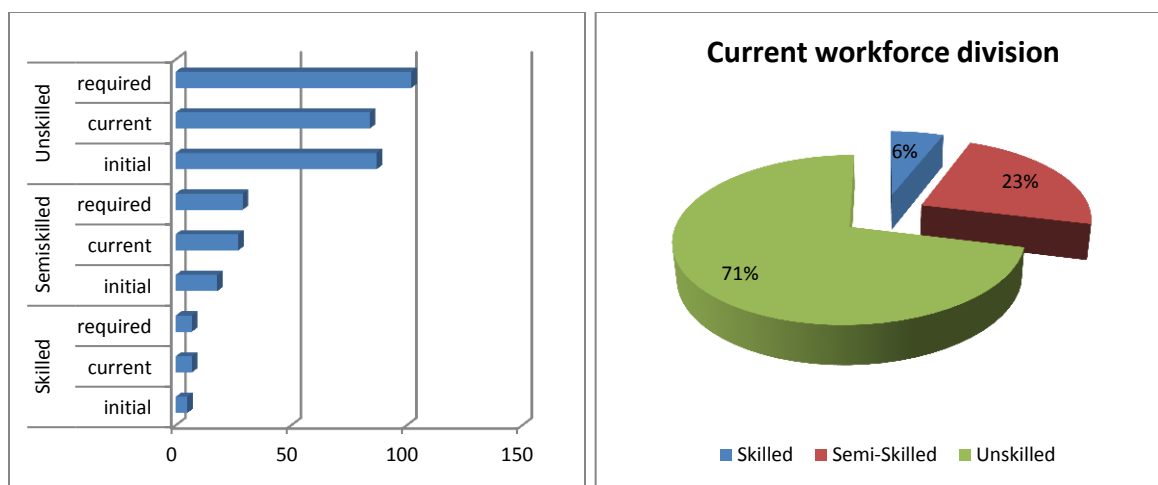


Figure 236 : Expected year wise requirement of workforce and current break up of workforce across industries surveyed (Sample)- Hanumangarh

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	172261	220688	274472	329767	361181	425610	471043	
Semiskilled	66815	72393	77593	82101	84662	89914	93618	
Skilled	5121	5493	5840	6140	6311	6661	6908	
Total demand	244197	298574	357905	418007	452154	522185	571568	68%
Industry Sector								
Unskilled	53599	57315	58004	61486	62695	64854	66501	
Semiskilled	24738	26453	26771	28378	28936	29933	30693	
Skilled	4123	4409	4462	4730	4823	4989	5115	
Total demand	82460	88177	89237	94594	96455	99775	102309	12%
Services Sector								
Unskilled	20801	21889	22670	23550	24122	24945	25585	
Semiskilled	48535	51075	52897	54949	56284	58205	59699	
Skilled	69335	72964	75567	78498	80405	83151	85284	
Total demand	138670	145927	151134	156997	160811	166301	170568	20%
All Sectors								
Unskilled	246661	299892	355147	414803	447998	515409	563129	
Semiskilled	140087	149921	157261	165428	169882	178052	184009	
Skilled	78579	82865	85868	89368	91539	94800	97307	
Total Demand	465327	532678	598276	669599	709419	788261	844445	100%

Table 158 Projected percentage of workforce (demand) requirement till 2017 across primary, secondary and tertiary sectors-Hanumangarh

The projections suggest the demand in the services sectors and the industries would grow and the workforce demand from these sectors shall be close to 32%, services contributing 20% of the total. The upcoming services which may engage good workforce in near future shall be as follows:

- Packaged food industries
- Printing Press
- Automobiles & Tractor Services
- Tyre Retrading
- Hotel Management

Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Agriculture and allied	Yellow	Green	Green
Automobiles & Auto Components	Orange	Orange	Red
Food processing	Orange	Orange	Red
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)	Red	Yellow	Red
Textile & Garments	Green	Green	Red
Building, Hardware & Home Furnishings	Yellow	Yellow	Red
Leather & Leather Goods	Yellow	Green	
Unorganised Sectors (includes services)		Yellow	Green
ITES- BPO	Yellow	Yellow	
Chemical & Pharmaceuticals		Green	Yellow
Tourism, Hospitality & Travel	Orange	Orange	Orange
Building & Construction	Yellow	Yellow	Green
Transportation/logistics/warehousing & packaging	Red	Green	Yellow
Education/ Skill Development	Green	Yellow	
Banking, Insurance & Finance	Yellow		
Healthcare	Yellow	Yellow	
Machinery, Electricals & Manufacturing	Red	Red	Green
Mining, Minerals & Metals (includes stone quarrying)	Red	Red	Green
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 159 Workforce across various sectors by 2017- Hanumangarh

5.17.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	62494	69814	76275	82102	85324	92010	96669
Semiskilled	15629	16117	16378	16751	16745	17085	17230
Skilled	5649	5983	6164	6398	6513	6727	6864

Table 160 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 1.20 lakh (working population). Keeping in mind the rate of workforce participation from unskilled masses and the existing demand of skilled workforce to be low; the significance would be to target training to atleast 40,000 youths by 2017 from unskilled categories to engage either in various entrepreneurship training modules or skill development through short term courses with on job training. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation is not conducive enough to support industrial growth in Hanumangarh. Investments were not good but there was hardly any support from the government. Land for establishment of industries was a problem since the district was primarily into agriculture and therefore, the farmers were not willing to give their land for the establishment of the industries. Acquiring of land was a major problem.
- The VTIs felt short of fulfilling the needs of the industries (not exactly or completely). Industries should give more attention regarding the remuneration so that it could attract skilled workers. Scope for self-employment and entrepreneurship in the district was very good. The district authorities were not making any efforts in this direction, but the agriculture based business helped people get self-employment.
- Guar Gum, Atta, Rice Mill and Oil Mills were predominant in the district. Rice processing and other agricultural products were emerging fast as new areas for growth. In case of services sector, the number of visitors to the town has seen a steady rise in the last few years and the hospitality industry has started responding to this trend. As a natural consequence the demand for skilled manpower in this sector is substantial. Along with this, some of the other preferred services shall be computer based works, sales, household wiring and engine repairs etc.

5.17.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Hanumangarh district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth to provide deep insight and understanding on their aspirations and perceptions; of self and people associated/related with them.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 35% of the youth covered were college educated and 65% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 161 Youth Profile of sample in Hanumangarh

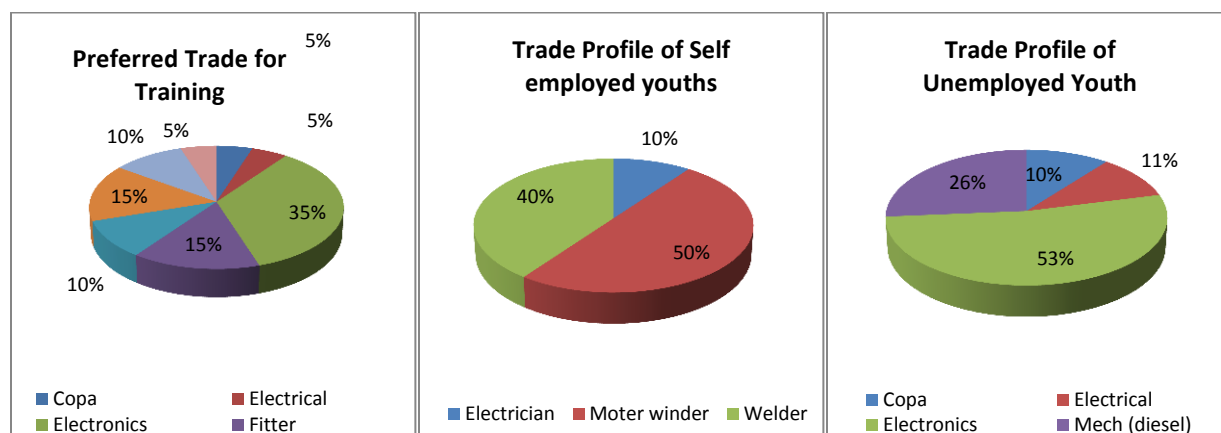


Figure 237 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Hanumangarh

Inclination towards electronics course was found high as around 35% of the youth preferred it during his/her training at VTI. The reason for the same seemed to be the demand for this course in the market. Second, most sought, trade was Plumber and Fitter trade i.e. 15%. In continuation with the most preferred trade during VTI, it was found that half of the self-employed youth, who were surveyed, were engaged in Motor winding work. Welding as an occupation was chosen by around 40% of the youth. As large numbers of respondents were trained in Electronics at VTIs, so maximum (around 53%) numbers of unemployed youths were also from this category. Mechanic (diesel) emerged as the second leading trade (26%) in unemployed youths. The youths at present were engaged mainly in the following trades as a semi or unskilled workers:

Agricultural labourers, Handicraft making Industry workers, Casual laborers, Construction labor, Hotel boys/ house-keepers, Unskilled industrial workers, Vegetable vendor, Factory laborers, Furniture workers. There were few who are self-employed and are engaged as: Vendors, Drivers Painters.

5.17.10 Youth's Perception

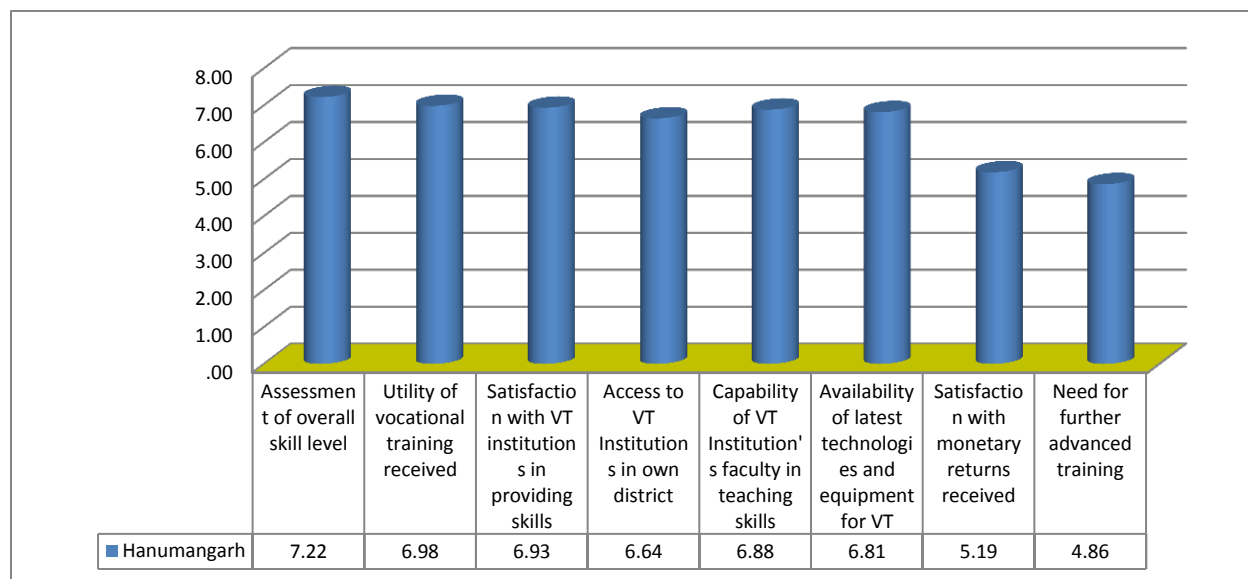


Figure 238 Hanumangarh Youth's perception, need and aspirations –Sample Group

The major dissatisfaction of the surveyed youths was the less opportunities of further training (especially in computers and English communication) followed by current monetary returns. On a scale of 10, youths rated importance of skill level of the VTIs providing training at the highest.

The general aspirations were mapped by conducting FGDs with the youths from various categories and the following responses were evidently represented by the group:

- g) Better salaries, work satisfaction, family security and learning new technologies (respective trades) were the desires and expectations of the youth from the employment
- h) Families expected from them to get engaged in government jobs or well-paid jobs in big firms
- i) Preference to join the government jobs has made maximum number of youths to pursue training in the ITI
- j) Communicative English and computer training were generally undertaken by local training centres for better job opportunities
- k) 7 out of 10 felt that self-employment had least scope in terms of secured future and sustainable growth. Also there were no encouragement by the family members to encourage the self-employment or enterprising
- l) The minimum salary expected after training by most of the youths was between Rs. 8000-10000/month. Though many were not comfortable with the entry level jobs with less pay in private sectors, but as an option they would prefer to get engaged

5.17.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and

the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 1.2 lakh of skilled, unskilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at district and block level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

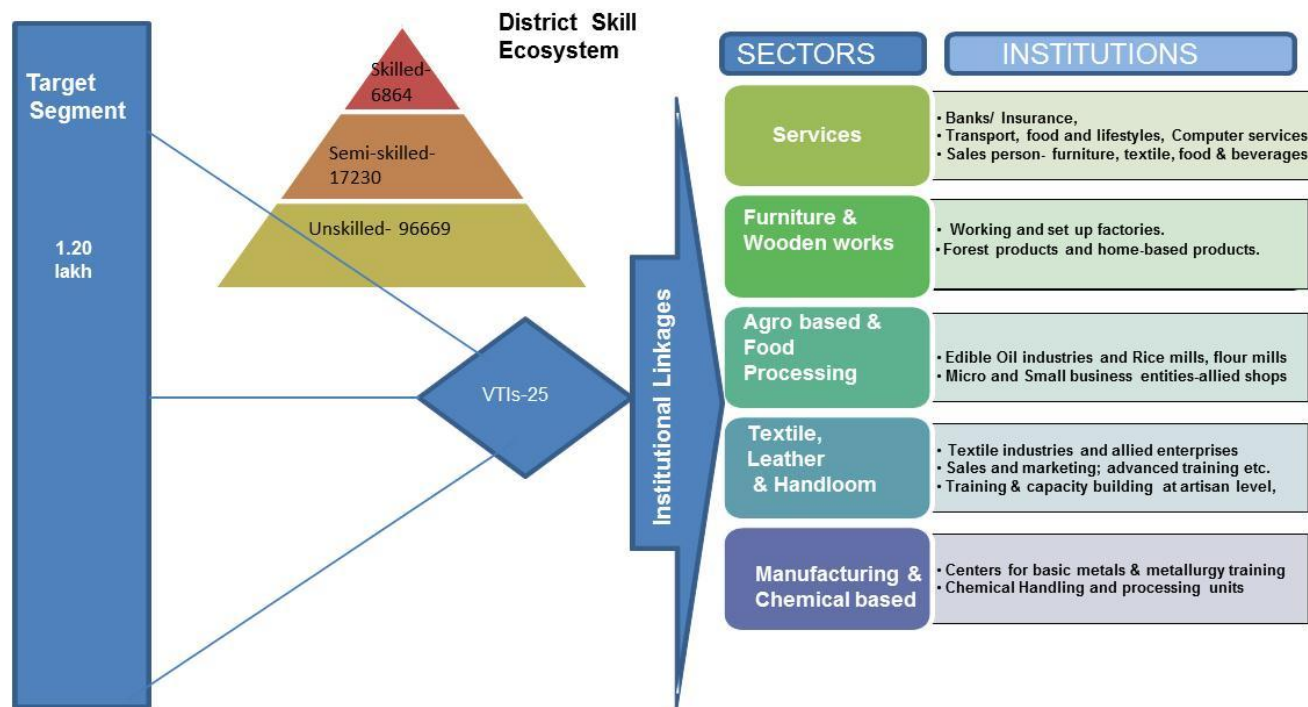


Figure 239 Optimization plan- Skill Development Eco System-Hanumangarh

The district would require more dedicated approach to advocate the usefulness of skilled workers in the industries and also need to target the service sector employment (emerging sectors) by engaging and converting unskilled workforce to semi-skilled and skilled. VTIs should be vital in getting the work ready repairers and mechanics, also for more skilled workers in agriculture and allied sectors. The interface between the VTIs and the industrial bodies would be essential for the mutual benefit.

5.18 District Sirohi

SIROHI DISTRICT



District Skill Workforce Face Sheet-2012								
District	Sirohi			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	10	No. of Villages		477	No. of Schools (elementary & sec.)		1475	
Basic Data								
Population (in '000s)	1037	Overall Literacy(in %)		56.02	Sex Ratio		938	
Decadal growth rate(in %)	21.86	Female Literacy(in %)		40.12	HDI Ranking (2008)		0.645 (14 th position)	
% Urban Population	17.73	Male Literacy(in %)		71.09	Per Capita Income (in Rs.)		18340	
Workers participation rate (2001)								
Workers participation rate (2001)	40.41	Share of primary sector (%)		50.60	Share of secondary & tertiary sector (%)		49.50	
No. of MSME/Industries	5480	Total Employment (in 000s)		20330	Total Investment (in lakhs)		15429.3	
No. of colleges (PG & Graduation)	9	Total graduates (In '00s)		3268	Total Post graduates (in '00s)		2118	
No.of VTIs(registered ITI+Poly+ITC)				4	Total trainees trained (in '00s)		750	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Semi-skilled workforce	14258	15186	16214	17039	17916	18901	19805	0.62 lakhs
Skilled workforce	7732	7884	7896	7953	7965	8021	8030	

5.18.1 Demographic Profile:

Sirohi district is situated at the south-west part of Rajasthan between parallel of 24°53' N and 72°51' E. It has an area of 5139 km's (2009 sq. miles) and is the third smallest district of Rajasthan. It is the third smallest district of Rajasthan, after Dungarpur and Banswara.

In 2011, Sirohi had population of 1,037,185 of which male and female were 535,115 and 502,070 respectively. In 2001 census, Sirohi had a population of 851,107 of which males were 437,949 and remaining 413,158 were females. Sirohi District population constituted 1.51 percent of total Rajasthan population. In 2001 census, this figure for Sirohi District was at 1.51 percent of Rajasthan population.

It ranks as the 25th largest district of the state covering 1.50 % of the area of the state. With just 202 the density of population in the state ranks at 19 (Census, 2011- Provisional). It stands 14th on the Human Development Index (0.645) and 26th on the GDI (0.460). It was observed that though the district fares quiet high on income index (6th rank), its due to the education and health index (26th and 23rd rank

respectively) which pulls the district down on overall HDI ranking. As per provisional census 2011 data, Sirohi accounts for population of 10.37 lakhs (1.5% of the state population and 30th ranked in population of the state) with sex ratio of 938 (compared to 2001 census figure of 943) which still is on

S.no	Section	Unit	Quantity/
			Value
1	LOCATION		
	Latitude	degree	24°53' N
	Longitude	degree	72°51' E
2	AREA		
	Total geographical area	square	5136
3	ADMINISTRATION		
	Tehsil	number	5
	Villages	number	477
4	Land Use Pattern		
	Total Area	Hectare	517947
	Total Irrigated area	Hectare	97496
5	Population (census 2011, provisional)		
	Total population	number	1037185
	Men	number	535115
	Women	number	502070
	SC (2001)	number	162984
	ST (2001)	number	210763
6	Literacy (except 0-6 age group)		
	Total literate	percent	56.02
	Men	percent	71.09
	Women	percent	40.12
8	Energy		
	Electrified Villages	number	462
9	Industries (DIC, 2009)		
	Registered MSME units	number	5480
	Employed persons	number	20330
10	Education		
	Pre Primary & Primary Schools	numbe	845
	Upper Primary	numbe	451
	Secondary & Sr. Secondary	numbe	179
	Higher Education / Others		
	Colleges	numbe	09
	IT I	numbe	03
Polytechnic	numbe	01	

Table 162 Sirohi District Profile- a snapshot

the higher side of the state ratio of 926. There was a decrease in the decadal growth of population of 9% approximately showing trends of population stabilization.

The worker participation rate in Sirohi is 40.41% (HDI, Rajasthan, 2008) with primary sector engaging close to 50.60% of the workforce and rest 49.50% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 12% (Urban- 30.6% & Rural- 42.5%). There has been tremendous shift to secondary and tertiary workforce participation by over 17% for a period over a decade. The literacy rate of Sirohi in 2011 is 56.02% compared to 53.94% of 2001 which remains on the lower side of the state figure of 67.06. According to Census 2011 provisional data, the male literacy figure stands at 71.09% and female literacy was at a low of 40.12% with marginal increase in the rates for both males and females though remains significantly lower than the state figures.

5.18.2 Education Infrastructure and Utilization

Sirohi's status in literacy was marked far below than the state average but also marked with very low literacy status of both male and female literacy. As per the HDI report of 2008, Sirohi has also been among the districts with high drop-out rates. The retention rate is just at 43.4% with enrolment rate of girls being among the lowest. With high percentage of ST population in Sirohi, the education at primary and secondary levels for ST was just at 27-35% only.

According to Census 2011 provisional Sirohi has a total of 1475 schools from pre-primary to senior secondary levels. Considering the density of population and the vast area, the school spread was uneven in comparison to the state average and across other districts. The retention rate of students in schools was quite low which also contributes to the drop in literacy rates and status of education. The supply constraint in case of education infrastructure was evident as per reports of Rajasthan HDI report, 2008.

Education	Sirohi	Rajasthan
Pre Primary & Primary	845	49546
Upper Primary	451	38889
Sec/ Sr Sec	179	19135

Table 163 Sirohi vs. Rajasthan education status

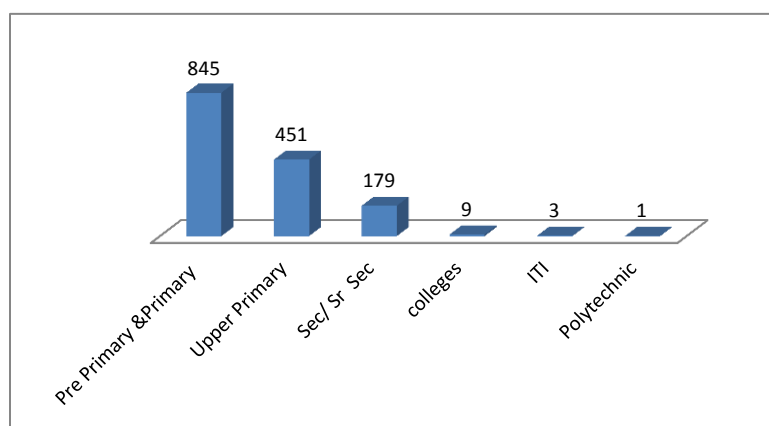


Figure 240 Number of Schools, Colleges, ITI & Polytechnic, 2009-10-Sirohi

A total of over 3,200 students enroll in various institutes at colleges, ITI & polytechnic. At the intermediate college level, courses are available in the area of science, arts and commerce. The district clearly lacks the education infrastructure for higher education. Even the private institutes have not come up with courses befitting the district masses. There are total of four registered vocational training institutes in Sirohi district out of which 03 are ITIs and 01 polytechnic. A total of just above 650 aspirants got enrolled in 2009-10 in the registered training institutes. As per the updated

report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 04 partners (includes NGOs, ITIs, government college) implementing skilling initiatives with 08 approved programs (06 are completed). A detailed view of the vocational training of Sirohi could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.18.3 VTI's demand across various trades

The existing scenario of VTIs in Sirohi was on the lower side considering the number of youths passing out; and seeking employment as skilled workforce. Private players have not yet ventured in a big way eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district.

The government VTIs interviewed in the survey was four and five were from the private. The courses which were offered by the government VTIs were predominantly self-employment based or to cater the local market needs. In private VTIs the courses were more male oriented and 1 of the 06 courses offered was preferred by the women. The details of the courses offered in the VTIs of Jaipur are represented as follows:

Private VTI Trades	Government VTI Trades	
Electrical	Electrical	Welder
Fitter	Electronics	Wireman
Mechanic (Diesel)	Fitter	Mechanic (Diesel)

Table 164 Sirohi district's (sample study) courses offered

The total 05 VTIs (03 governments+02 private) covered in the sample. The government VTIs sampled for the study offer 06 different trades for training while the private VTIs offer 03 trades. It appears that electrical was among the preferred trades in the VTIs (as the difference between the sanctioned and

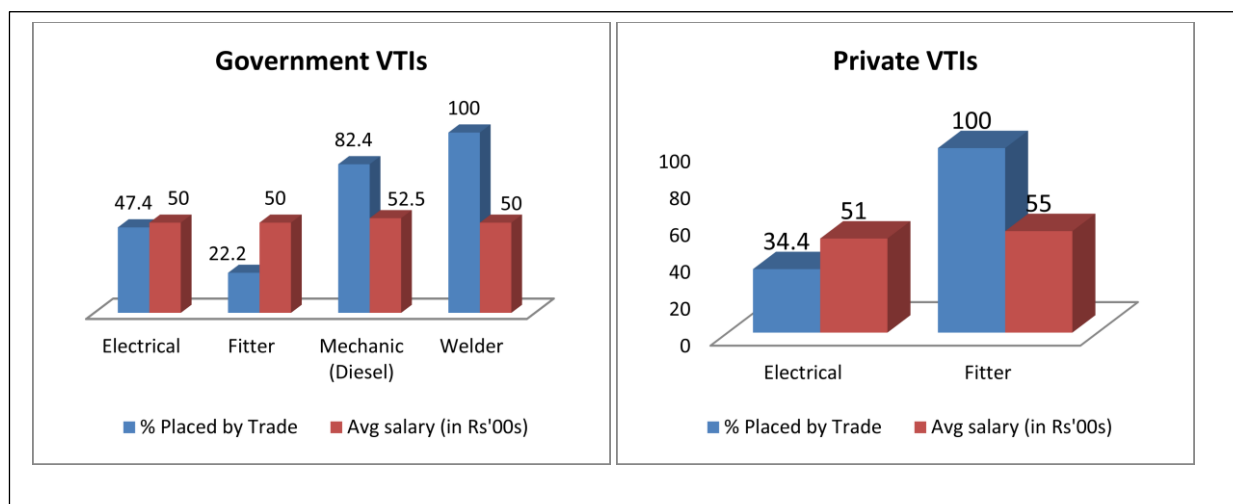


Figure 241 Sirohi district's (sample study) courses offered placements in government and private VTIs

actual seats in the existing batches was low). It appears in the all the sampled VTIs, the number of actual trainees compared to the number of approved number of trainees was more or less same across all the trades. An overview of placement records by trade in the government and private VTIs indicate poor prospects in almost all the trades with the exception of Diesel Mechanic trade in government VTI and fitter private VTIs. The trades like electrical with maximum number of overall seats did not have proper placement scenario and accounted for just 40% of the overall placement. Average salary/trainee indicated good prospect in terms of initial pay of Rs. 5000/month in most of the trades. More often the courses provided were less oriented for direct placement in the market; rather introduced the aspirants for self-employment. The selection of course design and other influencing factors for finalization of courses by the VTI functionaries were more or less determined by the availability of facilities and equipment. All the VTIs claimed to have updated technologies, equipped labs, and space for conducting the training, electricity and water supply. None of the VTIs had hostel facilities for girls and boys. Commuting facility for the aspirants in all private and government VTIs was a good initiative and different from many other districts surveyed. The staffing in these institutes were marked understaffed in aspects dealing in academics & managerial positions in government VTIs, and private VTIs had staffed adequately as per requirement.

5.18.4 Industry Mapping

The district had been declared as industry less district of the Rajasthan a decade ago. At that time the 1574 Industries units were registered. The total investment of these Industries was 2 crore and 21 lakh of rupees. And these had given employment to 3314 persons of the district. Agricultural, Forest, Mechanical, Textile and Animal husbandry were the main among these industries.

This industry less district Sirohi came up along with other industrially developed districts of the state by the special efforts put by the State Government. Today, there are 8 Large Scale Industries and 12 Medium Scale Industries, and 6257 small scale industries in the district. The Sirohi district is full of minerals therefore the industries based on minerals were developed rapidly. These industries produce portland cement, synthetics yarn, high tension insulators, fibres, marble, granite, polymers and mineral powder. Similarly, medium scale industries produces tiles and slabs of cement, marble and granites, acid, tubes, woven checks and texturizing threads. Pindwara tehsil emerging as an Industrial center of the district has Binani Cement having investment of 400 crores of rupees and producing portland cement. Gujrat Cable Ltd. in Bharja with investment of 350 crore rupees which produce telephone cables. Similarly, in Abu road there are Gujarat Mineral Development Corporation Ltd and Lok Housing And Construction Ltd. are under construction with the investment of rupees 100 crores. There are 7 no. of Industrial Areas and which are as follows-

- Abu Road
- Ambaji
- Mandaur
- Saroop Ganj
- Sheoganj
- Sirohi
- Sirohi Road

Main existing Industries - Marble handicraft items, ceramic glazed tiles, cotton yarn textures, granite slabs & tiles, HDPE /PP fabrics & bags, high tension insulators, hydrochloric acid, marble slabs & tiles, PVC granules, polleyester yarn, portland cement, steel pipes & synthetic blended yarn.

Export Items - Catate powder, granite slabs, hydrochloric acid, high tension insulators, marble articles, marble polished slabs, mustard de-oiled cakes, precipitated silica & synthetic blended yarn.

Major industries in the district are-

- Binani Cement Ltd., Aml, Pindwara.
- J.K. Corporation Ltd (Laxmi Cement Ltd), Banas.
- Volcam India Ltd., Sirohi Road.
- Triupati Fibers Ltd., Arbuda Industrial Area, Aburoad.
- Modern Insulator, Aburoad.
- Greaves Limited.
- Risabh Special Yarn Ltd., Ambaji, Industrial Area, Aburoad.
- Gujarat Cable Limited, Bharja.

Since, Sirohi district is enriched with minerals and also due to immense possibility of Handloom Industry, we hope that in near future Sirohi district will emerge as leading Industrial district in the State.

MSME in Sirohi

According to D.I.C data (March, 2012), there were around **6257 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.26463.06 lakhs** providing employment to **24651 persons**.

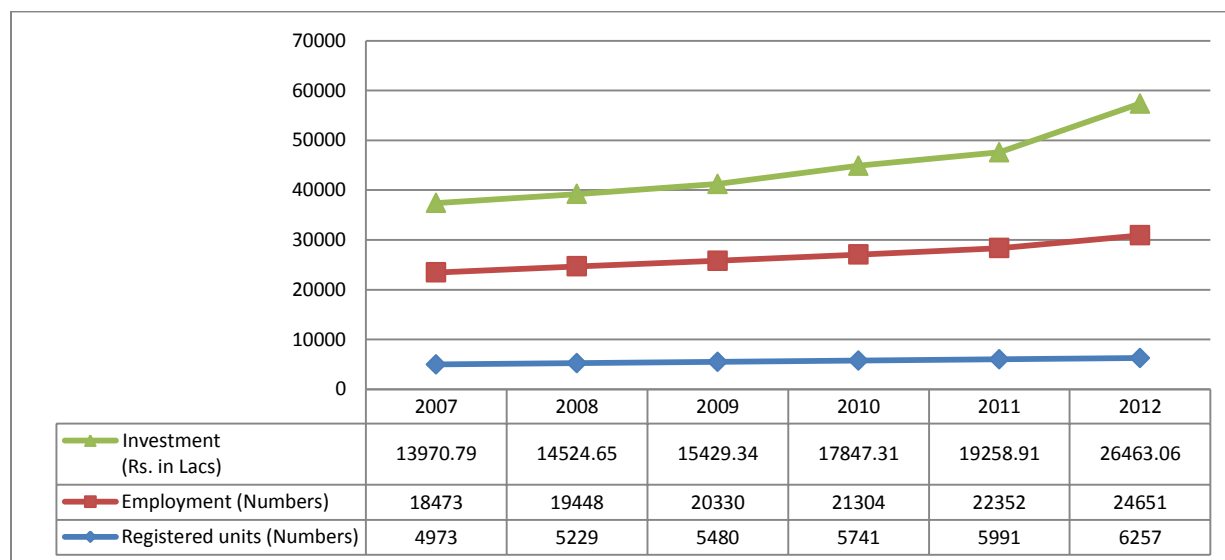


Figure 242 MSME trend analysis of the district Sirohi

There has been a constant increasing trend in the investment of industries, employment and thus, the number of units as well. The main existing cluster of the district were Terra kotta cluster, Siyawa, Stone

cluster, Pindwada, Mineral powder cluster, Pindwada, Granite cluster Abu Road, Utensils cluster, Abu Road and Leather cluster, Mandar.

5.18.5 Sector wise mapping of industries in across Jaipur

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Sirohi. Against the mapped sectors **sector wise analysis were carried out on the labour growth projections** like **high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	5	114.31	51
Auto & Auto Components			
Chemical & chemical products	15	555.15	182
Construction Material & Building Hardware			
Food Processing	22	78.20	104
Furniture & Furnshing	23	41.37	63
Leather & leather goods	14	56.39	40
Textile	19	68.59	53
Repair & Servicing	93	464.22	412
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging			
Mines, Metals & Minerals	244	791.76	911
Machinery, Electricals & Manufacturing	208	390.21	551
High	Units>200, investment>350, emp>500		
Medium	Units>80, investment>200, emp>400		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 165 Sector wise mapping of industries in Sirohi as per DIC report, 2007

There have been many MSME coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of mines and minerals, and manufacturing sector. A substantially good number of workforce (60%) form the services backbone of the district and are engaged in various industries, households etc. as daily wagers. Some of the upcoming and potential service based industries were as follows:-

Potential Service Industries	
Photography	Data processing
Cycle Repairing	Steel Fabrication
Electronics/Electrical Repairing	Motor Rewinding
Cyber café	Beauty Parlor/Hair cutting saloon
Photo copying	Mobile Repairing
Hotel & Restaurants	Vehicle Repairing

Table 166 Potential service industries providing employment to the semi-skilled workforce in Sirohi

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries was selected (depending on the availability of respondents' of the employer group set up).

Sectors covered under sample survey
Construction material & building hardware- 03
Minerals and metals- 04
Machinery, Electricals & Manufacturing-01
Tourism, Travel & Hospitality- 01
Agri & Allied-01

Table 167 Break up of industries in Sirohi (Sample study)

These industries were selected from large, medium and small industries covering various growth sectors of the district as shown in the table above. All the industries selected were having representation of the various sectors either emerging or prominent in the district. The sampled industries were majorly from mines and minerals, construction and tourism/ hospitality. All these firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers.

5.18.6 Workforce Demand and Supply

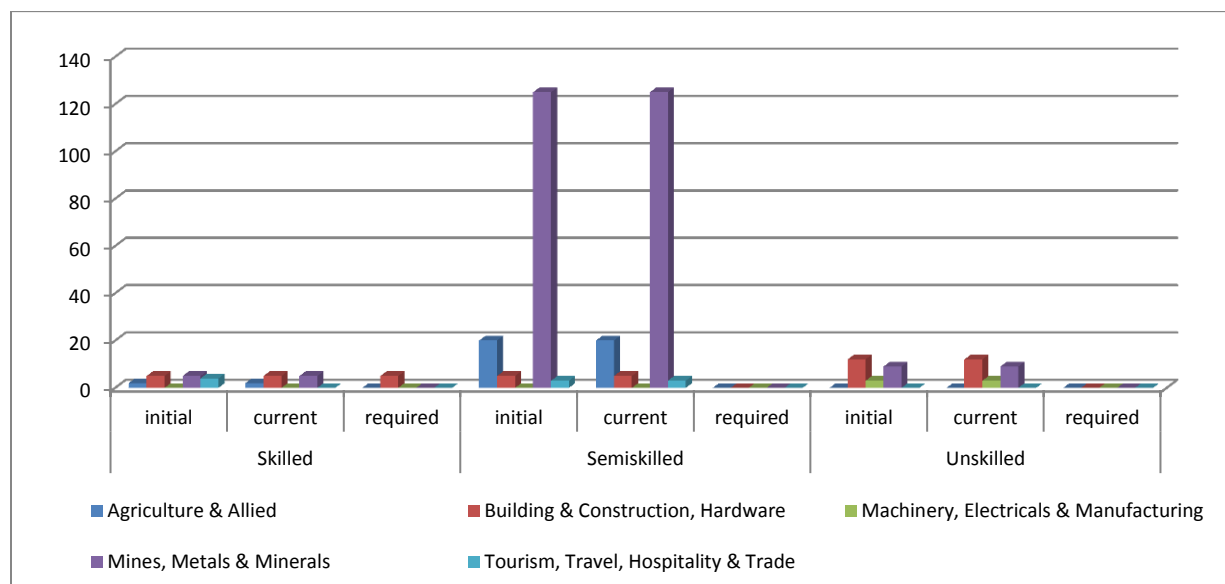


Figure 243 Status of skilled, semi-skilled workforce and unskilled workforce across sectors (Sample Sirohi) at various stages (initial, current and required)

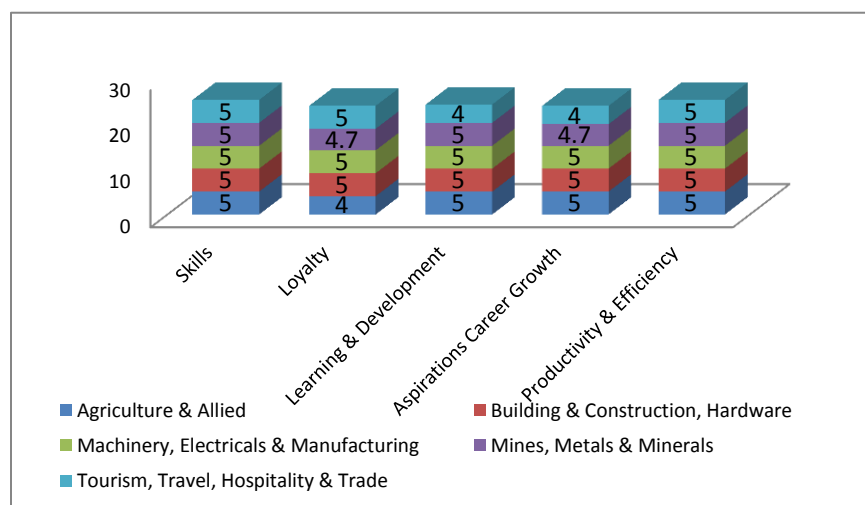


Figure 244 Employers demands in terms of expectations from workers (Sirohi)

The major workforce participation observed in Sirohi district over a period of two decades has been majorly shifting to more secondary and tertiary sectors with emphasis majorly on cluster based industries and the service demand laborers. There has been declining trend of workforce share in primary

sector from 67.1% to 50.6% from 1991-2001. Therefore,

the increase in the share of secondary and tertiary has been quiet significant for the same period. Majority of the workforce has been engaged in services like repairing and upcoming industrial support functions in transport, logistics etc. There is distinct trend observed in the workforce engaged as laborers and wage earners who get engaged as helpers, cleaners, semi-skilled mechanics etc. Engagement in secondary and tertiary sector shows an increasing trend as per the industrial growth of the district though very marginal in some of the textile and leather sectors. In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were skills and efficiency. Almost all the sectors ranked closely in their overall demand with leading expectations mapped by engineering based industries like machinery, mineral based and construction.

5.18.7 Projected Workforce Demand

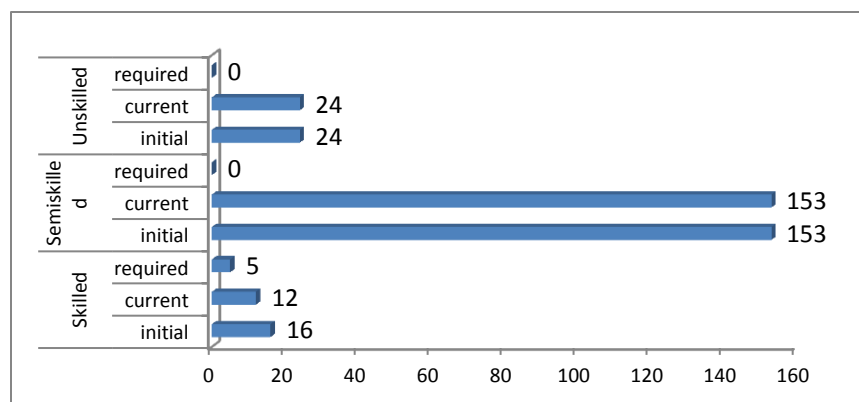


Figure 245 Status of workforce in terms of initial, current and required strength across sample industries of Sirohi

There has been certain decrease in the number of full time skilled workers over a period of time and the future engagement of skilled workers would be only to fulfil the existing gap. The semi-skilled and unskilled categories of the workforce

did not see any increase from the previous years and the future requirement also was not seen as per the primary survey across industries. Across all five sectors represented in the sample, relatively large worker strength (semi-skilled and unskilled) was observed for mines, metals & minerals sector which also included the stone polishing and related industries. As reported by industries since industry establishment, they were mainly relying on semi-skilled workforce as this category had the largest workforce and high potential to absorb unskilled workers in the near future from secondary analysis of trends shown in the service sectors.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	35053	35867	36346	37131	38505	38579	39504	
Semi-Skilled	29391	29240	29629	30271	31390	31450	32204	
Skilled	1959	1949	1975	2018	2093	2097	2147	
Total demand	66404	67057	67950	69420	71987	72125	73855	46%
Industry Sector								
Unskilled	17649	19456	18390	19343	19252	19617	19605	
Semi-Skilled	17377	18210	17718	18158	18116	18285	18279	
Skilled	2896	3035	2953	3026	3019	3047	3047	
Total demand	37922	40702	39062	40528	40387	40950	40931	26%
Services Sector								
Unskilled	11340	11957	12258	12636	12860	13255	13505	
Semi-Skilled	16459	17899	18601	19483	20008	20929	21511	
Skilled	3798	4155	5659	6212	7868	8684	9415	
Total demand	31597	34011	36518	38330	40736	42867	44430	28%
All Sectors								
Unskilled	64042	67280	66993	69110	70617	71451	72613	
Semi-Skilled	63227	65349	65949	67912	69513	70663	71994	
Skilled	42654	44840	45788	47163	47980	49328	14609	
Total Demand	169923	177469	178730	184185	188111	191442	159216	100%

Table 168 Labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors Sirohi

The district has shown a shift towards more secondary and tertiary based workforce and has strong potential in terms of service sectors coming up in various sectors to enable industrial development and addressing the basic requirements of IT and computers. These sectors would basically cover 54% of the total workforce by 2017 of which the demand for the unskilled and semi-skilled workers shall be almost similar keeping in mind the scope of industrialization in the district and the new services coming in the district. Basis on the inputs received from sector wise expansion plans the Workforce projections made across different categories highlight these distribution pattern. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components	Yellow	Yellow	Red
Food processing	Red	Red	Red
Electronics Hardware	Red	Red	White
Handloom & Handicrafts (includes wooden & paper)	Yellow	Yellow	Green
Textile & Garments	Yellow	Yellow	Green
Building, Hardware & Home Furnishings	Yellow	Green	Green
Leather & Leather Goods	Yellow	Green	Green
IT or software	Orange	Orange	Green
ITES- BPO	Orange	Yellow	White
Chemical & Pharmaceuticals	Green	Green	Yellow
Tourism, Hospitality & Travel	Yellow	Green	Yellow
Building & Construction	Yellow	Green	Green
Transportation/logistics/warehousing & packaging	Yellow	Green	Yellow
Repair and services	Yellow	Yellow	Yellow
Education/ Skill Development	Green	Yellow	White
Banking, Insurance & Finance	Green	Green	Red
Healthcare	Yellow	Yellow	Red
Machinery, Electricals & Manufacturing	Yellow	Green	Green
Mining, Minerals & Metals (includes stone quarrying)	Yellow	Green	Green
High Requirement	White	White	White
Medium Requirement	Yellow	White	White
Low Requirement	Red	White	White
Emerging Requirement	Orange	White	White

Table 169 Workforce across various sectors by 2017- Sirohi

5.18.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis would factor in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging. The situation of skill gap for the district for 2010-11 to 2016-17 based on projections is represented in the table below (assumptions set in the annexure _ Projection Model):-

Workforce Demand & Supply Gap							
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	66392	65880	62987	56167	43993	43453	35910
Semiskilled	14258	15186	16214	17039	17916	18901	19805
Skilled	7732	7884	7896	7953	7965	8021	8030

Table 170 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The gap after the projection till 2017 suggests a total of 0.62 lakh across various sectors at different workforce compositions. The gap in semi-skilled and unskilled would be close to 0.54 lakhs which should be the basic target for skilling initiatives. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Also there were few gaps observed in the overall workforce requirement and the available as per the primary analysis. Some of the important findings from the in-depth interviews with district representatives were as follows:-

- Situation was not conducive enough to support industrial growth in Sirohi. Investments were good but acquiring of land for establishment of industries, skilled labour/minimal skilled workforce and power supply were problem areas. Water supply was sufficient in the district
- Scope for self-employment and entrepreneurship in the district was very good. The district authorities did not make many efforts in this direction, but the agriculture based business helped people get self-employment.
- Stone quarrying cutting and polishing were predominant in the district. Material building and hardware were emerging fast as new areas for growth. Material building and hardware and machinery electrical and manufacturing sector may absorb maximum skilled manpower in the industrial base.
- Establishment of VTIs and Polytechnics by the government in Sirohi was an important step to meet the needs of the industry. Currently there was a gap between the demand and supply of manpower since most of the trained person looking for government services.

5.18.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Jaipur district to understand what the youth think, why they think the way they do and how does

society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions, interaction with other stakeholders in terms of sustainable livelihoods and future course of actions for growth in the sectors favorable as per the district or overall economy of the state.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 34% of the youth covered were college educated and 64% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government. The average age of the respondents was 24 years with majority (58%) interviewed at government centres and 42% at private VTIs.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 171 Youth Profile of sample in Sirohi

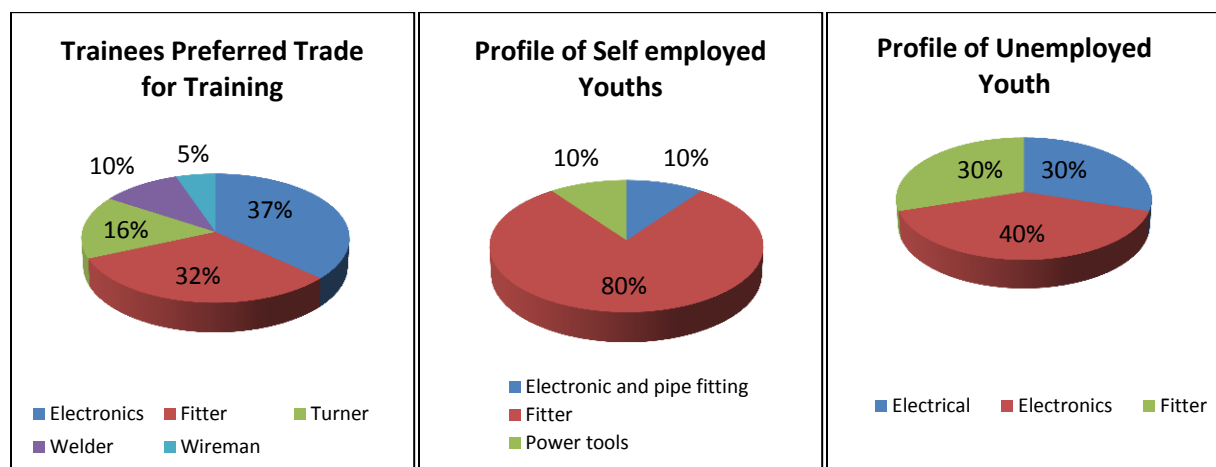


Figure 246 Profile of respondents (trainees, self-employed and unemployed) by trade in sample of Sirohi

Among the respondents covered under the survey the course of electronics was one of the most preferred one followed by fitter and turner. In sample of youths under self-employed the course of fitter was dominant and engaged close to 80% of the sampled youths. The unemployed youths also were from the base of electronics, electrical and fitter trade categories. The instances of supply in these trades were evident and improper placement strategy could be assigned as the reasons for such a situation. These trades appear to be the most popular trades as per the perceived demand in the market.

5.18.10 Youth's Perception

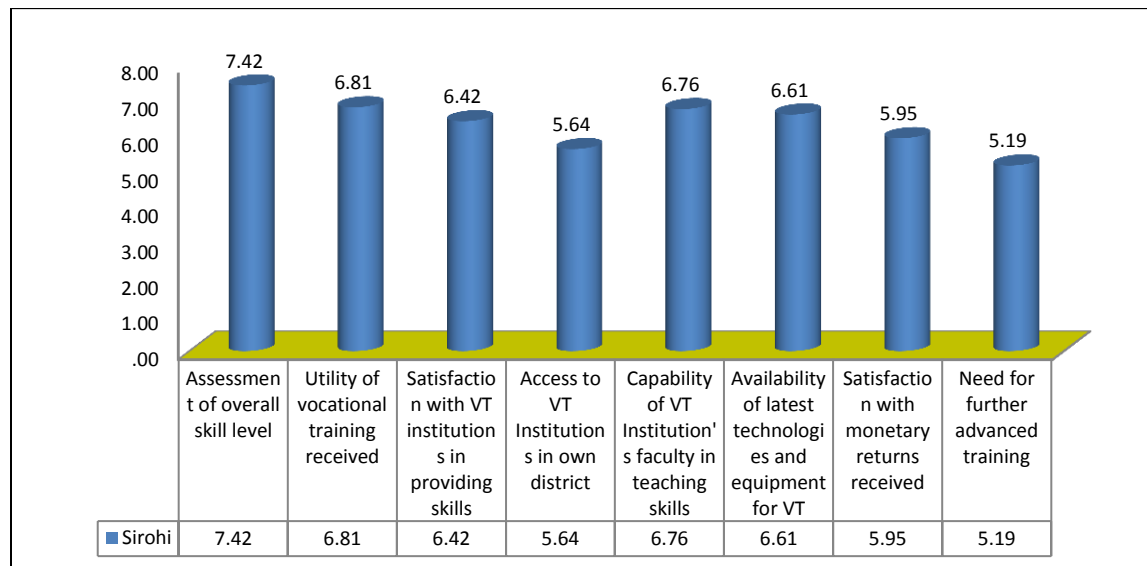


Figure 247 Sirohi Youth's perception, need and aspirations –Sample Group

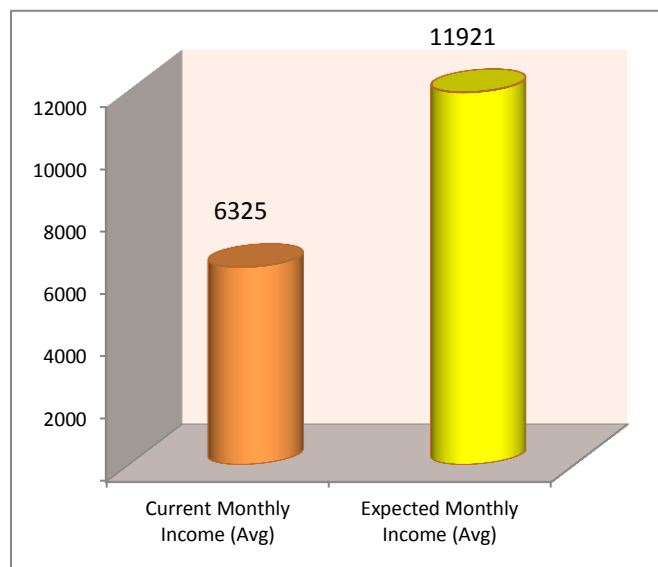


Figure 248 Income current and expected- sample group, Sirohi

Satisfaction with current monetary returns and need for advanced training emerged as the two leading factors identified by the respondents as the key to better skilling initiatives of the district. The assessment of skill levels in the VTIs and their capabilities in the training were among the highly rated thoughts among the group of youths.

There were no pronounced needs for further advanced training provided for up-skilling and basic skilling in communicative English. Expected monthly salaries required a change of at least Rs. 4500/month as skilled workforce among 90% of the sampled youth. 85% of the respondents did not receive any increment.

The expectations of the family members were mainly on the lines of gaining government sector placement post training, job security etc. Trainees preferred to learn from the peer about other trades to get the basic understanding of them. Computer courses in basic forms were expected by the youths as the major differentiator for better placement and growth. About 80% of the sample youths feel that there were ample scope for self-employment and better standard of living though much support was not expected from family members.

5.18.11 Optimization Plan

The optimization plan would be structured at three tier level of district, state and NSDC. The preliminary gap finding, projection and analysis would be presented at every district level which would in turn determine the action plan of the state as represented in the below diagram. The overall scenario of the state would finally give major leads to apex bodies like NSDC for formulation of state specific portfolios to suit the requirements and address the future needs of the state in the skilled workforce.

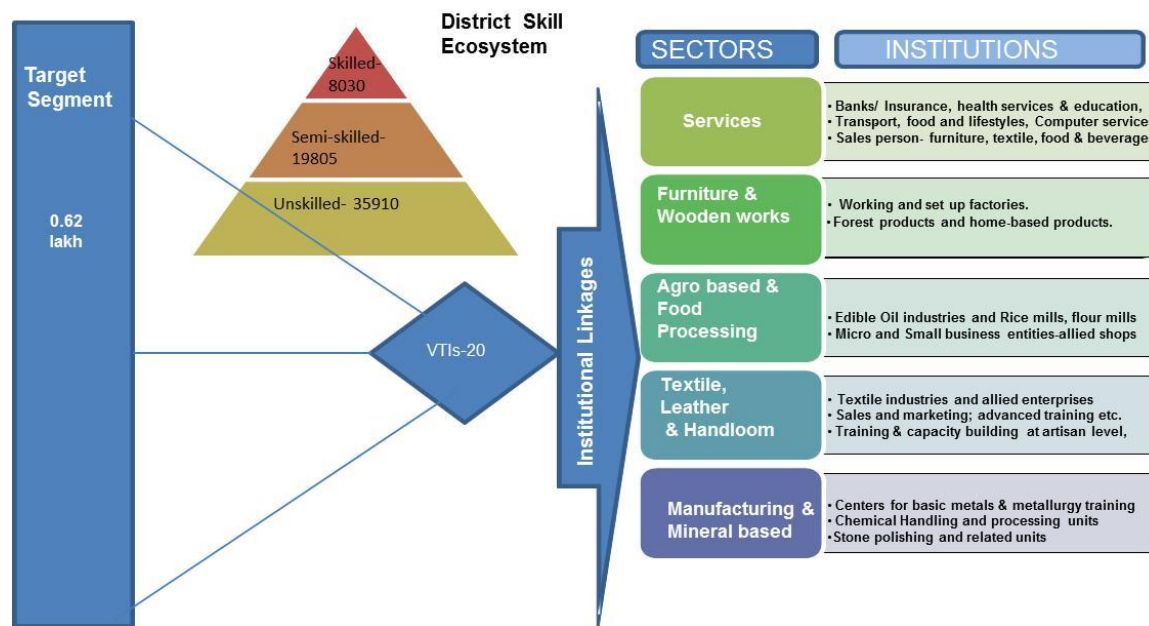


Figure 249 Optimization plan- Sirohi Skill Eco-system 2017

The high priority sector which shall need maximum number of semi-skilled workforce and less of skilled shall be the resource based industries of the district like the marble and stone polishing, food processing, and manufacturing etc. industries. Apart from these, the upcoming service sectors in hospitality and tourism, IT & computer related services along with logistics shall engage a considerable section of the semi-skilled workforce. The demand based industries shall engage more of skilled resources in data processing, wooden and furniture industries cement, repair industries etc. The semi-skilled workforce shall be the backbone of the district by getting engaged in large number of SSIs of the district. The unskilled workforce shall get engaged in more building and construction related works and shall be targeted for site trainings for better financial bargaining.

District Skill Workforce Face Sheet-2012								
District	Dausa			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	10	No. of Villages		1109	No. of Schools (elementary & sec.)		2499	
Basic Data								
Population (in '000s)	1637	Overall Literacy(in %)		69.17	Sex Ratio		904	
Decadal growth rate(in %)	23.75	Female Literacy(in %)		52.33	HDI Ranking (2008)		0.576 (23 rd position)	
% Urban Population	10.31	Male Literacy(in %)		84.54	Per Capita Income (in Rs.)		1142	
Workers participation rate (2001)								
Workers participation rate (2001)	41.1	Share of primary sector (%)		73.4	Share of secondary & tertiary sector (%)		26.5	
No. of MSME/Industries	5777	Total Employment (in 000s)		16916	Total Investment (in lakhs)		3717.95	
No. of colleges (PG & Graduation)	31	Total graduates (In '00s)		20716	Total Post graduates (in '00s)		629	
No.of VTIs(registered ITI+Poly+ITC)				1	Total trainees trained (in '00s)			
Indicators (Cumulative)								
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Semi- skilled workforce	29955	31977	35839	38348	41870	44971	48386	0.50 lakhs
Skilled workforce	2341	2498	2529	2594	2599	2666	2678	

5.19.1 Demographic Profile:

Dausa is one of the district of Jaipur Division and surrounded with 6 districts, namely, Jaipur, Tonk, SawaiMadhopur, Karouli, Bharatpur& Alwar. It has total area of 3404.78 sq. kms. In roughly semicircular or 'C' shape with tempering towards east and west at corners. There are 36 dams in the district. The major dams are SainthalSagar, KalakhoBandh, MadhosagarBandh and Moral Bandh. Morel and Ban Ganga are major rivers located in the district. The major sources of irrigation are wells and tube-wells in the district. Around 155000 Hectare areas (45% of the district area) are covered by these sources per year. Besides this, very limited area is irrigated through small rivers & ponds.

It ranks as the 31st largest district of the state covering just 1% of the area of the state. With 476 the density of

population in the state ranks at 3 (Census,2011-

Provisional). It stands 23rd on the Human Development Index (0.576) and 15th on the GDI (0.487). It was observed that though the district fares quiet average on education and health index (15th and 17th respectively) but the income index which pulls the district on overall HDI ranking to the lower side of the state ranks at 26th. As per provisional census 2011 data, Dausa accounts for population of 16.37

S.no	Section	Unit	Quantity /
			Value
1	LOCATION		
	Latitude	degree	26°54' N
	Longitude	degree	76°19' E
2	AREA		
	Total geographical area	sq km	3405
3	ADMINISTRATION		
	Tehsil	number	05
	Villages	number	1109
4	Land Use Pattern		
	Total Area	Hectare	341406
	Total Irrigated area	Hectare	166981
5	Population (census 2011, provisional)		
	Total population	number	1637226
	Men	number	859821
	Women	number	777405
	SC (2001)	number	279377
	ST (2001)	number	353187
6	Literacy (except 0-6 age group)		
	Total literate	percent	69.17
	Men	percent	84.54
	Women	percent	52.33
8	Energy		
	Electrified Villages	number	1051
9	Industries (DIC, 2009)		
	Registered MSME units	number	1973
	Employed persons	number	8720
10	Education		
	Pre Primary & Primary Schools	numbe	1078
	Upper Primary	numbe	867
	Secondary & Sr. Secondary	numbe	554
11	Higher Education / Others		
	Colleges	numbe	31
	I T I	numbe	01
	Polytechnic	numbe	02

Table 172 Dausa District Profile- a snapshot

lakhs (2.39% of the state population) with sex ratio of 904(compared to 2001 census figure of 899)which still is on the lower side of the state ratio of 926. There was asignificant decrease in the decadal growth of population (9% approximately) showing trends of population stabilization.

The worker participation rate in Dausa was 41.1% (HDI, Rajasthan, 2008) with primary sector engaging close to 73.4% of the workforce and rest 26.50% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 15% (Urban- 27.2% & Rural- 42.8%). The literacy rate of Dausa in 2011 is 69.17% which were higher than the state figure of 67.06%.According to Census 2011 provisional data, the male literacy figure stands at 84.54% and female literacy was at a low of 52.33%.

5.19.2 Education Infrastructure and Utilization

Dausa’s status in literacy was marked higher than the state average with just 69.17% and female literacy marking the low of 52.33%. Dausa with 2499 schools had recorded 56.6% retention rate from primary to higher level (DISE, 2009-10). Dausa has also been among the districts with high drop-out rates as per HDI, 2008.According to Census 2011 provisional Dausa has a total of 2499 schools which as per state comparisons stands at better positions. The retention rate of students in schools of Dausa was quiet low which also contributed to the drop in literacy rates and status of education.

Education	Dausa	Rajasthan
Pre Primary & Primary	1078	49546
Upper Primary	867	38889
Sec/ Sr Sec	554	19135

Table 173 Dausa vs. Rajasthan education status

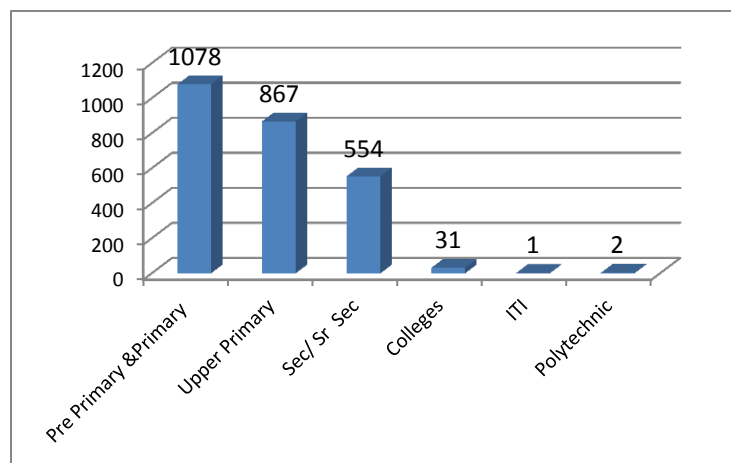


Figure 250 Number of Schools, Colleges, ITI & Polytechnic, 2009-10- Dausa

A total of over 14000 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There were just a total of three registered vocational training institutes in Dausa district (2 polytechnic and 1 ITI). A total of just above 300 aspirants got enrolled in 2009-10 in the registered training institutes. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 04 partners (includes ITC and NGO) implementing skilling initiatives

with 12 approved programs (11 are completed). A detailed view of the vocational training of Dausa could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.19.3 VTI's demand across various trades in Dausa district

The existing scenario of VTIs in Dausa was certainly on the lower side considering the number of youths passing out and the existing vocational training institutes in the district. Private players have not yet ventured in a big way eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district. The major five trades that emerged as the demand in vocational training were Computer Hardware, Desktop Publishing, Sales & Marketing, Household wiring and repair of domestic appliances, Computer based Accountancy. The two upcoming trades – Repair and maintenance of refrigerator and ACs and Mobile Repair were identified which may address some of the self-employment of the youths as well.

The government VTIs interviewed in the survey was one and nine from the private were covered under the primary survey. The courses which were offered by the VTIs were predominantly self-employment based or to cater the local market needs in engineering or computer based supports. In private VTIs and the NGO these courses were more oriented towards service like retail, sales and computer basics for office assistants etc. A details of the courses provided are listed below for further understanding:

Govt. VTI Trades	Pvt. VTI Trades
COPA	COPA
Electrical	Electrical
Mechanic (Diesel)	Fitter
	Mechanic (Diesel)
	Retail & Sales
	Office Assistant Plus

Table 174 Dausa district's (sample study) courses offered

It could be inferred that electrical was the most popular trade in the VTIs as this trade had the maximum batch strength. Preference of this trade can be seen by the fact that Private VTI offered more seats as compared to government VTI. In the Govt. VTIs, the number of actual trainees compared to the number of approved number of trainees was same across the trades of electrical and mechanic whereas, in COPA there were no trainees as per the records. On the other hand, gap between the actual and approved strengths of trainees was more across all trades in private VTIs except COPA as it had fewer seats than other courses. The seats in electrical, fitter and mechanic trades of the private VTIs were unutilized.

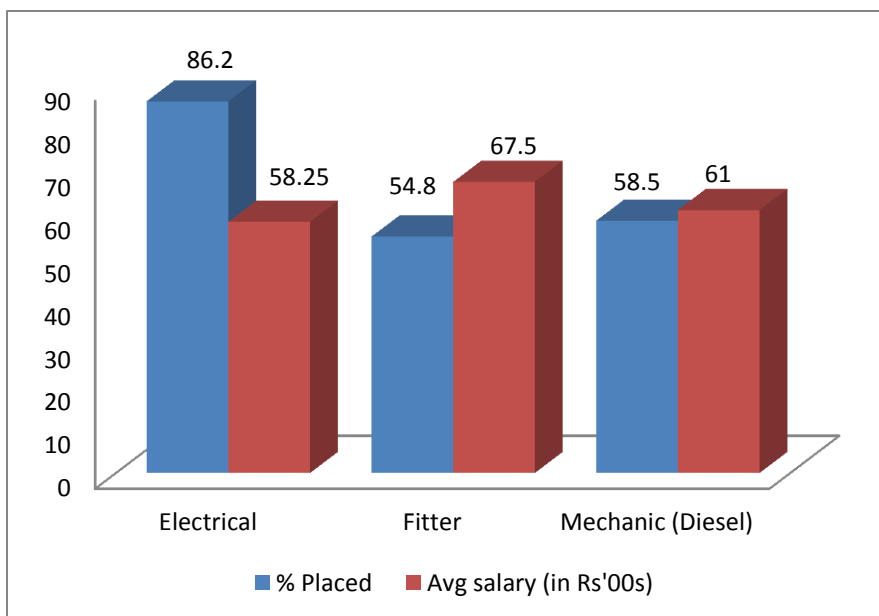


Figure 251 Dausa district's (sample study) courses offered placements in private VTIs

An overview of placement records by trade in the Govt. VTIs indicates that the trades in government VTIs had 100% placement for the electrical and fitter courses with an average starting salary of Rs. 8000/month. in almost all of the trades. Motor Mechanic, Wiremen and Carpenter trade registered no placement last year. In contrast to

the government VTI, the job prospects in

private VTIs was very promising as a significant number of trainees got job from the institutes with above 80% placement in electrical trade. Though trades like fitter and mechanic were just at 50% placement average but were the trades for self-employment with an average salary of Rs 6750/month and Rs 6100/month respectively. While placements of trainees from the Govt. VTIs was through campus interviews, the private VTIs placed their trainees through campus interviews as well as through a proactive approach to the industry. It seems that employment exchanges are not playing any role in placements. The selection of course design and other influencing factors for finalization of courses by the VTI functionaries were more or less determined by the availability of facilities, faculties and equipment. All the VTIs claimed to have updated technologies, equipped labs, and space for conducting the training, electricity and water supply. Almost all of them did not have hostel facility and commuting facilities for the aspirants. The staffing in these institutes were marked understaffed in aspects dealing in academics & managerial positions. There has been steady increase for all the courses offered in terms of students enrolment except for the course in COPA.

5.19.4 Industry Mapping

Agriculture is the main occupation and the main crops are wheat, bajra, rapeseed, mustard and groundnuts. The number of small scale units in Dausa region is 471. Total no. of industrial areas is 6 and these are Bandikui, Bapi, Dausa, Jirota, Lalsot & Mahuwa. Main existing industries are Automobile repairing workshops, dal mills, durries, general repairing workshops, ice plant, milk chilling, marble slabs, printing press, quick lime, soap stone grinding, stone carving, tyre retreading, woollen carpets. However, tourism is also growing as a industry. Some of the popular places of interests in Dausa are Mehandipur Balaji temple, Mataji Ka Mandir, Nilkanth Mahadev Temple and the Temples dedicated to Lord Shiva. Main minerals of the area are felspar, quartz, asbestos, soapstone, magnesite, calcite, limestone, mica, emerald, marble, granite, and masonry stone. Fairly good reserves of barytes fluorite, wolastonite and vermiculite have also been found.

MSME in Dausa

According to D.I.C data (March, 2012), there were around **5777 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.3717.95 lakhs** providing employment to **16916 persons**.

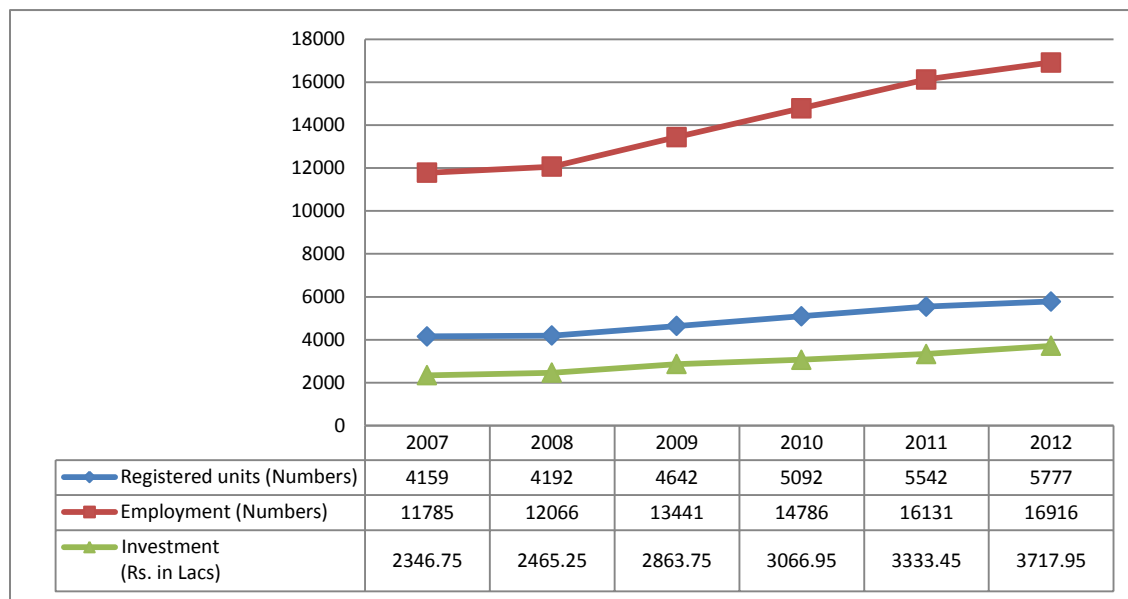


Figure 252 MSME trend analysis of the district Dausa

There has been a constant increasing trend in the investment of industries, employment post 2007 and but the rate of industries in terms of number of units were not very significant. There were none large scale or medium scale industries as per DIC records. The upcoming DMIC (Delhi Mumbai Industrial Corridor) promises to be the change agent for the district.

Node-8: Jaipur-Dausa Industrial Area, would be located within 50km-100km from Phulera. Government of Rajasthan is considering development of a growth Pole at Sikandra and initiated the study for preparation of detailed project report. Growth Pole will cater to multi-sectoral clusters as stone, carpet, leather and dairy and will cover an area of 1250sqkm and 350 villages. Jaipur-Dausa region is connected by NH-11, which is being widened to fourlanes dual carriageway under Phase-3A of NHDP, broad gauge rail linkage between Jaipur and Agra, availability of large parcels of land at comparatively lower prices and air connectivity from Jaipur airport are some of the infrastructural advantages.

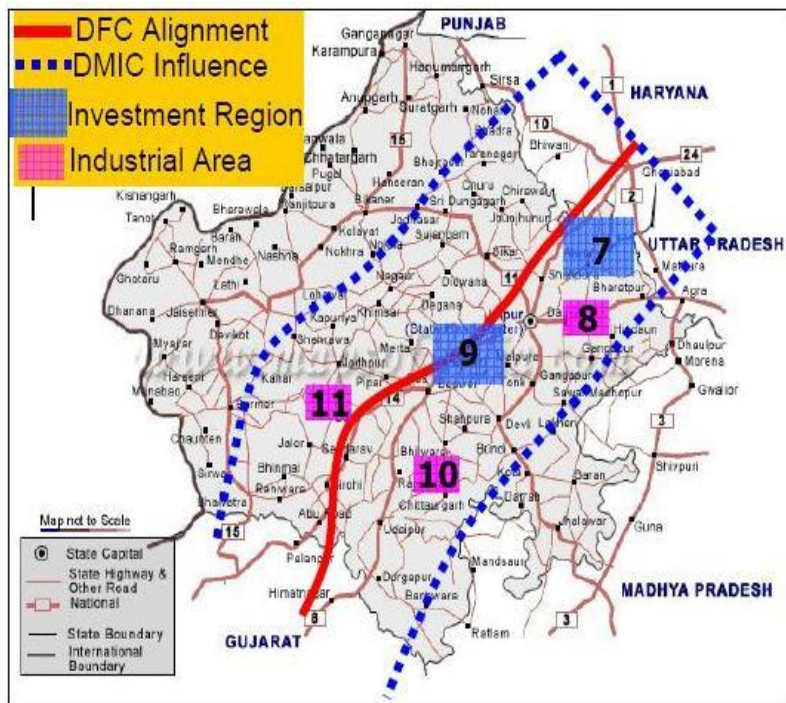


Figure 253 Node 8- Jaipur Dausa Industrial Area of the DMIC project

Export-oriented Industrial Units/ SEZ: This industrial area has the potential to cater to leather, marble and carpet making industries. An export-oriented industrial park would give a substantive boost to the sector in the region along with truck terminal with warehousing facilities in order to cater to the truck parking/servicing facilities along with warehousing, communication and other logistic infrastructure would be developed. Integrated Township would be provided with residential, institutional, commercial and leisure/recreation infrastructure which could be

dovetailed to requirements of specific investor groups/ countries. As agriculture predominates all over the state with about 70% population engaged in agriculture activities in Rajasthan which offers opportunities for contract farming, processing of oil seeds, fruits and vegetables, and dairy production. Accordingly, an agro/food processing zone with necessary backward and forward linkages is envisaged in the industrial area.

Development of Feeder linkages connecting the identified industrial area with NHDP, DFC corridor and Hinterland, inter alia, includes following proposals:

- Connectivity to NH-11
- Widening of NH-11A (Dausa- NH-8) to Four lanes
- Development of requisite grade separators/flyovers/interchanges and underpasses along the National Highways/ State Highways and access roads for uninterrupted freight and passenger movement to the region would also be included in the development of feeder links.
- Jaipur-Dausa Industrial Area will be served by Jaipur-Bharatpur-Agra Broad-gauge Railway Line and linked to DFC at Phulera.
- Development of Feeder Rail links also includes construction of underpasses wherever required so as to avoid level crossings.

5.19.5 Sector wise mapping of industries in across Dausa

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector

other than the listed sectors existing in Dausa. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections** like **high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	153	372.34	763
Auto & Auto Components			
Chemical & chemical products	90	458.53	565
Construction Material & Building Hardware			
Food Processing	4	110.00	96
Furniture & Furnshing	67	54.60	216
Leather & leather goods	111	49.75	276
Textile & Handloom	222	91.42	1047
Building Construction & Real Estates			
Services- Health, Education & Repairing	758	1375.94	2474
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging	42	26.10	158
Mines, Metals & Minerals	274	1181.25	1820
Machinery, Electricals & Manufacturing	252	378.68	8171
High	Units>200, investment>300,emp>1000		
Medium	Units>100, investment>50, emp>250		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 175 Sector wise mapping of industries in Dausa as per DIC report, 2007

There have been many SSI coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of handloom products, mineral based, engineering based and chemical based sectors. A substantially good number of workforce form the backbone of the district and are engaged in various industries, households etc. as daily wagers.

Sectors covered under sample survey
Agriculture & Allied
Construction Material & Building Hardware
Machinery, Electricals & Manufacturing
Mines, Metals & Minerals
Textiles & Handlooms

Table 176 -Break up of industries in Dausa (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in the Dausa district of Rajasthan.

These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table. A total of 10 industries were sampled for the survey to represent 5 major sectors that are prominent in the district. Availability of skilled, semi-skilled and unskilled workers according to their numbers in the sampled industries (segregated under specific sectors) at the time of the establishment of the industry, their present strength and their required strength as projected by the industries was evaluated (shall be discussed in sections ahead).

5.19.6 Workforce Demand and Supply

The major workforce participation observed in Dausa district over a period of two decades has been majorly as cultivators/ agricultural laborers and has had a significant increase by 20% over a period. Quiet contrary to other districts there has been declining trend of workforce share in secondary and tertiary sectors from 46.50% to 26.50% from 1991-2001. Therefore, the increase in the share of agriculture and allied activities has been quiet significant for the same period keeping the context of the district in mind. Majority of the workforce has been engaged in subsistence agriculture and remains idle for the bulk period of the year. Dausa lies in less arid region and farmers have benefitted from ground and some surface waters to reap the benefits of the green revolution. In terms of social structure, this region is varied: in many locales, middle/peasant castes control land and hence define the agrarian structure. This has permitted a larger number of women to join the labour force; sex ratios, therefore, were better.

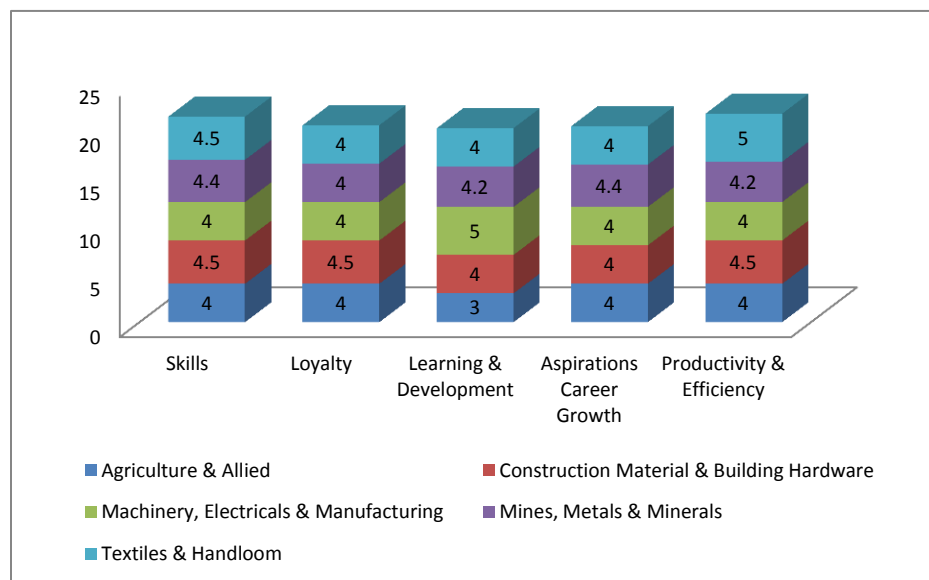


Figure 254 Employers demands in terms of expectations from workers-Dausa

In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were productivity and efficiency followed by skills. The textiles and handloom and construction sectors demanded for the maximum results in terms of the qualities

rated on scale of 5 across employers.

5.19.7 Projected Workforce Demand

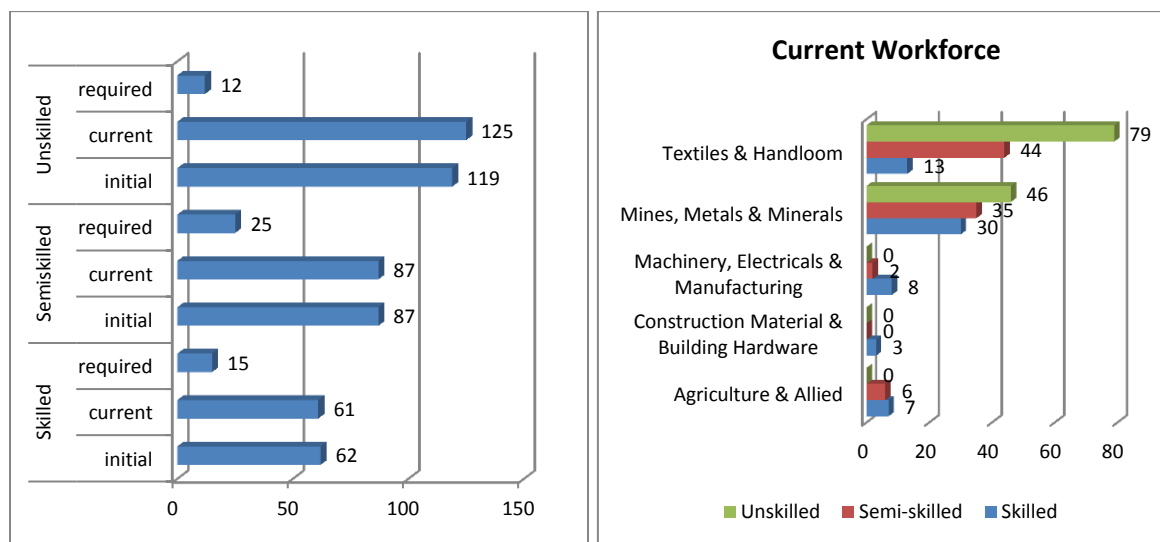


Figure 255 Status of workforce in terms of initial, current and required strength & sectors across sample industries of Dausa

As per the primary data on skilled workforce, it could be inferred towards the trend of slightly decreasing workforce (at present since establishment of industries across all the industries). Only Machinery, Electricals & Manufacturing sector industries had not decreased the manpower since they came into existence. Demand for skilled worker in future was also not very high across all industries. As reported by industries for semiskilled workforce, Mines, Metals & Minerals sector industry saw steep rise in workers strength over the years. It was observed that there is hardly any demand of semiskilled workers in near future across all type of industries. As reported by industries there was no or little involvement of unskilled workforce in all the industries except Mines, Metals & Minerals sector but the demand is decreasing day by day. Potential to absorb unskilled worker across all the industries was found decreasing. In current scenario, textiles followed by mines and minerals (stone cutting and polishing) included engaged maximum number of unskilled and semi-skilled workforce. Similar trend could be also seen in the utilization of skilled workforce for both the sectors.

Apparently the number of workers category across skilled, semi-skilled and unskilled segments has marginal increase and the future requirement also is high for the semi-skilled workforce followed by unskilled workforce. The demand for skilled workforce comparatively is on the lower side. During the study and from secondary data it was observed that the large proportion of the workforce was engaged as agricultural laborers and then followed by services and repair works like mechanic, electrician, mason and automobiles. The majority is engaged as casual labour in industry and agriculture or is surviving on marginal farming. A large number of youth is unemployed as well. In case of youths, maximum number come under the category of marginal farming or sitting idle/unemployed (49%) followed by casual labour in industry (33%) or local areas. Only 10% were found to be salaried and 8% assisted their parental artisan related works. The sustainability of workforce to gain meaningful livelihood was highly questionable under these circumstances.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	258240	266656	268427	272490	275865	280199	282877	
Semiskilled	21052	21738	21883	22214	22489	22842	23061	
Skilled	1403	1449	1459	1481	1499	1523	1537	
Total demand	280695	289843	291768	296184	299853	304564	307475	66%
Industry Sector								
Unskilled	35403	36970	36513	37659	37890	38424	38748	
Semiskilled	16340	17063	16852	17381	17488	17734	17884	
Skilled	2723	2844	2809	2897	2915	2956	2981	
Total demand	54466	56876	56174	57937	58292	59114	59612	13%
Services Sector								
Unskilled	11760	12436	12858	13335	13615	14098	14429	
Semiskilled	27439	29018	30001	31115	31769	32895	33668	
Skilled	39198	41455	42858	44450	45385	46993	48097	
Total demand	78397	82910	85717	88901	90769	93987	96194	21%
All Sectors								
Unskilled	305402	316062	317798	323484	327370	332721	336054	
Semiskilled	64831	67820	68736	70710	71746	73472	74612	
Skilled	43325	45748	47126	48828	49799	51472	52615	
Total Demand	413558	429629	433660	443023	448915	457666	463281	100%

Table 177 Projected labor percentage of workforce demand requirement till 2017 across sectors- Dausa

Basis on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Agri- Allied & Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			

Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 178 Workforce across various sectors by 2017- Dausa

5.19.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	41248	30617	29453	24986	21964	17103	14771
Semi-skilled	29955	31977	35839	38348	41870	44971	48386
Skilled	2341	2498	2529	2594	2599	2666	2678

Table 179 Representation of projected Skilled/ Semi-skilled & Unskilled workforce gap 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.65 lakh. Keeping in mind the growth rate of the district and the workforce participation from unskilled masses; the significance would be to target training to at least 50,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation is not conducive enough to support industrial growth in Dausa, and there has been consistent increase in agriculture and allied investments in past decade. Also there existed the shortage of skilled manpower due to schemes like MNREGA

- The VTIs are fulfilling the needs of the industries but some latest training equipment is needed to provide perfect knowledge of trades and NCVT should revise their trades that can compete the day to day requirement of the industries (a similar agreement was also found with the ITI representative)
- Textile and stone industries are predominant in the district. DMIC region of Dausa would be the factor for the upcoming of service sectors in the district.
- Scope of self-employment and entrepreneurship in the district remains on a high. Scope of informal sector employment is high and the government positions for class C & D employees remains a requirement

5.19.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Dausa district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the

table). With average age of 26 years of the respondent group, 38% of the youth covered were college educated and 62% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government. All the respondents who were trained through vocational courses and interviewed, it was found that 80% youth were trained through government VTI and only 20% of youth were trained through private VTIs.

Table 180 Youth Profile of sample in Dausa

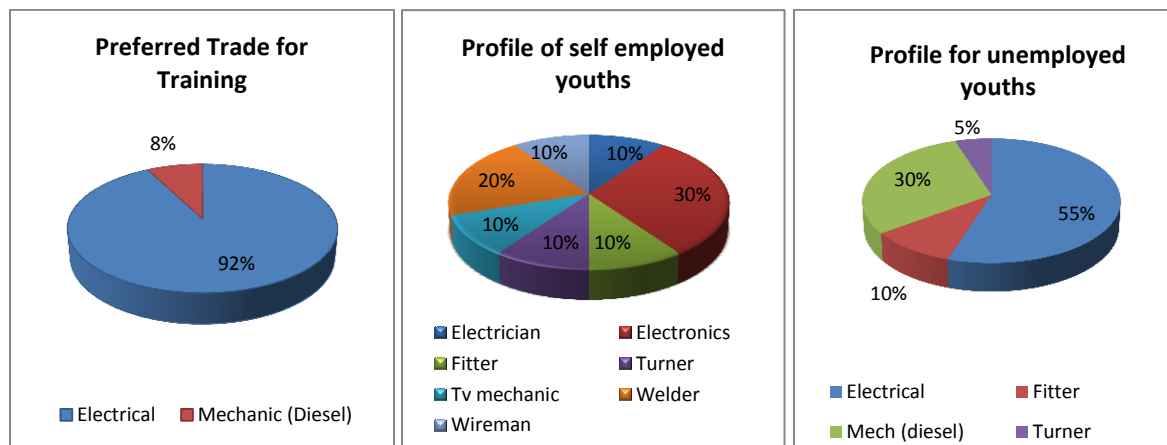


Figure 256 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Dausa

Inclination towards electrical course was found high as around 92% of the youth reported that they had preferred electrical trade during his/her training at VTI. In the self-employed category, the respondents belonged to the electronics followed by welder. A large distribution of trades could be seen in the self-employed category as mechanic, fitter, turner and wireman along with the trades mentioned earlier. Electrician group was also evidently the maximum in the unemployed group followed by mechanic. This suggested that the saturation of these courses, or no proper training as per industrial requirement was provided. Also it highlighted the lack of new courses to engage youths in trades coming up in the district. .

5.19.10 Youth's Perception

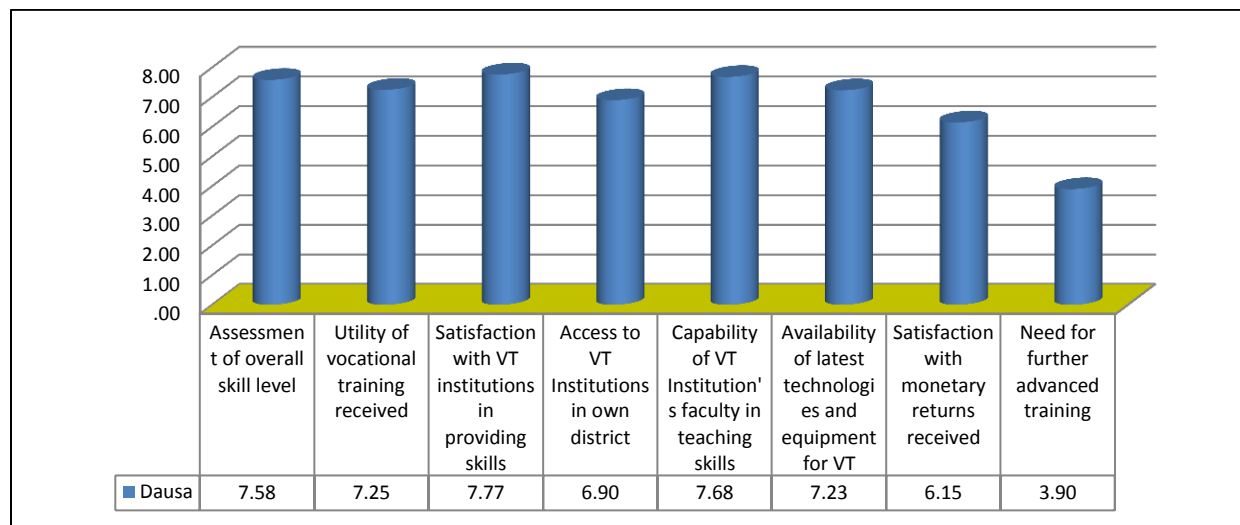
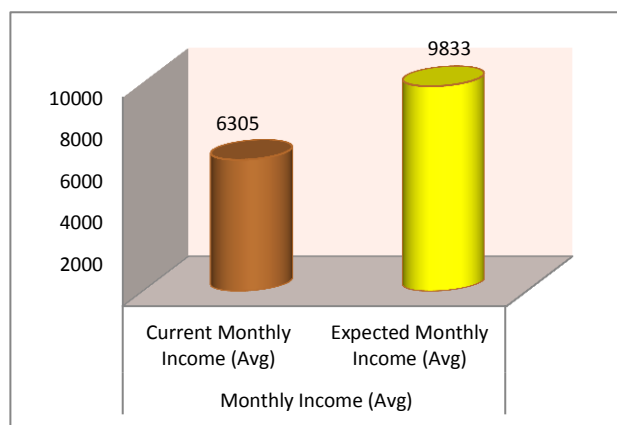


Figure 257 Dausa Youth's perception, need and aspirations –Sample Group



The satisfaction with VTIs and the capabilities of VTIs' faculties, overall the VTIs were the most highly rated by the youths and the least importance was for the advanced training. It could be because of the fact that the youths were still not totally involved in the basic training course and awareness for these advanced training was lacking.

Figure 258 Income current and expected- sample group,

Though the satisfaction level seemed to be average with the returns from initial jobs post training than expected but the average monthly income was Rs. 6305 which was quiet good as per industry

standards. The expected hike was another Rs. 3500/ per month on an average across trades; which remains very high as per the existing market. About 52.6% of the surveyed youths therefore remained dissatisfied with the monthly salary.

5.19.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.5 lakh of skilled, semi-skilled and unskilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at Dausa district level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

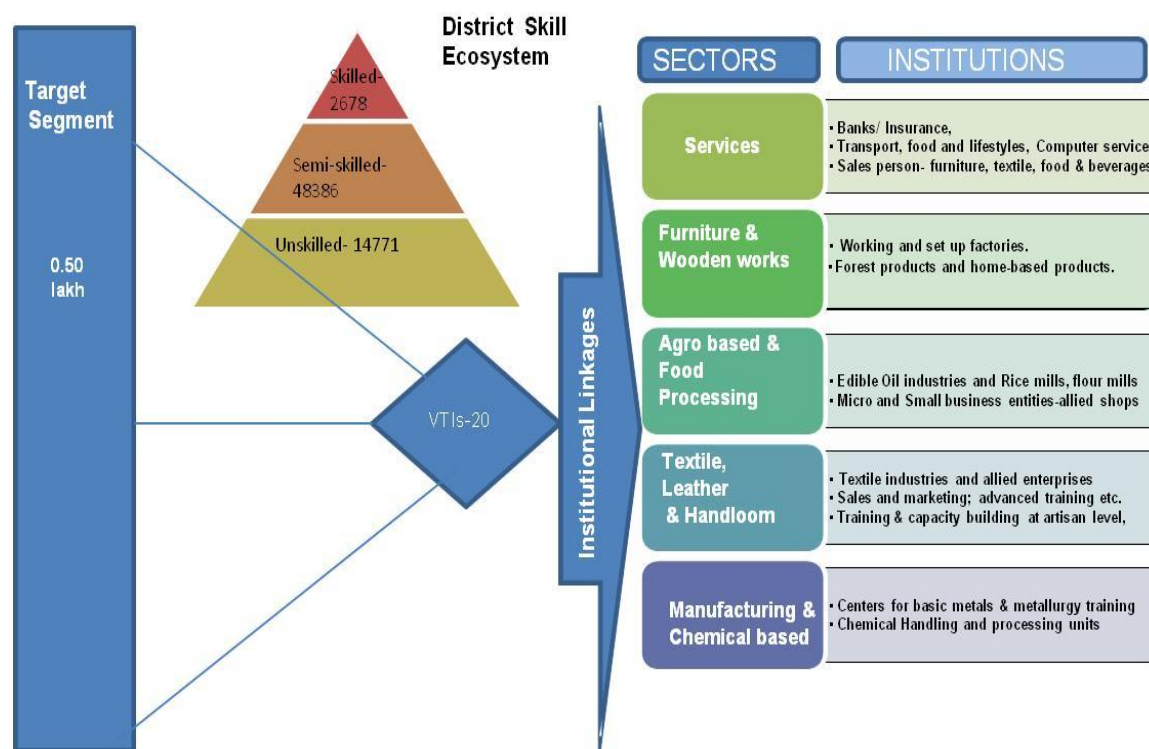


Figure 259 Optimization plan- Skill Development Eco System-Dausa

The key stakeholders' contribution in enabling to achieve the target (as shown in the figure) would be as follows:

- State: The state to target the skilled and semi-skilled segment for skilled training by creating additional 25 skill development centres (VTIs) in the district level of operations. It should encourage the private training partners to participate and operate in the district due to its large base of workers involved in secondary and tertiary sectors.
- Training Partners: The sectors for engaging more skilled workforce would be in food processing, textiles and services in the district. Course curriculum designed to cater for the institutions

based in food processing, textiles, insurance (sales), education and training and engineering based institutions in metals and mining should be the focus. Along with these, specific course curriculum designed for communicative English, life skills and basics in computer would be the key areas of skill development training.

- c) Industries: The primary sectors of high human resource requirement would be food processing, textiles, leather, chemical and services and therefore would require increasing linkages with the related institutions for skilled workforce absorption

NSDC would be an enabler to lead the training partners in retail, textiles and food processing by encouraging specifically designed proposals with increasing the linkages in industry associations and PPP models.

District Skill Workforce Face Sheet-2012								
District	Sikar			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	1	No. of Villages	1167	No. of Schools (elementary & sec.)	4650			
Basic Data								
Population (in '000s)	2677	Overall Literacy(in %)	72.98	Sex Ratio	944			
Decadal growth rate(in %)	19.79	Female Literacy(in %)	58.76	HDI Ranking (2008)	0.698 (8 th position)			
% Urban Population	20.65	Male Literacy(in %)	86.66	Per Capita Income (in Rs.)	15034			
Data Source: DIC, HDI Report, 2008; Statistical Abstract 2011								
Workers participation rate (2001)	38.81	Share of primary sector (%)	66.00	Share of secondary & tertiary sector (%)	34.00			
No. of MSME/Industries	8846	Total Employment (in 000s)	71583	Total Investment (in lakhs)	26044			
No. of colleges (PG & Graduation)	85	Total graduates (In '00s)	16008	Total Post graduates (in '00s)	2063			
No.of VTIs(registered ITI+Poly+ITC)			4	Total trainees trained (in '00s)	617			
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Semi-skilled workforce	10077	10642	10572	10975	11069	11290	11404	0.83 lakhs
Skilled workforce	5619	5993	6066	6262	6314	6488	6552	

5.20.1 Demographic Profile:

The district is located in the north-eastern part of the state of Rajasthan. It is bounded on the north by Jhunjhunu district, in the north-west by Churu district, in the south-west by Nagaur district and in the south-east by Jaipur district. It also touches Mahendragarh district of Haryana on its north-east corner. Sikar District, with Sikar town as its headquarters, is a district of the state of Rajasthan in western India. Sikar is a historical city containing situated in the Shekhawati region of Rajasthan and is popular for many old havelis, attracting a large number of tourists.

It ranks as the 17th largest district of the state covering 2.26 % of the area of the state. With 346 the density of population in the state ranks at 10 (Census, 2011-Provisional). It stands 08th on the Human Development Index (0.698) and 19th on the GDI (0.478). It was observed that though the district fares quiet high on HDI ranking but the ranking in the GDI states the gender differences in the district which brings it to the lower side of the state

ranking in GDI. As per provisional census 2011 data, Sikar accounts for population of 26.77 lakhs (3.9% of the state population) with a drop in sex ratio of 944 (compared to 2001 census figure of 951) which

S.no	Section	Unit	Quantity/ Value
1	LOCATION		
	Latitude	degree min	28°12' N
	Longitude	degree min	75°25' E
2	AREA		
	Total geographical area	sq km	7732
3	ADMINISTRATION		
	Tehsil	number	15
	Villages	number	986
4	Land Use Pattern		
	Total Area	Hectares	774244
	Total Irrigated area	Hectares	233299
5	Population (census 2011, provisional)		
	Total population	number	2677737
	Men	number	1377120
	Women	number	1300617
	SC (2001)	number	339824
	ST (2001)	number	62512
6	Literacy (except 0-6 age group)		
	Total literate	percent	72.98
	Men	percent	86.66
	Women	percent	58.76
8	Energy		
	Electrified Villages	number	986
9	Industries (DIC, 2009)		
	Registered MSME units	number	7901
	Employed persons	number	29874
10	Education		
	Pre Primary & Primary Schools	number	1490
	Upper Primary	number	1887
	Secondary & Sr. Secondary	number	1273
11	Higher Education / Others		
	Colleges	number	85
	IT I	number	03
	Polytechnic	number	01

Table 181 Sikar District Profile- a snapshot

still is on the higher side of the state ratio of 926. There was a marginal decrease in the decadal growth of population of about 7% from previous decade showing trends of population stabilization.

The worker participation rate in Sikar was low with 38.81% (HDI, Rajasthan, 2008) with primary sector engaging close to 66.00% of the workforce (marginal 0.04% increase from 91 census) and rest 34.00% in secondary & tertiary sectors. In rural areas the participation rate is higher due to agrarian based economy than the urban by close to 17% (Urban- 25.99% & Rural- 42.15%). The literacy rate of Sikar in 2011 is 72.98% which is higher than the state figure of 67.06. According to Census 2011 provisional data, the male literacy figure stands at a high 86.66% and female literacy was at a low of 58.76%. Sikar district therefore was rated as one of the highest literate districts of the state.

5.20.2 Education Infrastructure and Utilization

Sikar's status in literacy was marked higher than the state average but also marked as the higher side for the state with in both male and female literacy. Sikar district has become a hub for education in Rajasthan state. Along with numerous government colleges providing arts, sciences, and commerce education, private educational institutes have played a vital good role in imparting education level in the district. Mody Institute of Technology and Science, which is situated in the Lakshmangarh town of the district playing a very good role to impart girl education in India, other reputed colleges includes Sobhasaria Engineering College. There is one Government Polytechnic College also in Sikar district. Sikar ranks 3rd in the education index and have high girl child enrolment and retention rate in comparison to the nearby districts. Sikar has a total of 4819 schools from pre-primary to senior secondary levels with private schools providing good services as well. The retention rate of students in schools of Sikar is quiet high as well as the continuously rising enrolment rates have contributed to the drop in illiteracy rates and status of education.

Education	Sikar	Rajasthan
Pre Primary & Primary	1490	49546
Upper Primary	1887	38889
Sec/ Sr Sec	1273	19135

Table 182 Sikar vs. Rajasthan education status

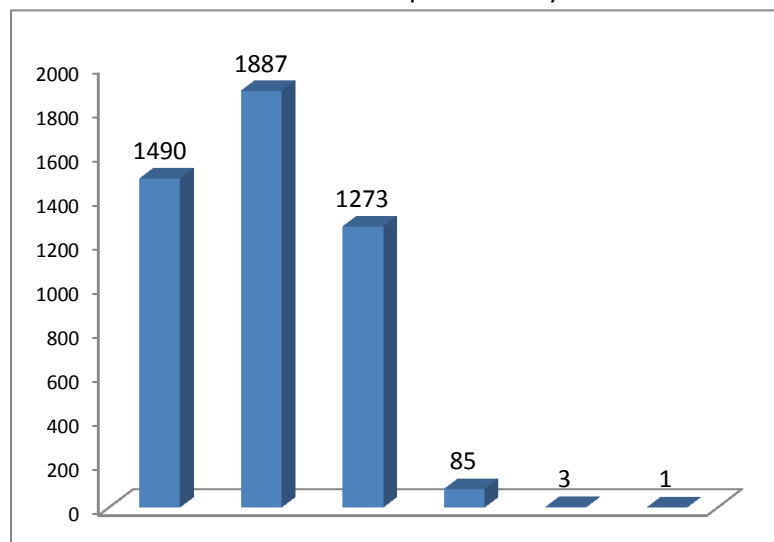


Figure 260 Number of Schools, Colleges, ITI & Polytechnic, 2009-10- Sikar

A total of over 2900 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There were just a total of four registered vocational training institutes in Sikar district. A total of just above 650 aspirants got enrolled in 2009-10 in the registered training institutes. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 08 partners (includes 01 ITI, 01 NGO, 01

KVK and 05 ITCs) implementing skilling initiatives with 14 approved programs (all completed). A detailed view of the vocational training of Sikar could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.20.3 VTI's demand across various trades in Sikar district

The existing scenario of VTIs in Sikar was certainly on the lower side considering the number of youths **passing out from formal educational set ups and the existing vocational training institutes in the district. Private players have not yet ventured in a big way** eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields as follows:

- e) **Computer Based Accountancy and computer operators:** With number of small scale industries coming up in the region the educated youth having the basic education levels could be engaged in computer courses for accountancy (VAT & TALLY) and data entry operators for industries and government development projects.
- f) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is food processing, banks/insurance or leather products firms which are growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field
- g) **Repair Services:** The numbers of electronic and electrical based equipment along with basic motor repairing in workshops are on a rise in Sikar. Also, the wiring and fitting of household electric equipment is on the rise. The owners of these are in need of economical, efficient easy access to repair and maintenance which can be easily produced in local economy through skilling

The government VTIs interviewed in the survey was two and eight were from the private. The courses which were offered by the government VTIs were predominantly self-employment based or to cater the local market needs. In VTIs the courses were more male oriented and none of the courses offered was designed demands to engage women. The details of the courses offered in the VTIs of Sikar are represented as follows:

Govt. VTI Trades	Pvt. VTI Trades
Electrical	COPA
Fitter	Electrical
Mechanic (Diesel)	Fitter
Motor Mechanic	Mechanic (Diesel)
Welder	Wireman
Wireman	Plumber
Turner	AC Mechanic

Table 183 Trades offered in government and private VTIs (sample study) Sikar

The government and private VTIs sampled for the study offer 7 different trades each with some common ones like electrical, wireman, fitter, and mechanic for training. Electrical was most preferred trade in Sikar as maximum number of seats in VTIs was from this trade. It appears in the government VTIs; the number of actual trainees compared to the number of approved number of trainees is more or less same across all most all the trades. On the other hand in private VTI, the difference between actual trainees and approved trainees was varying from 0 to 63 in number.

An overview of placement records by trade in the VTIs indicate stronger prospects in all most all of the trades with the exception of Diesel Mechanic trade in government and wireman and AC mechanic in private VTIs. It may be due to the fact that most of the trainees from these trades seek self-employment as second choice. In terms of average salary/trainee; in government VTIs, the highest paid trade was Motor Mechanic (Rs. 7,000/month) and in private VTIs, the highest paid trade was Diesel Mechanic trade with Rs. 7,600/month. While placements of trainees from the government VTIs was more through campus interviews, the private VTIs placed their trainees through campus interviews as well as proactive approach to the industry. Though some of the trainee from government VTI got their placement through employment exchange but it was inferred that employment exchanges were not playing a major role in placements. The private VTIs placement and average salary as initial package was better than the government VTIs.

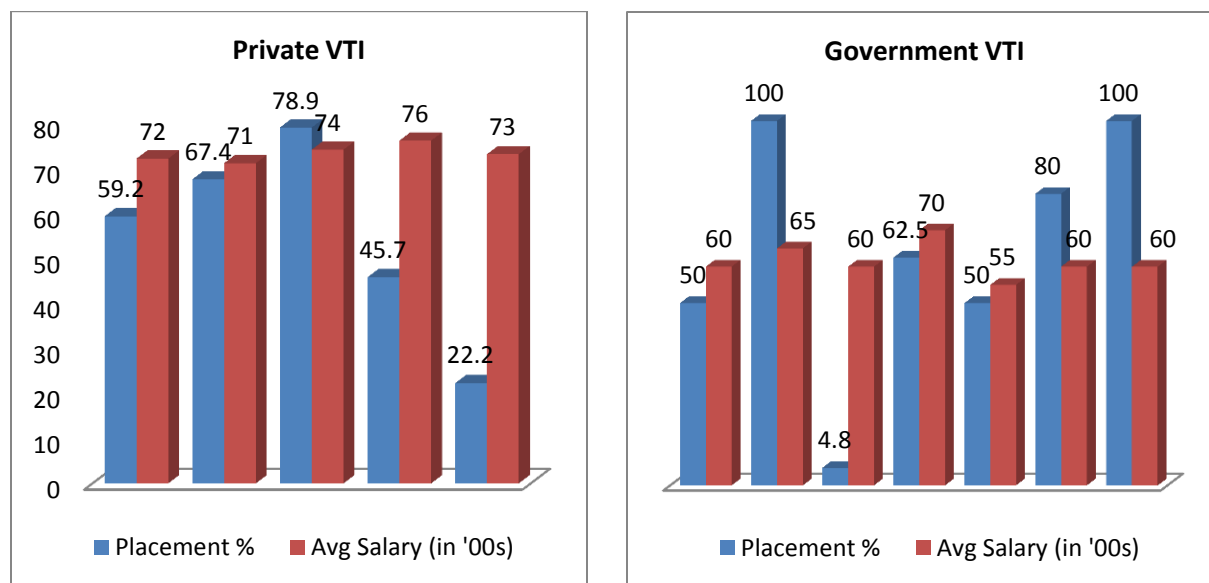


Figure 261 Sikar district's (sample study) courses offered placements in government and private VTIs

The trends across most of the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the government VTIs whereas for Motor Mechanic trade the demand declined slightly over the years. On contrary, the private VTIs increased the strength of trainees over the years was making significant remarks regarding the scope of present trades. The selection of course design and other influencing factors for finalization of courses by the VTI functionaries were more or less determined by the availability of facilities, faculties and equipment. All the VTIs claimed to have updated technologies, equipped labs, and space for conducting the training,

electricity and water supply (private VTIs were lacking in upgrading them). None of them have hostel facility for girls (three for boys in private VTI). Commuting facility for the aspirants in all private and government VTIs was a good initiative. The staffing in these institutes was marked proper and adequate in aspects dealing in academics & managerial positions in government set-ups whereas, the private VTIs were well staffed.

5.20.4 Industry Mapping

Sikar has 07 industrial areas marked with three major clusters in leather (Mojri), agricultural equipments and tye & dye. The main existing industries mainly comprise of Granite Tiles, & Slab, Cattle Feed' Electric Wire & Cable, Grain & Spices Grinding Sprinkler Irrigation System Plywood, PVC & Plastic Pipes, HDPE Pipes & Fittings, Woolen Carpet Yarn, Synthetic Blended Yarn, EAL Bottling Plant, Dairy Plant, FRP Rods, Electric Transformer, Rubber Footwear, Mineral Grinding, Pulses & Oil manufacturing etc. In exported Items Synthetic Blended Yarn, Rubber Footwear, and Furniture stand out.

MSME in Sikar

According to D.I.C data (March, 2012), there were around **8846 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.26044 lakhs** providing employment to **71583 persons**. It also has six large and medium scale industries employing close to 2000 persons.

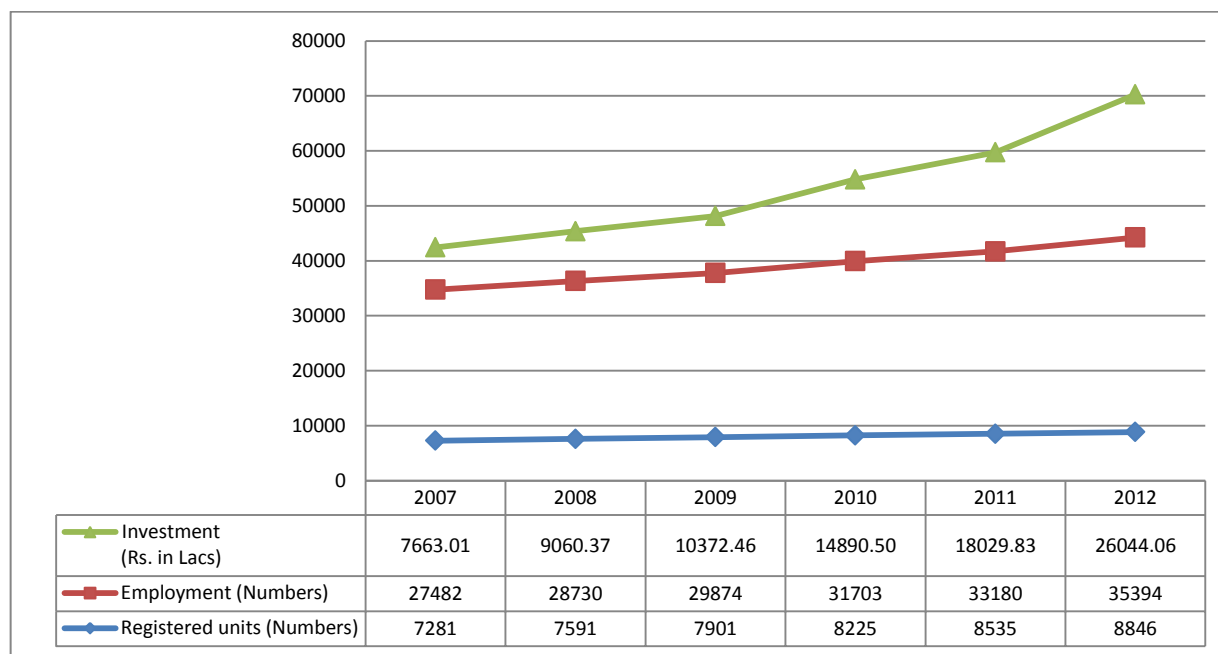


Figure 262 MSME trend analysis of the district Sikar

There has been a constant increasing trend in the investment in industries, and increase in the employment as well. The main existing industries are leather based, food product based, metals and

minerals and manufacturing. The potential growth areas would be cattle feed, mineral grinding and tiles

5.20.5 Sector wise mapping of industries in across Sikar

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Sikar. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections** like **high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and number of units.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	1189	2000.81	3748
Auto & Auto Components			
Chemical & chemical products	499	529.10	1246
Construction Material & Building Hardware			
Food Processing/ Products	1277	2850	4266
Furniture &Furnishing	238	238	238
Leather & leather goods	1392	1392	1392
Textile & Handloom	387	140.81	2174
Services & repairing	1168	123.80	1328
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging			
Mines, Metals & Minerals	814	5932.02	6016
Machinery, Electricals & Manufacturing	2504	20763.02	51169
High	Units>400, investment>500, emp>500		
Medium	Units>200, investment>200, emp>250		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 184 Sector wise mapping of industries in Sikar as per DIC report, 2010

There have been many MSME coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of metals, mines & minerals, leather and textiles, furniture and manufacturing sector and services. A substantially good number of workforce (15%) form the services backbone of the district and are engaged in various industries, households etc. as daily wagers.

Sectors covered under sample survey
Leather & Leather Goods
Machinery, Electricals & Manufacturing
Stone Querying, Cutting & Polishing
Textile & Handloom
Food Processing

Table 185 Break up of industries in Sikar (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in Sikar district of Rajasthan. These functionaries represented different levels of management as Partners, Directors, General Managers, HR Managers, etc. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table. The industries sampled were performing without any gap in production except the packaging industry which was running short of skilled manpower. All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers.

5.20.6 Workforce Demand and Supply

The major workforce participation observed in Sikar district over a period of two decades has been majorly as cultivators/ agricultural laborers and has had a marginal increase of 0.04% over a period. There has been increasing trend of workforce share in primary sector from 65.60% to 66.00% from 1991-2001. Therefore, the decrease in the share of secondary and tertiary has been quiet insignificant for the same period. Majority of the workforce has been engaged in subsistence agriculture and remains idle for the bulk period of the year. Sikar lies in edge of Thar region. There is distinct trend observed in the workforce engaged as laborers & wage earners who get engaged as land labourers, helpers, cleaners, semi-skilled mechanics etc. People have migrated to become traders and merchants and have benefitted the local human capital and social attainments. Engagement in secondary and tertiary sector shows an emerging trend as per the industrial growth of the district. Looking at the present resources and skill set of the workforce tiles and stones, textiles and leather hold the key to future employment for the district Sikar. The requirement for semi-skilled workforce was higher than the skilled workforce. The granite related industries demand for unskilled workforce more than double of that of semi-skilled workforce requirement clearly illustrating the model of low-cost unorganized form of labour utilization in the sector. Sikar workforce engagement plan should also cater for agri-based and food products industries.

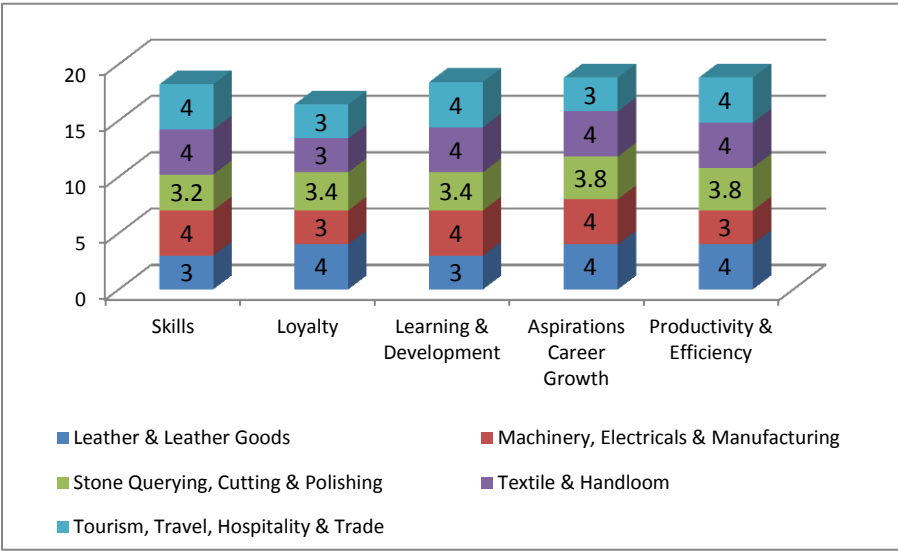


Figure 263 Employers demands in terms of expectations from workers (Sikar)

In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were loyalty towards work and least scaled was importance of enhancing skills. Other parameters were closely rated as shown in the figure showing the employer's expectations.

5.20.7 Projected Workforce Demand

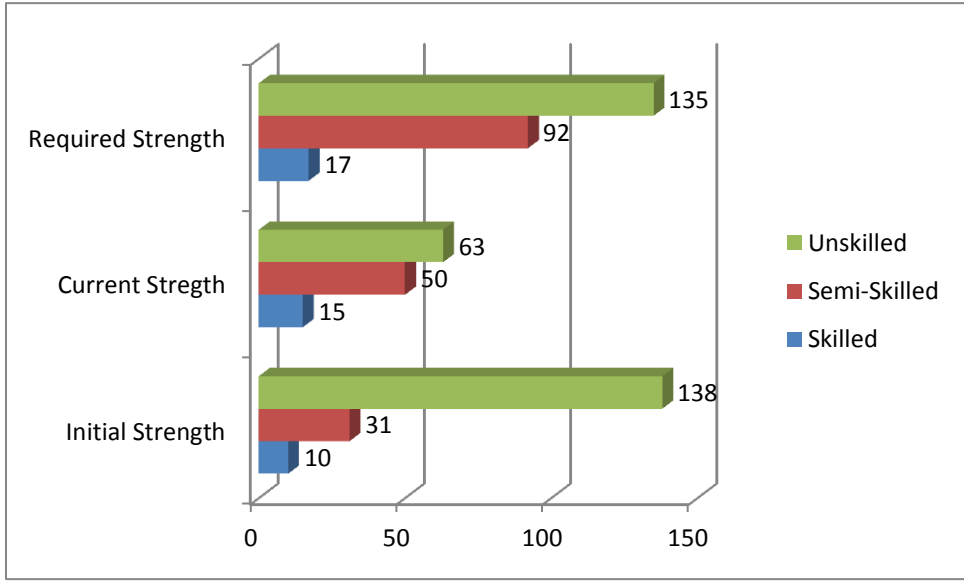


Figure 264 Status of workforce in terms of initial, current and required strength across sample industries of Sikar

There has been certain increase in the number of full time skilled workers over a period of time by close to 25%, though majority of the industries interviewed still feel the requirement of unskilled workers over the skilled workers for their full time roles. Apparently the number of semi-

skilled workers category has grown by 66% but the need for unskilled contract/ daily wage laborers was phenomenally very high. A clear distinction could be observed in the preference of only skilled workers for the contract and daily wage worker category as the industries felt the low cost module works better in a capital scenario and incurs less cost in on job training.

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers. One could observe a similar requirement in the skilled daily wage labor requirement and unskilled contract based

requirements. This clearly validates the mindset of the industry houses to engage less skilled workers and increase the intake of semi-skilled workers.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of Skilling Requirement
Agricultural Sector								
Unskilled	687627	729023	732954	767333	786330	809151	827494	
Semi-Skilled	56057	59431	59752	62554	64103	65963	67459	
Skilled	3737	3962	3983	4170	4274	4398	4497	
Total demand	747420	792416	796689	834058	854707	879512	899450	74%
Industry Sector								
Unskilled	73660	76625	75424	77666	78146	79005	79586	
Semi-Skilled	33997	35365	34811	35846	36067	36464	36732	
Skilled	5666	5894	5802	5974	6011	6077	6122	
Total demand	113323	117884	116037	119486	120225	121547	122439	10%
Services Sector								
Unskilled	23932	25341	26116	27116	27688	28652	29313	
Semi-Skilled	55841	59129	60937	63272	64604	66854	68398	
Skilled	79773	84470	87053	90388	92292	95505	97711	
Total demand	159547	168940	174106	180776	184584	191011	195422	16%
All Sectors								
Unskilled	785219	830989	834494	872116	892164	916808	936393	
Semi-Skilled	145895	153925	155500	161672	164775	169281	172588	
Skilled	89177	94326	96838	100533	102577	105980	108330	
Total Demand	1020291	1079241	1086832	1134320	1159515	1192070	1217311	100%

Table 186 Labor percentage of workforce demand requirement (in terms of skills) till 2017 across sectors- Sikar

Basis on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			

Building & Construction			
Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 187 Workforce across various sectors by 2017- Sikar

5.20.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	51251	55826	56131	59798	61735	64160	66040
Semi-skilled	10077	10642	10572	10975	11069	11290	11404
Skilled	5619	5993	6066	6262	6314	6488	6552

Table 188 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.8 lakh. Keeping in mind the high rate of workforce participation from unskilled masses; the significance would be to target training to atleast 60,000 youths by 2017 and majorly concentrate on skilling the unskilled to semi-skilled in agriculture and allied sectors. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation was conducive enough to support industrial growth in Sikar but water and power has been major problems for some of the industries. Availability of skilled manpower has been a problem but with little or no mention.

- The VTIs were not fulfilling the needs of the industries completely since trained person from ITI lacked in practical work and so the fresher were considered as semi-skilled worker and because of this reason industries end up paying minimum amount that creates dissatisfaction among the workers and gap between the demands and supply of workers.
- The current demand for skilled workers is good across the various sectors. Stones and mineral based industries were predominant in the district .Marbles and granites industries were emerging in the district which shall be sustainable enough to absorb new manpower. Existing industries in textiles and leather would require up-skilling for better efficiency.
- Scope for self-employment and entrepreneurship in the district was good since government provided subsidiaries on loan for the self-employment to the unemployed person and apart from this reason there were a number of directly or indirectly self-employment work available Rozgaar melas and Rajasthan Nivesh Protsahan Yojna are some government initiatives which were helpful in employment generation

5.20.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Jaipur district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above).250% of the youth covered were college educated and 75% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government. The average age of the respondents was 26 years.

Table 189 Youth Profile of sample in Sikar

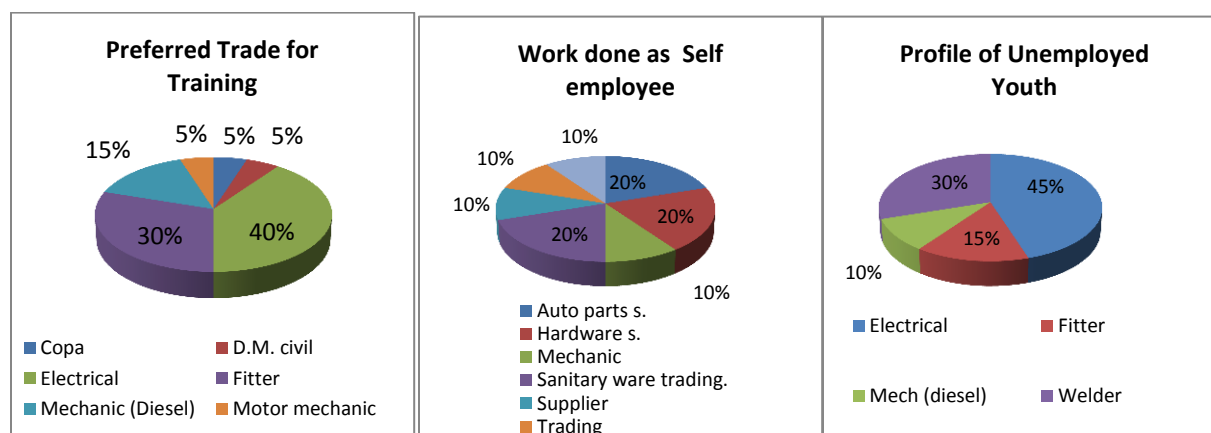


Table 190 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Sikar

Among the respondents, inclination towards electrical and fitter course was found very high as around 70% of the youth reported that they had chosen these as a preferred trade during his/her training at VTI. The reason for the same seems to be the demand for this course in the market. The same trades also reflect highly on the unemployment pattern. It infers that though the demand was high but the quality of supply was hindrance in total absorption. In case of self-employment, which was the course taken after non placement by trainees; the trade of hardware, and auto mechanic were prominent in Sikar.

5.20.10 Youth's Perception

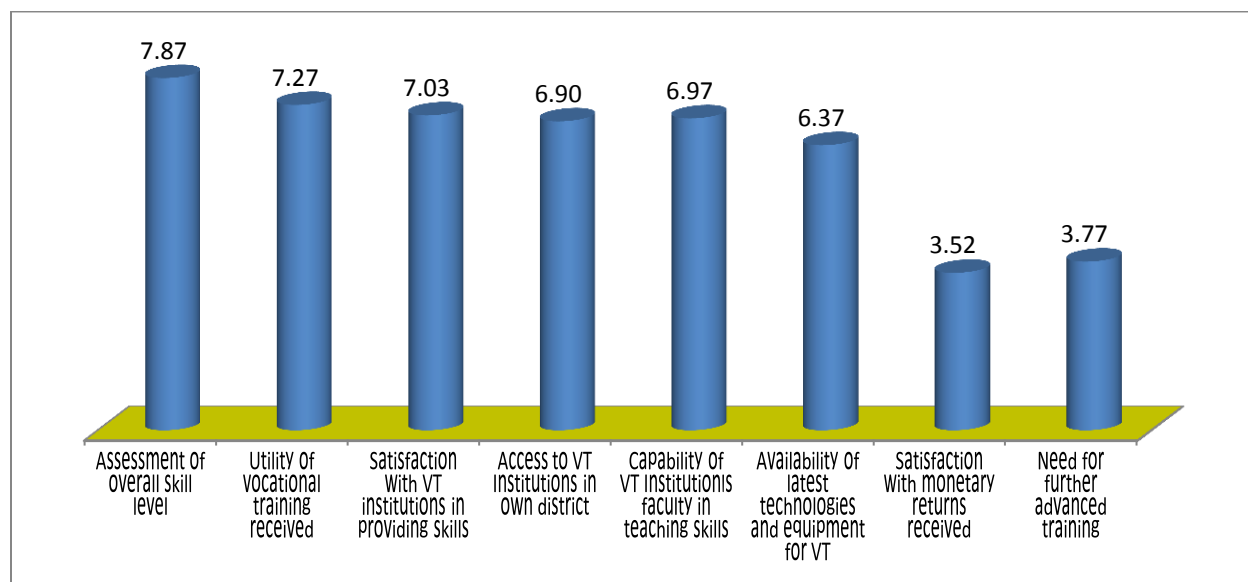


Figure 265 Sikar Youth's perception, need and aspirations –Sample Group

Satisfaction with current monetary returns and need for advanced training emerged as the least ranked parameters from the youths and assessments of skill inputs of the VTIs were ranked high. The capability of VTIs faculty members and the utility of these training were among the most appreciated thoughts among the group of youths. Though the average monthly salary post training was Rs 7000/month, the need for better salary and facilities (increment, bonus, insurance) were the most discussed and desired parameters for the youth in the district.

5.20.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.80 lakh of skilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at Sikar district level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

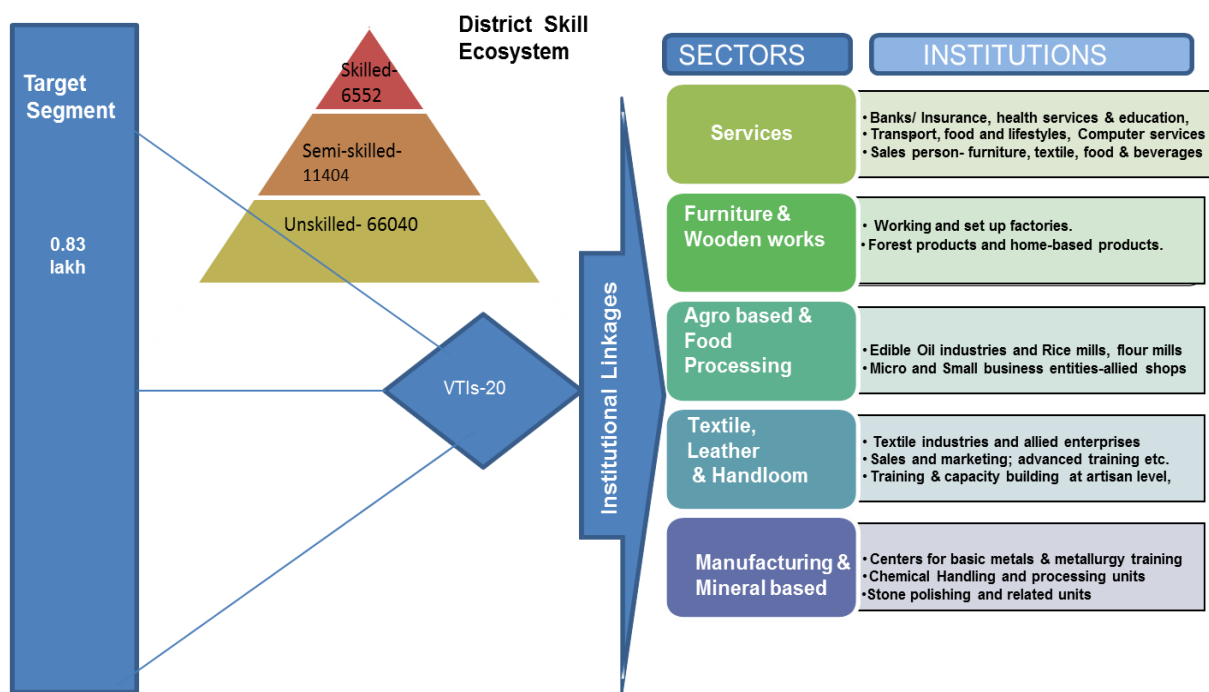


Figure 266 : Optimization plan- Skill Development Eco System-Sikar

Sikar district would need to skill majorly the unskilled workforce to semi-skilled in the sectors of agriculture and allied by specific training programs and also would do good by working on the emerging service sector of the district. Some of the important ones shall be the education, coaching and competition based institutes, leather, synthetic yarn based (textile) industries, food products and stone/cement based industries. Linking the trained beneficiaries to the market demand could be the key factor and also vital would be the market linkage established for allied products of agriculture like cattle feed etc. Special training programs for the unskilled group in agri-based and textiles related occupations through convergence models should be initiated by the training partners taking the support of NSDC and its SSCs.

5.21 District Bhilwara



District Skill Workforce Face Sheet-2012								
District	Bhilwara			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	23	No. of Villages		1834	No. of Schools (elementary & sec.)		3923	
Basic Data								
Population (in '000s)	2410	Overall Literacy(in %)		62.71	Sex Ratio		969	
Decadal growth rate(in %)	19.27	Female Literacy(in %)		47.93	HDI Ranking (2008)		0.633 (15 th position)	
% Urban Population		Male Literacy(in %)		77.16	Per Capita Income (in Rs.)		24110	
Workers participation rate (2001)								
Workers participation rate (2001)	46.67	Share of primary sector (%)		64.00	Share of secondary & tertiary sector (%)		36.60	
No. of MSME/Industries	16108	Total Employment (in 000s)		67686	Total Investment (in lakhs)		57456.64	
No. of colleges (PG & Graduation)	25	Total graduates (In '00s)		4670	Total Post graduates (in '00s)		1337	
No.of VTIs(registered ITI+Poly+ITC)				7	Total trainees trained (in '00s)		601	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	12278	13218	13449	14005	14346	14830	15133	1.04 lakh
Semi-skilled workforce	12220	13361	12816	13528	13814	14027	14130	

5.21.1 Demographic Profile:

The district Bhilwara is situated between 25°.21' to 27°.50' North Latitude and 74°.38' to 75°.25' East longitude. It is bounded in the north by Ajmer District, in the north-west, west and south west by Udaipur and Rajasamand district. The total length of the district from west to east is 144 km. while the breadth from North to south is 104 km approximately. The district Bhilwara has a hot dry summer and bracing cold winter. The cold season is from December to February and is followed by hot summers from March to the last week of June. The south west Monsoon season which follows, last till about mid- September, followed by post monsoon season till end of November.

The district has an area of 10,455 km². It ranks as the 13th largest district of the state covering 3.05 % of the area of the state. With 230 the density of population in the state ranks at 15 (Census, 2011- Provisional). It stands 15th on the Human Development Index (0.633) and 23rd on the GDI (0.471). It was observed that the district fares quiet high on income index (2nd ranked), its due to the education and health index (29th and 28th respectively) which pulls the district on overall HDI ranking to fifteenth. As per provisional census 2011 data, Bhilwara accounts for population of 24.10 lakhs (3.51% of the state population) with sex ratio of 969 (compared to 2001 census figure of 962) which was marginally on the higher side of the state ratio of 926. There was a decrease in the decadal growth of population of 7% showing trends of population stabilization.

S.no	Section	Unit	Quantity/ Value
1	LOCATION		
	Latitude	degree	25°21' N
	Longitude	degree	74°38' E
2	AREA		
	Total geographical area	Sq km	10455
3	ADMINISTRATION		
	Tehsil	number	12
	Villages	number	1834
4	Land Use Pattern		
	Total Area	Hectares	1050673
	Total Irrigated area	Hectares	130895
5	Population (census 2011, provisional)		
	Total population	number	2410459
	Men	number	1224483
	Women	number	1185976
	SC (2001)	number	316536
	ST (2001)	number	180556
6	Literacy (except 0-6 age group)		
	Total literate	percent	62.71
	Men	percent	77.16
	Women	percent	47.93
8	Energy		
	Electrified Villages	number	1693
9	Industries (DIC, 2009)		
	Registered MSME units	number	16108
	Employed persons	number	67686
10	Education		
	Pre Primary & Primary Schools	number	2139
	Upper Primary	number	1333
	Secondary & Sr. Secondary	number	451
11	Higher Education / Others		
	Colleges	number	25
	I T I	number	07
	Polytechnic	number	00

Table 191 : Bhilwara District Profile- a snapshot

The worker participation rate in Bhilwara is 46.67% (HDI, Rajasthan, 2008) with primary sector engaging close to 64.00% of the workforce and rest 36.00% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 17% (Urban- 33.55% & Rural- 50.08%). The literacy rate of Bhilwara in 2011 is 62.71% which is on the lower side of the state figure of 67.06. According to Census 2011 provisional data, the male literacy figure stands at 77.16% and female literacy was at a state highest of 47.93%.

5.21.2 Education Infrastructure and Utilization

Bhilwara's status in literacy was marked as one of the lowest of the state with 29th rank in education index and 28th rank in the health index among the other districts of the state. It ranks fairly below the state average in both male and female categories. The grim situation in educational scenario was eventually seen taking the right discourse as there was decrease in the gender difference in terms of enrolment and also the inclusiveness of the backward classes in the society through education. A number of schemes are run by the government to improve the educational status of the district like Shiksha Aapke Dwar (Education at your door), District Primary Education Program (DPEP), Ghummakad Vidyalaya Shiksha Mitra Yojana etc.

Education	Bhilwara	Rajasthan
Pre Primary & Primary	2139	49546
Upper Primary	1333	38889
Sec/ Sr Sec	451	19135

Table 192 Bhilwara vs. Rajasthan education status

In terms of higher education there are just 25 colleges and 07 ITI institutes recognized by the state (Statistical Abstract, 2010). There are two engineering and one management institute in the district to support technical/ professional education in the district. A total of over 10,000 students enroll in

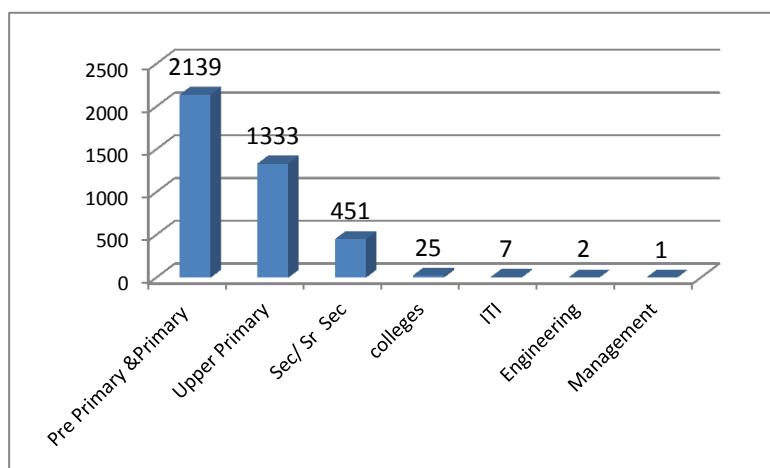


Figure 267 Number of Schools, Colleges, ITI & other institutes - Bhilwara

various institutes at colleges ITI & polytechnic. At the intermediate college level, courses are available in the area of science, arts and commerce. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 06 partners (includes NGOs, ITIs, government institutes, KVK) implementing skilling initiatives with 16 approved programs (11 are completed). A detailed view of the vocational training of Bhilwara could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.21.3 VTI's demand across various trades

The existing scenario of VTIs in Bhilwara is on the rising side considering the number of youths passing out; and seeking employment as skilled workforce. Private players have ventured but was still far less in numbers for the district. As observed from the secondary data, the number of graduates and aspirants from ITI & polytechnics are also on the higher side compared to other districts of the state. Therefore, the scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields of requirement and demand as per market shall be the need of the hour to address the skill shortage.

The survey was carried out in 10 sample VTIs (07 ITI & 03 ITC). The government VTIs/ ITI provided 14 different courses in training whereas; it was 04 courses in the ITC. These courses were predominantly employment based for services and manufacturing or to cater the local market needs of self-employment. In VTIs the courses were more male oriented. The details of the courses offered in the VTIs of the district are represented as follows:

Private VTI Trades (ITC)	Government VTI Trades (ITI)	
COPA	Cutting & Sewing	Mechanic (Diesel)
Electrical	Electrical	Steno Hindi
Fitter	Electronics	Welder
Mechanic (Diesel)	Fitter	Wireman
	IT & ESM	Turner

Table 193 Bhilwara district's (sample study) courses offered

It appears that Fitter and Diesel Mechanic trade were the most popular trade in Govt VTIs whereas most popular trade in private CTI was Electrical. The difference between the numbers of actual trainees and the number of approved number of trainees is ranging from 5 to 32 seats. Electrical trade had least difference whereas Welder trade had the highest difference. On the other hand, gap between the actual and approved strengths of trainees was significant across all four trades and highest for COPA trade in the ITCs.

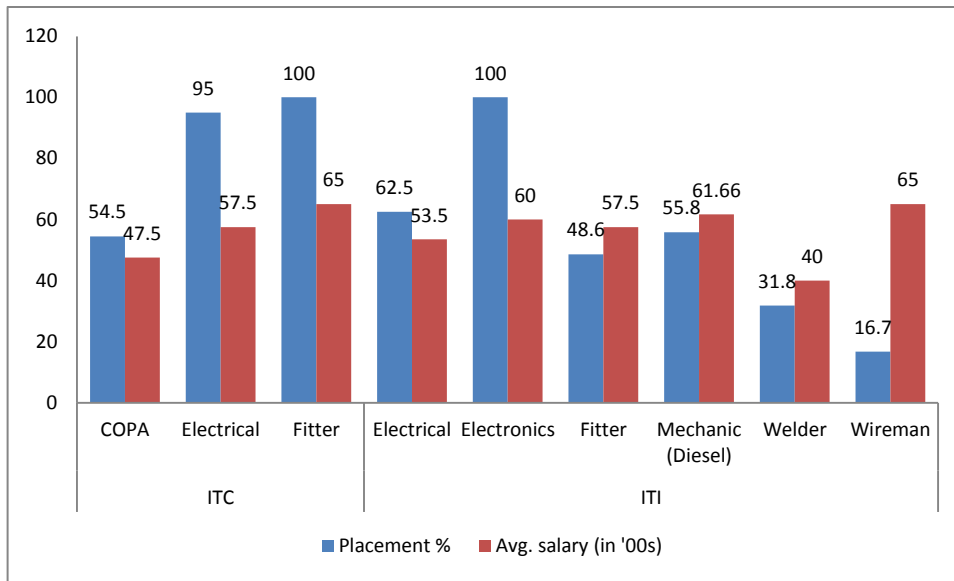


Figure 268 Bhilwara district's (sample study) courses offered placements in government and private VTIs

An overview of placement records by trades in the government VTIs indicates moderate prospects in all the trades at around 48% of the total batch strength across all these VTI got placed through college. Trades like Cutting & Sewing, Turner and Steno

Hindi could not place their single trainee whereas all

the students from Electronics trade got job from college itself. The condition in private VTIs was better as 68% of the total batch strength across all Private VTI got placed through college. It was noticeable that IT & ESM trade of ITI and Diesel Mechanic Trade from Private VTI did not get any trainee last year. Average salary/trainee indicates towards good prospect in Wiremen trade in ITIs and trainees from this trade got the highest paid job (Rs. 6,500/Month). In case of ITCs the highest paid job was from Fitter trade (Rs. 6,500/Month). While placements of trainees from the VTIs was more through campus interviews but a good number of students also got placed through proactive approach to the industry by the VTIs trainees themselves. It was observed that Employment exchanges had not played any role in placements. The poor placement percentage was also due to the fact that the enrolment of aspirants in some of the courses like IT, Cutting and Sewing, Steno and Turner of the ITI was nil in the last year.

5.20.1 Industry Mapping

Bhilwara District has opened new field for exports of textile good like polyester, viscose and woolen blankets and cotton fabric, cotton yarn, woolen shoddy yarn and wool tops. In the district, textile industries were showing 8-10% annual growth due to their strategic location and mostly industries are export their products goods like textile, synthetic yarn, cotton yarn, woolen products and fabric cloths. In the last 5 year Insulation bricks industries have shown a growth rate 5% average annually but next 5 years possibility growth rate was estimated at 25% in the district. Looking to the demand of insulations bricks availability of raw material in the district, the projected capacity addition is likely to be of 2 crore bricks per annum, during next 5 years. In the district minerals grinding growth approximate 25-30% in the next 5 years which was in the increasing side due to availability of raw material.

MSME in Bhilwara

According to D.I.C data (March, 2012), there were around **18733 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.72729.65lakhs** providing employment to **82557 persons**. It also has **70** registered large and medium industries engaging **33102** persons with fixed investment of **Rs. 3792.81 crore**.

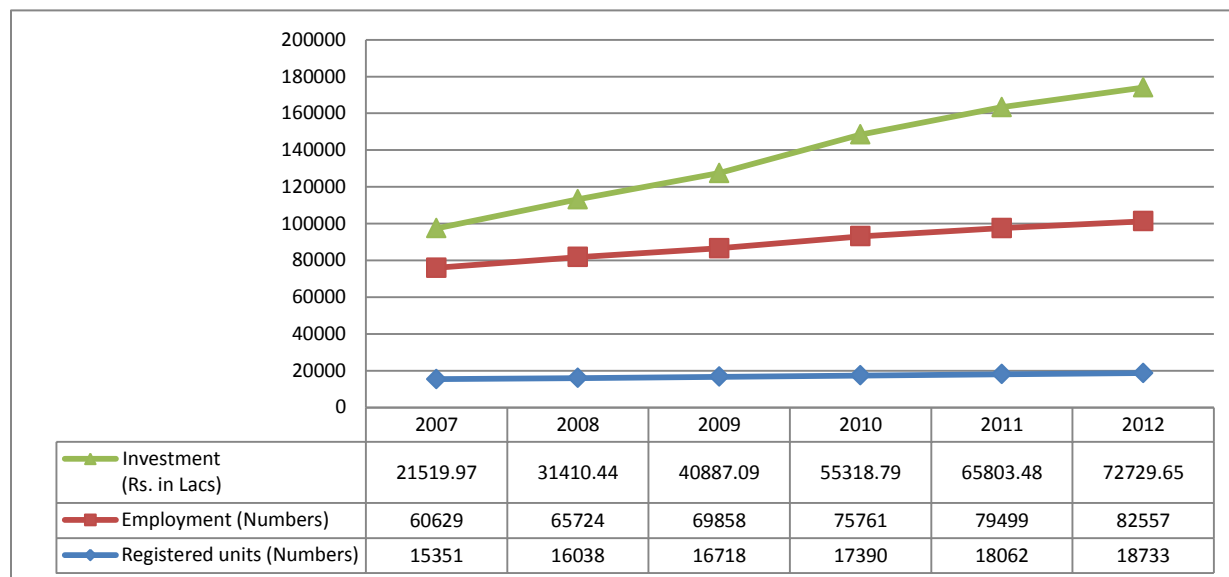


Figure 269 MSME trend analysis of the district- Bhilwara

In the district Textile industries are showing 8-10% annual growth due to their strategic location and mostly industries are export their products goods like textile, synthetic yarn, cotton yarn, woollen products and fabric cloths. Insulation bricks industries growth rate in the last 5 year 5% average annually but next 5 years possibility growth rate 25% increasing in the district. Looking to the demand of insulations bricks availability of raw material in the district, the projected capacity addition is likely to be of 2 crore bricks p.a., during next 5 years. In the district minerals grinding growth approximates 25-30% in the next 5 years increasing due to availability of raw material. Bhilwara is one of the largest producers of raw material required for ceramic industry –Quartz Feldspar, China Clay etc. There are deposits of these minerals in the district. Now with the announcement of LNG gas pipe lines from KG Basin to Bhilwara Pipe line by GAIL India, the natural gas will be available for industrial use in the district within next 2-3 years. As natural gas is one of the major requirements of the ceramic industry and availability of raw material in the district, the ceramic & ceramic tiles industry can develop in a big way in the district during the next 5 years period growth rate 10-15% p.a.

Iron ore beneficiation plant has been announced by Jindal Limited in the district. Mining & industrial land have been allotted. With this Iron Ore Beneficiation plant, there is likely hood of new Sponge Iron units, based on new Japanese & Chinese technology and development of Ancillary units to Iron Ore Beneficiation Plant in the MSMEs. Bhilwara district has made an important place for itself in the industrial map of the state. During the last decade the district has developed in to a leading place in the textile industry in the country. There are 75 large and medium Enterprises and others enterprises

working in the district and many industries export their products in different countries so that vide scope for repair & maintenance requirement of the textile industries and other industries sectors. In the district vide scope in Garment Making & Fashion Design, Aari Tari and Embroidery works Enterprises due to availability of quality raw material and other facilities in the district for MSMEs. The district has deposits of Soap Stone, Mica, China Clay, Garnets, and Marble etc. Based on them a number of units have come up for manufacturing Insulation bricks, Mica grinding Marble cutting and Polishing, China clay, washing powder etc. There are also units for manufacturing Cement, Jali, Tanki, Pipes and P.C.C poles. Availability of raw material in the district provided scope for the above industries in Manufacturing and Service Sector for MSMEs. The district has a number of units manufacturing Agricultural tools and instruments, Thresher, Spades Axes Repair Shops, Welding, Motor winding, pump repairing, Auto mobile workshop etc. 100% scrap and other dies are procured form Bhilwara and still there is scope for MSMEs of Manufacturing and Service Sector. Leather and Leather based many Industries working in the Bhilwara district for Leather dyeing and finishing, Shoe making, Manufacturing of cycle seats, Leather bags etc. The vide scope in Manufacturing and Service sector to availability of raw material in the district for

5.20.2 Sector wise mapping of industries in the district

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries and the total number of employment) and would also represent any new sector other than the listed sectors existing in Bhilwara. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	50	116	650
Auto & Auto Components			
Chemical & chemical products	452	2001.2	3302
Construction Material & Building Hardware	1946	729.24	2281
Food Processing	1338	927.32	5119
Furniture & Furnshing	1914	387.23	6012
Leather & leather goods	2924	195.64	6157
Textile & Handloom	2430	48066.95	26541
Repairing & Services	2321	487.47	4239
Building Construction & Real Estates	52	520	1100
Education & Skill Development (private)	25	-	1200
Healthcare (private)	80	-	2500
IT/ ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging	63	650.98	297
Mines, Metals & Minerals	2117	3044.76	10960
Machinery, Electricals & Manufacturing	340	266.71	1219

High	High-Units>1000, investment>500,emp>2000
Medium	Medium-Units>300, investment>200, emp>750
Low	Low-Units> 10, investment> 30, emp>30
Emerging	Emerging- Investment & demand based sectors of district-DIC

Table 194 Sector wise mapping of industries in Bhilwara; DIC report, 2009

There have been many MSME coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of textiles and handloom, leather, food processing and services sector. Bhilwara has been an industrial town. It has been famous country wide for the textiles industry. It has been well connected with roads and rail. In the district, private hospitals were increased in last few years in the fields of orthopedic operation and some of the best medical facilities were available after Jaipur. In the district training facilities were also available. Approximately 80 private hospitals were running in the district, with 2500 employment. Similarly, approximately 25 coaching institutes were running in the district, mainly imparting the coaching for engineering and medical entrance examination for under graduates courses, having approximate 1200 employment and about 25,000 students is studying in these institutes.

From this industry other allied industry is also working like hostels, Hotel & Restaurants, laundry, mess, catering services, Marriage Halls, decoration, tent house, offset printing , printing press, transportation packaging industry and packaged food industry. Some of the manufacturing and service based industries which have come up in the district were as follows:-

Manufacturing Based	Service Based
Textile industry	Off Set printing and printing press
Insulation Bricks industry	Hostels
Ceramic & Ceramic Tiles industry	Hotel and Restaurants
Quartz & Feldspar Grinding industry	Transportation
Sponge Iron & Ancillary units to Iron Ore	Hospital
Cold Storage /Clod Chain	Coaching Institutes
Sand Stone Processing industry	Catering Service
Lathe Machines Enterprises	Laundry
Welding Workshop	Video & Photography
Packaging Material Enterprises	Motor winding & Pump Repairing
Engineering Machine and tools	Motor Vehicle repairing (Two Wheeler & Four Wheeler etc.)

Paper and paper products industry	Mobile and Computer Repairing
Wooden Crafts	
Crusher Enterprises	
Stone Cutting Enterprises	

Table 195 Potential industries providing employment to the semi-skilled workforce in Bhilwara

In order to understand the trend in the existing market and industrial set up stratified sample of 14 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of senior level functionaries from the industries sampled for the district. These industries were selected from large, medium and small industries covering various growth sectors of the district as shown in the table:-

Type of Industry	Large	Medium	Small	Total
AGRICULTURE & ALLIED	0	2	0	2
LEATHER & LEATHER GOODS	0	1	0	1
SERVICE & REPAIRING	0	0	1	1
TEXTILE & HANDLOOM	3	3	3	9
WOODEN PRODUCTS, HANDICRAFTS	0	0	1	1
Total	3	6	5	14

Table 196 Break-up of industries in Bhilwara (Sample study)

As textile and handloom formed the major base of employment in the district, a total of 9 industries were covered; three each from small, medium and large. From the agriculture equipment cluster two industries were covered and one each from rest of the sectors chosen as sample.

5.20.3 Workforce Demand and Supply

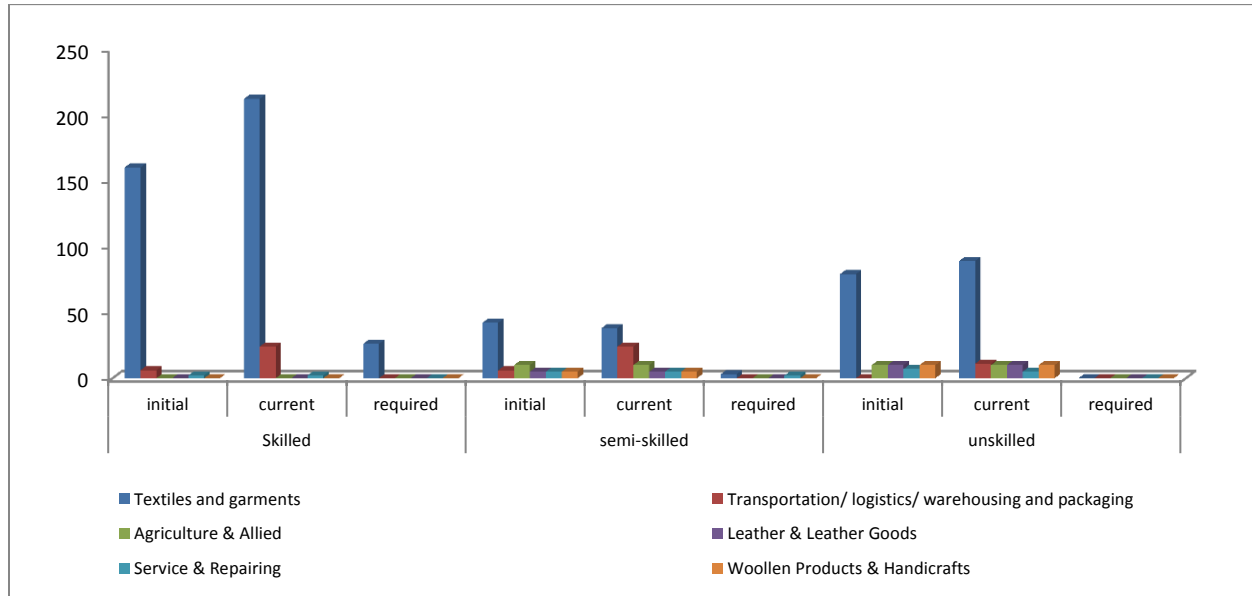


Figure 270 Status of skilled, semi-skilled workforce and unskilled workforce across sectors (Sample Bhilwara) at various stages (initial, current and required)

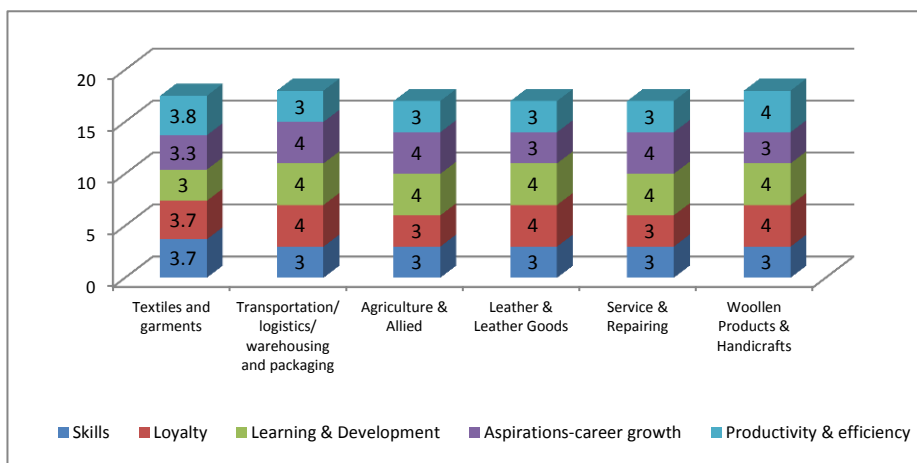


Figure 271 Expectations of employers from its employees in Bhilwara (Sample study)

Three of the sampled industries across three sectors (textiles, transportation and services) could provide their skilled workers strength whereas industries from other three sectors reported on the retention and an increase of their worker strengths from

the time of establishment till current date. The potential to absorb more skilled workforce was reported by textiles and garments sector industries only. Except Textiles & Garments sector industries, all other industries have either expanded or maintained the same number of semiskilled staff as compare to semiskilled workers' strength at the time of industry establishment. Very low potential to absorb more semiskilled workforce across different sectors was reported by Textiles & Garments and Service & Repairing sector industries. Similarly except service & repairing sector industry, all other industries have either expanded or maintained the same number of unskilled staff as compare to workers' strength at the time of industry establishment.

In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were learning and development of the employees during work and loyalty. The least scaled was skills and requirement of skilled workforce and aspirations for career growth. Transportation and handicrafts industries were rated with higher expectation across all the parameters from its employees.

5.20.4 Projected Workforce Demand

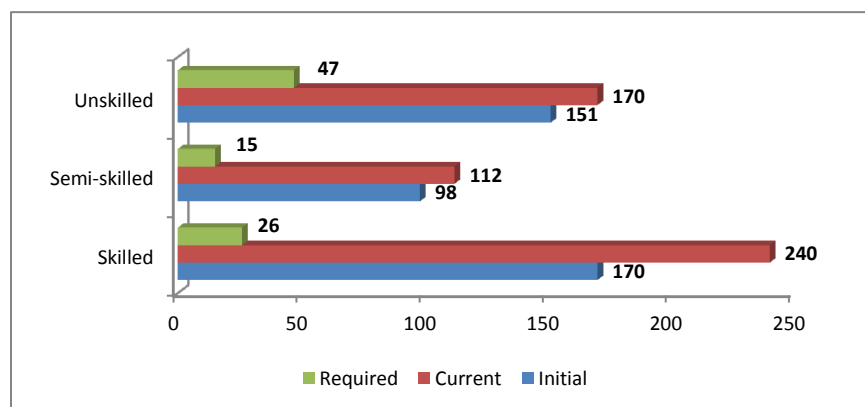


Figure 272 Status of workforce in terms of initial, current and required strength across sample industries of Bhilwara (Sample study)

The number of vacancies reported by the sampled employers for skilled and unskilled workers was relatively more and reflects a good potential for absorption of workers in this category. Potential to absorb semi-skilled workers appears to be low as reflected by the data.

Current strength for the skilled, semi-skilled and

unskilled categories of workers was not in the equal proportion. The count for skilled worker is more than twice of semi-skilled due to large scale absorption of skilled workforce in textile and growing marble industries. The current dependency on unskilled workforce in comparison to that of semi-skilled provides the avenues to engage more semi-skilled workforce in the future though there was less demand for semi-skilled workforce by the industries in future.

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers to address the current shortage and not with the intentions to expand. The number of vacancies reported by the sampled employers for the skilled, semi-skilled and unskilled categories of workers indicated unequal proportion and reflected that skilled workforce had good demand and unskilled workforce had still been the demand for daily wage based works; also indicated high potential for absorption of workers in this category. In semi-skilled workforce had witnessed rise in engagement since industry inception but with less demand in future. As per secondary analysis, the service sector would engage considerable number of workforce in future along with manufacturing and ancillary industries. This could be projected as shown in the below projections:

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of workforce
Agricultural Sector								
Unskilled	783217	844396	803028	856243	902443	910877	931707	
Semi-skilled	63849	68837	65464	69802	73569	74256	75954	
Skilled	4257	4589	4364	4653	4905	4950	5064	
Total demand	851323	917822	872857	930699	980917	990084	1012725	62%

Industry Sector								
Unskilled	120299	130324	129882	136059	137149	141640	143605	
Semi-skilled	55523	60150	59946	62796	63300	65372	66279	
Skilled	9254	10025	9991	10466	10550	10895	11047	
Total demand	185075	200499	199819	209322	210999	217908	220931	15%
Services Sector								
Unskilled	37587	40280	41311	43001	44146	45725	46801	
Semi-skilled	87702	93986	96391	100337	103008	106691	109203	
Skilled	125289	134266	137702	143338	147155	152416	156005	
Total demand	250577	268532	275404	286676	294310	304833	312010	23%
All Sectors								
Unskilled	941102	1015000	974221	1035303	1083739	1098242	1122113	
Semi-skilled	207074	222972	221801	232936	239877	246320	251437	
Skilled	138799	148880	152057	158458	162609	168262	172115	
Total Demand	1286975	1386852	1348079	1426697	1486225	1512824	1545665	100%

Table 197 Percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors- Bhilwara

The district shall continue to engage close to 62% of the workforce in primary sector and balance 38% in secondary and tertiary sector (15% in manufacturing and 23% in services) of the total workforce. These projections account till 2017 for the district. Basis on the inputs received from sector wise expansion plans the workforce projections made across different categories highlight these distribution pattern. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			

High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 198 Workforce across various sectors by 2017-Bhilwara

5.20.5 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would highlight on the mismatch between industry skill requirements and the skill pool emerging. The situation of skill gap for the district for 2010-11 to 2016-17 based on projections is represented in the table below (assumptions set in the annexure _ Projection Model):-

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	57518	64904	60766	66746	71498	72897	75178
Semi-skilled	12220	13361	12816	13528	13814	14027	14130
Skilled	12278	13218	13449	14005	14346	14830	15133

Table 199 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The conducive industrial and service sector environment has made Bhilwara an important industrial centre of the state. The skilled workforce requirement also shows comparatively very low requirement and just addressing the optimum utilization of current infrastructure and semi-skilled workforce requirement was on the lower side than the skilled workforce as also demonstrated by the primary survey across sectors and industries. The focus of the district would be to engage more unskilled to form semi-skilled through trainings and further enhance the skilled workforce base across emerging services.

5.20.6 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Bhilwara district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth that provided rich information and understanding on their aspirations and perceptions.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table). 45% of the youth covered were college educated and 55% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government. The average age of the respondents was 22 years with majority (95%) interviewed at ITI and 5% at ITC.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 200 Youth Profile of sample in Bhilwara

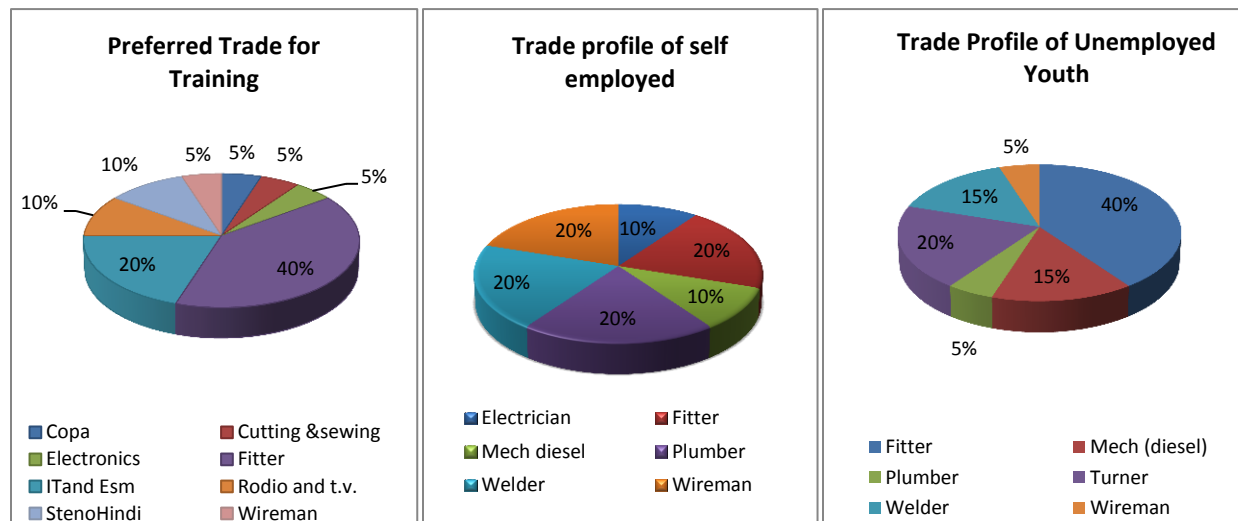


Figure 273 Profile of respondents (self-employed and unemployed) by trade in sample of Bhilwara

Among the respondents covered under the survey the course of fitter (40%) was one of the most preferred one followed by IT & ESM in sample of youths under trainees category. Youth preference for self-employed courses was similar for trades of electrician, plumbing, fitter and wireman. But fitter trade also was seen with the maximum number of unemployed youth post training (40%) followed by turner (20%). These trades appear to be the most popular trades as per the perceived demand in the market. But due to the surplus of similar workforce and unskilled labours/ daily wagers or improper market linkage of the supply of trained workers, about 60% of the unemployed youth also belonged from these trades.

5.20.7 Youth's Perception

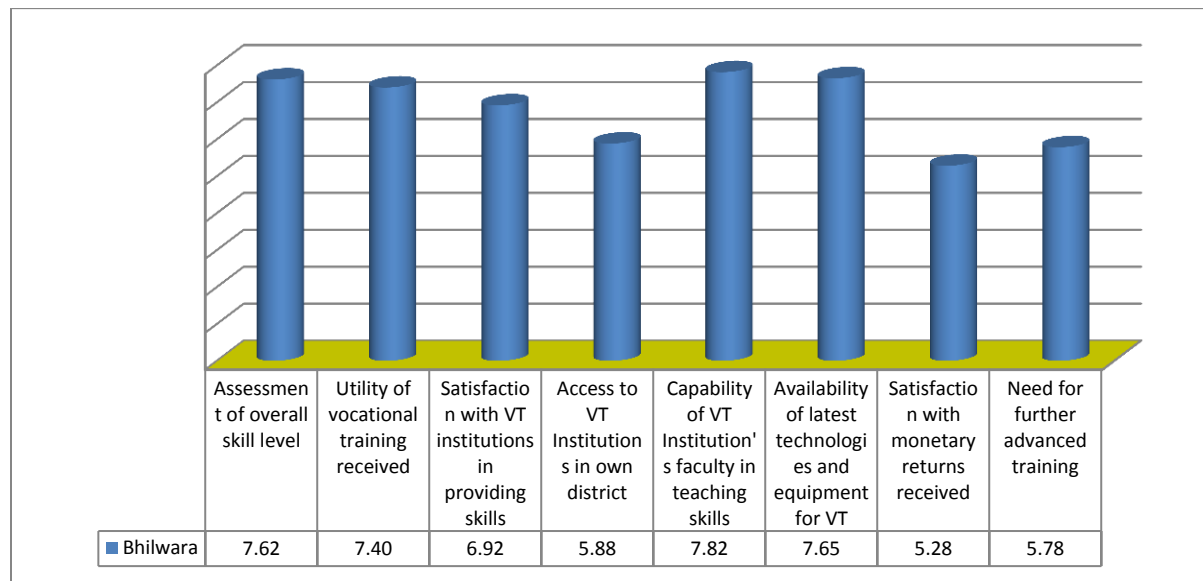


Table 201 Bhilwara Youth's perception, need and aspirations –Sample Group

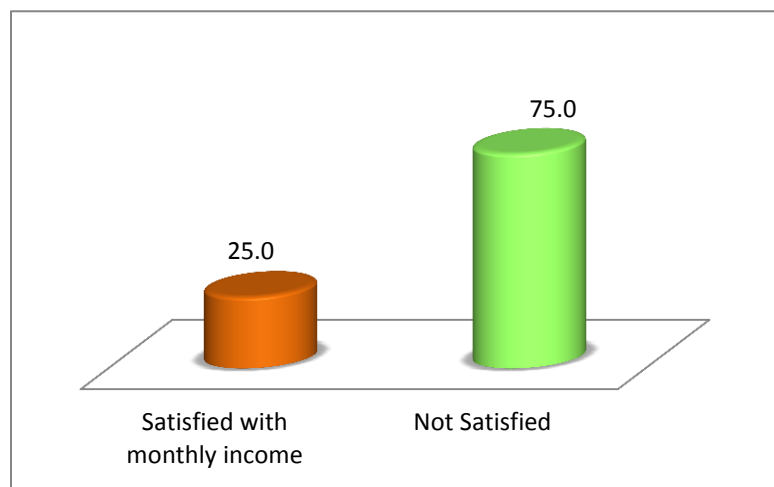


Figure 274 . Satisfaction among youths with initial salary post training-sample group, Bhilwara

Satisfaction with current monetary returns, need for advanced training and access to the training institutes emerged as the three deterring factors identified by the respondents that needed attention and had to be addressed by the government and industry. Better skilling initiatives of the district do relate with the capabilities of the faculty and the utility of the

vocational training as an important success factor.

There were pronounced needs for further advanced training provided for up-skilling and basic skilling in computer applications. Expected monthly salaries required a change of at least Rs. 3000/month approximately as skilled workforce among 60% of the sampled youth. 60% of the respondents did not receive any increment. The pay scale after skilling and few months of work experience enables for better financial negotiations among the youth. Youth expected to join a job, either government or private. Power grids and factories, railways, fertilizers etc. were the preferred sectors. Need for communicative English was realized for interviews and formal documentation only, especially to cater for private industries.

5.20.8 Optimization Plan

The optimization plan would be structured at three tier level of district, state and NSDC. The preliminary gap finding, projection and analysis would be presented at every district level which would in turn determine the action plan of the state as represented in the below diagram. The overall scenario of the state would finally give major leads to apex bodies like NSDC for formulation of state specific portfolios to suit the requirements and address the future needs of the state in the skilled workforce.

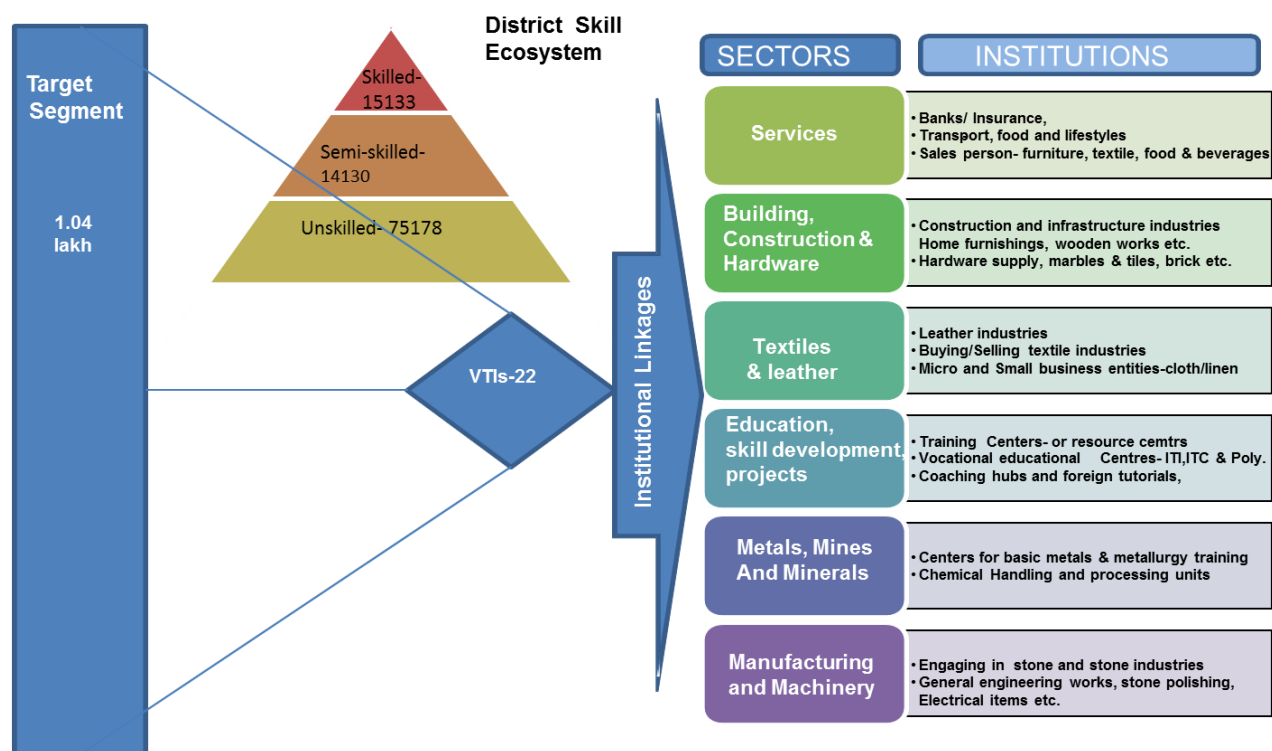


Figure 275 Optimization plan- Bhilwara Skill Eco-system

The high priority sector which shall need maximum number of semi-skilled workforce and less of skilled shall be the resource based industries of the district. This shall include the textile based and related industries, leather processing, and education sector (allied with the unorganized sectors along) etc. The demand based industries shall engage more of skilled resources in data processing, transport and logistics, cement, repair industries etc. The semi-skilled workforce shall be the backbone of the district by getting engaged in large number of SSIs and service sectors of the district and eventually catering for the growing coaching hub of the nation as various work groups.

5.22 District Chittorgarh

CHITTAURGARH DISTRICT



District Skill Workforce Face Sheet-2012								
District	Chittorgarh			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	21	No. of Villages	1730	No. of Schools (elementary & sec.)	2606			
Basic Data								
Population (in '000s)	1544	Overall Literacy(in %)	62.51	Sex Ratio	970			
Decadal growth rate(in %)	16.09	Female Literacy(in %)	46.98	HDI Ranking (2008)	0.559 (27 th position)			
% Urban Population	16.04	Male Literacy(in %)	77.74	Per Capita Income (in Rs.)	16861			
Workers participation rate (2001)								
Workers participation rate (2001)	51.58	Share of primary sector (%)	77.20	Share of secondary & tertiary sector (%)	22.70			
No. of MSME/Industries	2614	Total Employment (in 000s)	14658	Total Investment (in lakhs)	9112.31			
No. of colleges (PG & Graduation)	21	Total graduates (In '00s)	5113	Total Post graduates (in '00s)	791			
No. of VTIs(registered ITI+Poly+ITC)			6	Total trainees trained (in '00s)	623			
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	5004	4743	4370	4213	4249	3927	3797	0.52 Lakh
Semi-skilled workforce	47169	36057	23819	18095	15573	11418	9256	

5.22.1 Demographic Profile:

Chittorgarh district lies on southeastern part of Rajasthan. It extends from 24°13' to 25°88' latitude and from 74°04' to 75°53' east longitude. It is surrounded by Kota in east and Pratapgarh district in southwest, Udaipur in west and Bhilwara and Bundi in North. The total geographical area of the district is 750761 hectares, which stand at 3.03 percent of the total area of the state (11th in ranking),

The Aravalli ranges spread all over the district. The plains are very fertile. The western part of the district forms part of the Mewar plain irregular, dissected and drained by the river Berach and its tributaries, Gambhiri and Wagon, the ferra in slopes generally towards the east and north east. The district of Chittorgarh is good in forest resources as the total area under forest including hills is reported to be 2407 square kilometers which is 22.17% of total geographical area of the district. The forest coverage is above the state average of above 9% under forest.

It has a total population of 15.44 lakh which was 2.25% of the state population (21st ranked in the state). The decreasing trend of decadal

rate in the population shows signs of population stability. (less by ~4% from '91-01 census). It was placed low on HDI at 27th rank (HDI, 2008 updated). It stands 25th in education index, 29th in health and

S.no	Section	Unit	Quantity / Value
1	LOCATION		
	Latitude	degree	24°88' N
	Longitude	degree	74°53' E
2	AREA		
	Total geographical area	Square km	10856
3	ADMINISTRATION		
	Tehsil	number	10
	Villages	number	1730
4	Land Use Pattern		
	Total Area	Hectares	750761
	Total Irrigated area	Hectares	200365
5	Population (census 2011)		
	Total population	number	1544392
	Men	number	784054
	Women	number	760338
	SC (2001)	number	250762
	ST (2001)	number	388311
6	Literacy (except 0-6 age group)		
	Total literate	percent	62.51
	Men	percent	77.74
	Women	percent	46.98
8	Energy		
	Electrified Villages	number	1659
9	Industries (DIC, 2009)		
	Registered MSME units	number	2614
	Employed persons	number	14658
10	Education		
	Pre Primary & Primary Schools	number	1302
	Upper Primary	number	967
	Secondary & Sr. Secondary	number	337
11	Higher Education / Others		
	Colleges	number	21
	I T I	number	05
	Polytechnic	number	01

Table 202 District profile –a Snapshot (Chittorgarh)

27th on the income index of the Human Development Index. Comparatively, it ranks better in the gender development index with rank 14th (0.497). It was observed that the district fares quiet low on education, health and income index which pulls the district on overall HDI ranking to the lower side of the state. As per provisional census 2011 data, the sex ratio of the district remains at 970 (compared to 2001 census figure of 966) which still were on the higher side of the state ratio of 926.

The worker participation rate was comparatively high on 51.58% (HDI, Rajasthan, 2008) with primary sector engaging close to 77.20% of the workforce and rest 22.7% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 13% (Urban- 32.7% & Rural- 55.19%). The literacy rate of the district in 2011 is 62.51% which is lower than the state figure of 67.06%. According to Census 2011 provisional data, the male literacy figure stands at 77.74% and female literacy was at a low of 46.98%, which is on the lower side of the female state literacy rate of 52.66%.

5.22.2 Education Infrastructure and Utilization

Chittorgarh’s status in literacy has seen marked changes in the number of colleges which has grown and the literacy has grown significantly over a period of ten years (close to 10%). The primary and secondary education report still shows a dismal performance in retention rate, enrolment of girl children, and drop out ratio.

Chittorgarh faces real time constraints in terms of basic schooling infrastructure, teachers and quality education (rated as one of the districts with high dropout rates).

Chittorgarh has also been among the districts with high one room schools and with more than 30% of schools with single teacher (HDI, 2008). According to Census 2011 provisional Chittorgarh has a total of

Education	Chittorgarh	Rajasthan
Pre Primary & Primary	1302	49546
Upper Primary	967	38889
Sec/ Sr Sec	337	19135

Table 203 Chittorgarh vs. Rajasthan primary education scenario

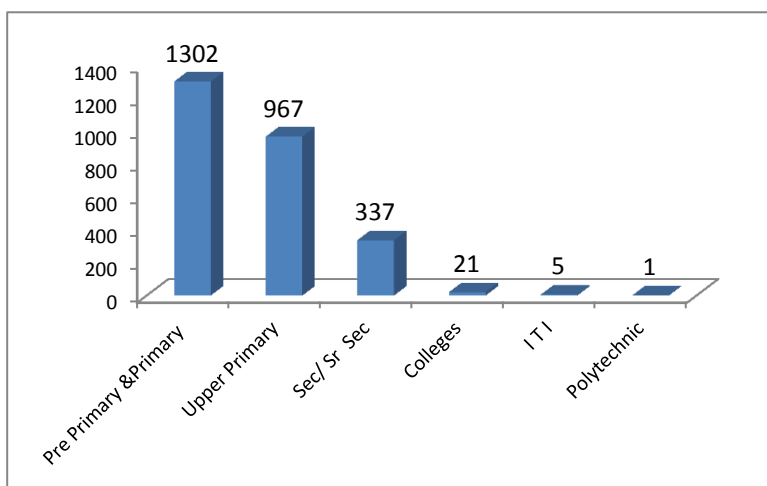


Figure 276 Number of Schools, Colleges, ITI & Polytechnic, 2009-10- Chittorgarh

2606 schools from pre-primary to senior secondary levels with DISE reports stating that close to 47% as the retention rate.

A total of over 8200 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There were just a total of five registered vocational training institutes in Chittorgarh district (02 ITI) and one polytechnic. A total of just above 750 aspirants got enrolled in 2009-

10 in the registered training institutes. As per the updated report available on Rajasthan Mission on

Skill and Livelihoods (RSLDC) a total of 03 partners (includes 01 KVK and 01 NGO) was involved in implementing skilling initiatives with 16 approved programs (14 completed). A detailed view of the vocational training of Chittorgarh could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.22.3 VTI's demand across various trades in Chittorgarh district

The existing scenario of VTIs in Chittorgarh was certainly on the lower side considering the number of youths passing out and the existing vocational training institutes in the district. Private organizations working in this sphere have a vast scope for initiating skilled interventions of the district and catering the needs for skilling youths of the district. The primary survey conducted in the district to understand the present scenario of skilled intervention of the district. The government VTIs interviewed in the survey was one and nine were from the private. The courses which were offered by the government VTIs were predominantly engineering based or to cater the local market needs. In private VTIs the courses taken up were a mix of technology and new courses like fashion and interior etc. which were women oriented. The details of the courses offered in the VTIs of Chittorgarh are represented as follows:

Government VTI Trades	Pvt. VTI Trades
Electrical	COPA
Fitter	Cutting & Sewing
Welder	Electrical
Electrical	Fitter
Fitter	Mechanic (Diesel)
Welder	Fashion Technology
	Interior

Table 204 Table 3 Courses offered in government and private VTIs (sample)

It appears that Electrical is the most popular trade in government as well as private VTIs in Chittorgarh as this trades had the maximum trainee strength. In the government VTIs, the number of actual trainees compared to the number of approved number of trainees was more or less same across all most all the

trades. On the other hand, gap between the actual and approved strengths of trainees is significant for COPA, Fitter and Fashion Technology trades in private VTIs.

The trends across all the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the government VTIs whereas private VTIs have increased the strength of trainees over the years. Data on the number of trainees for Cutting & Sewing and Fashion Technology trade in private VTIs was not available as there is no demand for these trades over the years.

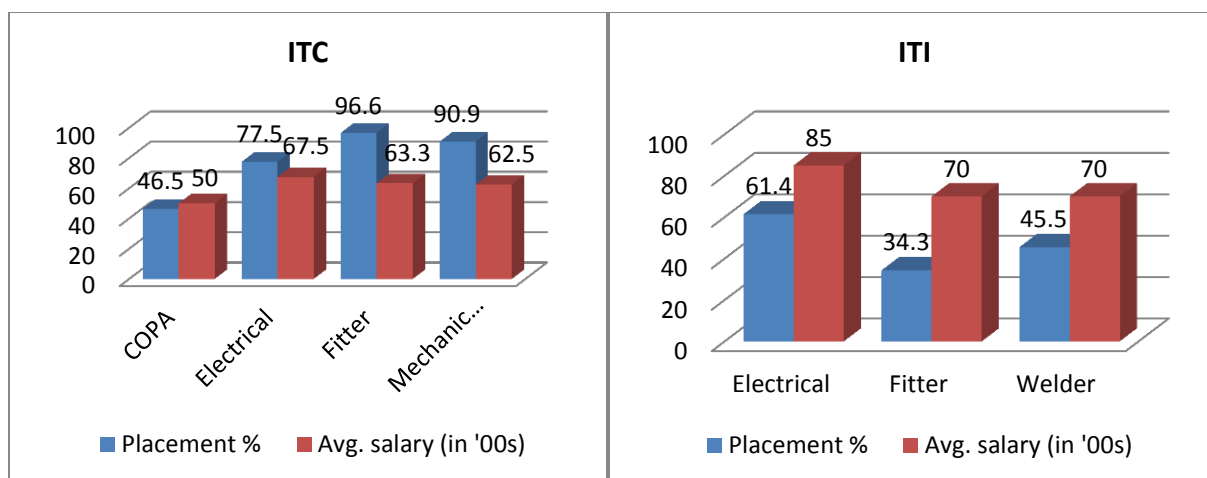


Figure 277 Chittorgarh district's (sample study) courses offered placements in VTIs and average (avg) salary offered

An overview of placement records by trade in the government and private VTIs indicate moderate prospects in all most all of the trades with the exception of Fitter and Diesel Mechanic trade where the prospects were very strong. It may be due to the fact that most of the Fitter and Diesel Mechanic trade trainees get employment in local level institutions. Average salary/trainee indicates towards good prospect in Electrical trade as government VTIs have reported that their trainees have got placement of Rs. 8,500/Month as the highest from their institute. In case of private VTIs the highest paid placement was also from Electrical trade. While placements of trainees from the VTIs was more through campus interviews, the private VTIs depended more through a proactive approach to the industry by the VTIs and the trainees themselves on for placement. Though some of the trainee from private VTI got their placement through employment exchange but it seems that employment exchanges were not playing any role in placements. In terms of infrastructure support commutation support was made available all the VTIs surveyed. None of them had hostel facilities. Staffing was an issue in the administrative aspects but was up to the mark from academics and support point for all the VTIs.

5.22.4 Industry Mapping

The western part of the district exposes the oldest rocks comprising states, phyllites, mica schists which intercalated bands of dolomites, quartzite and igmatites belonging aravalli deposits back to over 2500 million years. These rocks have been intruded by the berach granite. These were later eroded and leveled before the sedimentation of vindhyan rocks commenced about 1400 million years ago under shallow water condition proceeds by volcanic activity. The vindhyan rocks of this area forms part of the great vindhyan basin extending from Rohbas in Bihar to Chittorgarh. The district is endorsed with mineral resources. The minerals included barytes, china clay, limestone, sand stone, ochre's.

There is a vast scope of fabrication and engineering items, process equipments, power plant, components, etc due to presence of RAPP and heavy Water plant at Rawatbhata and Hindustan Zinc Limited at Chanderiya, District Chittorgarh. The district Chittorgarh is the largest producer of cement in Rajasthan and known for high grade lime stone belt and huge reserve of china clay in India. The existence of MSME marble gang saw units are other advantage to the district for putting more units as ancillaries to these industries. Gopalpura, Manpura, Nimbahera has lot of lime stone reserve which

provides opportunities to the entrepreneurs for establishment of crusher , cement & lime stone units. The big development of smelter based ancillary industry in the district.

Thermal Power Plant is showing 15%- 20% annual growth due to their strategic location. In the Hindustan Zinc Limited Group was still using the old technology which was having cost competitiveness due to its professional managements and buyers requirements. Some companies were facing negative growth due to its obsolete technology and no demand of the products in the market.

Some of the potential areas for service industry:-

1. Printing work by offset printing
2. Screen Printing
3. Computer DTP Work
4. Automobile workshop

The district has 07 clusters which were as follows:

S.No.	Name of Cluster	Location
1	Printing	Akola
2.	Wooden art	Bassi
3.	Leather Juti	Gangrar
4.	Marble	Chittorgarh/ Aajolia ka Khera
5.	Stone	Manpura/Nimbahera
6.	Bans tokari	Barisadri

Table 205 Clusters in Chittorgarh

MSME in Chittorgarh

According to D.I.C data (March, 2012), there were around **9232 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.22016.88 lakhs** providing employment to **33868 persons**. Also it has twelve large scale industries in cement, energy and mines employing close to 5653 persons with a fixed investment of Rs. 5567 crore.

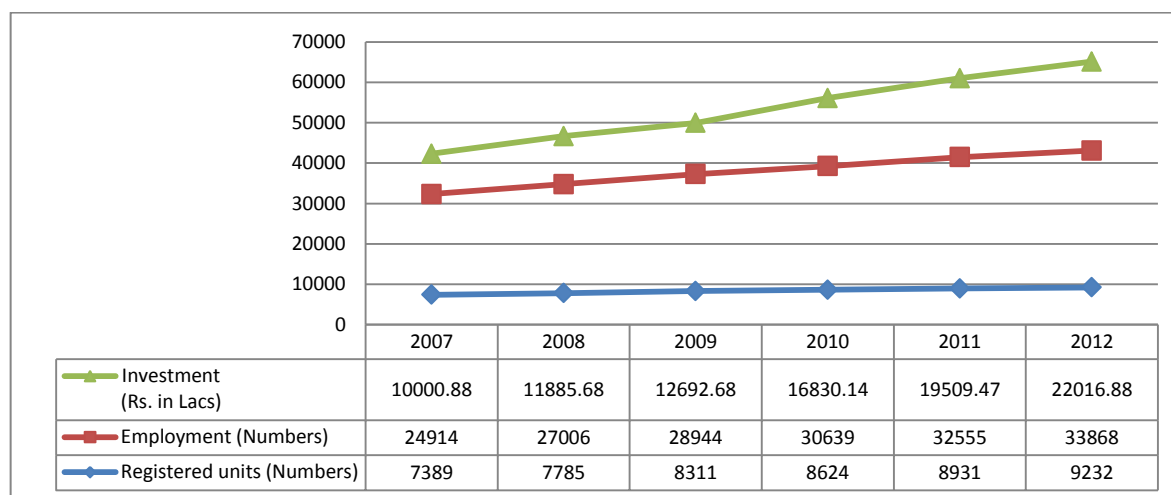


Figure 278 MSME trend analysis of the district Chittorgarh

There has been a constant increasing trend in the investment of industries and units; thus, the number of employment as well. The main existing industries are food and agri based, cement and energy based with large existence of services and repair.

There are presently twelve large medium scale industries in the district. There is a vast scope of fabrication and engineering items, process equipment, power plant, components, etc. due to presence of RAPP and heavy water plant at Rawatbhata and Hindustan Zinc Limited at Chanderiya, District Chittorgarh. The district Chittorgarh is the largest producer of cement in Rajasthan and known for high grade lime stone belt and huge reserve of china clay in India. The existence of MSME marble gang saw units are other advantage to the district for putting more units as ancillaries to these industries. Gopalpura, Manpura, Nimbahera has lot of lime stone reserve which provides opportunities to the entrepreneurs for establishment of crusher , cement & lime stone units. The big development of smelter based ancillary industry in the district.

5.22.5 Sector wise mapping of industries

District wise the existing sectors were mapped against the high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Chittorgarh. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections** like **high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Employment	Investment (Rs lakhs)
Agriculture & Allied	232	1054	334.60
Auto & Auto Components			
Chemical & chemical products	88	511	464.12
Construction Material & Building Hardware (Cement)	698	6360	6762.80
Food Processing	461	918	252.71
Furniture & Furnishing	178	676	151.96
Leather & leather goods	84	388	156.92
Textile & Handloom	139	365	94.56
Repair & Servicing			
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade	29	137	8.12
Mines, Metals & Minerals	408	1305	459.26
Machinery, Electricals & Manufacturing	454	2741	691.48
High	Units>400, investment>200,emp>1000		
Medium	Units>100, investment>100, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 206 Sector wise mapping of industries in Chittorgarh as per DIC report, 2009

The most important sectors contributing to the economy of the district and providing employment opportunities were food processing, edible oil, leather, wooden and furniture, cement, engineering based manufacturing sector and energy. The future scopes of industries were in the emerging sectors like the computer applications, trade and hospitality, auto workshops, construction etc.

Sectors covered under sample survey
Construction material & building hardware
Machinery,electricals & manufacturing
Mines, metals & minerals
Stone querying, cutting & polishing

Table 207 Breakup of industries in Chittorgarh (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries were selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in Chittorgarh district of Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table above. The 10 industries were sampled for the survey to represent 04 major sectors that are prominent in the district as shown in the table above.

5.22.6 Workforce Demand and Supply

Of the salient features of the workforce in the district were as follows:-

- k) The overall participation of population in economic activities was better at 51.58 % (dependency ratio of more than 1:1); with rate of female participation at a high of 46.23%. There was steep decline in the main workers and increase in marginal workers showing the changing workforce engagement in the district.
- l) Rural employment could be majorly seen engaged in agricultural related jobs (77.20% engaged in primary sector), animal husbandry and dairy followed by service sector engaging in repairs and electrical services.
- m) The workforce categorized under skilled, semi-skilled and unskilled showed the following trend in the sampled industries (as shown in the figure)

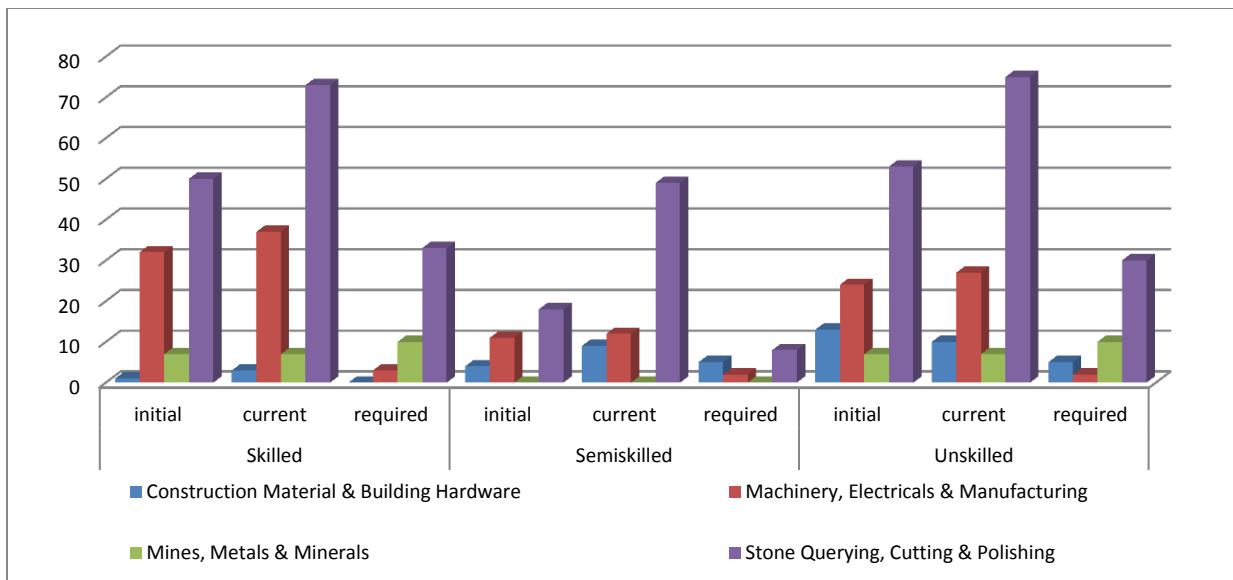


Figure 279 Workforce engagement under various stages and required strength of workers across sectors surveyed (Chittorgarh Sample)

- n) Data on skilled workforce indicated a little increase in the workforce at present since establishment of industries across all the sectors. Stone Querying, Cutting & Polishing sector is an exception of this as in this sector the increase in workforce is substantial. Demand for skilled worker in future was also not very high there except Stone Querying, Cutting & Polishing sector industries.
- o) As reported by industries for semiskilled workforce, Construction Material & Building Hardware and Machinery, Electricals & Manufacturing sector saw slight increase workers strength over the years whereas Stone Querying, Cutting & Polishing sector industries had almost tripled the workers strength.
- p) Unskilled workers demand and current engagement was on the higher side for the stone quarrying and machines related industries. The low cost module of operation was still the preferred mode of operations

In terms of industries' requirements and the expectation of the employers from its workers the primary survey provides the major demand to be loyalty. Stone quarrying, cutting and polishing emerged as the most demanding sector in terms of the set parameters (ranked on a scale of 5) with close resemblance to the requirements of the construction industries and cement related industries.

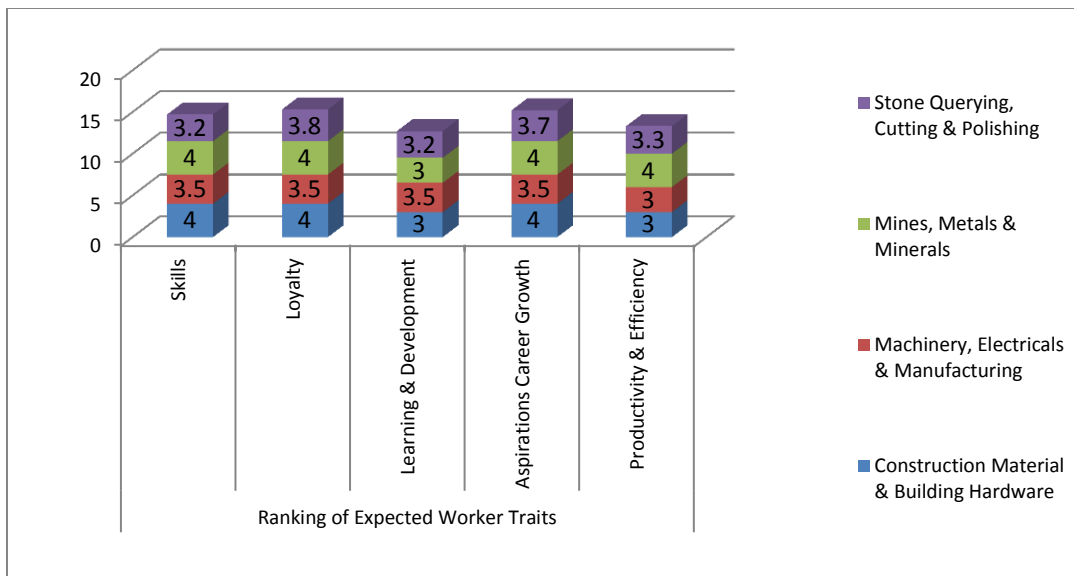


Figure 280 Employers demands in terms of expectations from workers (Chittorgarh)

Recruitment of required workers was done from known sources such as own workers which appeared to be the most reliable method of recruitment for most of the industries. The contractors were engaged for daily wage workers and no such interaction was evident with the VTIs to get the semi-skilled trained workers.

5.22.7 Projected Workforce Demand

It has been observed in the primary survey that the percentage of skilled workers have been almost static over the years and the semi-skilled has almost doubled but still far less than the unskilled workers. In contemporary scenario the engagement of unskilled labor (38% of the total workforce) was high with similar was for skilled (38%) and was very low in semi-skilled workforce (22.6%). In general, the emerging occupations and new establishments demand for workers could be the new areas of interest for the workers in the near future and engage more of semi-skilled workers.

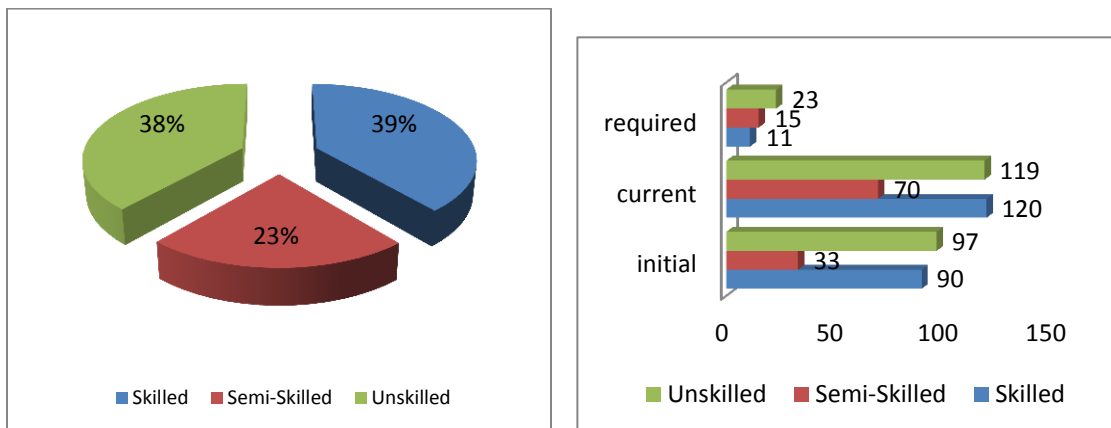


Figure 281 Expected year wise requirement of workforce and current break up of workforce across industries surveyed (Sample)- Chittorgarh

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	569319	490834	415284	391442	383608	313055	286268	
Semiskilled	46412	40014	33855	31911	31272	25521	23337	
Skilled	3094	2668	2257	2127	2085	1701	1556	
Total demand	618825	533515	451395	425481	416965	340277	311161	71%
Industry Sector								
Unskilled	30981	29162	25415	23718	23719	20925	19546	
Semiskilled	14299	13459	11730	10947	10947	9658	9021	
Skilled	2383	2243	1955	1824	1825	1610	1504	
Total demand	47663	44864	39100	36490	36490	32193	30071	7%
Services Sector								
Unskilled	16623	16148	15415	15191	15463	14841	14696	
Semiskilled	38788	37679	35968	35446	36079	34630	34291	
Skilled	55412	53828	51383	50637	51542	49471	48988	
Total demand	110823	107656	102766	101274	103084	98942	97975	22%
All Sectors								
Unskilled	616923	536144	456114	430352	422789	348822	320511	
Semiskilled	99499	91152	81553	78304	78299	69809	66650	
Skilled	60889	58739	55595	54589	55451	52782	52047	
Total Demand	777311	686035	593262	563245	556539	471413	439207	100%

Table 208 Projected percentage of workforce (demand) requirement till 2017 across primary, secondary and tertiary sectors- Chittorgarh

There exists not much difference in the projections of the workforce from the current scenario. Scope of secondary and tertiary to engage workers would be around 29% with some minor changes accounting for increase in services sector growth.

Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Agriculture and allied			
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			

Building & Construction			
Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 209 Workforce across various sectors by 2017- Chittorgarh

5.22.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	57803	52724	48685	45103	44022	41279	39899
Semiskilled	47169	36057	23819	18095	15573	11418	9256
Skilled	5004	4743	4370	4213	4249	3927	3797

Table 210 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.52 lakh (employable working population). Keeping in mind the high rate of workforce participation from unskilled masses and the existing demand of skilled workforce to be on high; the significance would be to target training to atleast 20,000 youths in unskilled to be trained as semi-skilled by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation was conducive enough to support industrial growth in Chittorgarh. All the resources were easily available in the district.
- Demand across large sector for skilled worker was good but small and medium sectors pooled semi-skilled and unskilled workers only for the major sections of the work
- Scope for self-employment and entrepreneurship in the district was good. Loan on subsidiary provided by the bank in this regards encouraged the trained youths
- Marbles industries were predominant in the district .Cement industries were the emerging industries in the district which could be sustainable enough to absorb new manpower. Service sectors would come up to engage more semi-skilled resources
- Compared to the informal sector, formal sector ventures were bound by some limitations in employing persons as they require trained people only

5.22.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Chittorgarh district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth to provide deep insight and understanding on their aspirations and perceptions; of self and people associated/related with them.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 40% of the youth covered were college educated and 60% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government. The average age of the respondents was high at 26 years which showcased the higher number of years for getting a vocational training in the district.

Table 211 Youth Profile of sample in Chittorgarh

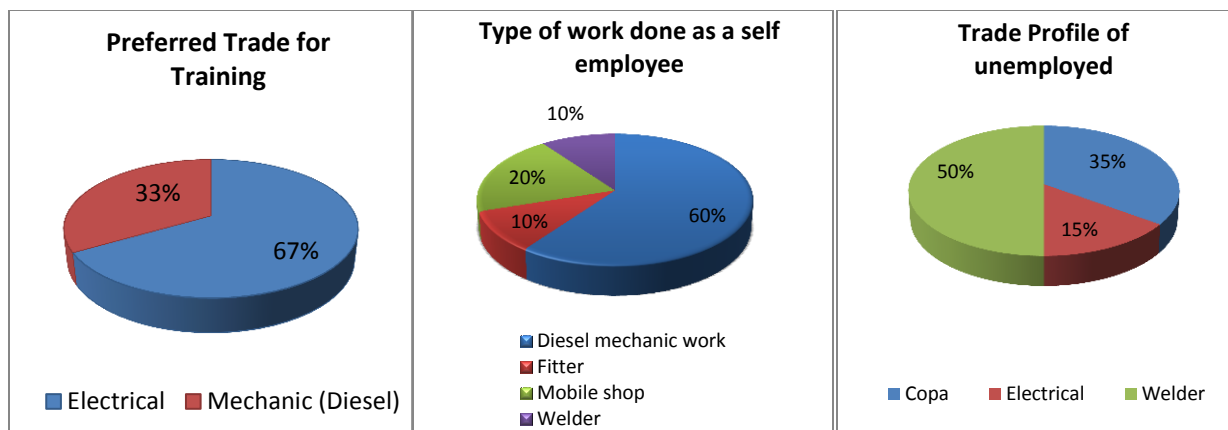


Figure 282 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Chittorgarh

Inclination towards electrical course was found high (67% of the youth reported their preference) followed by mechanic (33%). The reason for the same seems to be the demand for this course in the market especially related to stone and cement industries. As self-employment, diesel mechanic was the trade found with high percentage of 60% followed by mobile repair of 20%. High percentage of trained welders remained unemployed followed by COPA. Supply of the trainees in this trade in the market has increased and may be inferred to be the reason associated with the unemployment of this trade's trainees.

5.22.10 Youth's Perception

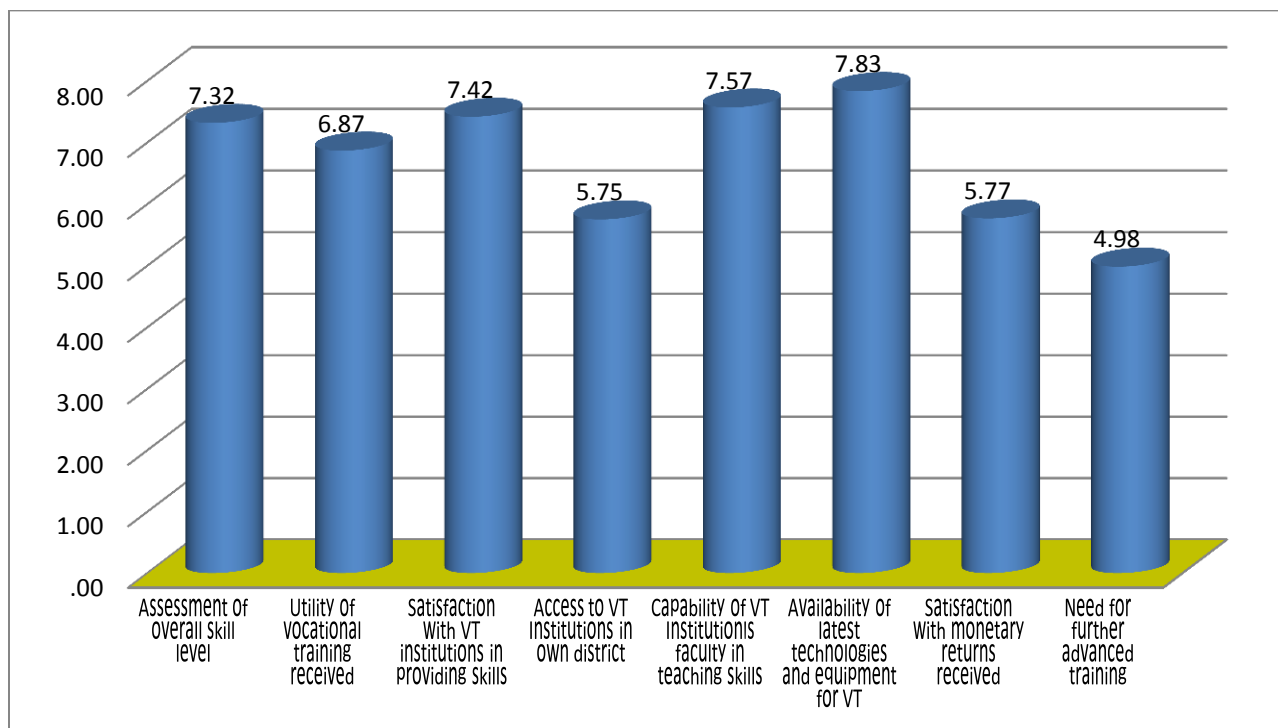


Figure 283 Chittorgarh Youth's perception, need and aspirations –Sample Group

Need of further advanced training was one of the emerging demands in the youth apart from dissatisfaction with the entry level salaries post training and access to VTIs for training were the growing concerns among the interviewed group of youths. As identified by the respondents, the availability of latest equipment for training, training delivery and faculty strength of the VTIs were the factors most satisfying for the youth. The reason which could be inferred from the analysis of these ranking is that though the youth require more access to VTIs with better post training placement and salaries; they were still unaware of the courses available for better training in their counterpart districts and the capital city. A minimum wage hike of Rs 2,000 was expected among youths across various trades with current average post training in the formal sector being close to Rs 11,000 (monthly basis).

The general aspirations were mapped by conducting FGDs with the youths from various categories and the following responses were evidently represented by the group:

- a) Better salaries, work satisfaction, family security and learning new technologies (respective trades) were the desires and expectations of the youth from the employment
- b) Families expected from them to get engaged in government jobs or well-paid jobs in big firms
- c) Less opportunities of on job training being provided and the less number of ITI make the overall skilling scenario very specific to the training manuals without much choice
- d) Communicative English and computer training were generally undertaken by local training centres for better job opportunities
- e) ITI training was more to get government jobs and 4 out of 10 felt that self-employment had least scope in terms of secured future and sustainable growth. Interestingly, the youths in Chittorgarh were more risk taking and open for enterprises given the conducive environment for staging the initial work

5.22.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.52 lakh of skilled, unskilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at district and block level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

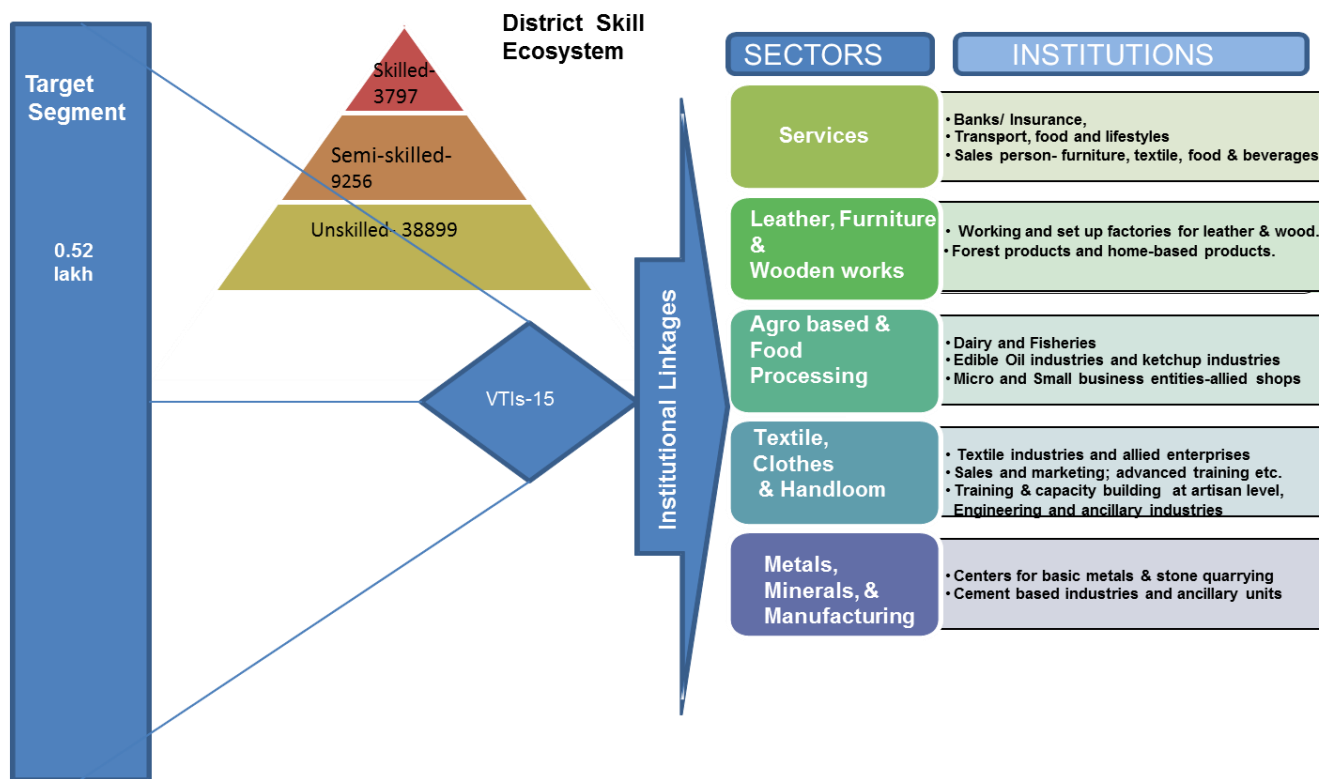


Figure 284 Optimization plan- Skill Development Eco System- Chittorgarh

The district would require more dedicated approach to advocate the usefulness of unskilled workers in the industries and also need to target the service sector employment (emerging sectors). VTIs should be vital in getting the work ready repairers and mechanics. The interface between the VTIs and the industrial bodies would be essential for the mutual benefit. The effective catchment area would be the training seeking youths in the district and the unskilled manpower existing in the district. Dedicated training courses in the fields related to construction, food processing, services and stone quarrying shall be beneficial for the district.

5.23 District Jaisalmer

JAISALMER DISTRICT



District Skill Workforce Face Sheet-2012								
District	Jaisalmer			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	6	No. of Villages	799	No. of Schools (elementary & sec.)	1582			
Basic Data								
Population (in '000s)	672	Overall Literacy(in %)	58.04	Sex Ratio	849			
Decadal growth rate(in %)	32.22	Female Literacy(in %)	40.23	HDI Ranking (2008)	0.673 (11 th position)			
% Urban Population	15.03	Male Literacy(in %)	73.09	Per Capita Income (in Rs.)	15386			
Workers participation rate (2001)								
Workers participation rate (2001)	41.65	Share of primary sector (%)	55.20	Share of secondary & tertiary sector (%)	44.90			
No. of MSME/Industries	3480	Total Employment (in 000s)	10094	Total Investment (in lakhs)	19620.16			
No. of colleges (PG & Graduation)	4	Total graduates (In '00s)	1481	Total Post graduates (in '00s)	202			
No.of VTIs(registered ITI+Poly+ITC)			2	Total trainees trained (in '00s)	217			
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	1998	2033	2110	2162	2171	2226	2266	0.50 Lakh
Semi-skilled workforce	31889	30183	31956	32353	31505	31862	32331	

5.22.4 Demographic Profile:

District Jaisalmer is located within a rectangle lying between 26°.4' –28°.23' North parallel and 69°.20'-72°.42' east meridians. It is the largest district of Rajasthan and one of the largest in the country. The breadth (East-West) of the district is 270 km and the length (North-South) is 186 km. On the present map, district Jaisalmer is bounded on the north by Bikaner, on the west & south-west by the Pakistani border, on the south by Barmer and Jodhpur, and on the east by Jodhpur and Bikaner Districts. The length of international border attached to District Jaisalmer is 471 km.

Jaisalmer District, a part of the Great Indian Thar Desert, is sandy, dry and scorched. The terrain around, within a radius of about 60 kms is stony and rocky. The area is barren, undulating and the soil here is grateful even to a little rain and turns lush green during monsoon. There is no perennial river in the district. The underground water level is very low. Geographically this district is spread over in 38,401 sq. kms which is one of the largest district and almost equal to the state of Kerala. No other part of Rajasthan is as lifeless and forbidding in appearance.

S.no	Section	Unit	Quantity
			Value
1	LOCATION		
	Latitude	degree	28°23' N
	Longitude	degree	72°42' E
2	AREA		
	Total geographical area	square	38401
3	ADMINISTRATION		
	Tehsil	number	03
	Villages	number	799
4	Land Use Pattern		
	Total Area	Hectare	3839154
	Total Irrigated area	Hectare	209239
5	Population (census 2011, provisional)		
	Total population	number	672008
	Men	number	363346
	Women	number	308662
	SC (2001)	number	74094
	ST (2001)	number	27834
6	Literacy (except 0-6 age group)		
	Total literate	percent	58.04
	Men	percent	73.09
	Women	percent	40.23
8	Energy		
	Electrified Villages	number	562
9	Industries (DIC, 2009)		
	Registered MSME units	number	3480
	Employed persons	number	10094
10	Education		
	Pre Primary & Primary Schools	numbe	1017
	Upper Primary	numbe	467
	Secondary & Sr. Secondary	numbe	98
11	Higher Education / Others		
	Colleges	numbe	06
	I T I	numbe	03
	Polytechnic	numbe	00

Table 212 District profile –a Snapshot- Jaisalmer

It is the largest district (11.22%) of the state catering for just 0.98% of the total state population. The total population was 6.72 lakhs with sex ratio as 849 (one of the lowest in the state) and lowered decadal growth rate in population at 32.22%. The literacy rate of the district in 2011 was one among the lowest with just 58.04% which was far below than the state figure of 67.06%. According to Census 2011 provisional data, the male literacy figure stands at 73.09% and female literacy was at a 40.23%, which were on the lower side of the male and female state literacy rate. Jaisalmer ranked 11th in the HDI, 2008 with income and health ranking at decent 10th and 12th respectively; but majorly impacted by the education status of the district which stands at rank 24 in the state.

In a resource scarce economy, population and demography of the region are closely related to the aspects of human development. The main part of the population leads a wandering life, grazing their flocks and herds. Large herds of camels, horned cattle, sheep and goats are kept. The principal trade is in wool, ghee, camels, cattle and sheep. The chief imports are grain, sugar, foreign cloth, piece-goods. It suffered from famine in 1897, 1900 and other years, to such an extent that it has had to incur a heavy debt for extraordinary expenditure. This reflects on the worker participation rate (WPR) which was 41.6% (HDI, Rajasthan, 2008) with primary sector engaging close to 55.2% of the workforce and rest 44.9% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 16% (Urban- 31.2% & Rural- 43.4%). A significant proportion of the district was engaged in the secondary and tertiary highlighting the paradigm shift from primary over a decade as WPR in primary drastically reduced from close to 10% over a decade.

5.23.2 Education Infrastructure and Utilization

In order to spread education in Jaisalmer many primary schools, government owned colleges and private institutes have been set up. These institutes cater to each and every need of their students. Education is playing a major role in uplifting the standard of the Jaisalmer society. Educational institutes in Jaisalmer were growing in number. The government has taken some serious initiatives to improve education in Jaisalmer.

Education	Jaisalmer	Rajasthan
Pre Primary & Primary	1017	49546
Upper Primary	467	38889
Sec/ Sr Sec	98	19135

Table 213 Jaisalmer vs. Rajasthan primary education scenario

The colleges of Jaisalmer were grooming up the students according to the requirement of the industries. A wide plethora of professional courses are taught in these colleges. These institutes are known to provide a well-rounded education to the students. The college of Shri Sangidass Bal Krishnan is one of the most renowned colleges in the golden city of Jaisalmer. The schools in Jaisalmer which provide secondary and higher secondary education inculcate within the students good humanitarian qualities. Along with providing good education the schools shape up the entire personality of each and every individual. A lot of emphasis is given to co-curricular activities such as sports, social work, art and craft.

The literacy rate has increased by 8% over a decade but still is on the lower side. In Jaisalmer district, the total enrollment upto upper primary in 2008-09 was 7,078, out of which, 4,252 were boys and the rest 2,826 were girls. Overall the number of girls enrolled per 1000 boys was just 665. Primary schools

providing basic education were being largely set up in the villages of Jaisalmer with large distances to travel to access for children. Private schools out perform the government in attendance of teachers and students. The availability of rooms for classes separately was the lowest in this district and similarly in other infrastructure requirements. NGO workers are penetrating in the remote regions of Jaisalmer and are providing basic education to the indigenous groups.

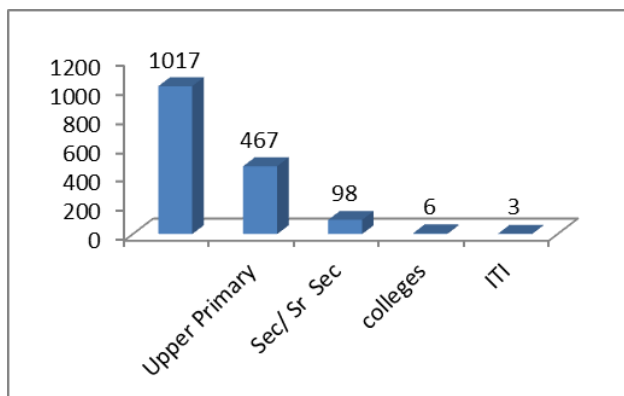


Figure 285 Number of Schools, Colleges, ITI & Polytechnic, Jaisalmer

A total of over 1200 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There were total of three registered vocational training institutes in Jaisalmer district. A total of just above 200 aspirants got enrolled in 2009-10 in the three government training institutes. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 02 partners (includes KVK and ITI) implementing skilling initiatives with 02 approved programs

(02 completed) which were for tailoring (ladies) course. A detailed view of the vocational training of Jaisalmer could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.23.3 VTI's demand across various trades in Jaisalmer district

The existing scenario of VTIs in Jaisalmer was certainly on the lower side considering the number of institutes or VTIs in other districts of the state. Private organizations working in this sphere were largely concentrated in school level educational services and thus have vast scope for initiating skilled interventions of the district and catering the needs for skilling youths of the district. The primary survey conducted in the district to understand the present scenario of skilled intervention of the district. The government VTI interviewed in the survey was one and same was the number from the private VTI coverage as well. The courses which were offered by the government VTIs were predominantly engineering based and to cater the local market needs. In private VTIs the courses were just two which were in electrical and COPA. The details of the courses offered in the VTIs of Jaisalmer are represented in the table below:-

Government VTI Trades		Pvt. VTI Trades
Electrical	Radio & T.V.	COPA
Fitter	Welder	Electrical
Mechanic (Diesel)	Wireman	
Motor Mechanic	Turner	

Table 214 Courses offered in government and private VTIs (sample), Jaisalmer

The government VTIs sampled for the study offer 8 different trades for training while the private VTIs offer only 2 trades as depicted in the table above. It seems that Electrical was the most preferred trade in Jaisalmer as this was the only common trade in the VTIs. It appears in the government VTI, the number of actual trainees compared to the number of approved number of trainees was more or less same across all most all the trades. On the other hand, the gap between the actual and approved strengths of trainees was significant for COPA trade in private VTIs.

ITI	Trades	% Placed	Avg Salary
	Electrical	70.8	5000
	Fitter	78.1	5000
	Mechanic (Diesel)	46.9	4200
	Motor Mechanic	33.3	4000
	Radio & T.V.	9.4	5500
	Welder	44.4	4500
ITC	COPA	90.9	5000
	Electrical	0	0

Table 215 Jaisalmer district's (sample study) courses offered placements in VTIs and average (avg) salary offered

An overview of placement records by trade in the government VTI indicated stronger prospects in all most all of the trades with the exception of Radio & T.V. trade. It may be due to the fact that most of the Radio & T.V. trade trainees seek to move towards tourism industry or for the capital city as positive migration. In private VTI there was around 91% placement in COPA trade and no placement in electrical.

The highest average salary/trainee/month was from Radio and TV trade as the trainee from this trade got placement Rs. 5,500/month from some of the government establishments. The overall placements of trainees from the VTIs were through proactive approach to the industry by the VTIs and the trainees themselves and through campus placement. It was observed that the employment exchanges were not playing any role in placements.

The trends across all the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the VTIs

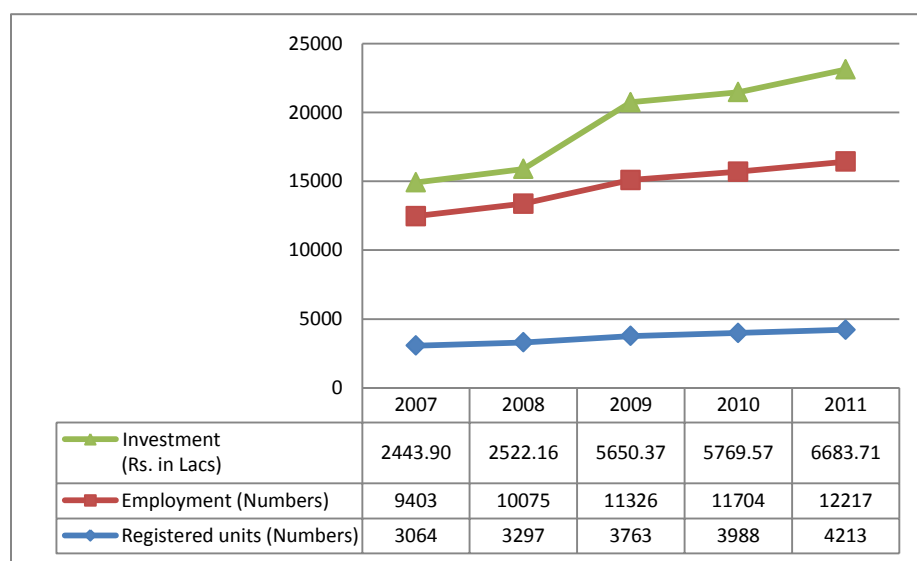
over the years. The government VTI had hostel facility for boys while this facility was not available in the private VTIs. Hostel facility for girls was absent in both VTIs. Transport facilities to trainees were present in government VTI but were missing in private VTI. Both the VTIs were well equipped with upgraded technologies. Staffing was not an issue in any of the VTIs.

5.23.4 Industry Mapping

Jaisalmer is an industrially backward district of the state. There are however, signs of change. The important minerals found in Jaisalmer district are fuller's earth, clay, gypsum, limestone, yellow and redocher and phosphorite, though fairly large deposits of fuller's earth is also available in the district, its exploitation seems to be of a limited scale near Manda, Nehdai and Ramgarh. It has four main existing

industrial bases from Stone Based Industries, Iron Fabrication, Embroidary patch work & mirror work and Pottery with four industrial areas in the district. The district has no large or medium scale industrial units. The only large scale economic activity taking place in the district is the mining of Steel Grade Lime Stone by the Rajasthan State Mines and Minerals Ltd., at Sanu. Major exportable items from Jaisalmer are Woolen Carpet, Woolen & Textile items, darry bed sheet, wall hanging, silver ornaments wooden & bras items. Cotton derry handicrafts & embroidery articles, sand stone article & Handicraft article etc. At growth rate was averaged to be about 1% per year. There was no large & medium scale industry in Jaisalmer district, so vendorisation / ancilliraisation was nil.

While Jaisalmer may always have been remote, it is filled with many artistic structures and monuments of local historical importance. Jaisalmer's medieval mud fortress and walled township make it a popular tourist destination. The surrounding desolate landscape evidences a stark, austere beauty. Camel safaris through the nearby desert dunes are popular with tourists; competition for business is fierce. A few quiet days spent wandering around the town and the surrounding desert can be a wonderful way of unwinding from the chaos of larger Indian cities. Thus, Tourism has been the major industry in Jaisalmer. The Government of India initiated departmental exploration for oil in 1955-56 in the Jaisalmer area. Oil India Limited discovered natural gas in 1988 in the Jaisalmer basin. Musicians and dancers are also a major cultural export from Jaisalmer to the rest of the world. Manganyar musicians have played the world over, and Queen Harish, the dancing desert drag queen, is touring the world and has featured in international movies. Jaisalmer is also known for its leather messenger bags, made from wild camels native to the area. Hotel industry and the transport system thrive due to tourism which does have seasonal effect on the income and thus, the migration could be accounted for. Further the service sector may be elaborated with food processing, beauty and herbal therapy, printing press, bakery and fashion designing for better market linkages of the local products of Jaisalmer. The handloom cluster and the artisan group was one of the known clusters of the nation at Pokaran. Since, last five years there has been no identification of any other cluster due to limited industrialization of the district.



MSME in Jaisalmer

According to D.I.C data (March, 2011), there were around **4213 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.6683.71 lakhs** providing employment to **12217 persons**.

Figure 286 MSME trend analysis of the district Jaisalmer

5.23.5 Sector wise mapping of industries

District wise the existing sectors were mapped against the high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Jaisalmer. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	134	6394.60	438
Auto & Auto Components			
Chemical & chemical products	9	34.01	69
Construction Material & Building Hardware			
Salt Based	40	14.51	248
Furniture & Furnishing	447	2186.88	1236
Leather & leather goods	498	177.34	1122
Textile & Handloom	492	664.34	1433
Repair & Servicing	1513	439.52	4203
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
Stone Based	314	8449.14	1201
Transport & Logistics			
Hospitality & Tourism	1946	5977.89	5422
Mines, Metals & Minerals (includes quarrying)	8	1421.52	56
High	Units>400, investment>200,emp>1000		
Medium	Units>50, investment>40, emp>250		
Low	Units> 10, investment> 30, emp>20		
Emerging	Investment & demand based sectors of district-DIC		

Table 216 Sector wise mapping of industries in Jaisalmer as per DIC report, 2007

Sectors covered under sample survey
Food Processing
Construction Material & Building Hardware
Tourism & Hospitality
Textile & Handloom

Table 217 Breakup of industries in Jaisalmer (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 11 industries were selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in Jaisalmer district of Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table above. The 11 industries were sampled for the survey to

represent 4 major sectors that are prominent in the district as shown in the table above along with representation of unorganized sectors. Handicrafts and leather formed the major thrust of the district in terms of employment in the household workers.

5.23.6 Workforce Demand and Supply

During 1955-56, the Indian Government started divisional geographic expedition for petroleum in the Jaisalmer district. A voluminous source of Natural Gas was found by Oil India Limited in the Jaisalmer plateau in 1988. The culture of the city largely contributes to the tourism industry of it. The city is home to some of the popular singers and dancers who visited various countries in the world. Singers from Manganyar have charmed the world. Queen Harish, one of the famous performers of the state, was on a world trip in 2010 and has performed in many foreign movies. The city is famous for its leather industry. The messenger bags made of wild camel leather are quite popular. These camels are indigenous creatures of the territory. Jaisalmer business and economy relies on the industries and businesses of the district to a significant degree. Currently, the major industries in Jaisalmer district are as follows:

- Stone-cutting and sculpturing
- Travel and tourism
- Mineral-oriented industry
- Khadi industry

In rural Sector, Khadi products and woolen products of the district are quite famous throughout India. Since breeding of farm animals and cattle is a major source of income in the district, woolen products are available in abundance. Khadi industry in the district of Jaisalmer has turned into the most significant rural manufacturing sector. Approximately 200,000 sq m of Khadi products are manufactured in the district annually. The Indira Gandhi Nahar Project zone offers unlimited opportunities for pulse mills, oil mills, and other agriculture-oriented industries. Hamira and Baramsar have of late been separated. Gandhi Colony and the Ricco Industrial Estate are economically advanced areas in the district. In Pokhran, there is an earmarked area for industries known as the Ashapura Industrial Estate. The district is home to three briny lakes and they are as follows: Gudi Rin, Pokaran Rin, Kanod Rin. As a result of this, the salt manufacturing industry has thrived significantly in the district.

There are plenty of opportunities for mining-oriented sectors in the Jaisalmer district. It is expected that big cement manufacturing factories and mining-oriented sectors would flourish in the area quite promptly. The district is substantially rich in mineral deposits and a range of valuable minerals is available in the area, which includes Gypsum, Marble, Sandstone, Yellow marble, Dolomite, Granite, Siliceous rock, Rock phosphate, Bentonite, , Jasper, Masonry stone. The limestone region is the most significant region of this district and it is full of high quality limestone at the upper layer and cement grade limestone at the bottom portion. Currently, Rajasthan State Mineral Development Corporation (RSMDC) and Rajasthan State Mines and Minerals Limited (RSMM) are making use of limestone's at Sanu, which is closely located to Ramgarh.

Various government departments and agencies are operating in the district and some of the major departments are as follows:

- Mining Division, supervised by the Assistant Mining Engineer.
- Geology Division, supervised by geological scientists of GSI.
- Rajasthan State Mineral Development Corporation Ltd. - It is a Government of Rajasthan Undertaking.
- Rajasthan State Mines & Minerals Ltd., Sanu - It is a Government of Rajasthan Enterprise.

The Mining Division of GSI under the Ministry of Mines, Govt. of India carries out the organizational and authoritative responsibilities.

The primary data during the survey focused on the diversified sectors of the district capturing the workforce structure in terms of skilled, semi-skilled and unskilled workers at various stages of the industries as shown in the below figure.

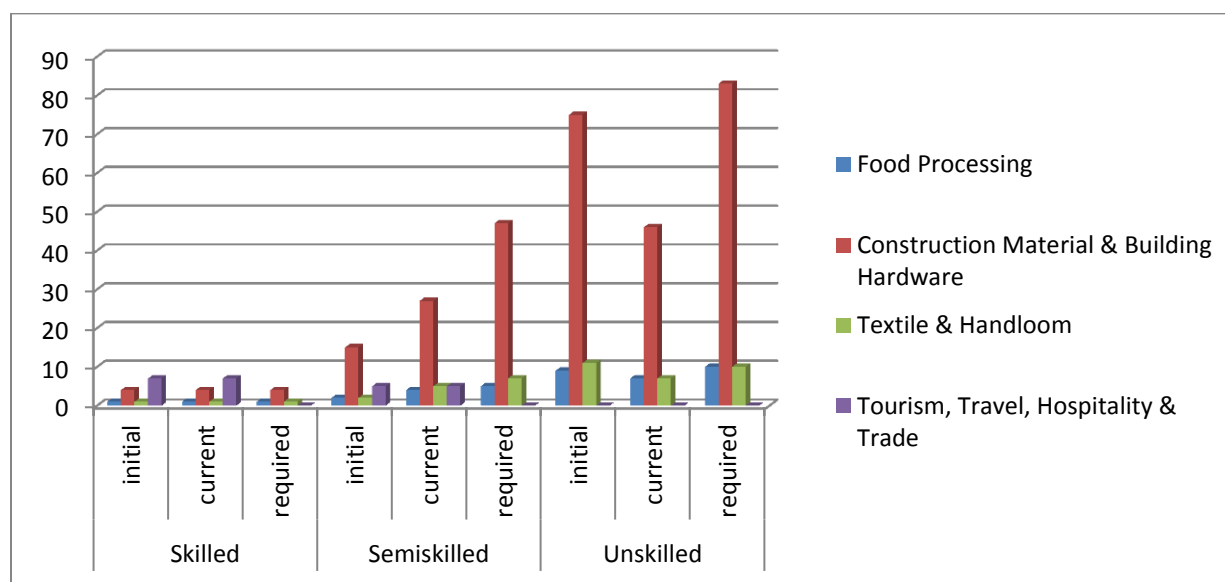


Figure 287 Workforce engagement under various stages and required strength of workers across sectors surveyed (Jaisalmer sample)

- Data on skilled workforce indicate no increase or decrease in the workforce at present since establishment of industries across all the sectors. Moreover, demand for skilled worker across all the industries in various sectors, in future, was also not present in Jaisalmer.
- As reported by industries for semiskilled workforce, the industries related to Tourism, Travel, Hospitality & Trade sector industry have not added significantly in the absorption of semi-skilled workers whereas, rest all other industries have increased their semiskilled workers' strength. Potential to absorb more semiskilled workforce in various sector was found in Jaisalmer.
- Though most of the sectors have reduced their workers' strength since establishment but potential to absorb more unskilled workforce in various sector was present in Jaisalmer in the sectors related to tourism, handicrafts, furniture and leather.

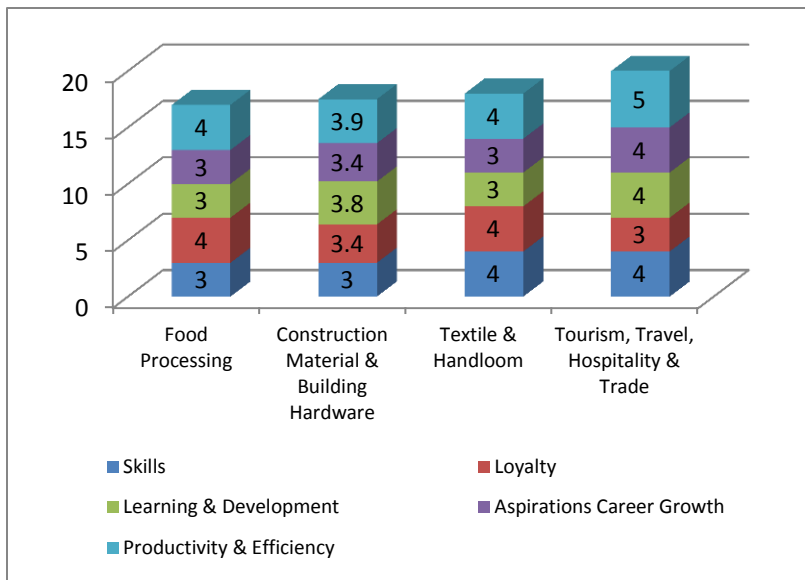


Figure 288 Employers demands in terms of expectations from workers (Jaisalmer)

In terms of industries' requirements and the expectation of the employers from its workers the primary survey provides the major demand to be the productivity and efficiency from its workers with aspirations for a stable career by employees was the least preferred by the employers. The sectors which were most demanding on these yardsticks were tourism and hospitality followed by textiles and handloom (ranked on a scale of 5).

Poaching of workers from other employers was reported by the industries. Recruitment of required workers from known sources such as own workers was reported by Tourism, Travel, and Hospitality sector industry. Dependency on VT institutions was reported across employers of Textile & Handloom sector only

5.23.7 Projected Workforce Demand

Across all four sectors represented in the sample, relatively large worker strength (skilled, semi-skilled and unskilled) was observed for Construction Material & Building Hardware sector. The number of vacancies reported by the sampled employers for the skilled, semi-skilled and unskilled categories of workers was not in equal proportion and reflects a high potential for absorption of workers in unskilled category. It was reported by various employer that they don't have any skilled workforce requirement as of now but require unskilled worker throughout the year.

Current strength for the skilled, semi-skilled and unskilled categories of workers was not in the equal proportion. The count for skilled worker is far less than semi-skilled and unskilled workers' count. It was observed, through the data of worker at the time industry establishment, that there was huge disparity in skilled and unskilled workforce. Earlier industries were more dependent on unskilled workforce for their day to day operation.



Figure 289 Expected year wise requirement of workforce and current break up of workforce across industries surveyed (Sample)- Jaisalmer

There exists not much difference in the projections of the workforce from the current scenario. Scope of secondary and tertiary to engage workers would be around 61% with some major changes accounting for increase in services sector growth. There would be 39% of the workforce engaged in the agriculture and allied activities. Mainly the livestock and animal husbandry would become the main focus of the allied sectors of agriculture. Entrepreneurship with rural enterprises would be more viable option for the rural farmers by making groups or cooperatives.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of Manpower
Agricultural Sector								
Unskilled	25230	23014	25194	25420	24708	25102	25754	
Semiskilled	20568	18761	20538	20723	20143	20464	20994	
Skilled	1371	1251	1369	1382	1343	1364	1400	
Total demand	47170	43026	47101	47525	46194	46931	48148	39%
Industry Sector								
Unskilled	19732	20459	20529	21292	21573	21961	22326	
Semiskilled	9107	9443	9475	9827	9957	10136	10304	
Skilled	1518	1574	1579	1638	1659	1689	1717	
Total demand	30358	31476	31583	32758	33189	33787	34348	27%
Services Sector								
Unskilled	5611	5757	5977	6137	6191	6367	6493	
Semiskilled	13093	13433	13946	14320	14447	14856	15151	
Skilled	18705	19191	19923	20457	20638	21223	21644	
Total demand	37410	38381	39845	40915	41276	42447	43287	34%
All Sectors								
Unskilled	277648	256355	278443	281634	274849	279357	286350	
Semiskilled	42769	41638	43959	44871	44546	45457	46449	
Skilled	21594	22015	22871	23477	23640	24277	24761	
Total Demand	114937	112883	118529	121197	120659	123164	125783	100%

Table 218 Projected percentage of workforce (demand) requirement till 2017 across primary, secondary and tertiary sectors-Jaisalmer

Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Agriculture and allied	Yellow	Yellow	Green
Automobiles & Auto Components	Orange	Orange	Red
Food processing	Orange	Yellow	Green
Handloom & Handicrafts (includes wooden & paper)	Red	Yellow	Green
Textile & Garments	Yellow	Yellow	Red
Building, Hardware & Home Furnishings	Red	Yellow	Red
Leather & Leather Goods	Red	Green	Green
Chemical & Pharmaceuticals	Yellow	Green	Yellow
Tourism, Hospitality & Travel	Yellow	Yellow	Red
Building & Construction	Red	Yellow	Green
Transportation/logistics/warehousing & packaging	Red	Green	Yellow
Education/ Skill Development	Green	Yellow	
Banking, Insurance & Finance	Yellow	Yellow	
Healthcare	Yellow	Yellow	
Machinery, Electricals & Manufacturing	Red	Green	Green
Mining, Minerals & Metals (includes stone quarrying)	Red	Green	Green
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 219 Workforce across various sectors by 2017- Jaisalmer

5.23.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	15466	13336	15525	15800	15091	15525	16188
Semiskilled	31889	30183	31956	32353	31505	31862	32331
Skilled	1998	2033	2110	2162	2171	2226	2266

Table 220 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.50 lakh (employable working population). Keeping in mind the high rate of workforce participation from unskilled masses and the existing demand of skilled workforce to be low; the significance would be to target training to atleast 32,000 youths by 2017 in semi-skilled segment. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation is conducive enough to support industrial growth in Jaisalmer. All the resources are available here to support industrial growth apart from few issues with water supply
- The VTIs are fulfilling the needs of the industries but industries should pay more to attract the skilled and semi-skilled manpower
- Scope for self-employment and entrepreneurship in the district is good since tourism and Stone industries provides good self-employment opportunities
- Stones and marbles are the predominant in the district .Electricity generation industries are emerging in the district and should be sustainable enough to absorb new manpower. Chemicals & Pharmaceuticals Industries are emerging sectors in the district absorbed skilled manpower
- Lack of placement related linkages with the industries of the current VTIs seemed to be a major hurdle in skilled manpower absorption

5.23.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Jaisalmer district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth to provide deep insight and understanding on their aspirations and perceptions; of self and people associated/related with them.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 28.3% of the youth covered were college educated and 71.7% had completed/ drop out from high

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 221 Youth Profile of sample in Jaisalmer

school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

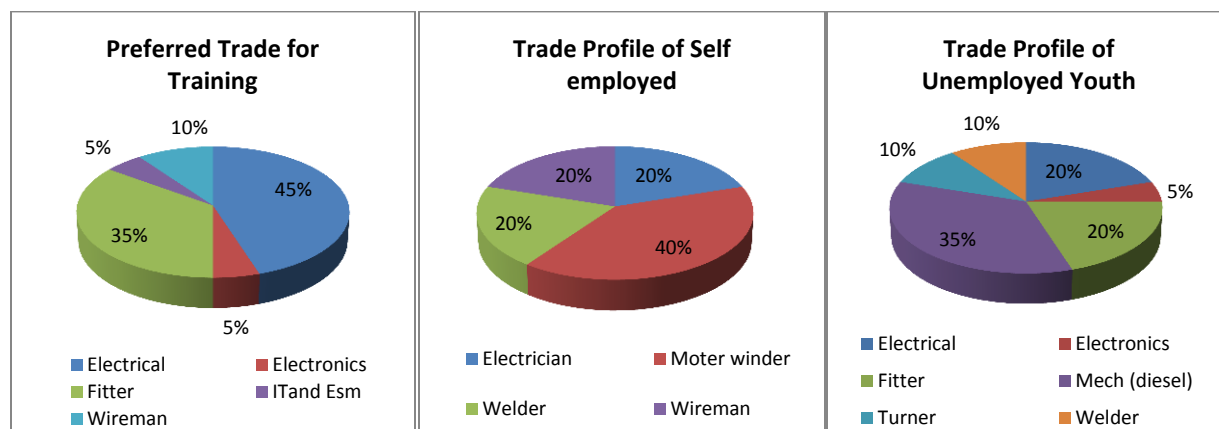


Figure 290 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Jaisalmer

Inclination towards Electrical course was found high as around 45% of the youth reported that they had preferred Electrical trade during his/her training at VTI. The reason for the same seems to be the demand for this course in the market. Second, most sought, trade was Fitter i.e. 35%. In continuation with the most preferred trade during VTI, it was found that around 40% of the self-employed youth, who were surveyed, are engage in Motor winding work. Equal proportions of remaining youth (20% each) had chosen Welding/Electrical work and wiremen trade as an occupation. A larger number of youth (35%) currently unemployed reported that Mechanic (diesel) trade was the area of specialization during VTI. Fitter and Electrical trade emerge as the second leading trade (20%) in unemployed youth.

5.23.10 Youth's Perception

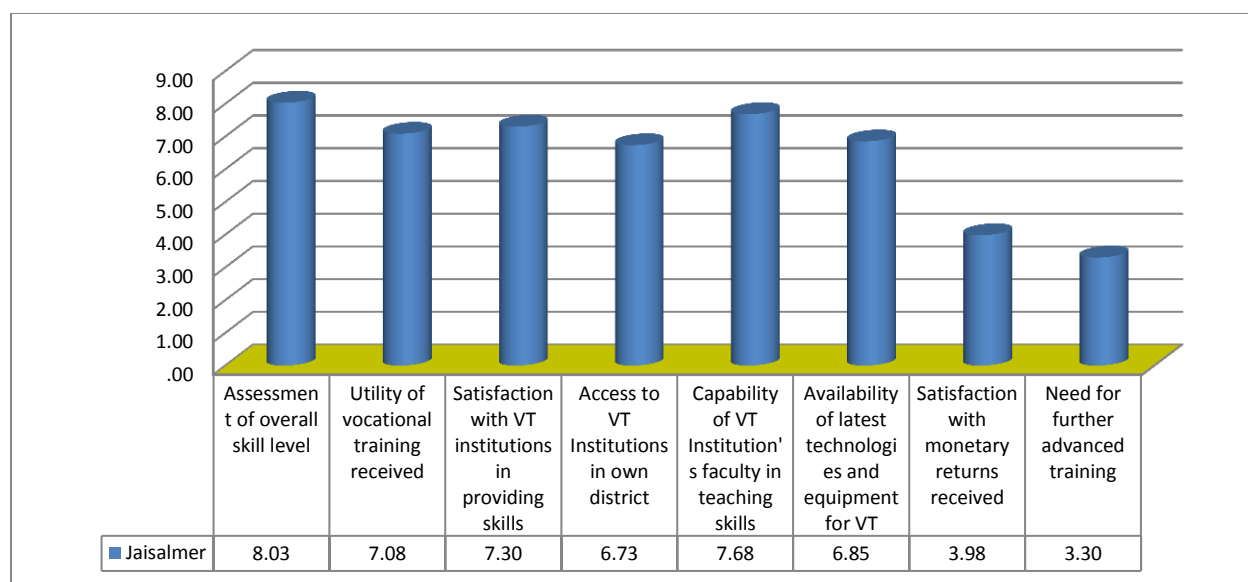


Figure 291 Jaisalmer Youth's perception, need and aspirations –Sample Group

The major dissatisfaction of the surveyed youths was the less opportunities of further training (especially in computers and English communication) followed by current monetary returns and access

to the VTIs in the own district. On a scale of 10 youths rated importance of skill level of the VTIs providing training at the highest followed by the availability of latest technologies at training centers.

The general aspirations were mapped by conducting FGDs with the youths from various categories and the following responses were evidently represented by the group:

- a) Self-dependent, better salaries, work satisfaction, family security and learning new technologies (respective trades) were the desires and expectations of the youth from the employment
- b) Families expected from them to get engaged in government jobs or well-paid jobs in big firms
- c) Preference to join the government jobs has made maximum number of youths to pursue training in the ITI
- d) Communicative English and computer training were generally undertaken by local training centres for better job opportunities
- e) 8 out of 10 felt that self-employment had least scope in terms of secured future and sustainable growth. Also there were no encouragement by the family members to encourage the self-employment or enterprising
- f) The minimum salary expected after training by most of the youths was between Rs. 8000-10000/month. Though many were not comfortable with the entry level jobs with less pay in private sectors, but as an option they would prefer to get engaged

5.23.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.4 lakh of skilled, unskilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at district and block level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

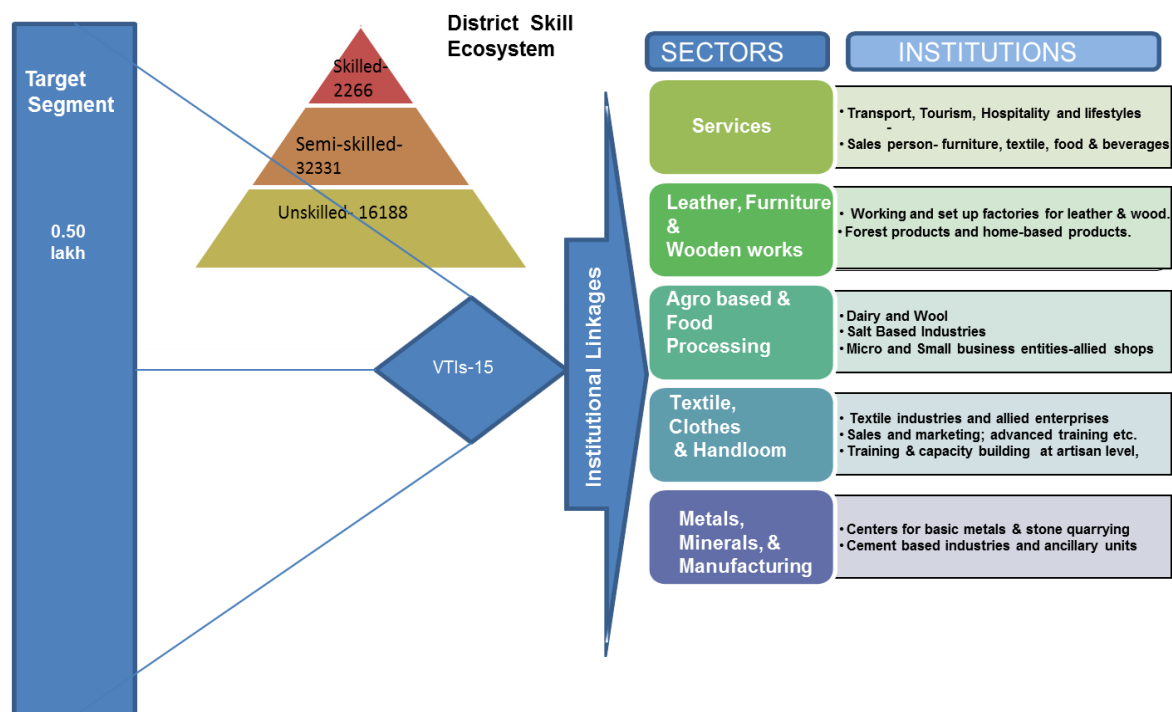
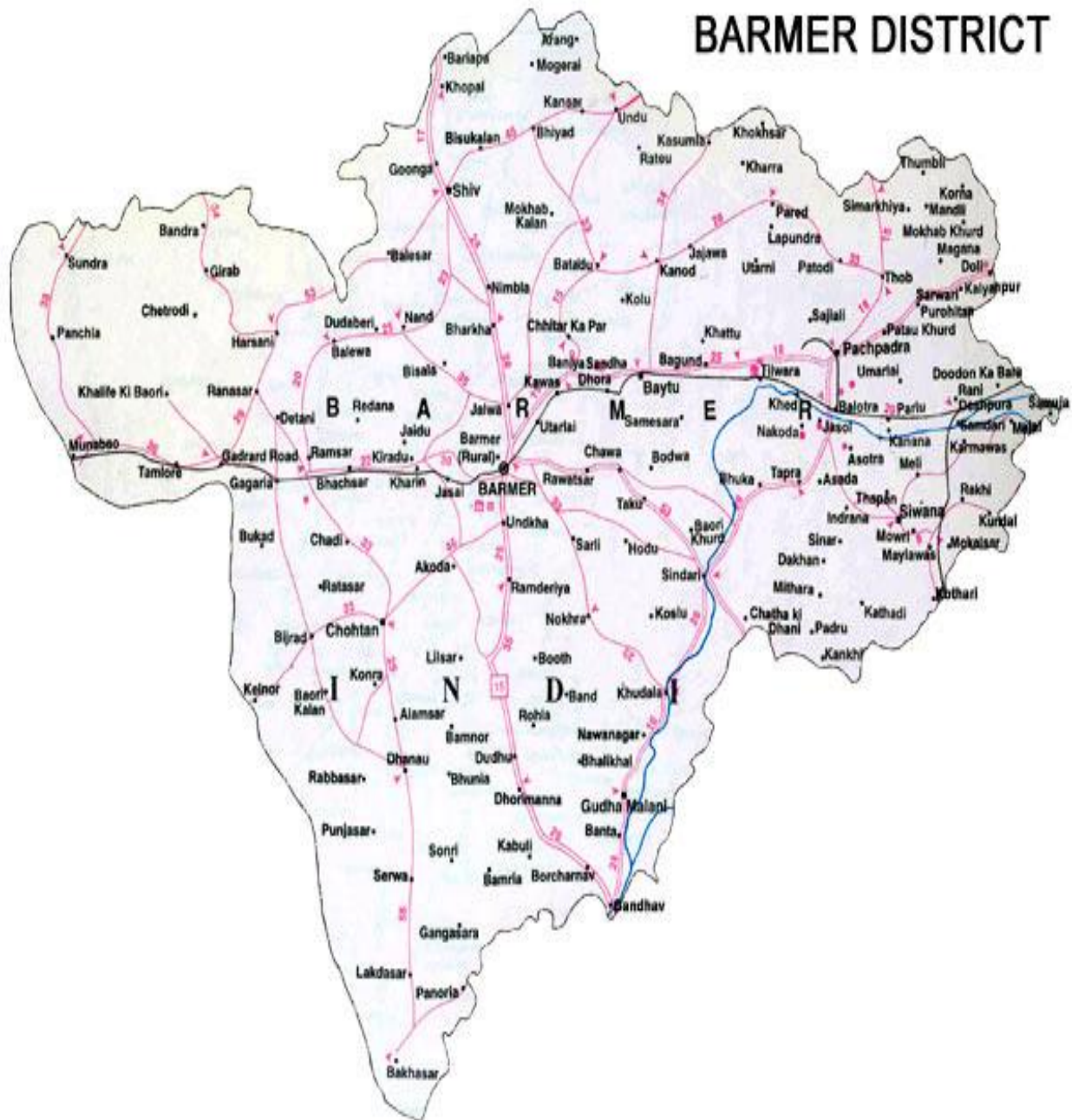


Figure 292 Optimization plan- Skill Development Eco System-Jaisalmer

The district would require more dedicated approach to advocate the usefulness of skilled workers in the industries and also need to target the service sector employment (emerging sectors as shown in the sections earlier). VTIs (15 additional) should be vital in getting the work ready workers. The interface between the VTIs and the industrial bodies would be essential for the mutual benefit. NSDC and state agencies could play the vital role in this kind of initiatives by organizing formal workshops, more proposals for skilling approved for emerging enterprises and encouraging partners to set new centres of operation in the district.

5.24 District Barmer



District Skill Workforce Face Sheet-2012								
District	Barmer			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	16	No. of Villages	2460	No. of Schools (elementary & sec.)	5298			
Basic Data								
Population (in '000s)	2604	Overall Literacy (in %)	57.49	Sex Ratio	900			
Decadal growth rate(in %)	32.55	Female Literacy(in %)	41.03	HDI Ranking (2008)	0.578 (21 st position)			
% Urban Population	7.40	Male Literacy(in %)	72.32	Per Capita Income (in Rs.)	11995			
Workers participation rate (2001)								
Workers participation rate (2001)	46.81	Share of primary sector (%)	77.90	Share of secondary & tertiary sector (%)	22.10			
No. of MSME/Industries	5698	Total Employment (in 000s)	16940	Total Investment (in lakhs)	8760.7			
No. of colleges (PG & Graduation)	11	Total graduates (In '00s)	6996	Total Post graduates (in '00s)	NA			
No. of VTIs(registered ITI+Poly+ITC)			5	Total trainees trained (in '00s)	842			
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	6122	6453	6586	6802	6948	7138	7273	0.64 lakh
Semi-skilled workforce	5622	5872	6154	6581	7055	7750	8130	

5.24.1 Demographic Profile:

Barmer is located in the western part of the state forming a part of the Thar Desert. The district is surrounded by Jaisalmer district in the north, Jalore district in the south, Pali district and Jodhpur district in the east and Pakistan in the west. The total area of the district is 28387 km². The district is located between 24,58' to 26, 32'N Latitudes and 70, 05' to 72, 52' E Longitudes.

Barmer is the second largest district of Rajasthan. Since its formation in 1949, there has been almost no change in its external-boundaries. Internally, however number of tehsils increased from 5 to 8. The number of towns however remained two. The district has divided into 8 panchayat samities viz, Barmer, Balotra, Siwana, Sindhari, Baitu, Shiv, Chohatan and Dhorimana.

Barmer, one of the largest and the most backward districts of the exotic state of Rajasthan which was largely arid. Apart from a small offshoot of Aravalli hills in the East, the region has vast sand covered tract which stretches for miles and miles together and forms a part of Thar desert known for its dryness, extreme temperature and erratic rainfall. For the local population comprising mostly of schedule castes, scheduled tribes and

refugees of the Indo-Pak wars, life is a struggle. Agriculture, which is the mainstay of rural India, was an unattractive proposition due to the frequency of droughts that plague the area, the inhospitable terrain and the lack of irrigation facilities. With no industries around, the only source of income seems to be animal husbandry, the traditional craft of patchwork and mirror embroidery, practiced by the women of the area.

S.no	Section	Unit	Quantity
			/
Value			
1	LOCATION		
	Latitude	degree	26°32' N
	Longitude	degree	72°52' E
2	AREA		
	Total geographical area	square	28387
3	ADMINISTRATION		
	Tehsil	number	08
	Villages	number	1933
4	Land Use Pattern		
	Land Holding (Avg)	Hectare	10.95
	Total Irrigated area	Percent	10.02
5	Population (census 2011, provisional)		
	Total population	number	2604453
	Men	number	1370494
	Women	number	1233959
	SC (2001)	%	15.73
	ST (2001)	%	6.04
6	Literacy (except 0-6 age group)		
	Total literate	percent	63.93
	Men	percent	79.52
	Women	percent	48.44
8	Energy		
	Electrified Villages	number	1616
9	Industries (DIC, 2009)		
	Registered MSME units	number	5158
	Employed persons	number	24689
10	Education		
	Pre Primary & Primary Schools	numbe	3378
	Upper Primary	numbe	1526
	Secondary & Sr. Secondary	numbe	394
11	Higher Education / Others		
	Colleges	numbe	11
	IT I	numbe	04
	Polytechnic	numbe	01

Table 219 Barmer District Profile- a snapshot

5.24.2 Education Infrastructure and Utilization

Barmer's status in literacy was marked lower than the state average. There was an increase in the male and female literacy rates and reports of DISE, 2011 state that there have been significant increases in the girls' enrolment. Barmer has also been among the districts with high drop-out rates as per HDI, 2008 and maximum number of one room schools with high absenteeism (pupil & teacher) due to geographically difficult terrain and ST habited regions. According to Census 2011 provisional Barmer has a total of

2293 schools from pre-primary to senior secondary levels. Considering the density of population and the vast area, the school spread is average in comparison to the state average and across other districts. The supply constraint in case of education infrastructure was evident as per reports of Rajasthan HDI report, 2008. Though primary education has been made available in each village, education for secondary and college level seemed to be a luxury, which only a few could afford. Number of secondary, higher secondary schools and colleges was very less. Dropout rates were high (19.9 percent dropouts before class V). Girls were not encouraged to go to schools after class Vth. There was lack of girl schools and female teachers. Social customs and early marriage practice in some communities were also responsible for low literacy amongst females. Quality of these classes was poor and no study material was distributed. Anganwadi centres were not functioning well. Distribution of supplementary meals was not regular. No other facility was provided from the centre except meals.

Education	Barmer	Rajasthan
Pre Primary & Primary	3378	49546
Upper Primary	1526	38889
Sec/ Sr Sec	394	19135

Table 222 Barmer vs. Rajasthan education status

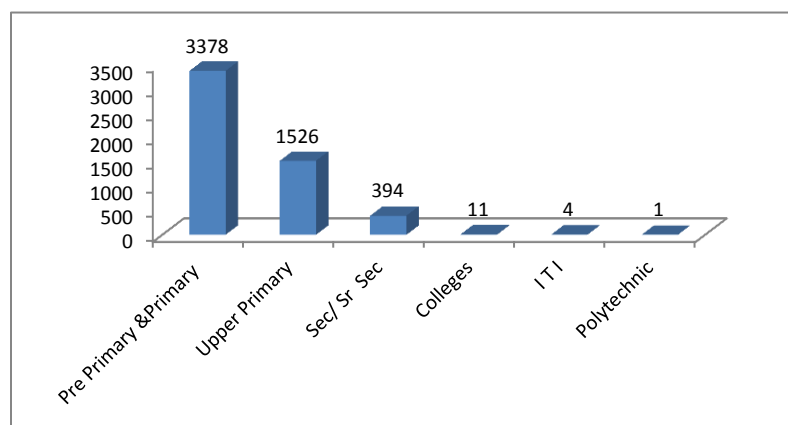


Figure 292 Number of Schools, Colleges, ITI & Polytechnic, 2009-10- Barmer

A total of over 3,681 students enroll in various institutes at colleges ITI & polytechnic. At the intermediate college level, courses are available in the area of science, arts and commerce. There are total of seven registered vocational training institutes in Barmer district out of which 04 are ITIs and 03 polytechnics. A total of just above 550 aspirants got enrolled in 2009-10 in the registered training institutes. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 02 partners (includes 1KVK and 1NGO) implementing skilling initiatives with 07 approved programs (all are completed). A detailed view of the vocational training of the district could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.24.3 VTI's demand across various trades in Barmer district

The existing scenario of VTIs in the district depicts on the lower side of the supply considering the number of youths passing out; and seeking employment as skilled workforce. Private players have not yet ventured in a big way eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district.

The government VTIs interviewed in the survey was three and four were from the private. The courses which were offered by the government VTIs were predominantly self-employment based or to cater the local market needs. The details of the courses offered in the VTIs of Jaipur are represented as follows:

Govt. VTI Trades		Pvt. VTI Trades
COPA	Welder	COPA
Electrical	Refrigeration	Electrical
Fitter		Fitter
Radio & T.V.		Mechanic (Diesel)

Table 223 Barmer district's (sample study) courses offered

In the total of 07 VTIs (03 government+04 private) covered in the sample, the government VTIs sampled for the study offered 06 different trades for training while the private VTIs offer 04 trades. Electrical was the most preferred trade in Barmer as maximum number of seats in both the VTIs was from this trade. The maximum variance in seats utilization was also observed for this trade as private VTIs had a difference of maximum 47 as in the number of seats allotted and number of seats filled.

The difference between actual trainees and approved trainees in government VTI varied from 1 to 21 in number though suggesting the over utilization across trades and the demand-supply gap. Refrigeration trade had the max difference (nearly double the number of approved strength was the actual strength). In case of private VTIs, the difference was varying from 0 to 47 seats marking on the underutilization contrary to what was observed in the government VTIs. COPA trade had no difference whereas electrical trade had max difference of 47 seats. An inference drawn was that though the electrical course COPA & IT courses had significant market potentials, the supply side catered far less for such trades than demanded for.

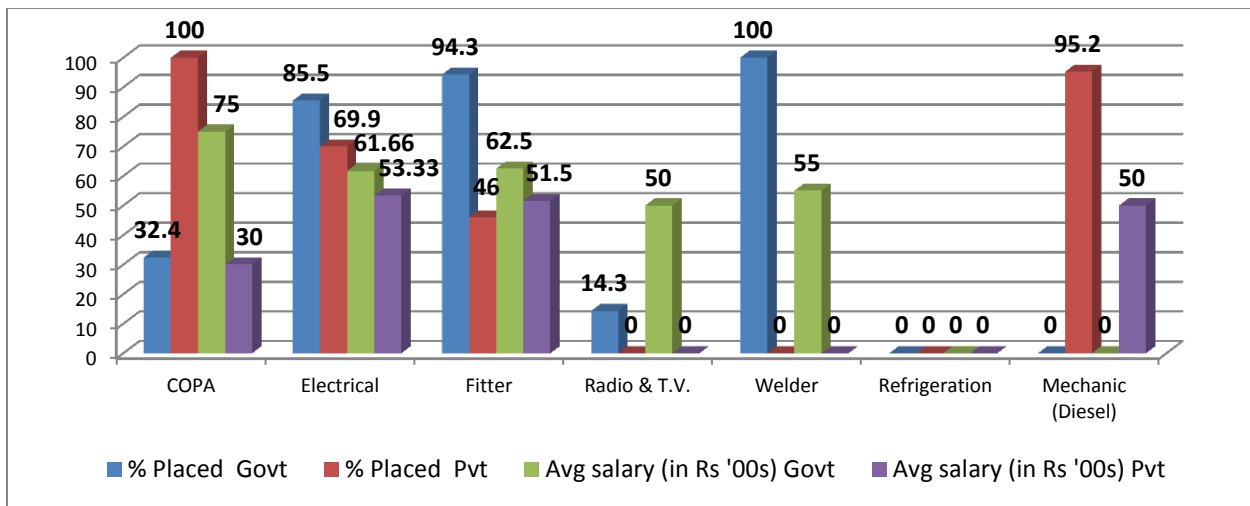


Figure 293 Barmer district's (sample study) courses offered placements in government and private VTIs

An overview of placement records by trade in the government and private VTIs indicate moderate prospects in all most all of the trades with the exception of refrigeration trade in government VTIs. It may be due to the fact that most of the trainees seek self-employment from refrigeration trade. The COPA course though shows high potential in the market but placements from the institutes were low (on ITI records; as ITC strength was low and placement recorded was 100%). Electrical and fitter courses offered good placement scope with an average salary of Rs. 5500. While placements of trainees from the government and private VTIs was more through a proactive approach to the industry by the government VTIs and the campus recruitment at the private VTIs, the contribution of the employment exchanges were almost nil.

The trends across most of the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the government VTIs whereas for refrigeration trade the demand declined over the years. In contrary, the private VTIs increased the strength of trainees over the years. Electrical trade indicated steep rise suggesting the demand of this trade over the years.

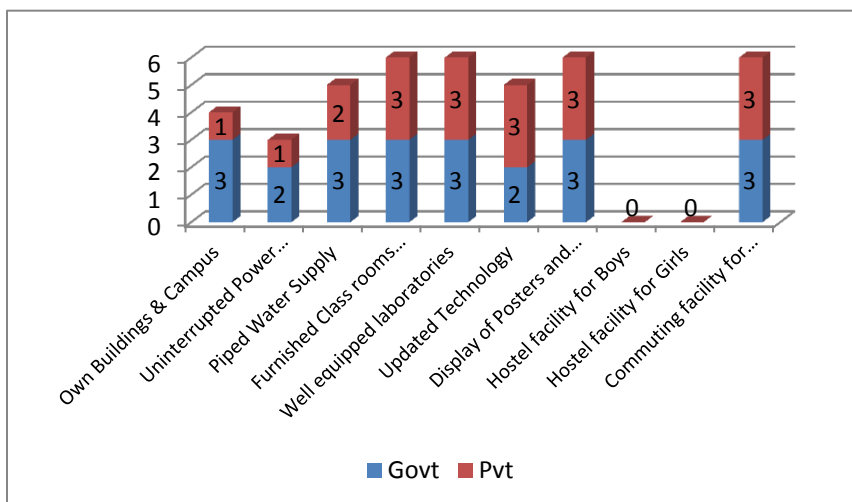


Figure 294 Facilities and Infrastructure availability in sampled VTIs, Barmer

All the VTIs claimed to have updated technologies, equipped labs, and space for conducting the training, electricity and water supply. Almost all of them did not have hostel facilities. Commuting facility for the aspirants in all government VTIs was a good initiative. The staffing in these

institutes were marked understaffed in aspects dealing in academics (both in government and private).

Interestingly the VTI functionaries claim that the courses on offer in these government VTIs are more demand driven as per the aspirations of the youths and less mandated from any university or board. The industry's role in demanding courses favorable for its optimization was observed to be high and thus one could anticipate the involvement of contemporary industries in campus placement in these VTIs.

5.24.4 Industry Mapping

Agriculture was the main occupation of the people and chief source of economic activity (77.90% was the share of primary occupation). Most of the land was arid with no irrigation facilities. Farmers have to depend on rainwater for sowing and cultivation. Only one crop is grown in most parts of the district. Important agricultural products include bajra, jawar, maize, and oilseeds. Landholding pattern in the district shows that most of the households fall into the category of big farmers. In 2006 the Ministry of Panchayati Raj named Barmer one of the country's 250 most backward districts (out of a total of 640). It is one of the twelve districts in Rajasthan currently receiving funds from the Backward Regions Grant Fund Programme (BRGF).

In this agrarian based economy of the district, the availability of water supply has been an issue for industry houses. The district has four industrial houses and has artisan clusters mainly located in Choutan and Shiv (Kashidakari cluster):

MSME in Barmer

According to D.I.C data (March, 2012), there were around **5698 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.16526.2 lakhs** providing employment to **27299 persons**.

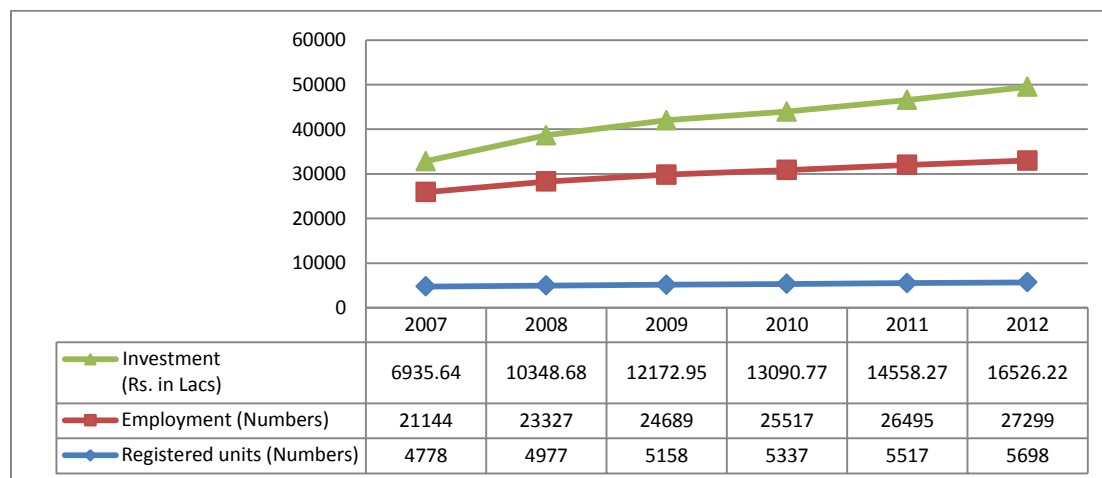


Figure 295 MSME trend analysis of the district Barmer

There has been a constant increasing trend in the investment of industries, employment and thus, the number of units as well. Also, the medium and large scale industries are 03 in number engaging close to

12617 persons with an investment of Rs. 92250 lakhs. Barmer has the mineral, textile, wooden and agriculture based main existing industries with exportable items like guar gum and embroidery items.

5.24.5 Sector wise mapping of industries in across Barmer

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of MSME as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Barmer. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	7	14.80	19
Auto & Auto Components			
Chemical & chemical products	5	8.5	21
Construction Material & Building Hardware			
Food Processing	26	127.77	1200
Furniture & Furnshing	192	25.24	198
Leather & leather goods			
Textile			
Unorganized Sector	1830	1464.00	2176
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging			
Mines, Metals & Minerals	1334	8449.85	6241
Machinery, Electricals & Manufacturing	3713	2252.78	5160
High	Units>200, investment>1000,emp>1000		
Medium	Units>100, investment>200, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 224 Sector wise mapping of industries in Barmer as per DIC report, 2007

There have been many MSME coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of mines and minerals, furniture and manufacturing sector. A substantially good number of workforce (14%) form the services backbone of the district and are engaged in various industries, households etc. as daily wagers etc. forming the unorganized sector. Sectors like tourism, transportation and logistics and construction were engaging more of semi-skilled workforce in the district. The mines and minerals were the only demand based industry of the district.

Sectors covered under sample survey
Construction Material & Building Hardware
Tourism, Travel, Hospitality & Trade
Food Processing & Products
Service & Repairing
Stone Querying, Cutting & Polishing
Wooden Products, Handicrafts

Table 225 Break up of industries in Barmer (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 14 industries was selected (depending on the availability of respondents' of the employer group set up).

These industries were selected from large, medium and small industries covering various growth sectors of the district as shown in the table. All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers.

5.24.6 Workforce Demand and Supply

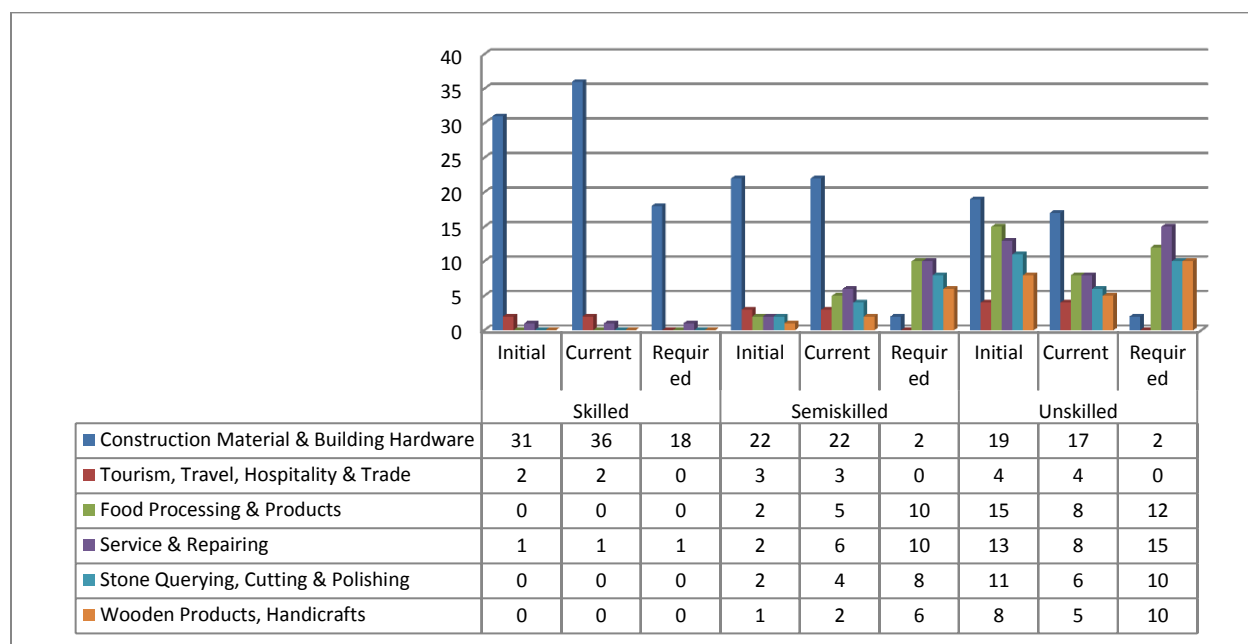


Figure 296 Status of skilled, semi-skilled workforce and unskilled workforce across sectors (Sample Barmer) at various stages (initial, current and required)

The major workforce participation observed in Barmer district over a period of two decades has been majorly as cultivators/ agricultural laborers but with significant reduction in the participation and shift to secondary and tertiary sector (mines, minerals, manufacturing etc.). Therefore, the increase in the share of secondary and tertiary has been quiet insignificant for the same period. Majority of the workforce has been engaged in subsistence agriculture and the geographical conditions also have reduced the sustainable agricultural options.

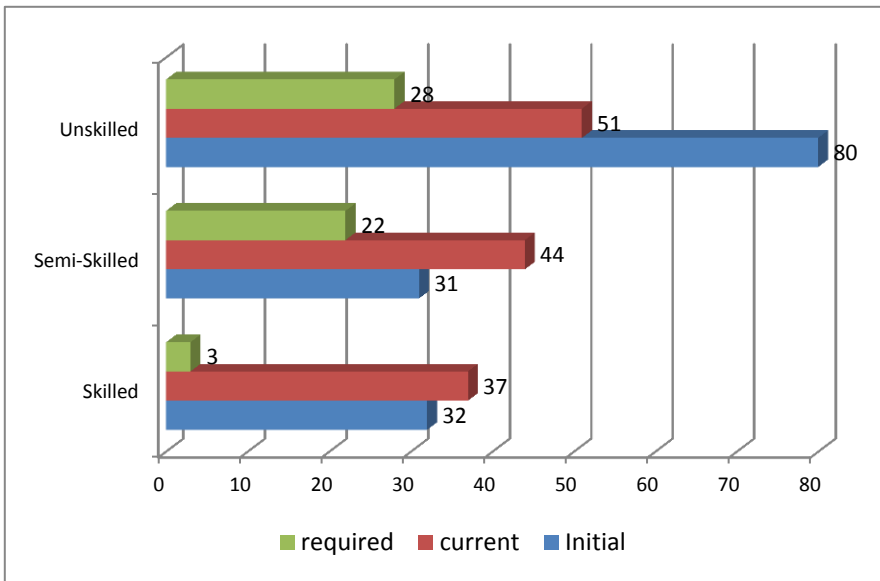


Figure 297 Status of skilled, semi-skilled and unskilled across sectors (Sample Barmer) at various stages (initial, current and required)

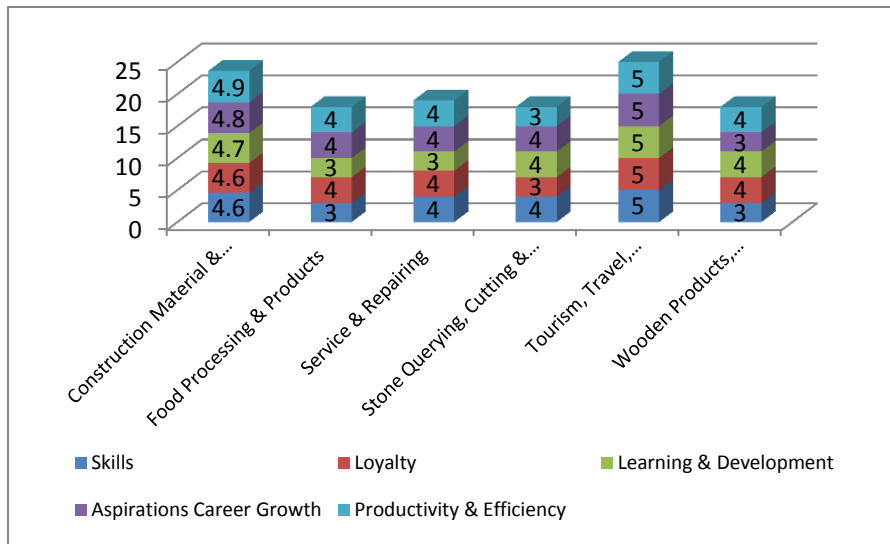


Figure 298 Employers demands in terms of expectations from workers (Barmer)

Skilled workforce data indicate marginal increase in the workforce at present since establishment of construction material & building hardware industries whereas static workforce for tourism, travel, hospitality & trade and service & repairing sector. In stone, quarrying and related industries (marble) the demand for semi-skilled and unskilled workers was on a high. Demand for skilled worker in future was not very high. As reported by industries for semiskilled workforce, there was marginal increase of workers who were engaged in the all the industries over the period of time since industries established. Though most of the sector had reduced their workers strength since establishment but

potential to absorb unskilled worker in the industry was found to be higher in Barmer.

In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were loyalty towards work and least scaled was importance of enhancing skills and learning and development. Other parameters were closely rated as shown in the figure showing the employer's expectations.

The employers were asked to rate their expectation from their workers on a scale of 5, employers from tourism, travel, and hospitality & trade sector reflected a high desire for all the characteristics that were used for rating, followed closely by the employers from construction material & building hardware sector.

5.24.7 Projected Workforce Demand

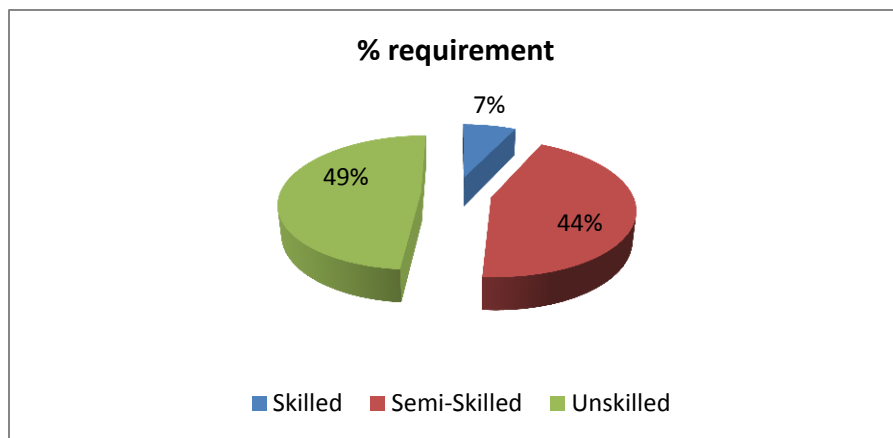


Figure 299 Requirement of skilled, unskilled and semiskilled workers in survey (Barmer)

There has been certain increase in the number of skilled and semi-skilled workers over a period of time and reduction in unskilled sector. Though majority of the industries interviewed still feel the requirement of unskilled workers over the skilled

or semi-skilled workers for their full time roles. Apparently the number of semi-skilled workers category has grown and the requirement shows another 44% in comparison to just 7% for skilled. A clear distinction could be observed in the preference of only skilled workers for the contract and daily wage worker category as the industries felt the low cost module works better in a capital scenario and incurs less cost in on job training.

or semi-skilled workers for their full time roles. Apparently the number of

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers. One could observe a similar requirement in the semi-skilled daily wage labor requirement and unskilled contract based requirements (44% & 49% respectively). This clearly validates the mindset of the industry houses to

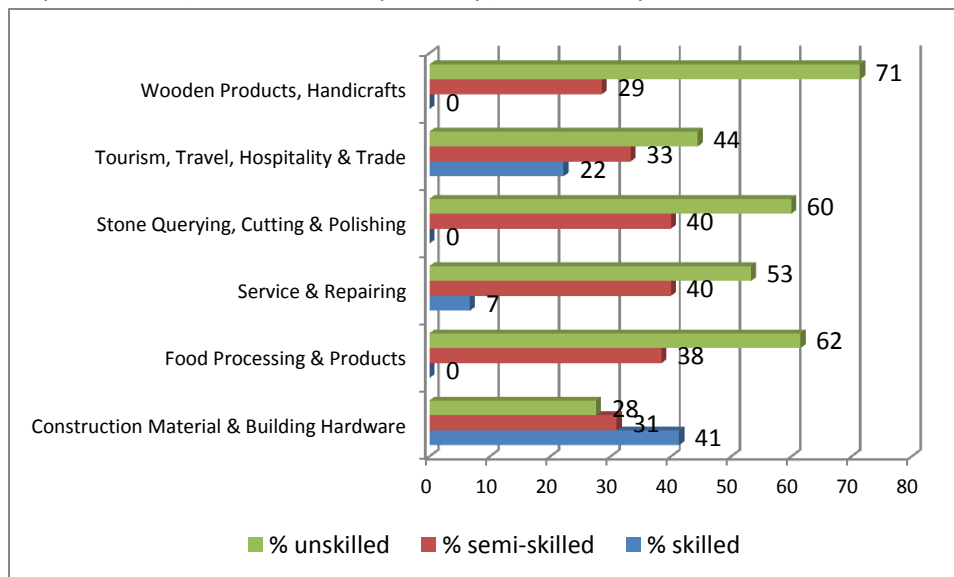


Figure 300 Current percentage of skilled, unskilled and semi-skilled works across sectors in sample survey (Barmer)

engage less skilled workers.

The number of vacancies reported by the sampled employers for the skilled, semi-skilled and unskilled categories of workers indicated unequal proportion and reflected that skilled workforce had least demand and unskilled workforce had

maximum demand; also indicated high potential for absorption of workers in this category. In current

scenario too the percentage of unskilled and semi-skilled remains on the higher side except for the construction materials and building hardware sector.

As reported by industries since industry establishment, they were mainly relying on unskilled workforce as this category had the largest workforce and high potential to absorb unskilled workers in the near future. There has been a declining trend and the semi-skilled workforce has come up. The difference in the wage structure in semi-skilled category to unskilled and semi-skilled to skilled was considerably high.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	470053	482813	468106	476971	487857	485732	487992	
SemiSkilled	38320	39360	38161	38883	39771	39598	39782	
Skilled	2555	2624	2544	2592	2651	2640	2652	
Total demand	510928	524796	508811	518447	530279	527970	530426	67%
Industry Sector								
Unskilled	58733	62975	63930	67046	68645	70920	72578	
SemiSkilled	27108	29065	29506	30944	31682	32732	33498	
Skilled	4518	4844	4918	5157	5280	5455	5583	
Total demand	90359	96884	98354	103147	105608	109108	111659	14%
Services Sector								
Unskilled	18396	19364	19881	20554	21036	21667	22141	
SemiSkilled	42923	45183	46389	47960	49084	50557	51662	
Skilled	61319	64547	66270	68515	70120	72225	73803	
Total demand	122638	129093	132539	137030	140240	144450	147607	19%
All Sectors								
Unskilled	547183	565151	551917	564571	577538	578320	582711	
SemiSkilled	108351	113608	114056	117788	120537	122887	124942	
Skilled	68392	72015	73731	76265	78052	80320	82038	
Total Demand	723925.1	750774	739704	758624	776127	781527	789692	100%

Table 226 Projected labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors Barmer

Basis on the inputs received from sector wise expansion plans the Workforce projections made across different categories highlight these distribution pattern. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Gems & Jewellery			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Unorganized sectors			
Real Estate			
Media, Entertainment, content creation, animation			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 227 Workforce across various sectors by 2017- Barmer

5.24.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis would factor in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging. The situation of skill gap for the district for 2010-11 to 2016-17 based on projections is represented in the table below (assumptions set in the annexure _ Projection Model):-

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	15750	23678	29633	34557	38300	44386	49360
Semi-skilled	5622	5872	6154	6581	7055	7750	8130
Skilled	6122	6453	6586	6802	6948	7138	7273

Table 228 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; some of the important findings were as follows:-

- Situation seems conducive enough to support industrial growth in Barmer. Investments are good since government provided 15% subsidiary on loan for investing here. Land for establishment of industries was not a problem. Currently lands allocations are handled by RIICO. Water & supply of power was also uninterrupted. Availability of skilled man power remains to be a continuous problem and so many of the local industries did not get required skilled manpower and faced scarcity of skilled manpower.
- Scope for self-employment and entrepreneurship in the district is not very good. The district authorities were not found making any concrete efforts in this direction. Some self-employment programs running like Akshat Kaushal Program help people get self-employment. Districts authority should take some necessary steps in this regards.
- Sand Stone, Lime Stone, Marbles industry is predominant in the district .Marbles machineries tools and handlooms are emerging sectors noticed in the districts.
- Compared to the informal sector, formal sector ventures were bound by some limitations in employing persons as they required more trained people. On the other hand, the informal sector is free to employ even a semi-skilled person and provide him the required skills later over a period of time. Getting job in informal sectors had been very easy so it attracts number of skilled and semi-skilled manpower.

5.24.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Barmer district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions. The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 15% of the youth covered were college educated and 85% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 229 Youth Profile in Barmer-sample

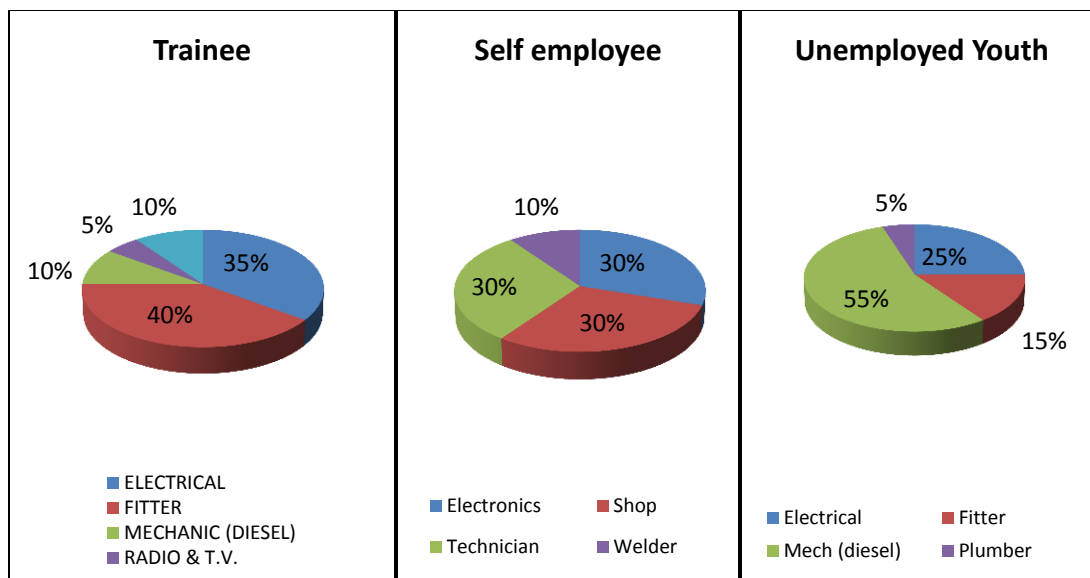


Figure 301 Profile of respondents (trainees, self-employed and unemployed) by trade in sample of Barmer

Among the respondents covered under the survey the course of fitter was one of the most preferred one followed by electrician in sample of youths under training. Similarly in the self-employed category electronics, technician and welder were the trades which were basically the fall off of either no placement or lack of continuous job opportunities. Electrical and fitter trades also featured in the unemployed category of the survey suggesting the competition among trainees from the same trade. These trades appear to be the most popular trades as per the perceived demand in the market. There was general consensus regarding better self-employment opportunity in electrician and technician.

5.24.10 Youth's Perception

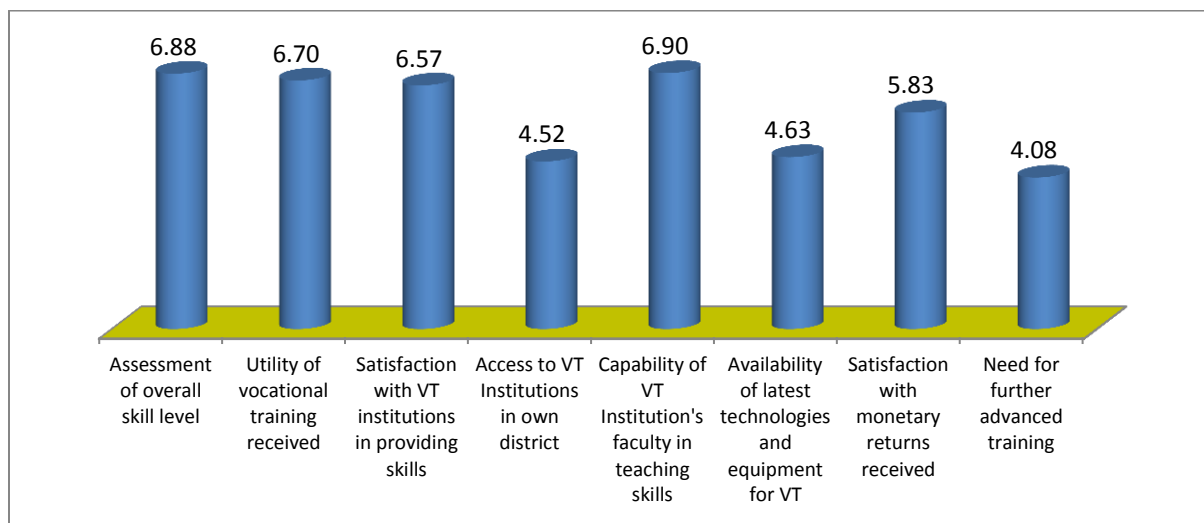


Figure 302 Barmer Youth's perception, need and aspirations –Sample Group

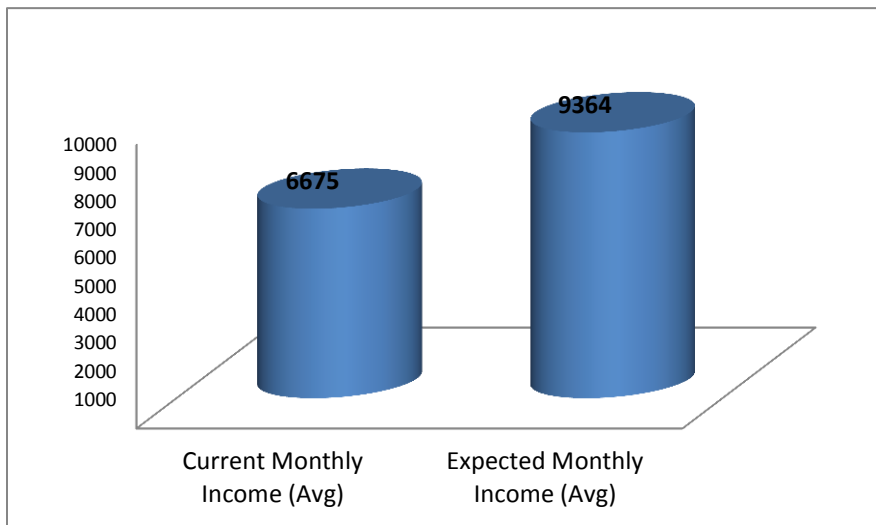


Figure 303 Barmer Youth's expectation as salary- Sample Group

expectation across all the trades provides an average raise in salary structure by Rs. 6800 (approximately). Similarly the scope of increment was not well pronounced nor was any such requirement followed by the interviewees.

5.24.11 Optimization Plan

The optimization plan would be structured at three tier level of district, state and NSDC. The preliminary gap finding, projection and analysis would be presented at every district level which would in turn determine the action plan of the state. The overall scenario of the state would finally give major leads to apex bodies like NSDC for formulation of state specific portfolios to suit the requirements and address the future needs of the state in the skilled workforce. The district skill development eco-system (diagram below) would enable to look at the possible sectors, targets (projected) and support systems required for the district.

Capability of VTI faculty teaching skills was rated the highest (6.9 on a scale of 10) by the sample group followed by skill level assessments. Need for further advanced training was the least rated and similarly low rated were access to VTI and the latest technological inputs in the VTIs. Though 45% of the

sample youth feel satisfied with the salary but an

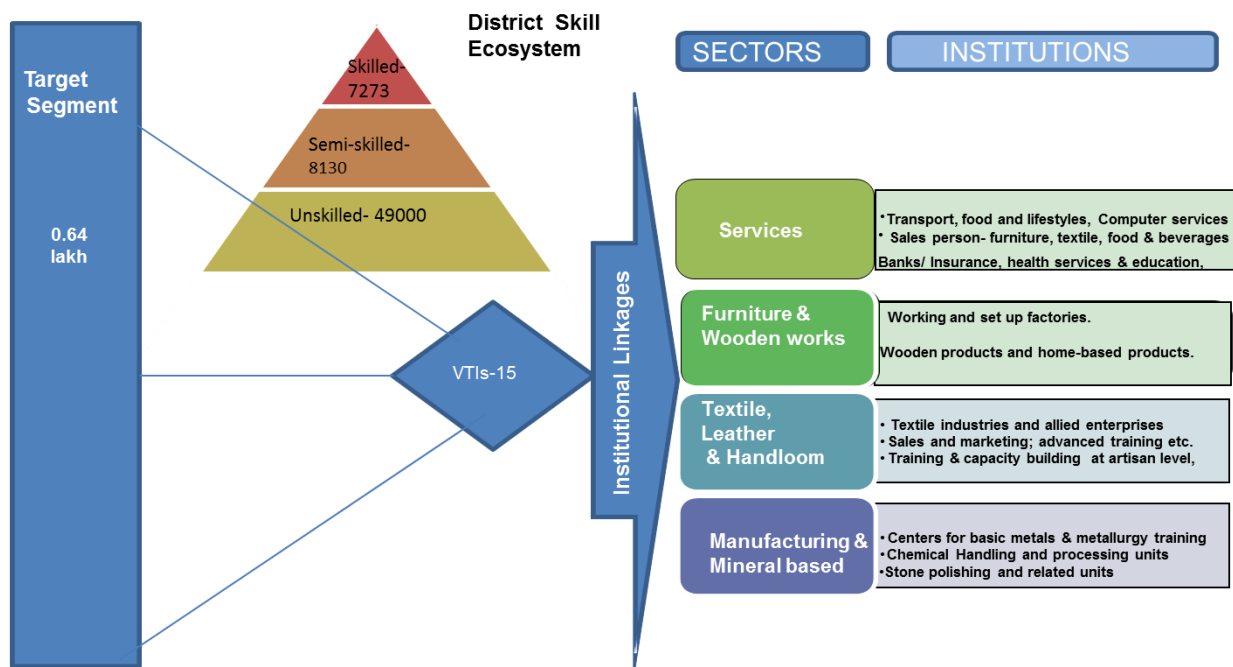


Figure 304 Optimization plan- Barmer Skill Eco-system 2017

The high priority sector which shall need maximum number of semi-skilled workforce and less of skilled shall be the resource based industries of the district, i.e. the mines and minerals, marble and stone polishing, food processing, and unorganized sectors of services and repairs etc. The key stakeholders' contribution in enabling to achieve the target (as shown in the figure) would be as follows:

- State:** The state to target the skilled and semi-skilled segment for skilled training by creating additional 15 skill development centres (VTIs) in the district level of operations. It should encourage the private training partners to participate and operate in the district due to its large base of workers involved in secondary and tertiary sectors.
- Training Partners:** The sectors for engaging more skilled workforce would be in textiles, leather, furniture and services in the district. Course curriculum designed to cater for the institutions based in textiles, sales, health and education and engineering based institutions in metals and mining should be the focus. Along with these, specific course curriculum designed for communicative English, life skills and basics in computer would be the key areas of skill development training.
- Industries:** The sectors of high human resource requirement would be textiles, leather, and services and therefore would require increasing linkages with the related institutions for skilled workforce absorption

5.25 District Bharatpur

BHARATPUR DISTRICT



District Skill Workforce Face Sheet-2012								
District	Bharatpur			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	19	No. of Villages		1524	No. of Schools (elementary & sec.)		3613	
Basic Data								
Population (in '000s)	2549	Overall Literacy(in %)		71.16	Sex Ratio		877	
Decadal growth rate(in %)	21.39	Female Literacy(in %)		54.63	HDI Ranking (2008)		0.604 (19 th ranking)	
% Urban Population	19.46	Male Literacy(in %)		85.70	Per Capita Income (in Rs.)		1350	
Workers participation rate (2001)								
Workers participation rate (2001)	40.5	Share of primary sector (%)		74.1	Share of secondary & tertiary sector (%)		25.9	
No. of MSME/Industries	10594	Total Employment (in 000s)		38384	Total Investment (in lakhs)		15768.07	
No. of colleges (PG & Graduation)	47	Total graduates (In '00s)		14381	Total Post graduates (in '00s)		2110	
No.of VTIs(registered ITI+Poly+ITC)				4	Total trainees trained (in '00s)		950	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	2700	2886	3049	3323	3284	3592	3645	0.34 lakhs
Semi-skilled workforce	11549	11890	12040	12303	12625	12944	13294	

5.25.1 Demographic Profile:

District Bharatpur lies on eastern part of Rajasthan located between 26°.22 to 27°.50 northern latitude and 76.53 to 78°.17 eastern longitudes and on the 100 meters above the mean sea level. According to national resource dots the district has an total land area of 507073 hectares which is 1.48% of the total area of Rajasthan State. All around boundaries of the district are as in north it is connected in the district Gurgaon of Haryana, in the east with district Mathura and Agra of Utter Pradesh. In the State it is connected with Dhaulpur and west Alwar and Swai Madhopur district. Considering the topography of the district some parts as tehsil Bharatpur and Nadbai are plain in as terrain tehsil Roopwass and Bayana are considerably diversifies by hills. In general the soil is alluvial which is fairly wooded and cultivated, the area surrounded by diversified and detached hill is locally called by name Dang. Forests exits in considerable size in all the Sub divisions of the district. Keoladev National Park (Bird Sanctuary) is located of a nearby distance of just 5 Km. From district. H.Q. and locally is known by the name Ghana bird Sanctuary.

S.no	Section	Unit	Quantity / Value
1	LOCATION		
	Latitude	degree	27°13' N
	Longitude	degree	77°29' E
2	AREA		
	Total geographical area	Sq. km	5066
3	ADMINISTRATION		
	Tehsil	number	09
	Villages	number	1472
4	Land Use Pattern		
	Average Land holding	Hectare	1.7
	Net area sown	%	69.3
5	Population (census 2011, provisional)		
	Total population	number	2549121
	Men	number	1357896
	Women	number	1191225
	SC (2001)	%	21.7
	ST (2001)	%	2.24
6	Literacy (except 0-6 age group)		
	Total literate	percent	60.78
	Men	percent	74.66
	Women	percent	46.98
8	Energy		
	Electrified Villages	number	1366
9	Industries (DIC, 2009)		
	Registered MSME units	number	9502
	Employed persons	number	35275
10	Education		
	Pre Primary & Primary Schools	numbe	1850
	Upper Primary	numbe	719
	Secondary & Sr. Secondary	numbe	234
11	Higher Education / Others		
	Colleges	numbe	13
	I T I	numbe	02
	Polytechnic	numbe	00

Table 230 Bharatpur District Profile- a snapshot

5.25.2 Education Infrastructure and Utilization

Bharatpur's status in literacy was marked lower than the state average even though there has been recorded improvement in the literacy among males (8%) and also in females (15%) as decadal improvement. Bharatpur faces real time constraints in terms of basic schooling infrastructure, teachers and enrolment (rated as one of the districts with high dropout rates). Bharatpur has also been among the districts with high one room schools and with more than 30%

of schools with single teacher (HDI, 2008). According to Census 2011 provisional Bharatpur has a total of 3050 schools from pre-primary to senior secondary levels with DISE reports stating that close to 50% remain less functional for major portions of academic year due to various reasons. The retention rate

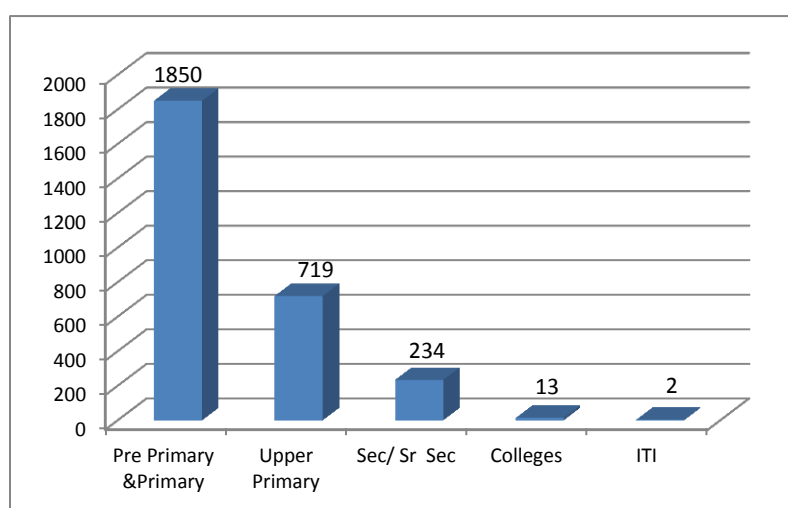


Figure 305 Number of Schools, Colleges, ITI & Polytechnic, 2009-10- Bharatpur

of students in schools of Jalore is quiet low which also contributes to the drop in literacy rates and status of education. The supply constraint in case of education infrastructure was evident as per reports of Rajasthan HDI report, 2008.

A total of over 6000 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There were just a total of two registered vocational training institutes in Bharatpur district (02 ITI). A total of just above 3000 aspirants got enrolled in 2009-10 in the registered training institutes. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 04 partners (includes 02 NGO, 01 mobile unit and 01 KVK) implementing skilling initiatives with 18 approved programs (16 are completed). A detailed view of the vocational training of Bharatpur could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.25.3 VTI's demand across various trades in Bharatpur district

The existing scenario of VTIs in Bharatpur was certainly on the lower side considering the number of youths passing out and the existing vocational training institutes in the district. Private players have not yet ventured in a big way eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields as follows:

Education	Bharatpur	Rajasthan
Pre Primary & Primary	1850	49546
Upper Primary	719	38889
Sec/ Sr Sec	234	19135

Table 231 Bharatpur vs. Rajasthan education status

of students in schools of Jalore is quiet low which also contributes to the drop in literacy rates and status of education. The supply constraint in case of education infrastructure was evident as per reports of Rajasthan HDI report, 2008.

A total of over 6000 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There were just a total

- d) **Computer Based Accountancy and computer operators:** With number of small scale industries coming up in the region the educated youth having the basic education levels could be engaged in computer courses for accountancy (VAT & TALLY) and data entry operators for industries and government development projects.
- e) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is cement, banks/insurance or agro based products firms which are growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field
- f) **Repair Services:** The numbers of electronic and electrical based equipment are on a rise. Also, the wiring and fitting of household electric equipment is on the rise. The owners of these are in need of economical, efficient easy access to repair and maintenance which can be easily produced in local economy through skilling
- g) **Agriculture & Allied:** In the areas of agriculture, fisheries, food processing, dairy etc. a high potential of self-employment could be found. It would demand for a more skilled workforce and hence the skilling opportunities remain high

The government VTIs interviewed in the survey was two and one was from the private. The courses which were offered by the government VTIs were predominantly engineering based or to cater the local market needs. In private VTIs the courses were more male oriented. The details of the courses offered in the VTIs of Bharatpur are represented as follows:

Govt. VTI Trades		Pvt. VTI Trades
Cutting & Sewing	Welder	Electrical
Electrical	Wireman	Fitter
Fitter	Turner	
Mechanic (Diesel)		

Table 232 Courses offered in government and private VTIs

The total 03 VTIs (02 government+0 1 private) were covered in the sample as there were only three available for the survey. The government VTIs and private VTIs sampled for the study offer 7 and 2 trades for training (respectively). It appears that electrical and fitter is the most popular trade in VTIs as private VTIs were offering only these two trades. It appears that in government as well as in private VTIs, the number of actual trainees compared to the number of approved number of trainees is more or less same across all most all the trades except cutting & sewing trade in government VTI where the difference was a bit high (under-utilized) as compare to other trade.

An overview of placement records by trade in the government VTIs indicates stronger prospects in all most all of the trades with the exception of welding trade. It may be due to the fact that most of the welding trade trainees seek self-employment. The placement in private VTI is not very attractive as only

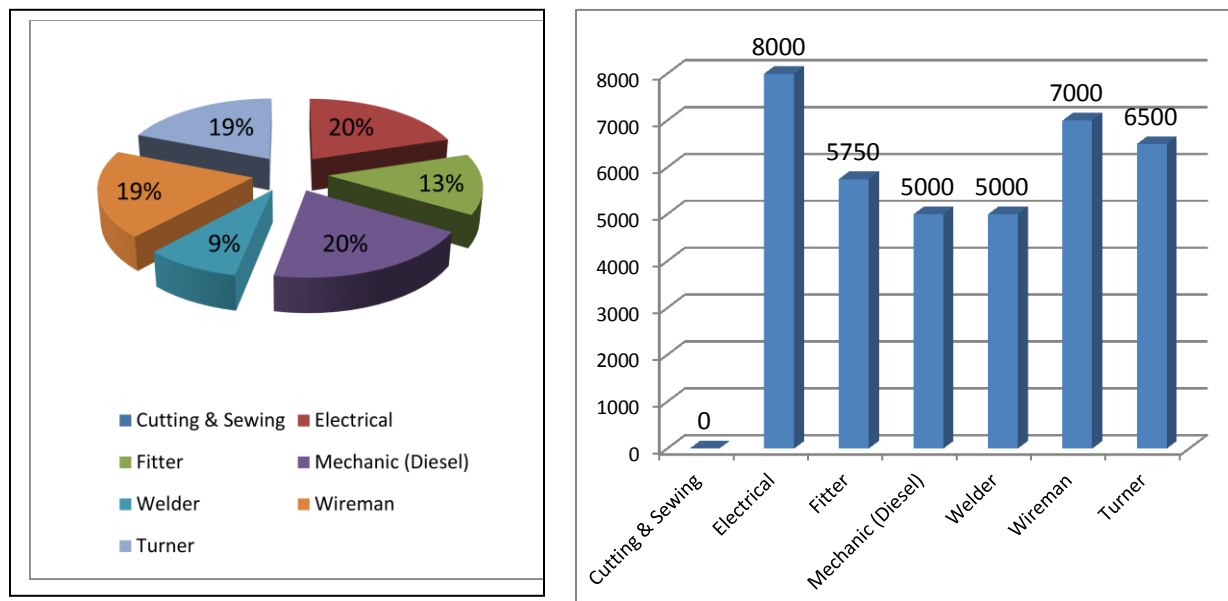


Figure 306 Bharatpur district's (sample study) courses offered placements in government VTIs

4 out of 20 trainees got placed post completion of training. Average salary/trainee indicates towards good prospect in electrical trade as government VTIs had reported that the trainee from this trade got the highest placement of Rs. 8,000/Month from their institute. Placements of trainees from the government VTIs was more through campus interviews but they had also done placement through proactive approach to the industry by the VTIs and the trainees themselves while the placements in private VTIs was through proactive approach to the industry. It seems that employment exchanges were not playing any role in placements. More often the courses provided were less oriented for direct placement in the market rather introduced the aspirants for self-employment for males (private VTI) and as another home based know how for females (tailoring in government VTI).

The trends across all the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the government VTIs whereas private VTIs had started their operation last year only. The governments VTIs were well equipped with upgraded technologies while the private VTI lacked the basic infrastructure.

5.25.4 Industry Mapping

Bharatpur has a rich assemblage of minerals. Estimated 2.5% of the total area of the district comes under the area of mines and minerals. Minerals are generally found in the area of Bayana, Kama, Weir, Bhusawar, Deeg, Roopwas & Bharatpur which covered approximate area 12736.9 hectares main mineral find in the district are Silica Sand, Soap stone, Brick clay, Mill 4 stone, quartzite etc. Brick clays is found generally all over the district. Apart from the minerals the main existing industries were from the following groups of industries:-

1. Sandstone industries, 2. Oil Industries (Mustard oil)

MSME in Bharatpur

According to D.I.C data (March, 2012), there were around **10594 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.15768 lakhs** providing employment to **38384** persons.

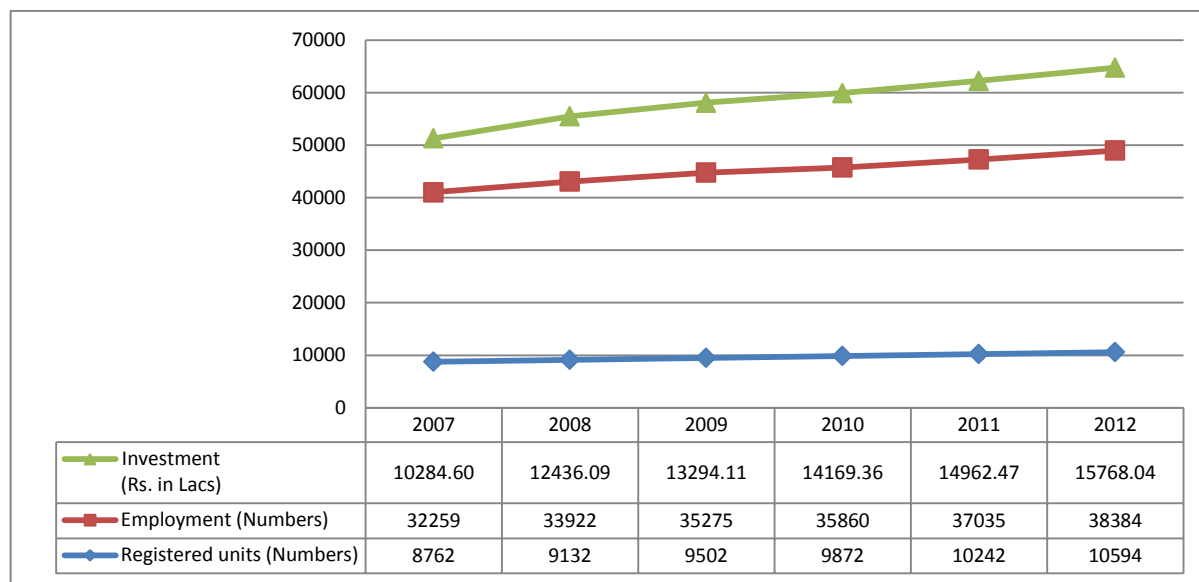


Figure 307 MSME trend analysis of the district Bharatpur

There has been a constant increasing trend in the investment of industries, employment and thus, the number of units as well. Apart from these, there were 03 large and medium scale industries engaging close to 291 employees with an investment of ~Rs 210 crore. Existing cottage and artisan units in the district are mainly based on handloom, forest, leather and livestock, industry. The development of cottage, village and artisan units is kept on important place in the development plans of the State. For the purpose easy loans on concessional rate of interest (by the financial institutes) and the subsidies are being provided to these units by state grant. Besides the above, the cottage/ village/house hold and artisan units are also being facilitated by way of availability the loan facilities on liberal terms of various schemes of the NABARD and SIDBI through the channels of Regional Rural Banks, commercial Banks, Co-operative Banks primary Land Development Banks etc.

5.25.5 Sector wise mapping of industries

District wise the existing sectors were mapped against the high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Bharatpur. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	1035	922.8	5210
Auto & Auto Components			
Chemical & chemical products	372	395.6	3320
Construction Material & Building Hardware			
Food Processing	08	13.3	120
Furniture & Furnishing	418	22.8	456
Leather & leather goods	680	134.2	1365
Textile & Handloom	114	22.8	456
Unorganized Sector	2418	72.5	4815
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
Repair & Services	1815	544.7	7180
Tourism, Travel, Hospitality & Trade			
Metal & Steel Based	1408	351.2	1804
Mines & Minerals	1705	1364.8	5980
Machinery, Electricals & Manufacturing	188	56.4	850
High	Units>300, investment>180, emp>1000		
Medium	Units>100, investment>100, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 233 Sector wise mapping of industries in Bharatpur as per DIC report, 2007

Sectors covered under sample survey
Construction Material & Building Hardware
Food Processing & Products
Machinery, Electricals & Manufacturing
Stone Querying, Cutting & Polishing
Textile & Handloom

Table 234 Break-up of industries in Bharatpur (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries were selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in Bharatpur district of Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table. The 10 industries were sampled for the survey to represent 5 major sectors that are prominent in the district as shown in the table. All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers.

5.25.6 Workforce Demand and Supply

Of the salient features of the workforce in the district were as follows:-

- b) The overall participation of population in economic activities was 47.97 % (dependency ratio of almost 1:1); with higher rate of male participation. There is steep decline in the main workers and increase in marginal workers showing the changing workforce engagement in the district.
- c) Rural employment could be majorly seen engaged in agricultural related jobs (75.5% engaged in primary sector), animal husbandry and fisheries followed by service sector engaging in repairs and electrical services.
- d) The workforce categorized under skilled, semi-skilled and unskilled showed the following trend in the sampled industries (as shown in the figure)

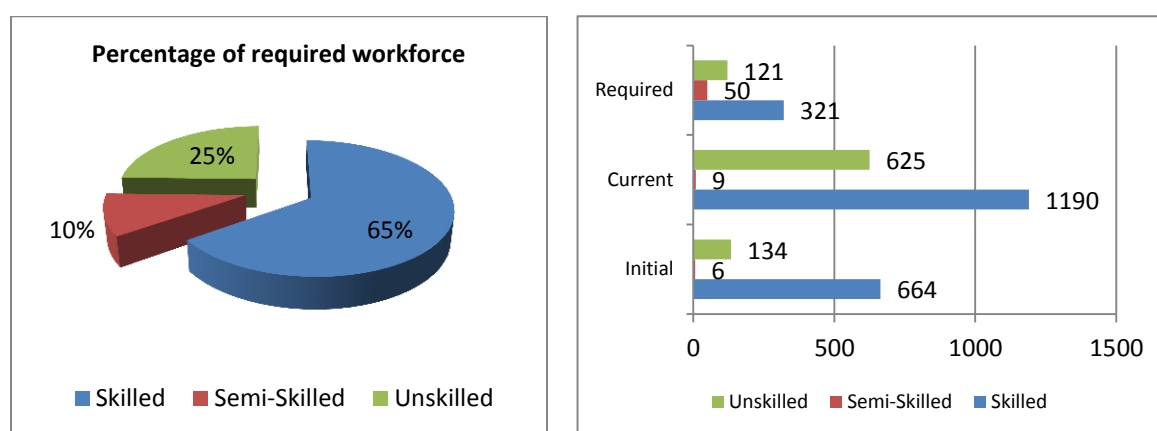


Figure 308 Workforce engagement under various stages and the percentage of required strength of workers (Bharatpur sample)

The demand for skilled workers continued to be on the higher side especially in textile industries and stone and quarrying industries. Incidentally, the demand and the current absorption of semi-skilled workers were lower than the skilled workers and similar was the requirement trend as well (just 10% required across industries).

- e) In the sample data on skilled workforce indicate a little increase in the workforce at present since establishment of industries across all the sectors except Textile & Handloom sector industries. Two industries covered under Textile & Handloom sector were very big and these industries have expanded their operation over the period of time. Expansion lead to more and more worker and this resulted to increase in workers' strength. Demand for skilled worker was also reported in these sector industries only.
- f) In case of unskilled workforce, Textile & Handloom sector industries have increased the current in-take of worker to almost six fold as compare to workers' count at the time of industry establishment. For all other sector industries, there is no rise in workers' count. Moreover, demand for more unskilled workforce was reported by Textile and Handloom sector only.

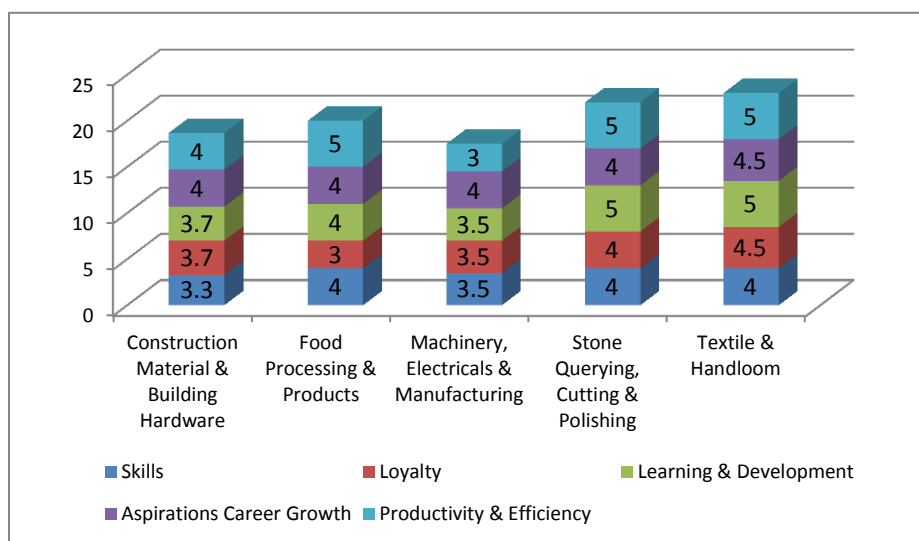


Figure 309 Employers demands in terms of expectations from workers (Bharatpur)

In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were skills and learning and development. Overall the employers were above average ranked across all the parameters showing the expectations set were high for the

workers and so the need for engaging skilled professional workforce was substantiated. Recruitment of required workers was done from known sources such as own workers which appeared to be the most reliable method of recruitment for most of the industries apart from textile & handloom sector industries who recruit the people from VT institutions and through employment exchange only.

5.25.7 Projected Workforce Demand

It has been observed that the percentage of skilled workers have multiplied over the years in small establishments but in large and medium there have been marginal increase in comparison. In general, the emerging occupations and new establishments demand for workers on year on year basis could be something on following lines:

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	580504	584909	583475	602034	603201	608879	616367	
SemiSkilled	47324	47683	47566	49079	49174	49637	50247	
Skilled	3155	3179	3171	3272	3278	3309	3350	
Total demand	630983	635770	634212	654384	655653	661825	669964	72%
Industry Sector								
Unskilled	47281	49967	50021	52222	52935	54237	55163	
SemiSkilled	21822	23062	23087	24102	24432	25032	25460	
Skilled	3637	3844	3848	4017	4072	4172	4243	
Total demand	72740	76872	76955	80341	81438	83441	84866	9%
Services Sector								
Unskilled	22895	23894	24473	25300	25718	26439	26969	
SemiSkilled	53421	55752	57105	59034	60010	61692	62927	
Skilled	76316	79645	81578	84334	85728	88131	89896	
Total demand	152632	159291	163156	168668	171456	176262	179792	19%
All Sectors								
Unskilled	650680	658769	657969	679556	681854	689555	698498	
SemiSkilled	122567	126496	127757	132215	133615	136361	138634	

Skilled	83108	86668	88597	91623	93078	95612	97489	
Total Demand	856355.4	871933	874323	903393	908548	921528	934622	100%

Table 235 Labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors- Bharatpur

There exists difference in the projections of semi-skilled workforce from the surveyed response due to the difference in defining skilled workforce as per the local industries and that of the standard practice. Appreciable workforce trends showcase the need of workforce in the services and industries increasing to 33% in secondary and tertiary sectors by 2017. Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components		Yellow	Red
Food processing	Yellow	Red	Red
Electronics Hardware	Yellow	Red	
Handloom & Handicrafts (includes wooden & paper)	Yellow	Red	Red
Textile & Garments	Green	Green	Yellow
Building, Hardware & Home Furnishings		Yellow	Red
Leather & Leather Goods	Yellow	Green	
IT or software	Yellow	Red	
ITES- BPO			
Chemical & Pharmaceuticals	Yellow	Green	Yellow
Tourism, Hospitality & Travel			
Building & Construction	Yellow	Yellow	Green
Transportation/logistics/warehousing & packaging		Green	Yellow
Education/ Skill Development	Green	Yellow	
Banking, Insurance & Finance	Yellow	Yellow	Red
Healthcare	Yellow	Yellow	Red
Machinery, Electricals & Manufacturing	Green	Yellow	Green
Mining, Minerals & Metals (includes stone quarrying)	Green	Yellow	Green
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 236 Workforce across various sectors by 2017- Bharatpur

5.25.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	13495	14300	14135	16112	16213	16910	17656
Semiskilled	11549	11890	12040	12303	12625	12944	13294
Skilled	2700	2886	3049	3323	3284	3592	3645

Table 237 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.34 lakh. Keeping in mind the high rate of workforce participation from unskilled masses and the existing demand of skilled workforce; the significance would be to target training to atleast 20,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation is not conducive enough to support industrial growth in Bharatpur. Investments are not good though growing at slower pace. Land for establishment of industries remained a problem. Water supply was not sufficient but supply of power was good. Availability of skilled man power was also one of the pronounced problems.
- The less number of VTIs are not fulfilling the needs of the industries. The trained person does not meet the requirement of the industries since they have lack of practical experience in the particular industrial knowledge.
- Demand for skilled workforce (skilled) would be increasing over next three to five years keeping in mind the increasing investment pattern of the district in the MSME for last five years. Major employment would be perceived in stones, marbles & textile industries. Cement & PVC- Plastic shall be considered as the emerging sectors. Manpower requirement of government establishments would also be providing sustainable livelihoods if addressed properly.
- Scope of self-employment and entrepreneurship in the district remains on a relatively lower side. MGNREGA contributes to the skill gap and availability of workforce for the industries.

5.25.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Bharatpur district to understand what the youth think, why they think the way they do and how does

society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth to provide deep insight and understanding on their aspirations and perceptions; of self and people associated/related with them.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 238 Youth Profile of sample in Bharatpur

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 38% of the youth covered were college educated and 62% had completed/drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

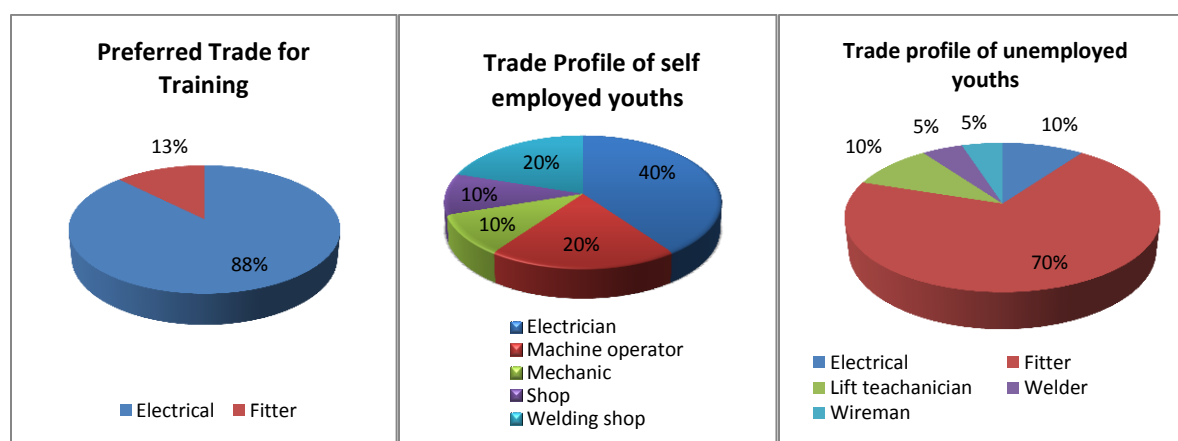


Figure 310 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Bharatpur

Among the respondents, inclination towards electrical and fitter courses was found very high as around 88% of the youth surveyed had chosen electrical as a preferred trade during his/her training at VTI. The reason for the same seems to be the demand for this course in the market. Second, most sought, trade was fitter and electrical i.e. 13%. Similarly, welder and mechanic were the courses most sought by the self-employed after electrical. The maximum numbers of unemployed youth (70% of sample) were from fitter clearly highlighting the surplus supply followed by electrical and technicians (10% each).

5.25.10 Youth's Perception

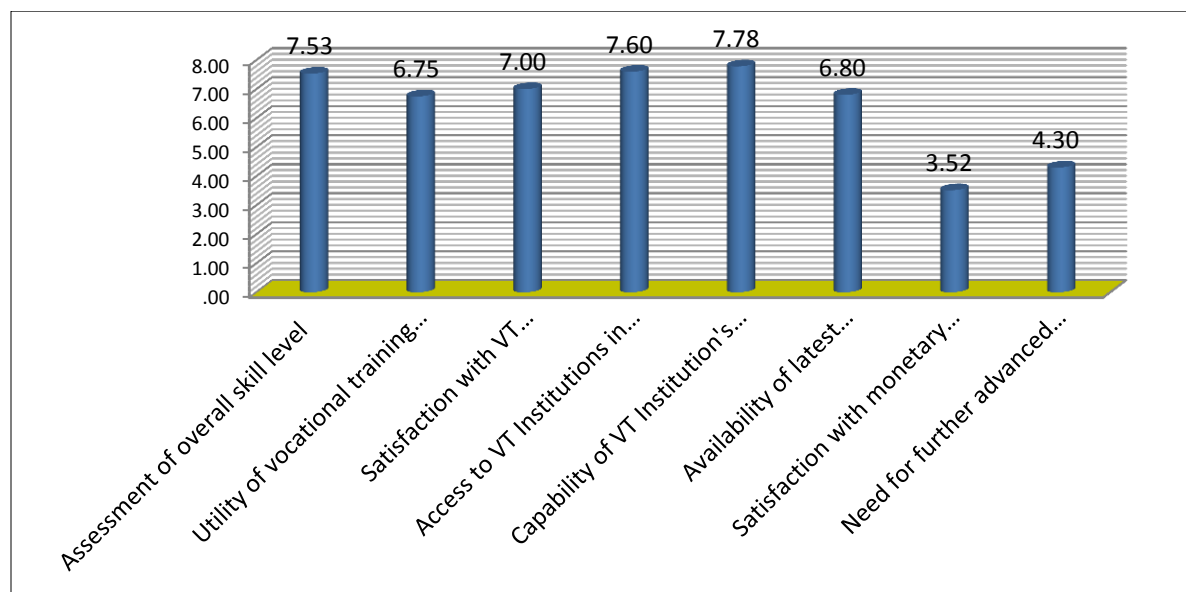


Figure 311 Bharatpur Youth's perception, need and aspirations –Sample Group

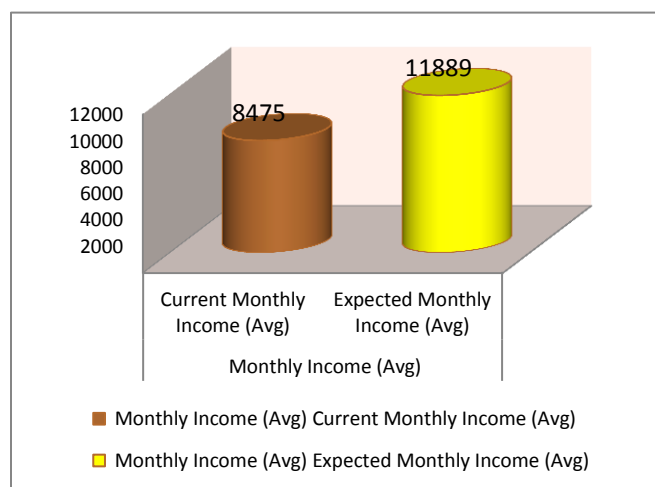


Figure 312 Income current and expected- sample group, Bharatpur

Satisfaction with current monetary returns and need for advanced training emerged as the two least rated factors on a scale of 10. As identified by the respondents, the satisfaction with VTI was overall rated 7 and above. The capability of VTIs faculty members and the utility of these training were among the most highly rated parameters among the group of youths. A minimum wage hike of Rs 3500 was expected among youths across various trades.

The general aspirations were mapped by conducting FGDs with the youths from various categories and the following responses were evidently represented by the group:

- Better salaries, work satisfaction, family security and learning new technologies (respective trades) were the desires and expectations of the youth from the employment
- Families expected from them to get engaged in government jobs or well-paid jobs in big firms
- Families supported the cause of getting vocational training in all the cases and no support was evidently provided by the banks, government etc.
- Communicative English and computer training were generally undertaken by local training centres for better job opportunities
- ITI training were more to get government jobs as 6 out of 10 felt that self-employment had least scope in terms of secured future and sustainable growth

- f) Most of the youths find difficulties taking up other trades post training and the adaptability remains low in terms of acceptance of other trades

5.25.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.34 lakh of skilled, unskilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at district and block level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

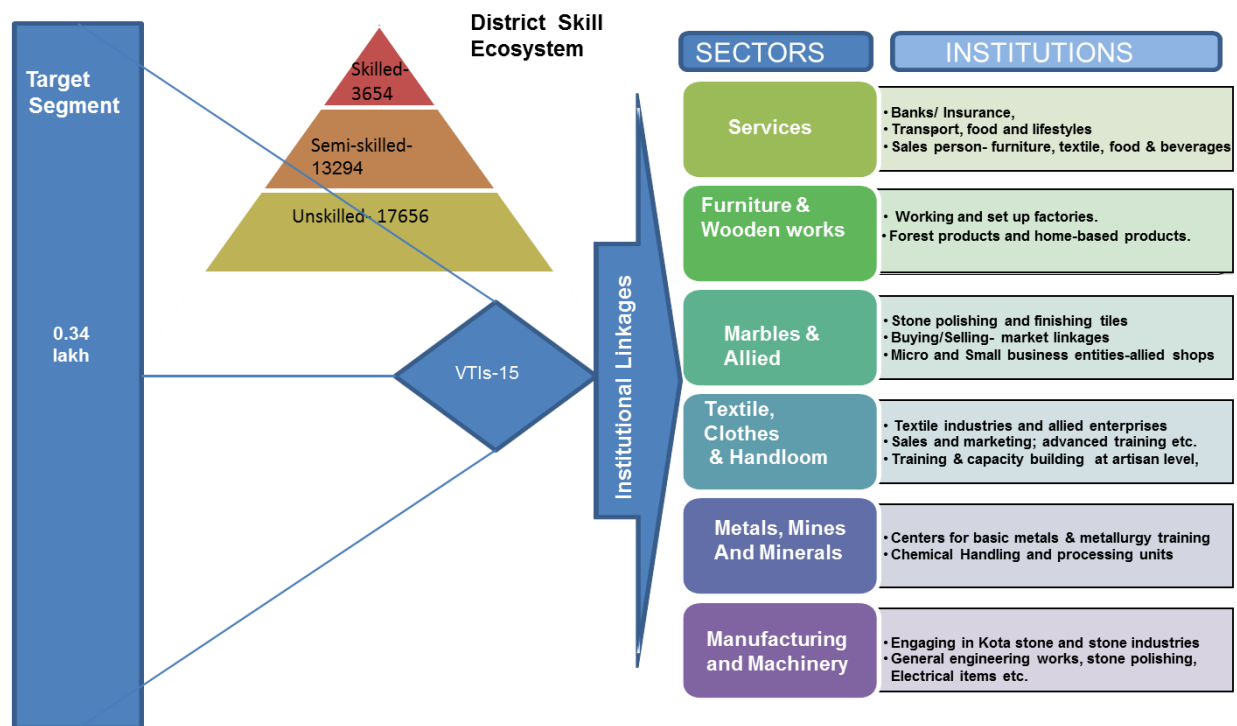


Figure 313 Optimization plan- Skill Development Eco System-Bharatpur

In order to keep the industrial area of Alwar on its consistent growth path, it would be important to maintain the skill workforce supply as per industries requirements. Customized training schedules and industry linkages would enable the VTIs to provide a more ready to be deployed workforce. Apart, the services sector shall require skilled workforce of education qualification of higher nature. In order to meet these requirements aspirants could be trained across various domains of service industry. Keeping in mind the readiness to migrate to NCR regions, the youths stand a good chance to earn a sustainable livelihood and skilling would provide them with better financial negotiation power. So training partners with life skills, communicative courses, and computer based courses should be encouraged along with mechanical (auto-related) courses by NSDC; also keeping in mind the high requirement of up-skilling in current industrial base.

District Skill Workforce Face Sheet-2012								
District	Baran			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	15	No. of Villages		1221	No. of Schools (elementary & sec.)		1891	
Basic Data								
Population (in '000s)	1223	Overall Literacy(in %)		67.38	Sex Ratio		926	
Decadal growth rate(in %)	19.82	Female Literacy(in %)		52.48	HDI Ranking (2008)		0.653 (12 th position)	
% Urban Population	16.84	Male Literacy(in %)		81.23	Per Capita Income (in Rs.)		19560	
Workers participation rate (2001)								
Workers participation rate (2001)	42.71	Share of primary sector (%)		77.20	Share of secondary & tertiary sector (%)		22.80	
No. of MSME/Industries	2519	Total Employment (in 000s)		3822	Total Investment (in lakhs)		10446.04	
No. of colleges (PG & Graduation)	9	Total graduates (In '00s)		6935	Total Post graduates (in '00s)		869	
No.of VTIs(registered ITI+Poly+ITC)				5	Total trainees trained (in '00s)		297	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	3406	3547	3601	3706	3748	3830	3882	0.54 lakhs
Semi-skilled workforce	7407	7933	8473	8931	9367	9941	10502	

5.26.1 Demographic Profile:

The District lies between 24° 25' and 25° 25' north altitude and from 72° 12' to 76° 26' longitude of Rajasthan State. M.P. state is situated in north east of Baran Distt. Jhalawar in south and Kota Distt in north west. It is situated at 265 meter high from sea level and average temperature maximum 48.6° and minimum 10.6° c. The total area of Distt is 6992 Sq.Km. in which 6909.82 Sq.Km. in rural and 82.18 Sq.Km. in urban areas. Baran is known as tribal area specially Sehariya tribe resides here. Around 283 villages of Kishanganj, Shahbad, Atru and Mangrol Tehsils are known as Sehariya Basti where about 90% population belongs to Sehariya According to a study there are about 80,000 Sehariya Trbals, Kalisindh, Parwati, Andheri, Banganga, Parwan rivers passes through south to north in the district.

It ranks as the 19th largest district of the state covering 2.04 % of the area of the state. With 175 the density of population in the state ranks at 26 (Census, 2011- Provisional). It stands 12th on the Human

Development Index (0.653) and 09th on the GDI (0.504). As per provisional census 2011 data, Baran accounts for population of 12.23 lakhs (1.78% of the state population and ranked 27th) with sex ratio of 926 (compared to 2001 census figure of 909) which was on the lower side of the state ratio of 926.

S.no	Section	Unit	Quantity /
			Value
1	LOCATION		
	Latitude	degree	25°06' N
	Longitude	degree	76°31' E
2	AREA		
	Total geographical area	sq km	6992
3	ADMINISTRATION		
	Tehsil	number	08
	Villages	number	1089
4	Land Use Pattern		
	Total Area	Hectares	699461
	Total Irrigated area	%	65.17
5	Population (census 2011)		
	Total population	number	1223921
	Men	number	635495
	Women	number	588426
	SC (2001)	%	17.72
	ST (2001)	%	21.23
6	Literacy (except 0-6 age group)		
	Total literate	percent	67.38
	Men	percent	81.23
	Women	percent	52.48
8	Energy		
	Electrified Villages	%	94.38
9	Industries (DIC, 2009)		
	Registered MSME units	number	2225
	Employed persons	number	6798
10	Education		
	Pre Primary & Primary Schools	number	841
	Upper Primary	number	666
	Secondary & Sr. Secondary	number	384
11	Higher Education / Others		
	Colleges	number	09
	IT I	number	05
	Polytechnic	number	0

Table 239 Baran District Profile- a snapshot

There was a decrease in the decadal growth of population of about 7% showing trends of population stabilization.

The worker participation rate in Baran was 42.7% (HDI, Rajasthan, 2008) with primary sector engaging close to 77.20% of the workforce and rest 22.8% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 15%. The literacy rate of Baran in 2011 is 67.3% which remained on the average with an increase of more than 6% than 2001 census results.

5.26.2 Education Infrastructure and Utilization

Baran's status in literacy was marked on the average and as per the state average and also marked by similar male and female literacy as that of the state. Though literacy has improved over the years but the overall figure as shown in the census 2011 (provisional) does not seem to do good for the state. There are good educational facilities in Baran district, which serve both townspeople and inhabitants of surrounding villages and towns in the hinterland. There are

Education	Baran	Rajasthan
Pre Primary & Primary	841	49546
Upper Primary	666	38889
Sec/ Sr Sec	384	19135

Table 240 Baran vs. Rajasthan education status

1040 pre-primary and primary schools, 679 upper primary schools and 270 secondary and senior secondary schools. Also it has 09 general degree colleges, and 04 industrial training institutes (ITI). The retention rate as per DISE, 2009-10 is just 53.4% from primary to upper primary suggesting that the drop outs are high and maximum youths of 10th or below are available for skilled training.

A total of over 6400 students enroll in various institutes at colleges and ITIs. At the intermediate college level, courses are available in the area of science, arts and commerce. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 07 partners (includes ITC, ITIs, government colleges & KVK) implementing skilling initiatives with 11 approved programs (07 are completed). A detailed view of the vocational training of Baran could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.26.3 VTI's demand across various trades

The existing scenario of VTIs in Baran is on the lower side considering the number of youths passing out; and seeking employment as skilled workforce. Private players have not yet penetrated in a big way but started with the formal education (private schools) space and few ITCs as well. As observed from the secondary data, the number of graduates and aspirants from ITI & polytechnics are also on the higher side compared to the number of training providers existing in the district. Therefore, the scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields of requirement and demand as per market shall be the need of the hour to address the skill shortage.

The primary survey was carried out in 10 sample VTIs (3 ITI & 7 ITC). The government VTIs/ ITI provided 05 different courses in training whereas it was 04 courses in the ITC. These courses were predominantly

engineering and self-employment based or to cater the local market needs. The details of the courses offered in the VTIs of Baran are represented in the below table:

Private VTI Trades (ITC)	Government VTI Trades (ITI)
Fitter	Electrical
Electrical	Fitter
Electronics	Mechanic (Diesel)
Mechanic (Diesel)	Welder
	Wireman

Table 241 Baran district's (sample study) courses offered

An analysis of the primary survey suggested the following results:

- Fitter was the most popular trade in ITI whereas electrical in ITCs as private VTIs offered more than 10 times seats in electrical trade as compare to ITI.
- In the ITIs, the number of actual trainees compared to the number of approved number of trainees was more or less same across all most all the trades except electrical and fitter where the difference is a bit high as compare to other trade.

high for electrical and diesel mechanic trades in private VTIs. Popularity of electrical trade applications was the highest but still the seats went unutilised.

On the other hand, gap between the actual and approved strengths of trainees was significantly

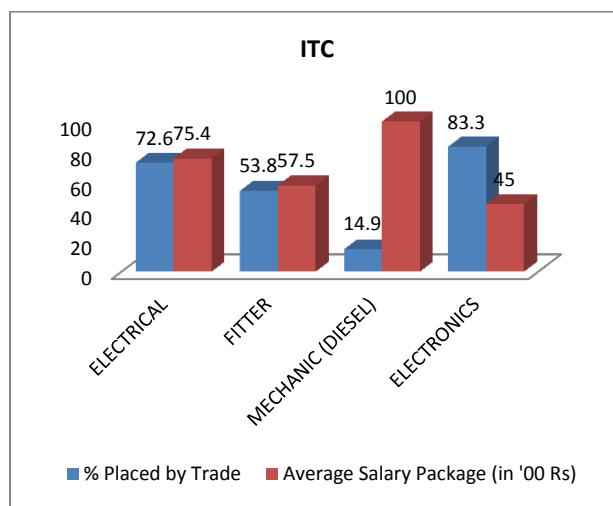
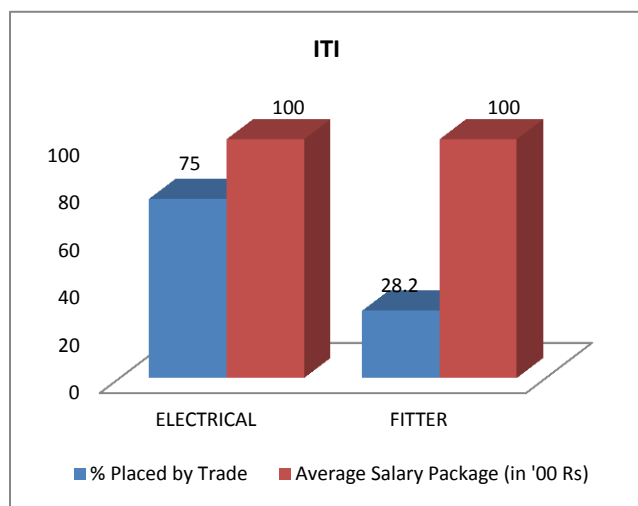


Figure 314 Baran district's (sample study) courses offered placements in government and private VTIs

An overview of placement records by trade in the VTIs surveyed indicated stronger prospects in most of the trades with the exception of diesel Mechanic trade. It was due to the fact that most of the diesel mechanic trade trainees seek self-employment. Electrical trade was most promising in terms of placement as it accounted for more than 70% of placement in the VTIs. Electronics trade clicked the highest placement percentage though with low average salary (Rs. 4500/month). ITCs had better placement scenario as most of the trades provided placement from the institute directly in the market.

Average salary/trainee indicates towards good prospect in electrical trade as ITIs have reported that their trainee got placement Rs. 10,000/month from their institute. While placements of trainees from the VTIs was more through a proactive approach to the industry by the VTIs and the trainees themselves, the private VTIs had adopted to the more contemporary approach of conducting campus interviews for placement by prior liaison with the industries. Though some of the trainee from private VTIs got their placement through employment exchange but it seems that employment exchanges were not playing a major role in placements.

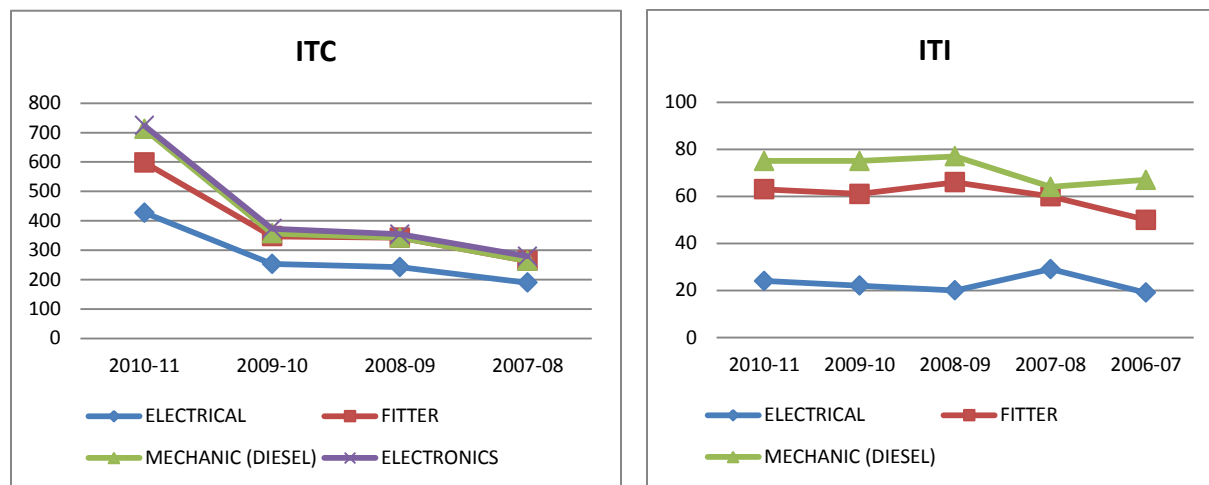


Figure 315 Baran district's (sample study) various trade's aspirant strength over a period in ITI & ITC

The trends across all the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the ITI whereas in ITCs the seats have increased considerably. ITCs increased maximum seats as the demand for electrical skilled persons was high. Diesel mechanic trade was a recent inclusion in the ITCs though it has not performed as expected in the ITI. Trades like welder and wireman did not have students registered for past four years in the ITI.

In terms of infrastructure all the government VTI had hostel facility for boys but none for girls whereas none of the private VTIs had any hostel facility for boys or girls. Transport facilities to trainees were absent in the ITI & ITCs. These VTIs were well upgraded with basic minimum standards of facilities available. Government VTIs appear to be under staffed in managerial academic fields where as private VTIs were well staffed.

5.26.4 Industry Mapping

Baran District is not rich from minerals point of view inspite of lime stone, snad stone etc. are found. No metallic ore of importance except Bauxite occures in the district. A small deposits of red clay, glass sand, dolomite and kankar are also found. The main mineral of the district is building stone. As such no commercial exploitation of these minerals is reported and no record is available.

MSME in Baran

According to D.I.C data (March, 2012), there were around **2519 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.8564.81 lakhs** providing employment to **8048** persons. It also has **02** registered large and medium industries engaging **274** persons with production value of **Rs. 896.04 crore**.

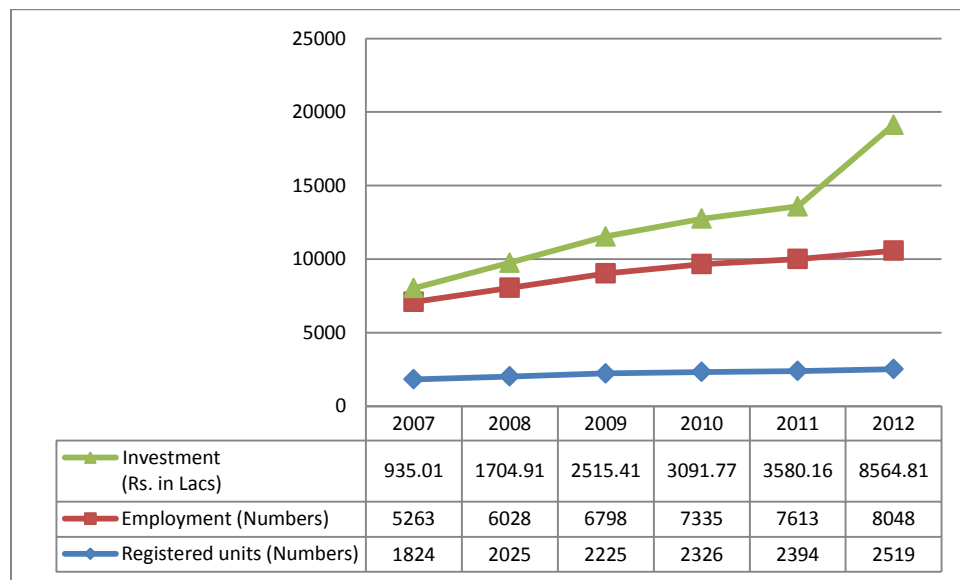


Figure 316 MSME trend analysis of the district Baran, DIC 2012

There has been a constant increasing trend in the investment of industries, units and thus, the number of employment as well. The large scale industries existed mainly in thermal and power plants with two coming up by Adani group. Repair & maintenance of plant equipments, Hardware, Electric cables, maintenance of utility services etc. were the ancillary set of industries. There are about 100 mistry type reparis shops providing cycle/automobile/welding services with potential for automobile workshop, general engineering workshop, tyre retreading, motor rewinding etc. The main existing industries were:

- Agriculture Based Industries
- Textiles
- Embroidery
- Jute and Jute Based Units
- Leather Units
- Metal Based Units
- Paper and Paper Products
- Readymade Garments
- Rubber and Plastic Units

There were clusters based on handloom, leather, wooden work and soap in the district which were largely manufacturing based.

5.26.5 Sector wise mapping of industries in the district

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Baran. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	53	2063.60	3949
Auto & Auto Components			
Chemical & chemical products	90	205.91	418
Construction Material & Building Hardware			
Food Processing			
Furniture & Furnshing	518	187.21	1128
Leather & leather goods	289	5.78	867
Textile	847	174.20	2133
Service Sector	554	526.55	1774
Building Construction & Real Estates			
Education & Skill Development			
Handloom	55	27.5	220
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging			
Mines, Metals & Minerals	821	1807.3	3475
Machinery, Electricals & Manufacturing	1237	348.63	3367
High	Units>500, investment>200,emp>400		
Medium	Units>100, investment>100, emp>200		
Low	Units> 10, investment> 10, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 242 Sector wise mapping of industries, Baran as per DIC report, 2007

There have been many MSME coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of mines and minerals, handloom and leather, agri and allied, furniture and manufacturing sector. There has been an increase of MSME from 2007-2012 with an increase in investment and employment.

In order to understand the trend in the existing market and industrial set up stratified sample of 13 industries was selected (depending on the availability of respondents' of the employer group set up).

Sectors covered under sample survey
AGRICULTURE & ALLIED
BUILDING & CONSTRUCTION
CONSTRUCTION MATERIAL & BUILDING HARDWARE
STONE QUERING, CUTTING & POLISHING
TEXTILE & HANDLOOM
TOURISM, TRAVEL, HOSPITALITY & TRADE
AGRICULTURE & ALLIED
BUILDING & CONSTRUCTION

The sample of employers consisted of senior level functionaries from 13 diverse industries located in the district. These industries were selected from large, medium and small industries covering various growth sectors of the district as shown in the table.

Table 243 Break-up of industries in Baran (Sample study)

5.26.6 Workforce Demand and Supply

The major workforce participation observed in Baran district over a period of two decades has been majorly engaged in primary sector and majorly has been an agrarian district. There has been declining trend of workforce share in primary sector, close to 7% and a gradual shift to secondary and tertiary sectors. Engagement in secondary and tertiary sector shows an increasing trend as per the industrial growth of the district and the educational sector provides the major structure to engage the majority of the unorganized sector. Looking at the present resources and skill set of the workforce furniture, computer based knowledge, electrical and leather, tiles and stones, textiles and the key to future employment for the district Kota in near future. The requirement for semi-skilled workforce was higher than the skilled workforce in the overall industries though a very marginal requirement was mentioned.

As observed in the primary survey the, the demand for semi-skilled workforce was high in stone cutting and construction and lowest in hospitality and tourism. Skilled workforce was more required by the stone quarrying and related industries, and textile industries. Unskilled workers were more or less engaged in stone related industries, construction and tourism. The below figure depicts the workforce requirements of the different sectors of the district in various phases of the industry:

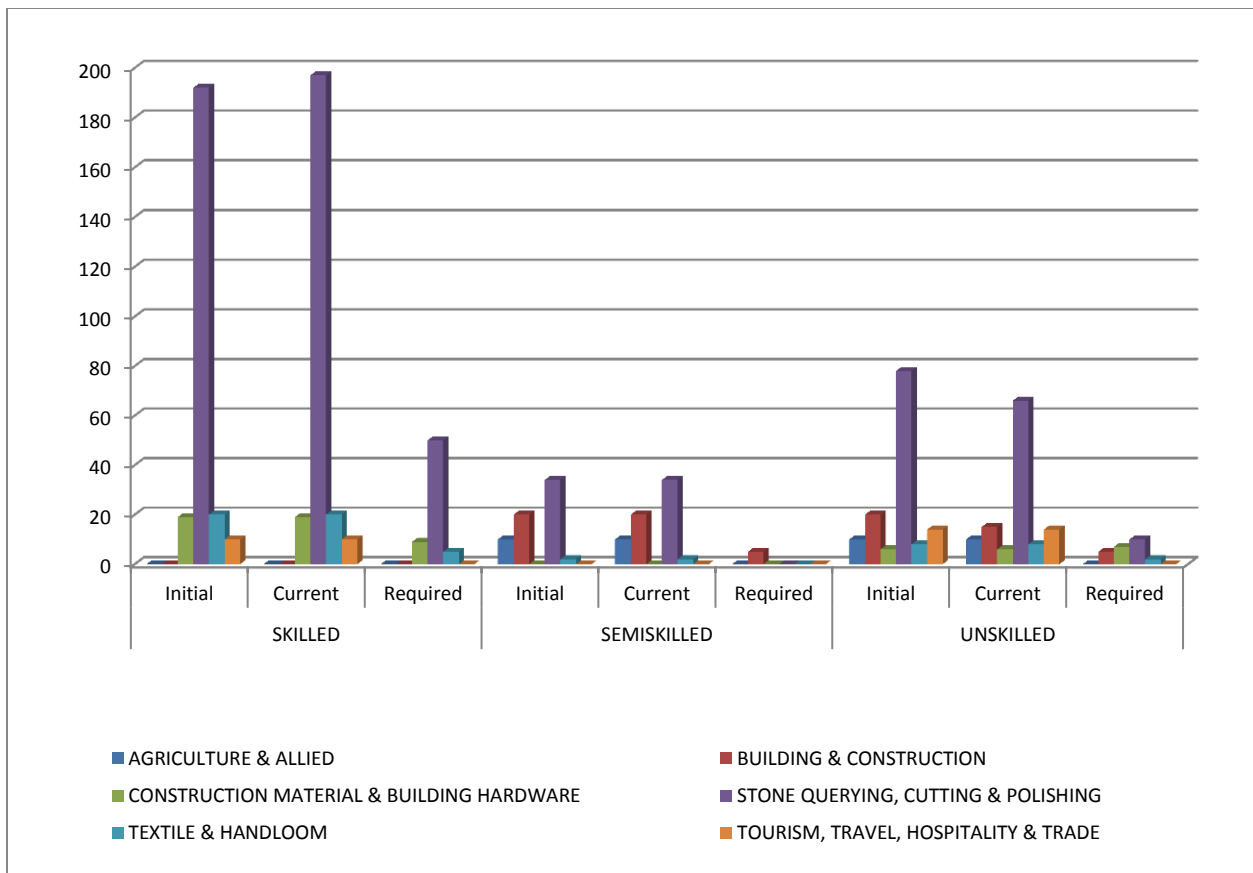


Figure 317 Fig 139: Status of skilled, semi-skilled workforce and unskilled workforce across sectors (Sample Baran) at various stages (initial, current and required)

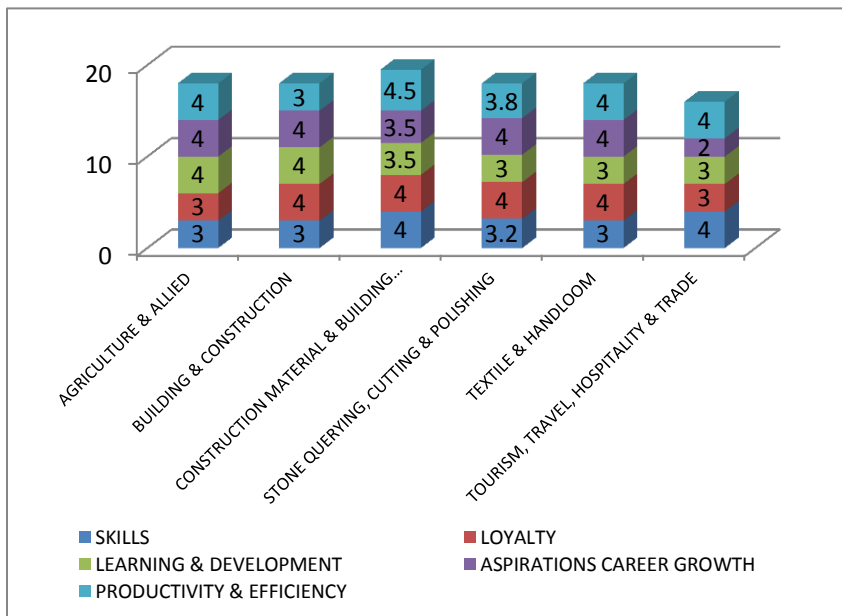


Figure 318 Employers demands in terms of expectations from workers (Baran)

In terms of industries' requirements and the employer's expectations the trends of the primary survey provides the major demand in terms of expectations from the employers were loyalty towards work and productivity/efficiency. On a scale of 5 the least scaled were skills and learning & development aspect of the employee. The figure showcases the employer's ranking of expectations on a scale of 5 across the various sectors.

5.26.7 Projected Workforce Demand

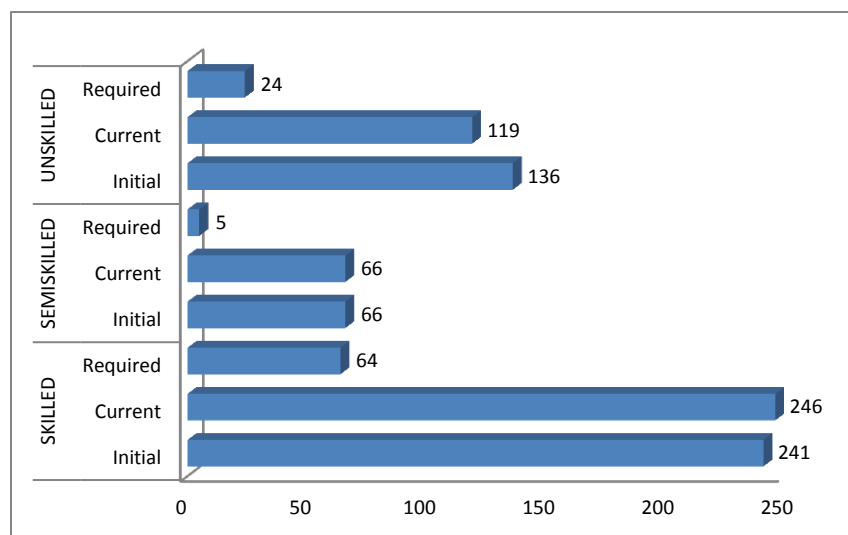


Figure 319 Status of workforce in terms of initial, current and required strength across sample industries of Baran

There has been marginal increase in the number of full time skilled workers over a period of time though majority of the industries interviewed feel the requirement of skilled workers over the semi-skilled workers for their full time roles. Apparently the number of semi-skilled workers category has not grown but the need for unskilled contract/ daily wage laborers was also low. A clear distinction could be observed

in the preference of only skilled workers as the industries felt the imperative need to engage more of skilled workforce over the semi-skilled and unskilled.

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers to address the current shortage and not with the intentions to expand.

The secondary analysis of the projected workforce for the district under the three major segments of agriculture, industries and services would be as follows:

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	284322	286321	288432	290388	292311	294453	296465	
SemiSkilled	41716	41244	41060	41663	42113	41905	42300	
Skilled	2781	2750	2737	2778	2808	2794	2820	
Total demand	328819	330315	332229	334829	337232	339152	341585	67%
Industry Sector								
Unskilled	36174	36654	37579	38713	38950	39635	40042	
SemiSkilled	12080	12764	12729	13252	13362	13678	13866	
Skilled	16013	16827	17621	18329	18927	19502	19982	
Total demand	64267	66245	67929	70294	71239	72814	73890	15%
Services Sector								

Unskilled	13567	14084	14404	14825	15067	15442	15726	
SemiSkilled	26990	28197	28943	29926	30489	31364	32026	
Skilled	38557	40281	41347	42752	43555	44806	45752	
Total demand	79113	82562	84695	87503	89110	91611	93504	18%
All Sectors								
Unskilled	334063	337060	340415	343926	346328	349529	352233	
SemiSkilled	80786	82205	82732	84841	85964	86947	88192	
Skilled	57351	59858	61706	63858	65290	67101	68554	
Total Demand	472199	479122	484853	492625	497581	503577	508979	100%

Table 244 Labor percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors Baran

The district shall continue to engage close to 33% of the workforce in secondary and tertiary sector with services sector close to 18% and then industries engaging 15% of the total workforce. These projections account till 2017 of the district based on the growth of service sectors as projected by DIC reports. Basis on the inputs received from sector wise expansion plans the workforce projections made across different categories highlight these distribution pattern. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Gems & Jewellery			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Organized Retail			
Real Estate			
Media, Entertainment, content creation, animation			
Education/ Skill Development			
Banking, Insurance & Finance			

Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 245 Workforce across various sectors by 2017- Baran

5.26.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis would factor in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging. The situation of skill gap for the district for 2010-11 to 2016-17 based on projections is represented in the table below (assumptions set in the annexure _ Projection Model):-

Workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	44112	42984	42817	41178	41130	40140	39510
Semiskilled	7407	7933	8473	8931	9367	9941	10502
Skilled	3406	3547	3601	3706	3748	3830	3882

Table 246 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

This upcoming conducive industrial and service sector environment would make Baran an important centre of the state industrialization keeping in mind the skilled requirement of the district. The skilled workforce requirement also shows comparatively very high requirement and just addressing the optimum utilization of current infrastructure and steady rate of inputs in education shall not resolving all the skill deficits of the district in all terms. Therefore, more dedicated skilling interventions shall be required. Looking at the current trends, the requirement of skilled workforce shall be almost equal to that of semi-skilled by keeping in mind the sectoral growth and the future of service industries.

5.26.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Baran district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table). 68% of the youth covered were college educated and 32% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government. The average age of the respondents was 26 years with majority (70%) interviewed at ITC and 30% at ITI.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 247 Youth Profile of sample in Baran

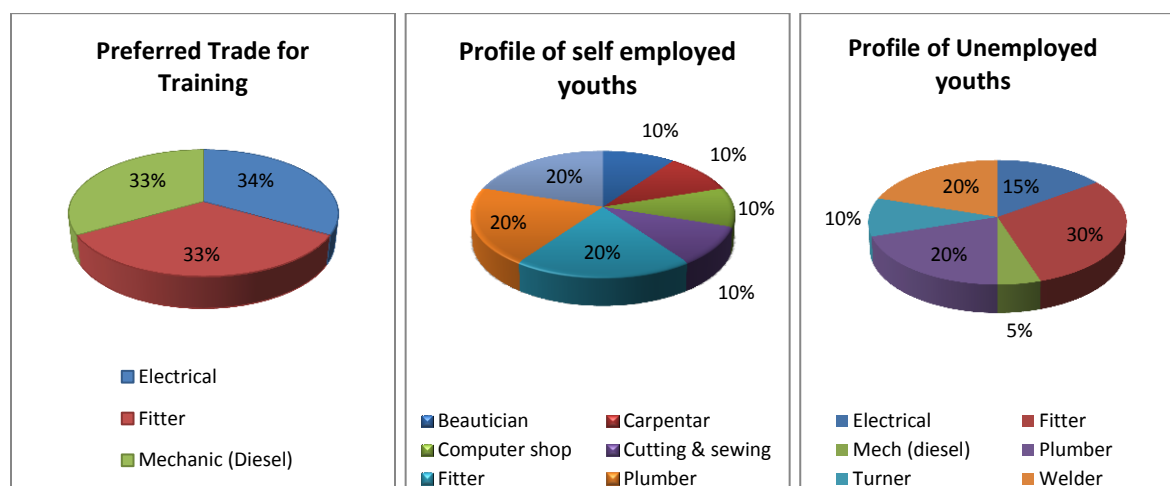


Figure 320 Profile of respondents (self-employed and unemployed) by trade in sample of Baran

Electrician, fitter and mechanic courses were the most popular trades as per the perceived demand in the market. The choice of trades selected for self-employment were in synchrony with the market demand as plumbing(20%), welding(20%) and fitting(20%) emerged as leading choices among the youths. Unemployed youths majorly were from fitter trade followed by plumber and welder. The relevance of these courses in terms of placement remained low as stated earlier.

5.26.10 Youth's Perception

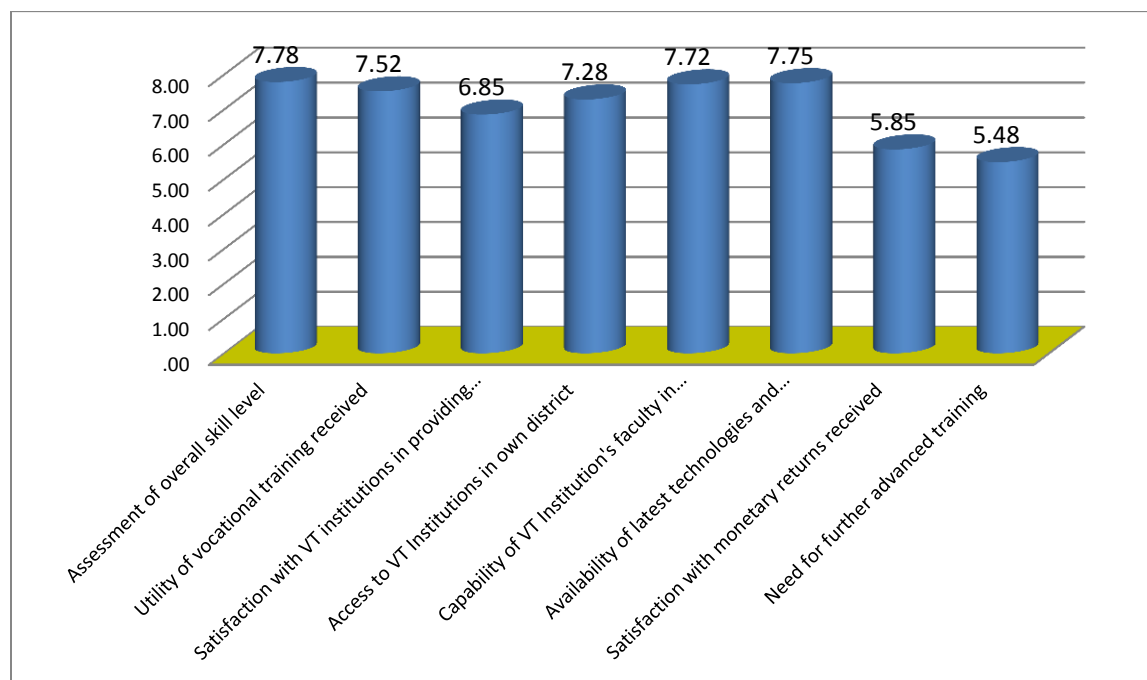


Figure 321 Baran Youth's perception, need and aspirations –Sample Group

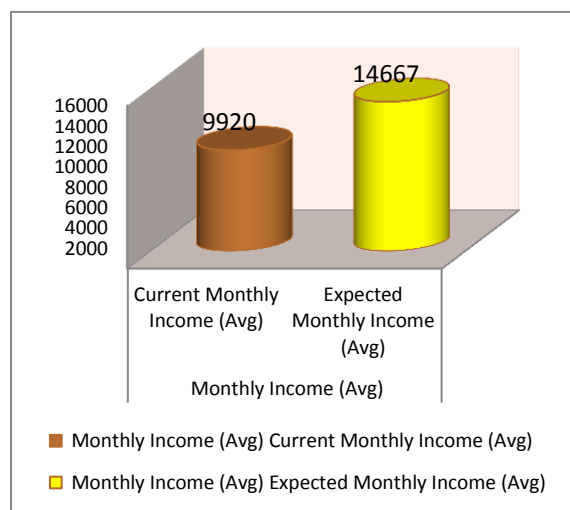


Figure 322 Income current and expected- sample group, Baran

Satisfaction with current monetary returns and need for advanced training emerged as the two deterring factors identified by the respondents as the basic need to be addressed by the government and industry requirements. Better skilling initiatives of the district do relate with the capabilities of the faculty and the utility of the vocational training as an important success factor.

There were pronounced needs for further advanced training provided for up-skilling and basic skilling in computer applications. Expected monthly salaries required a change of at least Rs. 4500/month approximately as skilled workforce among 80% of the sampled youth. 65% of the respondents did not receive any increment. The pay scale after skilling and

few months of work experience enables for better financial negotiations among the youth. Youth expected to join a job, either government (preferred) or private. Electricity boards, thermal power station, railways, etc. were the preferred sectors. Need for communicative English was realized for interviews and formal documentation only. Self-employment meant risk taking and less support from banks further accentuates the difficulties. Lack of awareness programs was evident in terms of commodity risk and competitive market scenario.

5.26.11 Optimization Plan

The optimization plan would be structured at three tier level of district, state and NSDC. The preliminary gap finding, projection and analysis would be presented at every district level which would in turn determine the action plan of the state as represented in the below diagram. The overall scenario of the state would finally give major leads to apex bodies like NSDC for formulation of state specific portfolios to suit the requirements and address the future needs of the state in the skilled workforce.

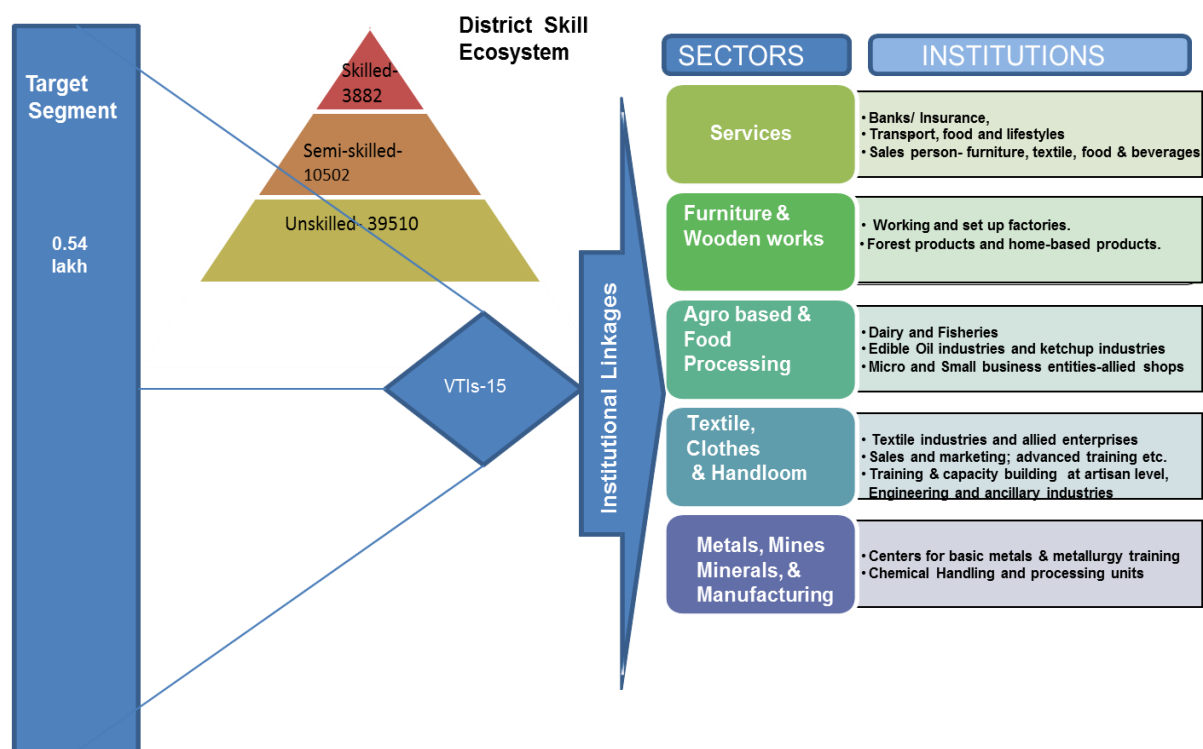


Figure 323 Optimization plan- Baran Skill Eco-system 2017

The high priority sector which shall need maximum number of skilled workforce and less of semi-skilled workers shall be required in the resource based industries of the district. The demand based industries shall engage more of skilled resources in data processing, transport and logistics, cement, repair industries etc. The health and education sector would primarily engage the more highly skilled workforce.

District Skill Workforce Face Sheet-2012								
District	Banswara			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	13	No. of Villages		1513	No. of Schools (elementary & sec.)		3445	
Basic Data								
Population (in '000s)	1421	Overall Literacy(in %)		57.20	Sex Ratio		979	
Decadal growth rate(in %)	26.58	Female Literacy(in %)		43.47	HDI Ranking (2008)		0.425 (31 st position)	
% Urban Population	7.15	Male Literacy(in %)		70.80	Per Capita Income (in Rs.)		11825	
Workers participation rate (2001)								
Workers participation rate (2001)	47.24	Share of primary sector (%)		85.50	Share of secondary & tertiary sector (%)		14.50	
No. of MSME/Industries	9092	Total Employment (in 000s)		25228	Total Investment (in lakhs)		9708.4	
No. of colleges (PG & Graduation)	16	Total graduates (In '00s)		5931	Total Post graduates (in '00s)		476	
No.of VTIs(registered ITI+Poly+ITC)				3	Total trainees trained (in '00s)		822	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	8795	9020	9278	9443	9643	9844	10713	0.58 lakhs
Semi-skilled workforce	11683	13832	14106	13906	13164	13875	13320	

5.27.1 Demographic Profile:

Banswara District is a district of the state of Rajasthan in western India with its administrative headquarters as Banswara city. The district is bordered with Jaipur district on the north, Sawai Madhopur district on the east, Kota district on the southeast, Baran district on the south, by Bhilwara district on the southwest and by Ajmer district on the west. Banswara was also the capital city of the princely state of British India from 1817 to 1947.

In 2006 the Ministry of Panchayati Raj named Banswara one of the country's 250 most backward districts (out of a total of 640). It is one of the twelve districts in Rajasthan currently receiving funds from the Backward Regions Grant Fund Programme (BRGF). In 2011, Banswara had population of 1,421,711 of which male and female were 7,29,390 and 692,321 respectively. Banswara district population constituted 2.07 percent of total state population. There was change of 17.33 percent in the population compared to population as per 2001.

It ranks as the 18th largest district of the state covering

2.10 % of the area of the state. With just 198 the density of population in the state ranks at 20th (Census, 2011- Provisional). It stands 24th on the Human Development Index (0.571) and 21st on the GDI

S.no	Section	Unit	Quantity
			Value
1	LOCATION		
	Latitude	degree	26°24' N
	Longitude	degree	76°16' E
2	AREA		
	Total geographical area	sq km	7194
3	ADMINISTRATION		
	Tehsil	number	7
	Villages	number	1183
4	Land Use Pattern		
	Total Area	Hectare	717958
	Total Irrigated area	Hectare	186198
5	Population (census 2011, provisional)		
	Total population	number	1421711
	Men	number	729390
	Women	number	692321
	SC (2001)	number	233084
	ST (2001)	number	145891
6	Literacy (except 0-6 age group)		
	Total literate	percent	62.46
	Men	percent	78.27
8	Energy		
	Electrified Villages	number	984
	Industries (DIC, 2009)		
9	Registered MSME units	number	7867
	Employed persons	number	26840
10	Education		
	Pre Primary & Primary Schools	numbe	1077
	Upper Primary	numbe	944
	Secondary & Sr. Secondary	numbe	410
11	Higher Education / Others		
	Colleges	numbe	24
	I T I	numbe	04
	Polytechnic	numbe	0

Table 248 Banswara District Profile- a snapshot

(0.475). It was observed that though the district fares quiet low on education, and health index (28th and 25th respectively) which pulls the district on overall HDI ranking to the lower side of the state. As per provisional census 2011 data, Banswara stood at 949 in sex ratio (compared to 2001 census figure of 934) which still is on the higher side of the state ratio of 926. The worker participation rate in Banswara was 43.96% (HDI, Rajasthan, 2008) with primary sector engaging close to 68.70% of the workforce and rest 31.30% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 16% (Urban- 31.02% & Rural- 47.38%). The average literacy rate of Banswara in 2011 was 62.46 compared to 51.97 of 2001. Gender wise, male and female literacy were 78.27 and 46.01 respectively in the provisional census data.

5.27.2 Education Infrastructure and Utilization

Banswara's status in literacy was marked lower than the state average with just 62.46 and female literacy marking the low of 46.01. One of the major challenges in education in the area, like in other parts of the state, has been universalization of education especially for the girl child and other socially deprived communities. Banswara has also been among the districts with high drop-out rates as per HDI, 2008. According to Census 2011 provisional Banswara has a total of 2431 schools which as per DISE reports have low retention rates and high drop outs. The enrolment rate of students, especially girl children in schools of Banswara was quiet low which also contributes/reflects to the drop in literacy rates and current status of education.

Education	Banswara	Rajasthan
Pre Primary & Primary	1077	49546
Upper Primary	944	38889
Sec/ Sr Sec	410	19135

Table 249 Banswara vs. Rajasthan education status

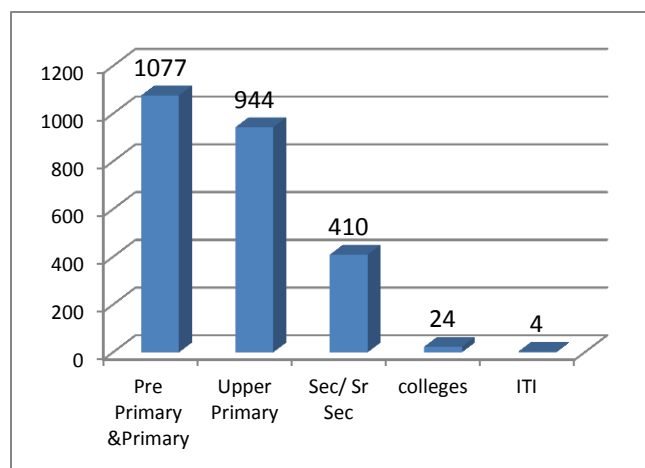


Figure 324 Number of Schools, Colleges, ITI -2009-10, Banswara

A total of over 7250 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. A private management college caters for the business administration knowledge. There were just a total of four registered vocational training institutes in Banswara district. A total of just above 220 aspirants got enrolled in 2009-10 in the registered training institutes with an average of just 68/institute/year. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 02 partners (includes 01 government school and 01 NGO) implementing skilling initiatives with

05 approved programs (03 are completed). A detailed view of the vocational training of Banswara could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.27.3 VTI's demand across various trades in Banswara district

The existing scenario of VTIs in Banswara was certainly on the lower side considering the number of youths passing out and the existing vocational training institutes in the district. Private players have not yet ventured in a big way eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields as follows:

- a) **Computer Based Accountancy and computer operators:** With number of small scale industries coming up in the region the educated youth having the basic education levels could be engaged in computer courses for accountancy (VAT & TALLY) and data entry operators for industries and government development projects.
- b) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is cement, banks/insurance or agro based products firms which are growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field
- c) **Agriculture & Allied services:** The scope in dairy, veterinary staff, cane products, livestock etc. would engage good number of youths in rural context. Apart from these, artisans for carpet making, embroidery, art works, leather, jewellery making would engage a substantial workforce who needs to be skilled.
- d) **Driving, Repair and Services:** With the increase in electric goods, electricians, mechanics and drivers in workshops and formal drivers would be the need. Good number of services would require hands skilled in transport and logistics, courier services and fashion designing/ ladies beauticians etc.

The government VTIs interviewed in the survey was zero and ten were from the private. The courses which were offered by these VTIs were predominantly self-employment engineering based largely to cater the local market needs. The details of the courses offered in the VTIs of Banswara are represented as follows:

Pvt. VTI Trades
Electrical
Fitter
Mechanic (Diesel)
Instrument Mechanic
Mechanical

Table 250 Banswara district's (sample study) courses offered

The private VTIs sampled for the sample study offer 05 different trades in for training. Electrical trade was the most popular trade in VTIs as it had the highest batch strength. The difference between actual trainees and approved trainees, in VTI, was varying from 0 to 107 in number, highest difference being registered in case of electrical course. So, the case of high preference was more infused by the running VTIs as the seats still were unutilized in electrical trade. Instrument mechanic and mechanical trade had no difference. An overview of placement records by trade in the VTIs indicates poor prospects in almost all of the trades as the highest placement percentage was for the trade mechanic (diesel) with 62.5% and the lowest was for fitter with 37.9% only. Around 52% of the total batch strength across all the

trades got placed through their institutes. In terms of average salary/trainee, the highest paid trade was Fitter (Rs.7,800/month) and the lowest was for the trade instrument mechanic with Rs 4500/month. Placements of trainees were more because of the proactive approach to the industry by the VTIs trainees and a major strength got placed through campus interviews. No role could be seen being played by employment exchange.

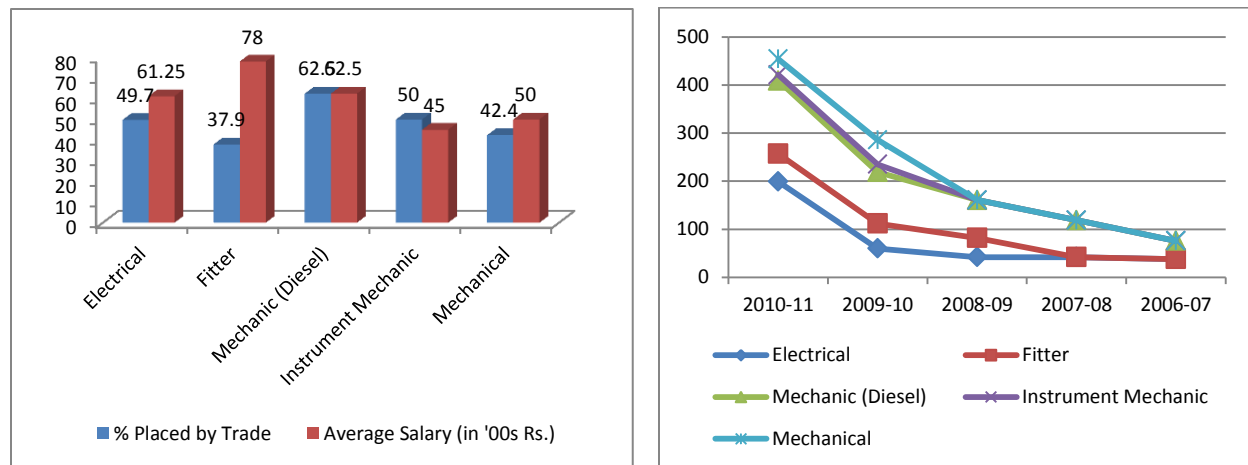


Figure 325 Banswara district's (sample study) courses enrolment status of government and private VTIs

There has been steady increase for all the courses offered in terms of students enrolment. The courses like mechanical and instrument mechanic were more recent additions by the VTIs. These VTIs were adequately staffed and had equipped with the upgraded facilities of training.

5.27.4 Industry Mapping

Banswara's significant population has been engaged in non-farm activities. Construction and mining & manufacturing have been the major propellers. Share of income from primary sector has been due to the livestock sector. Apart from agriculture, sub sectors like dairy, wool and fisheries have contributed in major terms.

Banswara has six industrial areas marked by RIICO. Banswara district endowed with a number of non-metallic of which garnet, Silica sand, quartz and soap are found in abundance. Besides these minerals, feldspar, mica and corundum are also found but in small quantities. In addition to these major minerals, the minor minerals viz. bricks clay masonry stone, patti-Katla etc. are also mined in Banswara district.

MSME in Banswara

According to D.I.C data (March, 2012), there were around **9092 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.9708.31 lakhs** providing employment to **25228 persons**. Also Banswara has **08** large and medium industries employing over **16000** persons with the production value of **Rs 277.66 crores**.

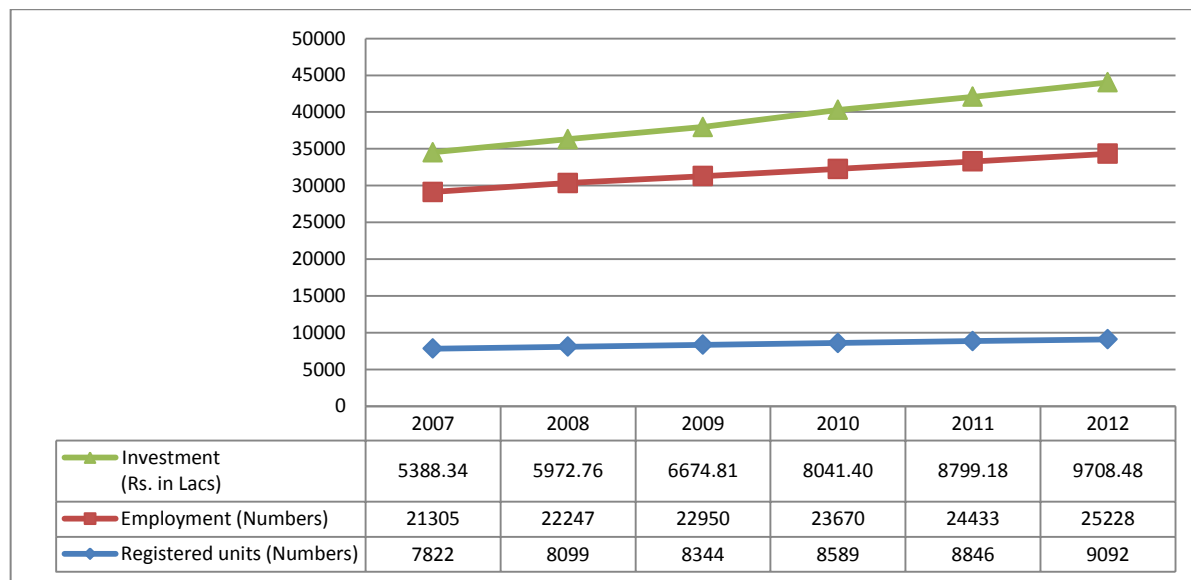


Figure 326 MSME trend analysis of the district Banswara

There has been a constant increasing trend in the investment of industries, units post 2007 and thus, the number of employees as well. Apart from the industries, a number of families depend on the following trades and are generally marked under the Khadi & village industries. These provide subsidiary employment and supplementary income to the villagers.

In the district Power are showing 15 % - 20 % annual growth due to their strategic location. In the Textile Group still use the old technology still in cost competitiveness due to its professional managements and buyers requirements. Some companies have been facing negative growth due to obsolete technology and no demand of the product in the market.

Textile based industries also obtain repair maintenance and general fabrication facilities from local MSMEs. The large & medium scale industries in Banswara district engaged in the manufacture of Textile & Marble small scale units. It is suggested to be set up sum textile ancillary units in the Textile Sector in Banswara like Bleaching of yarn, printing etc. The major exportable items were yarn, marble slabs & tiles.

At present in Bansawara 29 data processing & 18 offset printing press & general press and 8 large & medium enterprises registered with DIC, Banswara, so that DTP Processing and offset printing press and general engineering workshop has been suggested to set up new service industry at Banswara, Garhi Talwara, Ghatol and panchayat samiti level.

The potential service industries shall be as follows:

1. Printing Press Offset
2. Data Processing
3. Engineering Workshop
4. Automobile Workshop
5. Fabrication
6. Beauty Care

5.27.5 Sector wise mapping of industries in across Banswara

Banswara is considered to be industrially backward district. District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Banswara. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections** like **high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	862	3909.56	3097
Forest Based	1338	816.09	4665
Animal Husbandry	2000	817.2	4240
Auto & Auto Components			
Chemical & chemical products	59	189.40	315
Construction Material & Building Hardware	98	190.81	698
Food Processing			
Furniture & Furnishing	1215	354.19	4298
Leather & leather goods	1966	654.80	4141
Textile & Handloom	1260	1409.03	6502
Unorganized Sector (services & repairing included)	1142	2840.01	6105
Building Construction & Real Estates			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging			
Mines, Metals & Minerals	1277	2162.45	4641
Machinery, Electricals & Manufacturing	742	2038.39	2204
High	Units>200, investment>1000,emp>1000		
Medium	Units>100, investment>200, emp>750		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 251 Sector wise mapping of industries in Banswara as per DIC report, 2007

There have been many SSI coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of agro based-forest based products, mineral based, cloth based, engineering based and service sectors. A substantially good number of service providers form the backbone of the district and are engaged in various industries, households etc. as daily wagers.

Sectors covered under sample survey
Agriculture & Allied
Food Processing & Products
Leather & Leather Goods
Textile & Handloom

Table 252 Breakup of industries in Banswara (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 13 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in the Banswara district of Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table above. A total of 13 industries were sampled for the survey to represent 04 major sectors that are prominent in the district. Availability of skilled, semi-skilled and unskilled workers according to their numbers in the sampled industries (segregated under specific sectors) at the time of the establishment of the industry, their present strength and their required strength as projected by the industries was evaluated (shall be discussed in sections ahead).

5.27.6 Workforce Demand and Supply

The major workforce participation observed in Banswara district over a period of two decades has been majorly as cultivators/ agricultural laborers and has had a decline by 8% over the period. There has been declining trend of workforce share in primary sector from 76.20% to 68.70% from 1991-2001. Therefore, the increase in the share of secondary and tertiary has been quiet significant for the same period keeping the context of the district in mind. In 2001, Banswara had 1,37,443 main workers other than cultivators and agricultural labourers. Majority of them were engaged in crafts and related trades (27.36%) followed by service workers (17.57%), elementary occupations (mining, manufacturing and transport- 14.91%). The demand for the skilled craftsmen and service providers was seemingly high keeping the secondary and tertiary sectors demands. In industrial outfits the need of skilled and semi-skilled workforce could be seen across the sectors as per the primary survey results as well as shown the figure below:-

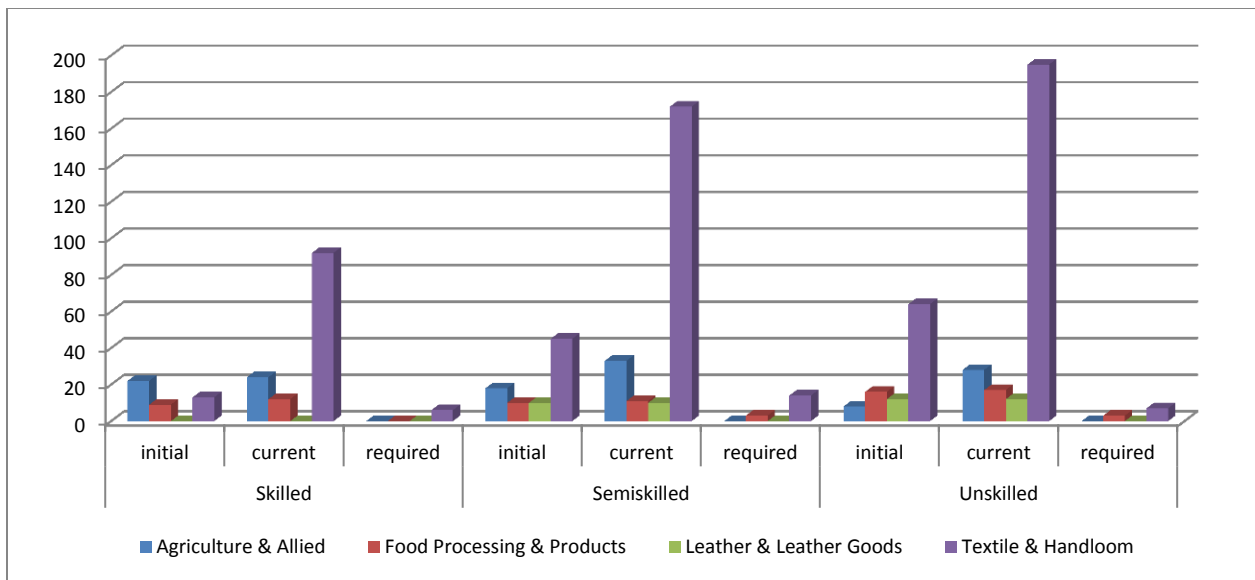


Figure 327 Workforce engagement in the industries across sectors categorized at various stages of the industry life cycle (Sample survey- Banswara)

While leather & leather goods sector industries could not provide details of their skilled worker strengths, in three of the other sectors (Agriculture & Allied, Food Processing & Products and Textile), a substantial increase in worker in-take was reported by the industries. Though these sectors have expanded well in terms of worker absorption but the future requirements of skilled workers was marginal. As reported by industries semiskilled workforce of textile & handloom sector saw steep increase in workers strength over the years whereas other sector also saw a substantial increase in current in-take of semiskilled workers. The unskilled worker base and future requirement for unskilled workers was very much in line with skilled and semiskilled workers category.

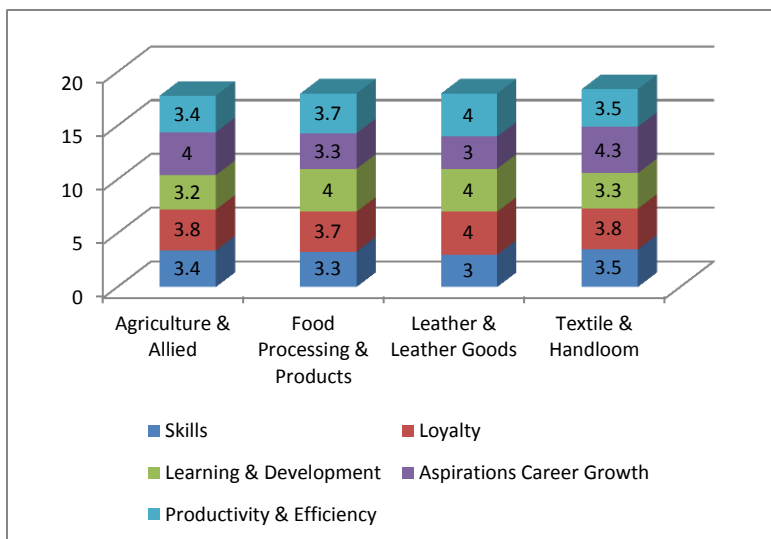


Figure 328 Employers demands in terms of expectations from workers- Banswara

In terms of industries' requirements and the employers' expectations from its workforce, market trends the primary survey productivity and efficiency and learning and development of the employees were the two leading parameters as per the ranking (scale of 5). The leather sector was more demanding in terms of expectations from the workers considering all the parameters of a skilled/ semi-skilled workforce. Other sectors also rated their expectations above average in most of the traits showcasing the interest to engage more

professional workforce.

5.27.7 Projected Workforce Demand

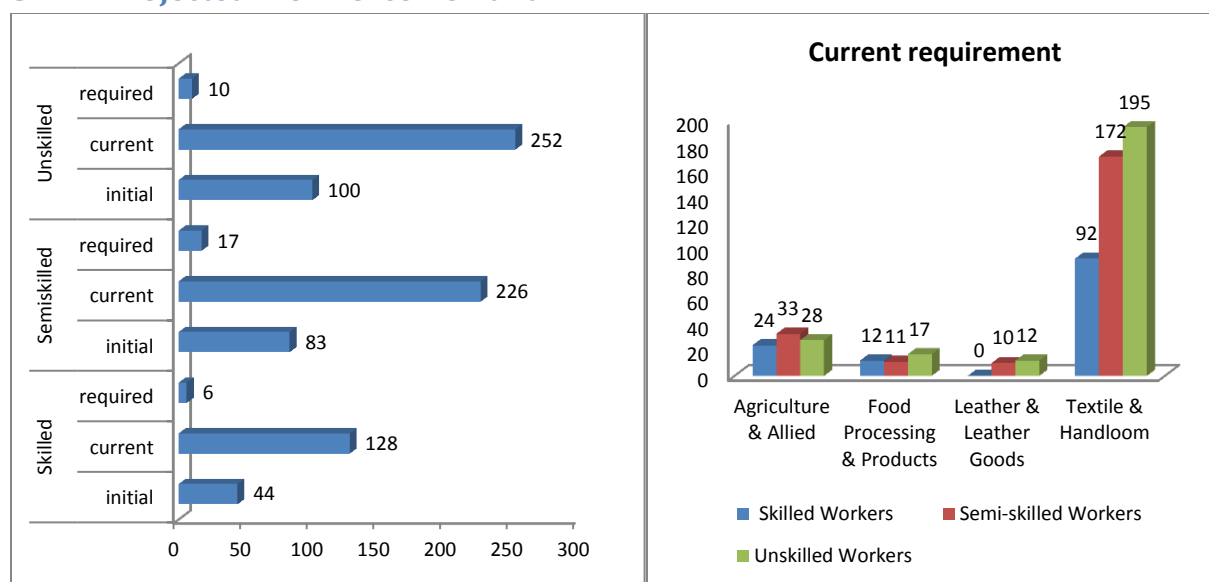


Figure 329 Status of workforce in terms of initial, current and required strength & sectors across sample industries of Banswara

As reported by industries for semiskilled workforce, across all the industries there has been increased engagement of the workers in all the categories of skilled, semi-skilled and unskilled workers. The current strength over the years has atleast doubled across all the segments of skilled to unskilled and the future requirement presently showcases a marginal increase (only to fulfil the current gap). Therefore, plans of expansion could not be high in terms of worker absorption. In current scenario, industries employ 21% of skilled workforce, 37% of semi-skilled workforce and 42% on unskilled workforce, as per the data from the primary survey. This varies from sector to sector as shown in the figure above.

A clear distinction could be observed in the preference of only semi-skilled workers for the contract and daily wage worker category as the industries had increased the absorption of semi-skilled by close to 76.8% and the incremental requirement of close to 60%. The clear observation made was in the engagement of workers at the time industry establishment which had huge disparity in skilled and unskilled workforce. Earlier industries were more dependent on semi-skilled workforce for their day to day operation. Slowly the shift was to the skilled and the reduction of unskilled workers as well. It continues in the present context as well for the district.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	353255	367551	379939	377178	378155	388278	389872	
Semiskilled	28798	29963	30973	30748	30828	31653	31783	
Skilled	1920	1998	2065	2050	2055	2110	2119	
Total demand	383973	399512	412977	409976	411038	422041	423774	67%

Industry Sector							
Unskilled	34100	36072	35779	36963	37406	38122	38530
Semiskilled	15739	16649	16513	17060	17264	17595	17783
Skilled	2623	2775	2752	2843	2877	2932	2964
Total demand	52462	55496	55045	56866	57547	58649	59277
							12%
Services Sector							
Unskilled	13420	14225	14706	15176	15440	15995	16324
Semiskilled	31313	33193	34314	35410	36027	37322	38090
Skilled	44733	47418	49020	50586	51466	53317	54414
Total demand	89465	94836	98041	101172	102933	106635	108829
							21%
All Sectors							
Unskilled	400775	417849	430424	429316	431000	442395	444726
Semiskilled	75849	79805	81801	83218	84118	86570	87656
Skilled	49276	52190	53837	55479	56399	58360	59497
Total Demand	525900	549844	566063	568013	571518	587325	591880
							100%

Table 253 Projected labor percentage of workforce demand requirement till 2017 across sectors- Banskara

Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Agriculture and Allied			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			

High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 254 Workforce across various sectors by 2017- Banswara

5.27.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	8349	10406	22639	20801	21968	33069	34803
Semiskilled	11683	13832	14106	13906	13164	13875	13320
Skilled	8795	9020	9278	9443	9643	9844	10713

Table 255 Representation of projected Skilled/ Semi-skilled & Unskilled workforce gap 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.5 lakh. Keeping in mind the growth rate of the district and the workforce participation from unskilled masses; the significance would be to target training to atleast 25,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced in future but more would depend upon the upcoming service industries to absorb the semi-skilled workforce.

5.27.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Banswara district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 71.7% of the youth covered were college educated and 28.3% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

Table 256 Youth Profile of sample in Banswara

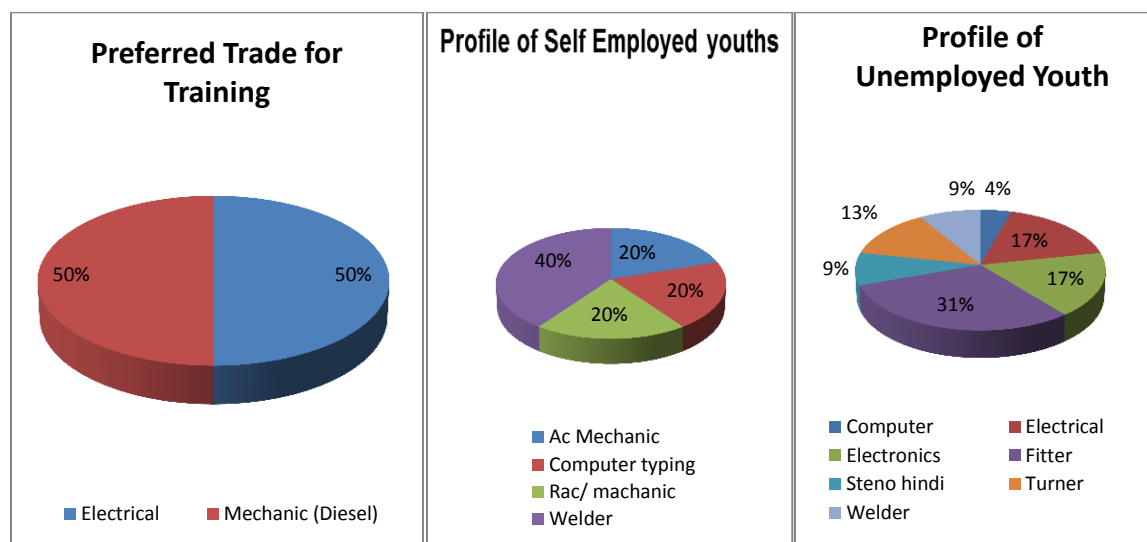


Figure 330 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Banswara

Inclination towards electrical course was found high as around 50% of the youth reported that they had preferred electrical trade during his/her training at VTI. The reason for the same seems to be the demand for this course in the market. Similarly, mechanic (diesel) was another of the most preferred trade. The trade profile of self-employed youth basically consisted of welder (40%) and other trades like mechanic, computer typing (20% each). The unemployed group had majorly been trained as fitter followed by electrical suggesting that the fitter course was either not as per industry requirements or the overall demand lacked for this trade (could be floating demands).

5.27.10 Youth's Perception

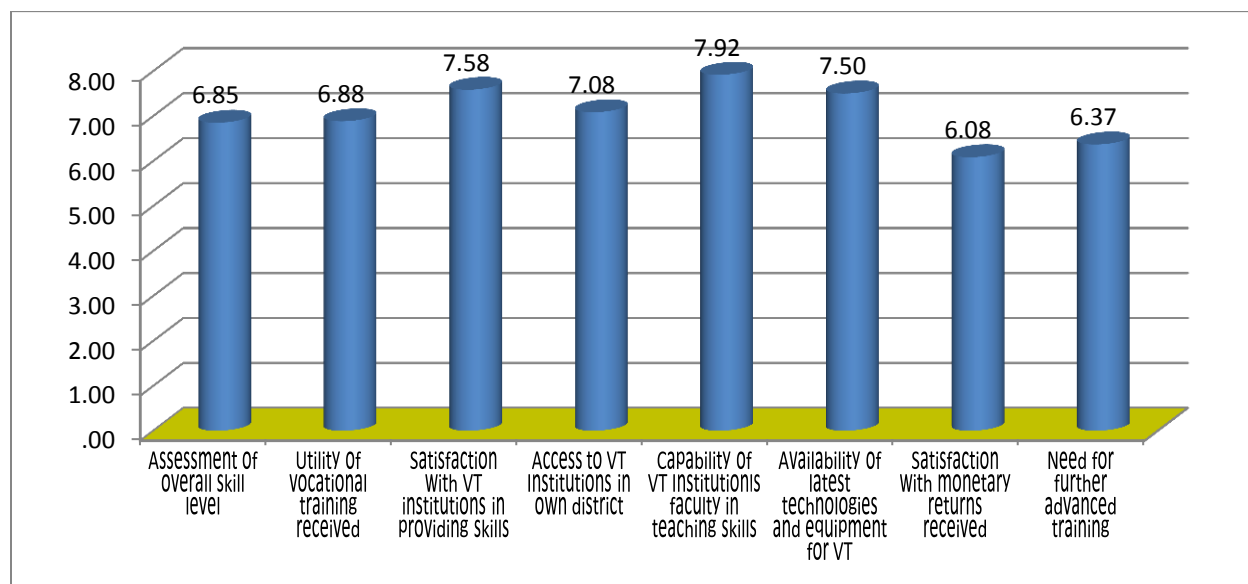


Figure 331 Banswara Youth's perception, need and aspirations –Sample Group

The capabilities of VTIs' faculties were the most rated in favour of the skilling capabilities of the VTIs (7.9 on a scale of 10) and the least rated was the satisfaction with the monetary returns post training. (6.08 on a scale of 10). The youths considered training to be an important facet of their life and career and appreciated the VTI efforts. Though the average salary was above Rs.6000/month (for the working population in the sample of youths), all wished to earn close to Rs.15000/month with advanced skill sets and working experience. More than 70% of the youth were not satisfied with the initial salary offered post training.

5.27.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.5 lakh of skilled, semi-skilled and unskilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at Banswara district level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

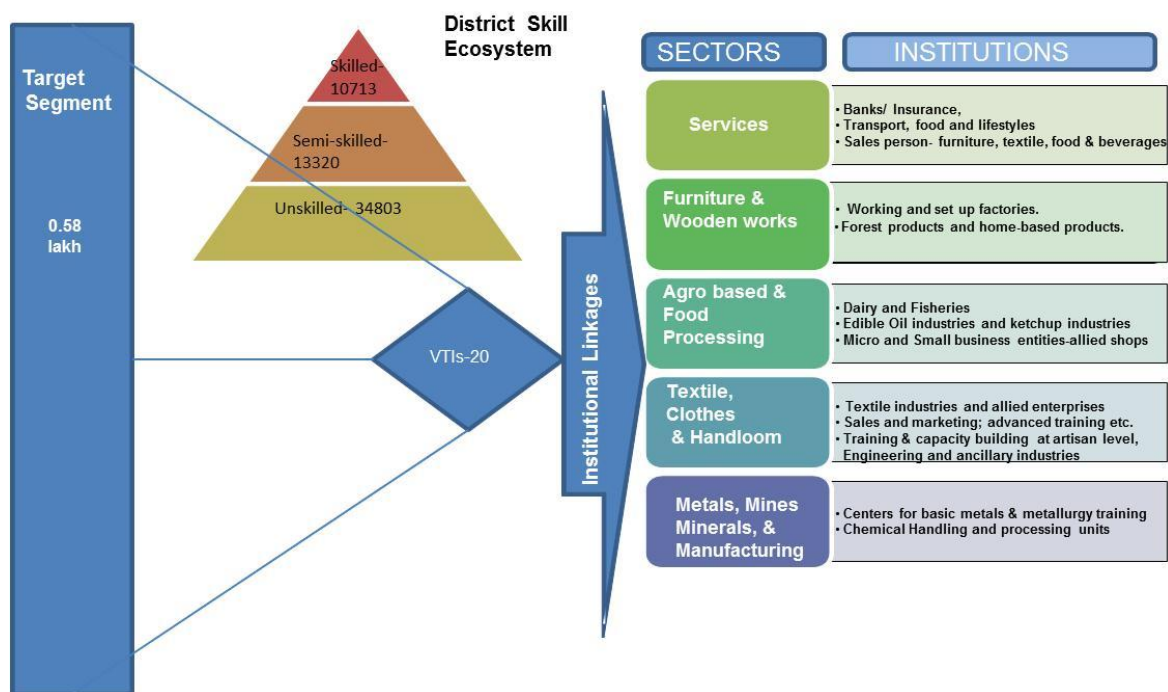


Figure 332 Optimization plan- Skill Development Eco System-Banswara

The district should look at training close to 23,000 youths by 2017 to address the needs of skilled and semi-skilled workforce across the major sectors especially to provide skilled workforce to the service sector. The key stakeholders' contribution in enabling to achieve the target (as shown in the figure) would be as follows:

- a) State: The state to target the skilled and semi-skilled segment for skilled training by creating additional 20 skill development centres (VTIs) in the district level of operations. It should encourage the private training partners to participate and operate in the district due to its large base of workers involved in secondary and tertiary sectors.
- b) Training Partners: The sectors for engaging more skilled workforce would be in food processing, textiles and services in the district. Course curriculum designed to cater for the institutions based in food processing, textiles (sales), health and training and engineering based institutions in metals and mining should be the focus. Along with these, specific course curriculum designed for communicative English, life skills and basics in computer would be the key areas of skill development training.
- c) Industries: The primary sectors of high human resource requirement would be food processing, textiles, and services and therefore would require increasing linkages with the related institutions for skilled workforce absorption

NSDC would be an enabler to lead the training partners in textiles and food processing by encouraging specifically designed proposals with increasing the linkages in industry associations and PPP models.

5.28 District Pali

PALI DISTRICT



District Skill Workforce Face Sheet-2012								
District	Pali			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	19	No. of Villages		1030	No. of Schools (elementary & sec.)		3073	
Basic Data								
Population (in '000s)	2038	Overall Literacy(in %)		63.23	Sex Ratio		987	
Decadal growth rate(in %)	11.99	Female Literacy(in %)		48.35	HDI Ranking (2008)		0.547 (28 th position)	
% Urban Population	21.47	Male Literacy(in %)		78.16	Per Capita Income (in Rs.)		17066	
Workers participation rate (2001)								
Workers participation rate (2001)	39.82	Share of primary sector (%)		56.80	Share of secondary & tertiary sector (%)		43.20	
No. of MSME/Industries	12447	Total Employment (in 000s)		44438	Total Investment (in lakhs)		13766	
No. of colleges (PG & Graduation)	22	Total graduates (In '00s)		9171	Total Post graduates (in '00s)		686	
No.of VTIs(registered ITI+Poly+ITC)				6	Total trainees trained (in '00s)		813	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	2435	2759	3038	3332	3687	3907	4295	0.40 lakhs
Semi-skilled workforce	17022	17605	18155	18725	19223	19838	20426	

5.28.1 Demographic Profile:

Pali district is located in the South-eastern region of Rajasthan bound by Dausa district in the north, Kota and Baran districts in the south, Bharatpur and Dhaulpur district in the north east and by Banswara & Jaipur in west and north- west respectively. Pali is a city and a municipality in Pali District in the Indian state of Rajasthan. It is the administrative headquarters of Pali District.

The district has a dry climate except during the short rainy season. The normal annual rainfall in the district is 70.92 cms. The mean daily maximum temperature in May is 41 degree Celsius and the mean daily minimum temperature is 8 degree Celsius in January. The district is presently composed of four sub-divisions viz., Pali, Gangapur, Hindaun and Karauli and ten Panchayat Samities/Tehsils. There are also five sub-tehsils.

The district covers an area of 5043 km² 1.31% of the total area of the state. It has a total population of 13.38 lakh which was 1.95% of the state population. The decreasing trend of decadal rate in the population shows signs of population stability. (less by 6%

from '91-01 census). It was placed low on HDI at 26th rank (HDI, 2008 updated). It stands 19th in education index, 24th in health and 20th on the income index of the Human Development Index. It ranks

S.no	Section	Unit	Quantity
			Value
1	LOCATION		
	Latitude	degree	26°48' N
	Longitude	degree	74°30' E
2	AREA		
	Total geographical area	square	12387
3	ADMINISTRATION		
	Tehsil	number	9
	Villages	number	1030
4	Land Use Pattern		
	Total Area	Hectare	1233079
	Total Irrigated area	Hectare	91188
5	Population (census 2011, provisional)		
	Total population	number	2038533
	Men	number	1025895
	Women	number	1012638
	SC (2001)	number	323452
	ST (2001)	number	105814
6	Literacy (except 0-6 age group)		
	Total literate	percent	63.23
	Men	percent	78.16
8	Energy		
	Electrified Villages	number	942
	Industries (DIC, 2009)		
9	Registered MSME units	number	12447
	Employed persons	number	44438
10	Education		
	Pre Primary & Primary Schools	numbe	1164
	Upper Primary	numbe	1408
	Secondary & Sr. Secondary	numbe	501
11	Higher Education / Others		
	Colleges	numbe	22
	I T I	numbe	05
	Polytechnic	numbe	01

Table 257 District profile –a Snapshot- Pali

22nd on the GDI (0.503). It was observed that the district fares quiet low on education, health and income index which pulls the district on overall HDI ranking to the lower side of the state. As per provisional census 2011 data, the sex ratio of the district remains at 894 (compared to 2001 census figure of 889) which still is on the lower side of the state ratio of 926.

The worker participation rate was 42.00% (HDI, Rajasthan, 2008) with primary sector engaging close to 72.30% of the workforce and rest 27.7% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 19% (Urban- 26% & Rural- 45%). The literacy rate of the district in 2011 is 66.19% which is lower than the state figure of 67.06%. According to Census 2011 provisional data, the male literacy figure stands at 82.72% and female literacy was at a low of 47.8%, which is on the lower side of the female state literacy rate of 52. 66%.

5.28.2 Education Infrastructure and Utilization

Pali's status in literacy has seen marked changes in the number of colleges which has grown to 16 from 05 over a period of three years. The primary and secondary education report still shows a dismal performance in retention rate, enrolment of girl children, and drop out ratio.

Education	Pali	Rajasthan
Pre Primary & Primary	1164	49546
Upper Primary	1408	38889
Sec/ Sr Sec	501	19135

Table 258 Pali vs. Rajasthan primary education scenario

Pali faces real time constraints in terms of basic schooling infrastructure, teachers and quality education (rated as one of the districts with high dropout rates). Pali has also been among the districts with high one room schools and with more than 30% of schools with single teacher (HDI, 2008). According to Census 2011 provisional Pali has a total of 2160 schools from pre-primary to senior secondary levels with DISE reports stating that close to 53% as the retention rate.

A total of over 8400 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There were just a total of two registered vocational training institutes in Pali district (02 ITI) and one polytechnic. A total of just above 500 aspirants got enrolled in 2009-10 in the registered training institutes. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 02 partners (includes 01 KVK and 01 ITC) implementing skilling initiatives with 03 approved programs (all completed). A detailed view of the vocational training of Pali could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.28.3 VTI's demand across various trades in Pali district

The existing scenario of VTIs in Pali was certainly on the lower side considering the number of youths passing out and the existing vocational training institutes in the district. Private organizations working in this sphere have a vast scope for initiating skilled interventions of the district and catering the needs

for skilling youths of the district. The primary survey conducted in the district to understand the present scenario of skilled intervention of the district. The government VTIs interviewed in the survey were two and eight were from the private. The courses which were offered by the government VTIs were predominantly engineering based or to cater the local market needs. In private VTIs the courses taken up were almost same. The details of the courses offered in the VTIs of Pali are represented as follows:

Government VTI Trades	Pvt. VTI Trades
Electrical	Electrical
Electronics	Electronics
Fitter	Fitter
Steno Hindi	Mechanic (Diesel)
Turner	Steno Hindi
Mechanic (Diesel)	

Table 259 Courses offered in government and private VTIs (sample)

Electrical trade was most preferred trade in Pali as maximum number of seats in both Government and Private VTIs were from this trade. Even, private VTIs offered more than two times of seats as compare to Government VTIs for this trade.

The difference between actual trainees and approved trainees, in government VTI, was varying from

1 to 21 as these seats went unutilized. Steno Hindi trade had the max difference as the preference for this course was low in government VTI whereas the difference in Turner trade was least. In case of Private VTIs, the difference was varying from 2 to 47 seats. Steno Hindi trade had least difference whereas Electrical trade had max difference of 47 seats.



Figure 333 Pali district's (sample study) courses offered placements in VTIs and average (avg) salary offered

An overview of placement records by trade in the government and private VTIs indicate poor prospects in all most all of the trades. It may be due to the fact that trainees after completing the course seek self-employment and also because of the fact that less industrial participation was informed. The highest paid average salary/trainee was for fitter trade both form government (Rs 4900/month) and private (Rs 5625/month) VTIs. While placements of trainees from the government VTIs was more

through a proactive approach to the industry by the VTIs and the trainees themselves whereas the private VTIs more depend on campus interviews and also place their student through proactive approach to the industry. Though some of the trainee from government and private VTIs got their placement through employment exchange but it seems that employment exchange were not playing a major role in placements.

The trends across all the trades show an increasing demand from the data on number of trainees by trade over time in the government VTIs as well as private VTIs. Trades like electrical and electronics, fitter have increased the strength of trainees over the years by over four times since inception of the particular trade. Data from the survey also indicate that private VTIs were established before the government VTIs.

In terms of infrastructure support commutation support was made available all the VTIs surveyed. None of them had hostel facilities. Staffing was an issue in the administrative aspects but was up to the mark from academics and support point for all the VTIs.

5.28.4 Industry Mapping

As the cement is one of the major component of construction sector which plays important role in economy; there has been a wide scope for the cement industry as some new cement industries made a huge investment in this sector. Same as in agriculture implements sector, the existing unit made new investment in the sector shows still there is scope for the new units. Some of the large scale and medium scale industries of the district were:

1. M/s. Ambuja Cement Ltd., Rabariyawas The.- Jaitaran, Pali Cement
2. M/s. Maharaja Shree Ummed Mills Ltd., Jodhpur Road, Pali Fabric Yarn
3. M/s. Shree Cement Ltd., Bangur Nagar, Pali Cement
4. M/s. Shiv Agro Implements Ltd., Teh.- Falna , Pali Rolling Products & Forging Products
5. M/s. Total Vinergy Bitumen India P. Ltd., Rohat, Pali Modified Bitualumination

The major exportable Item from large/ medium scale sector were agriculture implements and processed food products.

As there are numbers of large and medium scale industries having good capacity of production, hence there was scope for the new service industry especially for the cement industry. As there are many textiles and printing units in the district hence there is also scope for the repair & maintenance work of these machines and also scope for the natural color dyer suppliers. To support the looms of the textiles industry there is a need for sizing and wrapping units. Tourism is another growing sector where new investment is taking place and some major groups is investing in this sector.

MSME in Pali

According to D.I.C data (March, 2012), there were around **13834MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.18717.78 lakhs** providing employment to **49258 persons**.

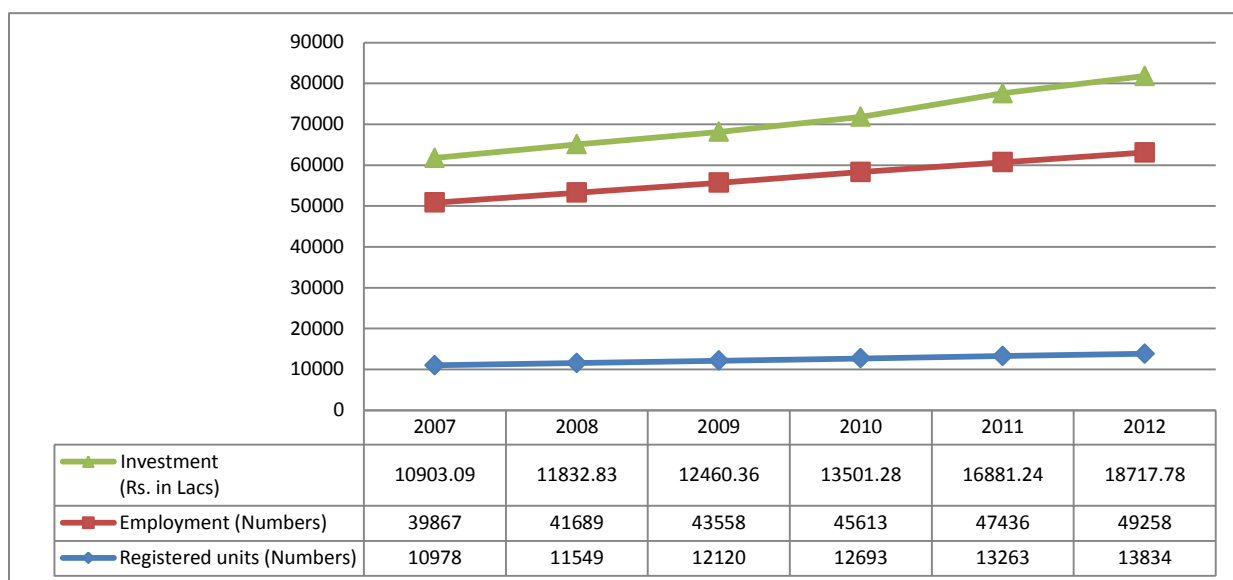


Figure 334 MSME trend analysis of the district Pali

As in the Jaitaran tehsil of the district is having huge availability of lime stone; raw material for the cement industry, small cement plant could be set up in this area. In the Rohat area there is a scope for mineral based, cattle feed & oil based industries could be set up. In the village Khutani Gypsum is available in large quantity; hence there is good scope for the Gypsum based units. In Rani area there is a scope for the stone marble, steel furniture, oil based industries. In the Bali area there is potentials for agriculture implements units.

5.28.5 Sector wise mapping of industries

District wise the existing sectors were mapped against the high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Pali. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	1340	1429.58	4033
Auto & Auto Components			
Chemical & chemical products	224	543.41	823
Construction Material & Building Hardware			
Food Processing			
Furniture & Furnishing	888	324.83	2446
Leather & leather goods	3415	229.71	7641
Textile & Handloom	1136	3915.40	10297
Repair & Servicing	1429	3425	3352

Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Mines, Metals & Minerals	1507	4466.05	7106
Machinery, Electricals & Manufacturing	2481	2747.66	8768
High	Units>800, investment>180, emp>1000		
Medium	Units>200, investment>100, emp>750		
Low	Units> 50, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 260 Sector wise mapping of industries in Pali as per DIC report, 2009

The most important sectors contributing to the economy of the district and providing employment opportunities were agriculture and allied sector, leather, wooden and furniture, repair and services, engineering based manufacturing sector. The future scopes of industries were in the emerging sectors like the computer applications, trade and hospitality, auto workshops, construction etc.

Sectors covered under sample survey
Food Processing & Products- 02
Handlooms & Handicrafts- 02
Machinery, Electricals & Manufacturing-02
Mines, Metals & Minerals-01
Stone Querying, Cutting & Polishing-03

Table 261 Breakup of industries in Pali (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries were selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in Pali district of Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table above. The 10 industries were sampled for the survey to represent 5 major sectors that are prominent in the district as shown in the table above. Food processing and products catered for the agriculture and allied sector as well. Similarly wooden industries were clubbed with handicrafts and handlooms.

5.28.6 Workforce Demand and Supply

Of the salient features of the workforce in the district were as follows:-

- g) The overall participation of population in economic activities was just 42.00 % (dependency ratio of more than 1:1); with rate of female participation at 35.55%. There is steep decline in the main workers and increase in marginal workers showing the changing workforce engagement in the district.

- h) Rural employment could be majorly seen engaged in agricultural related jobs (72.00% engaged in primary sector), animal husbandry and dairy followed by service sector engaging in repairs and electrical services.
- i) The workforce categorized under skilled, semi-skilled and unskilled showed the following trend in the sampled industries (as shown in the figure)

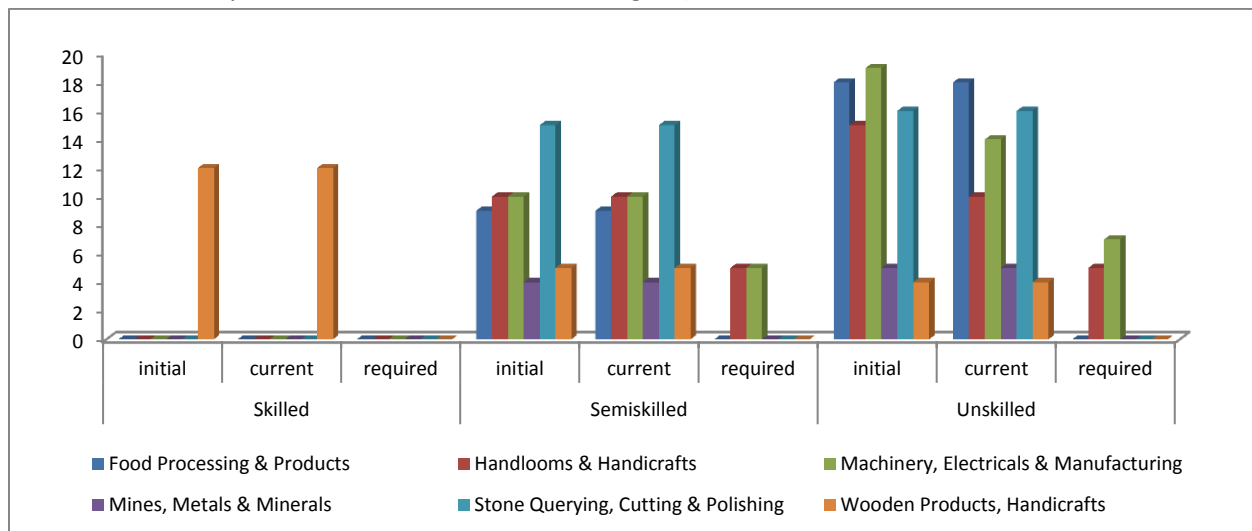


Figure 335 Workforce engagement under various stages and required strength of workers across sectors surveyed (Pali sample)

The demand for semi-skilled workers continued to be on the higher side especially in handicrafts and handloom industries and stone and quarrying industries. Incidentally, the demand and the current absorption of unskilled workers were higher than the skilled and semi-skilled workers and similar was the requirement trend as well (just 10% required across industries).

- j) While the nine industries sampled across five sectors could not provide details of their skilled worker strengths, wooden products and handicrafts sector industry has not increased the workers' in-take and were working with the same number as at the start of operations. Demand for skilled worker in future was reported zero by this industry
- k) As reported by industries for semiskilled workforce, none of the sector has increased its worker base and also no plans to expand further except handloom and manufacturing. In case of unskilled workforce, there was no further expansion and in fact two of the sectors have reduced their unskilled workforce.

In terms of industries' requirements and the expectation of the employers from its workers the primary survey provides the major demand to be productivity and efficiency followed by loyalty. Stone quarrying, cutting and polishing emerged as the most demanding sector in terms of the set parameters (ranked on a scale of 5)

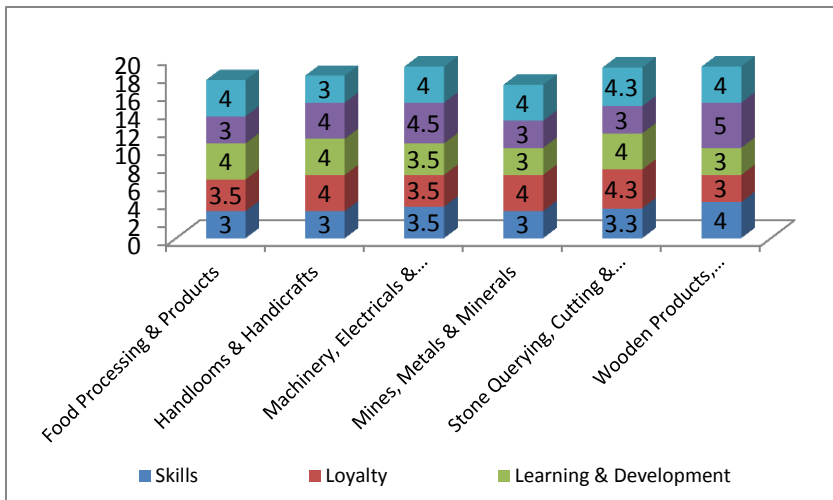


Figure 336 Employers demands in terms of expectations from workers (Pali)

Recruitment of required workers was done from known sources such as own workers which appeared to be the most reliable method of recruitment for most of the industries. The contractors were engaged for daily wage workers and no such interaction was evident with the VTIs to get the semi-skilled trained workers.

5.28.7 Projected Workforce Demand

It has been observed in the primary survey that the percentage of skilled workers have been almost static over the years and similar was the semi-skilled. In contemporary scenario the engagement of unskilled labor (51% of the total workforce) was high followed by semi-skilled (40%) and skilled (9%). In general, the emerging occupations and new establishments demand for workers could be the new areas of interest for the workers in the near future.

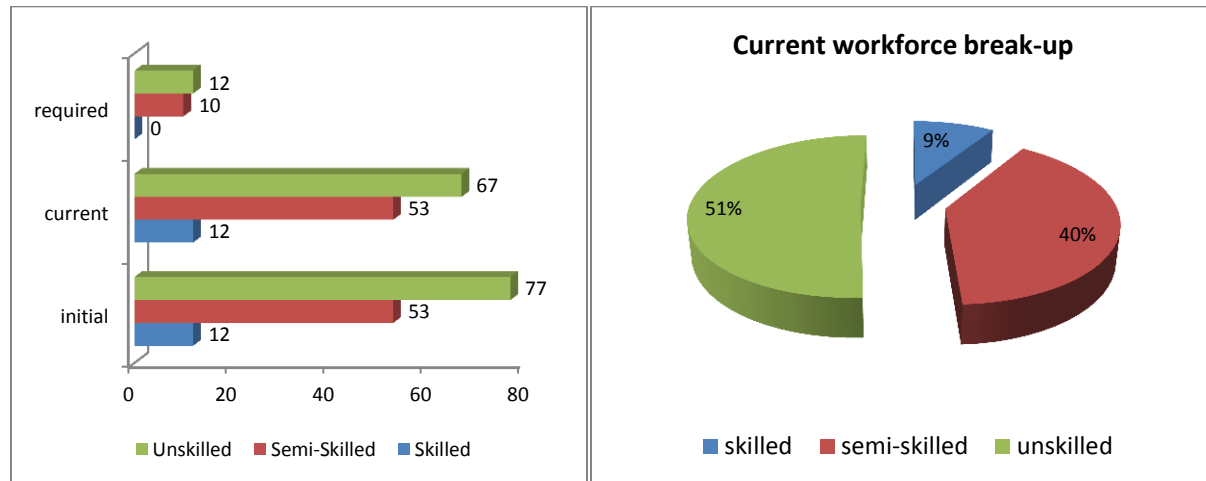


Figure 337 Expected year wise requirement of workforce and current break up of workforce across industries surveyed (Sample)- Pali

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	348210	349641	350377	355245	352486	355162	356496	
Semiskilled	28387	28503	28563	28960	28735	28953	29062	
Skilled	1892	1900	1904	1931	1916	1930	1937	
Total demand	378490	380045	380844	386136	383137	386046	387495	72%
Industry Sector								
Unskilled	29511	30911	30645	31664	32105	32597	32986	
Semiskilled	13621	14267	14144	14614	14818	15045	15224	
Skilled	2270	2378	2357	2436	2470	2507	2537	
Total demand	45402	47555	47146	48713	49392	50149	50748	9%
Services Sector								
Unskilled	12370	13010	13401	13877	14113	14578	14890	
Semiskilled	28864	30357	31269	32380	32929	34014	34743	
Skilled	41234	43367	44670	46256	47042	48592	49633	
Total demand	82467	86734	89340	92513	94084	97184	99266	19%
All Sectors								
Unskilled	390092	393562	394423	400785	398704	402336	404372	
Semiskilled	70871	73127	73976	75954	76482	78012	79030	
Skilled	45396	47645	48931	50623	51427	53030	54108	
Total Demand	506359	514334	517330	527362	526614	533378	537509	100%

Table 262 Projected percentage of workforce (demand) requirement till 2017 across primary, secondary and tertiary sectors- Pali

Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Agriculture and allied			
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			

Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 263 Workforce across various sectors by 2017- Pali

5.28.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	80335	83788	84302	89926	87322	90658	92088
Semiskilled	17022	17605	18155	18725	19223	19838	20426
Skilled	2435	2759	3038	3332	3687	3907	4295

Table 264 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.40 lakh (employable working population). Keeping in mind the high rate of workforce participation from unskilled masses and the existing demand of skilled workforce to be low; the significance would be to target training to atleast 40,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation was conducive enough to support industrial growth in Pali except some shortage of power.

- The VTIs were fulfilling the needs of the industries but industries need to pay more. Demand across the sector and size for skilled worker was good in some of the emerging sectors but small and medium sectors concentrated on pooling of semi-skilled and unskilled workers only.
- Scope for self-employment and entrepreneurship in the district is good.
- Stone cutting & polishing and machinery were predominant in the district with Tourism and handicrafts Industries emerging in the district sustainable enough to absorb new manpower.
- Establishments of more VTIs to enable the growing needs and industry specific requirements

5.28.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Pali district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth to provide deep insight and understanding on their aspirations and perceptions; of self and people associated/related with them.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 25% of the youth covered were college educated and 75% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

Table 265 Youth Profile of sample in Pali

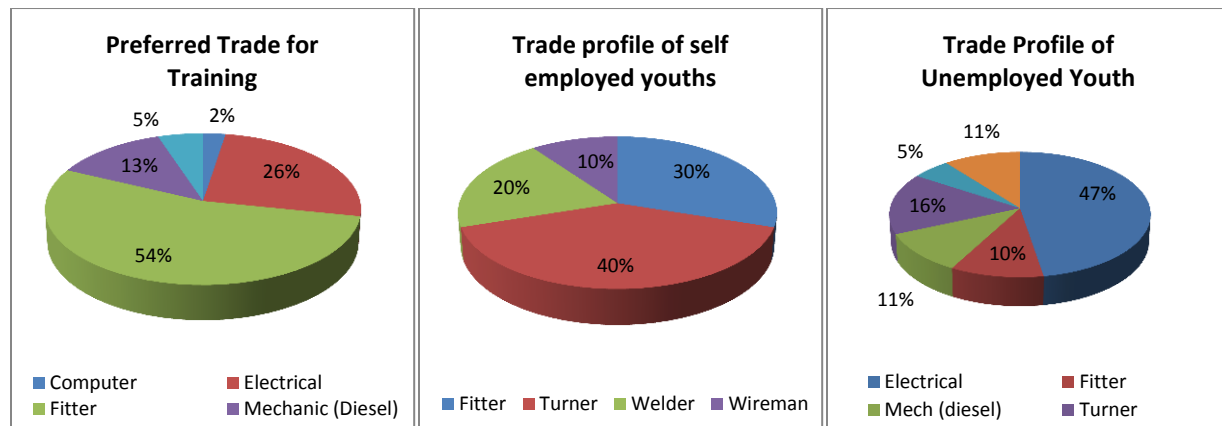


Figure 338 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Pali

Inclination towards Fitter course was found high (54% of the youth reported their preference) followed by electrical trade (26%). The reason for the same seems to be the demand for this course in the market. As self-employment turner and fitter were the chosen trades of the youths. High percentage of trained electricians remained unemployed followed by turners. Supply of the electrical trainees in the market has increased and may be inferred to be the reason of unemployment of this trade trainee.

5.28.10 Youth's Perception

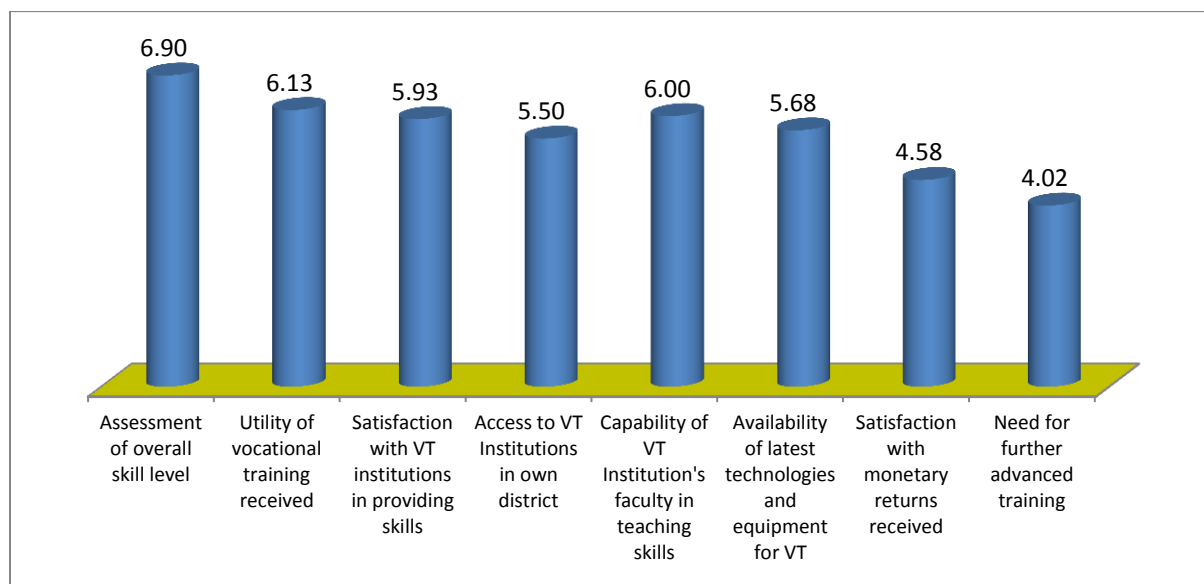


Figure 339 Pali Youth's perception, need and aspirations –Sample Group

Satisfaction with current monetary returns and need for advanced training emerged as the two least rated factors on a scale of 10. As identified by the respondents, the satisfaction, utility of the training and skill acquired from the VTI was overall rated higher than other parameters. A minimum wage hike of Rs 6000 was expected among youths across various trades.

The general aspirations were mapped by conducting FGDs with the youths from various categories and the following responses were evidently represented by the group:

- g) Better salaries, work satisfaction, family security and learning new technologies (respective trades) were the desires and expectations of the youth from the employment
- h) Families expected from them to get engaged in government jobs or well-paid jobs in big firms
- i) Less opportunities of on job training being provided and the less number of ITI make the overall skilling scenario very specific to the training manuals without much choice
- j) Communicative English and computer training were generally undertaken by local training centres for better job opportunities
- k) ITI training were more to get government jobs as 8 out of 10 felt that self-employment had least scope in terms of secured future and sustainable growth
- l) Most of the youths find difficulties taking up other trades post training and the adaptability remains low in terms of acceptance of other trades

5.28.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.4 lakh of skilled, unskilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training

capabilities) at district and block level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

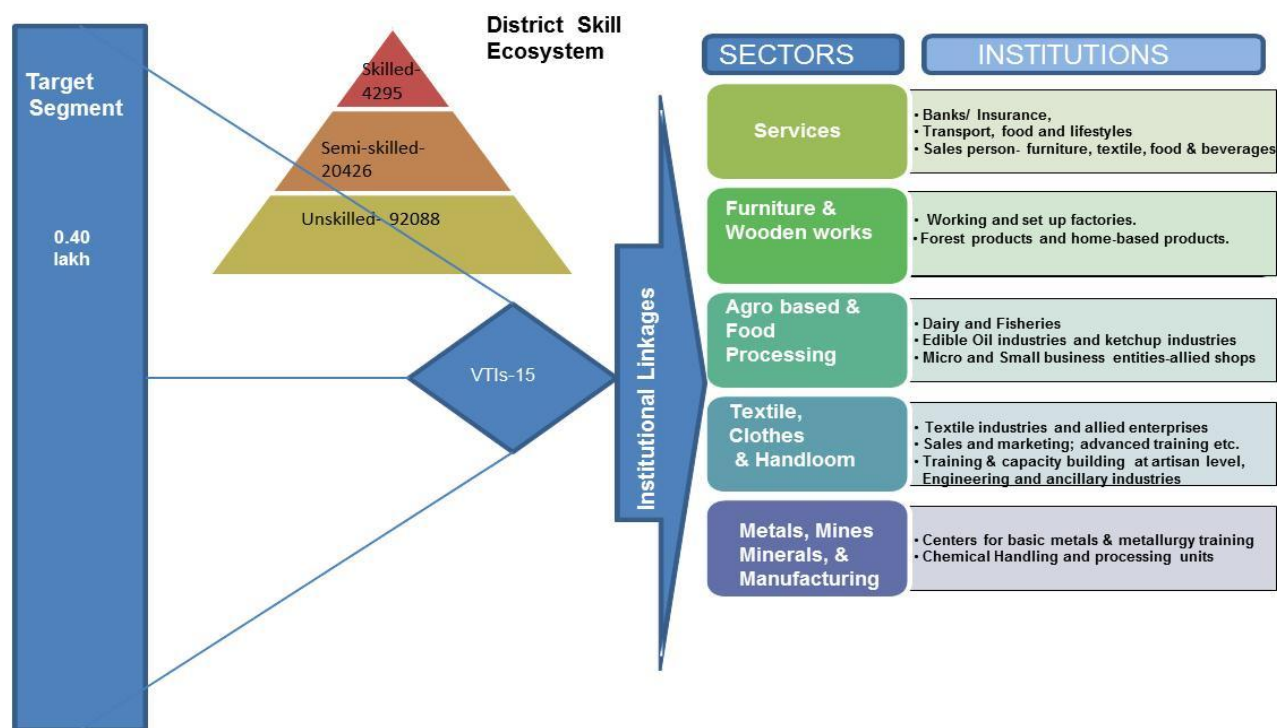
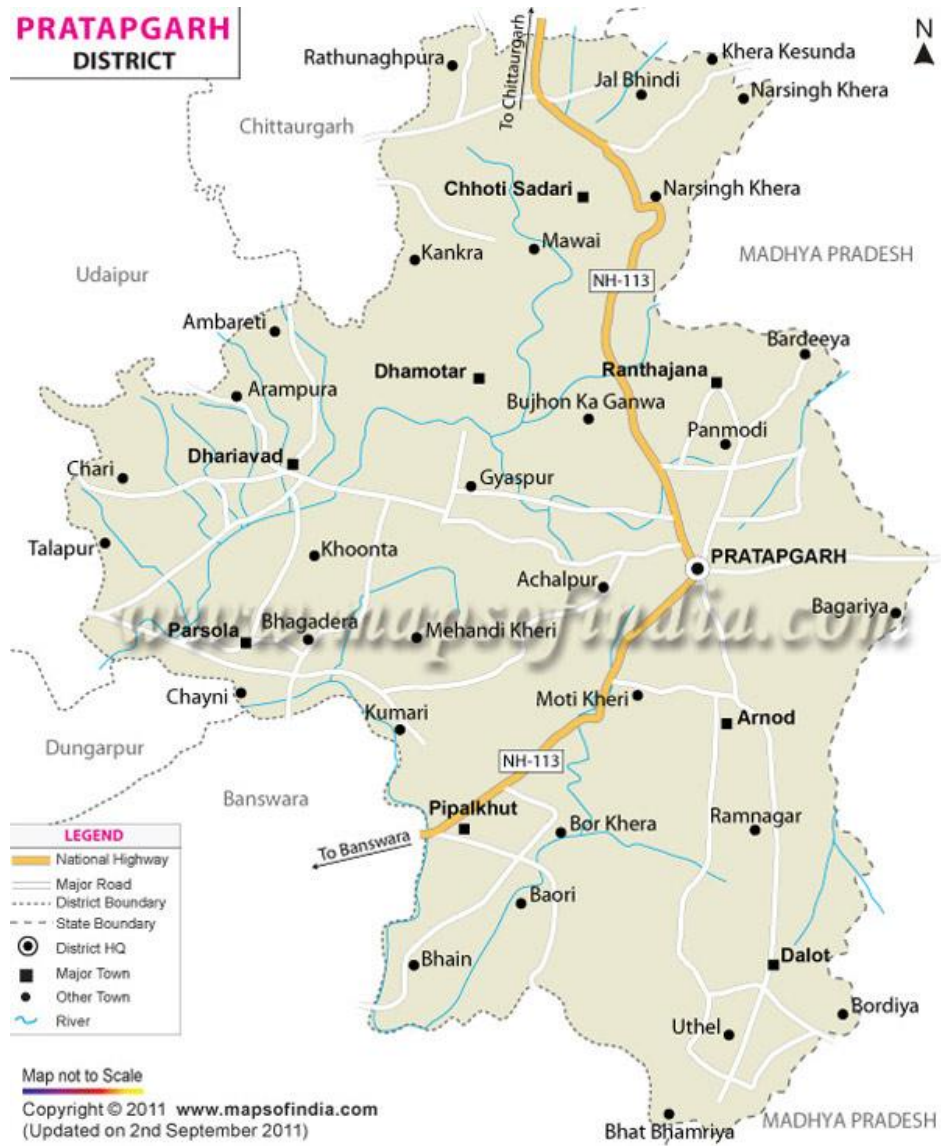


Figure 340 Optimization plan- Skill Development Eco System- Pali

The district would require more dedicated approach to advocate the usefulness of skilled workers in the industries and also need to target the service sector employment (emerging sectors). VTIs should be vital in getting the work ready repairers and mechanics. The interface between the VTIs and the industrial bodies would be essential for the mutual benefit. In order to keep the industrial area of Alwar on its consistent growth path, it would be important to maintain the skill workforce supply as per industries requirements. Customized training schedules and industry linkages would enable the VTIs to provide a more ready to be deployed workforce. Apart, the services sector shall require skilled workforce of education qualification of higher nature. In order to meet these requirements aspirants could be trained across various domains of service industry. Keeping in mind the readiness to migrate to NCR regions, the youths stand a good chance to earn a sustainable livelihood and skilling would provide them with better financial negotiation power. So training partners with life skills, communicative courses, and computer based courses should be encouraged along with mechanical (auto-related) courses by NSDC; also keeping in mind the high requirement of up-skilling in current industrial base.

5.29 District Pratapgarh



5.29.1 Demographic Profile:

Situated on the North-east border of Rajasthan, Pratapgarh district was formed in 1982 by merging 4 former tehsils of district Bharatpur – Pratapgarh, Rajakhera, Bari and Baseri. On the district's north lies Bharatpur and the Uttar Pradesh border. On the south-east is the border with Madhya Pradesh and on the west is the district of Pali. Pratapgarh is a junction of the Central Railways and is served by regular bus services of the Rajasthan, Madhya Pradesh and Uttar Pradesh roadways.

Pratapgarh has a dry climate, facing extremes of summer and winter. The monsoon hits the district in July and lasts till mid-September. The rainfall observed in the district a continuous decline in past few years. There is one perennial river, the Chambal, in the southeast of the district and a seasonal river in the north-west, the Parvati.

The district covers an area of 3, 033 square kilometers and is at a height of 183 metres above sea level. It is one of the smallest districts (0.89%) of the state catering for 1.76% of the total state population. The total population was 12.07 lakhs with sex ratio as 845 (one of the lowest in the state) and lowered decadal growth rate in population at 22.78%.

S.no	Section	Unit	Quantity
			Value
1	LOCATION		
	Latitude	degree	24°03' N
	Longitude	degree	74°78' E
2	AREA		
	Total geographical area	square	4117
3	ADMINISTRATION		
	Tehsil	number	05
	Villages	number	1008
4	Land Use Pattern		
	Total Area	Hectare	411736
	Total Irrigated area	Hectare	82215
5	Population (census 2011, provisional)		
	Total population	number	868231
	Men	number	437950
	Women	number	430281
	Population density (per km ²)	number	211
6	Literacy (except 0-6 age group)		
	Total literate	percent	56.30
	Men	percent	70.13
	Women	percent	42.40
8	Energy		
	Electrified Villages	number	NA
9	Industries (DIC, 2009)		
	Registered MSME units	number	151
	Employed persons	number	469
10	Education		
	Pre Primary & Primary Schools	numbe	891
	Upper Primary	numbe	390
	Secondary & Sr. Secondary	numbe	133
11	Higher Education / Others		
	Colleges	numbe	NA
	I T I	numbe	03
	Polytechnic	numbe	0

Table 266 District profile –a Snapshot- Pratapgarh

In a resource scarce economy, population and demography of the region are closely related to the aspects of human development. One, population stabilization achieved through a health demographic transition reflects good health and a good nutritional status of people, particularly of women. This becomes all the more important in a region where people still derive over 85 per cent of employment through land and livestock based activities. Secondly, demographic changes reflect gender equality and the care given to the mothers and children; an important component of human development.

The worker participation rate (WPR) was 43.6% (HDI, Rajasthan, 2008) with primary sector engaging close to 56.4% of the workforce and rest 43.7% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 16% (Urban- 30.9% & Rural- 46.4%). A significant proportion of the district was engaged in the secondary and tertiary highlighting the paradigm shift from primary over a decade as WPR in primary drastically reduced from close to 80% to 56% in a decade. The literacy rate of the district in 2011 is 70.14% which is higher than the state figure of 67.06%. According to Census 2011 provisional data, the male literacy figure stands at 82.53% and female literacy was at a 55.45%, which is on the higher side of the female state literacy rate of 52.66%.

5.29.2 Education Infrastructure and Utilization

While government aims to provide educational facilities across all the villages and habitations private schools are beginning to grow in numbers and enrollment particularly at the upper primary level (ASER, Annual Status of Education Report). Of the total 1612 schools in Pratapgarh district (2008), 386 or 24% schools were private schools in 2008. However share of teachers in private schools was 36% while the share of students in private schools was 26%. Number of primary government schools in Pratapgarh was 1226 in 2008. Most of the villages in the district have lower primary schools. 61 Villages were without any school. Highest number of villages without any school was observed in Rajakhera and in Baseri, on the other hand, no village was without a school.

Education	Pratapgarh	Rajasthan
Pre Primary & Primary	891	49546
Upper Primary	390	38889
Sec/ Sr Sec	133	19135

Table 267 Pratapgarh vs. Rajasthan primary education scenario

Pratapgarh observes a healthier trend in enrollment rates, when compared to the state average. While the ST population is increasing faster in Pratapgarh, the SC population maintains parity with the non-SC/ST population in terms of decadal growth during the nineties. One of the reflections may be observed in the ratio of SC/ST enrollment to the non-SC/ST population. One of the reasons for the good performance of SC/ST students, both in terms of growing literacy rates as well as enrollment, was the monetary incentives in the form of scholarships given to the children of these social groups besides the proximity of government schools to the locality of backward castes.

A total of over 3000 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There are two nursing colleges, one Law College and a military school. There were total of ten registered vocational training institutes in Pratapgarh district (10 ITI). A total of just above 400 aspirants got enrolled in 2009-10 in the four

government training institutes. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 06 partners (includes KVK and ITC) implementing skilling initiatives with 16 approved programs (14 completed). A detailed view of the vocational training of Pratapgarh could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.29.3 VTI's demand across various trades in Pratapgarh district

The existing scenario of VTIs in Pratapgarh was certainly on the better side considering the number of institutes or VTIs in other districts of the state. Private organizations working in this sphere have a vast scope for initiating skilled interventions of the district and catering the needs for skilling youths of the district. The primary survey conducted in the district to understand the present scenario of skilled intervention of the district. The government VTIs interviewed in the survey was three and seven were from the private. The courses which were offered by the government VTIs were predominantly engineering based and to cater the local market needs. In private VTIs the courses taken up were almost same. The details of the courses offered in the VTIs of Pratapgarh are represented in the table.

Government VTI Trades	Pvt. VTI Trades
Civil	Electrical
Electrical	Electronics
Electronics	Fitter
Fitter	Mechanic (Diesel)
Welder	
Wireman	

Electrical trade was most preferred trade in Pratapgarh as maximum number of seats in both Government and Private VTIs were from this trade. Even, private VTIs offered more than two times of seats as compare to Government VTIs for this trade. The difference between actual trainees and approved trainees, in government VTI, was varying from 7 to 16 as

Table 268 Courses offered in government and private VTIs (sample), Pratapgarh these seats went

unutilized. Electrical trade had the max difference In case of Private VTIs, the difference was maximum in case of electrical trade (varying by 26 seats).

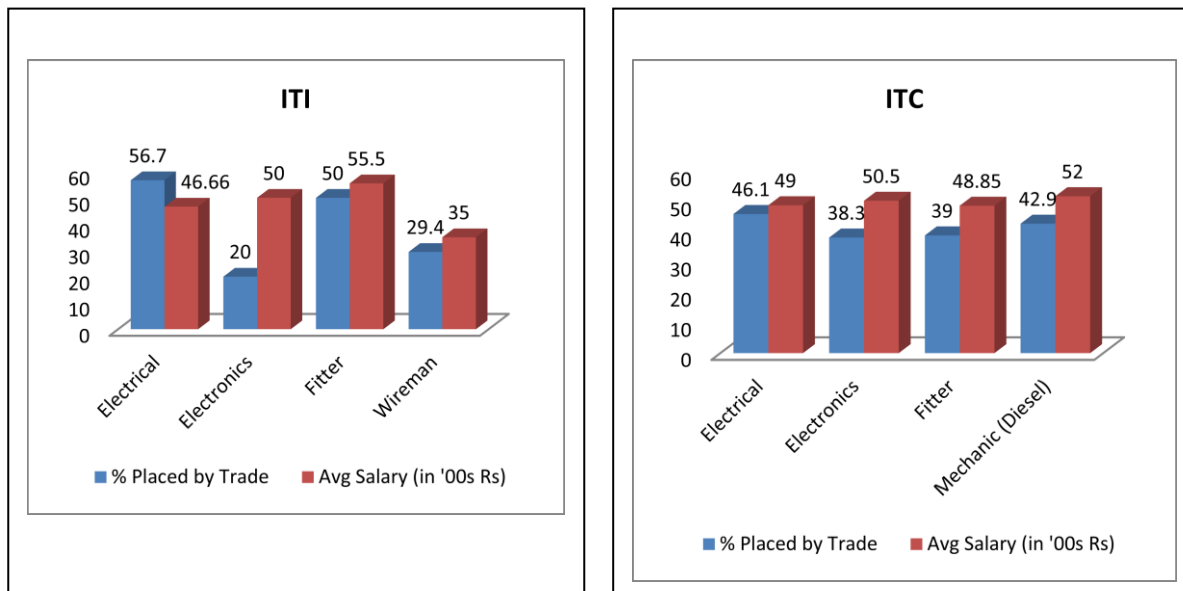


Figure 341 Pratapgarh district's (sample study) courses offered placements in VTIs and average (avg) salary offered

An overview of placement records by trade in the government and private VTIs indicate moderate prospects in all most all of the trades with the exception of welding trade in government VTI. It may be due to the fact that most of the welding trade trainees seek self-employment. Average salary/trainee indicates towards good prospect in fitter trade as government VTIs have reported that the trainee from this trade got the highest placement of Rs. 5,500/month from their institute. In case of private VTIs the highest paid placement was in diesel mechanic trade. While placements of trainees from the government VTIs was by campus interviews and through proactive approach to the industry by the VTIs and the trainees themselves. The trainee from private VTIs had secured their job through proactive approach to the industry. Though only few trainees from private VTI got their placement through employment exchange but it seems that employment exchanges are not playing any role in placements.

The trends across all the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the government VTIs over the years. Only in Electronics trade the strength had gone down over the years. Data on the number of trainees for civil trade in government VTIs was not available as there is no demand for these trades over the years. Trends, regarding private VTIs' trainee strength, indicate towards gradual increase over the years.

In terms of infrastructure support commutation support was made available all the VTIs surveyed. Staffing was not an issue in any of the VTIs. A hostel facility was available only in one private VTI for boys.

5.29.4 Industry Mapping

The district has 2 industrial areas named as Bagwas and Pratapgarh . The major existing industries were:

- Slat Stone
- Cement Tiles/Jalis
- Engineering Units
- Kota Stone

There was one cluster called in Thewa Art in Pratapgarh.

MSME in Pratapgarh

According to D.I.C data (March, 2012), there were around **450 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.1241.31 lakhs** providing employment to **1369 persons**.



Figure 342 MSME trend analysis of the district Pratapgarh

There were three large- scale industries in the district. Quarrying of building stone was one of the major activities which provided employment to the comparatively large number of persons. Traditionally people were engaged in cotton industries, weaving, pottery, leather tanning, carpentry, black smithy, rope making etc. Village ghanis, moodha industry, sugar cane-crushers, khas distillation are the other units, which kept persons employed and provided opportunity to local crafts men and artists to come forward.

5.29.5 Sector wise mapping of industries

District wise the existing sectors were mapped against the high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Pratapgarh. Against the mapped sectors **sector wise analysis**

shall be made on the labour growth projections like high/ medium/ low and emerging basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	50	159	157.25
Auto & Auto Components			
Chemical & chemical products			
Construction Material & Building Hardware			
Food Processing			
Furniture & Furnishing	47	144	94
Leather & leather goods	03	09	6.32
Textile & Handloom	121	352	311.03
Repair & Servicing	81	245	249.94
Transport & Logistics	10	11.53	24
Mines, Metals & Minerals (includes quarrying)	81	330	324.56
Machinery, Electricals & Manufacturing	68	207	252.63
High	Units>50, investment>100,emp>700		
Medium	Units>20, investment>40, emp>250		
Low	Units> 10, investment> 30, emp>20		
Emerging	Investment & demand based sectors of district-DIC		

Table 269 Sector wise mapping of industries in Pratapgarh as per DIC report, 2007

Sectors covered under sample survey
Chemical & Chemical Products
Construction Material & Building Hardware
Food Processing & Products
Mines, Metals & Minerals
Textile & Handloom

Table 270 Breakup of industries in Pratapgarh (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries were selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in Pratapgarh district of Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table above. The 10 industries were sampled for the survey to represent 5 major sectors that are prominent in the district as shown in the table above along with representation of unorganized sectors. Construction and minerals (stone quarrying) formed the major thrust of the district in terms of employment.

5.29.6 Workforce Demand and Supply

The economy of the district which has undergone some transition over a period from agriculture base to more wage based forms due to uncertainty and decline in agricultural production (difficult climatic

conditions could be a reason). This impact the WPR of the women and the Female WPR increased significantly in the year 2001. At the district level Female WPR has increased from 6.6 per cent in 1991 to 34 per cent in 2001 implying an increase of 27.4 per cent points. Across various blocks increase in female WPR varies between 21 per cent in Pratapgarh Tehsil to 38 per cent in Bari. Two thirds of the increase in workers in Pratapgarh is contributed by the marginal workers.

It was significant that the number of main workers dependent on agriculture was below 60 per cent in Pratapgarh. Other workers representing the non-farm sector along with workers engaged in household industry add up to 40.2 per cent of the main workers in the district. Similar structure of the work force was observed across all the Tehsils in Pratapgarh.

The primary data during the survey focused on the diversified sectors of the district capturing the workforce structure in terms of skilled, semi-skilled and unskilled workers at various stages of the industries as shown in the below figure.

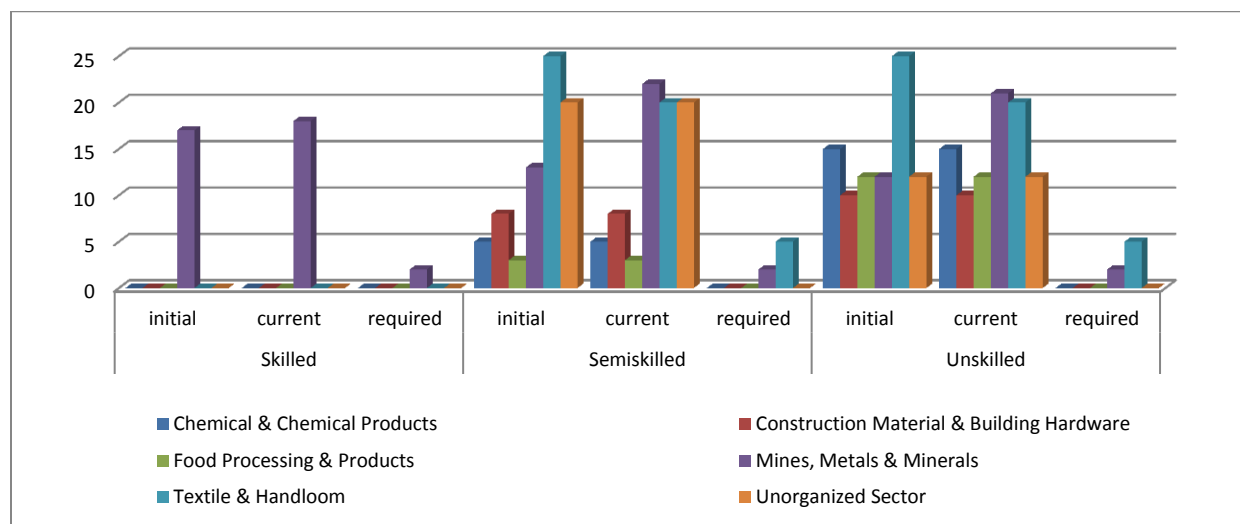


Figure 343 Workforce engagement under various stages and required strength of workers across sectors surveyed (Pratapgarh sample)

- While the majority of the industries covered in the sample could not provide details of their skilled worker strengths, it was in Mines, Metals & Minerals sector that the industries have not increased their workers’ base since industry established. Moreover demand for skilled worker was not observed across all the industries.
- Except Textile & Handloom sector industries all other sector industries have either increased their semiskilled workers’ base or keeping same worker strength as at the start of the industries. Potential to absorb semiskilled workers in various industries.
- In case of unskilled workforce the situation is very similar as described for semiskilled workers. Textile & Handloom sector have reduced their unskilled workforce whereas Mines, Metals & Minerals sector industries have increased their workers’ strength and all other industries have maintained same number of workers since industry establishment. The demand for unskilled worker was found low.

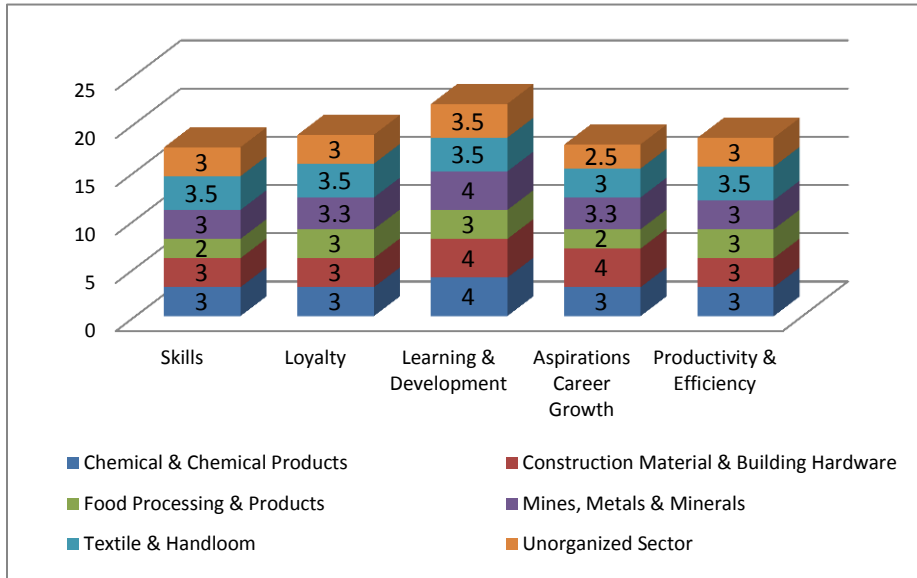


Figure 344 Employers demands in terms of expectations from workers (Pratapgarh)

In terms of industries' requirements and the expectation of the employers from its workers the primary survey provides the major demand to be learning and development attitude of the employee followed by loyalty, productivity and efficiency. Stone quarrying, construction and mining emerged as the demanding sectors

in terms of the set parameters (ranked on a scale of 5).

Recruitment of required workers was done from known sources such as own workers which appeared to be the most reliable method of recruitment for most of the industries. The VTI trained workers were only engaged by the mining industries but in very few in number.

5.29.7 Projected Workforce Demand

It has been observed in the primary survey that the percentage of skilled workers have been almost static over the years and similar was the semi-skilled. In contemporary scenario the engagement of unskilled labor (51% of the total workforce) was high followed by semi-skilled (40%) and skilled (9%). In general, the emerging occupations and new establishments demand for workers could be the new areas of interest for the workers in the near future.

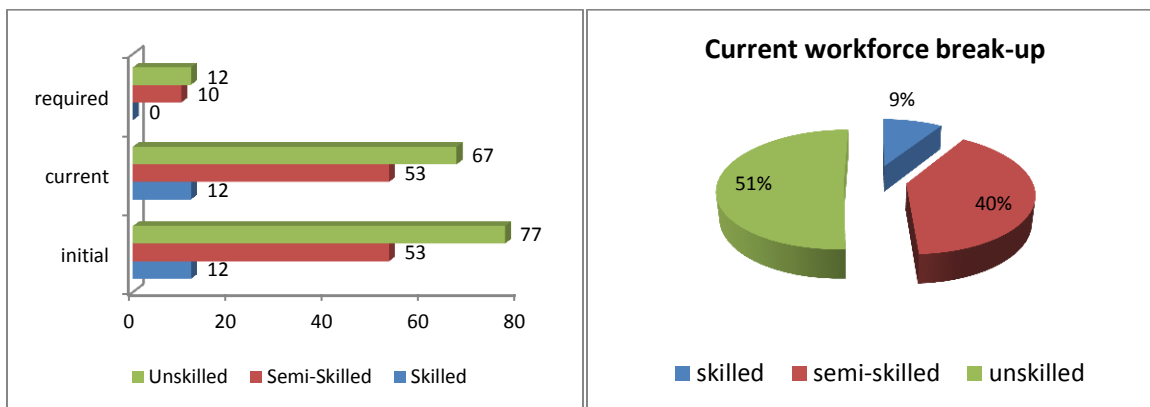


Figure 345 Expected year wise requirement of workforce and current break up of workforce across industries surveyed (Sample)- Pratapgarh

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	348210	349641	350377	355245	352486	355162	356496	
Semiskilled	28387	28503	28563	28960	28735	28953	29062	
Skilled	1892	1900	1904	1931	1916	1930	1937	
Total demand	378490	380045	380844	386136	383137	386046	387495	72%
Industry Sector								
Unskilled	29511	30911	30645	31664	32105	32597	32986	
Semiskilled	13621	14267	14144	14614	14818	15045	15224	
Skilled	2270	2378	2357	2436	2470	2507	2537	
Total demand	45402	47555	47146	48713	49392	50149	50748	9%
Services Sector								
Unskilled	12370	13010	13401	13877	14113	14578	14890	
Semiskilled	28864	30357	31269	32380	32929	34014	34743	
Skilled	41234	43367	44670	46256	47042	48592	49633	
Total demand	82467	86734	89340	92513	94084	97184	99266	19%
All Sectors								
Unskilled	390092	393562	394423	400785	398704	402336	404372	
Semiskilled	70871	73127	73976	75954	76482	78012	79030	
Skilled	45396	47645	48931	50623	51427	53030	54108	
Total Demand	506359	514334	517330	527362	526614	533378	537509	100%

Table 271 Projected percentage of workforce (demand) requirement till 2017 across primary, secondary and tertiary sectors-Pratapgarh

There exists not much difference in the projections of the workforce from the current scenario. Scope of secondary and tertiary to engage workers would be around 28% with some minor changes accounting for increase in services sector growth.

Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Agriculture and allied			
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
Chemical & Pharmaceuticals			
Education/ Skill Development			
Banking, Insurance & Finance			

Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 272 Workforce across various sectors by 2017- Pratapgarh

5.29.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

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Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	50335	53788	54302	59926	57322	60658	62088
Semiskilled	7022	7605	8155	8725	9223	9838	10426
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Table 273 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.40 lakh (employable working population). Keeping in mind the high rate of workforce participation from unskilled masses and the existing demand of skilled workforce to be low; the significance would be to target training to atleast 40,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced.

5.29.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Pratapgarh district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth to provide deep insight and understanding on their aspirations and perceptions; of self and people associated/related with them.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 274 Youth Profile of sample in Pratapgarh

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 25% of the youth covered were college educated and 75% had completed/drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

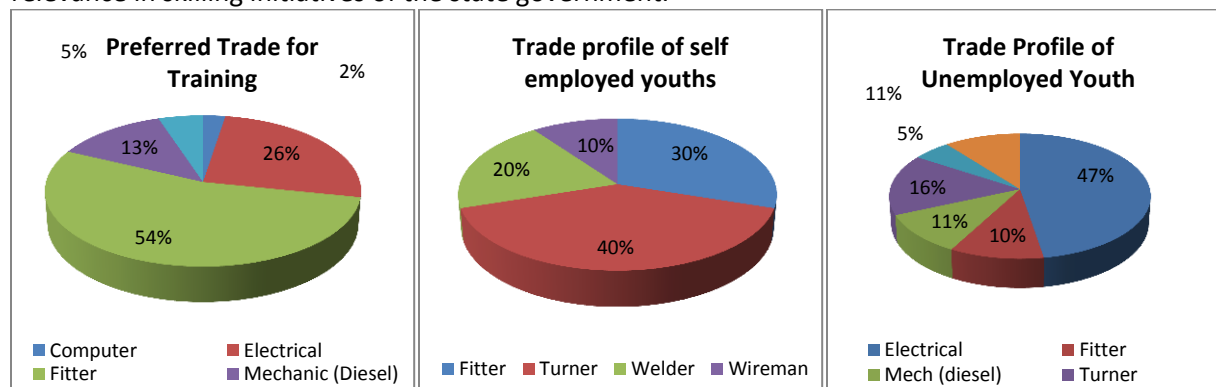


Figure 346 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Pratapgarh

Inclination towards Fitter course was found high (54% of the youth reported their preference) followed by electrical trade (26%). The reason for the same seems to be the demand for this course in the market. As self-employment turner and fitter were the chosen trades of the youths. High percentage of trained electricians remained unemployed followed by turners. Supply of the electrical trainees in the market has increased and may be inferred to be the reason of unemployment of this trade trainee.

5.29.10 Youth's Perception

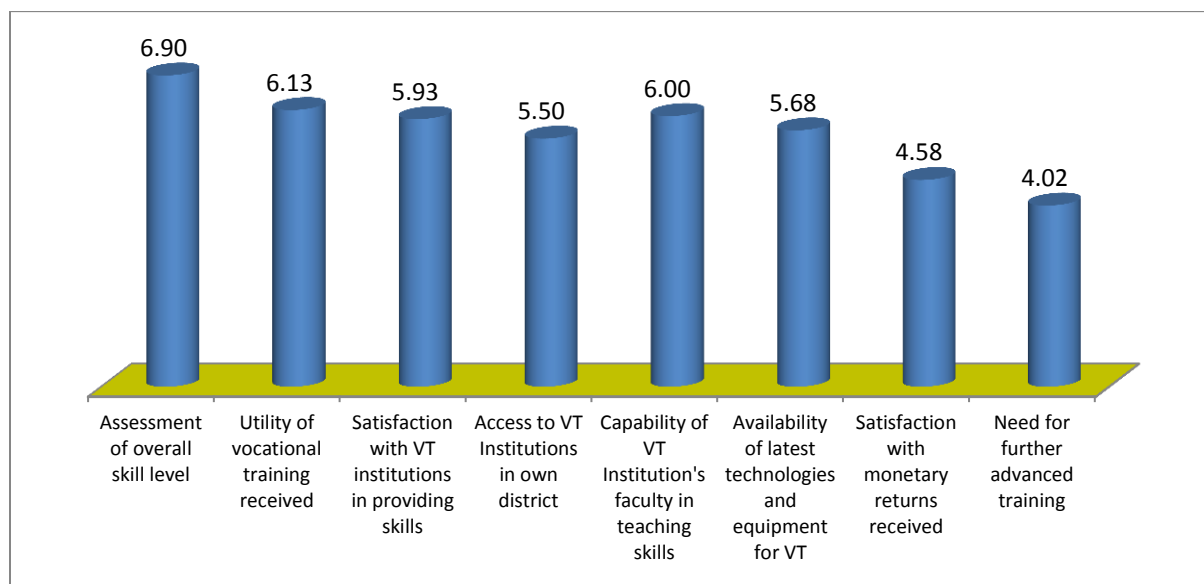


Figure 347 Pratapgarh Youth's perception, need and aspirations –Sample Group

Satisfaction with current monetary returns and need for advanced training emerged as the two least rated factors on a scale of 10. As identified by the respondents, the satisfaction, utility of the training and skill acquired from the VTI was overall rated higher than other parameters. A minimum wage hike of Rs 6000 was expected among youths across various trades.

The general aspirations were mapped by conducting FGDs with the youths from various categories and the following responses were evidently represented by the group:

- m) Better salaries, work satisfaction, family security and learning new technologies (respective trades) were the desires and expectations of the youth from the employment
- n) Families expected from them to get engaged in government jobs or well-paid jobs in big firms
- o) Less opportunities of on job training being provided and the less number of ITI make the overall skilling scenario very specific to the training manuals without much choice
- p) Communicative English and computer training were generally undertaken by local training centres for better job opportunities
- q) ITI training were more to get government jobs as 8 out of 10 felt that self-employment had least scope in terms of secured future and sustainable growth
- r) Most of the youths find difficulties taking up other trades post training and the adaptability remains low in terms of acceptance of other trades

5.29.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.4 lakh of skilled, unskilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training

capabilities) at district and block level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

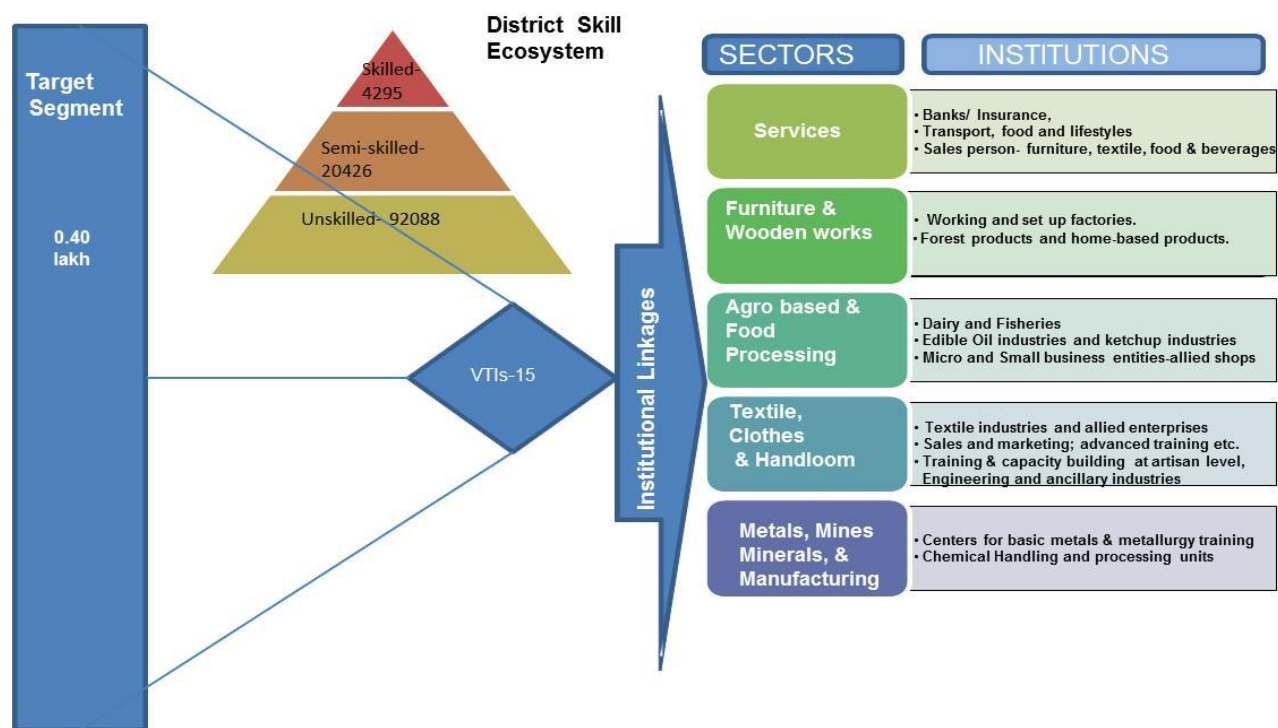
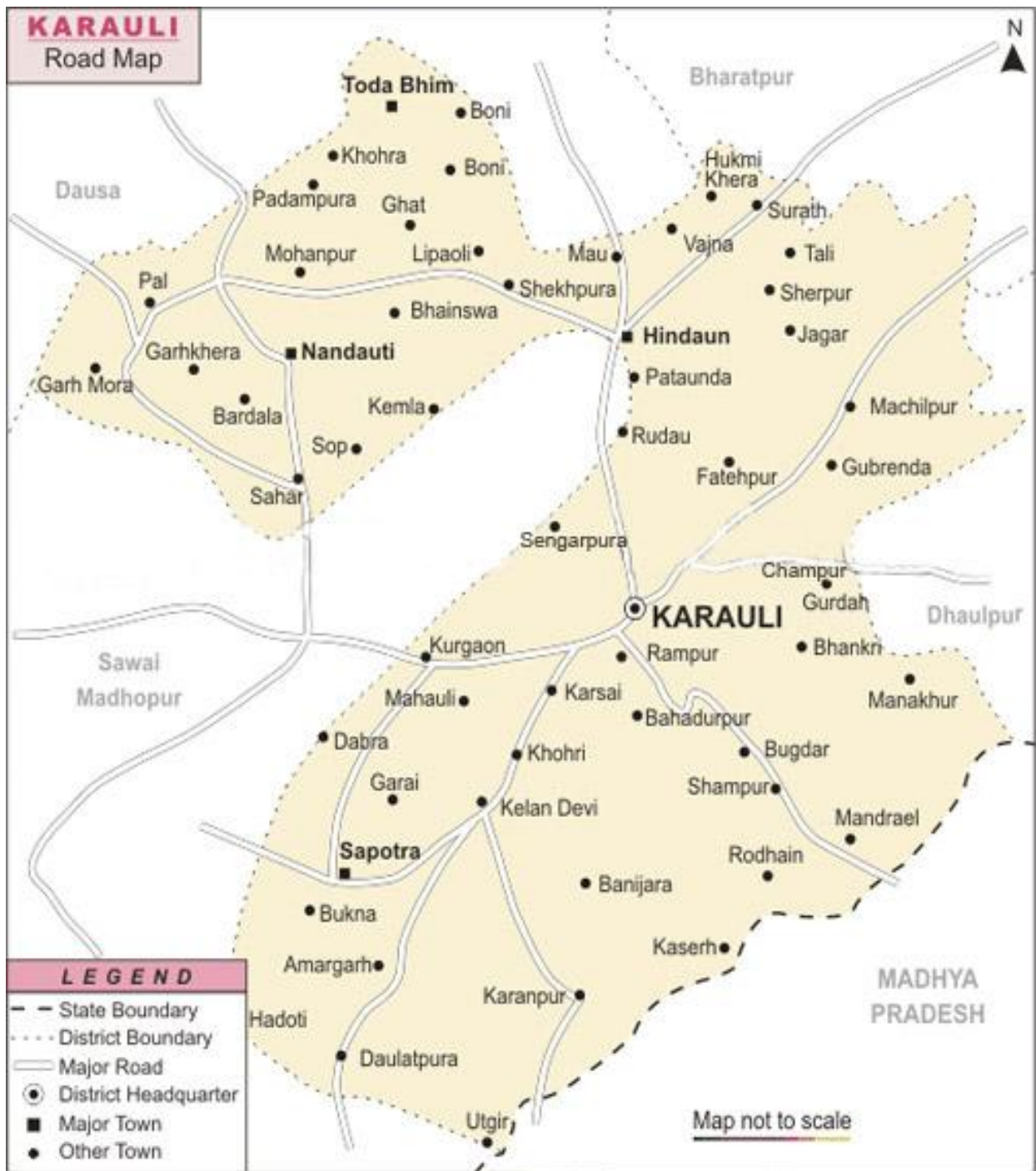


Figure 348 Optimization plan- Skill Development Eco System-Pratapgarh

The district would require more dedicated approach to advocate the usefulness of skilled workers in the industries and also need to target the service sector employment (emerging sectors). VTIs should be vital in getting the work ready repairers and mechanics. The interface between the VTIs and the industrial bodies would be essential for the mutual benefit.

5.30 District Karauli



District Skill Workforce Face Sheet-2012								
District	Karauli			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	11	No. of Villages		888	No. of Schools (elementary & sec.)		2429	
Basic Data								
Population (in '000s)	1458	Overall Literacy(in %)		67.34	Sex Ratio		858	
Decadal growth rate(in %)	20.94	Female Literacy(in %)		49.18	HDI Ranking (2008)		0.566 (25 th position)	
% Urban Population	14.21	Male Literacy(in %)		82.96	Per Capita Income (in Rs.)		14258	
Workers participation rate (2001)								
Workers participation rate (2001)	39.94	Share of primary sector (%)		71.60	Share of secondary & tertiary sector (%)		28.30	
No. of MSME/Industries	2767	Total Employment (in 000s)		8888	Total Investment (in lakhs)		2220.02	
No. of colleges (PG & Graduation)	17	Total graduates (In '00s)		9505	Total Post graduates (in '00s)		935	
No.of VTIs(registered ITI+Poly+ITC)				3	Total trainees trained (in '00s)		41	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	18235	22567	34176	40274	46001	51841	56380	1.3 lakhs
Semi-skilled workforce	6907	7197	7319	7591	7825	8054	8455	

5.30.1 Demographic Profile:

Karauli is the northern most district of Rajasthan State of western India. Karauli is situated at the point where the Satluj Waters enter Rajasthan. The Gang Canal laid down in 1927 is the life line of the district (89 miles of lined canal). Karauli is one of the well planned cities of India. Bagri and Punjabi languages are spoken by majority of population. The climate of Karauli varies to extreme limits. The Summer Temperature reaches up to 50° Celsius and Winter Temperature dips just around 0° Celsius. The average annual rainfall is only 20cms. Ganganagar district was also known as "the food basket of Rajasthan".

The district Karauli is located at 29.92°N 73.88°E in the northern most part of Rajasthan and occupies an area of approximately 10978 square kilometer catering for 3.2% of the state area. It has an average elevation of 164 meters (538 feet). It is surrounded by the state of Haryana in the northeastern side, Bikaner in the south, Jhunjhunu in the east and Pakistan in the northwest and west.

As per Census of India 2011, Karauli has a population of 19.69 lakhs, in which males are 10.43 lakhs and females are 9.25 lakhs. Males constitute approximately 53% of the population and females constitute approximately 47% of the total population. Sex ratio is

S.no	Section	Unit	Quantity
			Value
1	LOCATION		
	Latitude	degree	26°30' N
	Longitude	degree	77°01' E
2	AREA		
	Total geographical area	square	5070
3	ADMINISTRATION		
	Tehsil	number	5
	Villages	number	888
4	Land Use Pattern		
	Total Area	Hectare	504301
	Total Irrigated area	Hectare	127761
5	Population (census 2011, provisional)		
	Total population	number	1458459
	Men	number	784943
	Women	number	673516
	SC (2001)	number	280132
	ST (2001)	number	270630
6	Literacy (except 0-6 age group)		
	Total literate	percent	67.34
	Men	percent	82.96
	Women	percent	49.18
8	Energy		
	Electrified Villages	number	735
9	Industries (DIC, 2009)		
	Registered MSME units	number	937
	Employed persons	number	3566
10	Education		
	Pre Primary & Primary Schools	numbe	1174
	Upper Primary	numbe	783
	Secondary & Sr. Secondary	numbe	472
11	Higher Education / Others		
	Colleges	numbe	17
	I T I	numbe	03
	Polytechnic	numbe	0

Table 275 District profile –a Snapshot- Karauli

887 and the density (persons per sq. km.) is 179. In Ganganagar, 12.81 % (252376) of the population is under 6 years of age. From Census 2001 to 2011 apart from Karauli district, all the other districts of Rajasthan have reported a dip in Sex ratio (0-6 year's age group). Karauli District has minimum Population growth rate which is 10.06%. In between the census of 2001 and 2011 "the maximum dip" in Population growth rate is recorded in Karauli District which is 17.53%. Karauli has an average literacy rate of 70.25%, male literacy is 79.33%, and female literacy is 60.07% (best in terms of female literacy rates for the state). Majority of the population are Hindus and Sikhs, while only a few people constituting other sects stay here. The main languages spoken in the town are Hindi, Punjabi, Baagri or Marwari.

Economy of Karauli District is dependent on agriculture. The city has Cotton Ginning and Pressing factories, Mustard Oil mills and Sugar Mills Ltd. It also has spinning and textile factories. Because of its prosperity from agriculture, Karauli District also has a large number of automobiles and it becomes one of the largest automobile markets in India. The worker participation rate (WPR) was 40.22% (HDI, Rajasthan, 2008) with primary sector engaging close to 60.7% of the workforce and rest 39.3% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 13%. A significant proportion of the district was engaged in the secondary and tertiary highlighting the paradigm shift from primary over a decade as WPR in primary by 12% in a decade.

5.30.2 Education Infrastructure and Utilization

Karauli observes a healthier trend in enrollment rates, when compared to the state average. One of the reasons for the good performance in education was the early importance on education since historical days and the success of primary sector providing enabling environment for education.

Education	Karauli	Rajasthan
Pre Primary & Primary	1174	49546
Upper Primary	783	38889
Sec/ Sr Sec	472	19135

Table 276 Karauli vs. Rajasthan primary education scenario

A total of over 26000 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There are five professional colleges in the district providing courses in health, management, nursing etc. There were total of five registered vocational training institutes in Karauli district (05 ITI) with a total of above 1000 aspirants enrolled in 2009-10. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 04 partners (includes KVK, ITC and NGO) implementing skilling initiatives with 13 approved programs (10 completed). A detailed view of the vocational training of Karauli could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.30.3 VTI's demand across various trades in Karauli district

The existing scenario of VTIs in Karauli was certainly on the better side considering the number of educational institutes and VTIs. Private organizations working in this sphere have a vast scope for initiating skilled interventions of the district and catering the needs for skilling youths of the district. The primary survey conducted in the district to understand the present scenario of skilled intervention

of the district. The government VTIs interviewed in the survey was one and nine were from the private. The courses which were offered by the government VTIs were predominantly engineering based and to cater the local market needs. In private VTIs the courses taken up were almost same with some courses on computer and IT. The details of the courses offered in the VTIs of Karauli are represented in the table.

Government VTI Trades	Pvt. VTI Trades
Electrical	COPA
Fitter	Cutting & Sewing
Motor Mechanic	Craftsman
Welder	Electrical
Wireman	Fitter
Turner	IT & ESM
	Mechanic (Diesel)

Table 277 Courses offered in government and private VTIs (sample), Karauli

Electrical was most preferred trade in Karauli as maximum number of seats in both government and private VTIs were from this trade. In addition to that the number of seats in electrical trade in private VTIs was more 2.5 times than to government VTIs. There was no difference between actual trainees and approved trainees in Government VTI across all the trades whereas in Private VTIs the difference was varying from 1 to 65 seats. IT & ESM trade had least difference

and Electrical trade had max difference of 65.

Based on the needs and requirement of the area following trade has been identified:

- a) **Computer Based Accountancy:** With number of shops, and other establishments using TALLY to maintain their financial data, growing in number in almost all places including Karauli there is a significant demand for persons skilled in Computer Based Accountancy. After VAT became effective in the state TALLY has become a necessity for all VAT paying shops.
- b) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is telecom or banks or insurance firms is growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field.
- c) **Repair and maintenance of Refrigerators and ACs:** Karauli faces extreme heat in summers and the demand for technicians who can maintain and repair refrigerators and ACs was growing with the greater use of these equipments.
- d) **Diesel Engine Repairing:** Due to heavy use of diesel engines in the Karauli for irrigation and in automobiles the demand for skilled mechanics in this trade was very high
- e) **Computer Hardware:** The use of computer in the district has proliferated. There is a high demand for persons who can repair and maintain computers as well assemble new ones.

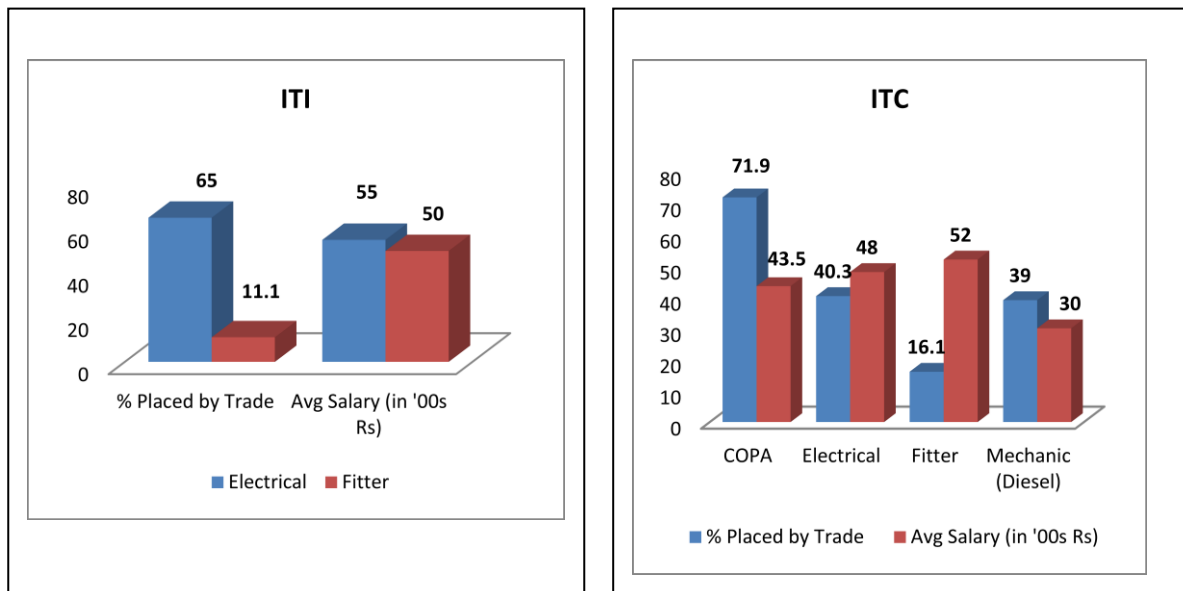


Figure 349 Karauli district's (sample study) courses offered placements in VTIs and average (avg) salary offered

An overview of placement records by trade in the government VTIs indicated very poor prospects in all the trades. Not even a single trainee from Motor Mechanic, Welder, Wireman and Turner trade got placed in the last year's passed out numbers. The placement in private VTIs was better than government institutions but not at all promising as only 34.7% of the total trainee strength got placed across all the trades. In terms of average salary/trainee from government VTIs, the highest paid trade was Electrical (Rs. 5,500/month) and in private VTIs, the highest paid trade was fitter with Rs. 5,200/month. While placements of trainees from the government VTIs was more through campus Interviews, the private VTIs depended more on proactive approach with the industry for placements. Employment exchanges had no role in the placements of the trained youths.

The trends across most of the trades showed marginal increase in demand for trades over time in the government VTIs apart from Wireman and Turner trade where the demand declined over the years. In contrast, Private VTIs had significant increase in the strength of trainees over the years across all trades. Data on the number of trainees for craftsman trade in Private VTIs highlighted no preference for this trade. All the VTIs were under staffed.

5.30.4 Industry Mapping

MSME in Karauli

According to D.I.C data (March, 2012), there were around **2767 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.2220.02 lakhs** providing employment to **8888 persons**. The major industries existing in the district were mineral based in the mining sector.

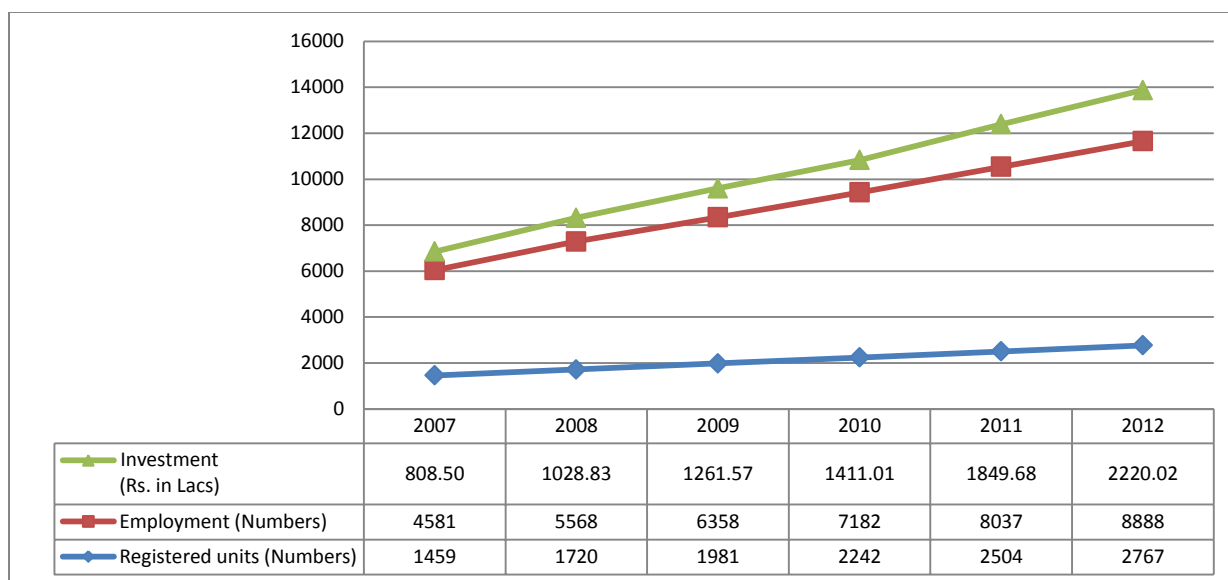


Figure 350 MSME trend analysis of the district Karauli

5.30.5 Sector wise mapping of industries

District wise the existing sectors were mapped against the high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Karauli. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	10	50	50
Auto & Auto Components			
Chemical & chemical products	15	20	45
Food Processing	1	5.00	4
Furniture & Furnishing	15	75	50
Leather & leather goods	10	03	40
Textile & Handloom	20	45	90
Repair & Servicing	40	50	80
Building Construction & Real Estates			
Mines, Metals & Minerals	192	768	1536
Machinery, Electricals & Manufacturing	35	200	100
High	Units>30, investment>50, emp>80		
Medium	Units>20, investment>30, emp>50		
Low	Units> 10, investment> 10, emp>10		
Emerging	Investment & demand based sectors of district-DIC		

Table 278 Sector wise mapping of industries in Karauli as per DIC report, 2007

Sectors covered under sample survey
Agriculture & Allied
Machinery, Electricals & Manufacturing
Mines, Metals & Minerals
Transportation, Logistics, Ware Housing & Packaging

Table 279 Breakup of industries in Karauli (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries were selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in Karauli district of Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table above. The 10 industries were sampled for the survey to represent 4 major sectors that are prominent in the district as shown in the table above. Agriculture and allied sector was the largest segment for the district engaging maximum number of workforce followed by mines, metals and minerals.

5.30.6 Workforce Demand and Supply

The economy of the district which has undergone some transition over a period from agriculture base to more wage based forms due to growing of the secondary and the tertiary sectors in the district. This impacted the WPR of the women and the Female WPR increased significantly in the year 2001 by close to 5%. It was significant that the number of main workers dependent on agriculture was just 60 per cent in Karauli. Other workers representing the non-farm sector along with workers engaged in household industry add up to 39 per cent of the main workers in the district who were primarily engaged in allied activities. Similar structure of the work force was observed across all the tehsils in Karauli.

The primary data during the survey focused on the diversified sectors of the district capturing the workforce structure in terms of skilled, semi-skilled and unskilled workers at various stages of the industries as shown in the below figure.

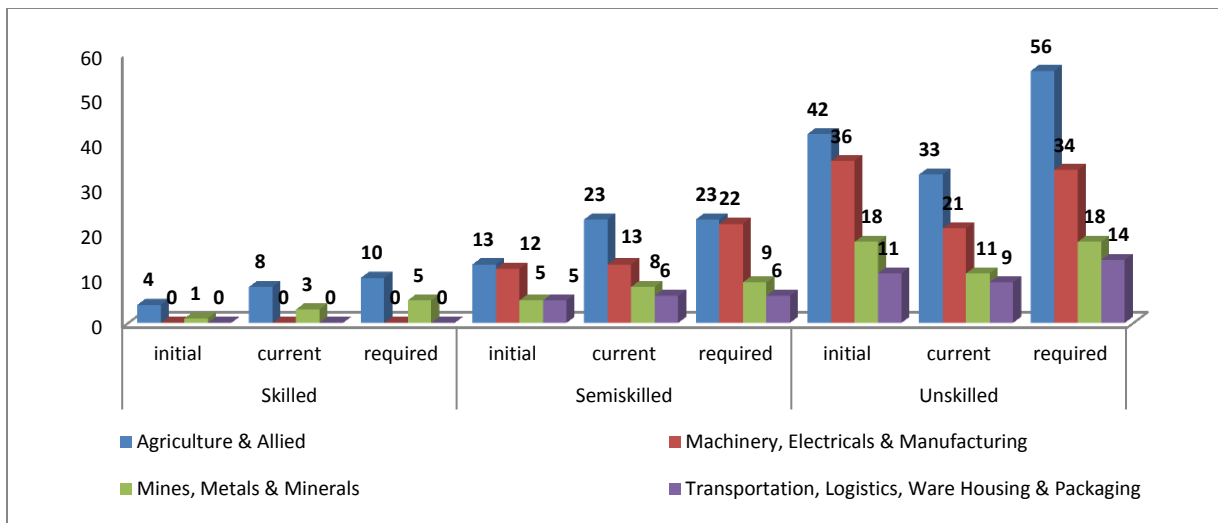


Figure 351 Workforce engagement under various stages and required strength of workers across sectors surveyed (Karauli sample)

Availability of skilled, semi-skilled and unskilled workers according to their numbers in the sampled industries (segregated under specific sectors) at the time of the establishment of the industry, their present strength and their required strength as projected by the industries is shown in above figure. While the two industries sampled from two different sectors (Machinery, Electricals & Manufacturing and Transportation, Logistics, Ware Housing & Packaging sector) could not provide details of their skilled worker strengths, for remaining two sector (mining and agricultural), industries had a marginal increase in skilled worker intake. Demand for skilled worker in future was not very high and reported by Agriculture & Allied and Mines, Metals & Minerals sector industries. All the industries have expanded their semiskilled workforce since industry establishment and reported potential to absorb more semiskilled workforce across different industries in near future. Though most of the sectors have reduced their unskilled

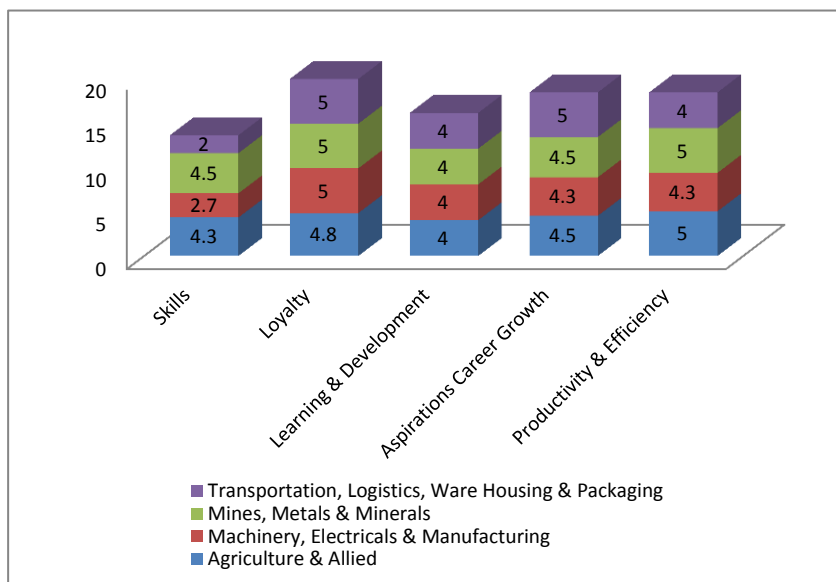


Figure 352 Employers demands in terms of expectations from workers Karauli

workers' strength since establishment but potential to absorb more unskilled worker in different industries was still there; clearly showing the low cost model of operation preferred by the industries.

In terms of industries' requirements and the expectation of the employers from its workers the primary survey provided the major demand to be loyalty followed by aspirations for career growth, productivity and efficiency. Agriculture and mining emerged as the demanding sectors in terms of the set

parameters (ranked on a scale of 5). It could be inferred that these sectors also employed skilled workforce.

Recruitment of required workers was done from known sources such as own workers which appeared to be the most reliable method of recruitment for most of the industries. The VTI trained workers were only engaged by the mining and agriculture industries.

5.30.7 Projected Workforce Demand

It has been observed in the primary survey that the percentage of skilled workers have been almost doubled over the years and had 70% increase in the semi-skilled and decrease in unskilled workforce. In contemporary scenario the engagement of unskilled labor (55% of the total workforce) was quiet high followed by semi-skilled (37%) and was just 8% for skilled. In general, the emerging occupations and new establishments demand for workers could be the new areas of interest for the workers in the near future as skilled and semi-skilled workforce.

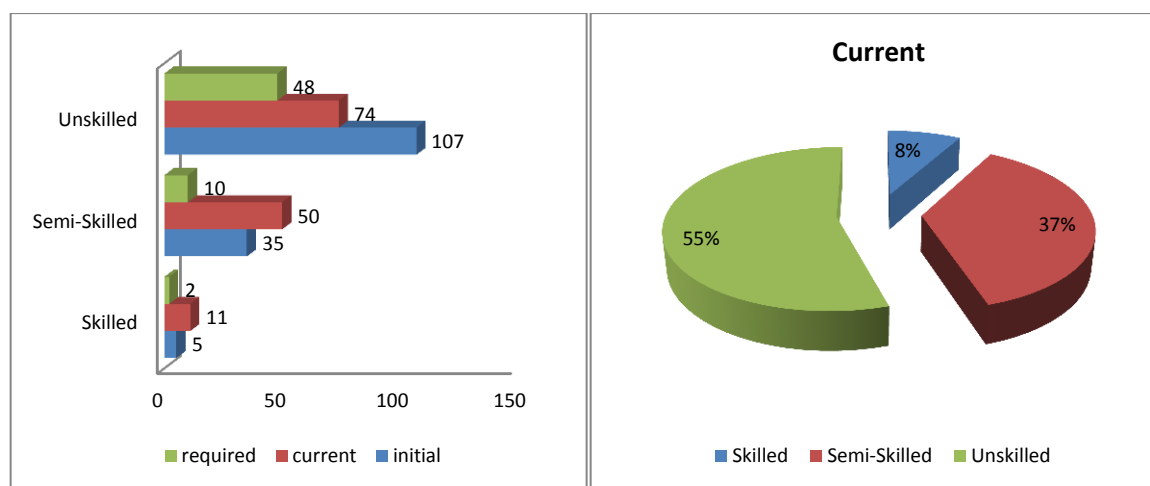


Figure 353 Expected year wise requirement of workforce and current break up of workforce across industries surveyed (Sample)- Karauli

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	73562	98056	113317	131133	151820	177991	198258	
Semiskilled	8443	8809	9237	9875	9931	10434	10808	
Skilled	5629	5872	6158	6583	6621	6956	7205	
Total demand	87634	112737	128713	147592	168372	195381	216271	49%
Industry Sector								
Unskilled	59076	63410	63116	65807	66158	68072	68879	
Semiskilled	27266	29266	29131	30372	30534	31418	31790	
Skilled	4544	4878	4855	5062	5089	5236	5298	
Total demand	90886	97554	97102	101241	101781	104727	105967	24%
Services Sector								
Unskilled	27182	28584	29371	30480	30988	31995	32685	

Semiskilled	63425	66695	68532	71121	72305	74655	76264	
Skilled	9061	9527	9790	10161	10330	10665	10895	
Total demand	99668	104806	107694	111762	113622	117314	119844	27%
All Sectors								
Unskilled	159820	190050	205805	227421	248966	278058	299821	
Semiskilled	99134	104770	106900	111369	112770	116507	118862	
Skilled	19234	20278	20804	21806	22039	22857	23398	
Total Demand	1397852	1462587	1524550	1621127	1632503	1709253	442082	100%

Table 280 Projected percentage of workforce (demand) requirement till 2017 across primary, secondary and tertiary sectors- Karauli

There exists not much difference in the projections of the workforce from the current scenario. Scope of secondary and tertiary to engage workers would be increasing with primary sector engaging around 49% with some major changes accounting for increase in services sector growth. There would be 51% of the workforce engaged in the secondary and tertiary sectors with major shares in service sector. Mainly the services of sales, automobiles & workshop and computer/IT related services. Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Agriculture and allied			
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			

High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 281 Workforce across various sectors by 2017- Karauli

5.30.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	79087	84140	89395	97482	98170	104589	109221
Semiskilled	18235	22567	34176	40274	46001	51841	56380
Skilled	6907	7197	7319	7591	7825	8054	8455

Table 282 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 1.74 lakh (employable working population). Keeping in mind the high rate of workforce participation from unskilled masses and the existing demand of skilled and semi-skilled workforce to be high; the significance would be to target training to atleast 80,000 youths by 2017. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation is conducive enough to support industrial growth in Karauli but Power has a major problem. Land, Water and availability of skilled manpower is not a problem and all resources are available except uninterrupted power supply
- The VTIs are not completely fulfilling the needs of the industries. Demand across the sectors for skilled workers was good but small and medium sectors only pooled semi-skilled and unskilled workers
- Scope for self-employment and entrepreneurship in the district was good, but the risk taking ability lacked in general. Loans were made available on subsidy and provided by the bank linkages in this regards. But lot needs to be done in terms of grooming and proper guidance
- Rod, Iron Tar and Atta industries are predominant in the district .Iron and tools Industries were the emerging sectors in the district which could sustainably absorb new manpower. Compared to the

informal sector, formal sector ventures were bound by some limitations in employing persons as they require trained people only. On the other hand, the informal sector was free to employ even a semi-skilled person and provide him the required skills later over a period of time. Getting job in informal sectors was therefore easier and attracted number of skilled and semi-skilled manpower.

5.30.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Karauli district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth to provide deep insight and understanding on their aspirations and perceptions; of self and people associated/related with them.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 51.7% of the youth covered were college educated and 48.3% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

Table 283 Youth Profile of sample in Karauli

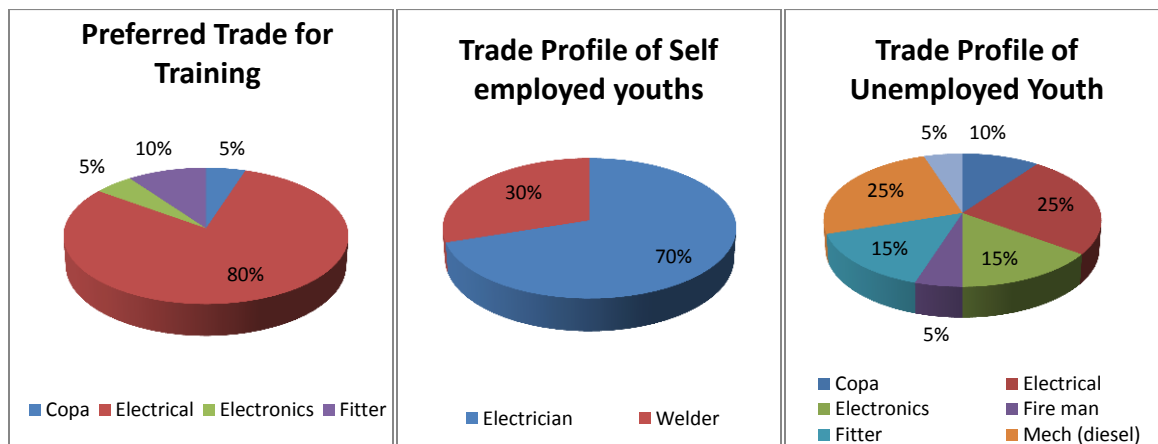


Figure 354 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample Karauli

Inclination towards Electrical course was found high (82% of the youth reported their preference) followed by fitter trade (10%). The reason seems to be the demand for this course in the market. As self-employment electrical and welder were the chosen trades of the youths keeping in mind the manufacturing sector, automobiles and the ancillary industries coming up in the district. High percentage of trained electricians and mechanics formed part of the unemployed youths in the survey

(25% and 25% respectively) which highlights the demand supply imbalance and highlights the major gap in the placement of the youths.

5.30.10 Youth's Perception

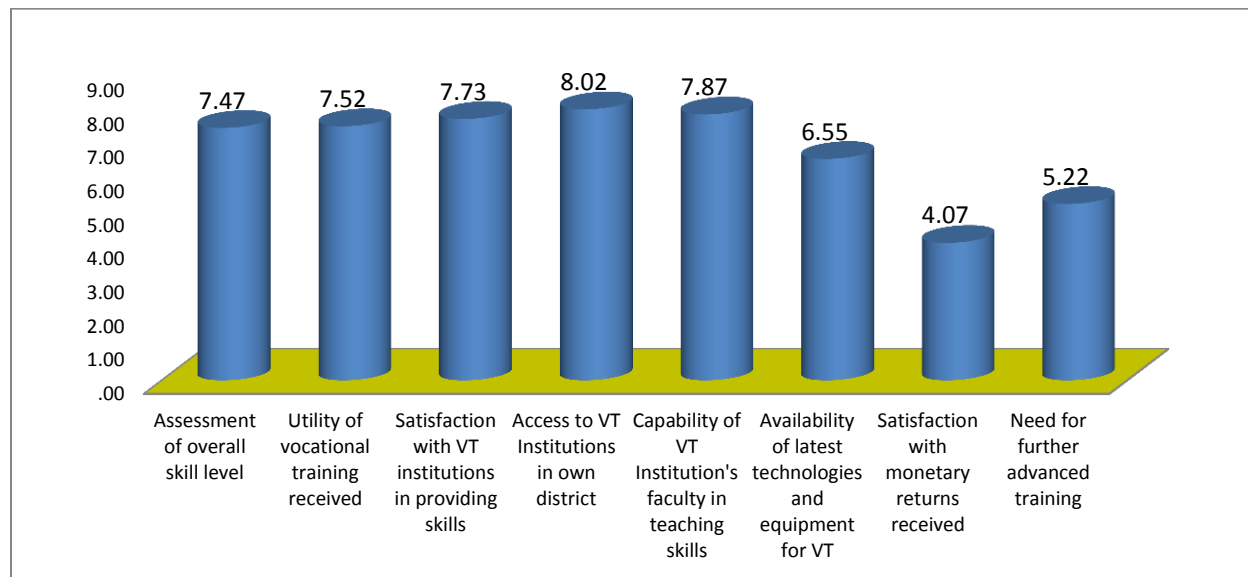


Figure 355 Youth's perception, need and aspirations –Sample Group Karauli

The major dissatisfaction of the surveyed youths was the current monetary returns followed by the less opportunities of further training (especially in computers and English communication). On a scale of 10 youths rated importance of access to VTIs and the capacity of VTIs providing training at the highest.

The general aspirations were mapped by conducting FGDs with the youths from various categories and the following responses were evidently represented by the group:

- m) Better salaries, work satisfaction, family security and learning new technologies (respective trades) were the desires and expectations of the youth from the employment
- n) Families expected from them to get engaged in government jobs or well-paid jobs in big firms
- o) Preference to join the government jobs has made maximum number of youths to pursue training in the ITI
- p) Communicative English and computer training were generally undertaken by local training centres for better job opportunities
- q) 50% of the youths felt that self-employment had least scope in terms of secured future and sustainable growth. Also there were no encouragement by the family members to encourage the self-employment or enterprising
- r) The minimum salary expected after training by most of the youths was between Rs. 8000-10000/month. Though many were not comfortable with the entry level jobs with less pay in private sectors, but as an option they would prefer to get engaged

5.30.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and

the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 1.74 lakh of skilled, unskilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at district and block level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

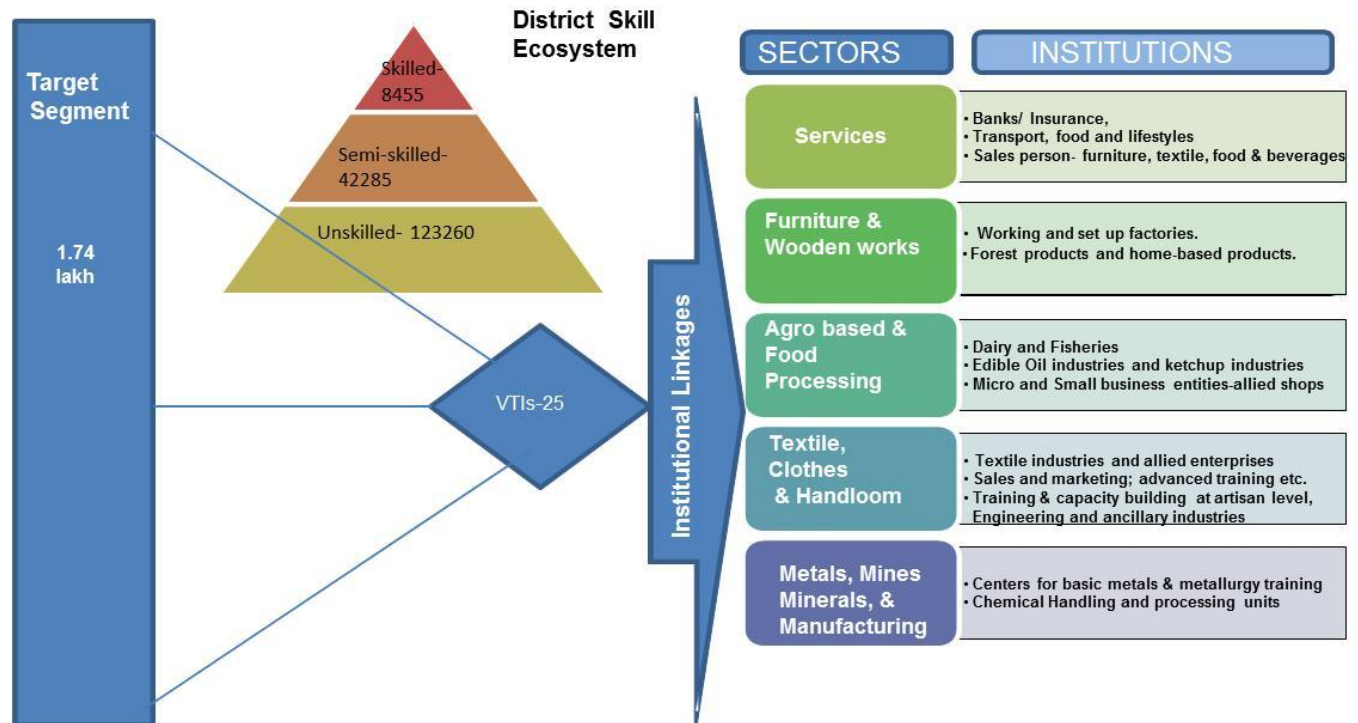


Figure 356 Optimization plan- Skill Development Eco System- Karauli

5.31 District Ajmer

AJMER DISTRICT



District Skill Workforce Face Sheet-2012								
District	Ajmer			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	17	No. of Villages		1111	No. of Schools (elementary & sec.)		3420	
Basic Data								
Population (in '000s)	2585	Overall Literacy(in %)		70.46	Sex Ratio		950	
Decadal growth rate(in %)	18.66	Female Literacy(in %)		56.42	HDI Ranking (2008)		0.677 (10 th position)	
% Urban Population	40.09	Male Literacy(in %)		83.93	Per Capita Income (in Rs.)		18483	
Workers participation rate (2001)								
Workers participation rate (2001)	39.27	Share of primary sector (%)		47.80	Share of secondary & tertiary sector (%)		52.20	
No. of MSME/Industries	16343	Total Employment (in 000s)		80142	Total Investment (in lakhs)		68406.44	
No. of colleges (PG & Graduation)	47	Total graduates (In '00s)		9306	Total Post graduates (in '00s)		2058	
No. of VTIs(registered ITI+Poly+ITC)				8	Total trainees trained (in '00s)		2294	
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	5619	5993	6066	6262	6314	6488	6552	0.83 Lakhs
Semi-skilled workforce	10077	10642	10572	10975	11069	11290	11404	

5.31.1 Demographic Profile:

Ajmer District is situated in the centre of Rajasthan State lying between 25.38" and 26.58" North Latitudes and 73.54" and 75.22" East Longitudes. The district is surrounded by Jaipur and Tonk district in East and Pali district in west, Nagaur district touches its North boundaries while Bhilwara district in the South, the total geographical Area of Ajmer district is 8.50 lac hectares, for land utilization purpose, the area was reported 8.42 lacs hectares in 2007-08. Ajmer district stands at 16th place among the existing 33 districts or the State so far its total area is concerned.

The district has no natural division. Its boundaries are territorial and composed of four sub-divisions namely Ajmer, Beawar, Kekri, and Kishangarh. Ajmer sub-division forms the Northern part of district and is more or less triangular in shape, Beawar sub-division is an irregular terrain lying the south-west of district. The track is generally hilly. Kekri sub-division forms the south Eastern portion of the district and consists of two narrow strips of land separated from each other. The distinguishing feature of the district is the Arawali range, which comes into prominence near the town of Ajmer.

S.no	Section	Unit	Quantity
			Value
1	LOCATION		
	Latitude	degree	26°27' N
	Longitude	degree	74°38' E
2	AREA		
	Total geographical area	square	8481
3	ADMINISTRATION		
	Tehsil	number	09
	Villages	number	1025
4	Land Use Pattern		
	Total Area	Hectare	842943
	Total Irrigated area	%	15.31
5	Population (census 2011, provisional)		
	Total population	number	2584913
	Men	number	1325911
	Women	number	1259002
	SC (2001)	%	17.71
	ST (2001)	%	2.41
6	Literacy (except 0-6 age group)		
	Total literate	percent	70.46
	Men	percent	83.93
	Women	percent	56.42
8	Energy		
	Electrified Villages	%	96.44
9	Industries (DIC, 2009)		
	Registered MSME units	number	15909
	Employed persons	number	74411
10	Education		
	Pre Primary & Primary Schools	number	1346
	Upper Primary	number	1464
	Secondary & Sr. Secondary	number	610
11	Higher Education / Others		
	Colleges	number	47
	IT I	number	06
	Polytechnic	number	02

Table 284 Ajmer District Profile- a snapshot

As per provisional census 2011 data, Ajmer accounts for population of 25.84 lakhs (2.48% of the state population). The district has a population density of 305 inhabitants per square kilometres. Its population growth rate over the decade 2001-2011 was 18.48%. Ajmer has a sex ratio of 950 females for every 1000 males, and a literacy rate of 70.46%.

5.31.2 Education Infrastructure and Utilization

Ajmer’s status in literacy was marked higher than the state average but also marked as the higher side for the state with in both male and female literacy. Ajmer district has become a hub for education in Rajasthan state. Along with numerous government colleges providing arts, sciences, and commerce education, private educational institutes have played a vital role in imparting education level in the district. There are two Government Polytechnic College also in Ajmer district. Ajmer ranks 3rd in the education index and have high girl child enrolment and retention rate in comparison to the nearby districts. Ajmer has a total of 3420 schools from pre-primary to senior secondary levels with private schools providing good services as well. The retention rate of students in schools of Ajmer is quiet high as well as the continuously rising enrolment rates have contributed to the drop in illiteracy rates and status of education.

Education	Ajmer	Rajasthan
Pre Primary & Primary	1346	49546
Upper Primary	1464	38889
Sec/ Sr Sec	610	19135

Table 285 Ajmer vs. Rajasthan education status

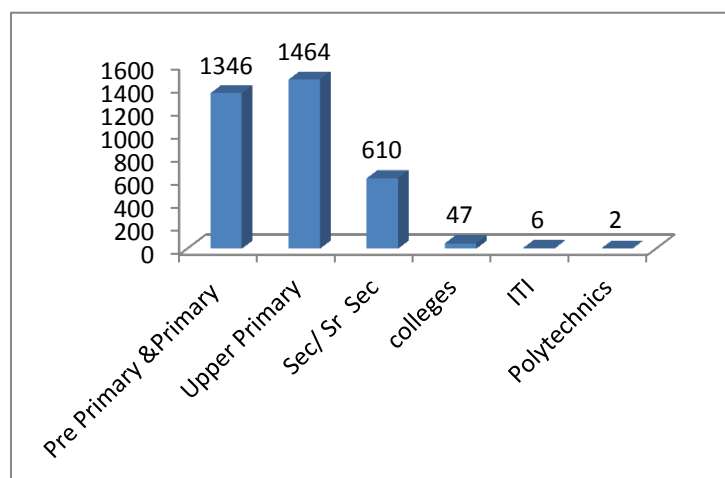


Figure 357 Number of Schools, Colleges, ITI & Polytechnic, 2009-10- Ajmer

A total of over 2900 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There were just a total of four registered vocational training institutes in Ajmer district. A total of just above 650 aspirants got enrolled in 2009-10 in the registered training institutes. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 08 partners (includes 01 ITI, 01 NGO, 01 KVK and 05 ITCs) implementing skilling initiatives with 14 approved programs

(all completed). A detailed view of the vocational training of Ajmer could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.31.3 VTI’s demand across various trades in Ajmer district

The existing scenario of VTIs in Ajmer was certainly on the lower side considering the number of youths passing out from formal educational set ups and the existing vocational training institutes in the

district. Private players have not yet ventured in a big way eventually leaving a vast scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields as follows:

- a) **Computer Based Accountancy and computer operators:** With number of small scale industries coming up in the region the educated youth having the basic education levels could be engaged in computer courses for accountancy (VAT & TALLY) and data entry operators for industries and government development projects.
- b) **Sales Persons:** Sales and Marketing has emerged as one of the trades where the demand from industry whether it is food processing, banks/insurance or leather products firms which are growing by the day. Although the companies prefer persons either having higher qualifications or are from the related educational background there is still ample scope for the youths who will be trained in this field
- c) **Repair Services:** The numbers of electronic and electrical based equipment along with basic motor repairing in workshops are on a rise in Ajmer. Also, the wiring and fitting of household electric equipment is on the rise. The owners of these are in need of economical, efficient easy access to repair and maintenance which can be easily produced in local economy through skilling

The government VTIs interviewed in the survey was two and eight were from the private. The courses which were offered by the government VTIs were predominantly self-employment based or to cater the local market needs. In VTIs the courses were more male oriented and none of the courses offered was designed demands to engage women. The details of the courses offered in the VTIs of Ajmer are represented as follows:

Govt. VTI Trades	Pvt. VTI Trades
Electrical	COPA
Fitter	Electrical
Mechanic (Diesel)	Fitter
Motor Mechanic	Mechanic (Diesel)
Welder	Wireman
Wireman	Plumber
Turner	AC Mechanic

Table 286 Trades offered in government and private VTIs (sample study) Ajmer

The government and private VTIs sampled for the study offer 7 different trades each with some common ones like electrical, wireman, fitter, and mechanic for training. Electrical was most preferred trade in Ajmer as maximum number of seats in VTIs was from this trade. It appears in the government VTIs; the number of actual trainees compared to the number of approved number of trainees is more or less same across all most all the trades. On the other hand in private VTI, the difference between actual trainees and approved trainees was varying from 0 to 63 in number.

An overview of placement records by trade in the VTIs indicate stronger prospects in all most all of the trades with the exception of Diesel Mechanic trade in government and wireman and AC mechanic in private VTIs. It may be due to the fact that most of the trainees from these trades seek self-employment as second choice. In terms of average salary/trainee; in government VTIs, the highest paid trade was Motor Mechanic (Rs. 7,000/month) and in private VTIs, the highest paid trade was Diesel Mechanic trade with Rs. 7,600/month. While placements of trainees from the government VTIs was more through campus interviews, the private VTIs placed their trainees through campus interviews as well as proactive approach to the industry. Though some of the trainee from government VTI got their placement through employment exchange but it was inferred that employment exchanges were not playing a major role in placements. The private VTIs placement and average salary as initial package was better than the government VTIs.

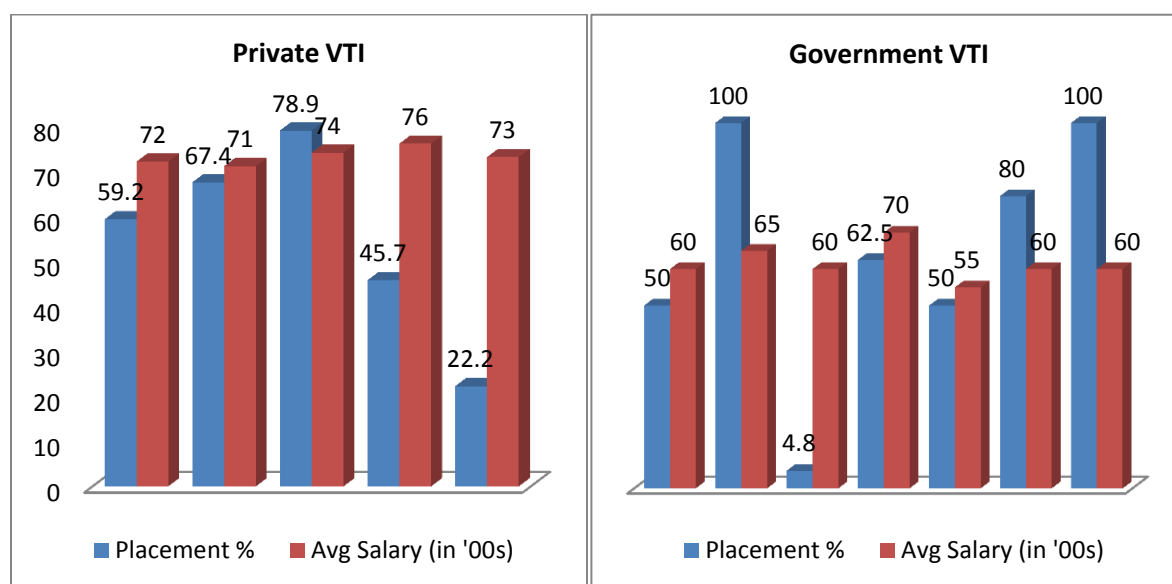


Figure 358 Ajmer district's (sample study) courses offered placements in government and private VTIs

The trends across most of the trades show a slightly increasing or static demand from the data on number of trainees by trade over time in the government VTIs whereas for Motor Mechanic trade the demand declined slightly over the years. On contrary, the private VTIs increased the strength of trainees over the years was making significant remarks regarding the scope of present trades. The selection of course design and other influencing factors for finalization of courses by the VTI functionalities were more or less determined by the availability of facilities, faculties and equipment. All the VTIs claimed to have updated technologies, equipped labs, and space for conducting the training, electricity and water supply (private VTIs were lacking in upgrading them). None of them have hostel facility for girls (three for boys in private VTI). Commuting facility for the aspirants in all private and government VTIs was a good initiative. The staffing in these institutes was marked proper and adequate in aspects dealing in academics & managerial positions in government set-ups whereas, the private VTIs were well staffed.

5.31.4 Industry Mapping

Ajmer has 07 industrial areas marked with three major clusters in leather (Mojri), agricultural equipments and tye & dye. The main existing industries mainly comprise of Granite Tiles, & Slab, Cattle Feed' Electric Wire & Cable, Grain & Spices Grinding Sprinkler Irrigation System Plywood, PVC & Plastic Pipes, HDPE Pipes & Fittings, Woolen Carpet Yarn, Synthetic Blended Yarn, EAL Bottling Plant, Dairy Plant, FRP Rods, Electric Transformer, Rubber Footwear, Mineral Grinding, Pulses & Oil manufacturing etc. In exported Items Synthetic Blended Yarn, Rubber Footwear, and Furniture stand out.

MSME in Ajmer

According to D.I.C data (March, 2012), there were around **17902 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.100953 lakhs** providing employment to **84262 persons**. It also has seven large and medium scale industries employing close to 3000 persons.

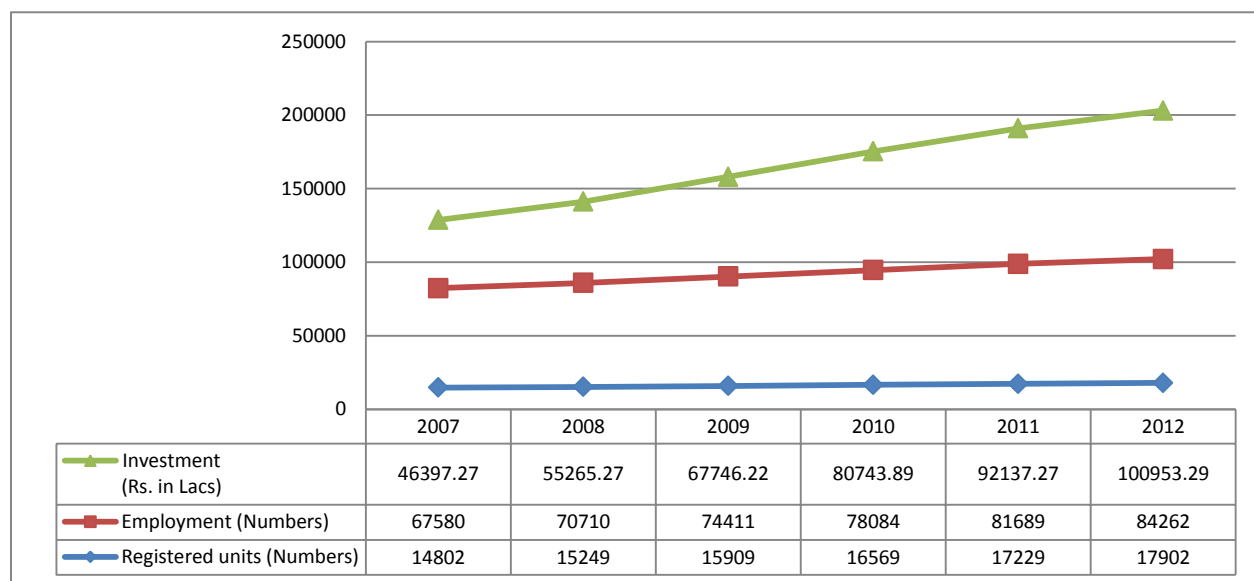


Figure 359 MSME trend analysis of the district Ajmer

There has been a constant increasing trend in the investment in industries, and increase in the employment as well. The main existing industries are leather based, food product based, metals and minerals and manufacturing. The potential growth areas would be cattle feed, mineral grinding and tiles

5.31.5 Sector wise mapping of industries in across Ajmer

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Ajmer. Against the mapped sectors **sector wise analysis shall be**

made on the labour growth projections like high/ medium/ low and emerging basis on the demand in that particular sector on the triggers like investment, employment and number of units.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	1189	2000.81	3748
Auto & Auto Components			
Chemical & chemical products	499	529.10	1246
Construction Material & Building Hardware			
Food Processing/ Products	1277	2850	4266
Furniture &Furnishing	238	238	238
Leather & leather goods	1392	1392	1392
Textile & Handloom	387	140.81	2174
Services & repairing	1168	123.80	1328
Building Construction & Real Estates			
Education & Skill Development			
Healthcare			
IT & ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging			
Mines, Metals & Minerals	814	5932.02	6016
Machinery, Electricals & Manufacturing	2504	20763.02	51169
High	Units>400, investment>500,emp>500		
Medium	Units>200, investment>200, emp>250		
Low	Units> 10, investment> 30, emp>30		
Emerging	Investment & demand based sectors of district-DIC		

Table 287 Sector wise mapping of industries in Ajmer as per DIC report, 2010

There have been many MSME coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of metals, mines & minerals,

Sectors covered under sample survey
Leather & Leather Goods
Machinery, Electricals & Manufacturing
Stone Querying, Cutting & Polishing
Textile & Handloom
Food Processing

leather and textiles, furniture and manufacturing sector and services. A substantially good number of workforce (15%) form the services backbone of the district and are engaged in various industries, households etc. as daily wagers.

Table 288 Breakup of industries in Ajmer (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in Ajmer district of

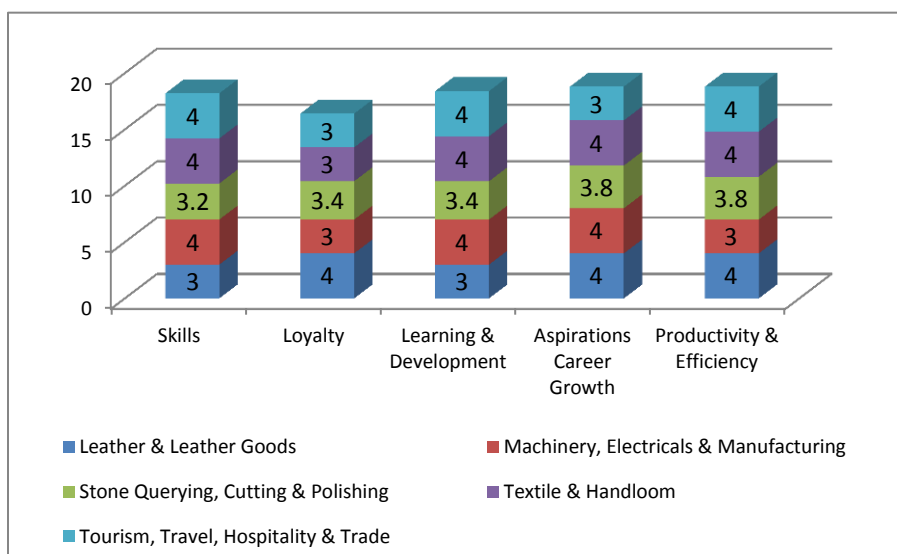
Rajasthan. These functionaries represented different levels of management as Partners, Directors, General Managers, HR Managers, etc.

These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table. The industries sampled were performing without any gap in production except the packaging industry which was running short of skilled manpower.

All the sampled firms had some popular worker welfare schemes such as ESI scheme, Health scheme, PF scheme, Housing scheme and provision of food for their workers.

5.31.6 Workforce Demand and Supply

The major workforce participation observed in Ajmer district over a period of two decades has been majorly as cultivators/ agricultural laborers and has had a marginal increase of 0.04% over a period. There has been increasing trend of workforce share in primary sector from 65.60% to 66.00% from 1991-2001. Therefore, the decrease in the share of secondary and tertiary has been quiet insignificant for the same period. Majority of the workforce has been engaged in subsistence agriculture and remains idle for the bulk period of the year. Ajmer lies in edge of Thar region. There is distinct trend observed in the workforce engaged as laborers & wage earners who get engaged as land labourers, helpers, cleaners, semi-skilled mechanics etc. People have migrated to become traders and merchants and have benefitted the local human capital and social attainments. Engagement in secondary and tertiary sector shows an emerging trend as per the industrial growth of the district. Looking at the present resources and skill set of the workforce tiles and stones, textiles and leather hold the key to future employment for the district Ajmer. The requirement for semi-skilled workforce was higher than the skilled workforce. The granite related industries demand for unskilled workforce more than double of that of semi-skilled workforce requirement clearly illustrating the model of low-cost unorganized form of labour utilization in the sector. Ajmer workforce engagement plan should also cater for agri-based and food products industries.



In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were loyalty towards work and least scaled was importance of enhancing skills. Other parameters were closely rated as shown in the figure showing the

Figure 360 Employers demands in terms of expectations from workers (Ajmer)

employer's expectations.

5.31.7 Projected Workforce Demand

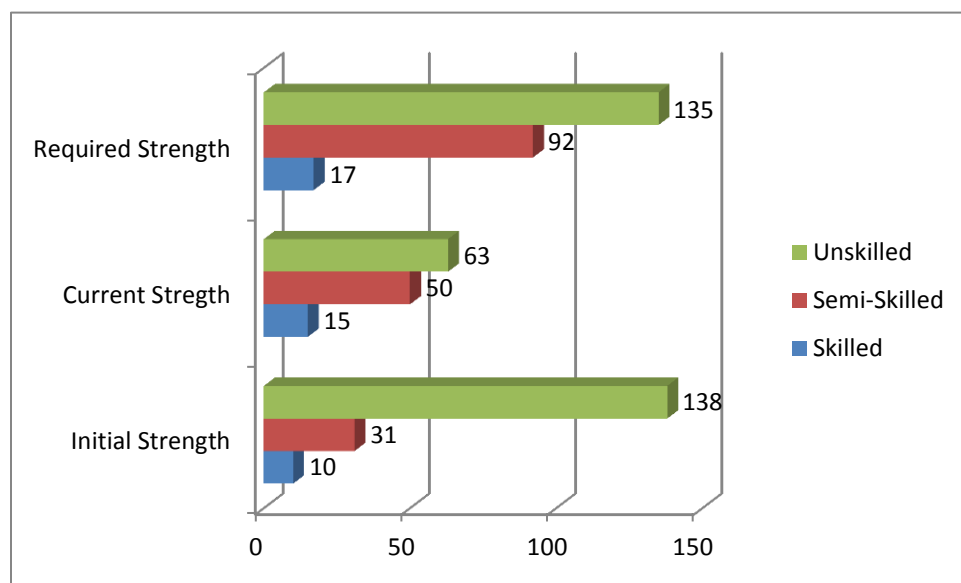


Figure 361 Status of workforce in terms of initial, current and required strength across sample industries of Ajmer

There has been certain increase in the number of full time skilled workers over a period of time by close to 25%, though majority of the industries interviewed still feel the requirement of unskilled workers over the skilled workers for their full time roles. Apparently the number of semi-

skilled workers category has grown by 66% but the need for unskilled contract/ daily wage laborers was phenomenally very high. A clear distinction could be observed in the preference of only skilled workers for the contract and daily wage worker category as the industries felt the low cost module works better in a capital scenario and incurs less cost in on job training.

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers. One could observe a similar requirement in the skilled daily wage labor requirement and unskilled contract based requirements. This clearly validates the mindset of the industry houses to engage less skilled workers and increase the intake of semi-skilled workers.

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of manpower
Agricultural Sector								
Unskilled	73562	98056	113317	131133	151820	177991	198258	
Semiskilled	8443	8809	9237	9875	9931	10434	10808	
Skilled	5629	5872	6158	6583	6621	6956	7205	
Total demand	87634	112737	128713	147592	168372	195381	216271	49%
Industry Sector								
Unskilled	59076	63410	63116	65807	66158	68072	68879	
Semiskilled	27266	29266	29131	30372	30534	31418	31790	
Skilled	4544	4878	4855	5062	5089	5236	5298	

Total demand	90886	97554	97102	101241	101781	104727	105967	24%
Services Sector								
Unskilled	27182	28584	29371	30480	30988	31995	32685	
Semiskilled	63425	66695	68532	71121	72305	74655	76264	
Skilled	9061	9527	9790	10161	10330	10665	10895	
Total demand	99668	104806	107694	111762	113622	117314	119844	27%
All Sectors								
Unskilled	159820	190050	205805	227421	248966	278058	299821	
Semiskilled	99134	104770	106900	111369	112770	116507	118862	
Skilled	19234	20278	20804	21806	22039	22857	23398	
Total Demand	1397852	1462587	1524550	1621127	1632503	1709253	442082	100%

Table 289 Labor percentage of workforce demand requirement (in terms of skills) till 2017 across sectors- Ajmer

Basis on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Electronics Hardware			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
ITES- BPO			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			

5.31.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	51251	55826	56131	59798	61735	64160	66040
Semi-skilled	10077	10642	10572	10975	11069	11290	11404
Skilled	5619	5993	6066	6262	6314	6488	6552

Table 291 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.8 lakh. Keeping in mind the high rate of workforce participation from unskilled masses; the significance would be to target training to atleast 60,000 youths by 2017 and majorly concentrate on skilling the unskilled to semi-skilled in agriculture and allied sectors. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation was conducive enough to support industrial growth in Ajmer but water and power has been major problems for some of the industries. Availability of skilled manpower has been a problem but with little or no mention.
- The VTIs were not fulfilling the needs of the industries completely since trained person from ITI lacked in practical work and so the fresher were considered as semi-skilled worker and because of this reason industries end up paying minimum amount that creates dissatisfaction among the workers and gap between the demands and supply of workers.
- The current demand for skilled workers is good across the various sectors. Stones and mineral based industries were predominant in the district .Marbles and granites industries were emerging in the district which shall be sustainable enough to absorb new manpower. Existing industries in textiles and leather would require up-skilling for better efficiency.
- Scope for self-employment and entrepreneurship in the district was good since government provided subsidiaries on loan for the self-employment to the unemployed person and apart from this reason there were a number of directly or indirectly self-employment work available Rozgaar melas and Rajasthan Nivesh Protsahan Yojna are some government initiatives which were helpful in employment generation

5.31.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Jaipur district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth had given rich information and understanding on their aspirations and perceptions.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 25% of the youth covered were college educated and 75% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government. The average age of the respondents was 26 years.

Table 292 Youth Profile of sample in Ajmer

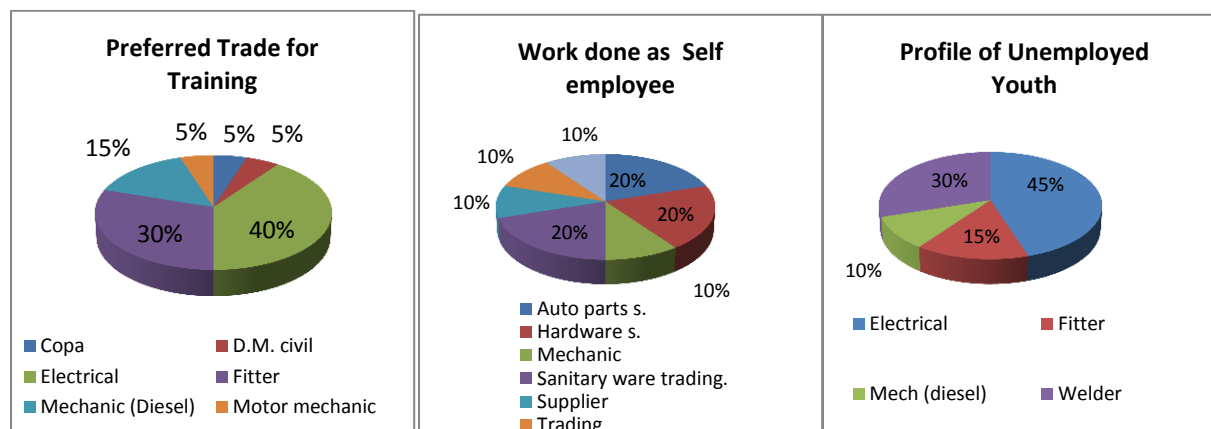


Figure 362 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Ajmer

Among the respondents, inclination towards electrical and fitter course was found very high as around 70% of the youth reported that they had chosen these as a preferred trade during his/her training at VTI. The reason for the same seems to be the demand for this course in the market. The same trades also reflect highly on the unemployment pattern. It infers that though the demand was high but the quality of supply was hindrance in total absorption. In case of self-employment, which was the course taken after non placement by trainees, the trade of hardware, and auto mechanic were prominent in Ajmer.

5.31.10 Youth's Perception

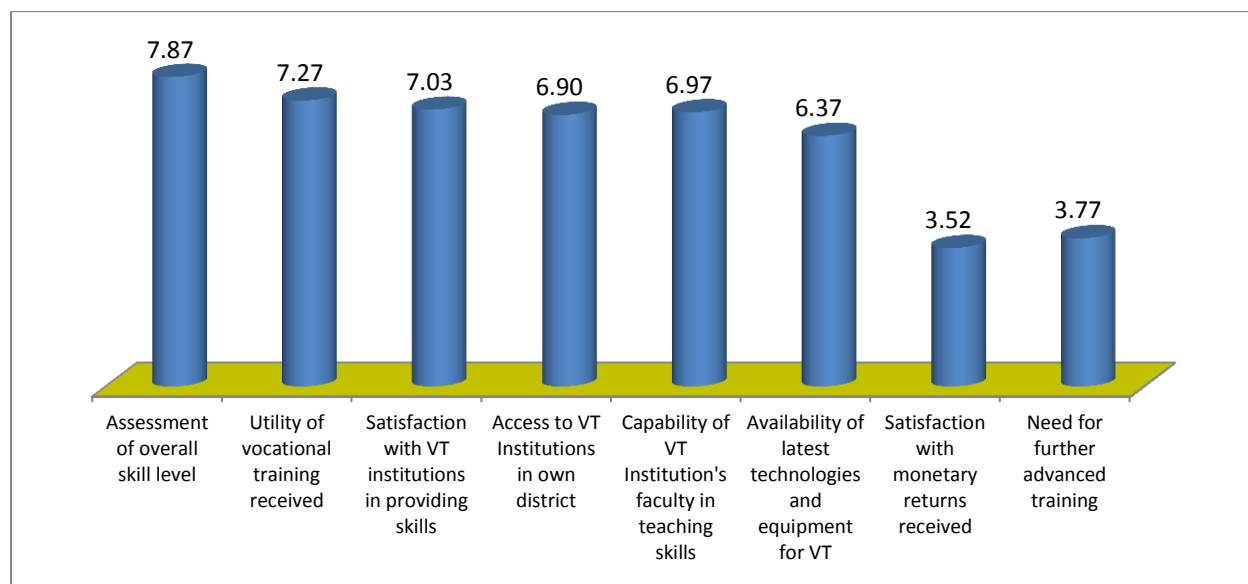


Figure 363 Ajmer Youth's perception, need and aspirations –Sample Group

Satisfaction with current monetary returns and need for advanced training emerged as the least ranked parameters from the youths and assessments of skill inputs of the VTIs were ranked high. The capability of VTIs faculty members and the utility of these training were among the most appreciated thoughts among the group of youths. Though the average monthly salary post training was Rs 7000/month, the need for better salary and facilities (increment, bonus, insurance) were the most discussed and desired parameters for the youth in the district.

5.31.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.80 lakh of skilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at Ajmer district level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

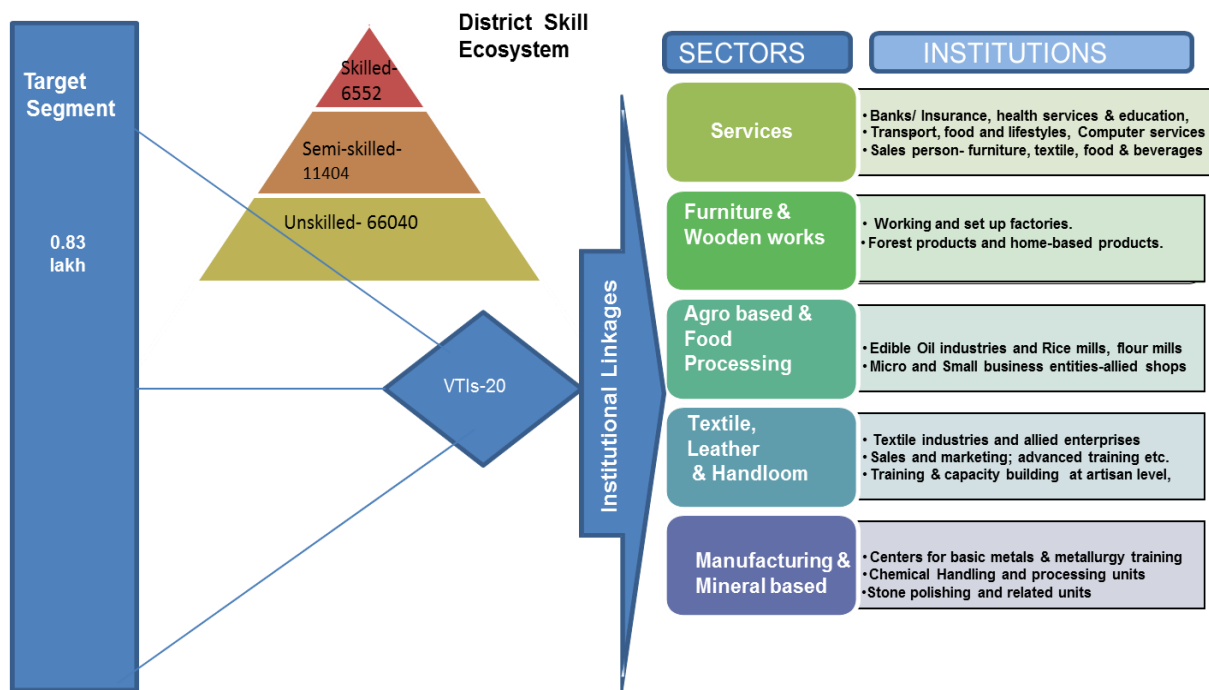
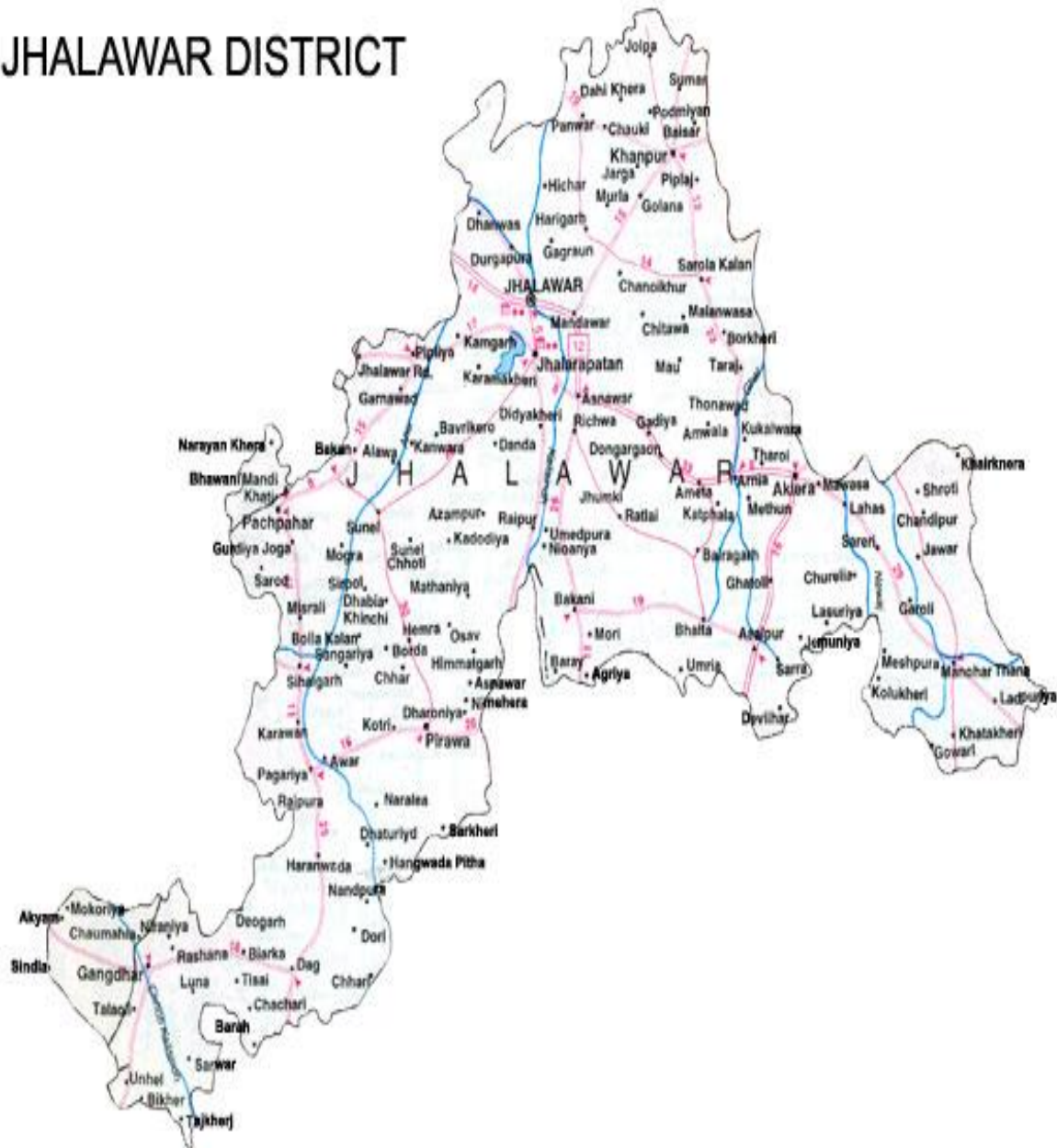


Figure 364 Optimization plan- Skill Development Eco System-Ajmer

Ajmer district would need to skill majorly the unskilled workforce to semi-skilled in the sectors of agriculture and allied by specific training programs and also would do good by working on the emerging service sector of the district. Some of the important ones shall be the education, coaching and competition based institutes, leather, synthetic yarn based (textile) industries, food products and stone/cement based industries. Linking the trained beneficiaries to the market demand could be the key factor and also vital would be the market linkage established for allied products of agriculture like cattle feed etc.

5.32 District Jhalawar

JHALAWAR DISTRICT



District Skill Workforce Face Sheet-2012								
District	Jhalawar			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	13	No. of Villages	1606	No. of Schools (elementary & sec.)	2349			
Basic Data								
Population (in '000s)	1411	Overall Literacy(in %)	62.13	Sex Ratio	945			
Decadal growth rate(in %)	19.57	Female Literacy(in %)	47.06	HDI Ranking (2008)	0.614 (16 th position)			
% Urban Population	14.25	Male Literacy(in %)	76.47	Per Capita Income (in Rs.)	16882			
Workers participation rate (2001)								
Workers participation rate (2001)	47.00	Share of primary sector (%)	80.80	Share of secondary & tertiary sector (%)	19.20			
No. of MSME/Industries	5090	Total Employment (in 000s)	16356	Total Investment (in lakhs)	2857.37			
No. of colleges (PG & Graduation)	7	Total graduates (In '00s)	5424	Total Post graduates (in '00s)	1150			
No. of VTIs(registered ITI+Poly+ITC)			8	Total trainees trained (in '00s)	838			
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	2278	13218	3449	4005	4346	4830	5133	0.54 lakhs
Semi-skilled workforce	12220	13361	12816	13528	13814	14027	14130	

5.32.1 Demographic Profile:

The district Jhalawar is situated between 25°.21' to 27°.50' North Latitude and 74°.38' to 75°.25' East longitude. It is bounded in the north by Ajmer District, in the north-west, west and south west by Udaipur and Rajasamand district. The total length of the district from west to east is 144 km. while the breadth from North to south is 104 km approximately. The district Jhalawar has a hot dry summer and bracing cold winter. The cold season is from December to February and is followed by hot summers from March to the last week of June. The south west Monsoon season which follows, last till about mid- September, followed by post monsoon season till end of November.

The district has an area of 10,455 km². It ranks as the 13th largest district of the state covering 3.05 % of the area of the state. With 230 the density of population in the state ranks at 15 (Census, 2011-Provisional). It stands 15th on the Human Development Index (0.633) and 23rd on the GDI (0.471). It was observed that the district fares quiet high on income index (2nd ranked), its due to the education and health index (29th and 28th respectively) which pulls the district on overall HDI ranking

to fifteenth. As per provisional census 2011 data, Jhalawar accounts for population of 24.10 lakhs (3.51% of the state population) with sex ratio of 969 (compared to 2001 census figure of 962) which

S.no	Section	Unit	Quantity
			Value
1	LOCATION		
	Latitude	degree	24°36' N
	Longitude	degree	76°09' E
2	AREA		
	Total geographical area	square	6219
3	ADMINISTRATION		
	Tehsil	number	07
	Villages	number	1606
4	Land Use Pattern		
	Total Area	Hectare	632235
	Total Irrigated area	Hectare	231995
5	Population (census 2011, provisional)		
	Total population	number	1411327
	Men	number	725667
	Women	number	685660
	SC (2001)	number	184642
	ST (2001)	number	141861
6	Literacy (except 0-6 age group)		
	Total literate	percent	62.13
	Men	percent	76.47
8	Energy		
	Electrified Villages	number	1521
9	Industries (DIC, 2009)		
	Registered MSME units	number	5090
	Employed persons	number	16356
10	Education		
	Pre Primary & Primary Schools	numbe	1035
	Upper Primary	numbe	926
	Secondary & Sr. Secondary	numbe	388
11	Higher Education / Others		
	Colleges	numbe	07
	I T I	numbe	07
	Polytechnic	numbe	01

Table 293 Jhalawar District Profile- a snapshot

was marginally on the higher side of the state ratio of 926. There was a decrease in the decadal growth of population of 7% showing trends of population stabilization.

The worker participation rate in Jhalawar is 46.67% (HDI, Rajasthan, 2008) with primary sector engaging close to 64.00% of the workforce and rest 36.00% in secondary & tertiary sectors. In rural areas the participation rate is higher than the urban by close to 17% (Urban- 33.55% & Rural- 50.08%). The literacy rate of Jhalawar in 2011 is 62.71% which is on the lower side of the state figure of 67.06. According to Census 2011 provisional data, the male literacy figure stands at 77.16% and female literacy was at a state highest of 47.93%.

5.32.2 Education Infrastructure and Utilization

Jhalawar's status in literacy was marked as one of the lowest of the state with 29th rank in education index and 28th rank in the health index among the other districts of the state. It ranks fairly below the state average in both male and female categories. The grim situation in educational scenario was eventually seen taking the right discourse as there was decrease in the gender difference in terms of enrolment and also the inclusiveness of the backward classes in the society through education. A number of schemes are run by the government to improve the educational status of the district like Shiksha Aapke Dwar (Education at your door), District Primary Education Program (DPEP), Ghummakad Vidyalaya Shiksha Mitra Yojana etc.

Education	Jhalawar	Rajasthan
Pre Primary & Primary	1035	49546
Upper Primary	926	38889
Sec/ Sr Sec	388	19135

Table 294 Jhalawar vs. Rajasthan education status

In terms of higher education there are just 25 colleges and 07 ITI institutes recognized by the state (Statistical Abstract, 2010). There are two engineering and one management institute in the district to support technical/ professional education in the district. A total of over 10,000 students enroll in various institutes at colleges ITI & polytechnic. At the intermediate college level, courses are available in the area of science, arts and commerce. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 06 partners (includes NGOs, ITIs, government institutes, KVK) implementing skilling initiatives with 16 approved programs (11 are completed). A detailed view of the vocational training of Jhalawar could be seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.32.3 VTI's demand across various trades

The existing scenario of VTIs in Jhalawar is on the rising side considering the number of youths passing out; and seeking employment as skilled workforce. Private players have ventured but was still far less in numbers for the district. As observed from the secondary data, the number of graduates and aspirants from ITI & polytechnics are also on the higher side compared to other districts of the state. Therefore, the scope for skilled intervention of the district and catering the needs for skilling youths of the district in fields of requirement and demand as per market shall be the need of the hour to address the skill shortage.

The survey was carried out in 10 sample VTIs (07 ITI & 03 ITC). The government VTIs/ ITI provided 14 different courses in training whereas; it was 04 courses in the ITC. These courses were predominantly employment based for services and manufacturing or to cater the local market needs of self-employment. In VTIs the courses were more male oriented. The details of the courses offered in the VTIs of the district are represented as follows:

Private VTI Trades (ITC)	Government VTI Trades (ITI)	
COPA	Cutting & Sewing	Mechanic (Diesel)
Electrical	Electrical	Steno Hindi
Fitter	Electronics	Welder
Mechanic (Diesel)	Fitter	Wireman
	IT & ESM	Turner

Table 295 Jhalawar district's (sample study) courses offered

It appears that Fitter and Diesel Mechanic trade were the most popular trade in Govt VTIs whereas most popular trade in private CTI was Electrical. The difference between the numbers of actual trainees and the number of approved number of trainees is ranging from 5 to 32 seats. Electrical trade had least difference whereas Welder trade had the highest difference. On the other hand, gap between the actual and approved strengths of trainees was significant across all four trades and highest for COPA trade in the ITCs.

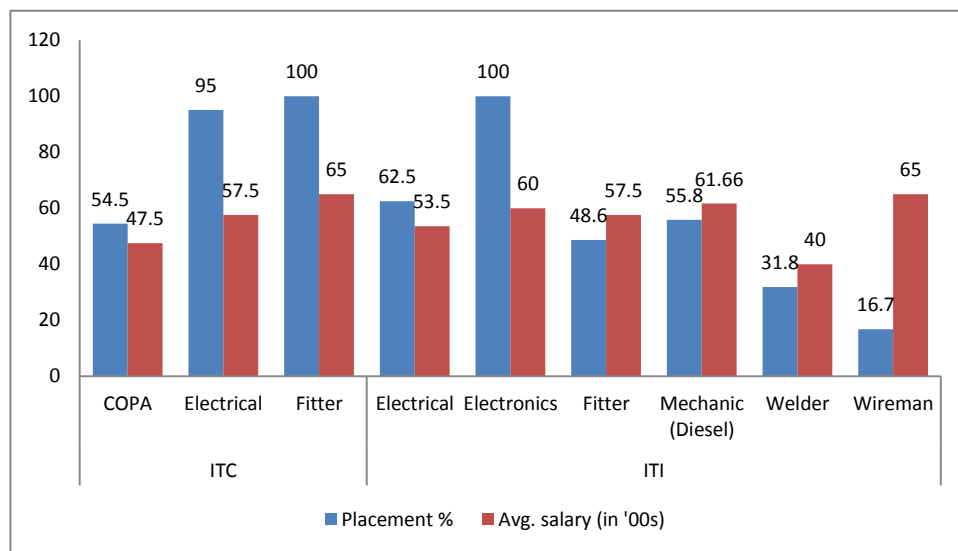


Figure 365 Jhalawar district's (sample study) courses offered placements in government and private VTIs

An overview of placement records by trades in the government VTIs indicates moderate prospects in all the trades at around 48% of the total batch strength across all these VTI got placed through college. Trades like Cutting & Sewing, Turner and Steno Hindi could not place their single trainee whereas all the students from

Electronics trade got job from college itself. The condition in private VTIs was better as 68% of the total batch strength across all Private VTI got placed through college. It was noticeable that IT & ESM trade of ITI and Diesel Mechanic Trade from Private VTI did not get any trainee last year. Average salary/trainee indicates towards good prospect in Wiremen trade in ITIs and trainees from this trade got the highest paid job (Rs. 6,500/Month). In case of ITCs the highest paid job was from Fitter trade (Rs. 6,500/Month). While placements of trainees from the VTIs was more through campus interviews but a good number of students also got placed through proactive approach to the industry by the VTIs trainees themselves. It was observed that Employment exchanges had not played any role in placements. The poor placement percentage was also due to the fact that the enrolment of aspirants in some of the courses like IT, Cutting and Sewing, Steno and Turner of the ITI was nil in the last year.

5.32.4 Industry Mapping

Jhalawar District has opened new field for exports of textile good like polyester, viscose and woolen blankets and cotton fabric, cotton yarn, woolen shoddy yarn and wool tops. In the district, textile industries were showing 8-10% annual growth due to their strategic location and mostly industries are export their products goods like textile, synthetic yarn, cotton yarn, woolen products and fabric cloths. In the last 5 year Insulation bricks industries have shown a growth rate 5% average annually but next 5 years possibility growth rate was estimated at 25% in the district. Looking to the demand of insulations bricks availability of raw material in the district, the projected capacity addition is likely to be of 2 crore bricks per annum, during next 5 years. In the district minerals grinding growth approximate 25-30% in the next 5 years which was in the increasing side due to availability of raw material.

MSME in Jhalawar

According to D.I.C data (March, 2012), there were around **18733 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.72729.65lakhs** providing employment to **82557 persons**. It also has **70** registered large and medium industries engaging **33102** persons with fixed investment of **Rs. 3792.81 crore**.

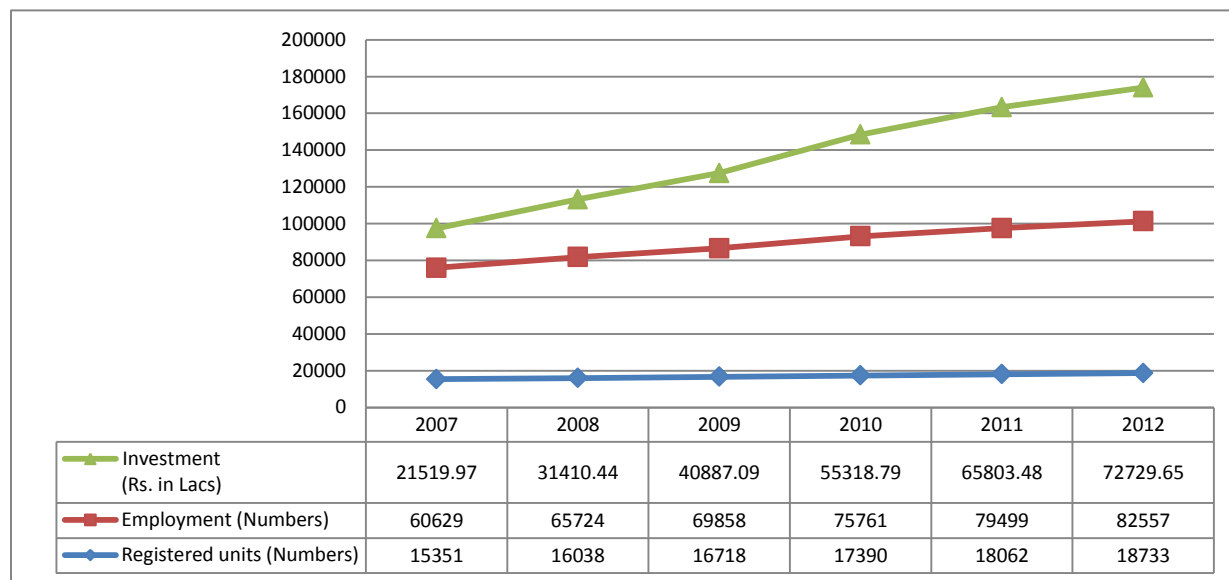


Figure 366 MSME trend analysis of the district- Jhalawar

There has been a constant increasing trend in the number of units, investment in industries, employment. There are 10 industrial areas with three of the clusters in handlooms and handicrafts, marble and agricultural equipments at Shahpura, Umaidpura and Paroli respectively. Jhalawar district has made an important place for itself in the industrial map of the state. During the last decade the district has developed in to a leading place in the textile industry in the country. In the district vide scope in Garment Making & Fashion Design, Aari Tari and Embroidery works Enterprises due to availability of quality raw material and other facilities in the district for MSMEs. The district has deposits of Soap Stone, Mica, China Clay, Garnets, and Marble etc. Based on them a number of units have come up for manufacturing Insulation bricks, Mica grinding Marble cutting and Polishing, China clay, washing powder etc. There are also units for manufacturing Cement, Jali, Tanki, Pipes and P.C.C poles. Availability of raw material in the district has provided large scope for the above industries in manufacturing and service sector for MSMEs. The district has a number of units manufacturing agricultural tools and instruments, thresher, spades axes, repair shops, welding, motor winding, pump repairing, auto mobile workshop etc. scrap and other dies are procured form Jhalawar and still there seems to be larger scope for MSMEs of related manufacturing and service sectors in the district. Leather and leather based many industries working in the Jhalawar district for leather dyeing and finishing, shoe making, manufacturing of cycle seats, leather bags etc.

5.32.5 Sector wise mapping of industries in the district

District wise the existing sectors were mapped against the 20 high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries and the total number of employment) and would also represent any new sector other than the listed sectors existing in Jhalawar. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections** like **high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Agriculture & Allied	50	116	650
Auto & Auto Components			
Chemical & chemical products	452	2001.2	3302
Construction Material & Building Hardware	1946	729.24	2281
Food Processing	1338	927.32	5119
Furniture & Furnishing	1914	387.23	6012
Leather & leather goods	2924	195.64	6157
Textile & Handloom	2430	48066.95	26541
Repairing & Services	2321	487.47	4239
Building Construction & Real Estates	52	520	1100
Education & Skill Development (private)	25	-	1200
Healthcare (private)	80	-	2500
IT/ ITES			
Tourism, Travel, Hospitality & Trade			
Transportation, Logistics, ware housing & packaging	63	650.98	297
Mines, Metals & Minerals	2117	3044.76	10960
Machinery, Electricals & Manufacturing	340	266.71	1219
High	High-Units>1000, investment>500,emp>2000		
Medium	Medium-Units>300, investment>200, emp>750		
Low	Low-Units> 10, investment> 30, emp>30		
Emerging	Emerging- Investment & demand based sectors of district-DIC		

Table 296 Sector wise mapping of industries in Jhalawar; DIC report, 2009

There have been many MSME coming up in the district engaging the semi-skilled workforce. Some of the major employment engagement in the district happens in the sectors of textiles and handloom, leather, food processing and services sector. Jhalawar has been an industrial town. It has been famous country wide for the textiles industry. It has been well connected with roads and rail. In the district, private hospitals were increased in last few years in the fields of orthopedic operation and some of the best medical facilities were available after Jaipur. In the district training facilities were also available. Approximately 80 private hospitals were running in the district, with 2500 employment. Similarly, approximately 25 coaching institutes were running in the district, mainly imparting the coaching for engineering and medical entrance examination for under graduates courses, having approximate 1200 employment and about 25,000 students is studying in these institutes.

From this industry other allied industry is also working like hostels, Hotel & Restaurants, laundry, mess, catering services, Marriage Halls, decoration, tent house, offset printing , printing press, transportation packaging industry and packaged food industry.

In order to understand the trend in the existing market and industrial set up stratified sample of 14 industries was selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of senior level functionaries from the industries sampled for the district. These industries were selected from large, medium and small industries covering various growth sectors of the district as shown in the table:-

Type of Industry	Large	Medium	Small	Total
AGRICULTURE & ALLIED	0	2	0	2
LEATHER & LEATHER GOODS	0	1	0	1
SERVICE & REPAIRING	0	0	1	1
TEXTILE & HANDLOOM	3	3	3	9
WOODEN PRODUCTS, HANDICRAFTS	0	0	1	1
Total	3	6	5	14

Table 297 Breakup of industries in Jhalawar (Sample study)

As textile and handloom formed the major base of employment in the district, a total of 9 industries were covered; three each from small, medium and large. From the agriculture equipment cluster two industries were covered and one each from rest of the sectors chosen as sample.

5.32.6 Workforce Demand and Supply

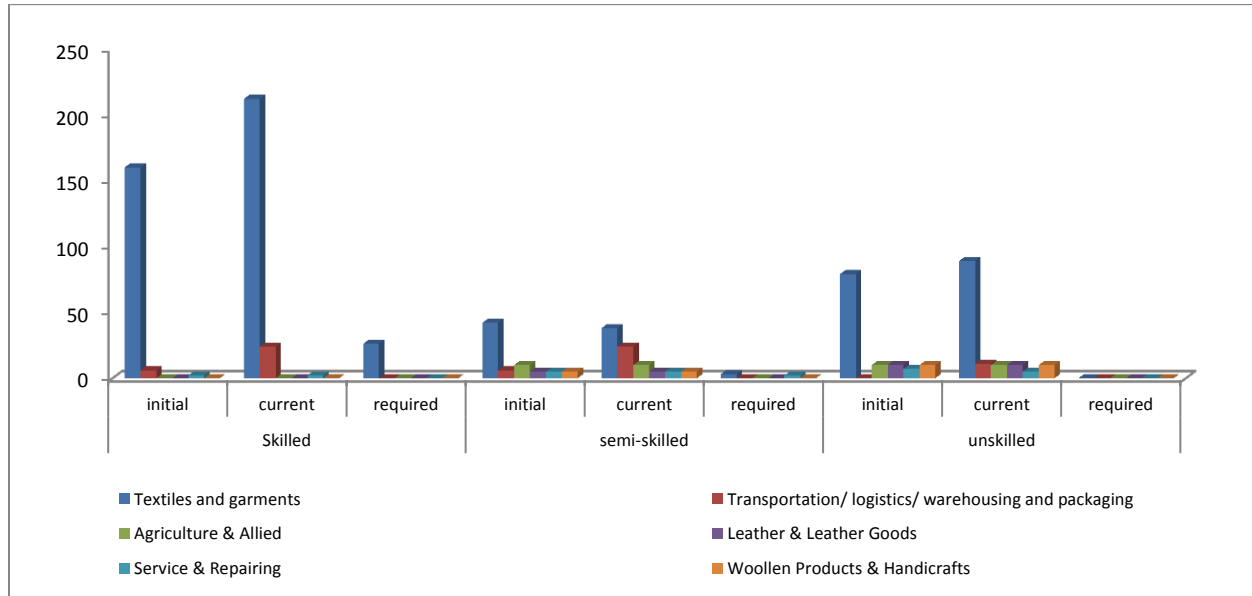


Figure 367 Status of skilled, semi-skilled workforce and unskilled workforce across sectors (Sample Jhalawar) at various stages (initial, current and required)

Three of the sampled industries across three sectors (textiles, transportation and services) could provide their skilled workers strength whereas industries from other three sectors reported on the retention and an increase of their worker strengths from the time of establishment till current date. The potential to absorb more skilled workforce was reported by textiles and garments sector industries only. Except Textiles & Garments sector industries, all other industries have either expanded or maintained the same number of semiskilled staff as compare to semiskilled workers' strength at the time of industry establishment. Very low potential to absorb more semiskilled workforce across different sectors was reported by Textiles & Garments and Service & Repairing sector industries. Similarly except service & repairing sector industry, all other industries have either expanded or maintained the same number of unskilled staff as compare to workers' strength at the time of industry establishment.

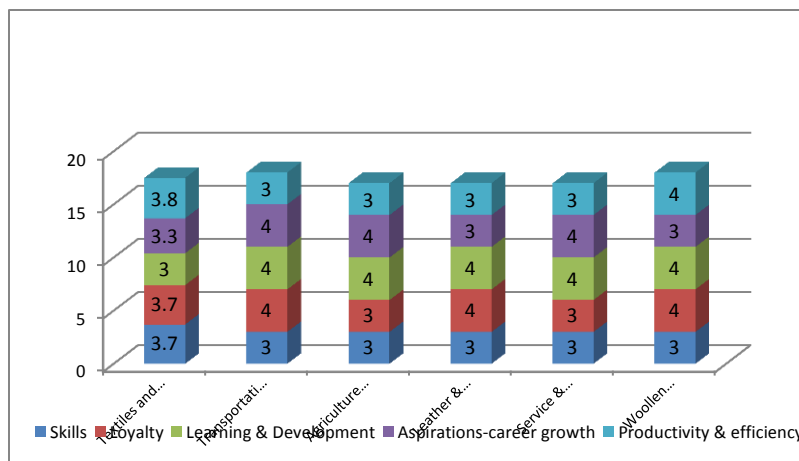


Figure 368 Expectations of employers from its employees in Jhalawar (Sample study)

In terms of industries' requirements and the market trends the primary survey provides the major demand in terms of expectations from the employers were learning and development of the employees during work and loyalty. The least scaled was skills and requirement of skilled workforce and

aspirations for career growth. Transportation and handicrafts industries were rated with higher expectation across all the parameters from its employees.

5.32.7 Projected Workforce Demand

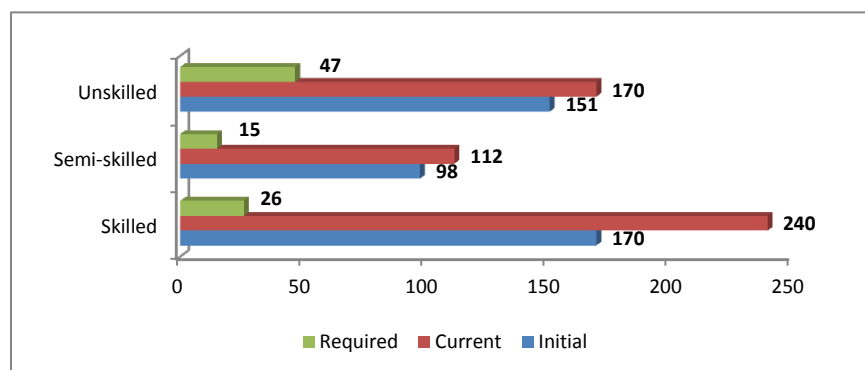


Figure 369 Status of workforce in terms of initial, current and required strength across sample industries of Jhalawar (Sample study)

The number of vacancies reported by the sampled employers for skilled and unskilled workers was relatively more and reflects a good potential for absorption of workers in this category. Potential to absorb semi-skilled workers appears to be low as reflected by the data. Current strength for the

skilled, semi-skilled and unskilled categories of workers was not in the equal proportion. The count for skilled worker is more than twice of semi-skilled due to large scale absorption of skilled workforce in textile and growing marble industries. The current dependency on unskilled workforce in comparison to that of semi-skilled provides the avenues to engage more semi-skilled workforce in the future though there was less demand for semi-skilled workforce by the industries in future.

The sampled industries demonstrate their intentions to expand the worker base across the skilled, semi-skilled and unskilled categories majorly in daily or contract based laborers to address the current shortage and not with the intentions to expand. The number of vacancies reported by the sampled employers for the skilled, semi-skilled and unskilled categories of workers indicated unequal proportion and reflected that skilled workforce had good demand and unskilled workforce had still been the demand for daily wage based works; also indicated high potential for absorption of workers in this category. In semi-skilled workforce had witnessed rise in engagement since industry inception but with less demand in future.

As per secondary analysis, the service sector would engage considerable number of workforce in future along with manufacturing and ancillary industries. This could be projected as shown in the below projections:

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of workforce
Agricultural Sector								
Unskilled	783217	844396	803028	856243	902443	910877	931707	
Semi-skilled	63849	68837	65464	69802	73569	74256	75954	
Skilled	4257	4589	4364	4653	4905	4950	5064	
Total demand	851323	917822	872857	930699	980917	990084	1012725	62%
Industry Sector								
Unskilled	120299	130324	129882	136059	137149	141640	143605	
Semi-skilled	55523	60150	59946	62796	63300	65372	66279	

Skilled	9254	10025	9991	10466	10550	10895	11047	
Total demand	185075	200499	199819	209322	210999	217908	220931	15%
Services Sector								
Unskilled	37587	40280	41311	43001	44146	45725	46801	
Semi-skilled	87702	93986	96391	100337	103008	106691	109203	
Skilled	125289	134266	137702	143338	147155	152416	156005	
Total demand	250577	268532	275404	286676	294310	304833	312010	23%
All Sectors								
Unskilled	941102	1015000	974221	1035303	1083739	1098242	1122113	
Semi-skilled	207074	222972	221801	232936	239877	246320	251437	
Skilled	138799	148880	152057	158458	162609	168262	172115	
Total Demand	1286975	1386852	1348079	1426697	1486225	1512824	1545665	100%

Table 298 Percentage of workforce demand requirement till 2017 across primary, secondary and tertiary sectors- Jhalawar

The district shall continue to engage close to 62% of the workforce in primary sector and balance 38% in secondary and tertiary sector (15% in manufacturing and 23% in services) of the total workforce. These projections account till 2017 for the district. Basis on the inputs received from sector wise expansion plans the workforce projections made across different categories highlight these distribution pattern. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Automobiles & Auto Components			
Food processing			
Handloom & Handicrafts (includes wooden & paper)			
Textile & Garments			
Building, Hardware & Home Furnishings			
Leather & Leather Goods			
IT or software			
Chemical & Pharmaceuticals			
Tourism, Hospitality & Travel			
Building & Construction			
Transportation/logistics/warehousing & packaging			
Education/ Skill Development			
Banking, Insurance & Finance			
Healthcare			
Machinery, Electricals & Manufacturing			
Mining, Minerals & Metals (includes stone quarrying)			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 299 Workforce across various sectors by 2017-Jhalawar

5.32.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking a primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would highlight on the mismatch between industry skill requirements and the skill pool emerging. The situation of skill gap for the district for 2010-11 to 2016-17 based on projections is represented in the table below (assumptions set in the annexure _ Projection Model):-

Workforce Demand & Supply Gap							
Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	57518	64904	60766	66746	71498	72897	75178
Semi-skilled	12220	13361	12816	13528	13814	14027	14130
Skilled	2278	13218	3449	4005	4346	4830	5133

Table 300 Representation of projected Skilled/ Semi-skilled & Unskilled workforce trend 2011-2017

The conducive industrial and service sector environment has made Jhalawar an important industrial centre of the state. The skilled workforce requirement also shows comparatively very low requirement and just addressing the optimum utilization of current infrastructure and semi-skilled workforce requirement was on the lower side than the skilled workforce as also demonstrated by the primary survey across sectors and industries. The focus of the district would be to engage more unskilled to form semi-skilled through trainings and further enhance the skilled workforce base across emerging services.

5.32.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Jhalawar district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth that provided rich information and understanding on their aspirations and perceptions.

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table). 45% of the youth covered were college educated and 55% had completed/ drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government. The average age of the respondents was 22 years with majority (95%) interviewed at ITI and 5% at ITC.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 301 Youth Profile of sample in Jhalawar

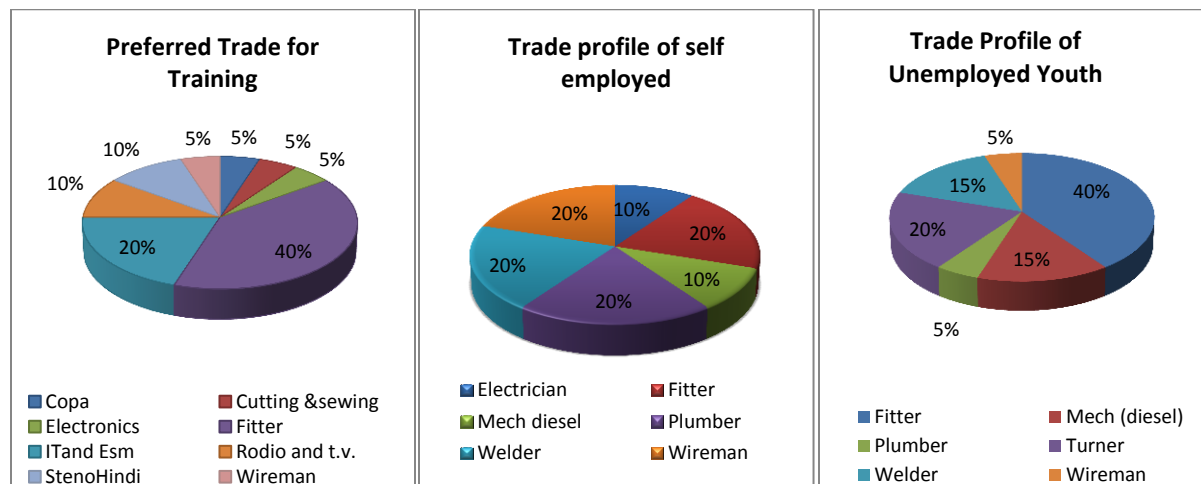


Figure 370 Profile of respondents (self-employed and unemployed) by trade in sample of Jhalawar

Among the respondents covered under the survey the course of fitter (40%) was one of the most preferred one followed by IT & ESM in sample of youths under trainees category. Youth preference for self-employed courses was similar for trades of electrician, plumbing, fitter and wireman. But fitter trade also was seen with the maximum number of unemployed youth post training (40%) followed by turner (20%). These trades appear to be the most popular trades as per the perceived demand in the market. But due to the surplus of similar workforce and unskilled labours/ daily wagers or improper market linkage of the supply of trained workers, about 60% of the unemployed youth also belonged from these trades.

5.32.10 Youth's Perception

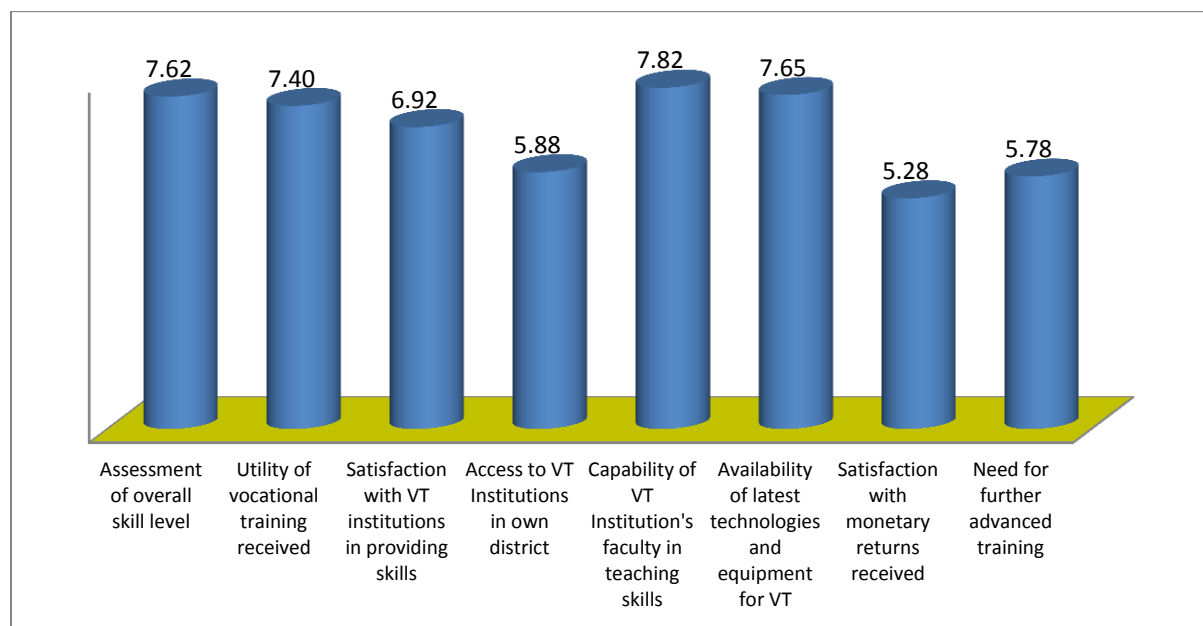


Figure 371 Jhalawar Youth's perception, need and aspirations –Sample Group

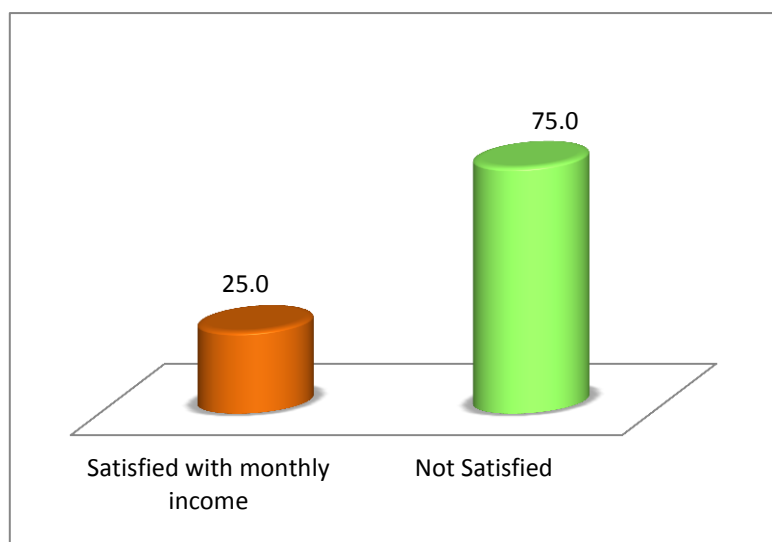


Figure 372 Satisfaction among youths with initial salary post training-sample group, Jhalawar

Satisfaction with current monetary returns, need for advanced training and access to the training institutes emerged as the three deterring factors identified by the respondents that needed attention and had to be addressed by the government and industry. Better skilling initiatives of the district do relate with the capabilities of the faculty and the utility of the vocational training as an important

success factor.

There were pronounced needs for further advanced training provided for up-skilling and basic skilling in computer applications. Expected monthly salaries required a change of atleast Rs. 3000/month approximately as skilled workforce among 60% of the sampled youth. 60% of the respondents did not receive any increment. The pay scale after skilling and few months of work experience enables for better financial negotiations among the youth. Youth expected to join a job, either government or private. Power grids and factories, railways, fertilizers etc. were the preferred sectors. Need for communicative English was realized for interviews and formal documentation only, especially to cater for private industries.

5.32.11 Optimization Plan

The optimization plan would be structured at three tier level of district, state and NSDC. The preliminary gap finding, projection and analysis would be presented at every district level which would in turn determine the action plan of the state as represented in the below diagram. The overall scenario of the state would finally give major leads to apex bodies like NSDC for formulation of state specific portfolios to suit the requirements and address the future needs of the state in the skilled workforce.

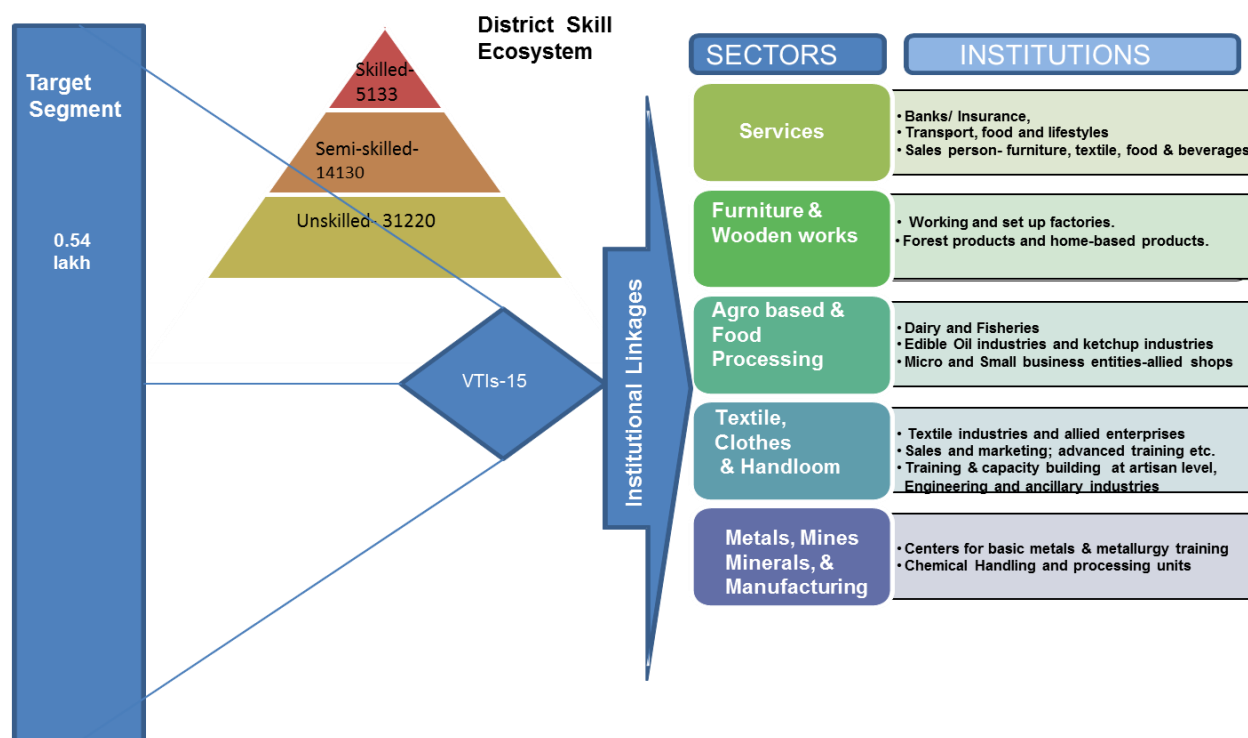
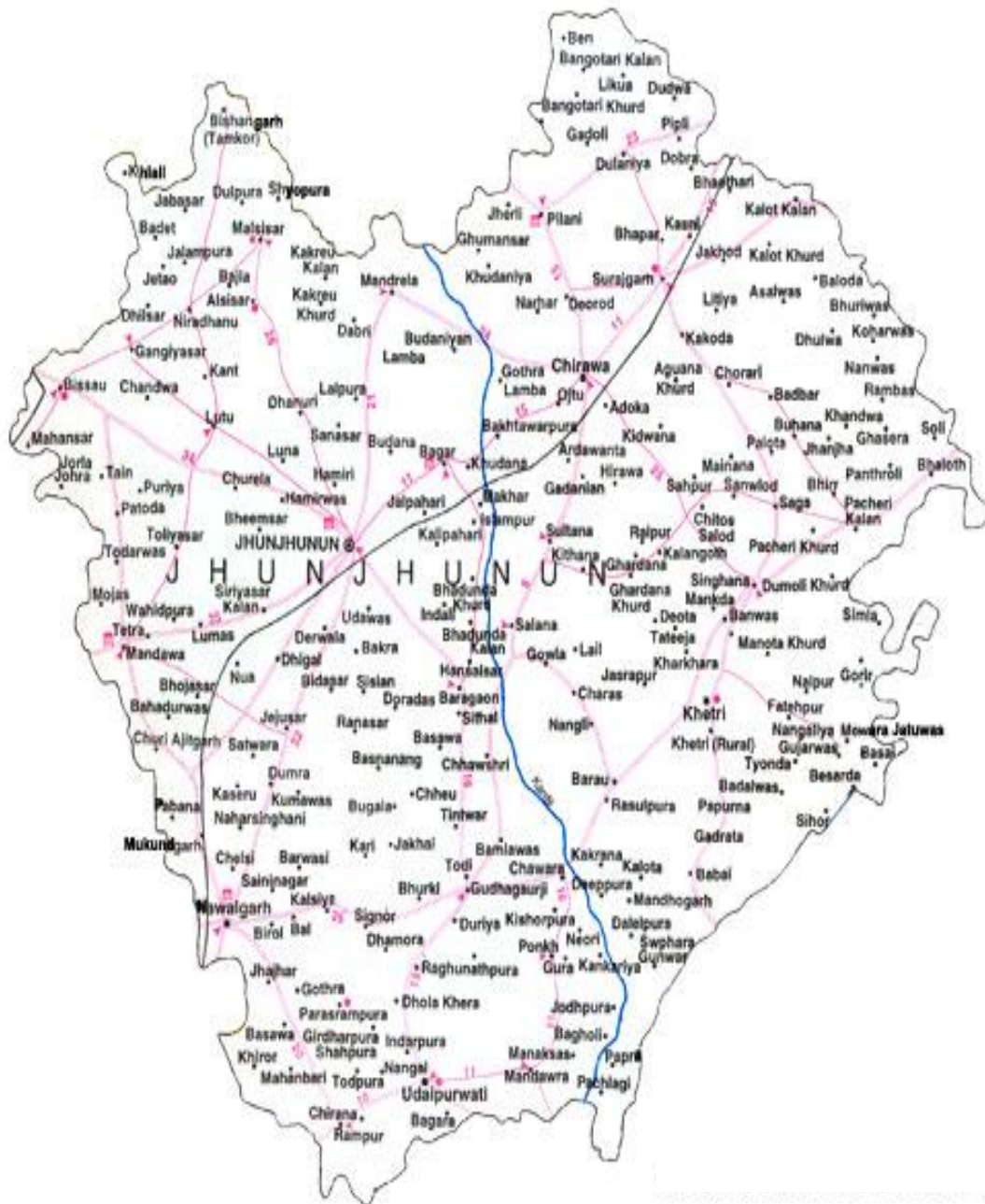


Figure 373 Optimization plan- Jhalawar Skill Eco-system 2017

The high priority sector which shall need maximum number of semi-skilled workforce and less of skilled shall be the resource based industries of the district. This shall include the textile based and related industries, leather processing, and education sector (allied with the unorganized sectors along) etc. The demand based industries shall engage more of skilled resources in data processing, transport and logistics, cement, repair industries etc. The semi-skilled workforce shall be the backbone of the district by getting engaged in large number of SSIs and service sectors of the district and eventually catering for the growing coaching hub of the nation as various work groups.

5.33 District Jhunjhunu

JHUNJHUNUN DISTRICT



District Skill Workforce Face Sheet-2012								
District	Jhunjhunu			State	Rajasthan			
Data Reported from Census 2011 (provisional)								
No. of Blocks/ Tehsils	14	No. of Villages	927	No. of Schools (elementary & sec.)	3228			
Basic Data								
Population (in '000s)	2139	Overall Literacy(in %)	74.72	Sex Ratio	950			
Decadal growth rate(in %)	11.81	Female Literacy(in %)	61.15	HDI Ranking (2008)	0.711			
(7 th position)% Urban Population	20.65	Male Literacy(in %)	87.88	Per Capita Income (in Rs.)	14325			
Workers participation rate (2001)								
Workers participation rate (2001)	39.76	Share of primary sector (%)	69.40	Share of secondary & tertiary sector (%)	30.70			
No. of MSME/Industries	7086	Total Employment (in 000s)	30241	Total Investment (in lakhs)	7318.95			
No. of colleges (PG & Graduation)	92	Total graduates (In '00s)	22275	Total Post graduates (in '00s)	5915			
No. of VTIs(registered ITI+Poly+ITC)			4	Total trainees trained (in '00s)	395			
Indicators (Cumulative)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Employable population
Skilled workforce	2473	2668	2630	2668	2583	2622	2559	0.50 lakh
Semi-skilled workforce	9761	10827	11971	13237	13990	14464	15006	

5.33.1 Demographic Profile:

The district settles in irregular hexagonal shape which lies between 28.31' N to 76.06' E longitudes. It has been surrounded by Churu district on the northwestern side, Hissar and Mahendragarh district of Haryana State in the northeastern part and by Sikar district in the west, south and south eastern part. The total geographical area of the district was 5928 square Kms. This stands at 1.73 percent of the total area of the state from the points of area, Jhunjhunu district stand at 22nd place among the existing 33 districts of the state. Most of the part of the district was coerced by blow sand and dunes which for part of the great that desert sand shifting and active dunes are main hazards to cultivation. Soil erosion was the result of constant deforestation and mining activity which have resulted in baring the slopes.

District Jhunjhunu was situated in arid Rajasthan plain known as Rajasthan. Its general elevation above means sea level is between 300 to 450 meters. It has no perennial river in the district with Katti and Dohan being the only seasonal rivers.

As per Census of India 2011,

Jhunjhunu has a population of 21.3 lakhs, with a density of population at 361 ranking 6th in the state. Sex ratio is 950 and Jhunjhunu district has decadal population growth rate which was at 11.81%.

S.no	Section	Unit	Quantity
			Value
1	LOCATION		
	Latitude	degree	28°31' N
	Longitude	degree	76°06' E
2	AREA		
	Total geographical area	sq km	5928
3	ADMINISTRATION		
	Tehsil	number	06
	Villages	number	927
4	Land Use Pattern		
	Total Area	Hectare	591536
	Total Irrigated area	Hectare	241400
5	Population (census 2011, provisional)		
	Total population	number	2139658
	Men	number	1097390
	Women	number	1042268
	SC (2001)	number	309236
	ST (2001)	number	36794
6	Literacy (except 0-6 age group)		
	Total literate	percent	74.72
	Men	percent	87.88
	Women	percent	61.15
8	Energy		
	Electrified Villages	number	855
9	Industries (DIC, 2009)		
	Registered MSME units	number	7077
	Employed persons	number	30241
10	Education		
	Pre Primary & Primary Schools	numbe	1169
	Upper Primary	numbe	968
	Secondary & Sr. Secondary	numbe	1091
11	Higher Education / Others		
	Colleges	numbe	92
	I T I	numbe	04
	Polytechnic	numbe	0

Table 302 Jhunjhunu District Profile- a snapshot

Jhunjhunu has an average literacy rate of 74.72% (higher than state average of 67.06%), male literacy is 87.8% (higher than the state average of 80.51%), and female literacy is 61.1% (higher than the average female literacy rates for the state).

The worker participation rate (WPR) was 39.76% (HDI, Rajasthan, 2008) with primary sector engaging close to 69.40% of the workforce and rest 30.7% in secondary & tertiary sectors. In rural areas the participation rate was higher than the urban by close to 19% showing the major engagement of workers in primary sector. A significant proportion of the district was engaged in the primary sector and in fact had a rising trend in the workforce percentage in a decade's period.

5.33.2 Education Infrastructure and Utilization

Jhunjhunu ranks as 7th in the Human Development Index. It also ranks 2nd on education index, 2nd in health and 22nd in income index. Jhunjhunu observes a healthier trend in enrollment rates, when compared to the state average. One of the reasons for the good performance in education was also the higher retention rates along with the early importance on quality of education in the primary level of education. The health indicators also highlight the status of females in the society and the healthier rate of enrolment of the girl child for formal education. The out of school and drop outs have been lower for the girl child in comparison to some of the other northern districts of the state. The overall status of income which has visible impact on the HDI of the district needed uplift for better results.

Education	Jhunjhunu	Rajasthan
Pre Primary & Primary	1169	49546
Upper Primary	968	38889
Sec/ Sr Sec	1091	19135

Table 303 Jhunjhunu vs. Rajasthan primary education scenario

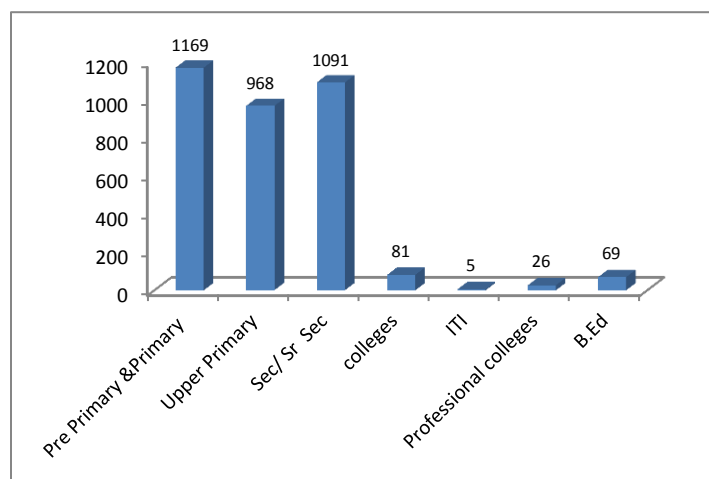


Figure 374 Number of Schools, Colleges, ITI & Polytechnic, Jhunjhunu

A total of over 36000 students enroll in various institutes at colleges & ITI. At the intermediate college level, courses are available in the area of science, arts and commerce. There exist 26 professional colleges as well. A notable aspect was the female enrolment in the college education was quiet high and higher than that of males. There were only five registered vocational training institutes in Jhunjhunu district (05 ITI) with a total of above 370 aspirants enrolled in 2009-10. As per the updated report available on Rajasthan Mission on Skill and Livelihoods (RSLDC) a total of 12 partners (includes KVK, ITC and NGO) implementing skilling initiatives with 34 approved programs (28 completed). A detailed view of the vocational training of Jhunjhunu could be

seen in the next section of the report which highlights on the various trades across the VTIs, preference of the youth for these trades, scope of placement and livelihood.

5.33.3 VTI's demand across various trades in Jhunjhunu district

The existing scenario of VTIs in Jhunjhunu was certainly on the lower side considering the number of educational institutes and the number of VTIs currently present. Private organizations working in this sphere have a vast scope for initiating skilled interventions of the district and catering the needs for skilling youths of the district keeping in mind the ratio of female literates to that of males in the higher education and the progressive nature of the district in terms of HDI. The primary survey conducted in the district to understand the present scenario of skilled intervention of the district. The government VTIs interviewed in the survey was two and eight were from the private. The courses which were offered by the government VTIs and the private VTIs were same and were predominantly engineering based to cater the local market needs and address self-employment. Also very little could be found for female related courses for skill development. The details of the courses offered in the VTIs of Jhunjhunu are represented in the table.

Government VTI Trades	Pvt. VTI Trades	
COPA	Civil	Fitter
Electrical	COPA	IT & ESM
Welder	Drafts Man	Mechanic (Diesel & AC)
Fitter	Electrical	Welder
	Electronics	Wireman

Table 304 Courses offered in government and private VTIs (sample), Jhunjhunu

Electrical was most preferred trade in Jhunjhunu as maximum number of seats in both government and private VTIs were from this trade. All the private VTIs had successful running of the electrical courses. There was no difference between actual trainees and approved trainees in Government VTI across all the trades whereas in Private VTIs the difference was observed significant variance in the seat utilization generally exceeding the number of seats available to actual trainees by more than 50%, a case of over utilization.

ITI	% Placed by Trade	Average Salary (in Rs '00s)
COPA	37.5	45
Electrical	35.2	50
Fitter	16.7	52
Welder	21.2	45

ITC	% Placed by Trade	Average Salary (in Rs '00s)
COPA	46.2	50
Electrical	75.6	66
Electronics	60	56.66
Fitter	94.6	60
Mechanic (Diesel)	100	45
Welder	25	50
Wireman	76.9	45
AC Mechanic	76.7	61.66

Table 305 VTIs with placement percentage and average salary across trades

An overview of placement records by trade in the government VTIs indicated low prospects in all most all of the trades. It may be due to the fact that most of trainees seek self-employment. In case of private VTIs, the prospect was very bright as a significant number for trainees across all trades got placed. In terms of average

salary/trainee form government

VTIs, the highest paid trade was Fitter (Rs. 5,200/Month) and in private VTIs, the highest paid trade was Electrical with Rs. 6,600/Month. While placements of trainees from the government VTIs was through a proactive approach to the industry by the VTIs and through campus interviews, the private VTIs depended more on campus interviews for placement. Though some of the trainee from private VTI got their placement through employment exchange but it seems that employment exchanges did not play any role in placements.

5.33.4 Industry Mapping

Economy of Jhunjhunu District is dependent on agriculture and animal husbandry. Although agriculture and animal husbandry are the main economic activities of the district, there are a large number of small and large scale industries too. Famous copper mines are situated in the Khetri thesil of the district. The Khetri Copper Complex of Hindustan Copper Limited is situated at distance of 10 km from the Khetri town . It is the largest Copper mines in India. It also has by-products i.e. Sulphuric Acid, Fertilizer etc.

MSME in Jhunjhunu

According to D.I.C data (March, 2012), there were around **7332 MSME units** set up in the district which were registered in D.I.C. These industries have a capital investment of **Rs.10030.99 lakhs** providing employment to **23763 persons**. Apart from these, there were **02** large and medium scale industries employing close to **3000** persons. There were 04 industrial areas mapped by RIICO in the district. There exists two clusters – leather (Charam Jooti) and Iron cluster in the district.

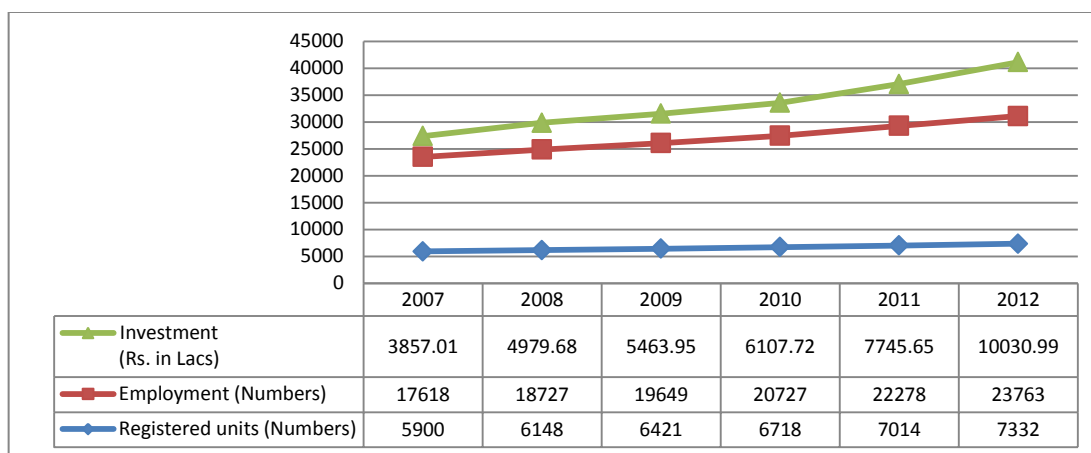


Figure 375 MSME trend analysis of the district Jhunjhunu

As there were public sector large scale unit M/s. Hindustan Copper Ltd. situated in the district and main product of the unit was Electrolyte Grade Copper and other products were sulphuric acid used in manufacture of fertilizers and alum, and drying of gases, copper sulphate used for electro refining of copper for electrolyte and pesticides and Single Super Phosphate mainly used in agriculture. There were no exports from this unit. As the growth in Indian economy has accelerated the demand for base metals driven by huge investment in power and infrastructure sectors. Domestic demand of copper is expected to surge, considering the huge power generation capacity enhancement in coming years. Present scenario was highly favorable for copper mining industry and provided the opportunity to expand the mine capacity and develop new mines. There was scope for the general electrical items, usage of Boiler ash/ cinder, repair and maintenance work of crusher and dumpers used in transportation of the material, R/M work of conveyor belts, spare parts of dumpers and crushers etc. As there were two large scale units in the district hence there was huge scope for the transport sector as well as repair & maintenance sector.

5.33.5 Sector wise mapping of industries

District wise the existing sectors were mapped against the high growth sectors identified by NSDC as presented in the table below. This would necessarily factor in the concentration of SSI as the major parameter (due to small number of large scale industries) and would also represent any new sector other than the listed sectors existing in Jhunjhunu. Against the mapped sectors **sector wise analysis shall be made on the labour growth projections like high/ medium/ low and emerging** basis on the demand in that particular sector on the triggers like investment, employment and numbers.

District /Sectors	Units	Investment (Rs lakhs)	Employment
Auto & Auto Components			
Chemical & chemical products	228	1528.41	1895
Construction Material & Building Hardware			
Wooden Based	753	434.33	2890
Food Processing	857	1336.63	3021
Leather & leather goods	2179	339.73	4741

Textile & Handloom	1194	760	3770
Woolen Based Products	829	1489.86	3226
Repair & Servicing	792	1606.24	3191
Unorganized (artisan/leather/services etc.)	350	50	500
Non-metallic mineral based	815	3483.63	10408
Mines, Metals & Minerals (includes quarrying)	530	802.98	1808
Machinery, Electricals & Manufacturing	564	757.26	2222
High	Units>800, investment>500,emp>700		
Medium	Units>500, investment>100, emp>250		
Low	Units> 100, investment> 30, emp>20		
Emerging	Investment & demand based sectors of district-DIC		

Table 306 Sector wise mapping of industries in Jhunjhunu as per DIC report, 2009

Sectors covered under sample survey
Agriculture & Allied
Construction Material & Building Hardware
Food Processing & Products
Machinery, Electricals & Manufacturing
Mines, Metals & Minerals
Tourism, Travel, Hospitality & Trade
Wooden Products, Handicrafts

Table 307 Breakup of industries in Jhunjhunu (Sample study)

In order to understand the trend in the existing market and industrial set up stratified sample of 10 industries were selected (depending on the availability of respondents' of the employer group set up). The sample of employers consisted of functionaries from diverse industries located in Jhunjhunu district of Rajasthan. These industries were selected from large, medium and small covering various growth sectors of the district as shown in the table above. The 10 industries were sampled for the survey to represent 5 major sectors that are prominent in the district as shown in the table above along with representation of unorganized sectors. Though the mines and minerals sector employed major workforce in the small scale industries, but due to the less mineral deposits in the district it had become more static over the years with marginal rise. Sectors like leather and textiles were considered to be the major thrust sectors for the district's industrial growth.

5.33.6 Workforce Demand and Supply

Most of the workforce in the sample areas was either unemployed or engaged in various skilled and unskilled trades such as agricultural workers, wage labourer, small tea shop owners, contract and casual labourers, working in garage, and retail shops etc. The average wage of the unskilled workers varies from Rs100/- to Rs150/- and the average duration of working hours per day varies from 10 to 12 hours. Many of them are working in copper related factories as skilled labour on machines- making hole, polishing vis-à-vis as loaders and un loaders. Females are mostly working in leather and miscellaneous manufacturing units or woolen manufacturing units as packaging

labourer. Male candidates are bound to work after they have turned 16 because their upbringing happens in deficiency of basic needs. Majority of the interviewed among youths have left their education because they were forced to earn money for supporting themselves and their families.

The primary data during the survey focused on the diversified sectors of the district capturing the workforce structure in terms of skilled, semi-skilled and unskilled workers at various stages of the industries as shown in the below figure.

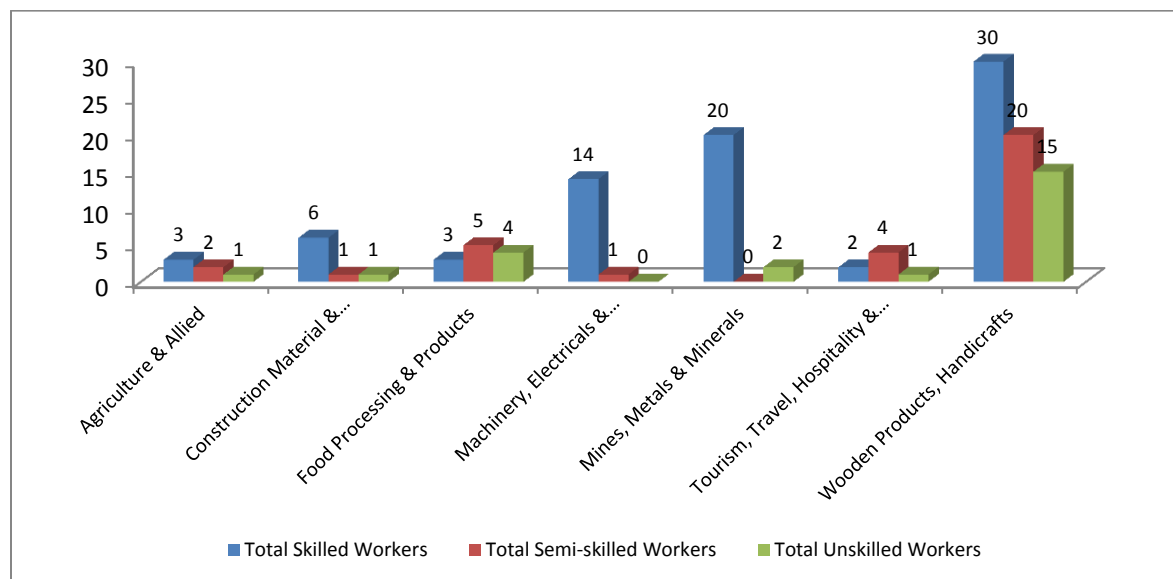


Figure 376 Workforce engagement-strength of workers across sectors surveyed (Jhunjhunu sample)

- While the two out of 5 sector industries sampled sector could not provide details of their skilled worker strengths, in three of the sectors (Agriculture & Allied, Construction Material & Building Hardware and Machinery, Electricals & Manufacturing sector), no significant increase in worker in-take was reported by the industries. Demand for skilled worker in future was also not very high across all sector industries.
- As reported by industries for semiskilled workforce, all industries across six sectors have increased their workers strength over the years and also have the potential to absorb more semiskilled workforce across the industries.
- Two out of five sectors (Agriculture & Allied and Tourism, Travel, Hospitality & Trade) have reduced their unskilled workforce whereas Construction Material & Building Hardware sector industries have increased their workers' strength and all other industries have kept same number of worker since industry establishment. The potential to absorb more unskilled workforce across the industries was found high.

In terms of industries' requirements and the expectation of the employers from its workers the primary survey provided that the major demand was productivity and efficiency though all other parameters were very closely ranked by the employers. It could be inferred that the employers seek for an all-round employer with all basic traits of good worker. Machinery related and agriculture related

industries were more demanding than the others interviewed. These industries had topped the demand expectations from its workers (on a scale of 5).

Recruitment of required workers from known sources such as workers working currently in the industries appeared to be the most reliable method of recruitment. Dependency on VT institutions was reported across employers of Machinery, Electricals & Manufacturing sector only whereas, no dependency on employment exchange, contractors and through any other source was not reported by any of the employers. Poaching of workers from other employers was not reported by any sector.

5.33.7 Projected Workforce Demand

It has been observed in the primary survey that the percentage of semi-skilled workers have been almost static over the years and had marginal decrease in the skilled workforce. The demand for skilled, semi-skilled workforce was low and in current scenario the skilled workforce engagement was on a higher side because of the skilled workers engaged in wooden, machinery and mineral related industries. In contemporary scenario the engagement of unskilled labor was just 18% which was quiet low followed by semi-skilled (24%) and skilled (58%).

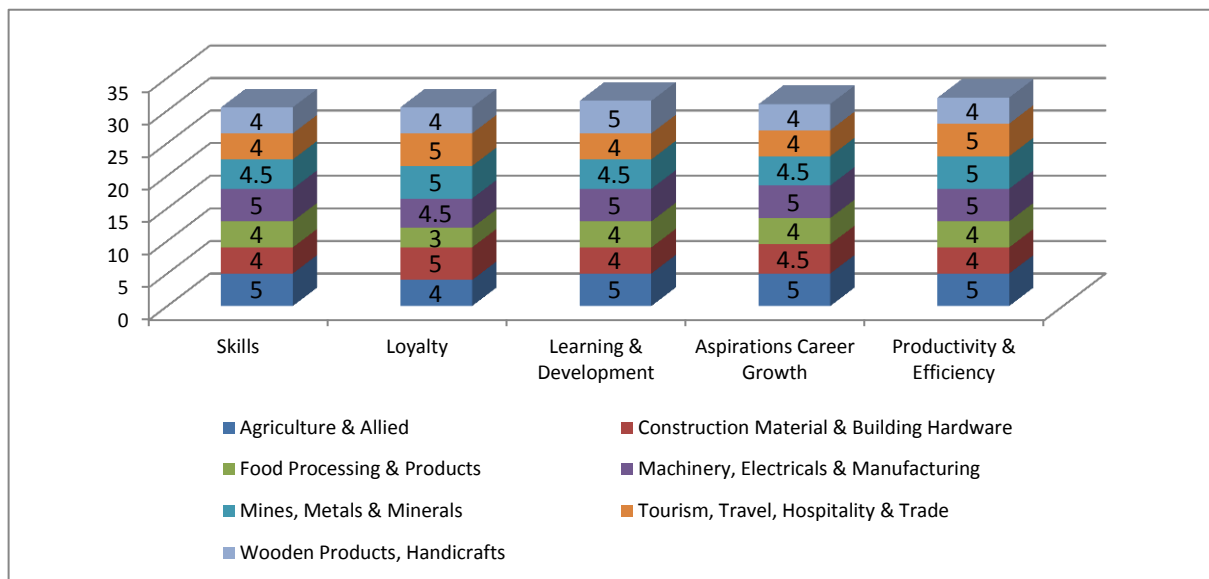


Figure 377 Employers demands in terms of expectations from workers (Jhunjhunu)

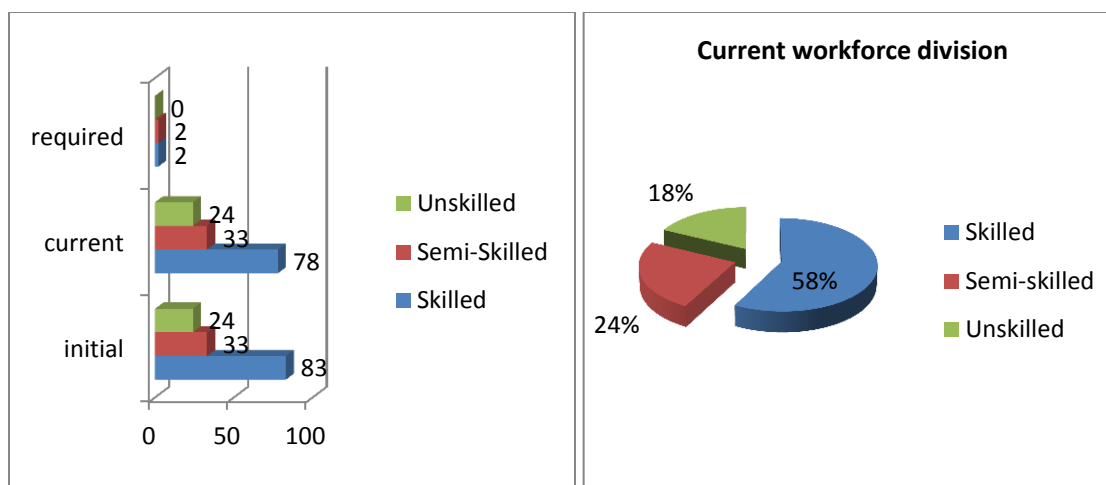


Figure 378 Expected year wise requirement of workforce and current break up of workforce across industries surveyed (Sample)- Jhunjhunu

Sectors	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	% of Skill manpower
Agricultural Sector								
Unskilled	480214	483761	486112	489262	492285	495382	498500	
SemiSkilled	40201	42196	43134	45051	45069	46779	47690	
Skilled	2680	2813	2876	3003	3005	3119	3179	
Total demand	523095	528770	532122	537317	540358	545280	549369	69%
Industry Sector								
Unskilled	52934	54670	53584	54993	55142	55512	55769	
Semiskilled	24431	25232	24731	25382	25450	25621	25740	
Skilled	4072	4205	4122	4230	4242	4270	4290	
Total demand	81437	84108	82437	84605	84834	85403	85798	11%
Services Sector								
Unskilled	19497	20605	21257	22042	22435	23223	23737	
Semiskilled	45494	48079	49600	51432	52347	54187	55385	
Skilled	64991	68685	70857	73475	74782	77410	79122	
Total demand	129982	137369	141714	146949	149563	154821	158244	20%
All Sectors								
Unskilled	552645	559036	560953	566298	569862	574117	578005	
Semiskilled	110126	115508	117465	121865	122866	126587	128815	
Skilled	71743	75703	77854	80708	82028	84799	86591	
Total Demand	734513	750247	756272	768871	774756	785503	793412	100%

Table 308 Projected percentage of workforce (demand) requirement till 2017 across primary, secondary and tertiary sectors-Jhunjhunu

The projections suggest the demand in the services sectors and the industries would almost remain at 31% and the workforce demand from these sectors shall be close to the current engagement patterns,

services contributing 20% of the total and industry with 11 %. The agriculture sector would engage close to 69% of the workers with overall workforce participation at about 40%. The upcoming services which may engage good workforce in near future shall be majorly focused on automobiles and transport services. Logistics and packaging may have its future course post development of MSMEs based on electrical, stone crushing etc.

Based on the inputs received from sector wise expansion plans the workforce projections were made across different categories. The methodology defined in the projections (refer section of methodology) shall be used to make the projections based on the primary inputs to support the secondary findings. The required format of workforce across various sectors would be as shown in the below table:

Sectors	Skilled	Semi-Skilled	Unskilled
Auto & Auto Components			
Chemical & chemical products			
Construction Material & Building Hardware			
Wooden Based			
Food Processing			
Leather & leather goods			
Textile & Handloom			
Woolen Based Products			
Repair & Servicing			
Unorganized (artisan/leather/services etc.)			
Non-metallic mineral based			
Mines, Metals & Minerals (includes quarrying)			
Machinery, Electricals & Manufacturing			
High Requirement			
Medium Requirement			
Low Requirement			
Emerging Requirement			

Table 309 Workforce across various sectors by 2017- Jhunjhunu

5.33.8 Skill Gap Analysis

The skill gap analysis was performed by undertaking the primary research on the employers through the survey instrument; structured questionnaire designed to map the current and the future skill requirements of the industries identified in the district on the basis of manpower absorption and production in high growth industries in the district. The analysis factored in industry linkages with vocational training institutes, employment exchange and with other sources for workforce absorption and retention and would bring out the analysis on significant mismatch between industry skill requirements and the skill pool emerging.

Workforce Demand & Supply Gap							
Workforce	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Unskilled	23632	26361	27414	29869	29863	32030	33130
Semiskilled	9761	10827	11971	13237	13990	14464	15006
Skilled	2473	2668	2630	2668	2583	2622	2559

Table 310 Representation of projected skill gap in demand and supply of employable Skilled/ Semi-skilled & Unskilled workforce (2011-17)

The incremental demand for skilled and semi-skilled workforces gives a gap of over 0.50 lakh (working population). Keeping in mind the rate of workforce participation from unskilled masses and the existing demand of skilled workforce to be low; the significance would be to target training to atleast 50,000 youths by 2017 from semi-skilled and unskilled categories to engage either in various entrepreneurship training modules or skill development through short term courses with on job training. As per the in-depth interviews conducted with senior functionaries of industry associations, district officials and observations; the need and dependence for skilled manpower by the local small scale industries was not well pronounced. Some of the important findings were as follows:-

- Situation was conducive enough to support industrial growth in Jhunjhunu .Investment was good but power supply was insufficient. Water and skilled manpower has good scope in the district but not sufficient in current course. Land was also available with efforts from RIICO
- The VTIs felt short of fulfilling the needs of the industries (not exactly or completely). Industries should give more attention regarding the remuneration so that it could attract skilled workers. Scope for self-employment and entrepreneurship in the district was very good. Though the district authorities were not making any efforts in this direction, but the agriculture based business helped people get self-employment.
- Machinery, electrical and manufacturing was predominant in the district. Handicraft and construction materials and building hardware were emerging in the district which shall be sustainable enough to absorb new manpower.

5.33.9 Youth Aspirations

The study of the perceptions, aspirations, attitudes and expectations of the youth was undertaken in Jhunjhunu district to understand what the youth think, why they think the way they do and how does society respond to their hopes, aspirations and perceptions. Interview schedules (60 youths) and FGD with youths in college were used to draw inferences of their thought process.

The objectives of the youth survey were mainly to understand the perceptions of youth, their aspirations mapped against their attitudes to take up sustainable livelihoods work. The in-depth interactions were held with 60 respondents across the various categories of youth to provide deep insight and understanding on their aspirations and perceptions; of self and people associated/related with them.

Youth Category	
Employed	10
Self employed	10
Unemployed	20
Trainees	20

Table 311 Youth Profile of sample in Jhunjhunu

The youth were covered from the categories of employed, self-employed, unemployed and trainees (as shown in the table above). 30% of the youth covered were college educated and 70% had completed/drop out from high school education. All the respondents were covered from registered VTIs for relevance in skilling initiatives of the state government.

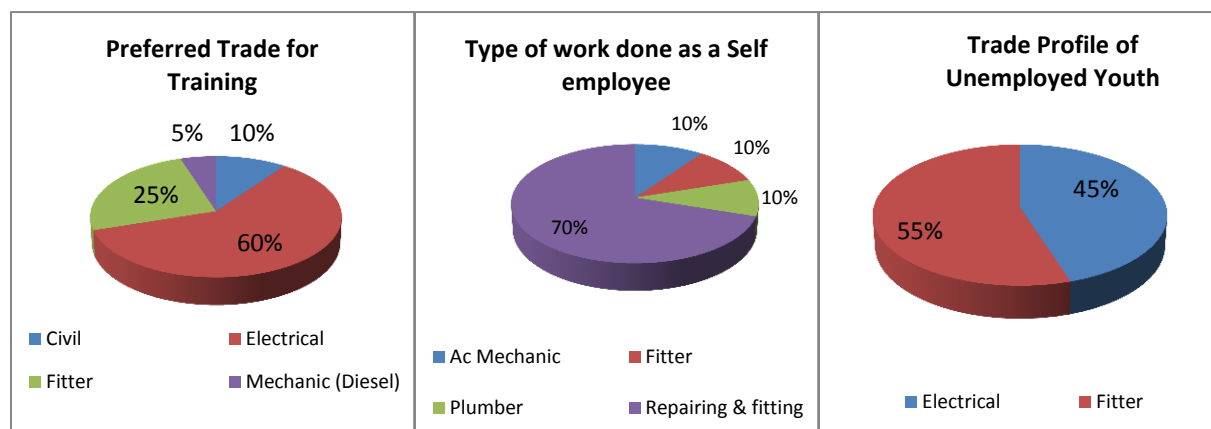


Figure 379 Profile of respondents (trainee, self-employed & unemployed youth) by trade in sample of Jhunjhunu

Inclination towards Electrical course was found very high as around 60% of the youth reported that they had chosen Electrical as a preferred trade during his/her training at VTI. The reason for the same seems to be the demand for this course in the market. Second, most sought, trade was Fitter trade i.e. 25%. Majority of self-employed youth selected Repairing & Fitting job (70%) as an occupation. AC repairing/Fitter/Plumber as an occupation was adopted by equally 10% of total covered youth. Similar to the large number of respondents who were trained in Electrical trade; around 55% numbers of unemployed youth were also from figured out in this category. Fitter trade emerge as the second trade (45%) in unemployed youth.

5.33.10 Youth's Perception

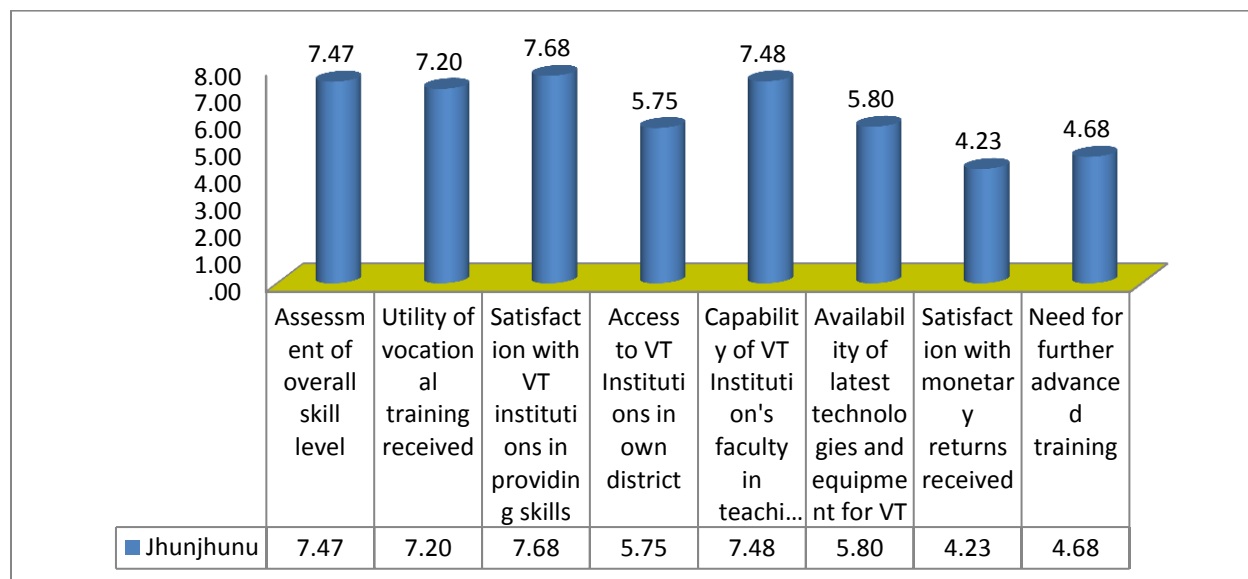


Figure 380 Jhunjhunu Youth's perception, need and aspirations –Sample Group

The major dissatisfaction of the surveyed youths was the initial salary post training (monetary returns) followed by less opportunities of further training (especially in computers and English communication). On a scale of 10, youths rated satisfaction with VTIs as the highest. In case of currently employed youths, the work satisfaction was evident and also that they were provided with annual increment in 90% of the employed youths interviewed.

The general aspirations were mapped by conducting FGDs with the youths from various categories and the following responses were evidently represented by the group:

- s) Better salaries, work satisfaction, family security and learning new technologies (respective trades) were the desires and expectations of the youth from the employment
- t) Families expected from them to get engaged in government jobs or well-paid jobs in big firms
- u) Preference to join the government jobs has made maximum number of youths to pursue training in the ITI and thus the course selection for training gets determined accordingly
- v) Communicative English and computer training were generally undertaken by local training centres for better job opportunities
- w) 7 out of 10 felt that self-employment had least scope in terms of secured future and sustainable growth. Also there were no encouragement by the family members to encourage the self-employment or enterprising
- x) The minimum salary expected after training by most of the youths was between Rs. 8000-10000/month. Though many were not comfortable with the entry level jobs with less pay in private sectors, but as an option they would prefer to get engaged

5.33.11 Optimization Plan

The optimization plan would be structured at three tier level of district comprising of target segment (skilled, semi-skilled and unskilled), institutions of training (VTI, ITI, ITC, Polytechnic, colleges etc.) and the sector wise institutions/industries. The preliminary gap finding, projection and analysis highlights the requirement of 0.5 lakh of skilled, unskilled and semi-skilled demand. Training institutions and the basic infrastructure for skilling suggests for more number of institutes (from various training capabilities) at district and block level which would in turn determine the linkages with the industries and institutions from various sectors as shown in the diagram below.

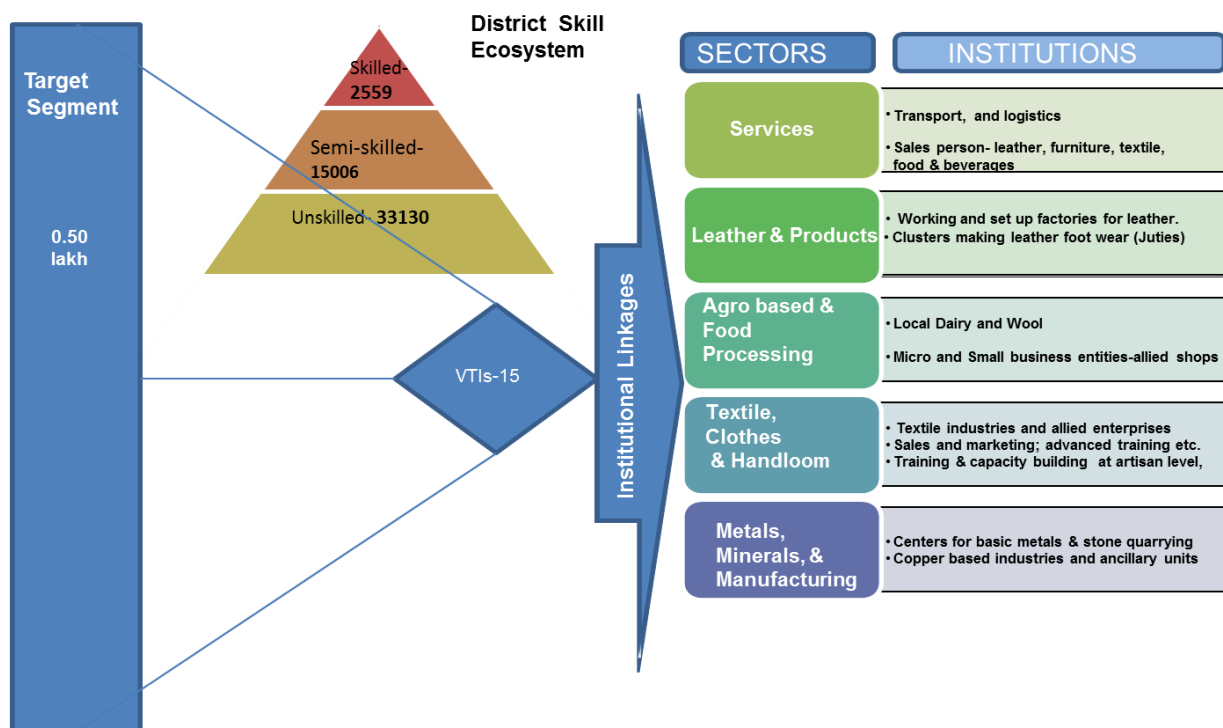


Figure 381 Optimization plan- Skill Development Eco System-Jhunjhunu

The district would require more dedicated approach to advocate the usefulness of skilled workers in the industries and also need to target the service sector employment (emerging sectors) by engaging and converting unskilled workforce to semi-skilled and skilled. It needs to add at least 15 more vocational training centers for skilling across major clusters and blocks. These VTIs should be vital in getting the work ready repairers and mechanics, also for more skilled workers in agriculture and allied sectors. The interface between the VTIs and the industrial bodies would be essential for the mutual benefit.

Annexures

Questionnaire for Major Employers

1.0 Identification Block

1. Name of the establishment	
2. Address	
3. Contact number of the respondent	
4. Name of the respondent	
5. Designation of the respondent	

2.0 Establishment Details

1. Year of establishment	
2. Scale of establishment	Large / Medium / Small
3. Type of establishment	Multi-national / Public Sector / Private Limited (Partnership firm) / (Single Ownership)
4. Major Product(s)	
5. Installed production capacity (units per month by product type)	
6. Actual production (units per month by product type)	
Reason: Why the gap is existing between the Installed and actual production ; (Power shortage, Investment, manpower, water shortage)	
7. Affiliation to unions	Yes / No

8. If affiliated to unions, which major unions? Please list
- _____
 - _____
 - _____

9. Please list down various worker welfare schemes implemented, if any. (Please specify). If No, Please state the reason for same

List of Schemes/Welfare programs	Yes/ No
Additional schemes: Transport facility, housing, health, education schemes,	

10. What are your major expectations from your workers in terms of the following parameters. Please rank on the scale of 1-5

Skills	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
Loyalty	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
Learning & Development	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
Aspirations- Career growth	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
Productivity & Efficiency	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

3.0 Staff deployment

Sl. No.	Staff Type	Map against Skilled/ Unskilled & Semi skilled	Educational Qualification (BE/ B.Tech/ B.Sc/ BA, graduates & MBA/ PG)-1	No. at the time of establishment		Current Strength		Required Strength		% Attrition		Plans to expand strength	
				Male	Female	Male	Female	Male	Female	Male	Female		
1	Senior Manage												

	ment												
2	Middle level Management												
3	Administration & Accounts												
4	Support Staff												
5	Full Time workers												
6	Contract workers												
7	Daily wages worker												

4.0 Reasons for attrition: (retirement, better opportunities outside, layoffs, downsizing, technology upgradation)

1. _____

2. _____

3. _____

5.0 Sources Used for Worker Recruitment

Source	Code	Source	Code
Employment Exchange	1	From other industries	4
VT Institutions	2	Contractors	5

Through current workers	3	Other Sources (Pls. specify)	6
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6.0 Type of employment for workers

Sl. No.	Staff Type	No. Full time		Average Wage Paid		Willingness to Increase Wages (Y/N)		No. Part time		Average Wage Paid		Willingness to Increase	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Skilled Workers												
2	Semi-skilled Workers												
3	Unskilled Workers												

7.0 Available Vacancies Information

Sr. No.	Category	Designation	Nature of Work		No. of vacancies	Educational Qualification	Skill Level required	Gender Specific	Average monthly wage
			Full Time	Part Time					
1	Skilled								

2	Semi-Skilled								
3	Unskilled								

8.0 Wage Structure for full time workers

Sl. No.	Staff Type	Actual Wage per Day	Incentives					
			Housing (Yes / NO)	Health Care (Yes / NO)	Production Linked Bonus (Yes / NO)	PF (Yes / NO)	Insurance (Yes / NO)	Others (specify)
1	Skilled Workers							
2	Semi-skilled Workers							
3	Unskilled Workers							

9.0 Skill Requirement and Availability

Sl. No.	Staff Type/ Designation	Type of Skills Required	Available Freely	Trained In-house	Required for Expansion
1					
2					
3					
4					
5					

Questionnaire for Labour Unions

1.0 Identification Block

1	Name of the Labour Union	
2	Registration No.	
3	Location (City / Town & District)	
4	Year of Establishment	
5	Affiliation	
6	No. of industries covered	
7	Key office functionaries	
	a) President	
	b) Vice-President	
	c) Secretary	
	d) Treasurer	
8	Name of the Respondent	
9	Designation of the Respondent	

2.0 Union Strength & Activities

Sl. No.	Type of Workers	No. of registered members		Strength at the time of establishment		Current Strength	
		Male	Female	Male	Female	Male	Female
1	Skilled Workers						
2	Semi-skilled Workers						
3	Unskilled Workers						
4	Daily Contract Workers						

3.0 Key Activities of the Union

Sl. No.	Type of Activity	Involvement (Yes = 1 / No = 2)
1	Representing member workers at meetings with management	1 / 2
2	Enforcement of worker's rights in industries	1 / 2
3	Awareness generation on worker rights	1 / 2
4	Non-formal education of workers	1 / 2
5	Protection of workers from Contractors and Middlemen	1 / 2
6	Overall welfare of the workers	1 / 2
7	Health care for worker's families	1 / 2
8	Ensure minimum wages for workers	1 / 2
9	Ensure timely payment to workers	1 / 2
10	Education to worker's children	1 / 2
11	Housing for workers	1 / 2
12	Arranging cultural / religious programs for workers	1 / 2
13	Any other activity (please specify)	1 / 2

4.0 Worker Composition in Catchment Area

Sl. No.	Type of Workers	Migrant		Local	
		Male	Female	Male	Female
1	Skilled				
2	Semi-skilled				
3	Unskilled				

5.0 Major Districts from where migrant workers seek employment

Sr.	Name	Name of	Approximate % of Workers	Major Trades

No	of the State	the District			
			Male	Female	
1					
2					
3					
4					
5					

Questionnaire for Vocational Training Institutes

1.0 Identification Block

1	Name of the VT Provider Institution	
2	Location address & Contact Nos.	
3	Registration No.	
4	Management (Govt. / Private, Large Institutions)	
5	Source of Funding	
6	Main trades covered	
7	Affiliation	
8	Type of certification issued (Single/ dual/ third party certification)	
9	Name of the Director	
10	Respondent Name	
11	Respondent Designation	

2.0 Manpower Availability for Management and Teaching

	Positions	Number Sanctioned		Number Available	
		Full Time	Part Time	Full Time	Part Time
1	Administration and Accounts				
2	Faculty (Mechanical Eng.)				
3	Faculty (Electrical Eng.)				
4	Faculty (Computer Eng.)				
5	Faculty (Other Trades)				
6	Support Staff				

3.0 Availability of Functional Infrastructure

	Type of Infrastructure	Availability (Yes = 1 / No = 2)
1	Own Buildings and Campus	
2	Uninterrupted Power Supply	
3	Piped Water Supply	
4	Furnished class rooms with teaching aids	
5	Well equipped laboratories	
6	Updated Technology	
7	Display of posters and drawings	
8	Hostel facility for boys	
9	Hostel facility for girls	
10	Commuting facility for trainees	

4.0 Trainee Absorption and Retention

		Trade - 1	Trade - 2	Trade - 3	Trade - 4	Trade - 5	Trade - 6
1	Sanctioned Trainee Strength by Trade						
2	Actual Trainee Strength by Trade						
3	Male Trainees by Trade						
4	Female Trainees by Trade						
5	Drop-out Nos. (Male) by Trade						
6	Drop-out Nos. (Female) by Trade						
7	Average age of Male Trainees by Trade						

8	Average age of Female Trainees Trade						
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5.0 Placement of Trainees by Trade

		Trade - 1	Trade - 2	Trade - 3	Trade - 4	Trade - 5	Trade - 6
1	Trainees Placed from Last Batch						
2	Placement through campus recruitment						
3	Placement through proactive approach to industry						
4	Placement through employment exchange						
5	Placement of project interns at industry						
6	Average starting pay package						
7	Placement within District						
8	Placement within State (other districts)						

6.0 Demand for Vocational Training

		Trade - 1	Trade - 2	Trade - 3	Trade - 4	Trade - 5	Trade - 6
1	Trainees in last passed out batch (2010-11)						
2	Trainees in 2009-10						
3	Trainees in 2008-09						
4	Trainees in 2007-08						

5	Trainees in 2006-07						
6	Expected / potential demand	+ / -	+ /	+ / -	+ /	+ / -	+ /

7.0 Selection of Course Components

	Logic for Inclusion in Course	Yes = 1 / NO = 2
1	Demand from trainees	
2	Demand from the industry	
3	Mandated by the Board / University	
4	Based on available faculty strength	
5	Based on availability of facilities & equipment	
6	Other reasons	

Questionnaire for Youth Surveys

1.0 Identification Block

1	Name of the respondent	
2	Contact number of the respondent	
3	Age	
4	Gender	
5	Marital Status: 1) Married 2)Unmarried 3)Divorced	
6	Languages known	

2.0 Socio-economic Profile

1	Caste	SC = 1, ST = 2, OBC = 3, General = 4	
2	Respondent's address	State	
		District	
		Block / Mandal	
		Rural = 1 / Urban = 2	
		Name of the town / village	
3	Formal education received	High School = 1, College = 2	
4	Current Status	Trainee = 1	
		Employee = 2	
		Self employed = 3	
		Unemployed = 4	
5	Any family trade?	Yes = 1 / No = 2	
6	If yes for above, what is the trade?		
7	Does the respondent's family migrate for work?	Yes = 1 / No = 2	

8	If yes for above, what type of migration?	Seasonal = 1, As per need = 2	
9	Average distance of migration		
10	Origin and destination of migration	Origin District	
		Destination District	

2.0 Skill Profile

1	<u>If trainee,</u>	Name of the VT	
		Location of the VT	
		Govt. VT = 1, Private = 2	
		Year of joining VT	
		Expected year of completion	
2	Trade offered by VT for training (specify)		Code
3	Preferred trade for training (specify)		Code
4	Reasons for preference (specify)		
5	If trainee, years completed in training		
6	If trainee, specify trade specialization		
7	<u>If currently employed,</u>	Name of employee establishment	
		Address of employee establishment	

		Years of employment with current employer	
		Previous years of work experience	
		Current designation	
		Current responsibilities	
		Membership in workers union (Yes = 1, No = 2)	
8	<u>If self employed</u>	Years in self employment	
		Years of working previously as an employee (if applicable)	
		Type of work done as a self employee	
		Reasons for choosing self employment	
		Willingness to be employed (Yes = 1, No = 2)	
		If willing to seek employment, what are the reasons?	
9	<u>If unemployed.</u>	Years since unemployed	
		Reasons for unemployment	
		Trade in which trained	
		Preferred trade for training	
		Reasons for preference of trade	

3.0 Youth Perceptions

	Score	1	2	3	4	5	6	7	8	9	10	NA
	Rated Parameters											
1	Assessment of overall skill level											
2	Utility of vocational training received											
3	Satisfaction with VT institutions in providing skills											
4	Access to VT institutions in own district											
5	Capability of VT institution's faculty in teaching skills											
6	Availability of latest technologies and equipment for VT											
7	Satisfaction with monetary returns received											
8	Need for further advanced training											

4.0 Remuneration and Incentives

1	If employed or self employed, what is the approximate monthly income?	
2	Are you satisfied with the monthly amount received?	
3	If not satisfied with the current monthly income, how much do you feel should be the right amount for your skill level?	
4	If you are an employee, is there a system of annual increment for you? (Yes = 1, No = 2)	
5	If there is an annual increment, what is the per cent increase usually given?	
6	If you are an employee, do you get a production linked bonus? (Yes = 1, No = 2)	
7	If employed, do you get company benefits like health care, accident insurance, housing, children's education and any other benefits? (Yes = 1, No = 2)	
8	If yes for above, please list benefits received	

5. Preference for the Job location

Within District	
Outside District (But in State)	
Outside State	

List of Sample Survey Respondents in the Pilot Districts:

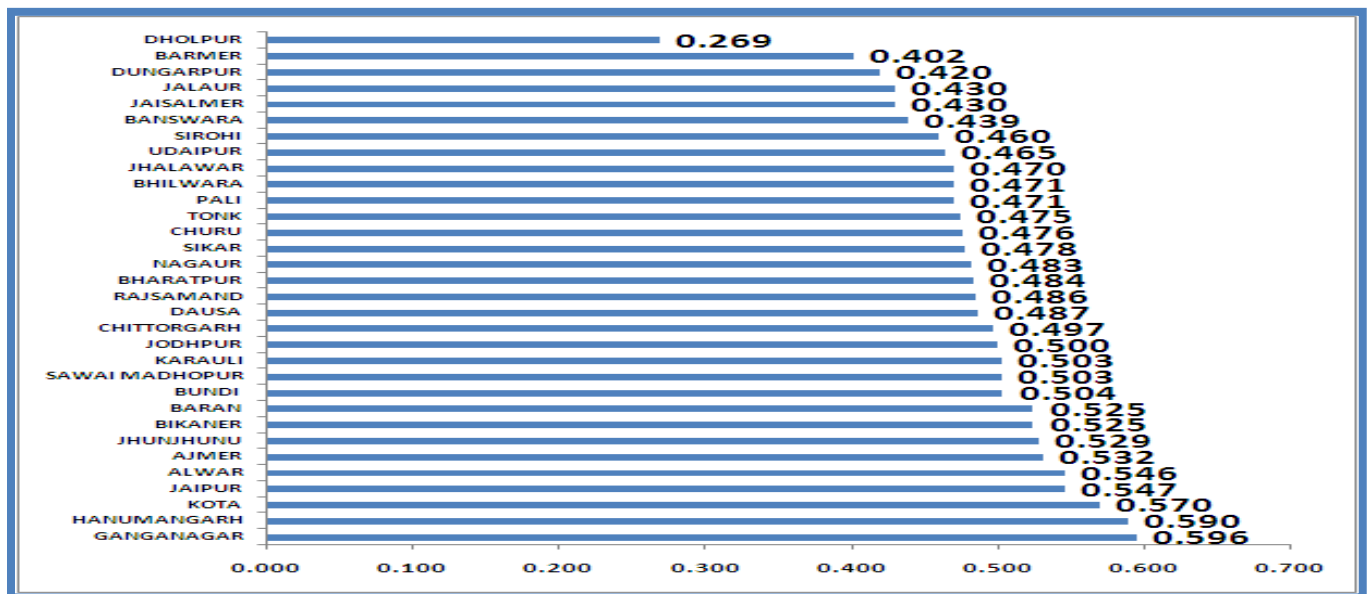
DISTRICTS	EMPLOYERS	VTIs	OTHER RESPONDENTS
BIKANER	<ol style="list-style-type: none"> Raj Plaster Pvt. Ltd. CH. Woolen Mill Pvt. Ltd. Surana woolen Mills Bikaji Foods International Ltd. Simplex Files Industries Durga Dal Mill Sethia Sweets Products. Sun Shine Food Products Super Max Enterprises Nokha Cement Pvt. Ltd. 	<p>Government VTI's (5 VTIs)</p> <ol style="list-style-type: none"> Govt. ITI College – Rewari Road Rajkiye Dugar College – Muthujyam Chauraha Govt. ITI College- Women – Vallav ITI Rd, Patel Nagar Govt. Women ITI – Nera Saras Dairy Agriculture Science Centre- Bikaner Town <p>Private VTI's (4VTIs)</p> <ol style="list-style-type: none"> Adult Education Association- Saraswati Park Carrier Launcher Skill School- JNU Colony Shri Abhay Animal College- Gandhi nagar Rajasthan Muktinath Samitee- Braham Bagicha 	<p>Interviewed 62 Youths</p> <ul style="list-style-type: none"> 09 Youths (employed) – 4 Rural + 5 Urban 20 Youths (Self Employed) - 10 Rural + 10 Urban 20 Youths (Unemployed) – 10 Rural + 10 Urban 21 Youths (Trainees) - 10 Rural + 11 Urban <p>Industry Association- Bikaner Vyapar Udyog Mandal District Representatives</p>
ALWAR	<ol style="list-style-type: none"> Rajsthan Antibiotic Ltd. Motherson Automotive Technologies &Engineering Galore packaging india pvt. Ltd. Mass wire and steels pvt.Ltd. M/S Satellite cables pvt.Ltd. RSPL LTD Stnergy steels pvt.Ltd. Ankur hotel Hariom precision pvt.Ltd. Imperial Hotel 	<p>Government VTI's (3 VTIs)</p> <ol style="list-style-type: none"> Woman ITI Kalimori Audhyogik Prasikshan Sansthan ITI,Bhiwadi <p>Private VTI's (7VTIs)</p> <ol style="list-style-type: none"> Shree Ganesh I.T.C.,Tapukara Ranjeet ITI,Tijara Shree Sai I.T.C. Matasya Lok Sewa I.T.C. Shri Siddhi Vinayak I.T.C. E.T.C I.T.C. Maps Industrial Training Institutes 	<p>Interviewed 60 Youths</p> <ul style="list-style-type: none"> 17 Youths (employed) – 08 Rural + 09 Urban 10 Youths (Self Employed) - 05 Rural + 05 Urban 10 Youths (Unemployed) – 05 Rural + 05 Urban 23 Youths (Trainees) - 10 Rural + 13 Urban <p>Industry Association- Bhiwadi Manufacturers Association District Representatives</p>
JAIPUR	<ol style="list-style-type: none"> Mashesheari ind. Corporation J.P.E nfeneering Pankaj Fabricators SRI RAM OIL & CHEMICAL Bhagwati chemical p.ltd khaitan tiles pvt.ltd. H.PC pakaging pvt.ltd. Aggrwal marwal pvt.ltd. 95 HEWAR METAL INDUSTRY Rajsthan mettel 	<p>Government VTI's (4 VTIs)</p> <ol style="list-style-type: none"> Persuasion Centre, Jaipur Govt. ITI, Sambher ITI Katputli Govt. ITI, Fungi <p>Private VTI's (5VTIs)</p> <ol style="list-style-type: none"> Modern I.T.C Raman ITI College Tirupati Industrial Training Institute Netaji Subhash Chandra Bose I.T.C. Saurav Industrial Institute 	<p>Interviewed 70 Youths</p> <ul style="list-style-type: none"> 12 Youths (employed) – 6 Rural + 6 Urban 18 Youths (Self Employed) - 09 Rural + 09 Urban 20 Youths (Unemployed) – 10 Rural + 10 Urban 20 Youths (Trainees) - 10 Rural + 10 Urban <p>Industry Association- CII District Representatives</p>

	industry		
JODHPUR	<ol style="list-style-type: none"> Parekh Industries A1 Uday Apex Steel Suncity Polymars Salawas Steel National Screen Art Kohinoor Handicraft Dilip Industries Stanley Chemicals Pvt. Ltd. Amrit Dall Mill 	Government VTI's (7VTIs) <ol style="list-style-type: none"> Maulana Abdul Kalam Aazad Muslim woman ITI. Divya Lok Seva Sansthan Maulana Abdul Kalam Aazad Muslim ITI. Karuna Royal Educarion Centre ITC Grihasti I.T.I. Shri Bhairav I.T.I. Rajiv Gandhi I.T.I 	Interviewed 52 Youths <ul style="list-style-type: none"> 20 Youths (Self Employed) - 10 Rural + 10 Urban 12 Youths (Unemployed) – 06 Rural + 06 Urban 20 Youths (Trainees) - 10 Rural + 10 Urban Industry Association- Jodhpur Industry Association District Representatives
UDAIPUR	<ol style="list-style-type: none"> Sulex Phasphet Fabtech Industries Khicha Phoschem Ltd. Tirupati Chemicals Jai Jinendra Industries National Plastic Lotus Modulars Vinayak Mineral Rajasthan Britels Ltd. Bahara Industries Ltd. 	Government VTI's (7 VTIs) <ol style="list-style-type: none"> ITI Kherwada Govt. ITI, Mavli Govt. Women ITI, Pratapnagar Zila Gramin Vyawasayik Prasikshan & Udhyog Vikas Kendra ITI, Kotda Govt. ITI, Salumber ITI , Udaipur Private VTI's (3VTIs) <ol style="list-style-type: none"> Saraswati ITI Jatin Industrial Training Centre Udaipur ITI 	Interviewed 70 Youths <ul style="list-style-type: none"> 09 Youths (employed) – 4 Rural + 5 Urban 20 Youths (Self Employed) - 10 Rural + 10 Urban 20 Youths (Unemployed) – 10 Rural + 10 Urban 21 Youths (Trainees) - 10 Rural + 11 Urban Industry Association- Udaipur Chambers of Commerce and Industries (UCCI) District Representatives

HDI & GDI

HDI Rajasthan, 2007								
DISTRICTS	Education Index	Ranking	Health Index	Ranking	Income Index	Ranking	Human Development Index	Ranking
Ajmer	0.772	8	0.574	17	0.686	8	0.677	10
Alwar	0.747	16	0.776	6	0.71	7	0.744	6
Banswara	0.63	32	0.309	31	0.335	29	0.425	31
Baran	0.763	11	0.571	18	0.624	12	0.653	12
Barmer	0.798	6	0.581	16	0.355	28	0.578	22
Bharatpur	0.762	12	0.625	13	0.424	24	0.604	19
Bhilwara	0.685	29	0.396	28	0.818	2	0.633	15
Bikaner	0.718	23	0.863	1	0.756	5	0.779	3
Bundi	0.722	22	0.561	20	0.663	10	0.649	13
Chittaurgarh	0.705	25	0.383	29	0.585	16	0.558	27
Churu	0.832	5	0.759	7	0.226	32	0.606	18
Dausa	0.757	15	0.591	14	0.38	26	0.576	23
Dhaulpur	0.758	14	0.504	21	0.23	31	0.497	30
Dungarpur	0.64	30	0.282	32	0.304	30	0.409	32

Ganganagar	0.787	7	0.816	5	0.825	1	0.809	1
Hanumangarh	0.765	10	0.846	3	0.673	9	0.761	5
Jaipur	0.833	4	0.688	10	0.814	3	0.778	4
Jaisalmer	0.714	24	0.641	12	0.663	10	0.673	11
Jalore	0.638	31	0.497	22	0.445	21	0.527	29
Jhalawar	0.735	18	0.588	15	0.52	19	0.614	16
Jhunjhunu	0.85	2	0.85	2	0.433	22	0.711	7
Jodhpur	0.725	19	0.725	8	0.609	14	0.686	9
Karouli	0.767	9	0.568	19	0.364	27	0.566	25
Kota	0.875	1	0.682	11	0.803	4	0.787	2
Nagaur	0.736	17	0.699	9	0.396	25	0.61	17
Pali	0.692	27	0.356	30	0.593	15	0.547	28
Rajsamand	0.724	21	0.44	26	0.571	18	0.578	22
Sawaimadhopur	0.725	19	0.484	24	0.474	20	0.561	26
Sikar	0.837	3	0.83	4	0.428	23	0.698	8
Sirohi	0.695	26	0.487	23	0.753	6	0.645	14
Tonk	0.688	28	0.443	25	0.582	17	0.571	24
Udaipur	0.761	13	0.413	27	0.611	13	0.595	20
Rajasthan	0.755		0.735		0.64		0.71	
Coefficient of variation	7.9		27.8		31.5		15.5	



List of industries interviewed in primary survey

Sl.	District	Industry Name	Address	Respondent	Respondents
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No				Name	Designation
1	Ajmer	Yash Industries.	H -81 RIICO Industrial Area, Gegal	Rajendra	Manger
2	Ajmer	Rawat Industries	H/1-49B RIICO Industrial Area, Gegal	Babulal Rawat	M .D
3	Ajmer	Sri Shyam Industries	H1-78 A toF Gegal inds Area	Raju singh	Manger A/C
4	Ajmer	Sri Charvya Fabrics	H/1-41RIICO Industrial Area, Gegal	Amit	M.D
5	Ajmer	Sidharath Oxi Gas [P] Ltd.	F-29RIICO Industrial Area, Gegal	Pawan Khatri	Manger
6	Ajmer	K .S .K Plastic Indsustries.	G-1/3DRIICO Industrial Area, Gegal	Dhanesh	M.D
7	Ajmer	Parth Formulation	G1/31RIICO Industrial Area, Gegal	Kamal Kishor	M.D
8	Ajmer	Tanish Export P Ltd	G1/31-D,RIICO Industrial Area, Gegal	Mukesh sharma	Manger
9	Ajmer	Civitron Transforma Pvt. Ltd.	F-15RIICO Industrial Area, Gegal	viKARAM SINGH	Manger
10	Ajmer	Radha Swami Fabrics	H-95RIICO Industrial Area, Gegal	Naresh	Manger
11	Alwar	Rajsthan Antibiotic Ltd.	A-619&630 RIICO industrial area Biwadi	Arun kumar	HR Assi.
12	Alwar	Motherson Automotive Technologies &Engineering	SP-1BRIICO ind. Area Tapukhera Bhiwadi	Vishambar sharma	HR
13	Alwar	Galore Packaging India Pvt. Ltd.	F-614,Bhiwadi ind. Area,Bhiwade	Mudit kumar	Ac. Managar
14	Alwar	Mass Wire And Steels Pvt.Ltd.	SP-149 D& E phase-1 riico ind. Area	Manoj kumar	Ac. Managar
15	Alwar	M/S Satellite Cables Pvt.Ltd.	F-626, RIICO ind.Area,phase-1	C.K NAIR	Sr Managar
16	Alwar	Rspl Ltd	RSPL LIMITED 10, Alwar	Vinod Mishra	Managar
17	Alwar	Stnergy Steels Pvt.Ltd.	2MIA	NARESH KUMAR	Office inch.
18	Alwar	Ankur Hotel	mahu marg alwar	Ayub Khan	Managar
19	Alwar	Hariom Precison Pvt.Ltd.	Itarana road old ind. Area Alwar	T.V Vishwakarma	Managing Director
20	Alwar	Imperial Hotel	Manu Marg,Alwar.	Parmanand Verma	Manager
21	Barmer	Girdhar Industries	RIICO Industrial Area Barmer	Mr. Girdhari lal	Director
22	Barmer	Khilji Ice Factory	H-1-38 RIICO Industrial Area Barmer	Mohhd. Sharif Ahemad	Director
23	Barmer	Riddhi Siddhi Mineral Industries	H-1RIICO Industrial Area Barmer	Jaswant Mehta	Director
24	Barmer	Tirath Das Deve	F-41 RIICO Industrial Area	Jayas Khatri	Director

		Chandra Khatri Industries	Barmer		
25	Barmer	Prakash Gwargam Industries	RIICO Industrial Area Barmer	Babu Lal	Manager
26	Barmer	Rishi Electric & Engineering Industries	38 RIICO Industrial Area Barmer	Sumer Singh	Director
27	Barmer	Jayas Industries	G-1-40 RIICO Industrial Area Barmer	Jayas Khatri	Director
28	Barmer	Mahaveer Gwargam Industries	46-47 RIICO Industrial Area Barmer	Kanhaiya Badhera	Director
29	Barmer	Neelkanth Industries	G-1-50 RIICO Industrial Area Barmer	Rajendra Shalesha	Director
30	Barmer	Mehta Gwargam Industries	RIICO Industrial Area Barmer	Hukmi Chand	Director
31	Banswara	Vinpolly Aditya Pvt.Ltd.	F-3,RIICO Indl.Area Banswar	Neema Ram	Incharge
32	Banswara	Gupta Industry	F-1,RIICO Indl.Area Banswar	Ram kr.Gupta	Manager
33	Banswara	L.N.J Denim.Co.Unit Of Rswm	Village-Mardi,Banswara	Prabir Bhand	G M
34	Banswara	Narain Distillery	Village-Sundri,Banswara	Karan	GM
35	Banswara	Hotel Shanti Niketan	Opp-Old Bus Stop,Banswara	Y.S.Mehta	Owner
36	Banswara	Bhilwara Malwa De Witte	Plot no.35,Village Mardi	C.K.Tharad	Ass.Vice President
37	Banswara	Banswara Syntex Ltd	Indl.Area Dahod Road,Banswara	S.S.Sajal	Manager
38	Banswara	Mayur Flooring Ltd.	Dahod Road	Manoj Bara M	MD
39	Banswara	Trinetra Cement Ltd.	P.O.Bhajwana,Banswara	Karan Basist	Plant Head
40	Baran	Avg Flour Mill	H-16 RIICO Industrial Area, Baran	Vikrant	Propariter
41	Baran	Sri Ganesh Industries	Plot No. G 1-40 RIICO Industrial Area, Baran	Choudh Nal	junior Manager
42	Baran	Chilly Soft Drinks, Ganesh Bottling	H 1/99 RIICO Industrial Area, Baran	Ganesh Namdeb	Propariter
43	Baran	Lohiya Industries	H-60 RIICO Industrial Area, Baran	Kamal Singh	Cleark
44	Baran	Skg Pvt Ltd	H-57 RIICO Industrial Area, Baran	Naam Singh Meena	Manager
45	Baran	Rk Flour Mill	H-17 RIICO Industrial Area, Baran	RK Singh	Manager
46	Baran	P.K Industries	H 72 RIICO Industrial Area, Baran	Aaksh Arora	M.D.
47	Baran	Mansha Ram Pvt Ltd	RIICO Industrial Area, Baran	Mansha Ram	Manager

48	Baran	Meshar Plastics	H-98 RIICO Industrial Area, Baran	Dayal	Manager
49	Baran	Dixit Industries	H-12 RIICO Industrial Area, Baran	Balai Bagat	Manager
50	Bharatpur	Hotel Raj Palace	infront of BSNL Office Bayana Bharatpur	Rakesh Kumar	Manager
51	Bharatpur	Sri Balaji Stone	G-1-62, RIICO Area Bayana Bharatpur	Manish Kumar	Manager
52	Bharatpur	Shiv Shankar Oil Industries	G-77 RIICO Area Bayana Bharatpur	Babu Lal	Owner
53	Bharatpur	Ganganagar Sagar Mill	old 48 Industrial Area Bharatpur	Pawan kumar	Factory incharge
54	Bharatpur	Saraswat Steel Rolling Mills	Old Industrial Area Bharatpur	Shekhar Sharma	Owner
55	Bharatpur	Union Corporation Pvt. Ltd.	A-3 RIICO Industrial Area Bayana Bharatpur	Rajesh	Owner
56	Bharatpur	Bhagawati Enterprises	Old RIICO Industrial Area Bharatpur	Shyam Singh	Senior Supervisor
57	Bharatpur	Jai Foundry	RIICO Industrial Area Bharatpur	Jai Singh	Owner
58	Bharatpur	Kalra Steel Private Limited	Old RIICO Industrial Area Bharatpur	D.N.Kalra	Propariter
59	Bharatpur	Sri Tej Industries Pvt. Ltd.	Tyonga Bharatpur	Sardar Singh Saini	Owner
60	Bhilwara	Mewad Suiting.	E-156 Riico ind. Area Bhilwara	Rajesh jain	womning master
61	Bhilwara	Madhur Textile Pvt Ltd.	E-240 Riico ind. Area Bhilwara	Kailash chandra	Manager
62	Bhilwara	Chalwa Textile	F-135 Riico ind. Area Bhilwara	Praveen	Supervisor
63	Bhilwara	Sunati Silk Mills	F-133 Riico ind. Area phase-3 Bhilwara	Prakash Babel	Accountant
64	Bhilwara	Jay Shri Suiting Pvt Ltd.	G-165,Riico ind. Area Bhilwara	Omkar Lal Dangi	Manager
65	Bhilwara	Swastika Threads Ltd.	E-152 Riico ind. Area Bhilwara	Shiv kumar	Sr.Accountant
66	Bhilwara	Kanak Packaging	E-164 Riico ind. Area Bhilwara	Mukesh	M.D.
67	Bhilwara	Mahadev Textile	F-80 Riico ind. Area Bhilwara	Anil agarwal	M.D.
68	Bhilwara	Suresh Universal Ltd.	E-147 Riico ind. Area Bhilwara	Ramawtar	Accountant
69	Bhilwara	Pusa Synthetic	E-145 Riico ind. Area Bhilwara	Mahesh kumar	Supervisor
70	Bhilwara	Guru Kripa Wooden Ind.	G 1-205 Phase 1 RIICO Industrial Area Bhilwara	Mr. Satya Prakash Kulkarni	M.D.
71	Bhilwara	Meera Datar Services &	G 1-178 Phase 4 RIICO	Manish Kumar	Asst.

	a	Eng.Works	Industrial Area Bhilwara		Manager
72	Bhilwar a	Sodani Group Of Ind.	G 1-178 Phase 4 RIICO Industrial Area Bhilwara	Manish Kumar	Asst. Manager
73	Bhilwar a	Laxmi Lather Ind.	G 1- 116 Phase 4 RIICO Industrial Area Bhilwara	Ganpat Seth	Owner
74	Bikaner	Raj Plaster Pvt. Ltd.	18,indusrial area,Rani bazar,Bikaner	Sonu Raj Swami	Manager
75	Bikaner	Ch. Woolen Mill Pvt. Ltd.	49, Rani Bazar industrial Area	Kanhaiya lal Batra	Managing Director
76	Bikaner	Surana Woolen Mills	67-A,Road no-7,Rani bazar Ind Area,Bikaner	Sidharth Surana	Director
77	Bikaner	Bikaji Foods International Ltd.	F-196-197,Road No- 4,Bichwal Indusrial Area,Bikaner	Sonika	Hr. Manager
78	Bikaner	Simplex Files Industries	Plot No-16,Road No-4,Rani Bazar,Bikaner	Ram Gopal Jhawar	Managing Director
79	Bikaner	Durga Dal Mill	13/A Industrial Area,Road No-4,Bikaner	Nandlal Thirani	Managing Director
80	Bikaner	Sethia Sweets Products.	F-262,Bichwal IndustrialArea,Bikaner	K.L.Sethia	Partner of the Firm
81	Bikaner	Sun Shine Food Products	F-88,89,Bichwal Indusrial Area,Bikaner	S.L. Vyas	Manager
82	Bikaner	Super Max Enterprises	F-265,Bichwal Indusrial Area,Bikaner	Ram Pal Jaiswal	Hr. Manager
83	Bikaner	Nokha Cement Pvt. Ltd.	S.P.I.C. Industrial Area,Nokha,Bikaner	Sri Ram Kishan Rathi	Director
84	Bundi	Shrinath Industry	D-1/42,RIICO Indl.Area Bundi	Krishanchand Mathur	Manager
85	Bundi	Arbicon International	Plot no.789,Hatipura,RIICO Indl.Area Bundi	Kamlesh Chauhan	Accountant
86	Bundi	Surya Industry	H-38 BB Chowki Hatipura,Bundi	Pradeep Goyal	Manager
87	Bundi	Forence Sand Stone Pvt.Ltd.	Johnson School,RIICO Indl.Area Bundi	Anil Goyal	Manager
88	Bundi	Nagaur Interprises	G-1-17A,RIICO Indl.Area Bundi	Sunil Mana	MD
89	Bundi	Marairs Marketing Ltd.	F-31,RIICO Indl.Area Bundi	Harjeet Singh	Sales Manager
90	Bundi	Prajapati Stone	F-61,RIICO Indl.Area Bundi	Govind	M D
91	Bundi	Naturare Slate Industry	Plot no.F-22,RIICO Indl.Area Bundi	N.K.Sahu	Manager
92	Bundi	Marbross Co.	Plot no.F-23-30,RIICO Indl.Area Bundi	Sunil Kumar	Supervisor
93	Bundi	Shiv Shanti Interprises	RIICO Indl.Area Bundi	Bisham Singh	Manager
94	Bundi	Deepika Toor & Travels	Main Bus Stand Bundi	Kamal Dadem	Manager
95	Bundi	Junior Rice Mills	H 47 RIICO Industrial Area Bundi	Ajay Sharma	Manager

96	Bundi	Shiv Shakti Enterprises //Forenla Sand Stone P.Ltd	RIICO Industrial Area Hadipura	Manish Kumar	Godown Manager
97	Chittorg arh	Krishana Engineering & Works	A 1/147A RIICO Industrial Area Chittorgarh	Ramesh Chandra	Manager
98	Chittorg arh	Hanuman Tiles Pvt. Ltd.	F-109 RIICO Industrial Area Chittorgarh	Ashok Kumar	M.D.
99	Chittorg arh	Paradize Marbals Pvt. Ltd.	F-87 RIICO Industrial Area Chittorgarh	Kailash	Manager
10 0	Chittorg arh	S.K. Tradings	F-118 RIICO Industrial Area Chittorgarh	Suresh Jain	M.D.
10 1	Chittorg arh	Nabi Marbals P{Vt. Ltd.	E-89 RIICO Industrial Area Chittorgarh	Ishak Mohammad	senior Accountant
10 2	Chittorg arh	Ss Trading Company	E-3 RIICO Industrial Area Chittorgarh	Shyam Lal Daat	Manager
10 3	Chittorg arh	Sriji Natural India Pvt.Ltd.	E-90 RIICO Industrial Area Chittorgarh	Pankaj	M.D.
10 4	Chittorg arh	Meera Marbals Pvt. Ltd.	F-110-111 RIICO Industrial Area Chittorgarh	Sandeep Birla	M.D.
10 5	Chittorg arh	Sagar Tiles Pvt.Ltd.	F-108 RIICO Industrial Area Chittorgarh	Sagar Kumar Gupta	M.D.
10 6	Chittorg arh	Chharbhuja Marbals	H 1 /113 RIICO Industrial Area Chittorgarh	Shanakar	Manager
10 7	Churu	Suraj Handicraft	G-54-60,RIICO Indl.Area,Sardarsahar,Chu ru	Surajmal	Director
10 8	Churu	Tiger Plaster Industry	176-178,RIICO Indl.Area,Sardarsahar,Chu ru	Mohan Ji	Manager
10 9	Churu	National Plaster Industry	H-1/278,RIICO Indl.Area,Sardarsahar,Chu ru	Manoj Kumar	Manager
11 0	Churu	Shiv Handicraft	Plot no.H1-237RIICO Indl.Area,Sardarsahar,Chu ru	Girdhari Lal	Director
11 1	Churu	Saraf Seasoning Udyog	Plot no.70-80,RIICO Indl.Area,Sardarsahar,Chu ru	Arisudan Saraf	Director
11 2	Churu	Prem Plaster	RIICO Indl.Area,Sardarsahar,Chu ru	Mukesh Saini	Director
11 3	Churu	Viskarma Art & Craft	H-1/18-20,RIICO Indl.Area,Sardarsahar,Chu ru	Nimichand	Director
11 4	Churu	Shree Viskarma Udyog	G1/69,RIICO Indl.Area,Sardarsahar,Chu ru	Banwari Lal	Director
11	Churu	Marwar Plaster	RIICO	Vivek Puniya	Manager

5			Indl.Area,Sardarsahar,Churu		
116	Churu	Kohinoor Plaster Industry	RIICO Indl.Area,Sardarsahar,Churu	Altaf Husain	Director
117	Dausa	Sri Govind Minerals	G-1 -34 RIICO Industrial Area Dausa	Jogesh Chandra Yadav	Manager
118	Dausa	Modern Transfarmers	E-94 RIICO Industrial Area Baapi	Rajesh Sharma	Manager
119	Dausa	Sri Balaji Marbals	SP-1 RIICO Industrial Area Dausa	Chandra Prakash Sharma	Propariter
120	Dausa	Neecon Power & Infra	Baapi Industrial Area Dausa	Sonu Singh	Supervisor
121	Dausa	Jaipur Mineral Development Pvt. Ltd.	Baapi Industrial Area Dausa	Sachin Maheswari	Manager
122	Dausa	R. K. Industries	R-1 RIICO Industrial Area Dausa	Ranveer Kumar	Senior Supervisor
123	Dausa	G. R.Industries	RIICO Industrial Area Dausa	Manoj	Owner
124	Dausa	Shyam Minerals	G-61-62 RIICO Industrial Area Somnath nagar Dausa	Mukesh	Supervisor
125	Dausa	Jagdamba Marbals	RIICO Industrial Area Dausa	Nathu Lal Saini	Supervisor
126	Dausa	Jyoti Quaraty	RIICO Industrial Area Dausa	Roshan Singh	Supervisor
127	Dhaulpur	Vardhman Metals	RIICO Industrial Area Dhaulpur	Munna Lal Jain	Manager
128	Dhaulpur	Usha Enterprises Ice Chilling Plant	RIICO Industrial Area Dhaulpur	Megh Singh Chauhan	Manager
129	Dhaulpur	R. M Mittal Steel Pvt. Ltd.	3rd KM milestone Agra Road < Dhaulpur	Pramod Mittal	Accountant
130	Dhaulpur	Ashish Kumkum	RIICO Industrial Area, Odalu road, Dhoulpur	Nathua Baghela	Manager
131	Dhaulpur	Jai Kela Ma Enterprise	RIICO Industrial Area Dhaulpur	Ram Lal	Senior Supervisor
132	Dhaulpur	K. G. Metlog	F-37-38 RIICO Industrial Area Dhaulpur	Mukesh Gyaji	Manager
133	Dhaulpur	Dixit Battary Centre	RIICO Industrial Area , Odhela Area Dhaulpur	Mukesh Sharma	Manager
134	Dhaulpur	M.S. Beena Readymade Garment	G-1-493 RIICO Industrial Area Dhaulpur	Viren Singh	Supervisor
135	Dhaulpur	Laxmi Inddustries Pvt. Ltd.	F-19/2 RIICO Industrial Area Dhaulpur	Karan Suri	Manager
136	Dhaulpur	Kapoor Marbal Industries	RIICO Industrial Area Dhaulpur	Mukesh kumar	Manager

137	Dungarpur	Rajan Industry	F-45 RIICO Industrial Area Dungarpur	Satish Kumar Jain	Owner
138	Dungarpur	Chanda Industry	H-17 RIICO Industrial Area Dungarpur	Priyesh Kumar Parmar	Owner
139	Dungarpur	Pradeep Industries	G/28 RIICO Industrial Area Dungarpur	Pradeep Singh	Manager
140	Dungarpur	Shrimal Ice Factory	H-47 RIICO Industrial Area Dungarpur	Sumit Sreemal	Owner
141	Dungarpur	Shree Rajasthan Textile & Chemicals	PB 25 Simlwara road Dungarpur	Jail Vyas	D.G.M.
142	Dungarpur	Shree Rajasthan Syntex Pvt Ltd	PB 23-24 Simlwara Road Dungarpur	Jail Vyas	D.G.M.
143	Dungarpur	Maha Shiv Shaktee Enginring Work	F-62 RIICO Industrial Area Dungarpur	Basant Lal	Owner
144	Dungarpur	Balaji Marbal	G/9-10 RIICO Industrial Area Dungarpur	Prabhu Lal	Manager
145	Dungarpur	Lucky Marvals	G-51 RIICO Industrial Area Dungarpur	Sunil Jain	Manager
146	Dungarpur	Bhagwati Marbals	G-20 RIICO Industrial Area Dungarpur	Madan Agrawal	Owner
147	Hanumangarh	Chanchan Brothers Pvt. Ltd.	Near-N.M.P.G.Collage FCI Godown Road,Hanumangarh	Surya Prakash	Director
148	Hanumangarh	Kediwal Industry	D-20/22 RIICO Indl.Area	Om K.D.Wall	Director
149	Hanumangarh	Anand Dhalai Udyog	RIICO Indl.Area,Hanumangarh	Shivram Verma	Director
150	Hanumangarh	Simmi Plaster Industry	D-24,RIICO Indl.Area,Hanumangarh	Prince	Manager
151	Hanumangarh	Goswami Industry	D-16,RIICO Indl.Area,Hanumangarh	Mahipal Goswami	Director
152	Hanumangarh	Tirupati Plastic	C-23,RIICO Indl.Area,Hanumangarh	Navneet	Manager
153	Hanumangarh	Kali India Pvt.Ltd.	A-6,RIICO Indl.Area,Hanumangarh	Harish Jain	Director
154	Hanumangarh	Hotel Himanshu	Main Bus Stand Hanumangarh	Santosh Jain	Manager
155	Hanumangarh	Shiv Jyoti Rice Mills	B-7,RIICO Indl.Area,Hanumangarh	Chiman Lal Garg	Director
156	Hanumangarh	Laxmi Plaster Industries	D 18 Phase 1 RIICO Industrial Area , Hanumangarh	Sandeep Garg	Manager
157	Jaipur	Mashesheari Ind. Corporation	F-77 road no 5	Naveen	MD
158	Jaipur	J.P.Engineering	E-104 road no 7	Abdulhanil	Managar
159	Jaipur	Pankaj Fabricators	plot no 75 Fb rood no 5c	Kaptan Singh	A/c

160	Jaipur	Sri Ram Oil & Chemical	Rod-1c v.k I Area plot no c-62	D.P MUNDRA	MD
161	Jaipur	Bhagwati Chemical P.Ltd	c-58 road 5,vki	Rohit Khera	MD
162	Jaipur	Khaitan Tiles Pvt.Ltd.	c-59,road no 5 vki area jaipur	Mukesh Khetan	MD
163	Jaipur	H.Pc Pakaging Pvt.Ltd.	c-60 road no 1-c v.k.i Area jaipur	Naveen Gupta	Director
164	Jaipur	Aggrwal Marwal Pvt.Ltd.	b-73,road no fc vk jaipur	M.L Aggarwal	A/c Manager
165	Jaipur	95 Hewar Metal Industry	F-793.road no 6 v.k.i jaipur	Manish Vijay	Senior A/c
166	Jaipur	Rajsthan Mettel Industry	E-108/A road no 7 c vki areia jaipur	Ajay chaudhary	Formen
167	Jaipur	Geetanjali Travels	Opp. Shekhawati Complex, Station Rd. jaipur.	Banti	Owner
168	Jaipur	Fine Marbles Pvt Ltd	D-49 Lal Kothi, Jaipur.	Rahul Kumar	Accountant
169	Jaipur	Bubbers Beauty Palace	Bapu Bajar Jaipur-302003	Rakesh Bubbar	Owner
170	Jaisalmer	Asha Stone	RIICO Indl.Area	Rajmal	Director
171	Jaisalmer	Datastone	G-1/5 RIICO Indl.Area,Jaisalmer	Neeraj Acharya	Director
172	Jaisalmer	Shree Industries	G-9,RIICO Indl.Area,Jaisalmer	Sandeep Dholakiya	Director
173	Jaisalmer	Sunrise Stone Industries	G-14 RIICO Indl.Area,Jaisalmer	D.K.Bhatiya	Director
174	Jaisalmer	Charbhujia Marbel.Co.	RIICO Indl.Area	Suresh Bajna	Director
175	Jaisalmer	Kapil Stoneco.	G-100 RIICO Indl.Area	Yogesh Mehra	Director
176	Jaisalmer	J.P.Industries	G-7,RIICO Indl.Area,Jaisalmer	Vijay Dongra	Director
177	Jaisalmer	Deepaktradingco.	G-3,RIICO Indl.Area,Jaisalmer	Deepak Mehra	Director
178	Jaisalmer	Baba Ramdev Stone Industries	G-2,RIICO Indl.Area,Jaisalmer	Gugal	Director
179	Jaisalmer	Golden Rocks	G-1/6,RIICO Indl.Area,Jaisalmer	Inder Chhelani	Director
180	Jaisalmer	Fateh Travel Services	Near Old Bus stand , Jaisalmer	Safakat Ali	Director
181	Jalor	Ganpati Granites Industries	Phase 1 , RIICO Industrial Area , Jalor	Prema Ram	Director
182	Jalor	Tirupati Granites Industries	Phase 1 , RIICO Industrial Area , Jalor	Manish Kumar	Director
18	Jalor	Darshan Granites	Phase 1 , RIICO Industrial	Marayan	Director

3		Industries	Area , Jalor	Bhandari	
184	Jalor	Bharat Granites Industries	Phase 2 , RIICO Industrial Area , Jalor	Ashok Kumar	Manager
185	Jalor	Maa Nagneshi & Minerals Industries	Phase 1 , RIICO Industrial Area , Jalor	Manwendra singh	Director
186	Jalor	Munjhal Granites Industries	Phase 2 , RIICO Industrial Area , Jalor	Ranjesh Bhandari	Director
187	Jalor	Hamendra Granites Industries	Phase 1 , RIICO Industrial Area , Jalor	Gautam Bhandari	Director
188	Jalor	Venkatesh Granites Industries	Phase 1 , RIICO Industrial Area , Jalor	Satnarayan Maheswari	Director
189	Jalor	Darpanm Granites Industries	Phase 1 , RIICO Industrial Area , Jalor	Nirmal Jain	Director
190	Jalor	Shiv Shambhu Granite Industries	Phase 2 , RIICO Industrial Area , Jalor	Mayur	Director
191	Jalor	Champal Lal Khemji Jutewala	Rampura Area Jalor	Champa Lal	Owner
192	Jalor	Panchseel Abrasive	Phase 3, RIICO industrial Area, Jalor	Ghewchand Ginger	Director
193	Jalor	Malviya Engineering	H 1/4 RIICO Industrial Area Jalor	Babu Lal Lohar	Director
194	Jalor	Hotel Geetco	Near Bus stand Jalor	Siraj Ansari	Manager
195	Jhalawar	Ajay Stone	RIICO Industrial Area,Phase-3,Jhalawar	Husain Bhai	Manager
196	Jhalawar	Ahsan Stone Industries,Phase-3	Phase-3,Mamu Bhanja Industrial Area	Attaur	MD
197	Jhalawar	Aiman Stone Industries	Plot no.32,Phase-3,RIICO Indl.Area,Jhalawar	Mohan	Manager
198	Jhalawar	Crown Stone Industries	Plot no.-32,RIICO Indl.Area,Jhalawar	M.D.Saleem	Manager
199	Jhalawar	Chaudhary Stone Industries	Phase-3,RIICO Indl.Area,Jhalawar	Ahsau Chisti	Manager
200	Jhalawar	Banas Stone	F-49,RIICO Indl.Area,Jhalawar	Anwar	Manager
201	Jhalawar	Mangal Stone Industries	Plot no.26,RIICO Indl.Area,Jhalawar	Hargovind Suman	Manager
202	Jhalawar	Jahoor Ahmed Stone	F-54,55,RIICO Indl.Area,Jhalawar	Jahoor Ahmed	Manager
203	Jhalawar	R.B.Stone	Plot.no.59,RIICO Indl.Area,Jhalawar	Lala Bhai	Manager
204	Jhalawar	Bhawani Stone	F-53,M.B.I.A,Phase-3,RIICO Indl.Area,Jhalawar	Yuvraj Singh	MD
205	Jhunjhunu	Sri Tirupati Industries	E-123/124 RIICO Area, Jhunjhunu	Anubhav Gupta	Owner
206	Jhunjhunu	Dayal Industries Pvt. Ltd.	G- 1- 120 RIICO Industrial Area Jhunjhunu	Ravindar Sharma	Operator
20	Jhunjhunu	Rajputana Steels	A-119 RIICO Industrial	Nafrendra	Manager

7	nu		Area Jhunjhunu	Singh	
208	Jhunjhunu	Rajdhani Craft	F-12 RIICO Industrial Area Jhunjhunu	K.K. Parikh	Manager
209	Jhunjhunu	Manju Sri Granite Pvt. Ltd.	G-1 - 116 RIICO Industrial Area Jhunjhunu	Vikram	Senior Supervisor
210	Jhunjhunu	Maruti Industries	F-13, RIICO Industrial Area Jhunjhunu	Chakrawardhan Singh	Owner
211	Jhunjhunu	Sushil Industries	G-63 RIICO Industrial Area Jhunjhunu	Sushil Kumar	Owner
212	Jhunjhunu	Tulsian Industries	F- 20 RIICO Industrial Area Jhunjhunu	Shashikant Tulsian	Owner
213	Jhunjhunu	Hotel Sangam	Sattion road Opposite Roadways Busstand Jhunjhunu	Subhash Chandara	Manager
214	Jhunjhunu	Shekhawati Transformers	G-69 RIICO Industrial Area , Jhunujhunu	Ashok Kumar	In charge
215	Jodhpur	Parekh Industries	F-109, M.I.A. Basni Phase-II, Jodhpur	Rahul	M.D.
216	Jodhpur	A1 Uday	G-121, M.I.A, Ph-II Basni, Jodhpur	Birendra	Senior Supervisor
217	Jodhpur	Apex Steel	C-84A Basni Phase-II, Jodhpur	Virendra Singh	Accounts officer
218	Jodhpur	Suncity Polymers	E-347 Basni Phase-II, Jodhpur	Gajender Kumar	M.D.
219	Jodhpur	Salawas Steel	E-344, M.I.A. Basni Phase-II, Jodhpur	Rajeev Patwa	Accountant
220	Jodhpur	National Screen Art	2nd phase, Road no-6, Behind Masjid(Basni), Jodhpur	Md.Sabir	Manager
221	Jodhpur	Kohinoor Handicraft	A-40, Basni Phase-II, Jodhpur	Md. Ali	Manager
222	Jodhpur	Dilip Industries	1096 Vyas Ji ki Bhayari, Gali no-6, Basni Phase-II, Jodhpur	Mohit Badh	Manager
223	Jodhpur	Stanley Chemicals Pvt. Ltd.	G-120, lind Phase, Basani, Jodhpur	Nand Kishore	Manager
224	Jodhpur	Amrit Dall Mill	E-104, Industrial Area, Ph-2, Jodhpur	Pramod	Manager
225	Karauli	Shivam Enterprises	RIICO Area, Karuli	Baneshawari Hardani	Manager
226	Karauli	Laxmi Udyog	RIICO Area, Karuli	Subodh Singh	Manager
227	Karauli	Om Industries	G-94 RIICO Industrial Area, Karuli	Basant Bachchan Singh	Manager
228	Karauli	M/S. Jain Stone Industries	RIICO Area, Karuli	Jain	Manager
22	Karauli	M/S. Sri Sant Dantwar	RIICO Area, Karuli	Manoj	Manager

9		Mahraj Gegas Son Industries			
230	Karauli	Subarbai Stone Industries	RIICO Area, Karuli	Ranji Jain	Manager
231	Karauli	Bhairav Baba Stone Industries	H-6 RIICO Area Karauli	Narayan Lal	Manager
232	Karauli	Balaji Enterprises	H-70 RIICO Area	Ram Hohan Sharma	Manager
233	Karauli	Agrawal Udyog	RIICO Area, Karuli	Sushil Singh	Manager
234	Karauli	Upadhyay Agro Pipe Industries	G-69 RIICO Area, Karauli	Surinder Singjh	Operator
235	Karauli	Ankur Ice Factory	H-21 RIICO Industrial Area	Kailash Singh	Manager
236	Karauli	Sunny Tours & Travels	B- 17 Gulab Bag Karauli	Shushil	Manager
237	Karauli	Laxmi Udyog	H- 24 RIICO Industrial Area	Kanaihya Gupta	M.D.
238	Kota	Sunny Fabricators India Pvt. Ltd.	E-16 Industrial Estate Kota	Sunny	M.D.
239	Kota	Sutragiri Enterprises	E-11 B Hadoti Industrial Area	Rajeev Aggrawal	Manager
240	Kota	Agro Engineering	E-3 Industrial Estate Kota	Kuldeep Agrawal	M.D.
241	Kota	Ankit Enterprises	E-8 Industrial Estate	Rajkumar	Manager
242	Kota	B.K.B. Engineering Works	E-8 Industrial Estate Kota	Manjeet Singh	Manager
243	Kota	Aggrwal Marble Industries	A-46 Industrial estate Kota	Sameer	Manager
244	Kota	Digicon	6-F Industrial Estate Kota	P.C. Godha	Manager
245	Kota	Avon Industries	5 B Industrial Estate Kota	Vijay Kabra	M.D.
246	Kota	Rakesh Engineering	E-15 Industrial Estate Kota	Rakesh	M.D.
247	Kota	Poddar Industries	E-4 Industrial Estate Kota	C.P. Vijay	Manager
248	Kota	Babu Travels	Fly Over, Cant Choraha, Konta	Naresh Kumar Sharma	Manager
249	Kota	P.M.I. Enterprises	E-2 Ind. Estate	Prem Jee Gupta	M. D.
250	Kota	Shri Mahaber Dal Mil	A-47 Ind. Estate , Kota	Paras Ram	M. D.
251	Kota	Career Point University	Talwandi Kota	Abhishek	Administration Co-ordinator
25	Nagaur	Golden Industries	81,IndustrialArea,Nagaur	AbidHusain	Manager

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25 3	Nagaur	Ali Forgings	39,IndustrialArea,Nagaur	Md.Ali	Director
25 4	Nagaur	Jaina Forgings	48/49,IndustrialArea,Naga ur	Gajendar Kumar	Director
25 5	Nagaur	Parveen Forgings	86,IndustrialArea,Nagaur	Gaus Md.	Director
25 6	Nagaur	Aggarwal Engineering Industries	51,IndustrialArea,Nagaur	Arjun Aggarwal	Director
25 7	Nagaur	Hareram Bhujwala Industries	55-,IndustrialArea,Nagaur	Chhagan Aggarwal	Director
25 8	Nagaur	Kohinoor Forging Industries	31,RIICO IndustrialArea,Nagaur	Musafar Ali	Director
25 9	Nagaur	Neelam Forgings	94-95,RIICO IndustrialArea,Nagaur	Sarafat Husain	Director
26 0	Nagaur	Maya Shree Tools	53,RIICO IndustrialArea,Nagaur	Charan Prakash	Director
26 1	Nagaur	Hotel Bhaskar Bar & Restaurant	Govt.Hospial Bikaner Road,Nagaur	Subhash Sharma	Manager
26 2	Nagaur	Shubh Laxmi Oil Ind.	Basani Road , 40-45 RIICO Industrial Area , Nagaur	Dharmendra Kumar	Manager
26 3	Nagaur	Erasmic Marbles	E 214 Industrial Area Bidiyaad, Makrona	Raj Jain	Owner
26 4	Pali	Royal Hotel	Near New Bus Stand- Pali Marwar	Ajjj Ali	Owner
26 5	Pali	Girnar Textile Pvt. Ltd.	R-402 B, Mandiya Road Industrial Area, -Pali: Marwar	Dinesh Kumar	Director
26 6	Pali	Balar Fabrics	E3- industrial Area Pali	Piyush	Director
26 7	Pali	Krishana Palace	New Bus Stand , Sumer Pur road Pali	Lalit Sharma	Manager
26 8	Pali	Panna Textile Industries	R-403, Mandiya Road Industrial Area, -Pali: Marwar	Kapil Gupta	Manager
26 9	Pali	Kothari Textile Product	R-406 Mandiya Road Industrial Area, -Pali: Marwar	Lalchand Kothari	Owner
27 0	Pali	Dimond Engineering Works	R-400A, Mandiya Road Industrial Area, -Pali: Marwar	Abdul Hamid	Foreman
27 1	Pali	Nakoda Gum And Chemicals	R- 402 , Mandiya Road Industrial Area, -Pali: Marwar	Subhash Chandhunia	Proprietor
27 2	Pali	Bluechip Fabrics Pvt. Ltd.	R-401 Mandiya Road Industrial Area, -Pali: Marwar	Gautam Kothari	Accountant
27	Pali	M/S. Sanjeen Fashion	F/300 A, Mandiya Road	M.C. Gadiya	Manager

3			Industrial Area, -Pali: Marwar		
27 4	Pratapg arh	Nakorachilli Powder Mills	RiicoIndl.Area Pratapgarh	Mahesh D.Mantri	MD
27 5	Pratapg arh	Tapan Foods	Plot- 6,RiICOIndl.Area,Pratapgar h	Prag Bhai	MD
27 6	Pratapg arh	Malwa Stone	P- 8RiICOIndl.Area,Pratapgar h	Imran Khan	MD
27 7	Pratapg arh	Rashana Food Product	F- RiICOIndl.Area,Pratapgarh	Vipul Jee	MD
27 8	Pratapg arh	Ashok Sining Mills	M.Groad,Pratapgarh	ArunGandhi	Manager
27 9	Pratapg arh	Shrinath Industries	Plot no.-H- 29,RiICOIndl.Area,Pratapg arh	Rajesh Gandhi	MD
28 0	Pratapg arh	Delta Engineering	H- 46,RiICOIndl.Area,Pratapg arh	Hitesh PuriGoswami	Accountant
28 1	Pratapg arh	Arun Programming Industries	F- 5,RiICOIndl.Area,Pratapgar h	ArunGandhi	MD
28 2	Pratapg arh	Manka Industries	M.G Road,Pratapgarh	VishalGandhi	MD
28 3	Pratapg arh	Dileep Powder Industries	Plot no.3,RiICOIndl.Area,Pratap garh	DileepSharma	MD
28 4	Rajsam and	Sri Bhairav Marbles	Chungi Naka	Gopal Hada	Owner
28 5	Rajsam and	Hemiltage Marbles	Piprada, rajsamand	Jugal Singh Bhati	Accountant
28 6	Rajsam and	Bholenath Marbles Pvt. Ltd.	NH-8 Piprada rajsamand	Kapeel	Owner
28 7	Rajsam and	Sri Salsar Balaji Marmo Pvt. Ltd.	NH-8 Piprada rajsamand	G.N. Ajmers	Director
28 8	Rajsam and	Hotel Siddarth	Near old Bus stand , Rajsamand	Sri Durga rawani	Manager
28 9	Rajsam and	Paras Guest House	Bus Stand Kankroli, rajsamand	Tej Singh	Manager
29 0	Rajsam and	Jangid Marmo & Granite Pvt.Ltd.	NH-8 Piprada rajsamand	Ramswaropp Jangeer	Director
29 1	Rajsam and	Sunlight Marbal Pvt. Ltd.	NH-8 Piprada rajsamand	Prem Prakash	Supervisor
29 2	Rajsam and	Mateshwari Marbals(Green)	NH-8 Piprada rajsamand	Prahlad Tiwari	Manager
29 3	Rajsam and	Shubham Marbals Pvt. Ltd.	NH-8 Piprada rajsamand	Ramsukh Jangid	Accountant

29 4	Rajsam and	Swastik Brazing	Piparda Riico Ind. Area.	Chagan ram	Director
29 5	Rajsam and	Gupta Car Care	Piparda Riico Ind. Area.	Vikram Gupta	Director
29 6	Rajsam and	Vishwakarma Wooden Furniture	Shankarpur RK Hospital Rd.	Lokesh Vishvakarma	Director
29 7	Rajsam and	Aarti Gamla Udhog	Piparda Riico Ind. Area.	Manish Gupta	Director
29 8	Rajsam and	Shree Mateshwara Aata Mill	Piparda Riico Ind. Area.	Sohje Bappna	Director
29 9	Sawai Madho pur	Naraini Oil Industry	592-93A,Kharda Industry Area	Hariom Gupta	Supervisor
30 0	Sawai Madho pur	Vijay Industry	F-11-12,RIICO Indl.Area Sawai Madhopur	Vijay Kumar	Owner
30 1	Sawai Madho pur	Shivam Enterpriess	Q-165,RIICO Indl.Area Sawai Madhopur	DileepSharma	MD
30 2	Sawai Madho pur	Marbel Industry	H-152,RIICO Indl.Area Sawai Madhopur	Vivek Sehgal	Manager
30 3	Sawai Madho pur	National Industry	H-111,RIICO Indl.Area Sawai Madhopur	Ankaj Arora	MD
30 4	Sawai Madho pur	Sujan Ice Factory	SP-5,RIICO Indl.Area Sawai Madhopur	Kailash	MD
30 5	Sawai Madho pur	Pragati Industry	H-152K,RIICO Indl.Area Sawai Madhopur	Suraj Dayal	MD
30 6	Sawai Madho pur	Sharma Transport Company	Near Main Bus Stand , Sawai Madhopur	Mr. Rajveer	Manager
30 7	Sawai Madho pur	Sai Marbal Industries	E-1/45,RIICO Indl.Area Sawai Madhopur	Mr. Satendra Kumar	Supervisor
30 8	Sawai Madho pur	Raj Handicraft	H-2/343,RIICO Indl.Area Sawai Madhopur	Mr. R.K . Mehta	Asst.Manage r
30 9	Sirohi	Hotel Atul	Near New Bus Stand Sirohi	Mr. Jagdish Chandra	Owner
31 0	Sirohi	Yogi Marbals	G-41, RIICO Industrial Area Sirohi	Mr. Chirag	Owner
31 1	Sirohi	K.S.Malviya Engineering	F-69 RIICO Industrial Area Sirohi	Mr. rakesh lohar	Owner
31 2	Sirohi	Tulsi Marbals	F-51 RIICO Industrial Area Sirohi	Mr. Indal Mali	Stone Cutter

313	Sirohi	M/S. Chhanga Lal R. Sompura	G-43 RIICO Industrial Area Sirohi	Mr. Kanan	Owner
314	Sirohi	Bhalla Ram And Amra Ram Industries	F- 6 RIICO Industrial Area Sirohi	Mr. Bhakta Ram	Owner
315	Sirohi	Ajanta Granite	G-22, RIICO Industrial Area Sirohi	Mr. Kanhaiya Lal rawal	Owner
316	Sirohi	Nakoda Industries	G- 15/16/17/18 RIICO Industrial Area Sirohi	Mr.Aadish Singh	Supervisor
317	Sirohi	Sompura Marbal Industries	F-33/34 RIICO Industrial Area Sirohi	Mr. Trilok Prajapati	Manager
318	Sirohi	Wolkem India Limited	New Railway Station Sirohi	Mr.PC. Bagoni/ Mr. A.K. Goyal	Manager
319	Tonk	Swatantra Bharat Mills	F-91,RIICO Indl.Area,Tonk	Sumer Singh	S.Officer
320	Tonk	Khandelwal Textiles	F-98,RIICO Indl.Area,Tonk	Sanjay Toni	Manager
321	Tonk	Shimla Silling Industries	Plot no.F-33,RIICO Indl.Area,Tonk	M.D.Shareef	MD
322	Tonk	Preeti Textile	F-97,RIICO Indl.Area,Tonk	Hemant Kumar	MD
323	Tonk	Shree Vinayak Industry Ltd.	F-93,RIICO Indl.Area,Tonk	Dipesh	Manager
324	Tonk	B.R.Industries	F-2-3,RIICO Indl.Area,Tonk	C.H.Verma	Accountant
325	Tonk	Kamal Industry	G1-44-50,RIICO Indl.Area,Tonk	Kamal	MD
326	Tonk	Neha Chilling Plant	G-24A,RIICO Indl.Area,Tonk	Imraz Parvez Khan	MD
327	Tonk	R.R. Industries	E-92 Industrial Area, Tonk	Mr. Anil Jain	M.D.
328	Tonk	Sri Badaya Industries	G 29/30 RIICO Industrial Area, Tonk	Mr. Alok Badaya	Manager
329	Tonk	Shree Badaya Industries	Riico Ind. Are, Tonk	Ramesh Jee	Manager
330	Tonk	Abhijeet Textile Product	Riico, P-4, Tonk.	Radhika	Manager
331	Tonk	Star Leather Company	Kota- Tonk Rd., Mukti Pura	Abhishek Meena	Manager
332	Udaipur	Sulex Phasphet	F-64,Mewar Industrial Area,Road no-2,Madri,Udaipur	Vijay Singh/Man Singh	Manager
333	Udaipur	Fabtech Industries	F-84,Road No-4,M.I.A.,Udaipur	Kamlesh Gandhi	M.D.
334	Udaipur	Khicha Phoschem Ltd.	204,Vinayak Business Centre,Udaipur	Sanjay Kumar	Manager
335	Udaipur	Tirupati Chemicals	B-169B,Road No-5,Mewar Industria,Madri,Udaipur	Santosh Kothari	M.D.

336	Udaipur	Jai Jinendra Industries	F-67-69,Road No-2,M.I.A.,Udaipur	Denesh	M.D.
337	Udaipur	National Plastic	E-159,Road No-3,MIA,Udaipur	S.K.Jha	M.D.
338	Udaipur	Lotus Modulars	Road No-4,MIA,Udaipur	Kishor Kothariya	Manager
339	Udaipur	Vinayak Mineral	Road No-4,MIA,Udaipur	Ashok Patil	Director
340	Udaipur	Rajasthan Britels Ltd.	F-32-33,Road No-5	Dr.M.S. Singhwi	M.D.
341	Udaipur	Bahara Industries Ltd.	E-252,MIA,Udaipur	AshokBahara	M.D.

List of Industry Associations / District Industries Centers' interviewed in primary survey

SI No	Districts	Interview Location	Respondent	Designation	Department
1	Ajmer	DIC,Ajmer	S. Nath	General Manager	DIC
2	Alwar	Bhiwadi Manufacturers Association, BMA House	Satinder Chauhan	President, BMA	Industry Association
3	Banswara	Industry Association, Banswara	Sohan Lal Mehta	President	CCI
4	Baran	Chamber of commerce and Industries, Baran	A.K. Meena	President	CCI
5	Baran	District Industries Centre	S.L. Meena	General Manager	DIC
6	Barmer	Industry Association, Barmer	Ganpat Salechar	President	CCI
7	Barmer	District Industries Centre	R.K. Sethia	General Manager	DIC
8	Bharatpur	District Industries Centre	K.C. Khandelwal	General Manager	DIC
9	Bhilwara	Chambers of Commerce & Industry	M.K. Jain	Executive officer	Mewar Chambers of Commerce & Industry(MCCI)
10	Bikaner	Bikaner Vyapar Udyog Mandal, Vyapar Udyog Bhawan	Surendra Patwa	Secretary (BVUM)	Industry Association
11	Bundi	District Industries Centre(DIC),Bundi	G.S. Trivedi	General Manager	DIC
12	Chittaurgarh	District Industries Centre	T.S. Marwah	General Manager	DIC

13	Churu	District Industries Centre	D.K. Dhwtot	General Manager	DIC
14	Dhaulpur	District Industries Centre	R.K. Meena	General Manager	DIC
15	Ganganagar	District Industries Centre	Manya Nain Godara	General Manager	DIC
16	Hanumangarh	District Industries Centre	P.N. Sharma	Officer Administration	DIC
17	Jaisalmer	District Industries Centre	P.N. Bhardwaj	General Manager	DIC
18	Jalore	Industry Association (I.A.),Jalore	Narendra Kumar	Chairman	Industry Association
19	Jhalawar	District Industries Centre	Y.N. Mathur	Officer Administration	DIC
20	Jhunjhunu	District Industries Centre	Mani Ram	General Manager	DIC
21	Jodhpur	Jodhpur Industry Association	D.D. Lohiya	President, JIA	Industry Association
22	Karouli	District Industrial Office	B.N. Meena	District Officer	DMDIC
23	Kota	SSI Office, DCM Road	Nainee	President,SSI	SSI
24	Nagaur	District Industries Centre	D K Sharma	District Industries Officer	DIC
25	Pratapgarh	District Industrial Office	Laljit Singh	District Officer	DIC
26	Rajsamand	District Industries Centre	A. Sharma	Assistant, Personnel	DIC
27	Rajsamand	Industry Association,Rajsamand	Madan Raj	Chairman	CCI
28	Sikar	District Industries Centre	Sita Ram Puniya	General Manager	DIC
29	Sirohi	District Industries Centre	Triveni Kumar	General Manager	DIC
30	Tonk	District Industries Centre	Omkar Mal	District Officer	DIC
31	Tonk	Shree Vyapar Mahasangh,Subhash Bazaar	Vishnu Gupta	President, Vyapar Mahasangh	Industry Association
32	Udaipur	Udaipur Chambers of Commerce and Industries (UCCI)	C P Talesara	President, UCCI	Industry Association

List Interviews: District level officials/ ITI/ Colleges/ Labor Unions

SI No	Districts	Interview Location	Respondent	Designation	Department
1	Ajmer	Govt. ITI,Bewar	N. Sharma	Superintendent	VTI
2	Ajmer	Govt. ITI,college road	Ram Nagesh	UDC	VTI
3	Banswara	Govt. ITI,Banswara	Jagdish Sharma	UDC	VTI
4	Banswara	INTUK,6114, Vidyut Nagar	Karan Singh Jhala	President	Trade Union
5	Baran	Govt. ITI,Amta College Campus	Dayal	Principal	VTI
6	Barmer	Govt. ITI,Uttrali road	Kishna Ram Deswa	Superintendent	VTI
7	Bharatpur	Govt. ITI,Kama	Prabhat Ranjan	Principal	VTI
8	Bharatpur	Govt. ITI,Bayana	Ram Nath Meena	Principal	VTI
9	Bhilwara	Govt. ITI,RIICO Ind, Area	Manoj Aggarwal	Superintendent	VTI
10	Bundi	Govt. ITI,Nainwa	Mukut Bihari Verma	Superintendent	VTI
11	Chittaurgarh	Govt. ITI,Gandhinagar	Prem Chandra Yadav	Principal	VTI
12	Churu	Govt. ITI	K. M. Jangir	Principal	VTI
13	Churu	Govt.Lohia College, Churu	Mr. J.S. Kavia	Lecturer	College
14	Dausa	Govt. ITI,Dausa	Ashok Meena	Superintendent	VTI
15	Dhaulpur	Govt. ITI,Dhaulpur	O.P. Gaur	Principal	VTI
16	Dungarpur	INTEC, Dungarpur	Charan Lal	Head of Labour Union	Labor Union
17	Dungarpur	Industrial Prakishan Sansthan, Sagwada	S.Lavana	Principal	VTI
18	Dungarpur	Govt. ITI,Dungarpur	S.S. Gehlot	Principal	VTI
19	Hanumangarh	Keshav Vidyapeeth,Hanumangarh	R.S. Singh	Instructor	VTI
20	Hanumangarh	Govt. ITI,Hanumangarh	GaurishankarNayar	Superintendent	VTI
21	Jaisalmer	Govt. ITI,Gandhi colony	I.R.Gewa	Superintendent	VTI
22	Jalore	District Education Office	S. Rana	Executive Officer	District Education Office
23	Jalore	Govt. ITI,Jalore	AmbaLalSuthar	Superintendent	VTI

24	Jhalawar	Govt. ITI,RIICO Area	N.K.Verma	Principal	VTI
25	Jhalawar	Govt. ITI,Khanpur	Rajesh Gupta	Principal	VTI
26	Jhunjhunu	Govt. ITI	S.C. Lamoriya	Principal	VTI
27	Karouli	ITI,Karouli	S.C.Garg	Superintendent	VTI
28	Kota	Govt ITI, Kota	Nainee	Principal	VTI
29	Kota	SaraswatiBhawan, near circle,Kota	Dr. R.S. Meena	Section Officer	VTI
30	Nagaur	Govt.ITI, Railway Fatak	Sunil Gupta	Superintendent	VTI
31	Nagaur	Marwar Institutes of Engineering,Nagaur	S.S. Meena	PO(Placement Officer)	VTI
32	Pali	All India trade union Congress(AITUC), Mill Gate	Dunger Singh Rajpoot	President	Labor Union
33	Pali	Rastriya Mill Majdoor Congress, Mill Gate	Okha Ram Rathore	President	Labour Union
34	Pali	Govt. ITI,Falna,Pali	Shri R.C. Mathur	Instructor	VTI
35	Pali	Riddhi Siddhi ITC,Rohat,Pali	S. N. Sharma	Instructor	Education
36	Pratapgarh	Govt. ITI,Pratapgarh	Shivlal Meena	Superintendent	Education
37	Pratapgarh	GOVT. ITI, ARNOD	Ranjeet Singh	UDC	VTI
38	Pindwara	Bhartiya Majdoor Sangh,Pindwara	Dinesh Purohit	President, Labour Union	Labour Union
39	Rajsamand	Govt.ITI, Ranthambore	ShriPrem Shankar Paliwal	Principal	Labour Union
40	Sikar	Govt.ITI,Sikar	P.C. Meena	Principal	VTI
41	Sikar	Govt.ITI,Fatehpur	S. Kajla	Principal	VTI
42	Sirohi	Govt. ITI,Abu road	Anil Kr. Trivedi	Principal	VTI
43	Sawaimadhopur	Govt. ITI	R. K. Gupta	Superintendent	VTI
44	Sri Ganganagar	Govt. ITI,SriGanganagar	Shushil Kumar Jindal	Principal	VTI
45	Tonk	ITI,Jail road	RaushanLalBairwa	Principal	VTI

FGD with youth and the number of participants

S. N.	District	No. of FGD	No. of Participant in FGD
1	Ajmer	1	8
2	Bhilwara	1	8
3	Chittorgarh	1	10
4	Dausa	1	8
5	Dhaulpur	1	10
6	Dungarpur	1	10
7	Hanumangarh	1	7
8	Jaisalmer	1	8
9	Jhalawar	1	10
10	Jhunjhunu	1	8
11	Karauli	1	8
12	Pali	1	8
13	Pratapgarh	1	8
14	Sawai madhopur	1	10
15	Sikar	1	8
16	Sirohi	1	8
17	Sri Ganganagar	1	8
18	Tonk	1	8
19	Churu	1	8
20	jalore	1	8
21	Kota	1	8
22	Nagaur	1	8
23	Rajsamand	1	10
24	Banswara	1	8
25	Baran	1	8
26	Barmer	1	7
27	Bharatpur	1	9
28	Bundi	1	8
29	Jaipur	1	8
30	Udaipur	1	8
31	Jodhpur	1	7
32	Bikaner	1	7
33	Alwar	1	8

Wage Structure across districts as per sample interviews

Sl no	Districts	Average Wage/Day in Rs. (Skilled Workers)	Average Wage/Day in Rs. (Semi-Skilled Workers)	Average Wage/Day in Rs. (Unskilled Workers)
1	Ajmer	346	240	198
2	Alwar	283	227	193
3	Banswara	249	217	183
4	Baran	180	263	193
5	Barmer	230	255	195
6	Bharatpur	236	237	143
7	Bhilwara	233	213	165
8	Bikaner	255	230	135
9	Bundi	308	225	204
10	Chittorgarh	266	200	164
11	Churu	285	344	239
12	Dausa	240	236	190
13	Dholpur	163	226	164
14	Dungarpur	211	243	196
15	Hanumangarh	265	211	180
16	Jaipur	309	238	176
17	Jaisalmer	400	263	206
18	Jalor	275	239	192
19	Jhalawar	239	238	148
20	Jhunjhunu	298	208	155
21	Jodhpur	200	241	179
22	Karauli	179	208	197
23	Kota	218	241	176
24	Nagaur	382	275	210
25	Pali	206	182	150
26	Pratapgarh	265	189	162
27	Rajsamand	190	231	162
28	Sawai Madhopur	165	271	228
29	Sikar	295	227	180
30	Sirohi	180	175	155
31	Sri Ganganagar	340	255	190
32	Tonk	212	198	155
33	Udaipur	200	225	170

Sectoral Employment Figures projected for districts (as per DIC data) & Demand-Supply Projections

* Similar figures in all the years of projections for any sector of a district depict stagnant figures for three years

** Sectoral figures of certain district depicting zero shows less or no presence in the district

*** Reducing figures in projections in specific sector across districts shows reduction in number of units and thus drop in numbers

All figures projected are based on the data available from the DIC sources in the sectors as per published reports

Dist rict	Ajmer												
S.No	Industrial Category	2009 Figures	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	186360	187082	187443	187804	188165	188526	188887	189248	189609	189970	190331	190692
2	Beverages & Tobacco Industry	2601	2601	2601	2601	2601	2601	2601	2601	2601	2601	2601	2601
3	Textile Industries other than Handloom	23116	23773	24102	24430	24759	25087	25416	25744	26073	26401	26730	27058
4	Handloom	135	377	498	619	740	861	982	1103	1224	1345	1466	1587
5	Wooden based	2783	2960	3049	3137	3226	3314	3403	3491	3580	3668	3757	3845
6	Paper based	3585	3779	3876	3973	4070	4167	4264	4361	4458	4555	4652	4749
7	Rubber Plastic Petroleum & Chemical Based	3149	3317	3401	3485	3569	3653	3737	3821	3905	3989	4073	4157
8	Leather based	4391	4718	4882	5045	5209	5372	5536	5699	5863	6026	6190	6353
9	Mineral based	15300	18037	19406	20774	22143	23511	24880	26248	27617	28985	30354	31722
10	Basic Metal and Non-ferrous Metal based	4870	5063	5160	5256	5353	5449	5546	5642	5739	5835	5932	6028
11	Machinery and Machine Tools based	1719	1790	1826	1861	1897	1932	1968	2003	2039	2074	2110	2145
12	Electrical Industry/Machinery Appliances	711	858	932	1005	1079	1152	1226	1299	1373	1446	1520	1593
13	Transport & Equipment and Parts	362	374	380	386	392	398	404	410	416	422	428	434
14	Service & Repairing	2595	2981	3174	3367	3560	3753	3946	4139	4332	4525	4718	4911
15	Misc.Mig.Industries	11165	12710	13483	14255	15028	15800	16573	17345	18118	18890	19663	20435
	Total	262	270	274	277	281	285	289	293	2969	3007	3045	3083

		842	420	209	998	787	576	365	154	43	32	21	10
Dist rict	Alwar												
S.No	Industrial Category	2009 Figures	2012	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	
1	Agro based Industries	399135	409500	412955	416410	419865	423320	426775	430230	433685	437140	440595	
2	Beverages & Tobacco Industry	218	5580	7367	9155	10942	12729	14517	16304	18091	19879	21666	
3	Textile Industries other then Handloom	9204	22500	26932	31364	35796	40228	44660	49092	53524	57956	62388	
4	Handloom	586	600	605	609	614	619	623	628	633	637	642	
5	Wooden based	5332	7500	8223	8945	9668	10391	11113	11836	12559	13281	14004	
6	Paper based	925	9800	12758	15717	18675	21633	24592	27550	30508	33467	36425	
7	Rubber Plastic Petroleum & Chemical Based	5028	12550	15057	17565	20072	22579	25087	27594	30101	32609	35116	
8	Leather based	3206	9300	11331	13363	15394	17425	19457	21488	23519	25551	27582	
9	Mineral based	15651	15651	15651	15651	15651	15651	15651	15651	15651	15651	15651	
10	Basic Metal and Non-ferrous Metal based	7046	7046	7046	7046	7046	7046	7046	7046	7046	7046	7046	
11	Machinery and Machine Tools based	8795	8795	8795	8795	8795	8795	8795	8795	8795	8795	8795	
12	Electrical Industry/Machinery Appliances	2471	4200	4776	5353	5929	6505	7082	7658	8234	8811	9387	
13	Transport & Equipment and Parts	728	728	728	728	728	728	728	728	728	728	728	
14	Service & Repairing	9572	6500	5476	4452	3428	2404	1380	3560	0	0	0	
15	Misc.Mig.Industries	18010	18010	18010	18010	18010	18010	18010	18010	18010	18010	18010	
	Total	485907	538260	555711	573162	590613	608064	625515	642966	661085	679560	698035	
Dist rict	Banswara												
S. No.	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro Based Industries	420446	420515	420550	420584	420619	420653	420688	420722	420757	420791	420826	420860
2	Beverage & Tobacco Based Industry	91	91	91	91	91	91	91	91	91	91	91	91
3	Textile Industries other then Handloom	1250	1417	1501	1584	1668	1751	1835	1918	2002	2085	2169	2252
4	Handloom	13	13	13	13	13	13	13	13	13	13	13	13
5	Wooden based	1564	1905	2076	2246	2417	2587	2758	2928	3099	3269	3440	3610
6	Paper Based	234	240	243	246	249	252	255	258	261	264	267	270
7	Rubber Plastic Petroleum &	383	409	422	435	448	461	474	487	500	513	526	539

	Chemical												
8	Leather Based	52	81	96	110	125	139	154	168	183	197	212	226
9	Mineral Based	401	863	1094	1325	1556	1787	2018	2249	2480	2711	2942	3173
10	Basic Metal and Non-ferrous Metal based	562	623	654	684	715	745	776	806	837	867	898	928
11	Machinery and Machine Tools Based	113	123	128	133	138	143	148	153	158	163	168	173
12	Electrical Industry/Machinery	92	92	92	92	92	92	92	92	92	92	92	92
13	Transport & Equipment and Parts	53	53	53	53	53	53	53	53	53	53	53	53
14	Service & Repairing	370	521	597	672	748	823	899	974	1050	1125	1201	1276
15	Misc. Industries	2835	2910	2948	2985	3023	3060	3098	3135	3173	3210	3248	3285
	Total	428459	429856	430555	431253	431952	432650	433349	434047	434746	435444	436143	436841
Dist rict	Baran												
S.No	Industrial Category	2009 Figures	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	93724	93643	93603	93562	93522	93481	93441	93400	93360	93319	93279	93238
2	Beverages & Tobacco Industry	0	0	0	0	0	0	0	0	0	0	0	0
3	Textile Industries other then Handloom	17	17	17	17	17	17	17	17	17	17	17	17
4	Handloom	1001	697	545	393	241	89	0	0	0	0	0	0
5	Wooden based	205	176	162	147	133	118	104	89	74	60	45	31
6	Paper based	120	112	108	104	100	96	92	88	84	80	76	72
7	Rubber Plastic Petroleum & Chemical Based	140	140	140	140	140	140	140	140	140	140	140	140
8	Leather based	0	0	0	0	0	0	0	0	0	0	0	0
9	Mineral based	131	131	131	131	131	131	131	131	131	131	131	131
10	Basic Metal and Non-ferrous Metal based	307	307	307	307	307	307	307	307	307	307	307	307
11	Machinery and Machine Tools based	0	0	0	0	0	0	0	0	0	0	0	0
12	Electrical Industry/Machinery Appliances	0	0	0	0	0	0	0	0	0	0	0	0
13	Transport & Equipment and Parts	0	0	0	0	0	0	0	0	0	0	0	0
14	Service & Repairing	508	274	157	40	0	0	0	0	0	0	0	0
15	Misc.Mig.Industries	669	610	581	551	522	492	463	433	404	374	345	315
	Total	96822	96107	95750	95392	95112	94871	94694	94605	94517	94428	94340	94251
Dist rict	Barmer												
S.No	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22

1	Agro based Industries	360 640	360 676	360 694	360 712	360 730	360 748	360 766	360 784	3608 02	3608 20	3608 38	3608 56
2	Beverages & Tobacco based Industry	32	32	32	32	32	32	32	32	32	32	32	32
3	Textile Industries other than Handloom	111 70	132 89	143 49	154 08	164 68	175 27	185 87	196 46	2070 6	2176 5	2282 5	2388 4
4	Handloom	30	34	36	38	40	42	44	46	48	50	52	54
5	Wooden based	554	596	617	638	659	680	701	722	743	764	785	806
6	Paper based	171	201	216	231	246	261	276	291	306	321	336	351
7	Rubber Plastic Petroleum & Chemical Based	825	850	863	875	888	900	913	925	938	950	963	975
8	Leather based	171	171	171	171	171	171	171	171	171	171	171	171
9	Mineral based	165 7	199 9	217 0	234 1	251 2	268 3	285 4	302 5	3196	3367	3538	3709
10	Basic Metal and Non-ferrous Metal based	590	605	613	620	628	635	643	650	658	665	673	680
11	Machinery and Machine Tools based	10	10	10	10	10	10	10	10	10	10	10	10
12	Electrical Industry/ Machinery Appliances	22	22	22	22	22	22	22	22	22	22	22	22
13	Transport & Equipment and Parts	10	10	10	10	10	10	10	10	10	10	10	10
14	Service & Repairing	101 3	111 4	116 5	121 5	126 6	131 6	136 7	141 7	1468	1518	1569	1619
15	Misc. Mig. Industries.	75	84	89	93	98	102	107	111	116	120	125	129
	Total	376 970	379 693	381 055	382 416	383 778	385 139	386 501	387 862	3892 24	3905 85	3919 47	3933 08
Dist rict	Bharatpur												
S.No	Industrial Category	200 9 Figures	201 2	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	201 8-19	2019 -20	2020 -21	2021 -22	
1	Agro based Industries	349 082	352 330	353 413	354 495	355 578	356 661	357 743	358 826	3599 09	3609 91	3620 74	
2	Beverages & Tobacco Industry	0	0	0	0	0	0	0	0	0	0	0	
3	Textile Industries other than Handloom	0	456	608	760	912	106 4	121 6	136 8	1520	1672	1824	
4	Handloom	66	66	66	66	66	66	66	66	66	66	66	
5	Wooden based	828	125 4	139 6	153 8	168 0	182 2	196 4	210 6	2248	2390	2532	
6	Paper based	75	460	588	717	845	973	110 2	123 0	1358	1487	1615	
7	Rubber Plastic Petroleum & Chemical Based	342	332 0	431 3	530 5	629 8	729 1	828 3	927 6	1026 9	1126 1	1225 4	
8	Leather based	672	136 5	159 6	182 7	205 8	228 9	252 0	275 1	2982	3213	3444	
9	Mineral based	147 2	598 0	748 3	898 5	104 88	119 91	134 93	149 96	1649 9	1800 1	1950 4	
10	Basic Metal and Non-ferrous Metal based	12	180 4	240 1	299 9	359 6	419 3	479 1	538 8	5985	6583	7180	
11	Machinery and Machine Tools based	0	850	113 3	141 7	170 0	198 3	226 7	255 0	2833	3117	3400	

12	Electrical Industry/Machinery Appliances	0	0	0	0	0	0	0	0	0	0	0	
13	Transport & Equipment and Parts	0	0	0	0	0	0	0	0	0	0	0	
14	Service & Repairing	231 2	718 0	880 3	104 25	120 48	136 71	152 93	169 16	1853 9	2016 1	2178 4	
15	Misc.Mig.Industries	524	481 5	624 5	767 6	910 6	105 36	119 67	133 97	1482 7	1625 8	1768 8	
	Total	355 385	379 880	388 045	396 210	404 375	412 540	420 705	428 870	4370 35	4452 00	4533 65	
Dist rict	Bhilwara												
S.No .	Industrial Category	200 9	201 1	201 2-13	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	2018 -19	2019 -20	2020 -21	2021 -22
1	Agro based Industries	191 119	191 119	191 119	191 119	191 119	191 119	191 119	191 119	1911 19	1911 19	1911 19	1911 19
2	Beverages & Tobacco based Industry	154	154	154	154	154	154	154	154	154	154	154	154
3	Textile Industries other then Handloom	265 41	262 98	261 77	260 55	259 34	258 12	256 91	255 69	2544 8	2532 6	2520 5	2508 3
4	Handloom	0	243	365	486	608	729	851	972	1094	1215	1337	1458
5	Wooden based	601 2	601 2	601 2	601 2	601 2	601 2	601 2	601 2	6012	6012	6012	6012
6	Paper based	140 5	140 5	140 5	140 5	140 5	140 5	140 5	140 5	1405	1405	1405	1405
7	Rubber Plastic Petroleum & Chemical Based	330 2	341 2	346 7	352 2	357 7	363 2	368 7	374 2	3797	3852	3907	3962
8	Leather based	615 7	615 7	615 7	615 7	615 7	615 7	615 7	615 7	6157	6157	6157	6157
9	Mineral based	769 9	769 9	769 9	769 9	769 9	769 9	769 9	769 9	7699	7699	7699	7699
10	Basic Metal and Non-ferrous Metal based	326 1	326 1	326 1	326 1	326 1	326 1	326 1	326 1	3261	3261	3261	3261
11	Machinery and Machine Tools based	121 9	121 9	121 9	121 9	121 9	121 9	121 9	121 9	1219	1219	1219	1219
12	Electrical Industry/ Machinery Appliances	216	216	216	216	216	216	216	216	216	216	216	216
13	Transport & Equipment and Parts	81	81	81	81	81	81	81	81	81	81	81	81
14	Service & Repairing	423 9	428 9	431 4	433 9	436 4	438 9	441 4	443 9	4464	4489	4514	4539
15	Misc. Mig. Industries.	228 1	228 1	228 1	228 1	228 1	228 1	228 1	228 1	2281	2281	2281	2281
	Total	253 686	253 846	253 926	254 006	254 086	254 166	254 246	254 326	2544 06	2544 86	2545 66	2546 46
Dist rict	Bikaner												
S.No	Industrial Category	200 9	201 1	201 2-13	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	2018 -19	2019 -20	2020 -21	2021 -22
1	Agro based Industries	467 687	475 687	479 687	483 687	487 687	491 687	495 687	499 687	5036 87	5076 87	5116 87	5156 87
2	Beverages & Tobacco Industry	296	129 6	179 6	229 6	279 6	329 6	379 6	429 6	4796	5296	5796	6296

3	Textile Industries other than Handloom	921	802 4	115 76	151 27	186 79	222 30	257 82	293 33	3288 5	3643 6	3998 8	4353 9
4	Handloom	802 4	802 4	802 4	802 4	802 4	802 4	802 4	802 4	8024	8024	8024	8024
5	Wooden based	126 0	126 0	126 0	126 0	126 0	126 0	126 0	126 0	1260	1260	1260	1260
6	Paper based	467	467	467	467	467	467	467	467	467	467	467	467
7	Rubber Plastic Petroleum & Chemical Based	166 2	566 2	766 2	966 2	116 62	136 62	156 62	176 62	1966 2	2166 2	2366 2	2566 2
8	Leather based	570	257 0	357 0	457 0	557 0	657 0	757 0	857 0	9570	1057 0	1157 0	1257 0
9	Mineral based	594 4	574 6	564 7	554 8	544 9	535 0	525 1	515 2	5053	4954	4855	4756
10	Basic Metal and Non-ferrous Metal based	117 2	117 2	117 2	117 2	117 2	117 2	117 2	117 2	1172	1172	1172	1172
11	Machinery and Machine Tools based	292	292	292	292	292	292	292	292	292	292	292	292
12	Electrical Industry/Machinery Appliances	229	152 8	217 8	282 7	347 7	412 6	477 6	542 5	6075	6724	7374	8023
13	Transport & Equipment and Parts	25	229	331	433	535	637	739	841	943	1045	1147	1249
14	Service & Repairing	338 3	430 5	476 6	522 7	568 8	614 9	661 0	707 1	7532	7993	8454	8915
15	Misc.Mig.Industries	503	503	503	503	503	503	503	503	503	503	503	503
	Total	492 435	516 765	528 930	541 095	553 260	565 425	577 590	589 755	6019 20	6140 85	6262 50	6384 15
Dist rict	Bundi												
S.N O	Type of Industries	200 9	201 1	201 2-13	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	2018 -19	2019 -20	2020 -21	2021 -22
1	Agro Based Industries	846 79	879 45	895 78	912 11	928 44	944 77	961 10	977 43	9937 6	1010 09	1026 42	1042 75
2	Beverages & Tobacco based Industries	0	0	0	0	0	0	0	0	0	0	0	0
3	Textile Industries other than Handloom	5	213 3	319 7	426 1	532 5	638 9	745 3	851 7	9581	1064 5	1170 9	1277 3
4	Handloom	0	0	0	0	0	0	0	0	0	0	0	0
5	Wooden based	239 5	239 5	239 5	239 5	239 5	239 5	239 5	239 5	2395	2395	2395	2395
6	Paper based	0	0	0	0	0	0	0	0	0	0	0	0
7	Rubber Plastic Petroleum & Chemical	0	401	602	802	100 3	120 3	140 4	160 4	1805	2005	2206	2406
8	Leather based	867	254 0	337 7	421 3	505 0	588 6	672 3	755 9	8396	9232	1006 9	1090 5
9	Mineral based	79	218 4	323 7	428 9	534 2	639 4	744 7	849 9	9552	1060 4	1165 7	1270 9
10	Basic Metal and Non-ferrous Metal based	0	0	0	0	0	0	0	0	0	0	0	0
11	Machinery and Machine Tools based	20	50	65	80	95	110	125	140	155	170	185	200
12	Electrical Industry/Machinery Appliances	0	0	0	0	0	0	0	0	0	0	0	0

13	Transport & Equipment and Parts	0	0	0	0	0	0	0	0	0	0	0	0
14	Service & Repairing	644	162 2	211 1	260 0	308 9	357 8	406 7	455 6	5045	5534	6023	6512
15	Misc. Mig. Industries.	876	710	627	544	461	378	295	212	129	46	0	0
	Total	895 65	999 80	105 188	110 395	115 603	120 810	126 018	131 225	1364 33	1416 40	1468 85	1521 75
Dist rict	Chittorgarh												
S.No	Type of Industries	200 9	201 1	201 2-13	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	2018 -19	2019 -20	2020 -21	2021 -22
1	Agro Based Industries	161 665	160 972	160 626	160 279	159 933	159 586	159 240	158 893	1585 47	1582 00	1578 54	1575 07
2	Beverages & Tobacco based Industries	0	0	0	0	0	0	0	0	0	0	0	0
3	Textile Industries other than Handloom	365	365	365	365	365	365	365	365	365	365	365	365
4	Handloom	0	0	0	0	0	0	0	0	0	0	0	0
5	Wooden based	676	676	676	676	676	676	676	676	676	676	676	676
6	Paper based	306	306	306	306	306	306	306	306	306	306	306	306
7	Rubber Plastic Petroleum & Chemical	511	511	511	511	511	511	511	511	511	511	511	511
8	Leather based	388	388	388	388	388	388	388	388	388	388	388	388
9	Mineral based	0	0	0	0	0	0	0	0	0	0	0	0
10	Basic Metal and Non-ferrous Metal based	637 7	717 3	757 1	796 9	836 7	876 5	916 3	956 1	9959	1035 7	1075 5	1115 3
11	Machinery and Machine Tools based	204	204	204	204	204	204	204	204	204	204	204	204
12	Electrical Industry/Machinery Appliances	288	288	288	288	288	288	288	288	288	288	288	288
13	Transport & Equipment and Parts	137	137	137	137	137	137	137	137	137	137	137	137
14	Service & Repairing	0	0	0	0	0	0	0	0	0	0	0	0
15	Misc. Mig. Industries.	274 1	274 1	274 1	274 1	274 1	274 1	274 1	274 1	2741	2741	2741	2741
	Total	173 658	173 761	173 813	173 864	173 916	173 967	174 019	174 070	1741 22	1741 73	1742 25	1742 76
Dist rict	Churu												
S.No	Industrial Category	200 9	201 1	201 2-13	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	2018 -19	2019 -20	2020 -21	2021 -22
1	Agro based Industries	710 974	710 040	709 573	709 106	708 639	708 172	707 705	707 238	7067 71	7063 04	7058 37	7053 70
2	Beverages & Tobacco based Industry	85	149	181	213	245	277	309	341	373	405	437	469
3	Textile Industries other than Handloom	544	609 5	887 1	116 46	144 22	171 97	199 73	227 48	2552 4	2829 9	3107 5	3385 0
4	Handloom	0	8	12	16	20	24	28	32	36	40	44	48
5	Wooden based	273 6	273 6	273 6	273 6	273 6	273 6	273 6	273 6	2736	2736	2736	2736
6	Paper based	202	202	202	202	202	202	202	202	202	202	202	202
7	Rubber Plastic	674	674	674	674	674	674	674	674	674	674	674	674

	Petroleum & Chemical Based												
8	Leather based	69	175 4	259 7	343 9	428 2	512 4	596 7	680 9	7652	8494	9337	1017 9
9	Mineral based	252 3	549	0	0	0	0	0	0	0	0	0	0
10	Basic Metal and Non-ferrous Metal based	692	371	211	50	0	0	0	0	0	0	0	0
11	Machinery and Machine Tools based	66	66	66	66	66	66	66	66	66	66	66	66
12	Electrical Industry/ Machinery Appliances	81	81	81	81	81	81	81	81	81	81	81	81
13	Transport & Equipment and Parts	104	104	104	104	104	104	104	104	104	104	104	104
14	Service & Repairing	401	401	401	401	401	401	401	401	401	401	401	401
15	Misc. Mig. Industries.	730	730	730	730	730	730	730	730	730	730	730	730
	Total	719 881	723 960	726 438	729 464	732 601	735 788	738 975	742 162	7453 49	7485 36	7517 23	7549 10
Dist rict	Dausa												
S.No .	Industrial Category	200 9	201 1	201 2-13	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	2018 -19	2019 -20	2020 -21	2021 -22
1	Agra based Industries	162 763	162 837	162 874	162 911	162 948	162 985	163 022	163 059	1630 96	1631 33	1631 70	1632 07
2	Beverages & Tobacco based Industry	96	96	96	96	96	96	96	96	96	96	96	96
3	Textile Industries other then Handloom	0	0	0	0	0	0	0	0	0	0	0	0
4	Handloom	104 7	118 2	125 0	131 7	138 5	145 2	152 0	158 7	1655	1722	1790	1857
5	Wooden based	216	236	246	256	266	276	286	296	306	316	326	336
6	Paper based	104	107	109	110	112	113	115	116	118	119	121	122
7	Rubber Plastic Petroleum & Chemical Based	461	478	487	495	504	512	521	529	538	546	555	563
8	Leather based	276	114 5	158 0	201 4	244 9	288 3	331 8	375 2	4187	4621	5056	5490
9	Mineral based	152 5	166 5	173 5	180 5	187 5	194 5	201 5	208 5	2155	2225	2295	2365
10	Basic Metal and Non-ferrous Metai based	295	448	525	601	678	754	831	907	984	1060	1137	1213
11	Machinery and Machine Tools based	57	57	57	57	57	57	57	57	57	57	57	57
12	Electrical Industry/ Machinery Appliances	253	266	273	279	286	292	299	305	312	318	325	331
13	Transport & Equipment and Parts	158	158	158	158	158	158	158	158	158	158	158	158
14	Service & Repairing	247 4	387 2	457 1	527 0	596 9	666 8	736 7	806 6	8765	9464	1016 3	1086 2
15	Misc. Mig. Industries.	995	995	995	995	995	995	995	995	995	995	995	995
	Total	170 720	173 542	174 953	176 364	177 775	179 186	180 597	182 008	1834 19	1848 30	1862 41	1876 52
Dist rict	Dhaulpur												

S.No	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	86718	87851	88418	88984	89551	90117	90684	91250	91817	92383	92950	93516
2	Beverages & Tobacco based Industry	0	0	0	0	0	0	0	0	0	0	0	0
3	Textile Industries other than Handloom	0	688	1032	1376	1720	2064	2408	2752	3096	3440	3784	4128
4	Handloom	0	0	0	0	0	0	0	0	0	0	0	0
5	Wooden based	281	964	1306	1647	1989	2330	2672	3013	3355	3696	4038	4379
6	Paper based	36	36	36	36	36	36	36	36	36	36	36	36
7	Rubber Plastic Petroleum & Chemical Based	16	1553	1553	1553	1553	1553	1553	1553	1553	1553	1553	1553
8	Leather based	251	650	850	1049	1249	1448	1648	1847	2047	2246	2446	2645
9	Mineral based	2262	2998	3366	3734	4102	4470	4838	5206	5574	5942	6310	6678
10	Basic Metal and Non-ferrous Metal based	596	1500	1952	2404	2856	3308	3760	4212	4664	5116	5568	6020
11	Machinery and Machine Tools based	39	39	39	39	39	39	39	39	39	39	39	39
12	Electrical Industry/ Machinery Appliances	100	580	820	1060	1300	1540	1780	2020	2260	2500	2740	2980
13	Transport & Equipment and Parts	24	24	24	24	24	24	24	24	24	24	24	24
14	Service & Repairing	553	553	553	553	553	553	553	553	553	553	553	553
15	Misc. Mig. Industries.	565	1046	1287	1527	1768	2008	2249	2489	2730	2970	3211	3451
	Total	91441	98482	101234	103986	106738	109490	112242	114994	117746	120498	123250	126002
Dist rict	Dungarpur												
S.No	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	209616	211156	211926	212696	213466	214236	215006	215776	216546	217316	218086	218856
2	Beverages & Tobacco Industry	0	0	0	0	0	0	0	0	0	0	0	0
3	Textile Industries other than Handloom	952	1014	1045	1076	1107	1138	1169	1200	1231	1262	1293	1324
4	Handloom	0	0	0	0	0	0	0	0	0	0	0	0
5	Wooden based	1420	1908	2152	2396	2640	2884	3128	3372	3616	3860	4104	4348
6	Paper based	0	0	0	0	0	0	0	0	0	0	0	0
7	Rubber Plastic Petroleum & Chemical Based	76	76	76	76	76	76	76	76	76	76	76	76
8	Leather based	1380	1380	1380	1380	1380	1380	1380	1380	1380	1380	1380	1380
9	Mineral based	2545	2994	3219	3443	3668	3892	4117	4341	4566	4790	5015	5239
10	Basic Metal and Non-ferrous Metal based	1593	1593	1593	1593	1593	1593	1593	1593	1593	1593	1593	1593
11	Machinery and	0	0	0	0	0	0	0	0	0	0	0	0

	Machine Tools based												
12	Electrical Industry/Machinery Appliances	0	0	0	0	0	0	0	0	0	0	0	0
13	Transport & Equipment and Parts	0	2007	3011	4014	5018	6021	7025	8028	9032	10035	11039	12042
14	Service & Repairing	0	0	0	0	0	0	0	0	0	0	0	0
15	Misc.Mig.Industries	2065	2763	3112	3461	3810	4159	4508	4857	5206	5555	5904	6253
	Total	219647	224891	227513	230135	232757	235379	238001	240623	243245	245867	248489	251111
Dist rict	Hanumangarh												
S.No	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	802180	805250	806785	808320	809855	811390	812925	814460	815995	817530	819065	820600
2	Beverages & Tobacco Industry	0	0	0	0	0	0	0	0	0	0	0	0
3	Textile Industries other then Handloom	0	58	87	116	145	174	203	232	261	290	319	348
4	Handloom	82	1621	2391	3160	3930	4699	5469	6238	7008	7777	8547	9316
5	Wooden based	227	1163	1631	2099	2567	3035	3503	3971	4439	4907	5375	5843
6	Paper based	0	0	0	0	0	0	0	0	0	0	0	0
7	Rubber Plastic Petroleum & Chemical Based	0	287	431	574	718	861	1005	1148	1292	1435	1579	1722
8	Leather based	52	1142	1687	2232	2777	3322	3867	4412	4957	5502	6047	6592
9	Mineral based	1919	6906	9400	11893	14387	16880	19374	21867	24361	26854	29348	31841
10	Basic Metal and Non-ferrous Metal based	236	236	236	236	236	236	236	236	236	236	236	236
11	Machinery and Machine Tools based	0	0	0	0	0	0	0	0	0	0	0	0
12	Electrical Industry/Machinery Appliances	0	0	0	0	0	0	0	0	0	0	0	0
13	Transport & Equipment and Parts	0	1170	1755	2340	2925	3510	4095	4680	5265	5850	6435	7020
14	Service & Repairing	261	556	704	851	999	1146	1294	1441	1589	1736	1884	2031
15	Misc.Mig.Industries	253	1360	1914	2467	3021	3574	4128	4681	5235	5788	6342	6895
	Total	805210	819749	827019	834288	841558	848827	856097	863366	870636	877905	885175	892444
Dist rict	Jaipur												
S.No	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	454909	460690	463580	466471	469361	472252	475142	478033	480923	483813	486704	489594
2	Beverages & Tobacco based Industry	35	425	620	815	1010	1205	1400	1595	1790	1985	2180	2375

3	Textile Industries other than Handloom	7911	31950	43970	55989	68009	80028	92048	104067	116087	128107	140126	152146
4	Handloom	0	0	0	0	0	0	0	0	0	0	0	0
5	Wooden based	3572	12195	16506	20818	25129	29441	33752	38063	42375	46686	50998	55309
6	Paper based	3826	5345	6104	6864	7623	8383	9142	9902	10661	11421	12180	12940
7	Rubber Plastic Petroleum & Chemical Based	14838	20003	22585	25168	27750	30333	32915	35497	38080	40662	43245	45827
8	Leather based	1068	14624	21402	28180	34958	41736	48514	55291	62069	68847	75625	82403
9	Mineral based	8049	22242	29339	36435	43532	50628	57725	64822	71918	79015	86112	93208
10	Basic Metal and Non-ferrous Metal based	17606	25924	30083	34242	38401	42560	46718	50877	55036	59195	63354	67513
11	Machinery and Machine Tools based	4447	5368	5828	6289	6749	7210	7670	8131	8591	9051	9512	9972
12	Electrical Industry/ Machinery Appliances	5411	12021	15326	18631	21936	25241	28546	31851	35155	38460	41765	45070
13	Transport & Equipment and Parts	21	564	836	1107	1379	1650	1922	2193	2465	2736	3008	3279
14	Service & Repairing	1450	12188	17557	22926	28294	33663	39032	44401	49770	55139	60507	65876
15	Misc. Mig. Industries.	4340	20159	28069	35979	43888	51798	59708	67618	75527	83437	91347	99257
	Total	527484	643698	701805	759912	818019	876127	934234	992341	1050448	1108555	1166662	1224769
Dist rict	Jaisalmer												
S.No .	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	89438	89438	89438	89438	89438	89438	89438	89438	89438	89438	89438	89438
2	Textile Industries	1306	1433	1497	1560	1624	1687	1751	1814	1878	1941	2005	2068
3	Wool based	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236
4	Forest & Wood Based	387	397	402	407	412	417	422	427	432	437	442	447
5	Paper Based	14	21	25	28	32	35	39	42	46	49	53	56
6	Leather Based Paper based	1080	1122	1143	1164	1185	1206	1227	1248	1269	1290	1311	1332
7	Chemical Based	48	48	48	48	48	48	48	48	48	48	48	48
8	Salt Based	248	248	248	248	248	248	248	248	248	248	248	248
9	Stone based	1078	1201	1263	1324	1386	1447	1509	1570	1632	1693	1755	1816
10	Gypsum Based, other/ Iron/ Demand/ Service	56	56	56	56	56	56	56	56	56	56	56	56
11	Repair Based	4203	5422	6032	6641	7251	7860	8470	9079	9689	10298	10908	11517
	Total	99094	100622	101386	102150	102914	103678	104442	105206	105970	106734	107498	108262
Dist rict	Jalore												

S.No	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	987	260	0	0	0	0	0	0	0	0	0	0
2	Beverages & Tobacco Industry	0	0	0	0	0	0	0	0	0	0	0	0
3	Textile Industries other than Handloom	0	0	0	0	0	0	0	0	0	0	0	0
4	Handloom	526	269	141	12	0	0	0	0	0	0	0	0
5	Wooden based	383	533	0	0	0	0	0	0	0	0	0	0
6	Paper based	7	0	0	0	0	0	0	0	0	0	0	0
7	Rubber Plastic Petroleum & Chemical Based	0	0	0	0	0	0	0	0	0	0	0	0
8	Leather based	212	188	176	164	152	140	129	117	1054	935	816	698
9	Mineral based	489	460	0	0	0	0	0	0	0	0	0	0
10	Basic Metal and Non-ferrous Metal based	270	471	0	0	0	0	0	0	0	0	0	0
11	Machinery and Machine Tools based	48	48	48	48	48	48	48	48	48	48	48	48
12	Electrical Industry/Machinery Appliances	32	32	32	32	32	32	32	32	32	32	32	32
13	Transport & Equipment and Parts	0	0	0	0	0	0	0	0	0	0	0	0
14	Service & Repairing	160	160	160	160	160	160	160	160	1600	1600	1600	1600
15	Misc.Mig.Industries	211	634	0	0	0	0	0	0	0	0	0	0
	Total	188	619	358	333	320	308	297	285	2734	2615	2496	2378
		60	0	5	8	8	9	1	2				
Dist													
ri	Jhalawar												
ct													
S.No	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	127	128	129	129	130	130	131	131	1320	1325	1330	1335
2	Beverages & Tobacco based Industry	630	617	111	604	098	591	085	578	72	65	59	52
3	Handloom	103	103	103	103	103	103	103	103	103	103	103	103
4	Wooden based	140	254	312	369	426	483	540	597	6550	7121	7693	8264
5	Paper based	6	9	1	2	4	5	7	8				
6	Rubber Plastic Petroleum & Chemical Based	158	321	474	627	780	932	108	123	1391	1544	1697	1850
7	Leather based	186	169	161	152	144	135	127	118	110	101	93	84
8	Mineral based	392	151	207	263	319	375	431	487	5437	5997	6558	7118
9	Basic Metal and Non-ferrous Metal based	279	279	279	279	279	278	278	278	2785	2783	2782	2780
10	Machinery and Machine Tools based	171	136	119	101	842	666	491	315	140	-36	-212	-387
		9	8	3	7								
		7	7	2	7	2	7	2	7	1342	1347	1352	1357
		0	0	0	0	0	0	0	0	0	0	0	0

11	Electrical Industry/ Machinery Appliances	51	40	35	29	24	18	13	7	1	0	0	0
12	Transport & Equipment and Parts	0	0	0	0	0	0	0	0	0	0	0	0
13	Service & Repairing	972	777	680	582	484	387	289	192	94	0	0	0
14	Misc. Mig. Industris.	664 4	664 4	664 4	664 4	664 4	664 4	664 4	664 4	6644	6644	6644	6644
	Total	143 356	149 097	151 968	154 838	157 709	160 579	163 450	166 320	1691 91	1720 68	1750 42	1780 15
Dist rict	Jhunjhunu												
S.No	Industrial Category	200 9 Figu res	201 2	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	201 8-19	2019 -20	2020 -21	2021 -22	
1	Agro based Industries	131 594	132 021	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
2	Beverages & Tobacco Industry	0	0	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
3	Textile Industries other then Handloom	312 9	322 6	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
4	Handloom	0	377 0	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
5	Wooden based	289 0	289 0	289 0	289 0	289 0	289 0	289 0	289 0	2890	2890	2890	
6	Paper based	35	35	35	35	35	35	35	35	35	35	35	
7	Rubber Plastic Petroleum & Chemical Based	161 6	189 5	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
8	Leather based	448 6	474 1	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
9	Mineral based	966 6	104 08	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
10	Basic Metal and Non- feffous Metal based	171 0	180 8	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
11	Machinery and Machine Tools based	203 4	222 2	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
12	Electrical Industry/Machinery Appliances	0	0	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
13	Transport & Equipment and Parts	0	0	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
14	Service & Repairing	0	0	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
15	Misc.Mig.Industries	208 1	319 1	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
	Total	159 241	166 207	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#RE F!	#REF !	#REF !	#REF !	
Dist rict	Jodhpur												
S.No	Industrial Category	200 9	201 1	201 2-13	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	2018 -19	2019 -20	2020 -21	2021 -22
1	Agro based Industries	271 753	270 000	269 124	268 247	267 371	266 494	265 618	264 741	2638 65	1888 87	1892 48	1896 09
2	Beverages & Tobacco	106	260	384	509	634	759	883	100	1133	2601	2601	2601

	Industry		1	9	6	4	1	9	86	4			
3	Textile Industries other than Handloom	56	237 73	356 32	474 90	593 49	712 07	830 66	949 24	1067 83	2541 6	2574 4	2607 3
4	Handloom	716	377	208	38	0	0	0	0	0	0	0	0
5	Wooden based	385 4	296 0	251 3	206 6	161 9	117 2	725	278	-169	3403	3491	3580
6	Paper based	130	377 9	560 4	742 8	925 3	110 77	129 02	147 26	1655 1	4264	4361	4458
7	Rubber Plastic Petroleum & Chemical Based	96	331 7	492 8	653 8	814 9	975 9	113 70	129 80	1459 1	3737	3821	3905
8	Leather based	347	471 8	690 4	908 9	112 75	134 60	156 46	178 31	2001 7	5536	5699	5863
9	Mineral based	185 4	180 37	261 29	342 20	423 12	504 03	584 95	665 86	7467 8	2488 0	2624 8	2761 7
10	Basic Metal and Non-ferrous Metal based	210	506 3	749 0	991 6	123 43	147 69	171 96	196 22	2204 9	5546	5642	5739
11	Machinery and Machine Tools based	444 9	179 0	460	0	0	0	0	0	0	0	0	0
12	Electrical Industry/Machinery Appliances	184 5	858	365	0	0	0	0	0	0	0	0	0
13	Transport & Equipment and Parts	420	374	351	328	305	282	259	236	213	404	410	416
14	Service & Repairing	371	298 1	428 6	559 1	689 6	820 1	950 6	108 11	1211 6	3946	4139	4332
15	Misc.Mig.Industries	437 6	127 10	168 77	210 44	252 11	293 78	335 45	377 12	4187 9	1657 3	1734 5	1811 8
	Total	290 583	353 338	384 716	417 091	450 423	483 793	517 163	550 533	5839 03	2851 90	2887 49	2923 08
Dist rict	Karauli												
S.No .	Industrial Category	200 9	201 1	201 2-13	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	2018 -19	2019 -20	2020 -21	2021 -22
1	Agro based Industries	200 471	200 546	200 584	200 621	200 659	200 696	200 734	200 771	2008 09	2008 46	2008 84	2009 21
2	Beverages & Tobacco based Industry	0	0	0	0	0	0	0	0	0	0	0	0
3	Textile Industries other than Handloom	139	327	421	515	609	703	797	891	985	1079	1173	1267
4	Handloom	6	6	6	6	6	6	6	6	6	6	6	6
5	Wooden based	305	374	409	443	478	512	547	581	616	650	685	719
6	Paper based	243	272	287	301	316	330	345	359	374	388	403	417
7	Rubber Plastic Petroleum & Chemical Based	223	197	184	171	158	145	132	119	106	93	80	67
8	Leather based	0	45	68	90	113	135	158	180	203	225	248	270
9	Mineral based	122 7	238 5	296 4	354 3	412 2	470 1	528 0	585 9	6438	7017	7596	8175
10	Basic Metal and Non-ferrous Metal based	102	102	102	102	102	102	102	102	102	102	102	102
11	Machinery and Machine Tools based	0	0	0	0	0	0	0	0	0	0	0	0
12	Electrical Industry/ Machinery Appliances	274	437	519	600	682	763	845	926	1008	1089	1171	1252
13	Transport &	0	0	0	0	0	0	0	0	0	0	0	0

	Equipment and Parts												
14	Service & Repairing	21	21	21	21	21	21	21	21	21	21	21	21
15	Other Industries	555	657	708	759	810	861	912	963	1014	1065	1116	1167
		203	205	206	207	208	208	209	210	2116	2125	2134	2143
		566	369	271	172	074	975	877	778	80	81	83	84
Dist rict	Kota												
S.No .	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	49667	49792	49855	49917	49980	50042	50105	50167	50230	50292	50355	50417
2	Beverages & Tobacco based Industry	100	100	100	100	100	100	100	100	100	100	100	100
3	Textile Industries other then Handloom	147	263	321	379	437	495	553	611	669	727	785	843
4	Handloom	1416	2014	2313	2612	2911	3210	3509	3808	4107	4406	4705	5004
5	Wooden based	2718	2874	2952	3030	3108	3186	3264	3342	3420	3498	3576	3654
6	Paper based	766	766	766	766	766	766	766	766	766	766	766	766
7	Rubber Plastic Petroleum & Chemical Based	898	2035	2604	3172	3741	4309	4878	5446	6015	6583	7152	7720
8	Leather based	2117	2117	2117	2117	2117	2117	2117	2117	2117	2117	2117	2117
9	Mineral based	5765	6321	6599	6877	7155	7433	7711	7989	8267	8545	8823	9101
10	Basic Metal and Non-ferrous Metal based	3805	4245	4465	4685	4905	5125	5345	5565	5785	6005	6225	6445
11	Machinery and Machine Tools based	1113	1273	1353	1433	1513	1593	1673	1753	1833	1913	1993	2073
12	Electrical Industry/ Machinery Appliances	587	587	587	587	587	587	587	587	587	587	587	587
13	Transport & Equipment and Parts	0	0	0	0	0	0	0	0	0	0	0	0
14	Service & Repairing	2891	3191	3341	3491	3641	3791	3941	4091	4241	4391	4541	4691
15	Misc. Mig. Industries.	1813	1845	1861	1877	1893	1909	1925	1941	1957	1973	1989	2005
	Total	73803	77423	79233	81043	82853	84663	86473	88283	90093	91903	93713	95523
Dist rict	Nagaur												
S.No .	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based industries	621	13240	19550	25859	32169	38478	44788	51097	57407	63716	70026	76335
2	Beverages & Tobacco based industries	0	0	0	0	0	0	0	0	0	0	0	0
3	Textile industries other then Handloom	563	4435	6371	8307	10243	12179	14115	16051	17987	19923	21859	23795
4	Handloom	12	12	12	12	12	12	12	12	12	12	12	12
5	Wooden based/Forest based	214	1332	1891	2450	3009	3568	4127	4686	5245	5804	6363	6922
6	Paper based	13	13	13	13	13	13	13	13	13	13	13	13

7	Rubber, plastic, Petroleum & Chemical based	670	670	670	670	670	670	670	670	670	670	670	670
8	Leather based	986	3889	5341	6792	8244	9695	11147	12598	14050	15501	16953	18404
9	Mineral based	1945	13527	19318	25109	30900	36691	42482	48273	54064	59855	65646	71437
10	Basic metal & non ferrous metal based	95	95	95	95	95	95	95	95	95	95	95	95
11	Machinery and Machine Tools based	310	7583	11220	14856	18493	22129	25766	29402	33039	36675	40312	43948
12	Electrical industries/Machinery appliances	0	0	0	0	0	0	0	0	0	0	0	0
13	Transport & Equipment and parts	0	0	0	0	0	0	0	0	0	0	0	0
14	Service & Repairing	104	104	104	104	104	104	104	104	104	104	104	104
15	Misc. Mig. Industries	1673	3503	4418	5333	6248	7163	8078	8993	9908	10823	11738	12653
	Total	7206	48403	69002	89600	110199	130797	151396	171994	192593	213191	233790	254388
Dist rict	Pali												
S.No .	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	303819	304033	304140	304247	304354	304461	304568	304675	304782	304889	304996	305103
2	Beverages & Tobacco based Industry	12	12	12	12	12	12	12	12	12	12	12	12
3	Textile Industries other then Handloom	10099	10297	10396	10495	10594	10693	10792	10891	10990	11089	11188	11287
4	Handloom	470	470	470	470	470	470	470	470	470	470	470	470
5	Wooden based	2286	2446	2526	2606	2686	2766	2846	2926	3006	3086	3166	3246
6	Paper based	35	42	46	49	53	56	60	63	67	70	74	77
7	Rubber Plastic Petroleum & Chemical Based	792	823	839	854	870	885	901	916	932	947	963	978
8	Leather based	7308	7641	7808	7974	8141	8307	8474	8640	8807	8973	9140	9306
9	Mineral based	6637	7106	7341	7575	7810	8044	8279	8513	8748	8982	9217	9451
10	Basic Metal and Non-ferrous Metal based	3592	3692	3742	3792	3842	3892	3942	3992	4042	4092	4142	4192
11	Machinery and Machine Tools based	56	56	56	56	56	56	56	56	56	56	56	56
12	Electrical Industry/ Machinery Appliances	24	24	24	24	24	24	24	24	24	24	24	24
13	Transport & Equipment and Parts	0	0	0	0	0	0	0	0	0	0	0	0
14	Service & Repairing	2612	3352	3722	4092	4462	4832	5202	5572	5942	6312	6682	7052
15	Misc. Mig. Industries.	6696	8768	9804	10840	11876	12912	13948	14984	16020	17056	18092	19128
	Total	344438	348762	350924	353086	355248	357410	359572	361734	363896	366058	368220	370382

Dist rict	Rajsamand												
S.No	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	19	10028	15033	20037	25042	30046	35051	40055	45060	50064	55069	60073
2	Beverages & Tobacco based Industry	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
3	Textile Industries other than Handloom	400	529	594	658	723	787	852	916	981	1045	1110	1174
4	Handloom	0	0	0	0	0	0	0	0	0	0	0	0
5	Wooden based	198	1035	1454	1872	2291	2709	3128	3546	3965	4383	4802	5220
6	Paper based	5	5	5	5	5	5	5	5	5	5	5	5
7	Rubber Plastic Petroleum & Chemical Based	16	28	34	40	46	52	58	64	70	76	82	88
8	Leather based	0	0	0	0	0	0	0	0	0	0	0	0
9	Mineral based	6007	6459	6685	6911	7137	7363	7589	7815	8041	8267	8493	8719
10	Basic Metal and Non-ferrous Metal based	234	234	234	234	234	234	234	234	234	234	234	234
11	Machinery and Machine Tools based	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808
12	Electrical Industry/ Machinery Appliances	12	12	12	12	12	12	12	12	12	12	12	12
13	Transport & Equipment and Parts	0	0	0	0	0	0	0	0	0	0	0	0
14	Service & Repairing	2176	5202	6715	8228	9741	11254	12767	14280	15793	17306	18819	20332
15	Misc. Mig. Industries.	3340	4089	4464	4838	5213	5587	5962	6336	6711	7085	7460	7834
	Total	15415	30629	38236	45843	53450	61057	68664	76271	83878	91485	99092	106699
Dist rict	Sawai Madhopur												
S.No	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	249132	250764	251580	252396	253212	254028	254844	255660	256476	257292	258108	258924
2	Beverages & Tobacco Industry	0	0	0	0	0	0	0	0	0	0	0	0
3	Textile Industries other than Handloom	283	283	283	283	283	283	283	283	283	283	283	283
4	Handloom	13	2282	3417	4551	5686	6820	7955	9089	10224	11358	12493	13627
5	Wooden based	73	870	1269	1667	2066	2464	2863	3261	3660	4058	4457	4855
6	Paper based	24	24	24	24	24	24	24	24	24	24	24	24
7	Rubber Plastic Petroleum & Chemical Based	25	233	337	441	545	649	753	857	961	1065	1169	1273
8	Leather based	103	1147	1669	2191	2713	3235	3757	4279	4801	5323	5845	6367
9	Mineral based	260	197	166	134	103	71	39	8	0	0	0	0

10	Basic Metal and Non-ferrous Metal based	65	65	65	65	65	65	65	65	65	65	65	65
11	Machinery and Machine Tools based	0	0	0	0	0	0	0	0	0	0	0	0
12	Electrical Industry/Machinery Appliances	5	562	841	1119	1398	1676	1955	2233	2512	2790	3069	3347
13	Transport & Equipment and Parts	0	0	0	0	0	0	0	0	0	0	0	0
14	Service & Repairing	54	648	945	1242	1539	1836	2133	2430	2727	3024	3321	3618
15	Misc. Mig. Industries	85	973	1417	1861	2305	2749	3193	3637	4081	4525	4969	5413
	Total	250122	258048	262011	265974	269937	273900	277863	281826	285813	289807	293802	297796
Dist rict	Sikar												
S.r.	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	436748	437266	437525	437784	438043	438302	438561	438820	439079	439338	439597	439856
2	Beverages & Tobacco based Industris	32	32	32	32	32	32	32	32	32	32	32	32
3	Textile industries other then Hundloom	1100	2177	2716	3254	3793	4331	4870	5408	5947	6485	7024	7562
4	Handloom	10	10	10	10	10	10	10	10	10	10	10	10
5	Wooden based	438	594	672	750	828	906	984	1062	1140	1218	1296	1374
6	Paper based	187	1909	2770	3631	4492	5353	6214	7075	7936	8797	9658	10519
7	Rubber plastic petrolium & chemical based	150	2756	4059	5362	6665	7968	9271	10574	11877	13180	14483	15786
8	Leather based	1772	2928	3506	4084	4662	5240	5818	6396	6974	7552	8130	8708
9	Mineral based	1215	5798	8090	10381	12673	14964	17256	19547	21839	24130	26422	28713
10	Based Matel and Non-ferrous Metal based	18	128	183	238	293	348	403	458	513	568	623	678
11	Machinery and Machine Toos based	138	340	441	542	643	744	845	946	1047	1148	1249	1350
12	Electrical Industry/ machinery Appliances	78	121	143	164	186	207	229	250	272	293	315	336
13	Transport & Equipment and parts	56	56	56	56	56	56	56	56	56	56	56	56
14	Service and Repairing	802	1328	1591	1854	2117	2380	2643	2906	3169	3432	3695	3958
15	Misc. Mig. Industries	5776	50708	73174	95640	118106	140572	163038	185504	207970	230436	252902	275368
	Total	448520	506151	534967	563782	592598	621413	650229	679044	707860	736675	765491	794306
Dist rict	Sirohi												
S.No	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	16	104	148	192	236	280	324	368	412	456	500	544

2	Beverages & Tobacco Industry	35	35	35	35	35	35	35	35	35	35	35	35
3	Textile Industries other than Handloom	80	80	80	80	80	80	80	80	80	80	80	80
4	Handloom	0	0	0	0	0	0	0	0	0	0	0	0
5	Wooden based	26	63	82	100	119	137	156	174	193	211	230	248
6	Paper based	0	0	0	0	0	0	0	0	0	0	0	0
7	Rubber Plastic Petroleum & Chemical Based	182	53	0	0	0	0	0	0	0	0	0	0
8	Leather based	42	40	39	38	37	36	35	34	33	32	31	30
9	Mineral based	835	400	183	0	0	0	0	0	0	0	0	0
10	Basic Metal and Non-ferrous Metal based	76	62	55	48	41	34	27	20	13	6	-1	-8
11	Machinery and Machine Tools based	0	0	0	0	0	0	0	0	0	0	0	0
12	Electrical Industry/Machinery Appliances	3	3	3	3	3	3	3	3	3	3	3	3
13	Transport & Equipment and Parts	0	0	0	0	0	0	0	0	0	0	0	0
14	Service & Repairing	412	220	124	28	0	0	0	0	0	0	0	0
15	Misc.Mig.Industries	551	29	0	0	0	0	0	0	0	0	0	0
	Total	2258	1089	748	524	551	605	660	714	769	823	877	932
Dist rict	Sriganganagar												
S.No .	Industrial Category	2009	2011	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	Agro based Industries	190675	191755	192295	192835	193375	193915	194455	194995	195535	196075	196615	197155
2	Beverages & Tobacco based Industry	4	4	4	4	4	4	4	4	4	4	4	4
43	Textile Industries other than Handloom	98	293	391	488	586	683	781	878	976	1073	1171	1268
4	Handloom	254	345	391	436	482	527	573	618	664	709	755	800
5	Wooden based	332	360	374	388	402	416	430	444	458	472	486	500
6	Paper based	85	130	153	175	198	220	243	265	288	310	333	355
7	Rubber Plastic Petroleum & Chemical Based	441	499	528	557	586	615	644	673	702	731	760	789
8	Leather based	230	368	437	506	575	644	713	782	851	920	989	1058
9	Mineral based	1120	9193	13230	17266	21303	25339	29376	33412	37449	41485	45522	49558
10	Basic Metal and Non-ferrous Metal based	349	827	1066	1305	1544	1783	2022	2261	2500	2739	2978	3217
11	Machinery and Machine Tools based	0	0	0	0	0	0	0	0	0	0	0	0
12	Electrical Industry/ Machinery Appliances	10	15	18	20	23	25	28	30	33	35	38	40
13	Transport & Equipment and Parts	0	0	0	0	0	0	0	0	0	0	0	0
14	Service & Repairing	586	1401	1809	2216	2624	3031	3439	3846	4254	4661	5069	5476
15	Misc. Mig. Industries.	394	394	394	394	394	394	394	394	394	394	394	394

	Total	194 578	205 584	211 087	216 590	222 093	227 596	233 099	238 602	2441 05	2496 08	2551 11	2606 14
Dist rict	Tonk												
S.N.	Industrial Category	200 9	201 1	201 2-13	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	2018 -19	2019 -20	2020 -21	2021 -22
1	Agro based Industries	239 643	239 922	240 062	240 201	240 341	240 480	240 620	240 759	2408 99	2410 38	2411 78	2413 17
2	Beverages & Tobacco based Industry	0	0	0	0	0	0	0	0	0	0	0	0
3	Textile Industries other then Handloom	0	0	0	0	0	0	0	0	0	0	0	0
4	Handloom	600 9	631 7	647 1	662 5	677 9	693 3	708 7	724 1	7395	7549	7703	7857
5	Wooden based (Forest based)	429 8	454 7	467 2	479 6	492 1	504 5	517 0	529 4	5419	5543	5668	5792
6	Paper based	0	0	0	0	0	0	0	0	0	0	0	0
7	Rubber Plastic Petroleum & Chemical	286	309	321	332	344	355	367	378	390	401	413	424
8	Leather based	414 1	414 1	414 1	414 1	414 1	414 1	414 1	414 1	4141	4141	4141	4141
9	Mineral based	429 8	458 8	473 3	487 8	502 3	516 8	531 3	545 8	5603	5748	5893	6038
10	Basic Metal and Non- ferrous Metal	0	0	0	0	0	0	0	0	0	0	0	0
11	Machinery and Machine Tools based	0	0	0	0	0	0	0	0	0	0	0	0
12	Electrical Industry/ Machinery Appliances	0	0	0	0	0	0	0	0	0	0	0	0
13	Transport & Equipment & Parts	0	0	0	0	0	0	0	0	0	0	0	0
14	Service & Repairing	161 9	204 4	225 7	246 9	268 2	289 4	310 7	331 9	3532	3744	3957	4169
15	Misc. Mig. Industries	346	378 2	550 0	721 8	893 6	106 54	123 72	140 90	1580 8	1752 6	1924 4	2096 2
	Total	260 640	265 650	268 155	270 660	273 165	275 670	278 175	280 680	2831 85	2856 90	2881 95	2907 00
Dist rict	Udaipur												
S.No .	Industrial Category	200 9	201 1	201 2-13	201 3-14	201 4-15	201 5-16	201 6-17	201 7-18	2018 -19	2019 -20	2020 -21	2021 -22
1	Agro based Industries	324 516	324 884	325 068	325 252	325 436	325 620	325 804	325 988	3261 72	3263 56	3265 40	3267 24
2	Beverages & Tobacco based Industry	8	43	61	78	96	113	131	148	166	183	201	218
3	Textile Industries other then Handloom	510	147 2	195 3	243 4	291 5	339 6	387 7	435 8	4839	5320	5801	6282
4	Handloom	29	29	29	29	29	29	29	29	29	29	29	29
5	Wooden based	857	100 8	108 4	115 9	123 5	131 0	138 6	146 1	1537	1612	1688	1763
6	Paper based	322	332	337	342	347	352	357	362	367	372	377	382
7	Rubber Plastic Petroleum & Chemical Based	243 0	278 8	296 7	314 6	332 5	350 4	368 3	386 2	4041	4220	4399	4578

8	Leather based	246	275	290	304	319	333	348	362	377	391	406	420
9	Mineral based	330 6	439 5	494 0	548 4	602 9	657 3	711 8	766 2	8207	8751	9296	9840
10	Basic Metal and Non-ferrous Metal based	287	338	364	389	415	440	466	491	517	542	568	593
11	Machinery and Machine Tools based	160 5	182 6	193 7	204 7	215 8	226 8	237 9	248 9	2600	2710	2821	2931
12	Electrical Industry/ Machinery Appliances	907	105 2	112 5	119 7	127 0	134 2	141 5	148 7	1560	1632	1705	1777
13	Transport & Equipment and Parts	0	27	41	54	68	81	95	108	122	135	149	162
14	Service & Repairing	179 1	262 2	303 8	345 3	386 9	428 4	470 0	511 5	5531	5946	6362	6777
15	Misc. Mig. Industries.	438	649	755	860	966	107 1	117 7	128 2	1388	1493	1599	1704
	Total	337 252	341 740	343 984	346 228	348 472	350 716	352 960	355 204	3574 48	3596 92	3619 36	3641 80

Projected Figures for districts (based on the demand and supply of workforce distributed as skilled, semi-skilled and unskilled)

Workforce Supply Calculation for districts:

Activities with explanation	Reference Data	Assumptions
District wise decadal WPR data trends and population projections have been used to calculate the projections till 2012	Census report on year 1991 & 2001 Census report 2011-Provisional	WPR till 2017 is projected by taking district wise projected population as the base and decadal WPR for the past years
<p>While drawing profile of the Work force, used education and continuously working workforce as the criteria for determining the level of skill, the same criteria will be used to draw the profile.</p> <p>Calculated educational data by considering the enrollment trend in elementary and senior secondary school and number of scholars from Vocational Institutes and Professional colleges</p> <p>Considered NSSO data and validated it state regional/district figures and factored in the final data by incorporating certain numbers as assumed percentatges</p>	<p>District wise Education data from Statistical Abstract report 2011</p> <p>NSSO data- 65th & 66th Reports</p>	<p>Skilled People are the one who are graduates or above as per their education levels and have successfully completed any vocational /Polytechnic courses</p> <p>Semi-Skilled people are the people who have senior secondary education and have worked for 2-3 years and have acquired the required skills have become skilled people.</p> <p>Around 5% of semiskilled people acquire hard skills by experience and become skilled labour (calculated year on year basis)</p> <p>Unskilled people are the ones who have education till secondary level and without working experience (consistently)</p> <p>Around 2% of unskilled population acquire the primary skills on the job/experience and become semi skilled workforce (calculated year on year basis)</p>

Workforce Demand Calculation for districts:

Activities with explanation	Reference Data	Assumptions
<p>Trend analysis using linear regression (using the method of least squares) model has been applied for predicting the future trends based on the past trends of a certain values</p> <p>GDP for a district is projected based on previous years data (historical data pattern considered)</p>	District wise GDP data points for the past few years has been taken from Directorate of Economics & Statistics report used for projections	

<p>Value per worker for Agriculture, Industry & Service sector have been considered as given in the planning commission report.</p> <p>Applied the assumption that value per worker for a region would be same as that of the state</p>	<p>Planning Commission Report</p>	<p>In Agriculture (Primary Sector), around 47% workforce is unskilled,36% is semi-skilled and rest 15% is skilled</p> <p>In Industry (Secondary Sector), around 65% workforce is unskilled, 30% is semi-skilled and rest 5% is skilled</p> <p>In services (Tertiary Sector), around 36% are unskilled, 29% are semi-skilled,34% people are skilled</p> <p>Rate for Value per worker across sectors has been taken from the rates published in Planning Commission report across sectors for the State</p>
<p>After estimating the projected GDP and Value per worker; data points shall be applied further to derive overall workforce demand by using the below formula:</p> <p>GDP of the region (for a particular sector : Agriculture/ Industry/ Services)</p> <hr/> <p>Value per worker for that particular sector</p>		
<p>Post district wise total workforce demand, further drilling down of workforce under various sub sectors shall be done by applying value per worker mapped against specific sector</p>	<p>Planning Commission Report</p>	<p>Sub sector value per figure has been taken from the Planning commission report</p> <p>Rate for Value per worker across sub sectors has been taken from the rates published in Planning Commission report across sectors for the State</p> <p>Percentages from Primary Survey across sectors in skilled, semi-skilled and unskilled are the percentages assigned for sectoral workforce composition</p>

*** the projected figures of the districts in annexure are purely statistical based on the methodology adopted and the gap suggested in the report is based on the qualitative and quantitative analysis carried out by the field study for skilled, semi-skilled and unskilled workforce determined as per each districts' specifications and demographic conditions; these numbers were projected to effectively calculate the districts conditions in terms of workforce and provide state a base figure to work upon*

SUPPLY		District	Ajmer	Alwar	Banswara	Baran	Barmer	Bharatpur	Bhilwara	Bikaner	Bundi
Projected Numbers	2010-11	Unskilled	1543521	2221305	1287751	706707	1894938	1564543	1495751	1491033	720177
		Semi-Skilled	98370	171567	79952	57495	52127	86027	84868	84025	43379
		Skilled	29417	39816	14348	9593	7169	26617	16014	20393	9288
	2011 - 12	Unskilled	1543649	2221490	1287858	706766	1895095	1564672	1495875	1491156	720237
		Semi-Skilled	103570	180636	84178	60535	54882	90575	89354	88467	45672
		Skilled	30679	41524	14964	10004	7477	27758	16701	21267	9686
	2012 - 13	Unskilled	1546196	2225156	1289983	707932	1898223	1567254	1498344	1493617	721426
		Semi-Skilled	108530	189285	88209	63433	57510	94912	93632	92703	47858
		Skilled	32264	43669	15736	10521	7863	29192	17563	22366	10187
	2013 - 14	Unskilled	1551628	2232973	1294515	710419	1904891	1572760	1503608	1498864	723960
		Semi-Skilled	113183	197402	91991	66153	59976	98981	97647	96678	49911
		Skilled	33809	45760	16490	11025	8239	30590	18404	23437	10675
	2014 - 15	Unskilled	1555474	2238508	1297724	712180	1909613	1576659	1507335	1502580	725755
		Semi-Skilled	117913	205651	95836	68918	62482	103118	101728	100718	51996
		Skilled	35170	47602	17154	11469	8571	31822	19145	24380	11104
	2015 - 16	Unskilled	1557660	2241653	1299547	713180	1912296	1578874	1509453	1504691	726774
		Semi-Skilled	122923	214388	99907	71846	65137	107499	106050	104997	54205
		Skilled	36658	49617	17880	11954	8934	33168	19955	25412	11574
	2016-17	Unskilled	1562111	2248059	1303261	715219	1917761	1583386	1513767	1508991	728851
		Semi-Skilled	127650	222633	103750	74609	67642	111633	110128	109035	56290
		Skilled	38175	51670	18620	12449	9303	34541	20781	26464	12053
	2017-18	Unskilled	1565972	2253616	1306483	716987	1922502	1587300	1517508	1512721	730653
		Semi-Skilled	132434	230977	107638	77405	70177	115817	114255	113122	58400
		Skilled	39617	53622	19323	12919	9655	35846	21566	27463	12509
2018-19	Unskilled	1569167	2258213	1309148	718449	1926423	1590538	1520604	1515807	732143	
	Semi-Skilled	137292	239450	111586	80244	72751	120065	118447	117271	60542	
	Skilled	41073	55592	20033	13394	10009	37162	22358	28472	12968	
2019-20	Unskilled	1572786	2263422	1312167	720106	1930867	1594207	1524111	1519303	733832	
	Semi-Skilled	142123	247876	115513	83068	75311	124290	122615	121398	62672	
	Skilled	42568	57615	20762	13881	10374	38515	23172	29509	13440	
2020-21	Unskilled	1576732	2269100	1315459	721913	1935711	1598206	1527935	1523114	735673	
	Semi-Skilled	146897	256202	119393	85858	77841	128465	126734	125476	64777	
	Skilled	44033	59599	21477	14359	10731	39841	23970	30524	13903	
2021-22	Unskilled	1580170	2274049	1318328	723487	1939932	1601691	1531267	1526436	737277	
	Semi-Skilled	151734	264639	123324	88685	80404	132695	130907	129608	66911	
	Skilled	45493	61575	22189	14835	11087	41162	24765	31536	14364	

SUPPLY	District	Chittorgarh	Churu	Dausa	Dholpur	Dungarpur	Ganganagar	Hanumangarh	Jaipur	
Projected Numbers	2010-11	Unskilled	933511	1220801	1033594	778124	957771	1099388	1118666	3293068
		Semi-Skilled	52330	78805	94786	46422	62745	86887	93790	324798
		Skilled	10841	17036	19907	5348	10204	30743	22088	80889
	2011 - 12	Unskilled	933588	1220902	1033680	778188	957850	1099479	1118759	3293342
		Semi-Skilled	55096	82971	99796	48876	66061	91480	98748	341967
		Skilled	11306	17766	20761	5578	10642	32062	23035	84358
	2012 - 13	Unskilled	935129	1222917	1035386	779472	959431	1101294	1120605	3298776
		Semi-Skilled	57734	86943	104575	51216	69225	95861	103476	358341
		Skilled	11890	18684	21833	5866	11192	33718	24225	88715
	2013 - 14	Unskilled	938414	1227213	1039023	782211	962801	1105162	1124541	3310365
		Semi-Skilled	60209	90671	109059	53412	72193	99971	107913	373706
		Skilled	12459	19579	22879	6147	11728	35333	25385	92964
	2014 - 15	Unskilled	940740	1230255	1041599	784150	965188	1107902	1127329	3318571
		Semi-Skilled	62725	94461	113616	55645	75210	104149	112423	389323
		Skilled	12961	20367	23800	6394	12200	36755	26407	96707
	2015 - 16	Unskilled	942062	1231983	1043062	785251	966544	1109458	1128913	3323233
		Semi-Skilled	65390	98474	118443	58009	78405	108573	117199	405864
		Skilled	13509	21229	24807	6665	12716	38310	27524	100799
	2016-17	Unskilled	944754	1235504	1046043	787495	969306	1112629	1132139	3332731
		Semi-Skilled	67905	102261	122998	60240	81420	112749	121707	421473
		Skilled	14069	22108	25834	6941	13242	39896	28663	104971
	2017-18	Unskilled	947090	1238558	1048629	789442	971702	1115379	1134938	3340969
		Semi-Skilled	70450	106093	127608	62497	84472	116974	126268	437268
		Skilled	14600	22943	26809	7203	13742	41403	29746	108935
	2018-19	Unskilled	949022	1241085	1050768	791052	973684	1117655	1137253	3347784
		Semi-Skilled	73034	109985	132289	64790	87570	121266	130900	453309
		Skilled	15136	23785	27794	7467	14247	42923	30839	112937
2019-20	Unskilled	951211	1243947	1053192	792877	975930	1120233	1139876	3355506	
	Semi-Skilled	75604	113855	136944	67070	90652	125533	135506	469260	
	Skilled	15687	24651	28806	7739	14766	44486	31961	117049	
2020-21	Unskilled	953597	1247068	1055834	794866	978379	1123043	1142736	3363924	
	Semi-Skilled	78144	117680	141544	69323	93697	129750	140058	485023	
	Skilled	16227	25500	29798	8006	15274	46018	33062	121078	
2021-22	Unskilled	955676	1249788	1058136	796599	980512	1125492	1145228	3371260	
	Semi-Skilled	80717	121555	146205	71605	96782	134022	144670	500994	
	Skilled	16765	26345	30786	8271	15781	47543	34158	125092	

SUPPLY		District	Jaisalmer	Jalore	Jhalawar	Jhunjhunu	Jodhpur	Karauli	Kota	Nagaur
Projected Numbers	2010-11	Unskilled	483037	1358960	927792	1088397	2284000	926209	915673	2416995
		Semi-Skilled	10880	64297	53490	140887	126770	65852	83808	148331
		Skilled	1613	7850	7870	47006	12782	10084	23856	16323
	2011 - 12	Unskilled	483077	1359073	927869	1088488	2284189	926286	915749	2417196
		Semi-Skilled	11455	67696	56317	148334	133471	69333	88239	156172
		Skilled	1683	8186	8208	49022	13330	10517	24879	17023
	2012 - 13	Unskilled	483874	1361315	929401	1090284	2287959	927814	917260	2421185
		Semi-Skilled	12003	70937	59014	155437	139862	72653	92463	163649
		Skilled	1769	8609	8632	51554	14019	11060	26164	17902
	2013 - 14	Unskilled	485574	1366098	932666	1094114	2295996	931074	920482	2429690
		Semi-Skilled	12518	73979	61544	162102	145859	75768	96428	170667
		Skilled	1854	9022	9045	54023	14690	11589	27417	18760
	2014 - 15	Unskilled	486777	1369484	934978	1096826	2301688	933382	922764	2435713
		Semi-Skilled	13041	77071	64116	168876	151955	78934	100458	177798
		Skilled	1929	9385	9409	56198	15282	12056	28520	19515
	2015 - 16	Unskilled	487461	1371408	936291	1098367	2304922	934693	924061	2439135
		Semi-Skilled	13595	80345	66840	176051	158411	82288	104726	185352
		Skilled	2010	9782	9807	58576	15929	12566	29727	20341
	2016-17	Unskilled	488854	1375328	938967	1101506	2311509	937365	926702	2446106
		Semi-Skilled	14118	83435	69411	182821	164503	85453	108754	192481
		Skilled	2094	10187	10213	61001	16588	13086	30958	21183
	2017-18	Unskilled	490063	1378727	941288	1104229	2317222	939681	928992	2452152
		Semi-Skilled	14647	86562	72012	189673	170668	88655	112829	199694
		Skilled	2173	10571	10599	63304	17214	13580	32127	21983
2018-19	Unskilled	491062	1381540	943208	1106481	2321949	941598	930887	2457155	
	Semi-Skilled	15184	89737	74654	196631	176928	91907	116968	207020	
	Skilled	2253	10960	10988	65630	17847	14079	33307	22790	
2019-20	Unskilled	492195	1384726	945384	1109034	2327305	943770	933034	2462822	
	Semi-Skilled	15719	92895	77281	203550	183154	95141	121084	214305	
	Skilled	2335	11359	11388	68019	18496	14592	34520	23620	
2020-21	Unskilled	493430	1388200	947755	1111816	2333144	946138	935375	2469001	
	Semi-Skilled	16247	96016	79877	210387	189307	98337	125152	221503	
	Skilled	2415	11750	11780	70361	19133	15094	35708	24433	
2021-22	Unskilled	494506	1391227	949822	1114240	2338232	948201	937415	2474385	
	Semi-Skilled	16782	99177	82507	217315	195540	101575	129273	228797	
	Skilled	2495	12139	12171	72693	19767	15595	36892	25243	

SUPPLY		District	Pali	Rajsamand	Sawai	Sikar	Sirohi	Tonk	Udaipur	Total
Projected Numbers	2010-11	Unskilled	1310521	651794	742273	860592	1680417	763496	1276804	41047610
		Semi-Skilled	85179	25704	29749	45118	215803	34167	463815	3192221
		Skilled	11007	5044	7562	32982	15337	9081	44179	622288
	2011 - 12	Unskilled	1310630	651848	742335	860664	1680557	763560	1276910	41051015
		Semi-Skilled	89681	27063	31322	47503	227211	35973	488333	3360968
		Skilled	11479	5260	7886	34397	15995	9470	46074	648976
	2012 - 13	Unskilled	1312793	652924	743560	862084	1683330	764820	1279017	41118761
		Semi-Skilled	93975	28358	32821	49778	238090	37695	511715	3521895
		Skilled	12072	5532	8293	36173	16821	9959	48453	682494
	2013 - 14	Unskilled	1317404	655217	746172	865112	1689244	767507	1283510	41263208
		Semi-Skilled	98005	29574	34229	51912	248299	39312	533657	3672911
		Skilled	12651	5797	8691	37906	17627	10436	50774	715184
	2014 - 15	Unskilled	1320670	656842	748022	867257	1693431	769409	1286692	41365501
		Semi-Skilled	102100	30810	35659	54082	258675	40954	555958	3826397
		Skilled	13160	6030	9040	39432	18337	10856	52818	743976
	2015 - 16	Unskilled	1322525	657764	749073	868475	1695810	770490	1288500	41423611
		Semi-Skilled	106438	32119	37174	56379	269665	42694	579579	3988967
		Skilled	13717	6285	9423	41100	19113	11316	55053	775459
	2016-17	Unskilled	1326305	659644	751214	870957	1700657	772692	1292182	41541999
		Semi-Skilled	110532	33354	38604	58548	280036	44336	601868	4142377
		Skilled	14284	6545	9813	42801	19904	11784	57332	807552
	2017-18	Unskilled	1329584	661275	753070	873110	1704860	774602	1295376	41644680
		Semi-Skilled	114674	34604	40051	60742	290530	45998	624424	4297616
		Skilled	14824	6792	10184	44418	20655	12229	59497	838050
2018-19	Unskilled	1332296	662624	754607	874891	1708338	776182	1298019	41729633	
	Semi-Skilled	118881	35874	41520	62970	301188	47685	647330	4455271	
	Skilled	15368	7042	10558	46049	21414	12678	61682	868836	
2019-20	Unskilled	1335369	664152	756347	876909	1712279	777973	1301013	41825884	
	Semi-Skilled	123064	37136	42981	65186	311787	49363	670109	4612044	
	Skilled	15928	7298	10942	47726	22194	13140	63928	900468	
2020-21	Unskilled	1338719	665818	758245	879109	1716574	779924	1304277	41930815	
	Semi-Skilled	127198	38384	44425	67376	322260	51021	692619	4766969	
	Skilled	16476	7550	11319	49369	22958	13592	66129	931464	
2021-22	Unskilled	1341638	667270	759898	881026	1720318	781625	1307121	42022253	
	Semi-Skilled	131386	39648	45887	69594	332872	52701	715426	4923939	
	Skilled	17022	7800	11694	51006	23719	14043	68321	962347	

DEMAND		District	Ajmer	Alwar	Banswara	Baran	Barmer	Bharatpur	Bhilwara	Bikaner	Bundi
Projected Numbers	2010-11	Unskilled	443257	686734	196866	344765	314672	377891	550992	392033	305433
		Semiskilled	201374	387169	122982	233925	185635	229255	309311	228913	202088
		Skilled	87906	169012	53685	102116	81036	100077	135024	99928	88218
	2011 - 12	Unskilled	69903	68629	7407	8912	25929	20873	53108	32180	11555
		Semiskilled	73248	71913	7761	9338	27170	21872	55650	33720	12108
		Skilled	100452	98621	10644	12806	37260	29995	76317	46243	16605
	2012 - 13	Unskilled	764782	1258758	317959	611487	551917	657969	974221	774634	543652
		Semiskilled	238035	276635	58268	85578	114056	127757	221801	153196	82732
		Skilled	180506	181709	41774	45660	73731	88597	152057	98551	46206
	2013 - 14	Unskilled	793004	1313051	300592	595749	564571	679556	1035303	790080	552605
		Semiskilled	249991	288308	56592	85163	117788	132215	232936	158552	84841
		Skilled	189610	188565	41584	46434	76265	91623	158458	102453	47738
	2014 - 15	Unskilled	820867	1342577	308611	595721	577538	681854	1083739	792290	558605
		Semiskilled	257777	293937	57345	85602	120537	133615	239877	160602	85964
		Skilled	195671	192517	41959	46978	78052	93078	162609	104578	48590
	2015 - 16	Unskilled	841983	1380282	292881	586078	578320	689555	1098242	834664	557113
		Semiskilled	266286	303157	55955	85648	122887	136361	246320	167588	86947
		Skilled	202953	198917	42005	47888	80320	95612	168262	108547	49879
	2016-17	Unskilled	861296	1408575	286815	580305	582711	698498	1122113	842825	562648
		Semiskilled	274070	309294	55117	85701	124942	138634	251437	170687	88192
		Skilled	209476	203217	41872	48477	82038	97489	172115	111157	50883
	2017-18	Unskilled	885997	1446753	280904	572690	592541	707699	1166429	859332	567092
		Semiskilled	282292	317092	54624	85673	127647	141067	259178	174665	89425
		Skilled	215841	208103	42000	49087	83932	99443	176843	113932	51913
	2018-19	Unskilled	906188	1475311	276137	568146	596837	712729	1188701	878834	569270
		Semiskilled	289203	323308	54146	85844	129652	142900	264352	178565	90344
		Skilled	221585	212455	42097	49712	85626	101169	180846	116553	52836
2019-20	Unskilled	925268	1507016	266699	560500	600802	721185	1212728	898877	571994	
	Semiskilled	296387	330133	53199	85782	131669	145151	269921	182710	91374	
	Skilled	227501	216983	42059	50316	87323	103041	184943	119288	53809	
2020-21	Unskilled	945388	1536785	262322	555045	607338	728468	1243658	910841	576196	
	Semiskilled	303185	336133	52736	85813	133728	147088	275529	185796	92411	
	Skilled	232923	220890	42104	50833	88867	104642	188620	121569	54665	
2021-22	Unskilled	964856	1566931	256130	548955	612636	735029	1270860	929163	578713	
	Semiskilled	309695	342332	52163	85813	135690	148977	280996	189460	93320	
	Skilled	238161	224942	42170	51375	90416	106262	192397	123967	55518	

DEMAND		District	Chittorgarh	Churu	Dausa	Dholpur	Dungarpur	Ganganagar	Hanumangarh	Jaipur
Projected Numbers	2010-11	Unskilled	349716	304425	178258	116789	161419	629998	563597	1064598
		Semiskilled	224838	183541	101985	66624	94316	409019	372121	384510
		Skilled	98149	80122	44520	29084	41172	178550	162443	167851
	2011-12	Unskilled	13677	20222	15629	9081	12516	26080	23662	184979
		Semiskilled	14332	21190	16377	9515	13115	27328	24795	193831
		Skilled	19654	29059	22459	13049	17986	37478	34003	265818
	2012-13	Unskilled	456114	621208	317798	197851	273907	1225598	1155147	1583557
		Semiskilled	81553	113160	68736	44450	58595	190036	167261	688884
		Skilled	55595	72014	47126	32220	40465	108917	85868	616479
	2013-14	Unskilled	430352	654111	323484	199547	274075	1307636	1214803	1614110
		Semiskilled	78304	118215	70710	45496	59609	200245	175428	720938
		Skilled	54589	74777	48828	33141	41480	113247	89368	648340
	2014-15	Unskilled	422789	682024	327370	197104	290759	1315352	1247998	1622531
		Semiskilled	78299	121644	71746	45652	61541	202149	179882	738227
		Skilled	55451	76447	49799	33545	42280	115002	91539	668730
	2015-16	Unskilled	348822	723131	332721	197782	285074	1379996	1315409	1639864
		Semiskilled	69809	127338	73472	46531	62058	210415	188052	763385
		Skilled	52782	79515	51472	34474	43398	118842	94800	697058
	2016-17	Unskilled	320511	750123	336054	196862	288327	1427282	1363129	1652119
		Semiskilled	66650	130952	74612	46939	62835	216129	194009	782954
		Skilled	52047	81418	52615	35019	44071	121452	97307	719273
	2017-18	Unskilled	292519	781270	340674	196621	293871	1469582	1409671	1667543
		Semiskilled	63767	135122	75973	47496	64025	221733	199967	803986
		Skilled	51514	83520	53827	35639	44923	124193	99817	742040
2018-19	Unskilled	252952	812145	344611	195797	297203	1507329	1457481	1677891	
	Semiskilled	59589	139117	77146	47927	64916	226629	205753	821918	
	Skilled	50551	85543	54961	36209	45704	126645	102180	762831	
2019-20	Unskilled	212227	842479	348576	195652	297366	1557722	1508173	1690642	
	Semiskilled	55059	143151	78381	48462	65559	232788	211902	841063	
	Skilled	49318	87604	56136	36818	46452	129373	104618	784243	
2020-21	Unskilled	185922	869603	352254	194962	302084	1595497	1550817	1701572	
	Semiskilled	52364	146650	79461	48850	66486	237535	217145	858018	
	Skilled	48825	89326	57135	37310	47121	131609	106752	803231	
2021-22	Unskilled	150824	898669	356134	194535	304756	1635356	1596074	1712216	
	Semiskilled	48663	150393	80580	49290	67291	242543	222595	874859	
	Skilled	47970	91165	58171	37840	47828	133936	108905	822223	

DEMAND		District	Jaisalmer	Jalore	Jhalawar	Jhunjhunu	Jodhpur	Karauli	Kota	Nagaur	Pali
Projected Numbers	2010-11	Unskilled	153388	266712	319442	326768	614871	284980	420124	472422	360129
		Semiskilled	99641	165088	214847	194749	325535	186140	241757	282144	183849
		Skilled	43496	72066	93788	85014	142107	81256	105535	123165	80256
	2011 - 12	Unskilled	8711	17309	9054	23369	67860	12799	31207	35692	48773
		Semiskilled	9128	18137	9487	24487	71108	13411	32700	37400	51107
		Skilled	12518	24873	13011	33581	97516	18392	44844	51290	70087
	2012 - 13	Unskilled	278443	458808	590184	603956	1159152	547233	744174	883262	615731
		Semiskilled	43959	85549	83982	117465	279233	83519	160340	170561	165932
		Skilled	22871	53159	45453	77854	198637	45837	115756	108848	116156
	2013 - 14	Unskilled	281634	466240	612257	629659	1201769	560632	750369	902934	639157
		Semiskilled	44871	87919	86822	121865	291795	85962	164325	175640	173922
		Skilled	23477	54974	46808	80708	207784	47330	119915	112465	121617
	2014 - 15	Unskilled	274849	484199	609700	630419	1247917	571885	780136	907170	664843
		Semiskilled	44546	90424	86969	122866	300496	87608	168741	177539	179524
		Skilled	23640	56326	47170	82028	213833	48241	122958	114414	125439
	2015 - 16	Unskilled	279357	476185	620867	652556	1303638	587267	788347	936909	668000
		Semiskilled	45457	91192	88884	126587	312214	89965	172377	183029	183974
		Skilled	24277	57808	48448	84799	222101	49747	126925	118158	129619
	2016-17	Unskilled	286350	480394	626204	664503	1344172	597045	802620	952507	680236
		Semiskilled	46449	92587	89792	128815	321158	91556	175594	186278	188800
		Skilled	24761	59030	49104	86591	228621	50763	129878	120601	133479
	2017-18	Unskilled	284036	488334	635146	678002	1388196	609466	817992	966542	698863
		Semiskilled	46633	94443	91192	131350	330724	93470	179254	189671	194236
		Skilled	25102	60384	49928	88508	235258	51862	133076	123172	137340
	2018-19	Unskilled	286046	490787	639098	689260	1433600	621095	833824	983535	709231
		Semiskilled	47153	95664	92072	133486	339570	95186	182607	193018	198351
		Skilled	25500	61558	50628	90280	241392	52895	136024	125634	140745
2019-20	Unskilled	289919	491309	647406	704544	1475940	632448	844454	1002227	718768	
	Semiskilled	47866	96767	93367	136074	348502	96921	185614	196660	202616	
	Skilled	25945	62727	51439	92184	247654	53949	138949	128194	144221	
2020-21	Unskilled	291194	497165	653008	715355	1515484	642857	859247	1015485	732769	
	Semiskilled	48296	98202	94308	138081	356582	98485	188718	199516	206979	
	Skilled	26281	63830	52055	93746	253235	54854	141589	130322	147479	
2021-22	Unskilled	292044	500141	659346	727708	1556683	653976	872289	1031095	744082	
	Semiskilled	48690	99402	95370	140253	364756	100114	191714	202637	210972	
	Skilled	26625	64909	52745	95393	258812	55795	144257	132562	150598	

DEMAND	District	Rajsamand	Sawai Madhopur	Sikar	Sirohi	Tonk	Udaipur	Total
		2010-11	Unskilled	296601	223886	447709	231390	231071
	Semiskilled	186440	137516	271560	142383	139509	319149	7027912
	Skilled	81387	60030	118545	62155	60900	139319	3067912
2011-12	Unskilled	18639	13028	32519	16621	15054	43489	998467
	Semiskilled	19531	13652	34075	17416	15775	45570	1046246
	Skilled	26785	18722	46730	23885	21633	62494	1434811
2012-13	Unskilled	568100	394423	834494	414100	430424	896102	21705145
	Semiskilled	95928	73976	155500	75949	81801	199735	4644162
	Skilled	55015	48931	96838	45788	53837	143350	3195808
2013-14	Unskilled	601967	400785	872116	423298	429316	889286	22304047
	Semiskilled	100590	75954	161672	77912	83218	203011	4810808
	Skilled	57230	50623	100533	47163	55479	147590	3320197
2014-15	Unskilled	638428	398704	892164	437157	431000	909031	22745330
	Semiskilled	104627	76482	164775	79513	84118	207309	4909933
	Skilled	58799	51427	102577	47980	56399	151043	3399100
2015-16	Unskilled	656407	402336	916808	438654	442395	879256	23130899
	Semiskilled	107504	78012	169281	80663	86570	207451	5035368
	Skilled	60633	53030	105980	49328	58360	154499	3510436
2016-17	Unskilled	684035	404372	936393	448146	444726	867615	23499510
	Semiskilled	110881	79030	172588	81994	87656	208660	5134993
	Skilled	62183	54108	108330	50209	59497	157300	3594385
2017-18	Unskilled	713037	406208	962488	456445	447607	868071	23951622
	Semiskilled	114495	80127	176712	83439	88947	211402	5249826
	Skilled	63806	55237	110911	51211	60739	160594	3683694
2018-19	Unskilled	736870	407313	981667	463306	453649	858110	24304954
	Semiskilled	117476	81038	179940	84612	90402	212691	5344577
	Skilled	65250	56280	113229	52124	61976	163394	3764410
2019-20	Unskilled	759691	409825	1003300	469161	458475	843357	24668729
	Semiskilled	120434	82125	183503	85765	91797	213598	5444300
	Skilled	66711	57398	115664	53060	63237	166111	3847269
2020-21	Unskilled	785666	411212	1023804	477353	461356	839414	25040122
	Semiskilled	123551	82994	186734	86995	92863	215364	5536596
	Skilled	68068	58324	117755	53867	64255	168741	3920823
2021-22	Unskilled	808757	412770	1044364	483609	465968	831404	25396071
	Semiskilled	126414	83894	190000	88109	94129	216716	5627828
	Skilled	69396	59289	119912	54709	65366	171315	3994927

Projected Numbers

This report has been prepared by **Accenture**.



About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with 257,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$27.9 billion for the fiscal year ended Aug. 31, 2012. Its home page is www.accenture.com.

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