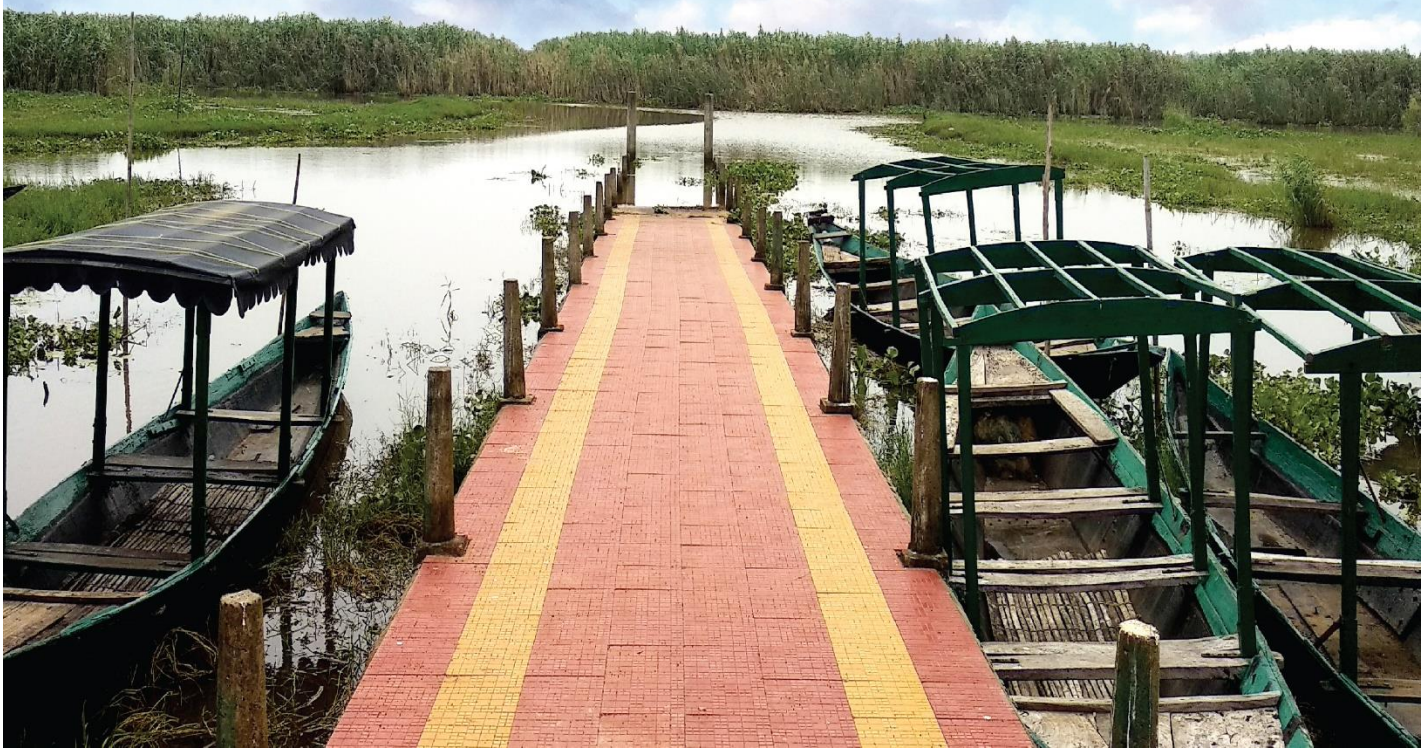
BASELINE AND NEEDS ASSESSMENT STUDY
MANGALAJODI GRAM PANCHAYAT
TANGI BLOCK, KHORDHA DISTRICT, ODISHA

--A Brief Report



SIDDHA DEVELOPMENT RESEARCH & CONSULTANCY (P) Ltd.

Contents

EXECUTIVE SUMMARY

This baseline/needs assessment report presents the background of the survey, the methodology used and the key findings weaved together from different tools used in the survey. The survey covered all the households of the 16 wards of the Mangalajodi Panchayat. The sixteen wards comprise of atleast 46.6% SC households, 37.5% general caste households, 15.5% OBC households and 0.4% ST households. Mangalajodi village of the Panchayat is the village of the fishermen community, majority of these are landless people living below poverty line.

The following qualitative and quantitative tools were used in the survey:

1. Secondary data review
2. Android based household survey tool
3. Focussed group discussion
4. Paired comparison/ranking tool
5. Visioning tool for village development
6. Key stakeholder interview

The findings from the above tools may be summarised under the following:

Issues and Challenges:

1. Mangalajodi is characterised by low access to basic services:

- ***Drinking water:*** With only 34.3% households in Mangalajodi having access to improved source of drinking water and with only 24.9% households having access to water within premises, health and wellness of people in Mangalajodi is at risk. Only few households out of these purify water before drinking and majority just use cloth to strain the water from open wells for drinking.
- ***Sanitation:*** While 71.3% households reported access to latrine within premises, there is a significant proportion of landless population that does not have access to toilet facility within premises. Besides, while ONGC has provided access to toilet facilities, behavioural change is still an important component to be worked upon.
- ***Fuel for cooking:*** Success of Ujjwala is visible in the village with atleast 60% households having LPG connections. However, firewood (80.9%) continues to remain the most popular **fuel for cooking** in the community and access to LPG through Ujjwala has not got translated into practice of using clean fuel.

2. Livelihood dependent primarily on seasonal rainfed agricultural labour and fishing leading to seasonal migration of the working age group population.

Fishing, wage labour and agriculture used to be the main source of livelihood for the people of Mangalajodi. With shrinking of the lake, restrictions imposed on the villagers for protection of migrant birds, land ownership of less than one acre by 88.3% households, wage labour becomes the obvious main source of livelihood for them and seasonal migration in search of work is common for almost all households of the GP.

3. High rate of migration of youth and people in the productive age group:

While at an aggregate level, 15.1% population were reported to have migrated out of the village, age disaggregated analysis shows high level of migration among youth, that is, 61% of the migrated population belonged to the age group 15-34 years. While 63.7% of the migrant population went outside the state and about 75% of these migrated for work, the nature of migration was reported to be mostly seasonal (73.1%). Migration outside the state was reported more among men (70.5%).

4. High proportion of population with disability

Out of the total population residing in Mangalajodi, 3.2% were reported living with some form of disability. Disability was reported higher among male population (4.2%). Disability in movement was reported as the most common form of disability among both male and female population. Access to rehabilitation programmes for people with disability was clearly missing in the Panchayat.

5. Low educational attainment and lack of aspiration for higher studies

While about one third youth reported attending school up to secondary level (32.2%), a significant proportion also reported dropping out after completing upper primary education (14.8%) and primary education (12.7%). Youth in Mangalajodi were also found to have very low aspiration for higher education. Out of the youth currently residing in the village, while majority had already dropped out after upper-primary, secondary or higher secondary, about 73.7% reported having no further educational aspiration. 'No employment opportunity' was reported as the main reason for lack of interest in pursuing higher education among youth.

6. High unemployment among youth

While unemployment was reported high among youth in general (83.7%), about 65.6% men and 96.8% women were reported unemployed in the GP. Wage labour was reported as the main occupation followed by fishing. Women were totally found missing from agriculture, business and fishing as an occupation.

7. Very low access to Technical Vocational Education

Out of the youth residing in Mangalajodi, only 9.8% (12.7% men and 7.6% women) reported access to technical/vocational education. The top five sectors of technical/vocational training reported are IT-ITeS, Apparel Made-Ups & Home Furnishing, Plumbing, Power and Automotive. Sex disaggregated analysis shows that sectors traditionally dominated by women or men continue to be sectors of priority for them in Mangalajodi.

8. Lack of awareness on skill development programmes & the different skill sectors

One of the major reasons for lack of access to the technical vocational training was revealed to be lack of awareness on the skill development programmes/schemes, the different sectors for skill development and related potential employment/entrepreneurship options. Out of the total youth interviewed in the survey, 95% reported not having heard of any scheme that provided skill training. Because of lack of awareness youth get enrolled in any available sector of skill training in the nearest ITI/Polytechnics. They do not explore options of more suitable to their aptitude that may have better prospects for them.

9. Gap between sector of training and sector of employment

Out of those who've received technical/vocational training, only 9.2% youth reported getting employed in the sector in which they received training. The sector in which people got trained and the sector in which they got employed were generally not the same for the youth in Mangalajodi. After technical education in any field the contractors help them get the job immediately. However, continuity on the job has been a challenge due to reasons like end of the contractual term and inability to cope with the hardships and demands of the job.

Opportunities:

1. Employment aspirations of youth and potential for skill development

While majority of both women and men aspire to get full time **employment after completion of their skill training**, a significantly higher percentage of women (26.8%) also wanted to opt for part-time

employment. This was also substantiated through FGDs with women SHG group members. Women shared their aspiration that if skill training was provided in a sector which helped them get engaged in part-time business, while staying at their homes, they could balance work and family better.

2. Informal training received by youth and potential for recognition of prior learning

While Mangalajodi is a village dominated by fishermen and other traditional skills such as boat making, carpentry etc, only 5.8% reported having received any informal skill training. While majority men reported informal skill training in fishing (57.4%), women reported receiving informal training in tailoring (47.4%). Besides, youth also reported being trained in family occupations of agriculture, barber, handloom, priest, astrology, construction/masonry, cooking, astrology, bamboo craft etc.

There is opportunity for building on the traditional/informal skills of the youth towards making them employable or better equipped for setting up an enterprise of their own. Some youth in the village showed interest in agriculture but didn't have modern skills to enhance productivity given the constraints of small land holdings and lack of irrigation. Skill training in agriculture and allied trades with modern techniques of processing, packaging and storage may be useful for them. Boat making, furniture making etc. too are skills available in the village that are not being taken up by the youth in absence of proper counselling and guidance. These trades could be promoted with formal training and access to better tools.

3. Unskilled youth and aspirations for formal skill training

While household survey revealed Apparel Made-Ups & Home Furnishing, Handicrafts & Carpet, IT-ITeS, Education and Textile & Handlooms as the top five sectors of skill development aspiration, the result of paired comparison tool prioritized Tourism & Hospitality, IT/ITeS, Sports, Telecom, Banking Finance Services & Insurance as the top five sectors. Besides these, Apparel Made-ups & Home furnishing, Handicrafts & Carpet, Food processing, and Healthcare were sectors prioritized more by women in the groups.

4. Skill development framework of PMKVY:

PMKVY, implemented by National Skills Development Corporation (NSDC) under the guidance of the Ministry of Skill Development and Entrepreneurship (MSDE) brings opportunity for school dropouts and unemployed youth and increase their employability or skills to enhance their incomes. The **Short Term Training courses** on 83 job roles, the Recognition of Prior Learning (RPL) trainings on 30 job roles and the **Special Projects component** of PMKVY are available for skill development of dropout and unemployed youth under potential sectors. There is, however, a strong need for counselling and orientation on the possible sectors of skilling and employability in those sectors. Youth in Mangalajodi neither are aware of the important skilling programmes nor have much idea about skilling environment and employability. The sectors traditionally dominated by women and men continue to be a priority for them. There is scope for both Short Term Training and RPL Training programmes in Mangalajodi.

5. Skill development under OSDA:

Besides the national level skill development programmes, the Government of Odisha also has a focused State level "Skilled in Odisha" programme under the OSDA. For each sector of priority identified by the youth and other stakeholders, different types of skill trainings courses are also provided under OSDA. There is opportunity to link the youth to these programmes and develop their skills. Besides, the "Nano-Unicorn" programme of OSDA also brings with it, opportunity for potential entrepreneurs in the area. Again, there is need to awareness on the different sectors of skill and related benefits among the youth for proper access and utilization of the same.

Way Forward for Skill Development:

The opportunities identified by the key stakeholders and prioritized skills by youth can be the initiation point for strengthening the livelihood base of the people of Mangalajodi. It can start with skill planning for the youth of Mangalajodi. Awareness generation on the schemes, sectors of skill development, possible job roles, benefits under the schemes, opportunity for entrepreneurship development etc need to be done on a large scale for proper utilisation of the opportunities brought by schemes of the Central as well as the State Governments. There is need for breaking the gender-based skill barrier, explore new horizons and achieve success in career options decided not based on sex but by aptitude. Skill development on unfamiliar potential areas of income generation and sustainable livelihood need to be taken up.

1. **Action Points:**

Immediate Steps (within 3 months):

a. Counselling and orientation sessions on all possible sectors of skill development and their prospects to be organised for youth of Mangalajodi
b. Information on all skill development programmes and provisions under each to be available with the Gram Panchayat Office
c. Facilitate participation of youth of Mangalajodi in Job Melas being organised by NSDC.

Short Term (3 to 6 months):

a. Awareness generation on different sectors of skill development and employability on a campaign mode to reach out to the last mile.
b. Bring the unskilled youth under skill development programmes
c. Organise skill training for women SHG members and other women members inside the village for entrepreneurship development.
d. Explore options of skill building in handicraft related to the bird sanctuary theme
e. Explore avenues of financial linkage for these groups to support the willing women entrepreneurs.

Long Term (Above 6 months to a year)

a. Create a cadre of skilled workforce among the unemployed and untrained youth of Mangalajodi
b. Promote eco-tourism as a village enterprise owned by and run by trained village entrepreneurs.
c. Investment in beautification of the Panchayat for all year tourism promotion. The funds under "Mo Adarsh Gaon" (40 lakhs as per Sarpanch) could be used for this purpose in a more planned manner.
d. Focus on infrastructure development and developing Mangalajodi as a model village for eco-tourism. This will not only help develop tourism as an all year tourism spot but with linkage to schools and colleges, it could be a place of exposure visit to a model village and village-based livelihoods.

2. **Promoting Eco-Tourism and green skills in Mangalajodi:**

The survey in Mangalajodi reveals eco-tourism as a feasible village enterprise run and owned by the trained village entrepreneurs of Mangalajodi. However, if tourism in Mangalajodi has to become a profitable trade for all, the following may be important steps in achieving this goal:

a. Conservation:

- Proper implementation of the guidelines of conservation; Notice boards at all public places to remind the commitment to the purpose
- Proper training and orientation to the community on norms of conservation and waste management.

- Clear instructions and orders for tourists and penalty for breaking the norms.

b. Study of Ornithology:

People in Mangalajodi have been observing birds since long and are mostly aware of the type of birds that come during the season. Proper training of the community on the varieties of birds visiting Mangalajodi, pictures with description of these birds at different places would help people and tourists understand the birds better. To educating the youth on the specialized science of birds, ornithology could be a potential area of skill development for them.

c. Developing Mangalajodi as a model eco-tourism destination of Odisha:

While there are three existing eco-tourism projects in Mangalajodi and one more is being developed by Government, and while Mangalajodi attracts tourists from all over the world for bird watching reaching the tourist point in the village isn't easy for a stranger. For tourists visiting Mangalajodi on day tour also, there aren't any decent facility for toilets, food joints, rest rooms etc. To develop Mangalajodi as a model eco-tourism destination of Odisha, the following would be needed:

Investment in beautification: One of the important factors in tourism is related to the overall clean and hygienic environment of the location. There is scope for investment on beautification of the Panchayat for all year tourism promotion. The funds allocated for the Panchayat under "Mo Adarsh Gaon" (40 lakhs) could be effectively used for this purpose in a more planned manner.

Investment on infrastructure of the village to ensure availability of basic services for the tourists like clean toilets and rest rooms, availability of clean and hygienic food for tourists locally and easy access to the tourist point from the main access road.

Behaviour change: Investment in infrastructure development and beautification of the village- would also need to be complemented with responsible management of the same by the villagers. Awareness generation on environment conscious lifestyle, plastic free village and village surroundings, cleanliness and proper disposal of waste would need to be integral part of the management of the 'Model village' infrastructure.

d. Promoting village-based cottage industries:

Skill development in handicraft to promote cottage industries manufacturing local souvenirs on the theme of Chilika, migrant birds and the religious places of importance around could be a profitable trade for the women's self-help groups and individuals. Linkage of these groups under finance schemes and support in marketing of the products within and outside the village with branding of Mangalajodi will be useful.

Mangalajodi **boat manufacturing** units supply boats to most of the nearby villages. Handicraft on boat/bird watching on boat could be another area of handicraft promotion enterprise. Advocacy for incentivizing these skills would create opportunities for bringing them together.

While fishing is a traditional occupation in the region promoting pisciculture and linking them with the Odisha Pisciculture Development Organisation would not only help recognize the traditional skills in the families but also provide the fishing community with income generation throughout the year and prevent migration.

Skill development in food processing, packaging and preservation could be another area that will help strengthen income generation of the local people all round the year. Entrepreneurship promotion in agri-based products, fish-based products and their packaging could create employment opportunities for local people and help check seasonal migration.

There is also scope for **skill training on apparel made-ups and home furnishing** with branding of Mangalajodi.

e. Scope for Green skills and waste management:

Promoting green skills, bio-manuring, organic farming, agri-based skills could be another area of skill development for the people of Mangalajodi. Developing skills in this sector would be a perfect blend with the eco-tourism promotion. The skills that may develop sector experts at village level in agriculture could include knowledge on soil health, crop rotation planning and farm mechanization for value edition (sorting and grading) etc. Marketing arrangement (like the demand and venue of market) can benefit them.

Green skills and waste management in the village could also help develop the village as a model village for exposure of school and college students to the green village way of life. Promoting local enterprises, local skills, locally made food and beverages in a clean environment friendly surrounding is the need of the hour especially with the increasing urbanisation and stressful work life Mangalajodi could be developed as the most preferred weekend get-away destination.

Massive plantation, as suggested by the key stakeholders in the village is required in the area for balancing the negative impacts of climate change. This will help reduce increasing heat in the area as well as help the rain-fed agricultural economy.

Lastly, the fishermen community, primarily living in Ward no 9, should be given priority in these village development and skill development activities as majority in this ward are people below poverty line. Their livelihood has traditionally been dependent on fishing and they do not have land ownership. With shrinking livelihood option in Chilika and bird conservation project, their livelihood is affected most. In promoting livelihood options for them, they should be given financial assistance.

1. INTRODUCTION

Skill pertains to the ability of a person for performing a particular task efficiently and has always been considered as one of the driving forces of social development and economic growth. Any country's economic growth is reflected by job creation and countries with higher levels and better standards of skills are likely to respond to challenges and opportunities of domestic and international job markets more effectively. Due to its significance in social development and economic growth both developing and developed countries are focusing on skilling of their population.[1]

National Skill Development Corporation (NSDC) is a one of its kind, Public Private Partnership in India. It aims to promote skill development by catalysing creation of large, quality, vocational institutions. It provides funding to build scalable vocational training initiatives. Its mandate is also to enable support systems such as quality assurance, information systems and train the trainer academies either directly or through partnerships.

The National Policy for Skill Development and Entrepreneurship, 2015 attempts to ensure skilling of the socially, geographically disadvantaged and marginalized groups across the country. Its vision statement mandates creating an ecosystem of empowerment by skilling on a large scale at speed with high standards; promoting a culture of innovation-based entrepreneurship which can generate wealth and employment for sustainable livelihoods for all.

The skill component of the policy aims to:

1. Addresses key issues in the skill landscape: low aspirational value, non-integration with formal education, lack of focus on outcomes, quality of training infrastructure and trainers, among others
2. Align supply with demand, bridge existing skill gaps, promote industry engagement, operationalise a quality assurance framework, leverage technology and promote apprenticeship to tackle the identified issues.
3. Promote equitable skilling opportunities for socially/geographically marginalised and disadvantaged groups as well as women.

To achieve these objectives, NSDC has formed the Affirmative Action division, dedicated to facilitating skill training among all these communities by understanding their unique needs and finding customized solutions. The division attempts to include diverse groups by collaborating the efforts of corporates, government, NGOs and industry leaders.

This baseline and needs assessment study in Mangalajodi Gram Panchayat of Tangi Block, Khordha District of Odisha is one such initiative of NSDC for such an integrated holistic development planning model for skill development. It is a part of the action research model that would help ensure holistic development of Mangalajodi Gram Panchayat with specific focus on Skill Training covering 100% households (HH).

1.1. The Context of Mangalajodi

Mangalajodi Panchayat with sixteen wards under Tangi block of Khordha district of Odisha, is located 75km from Bhubaneswar towards Berhampur. The Panchayat consists of nine revenue villages—Mangalajodi and Gopalpur Sasana (7 wards), Katiasahi (2 wards), Raulasahi (2 wards), Talapadapatana

[1] India Skills Report 2018, Future Skills Future Jobs sourced from http://www.in.undp.org/content/dam/india/docs/poverty/india-skills-report-2018_undp.pdf

(1 ward), Bhajagarh (2 wards) and Nuapada (2 wards), Talapada (0 HH) and Penthagada (0 HH). Characterised with a huge marshland along the northern edge of Chilika Lake, it is fresh water zone connected by channels passing through the reed beds with the brackish water of Chilika lagoon. The wetland hosts more than 3,00,000 birds during October to March and the region has been declared as an "Important Bird Area" (IBA)[2].

As per the population census 2011, the total population of Mangalajodi village, situated in Tangi block of Khordha district in Odisha was 3972. The Scheduled Caste (SC) population constitutes a major chuck of the total population at 69%, a significant part of which consists mainly of fishermen communities in Mangalajodi. Literacy rate is as low as 57.6% which is much lower than the district average of 77.7%. Male literacy rate is 57% and the female literacy is only 43%. Worker profile, as per Census 2011, is characterized by 33% employment in main or marginal works. Out of the total worker population, 90% are men. Of the male workers, 45% are main workers and 12% are marginal workers. Among women, only 4% of total female population are main workers and 2% are marginal workers.

Picture 1: Mangalajodi Gram Panchayat Map

Traditionally, the primary source of livelihood for the villagers of Mangalajodi was fishing due to its location on the banks of Chilika lake in Odisha. Country boat manufacturing units in Mangalajodi supply different types of wooden boats to government and people more than 50 nearby villages. Mangalajodi was also famous as 'poachers' village' because of the involvement of villagers in water bird poaching on a large, commercial scale. Even the eggs were not spared resulting in the census in the year 2000 counting a mere 5,000 birds in these waters[5].

As per Mangalajodi eco-tourism, Chilika Development Authority, Department Forest and Environment and many private agencies, after many years of deliberation, have managed to wean the poachers away from their trade. Hope of a sustainable and peaceful livelihood from tourism that the Mangalajodi Marshes held immense potential for has been one of the key driving forces in doing so. The villagers now monitor the bird population, co-ordinate with the forest department, assist in research and take tourists around on birding trips into the marshes.

However, absence of all year livelihood security for all through fishing and the limited development in tourism, a significant chunk of the village population is forced to migrate in search of livelihood opportunities. It has become essential to identify gaps and find possible ways of improvement of their socio-economic development which pertains to livelihood, education, health etc.

[2] http://www.mangalajodiecotourism.com/about_mangalajodi.php

Picture 2: Seafood from Chilika

In light of high rate of unemployment, high rate of migration and the national, state and district's employment and skilling related trends and needs, a comprehensive study is the need of the hour for understanding the needs as well as livelihood opportunities to implement development programs including skill development in order to boost skilling which in turn will translate into increased employment, reduced migration in short term and overall economic growth in long term.

1.2. Objective of the Study:

This study aims to identify ways of bridging the gap between supply and demand sides of workforce by trying to identify livelihood opportunities for implementing development programs including skill development while promoting women empowerment, increased work participation rate, higher literacy rate, social inclusion etc. The study will try to answer the following research questions:

- What are the livelihood opportunities available for the people of Mangalajodi?
- What are the major skill needs of the Mangalajodi gram panchayat?
- What is the level of awareness of the communities around the skill development programs like PMKVY, DDUGKY?
- What level of access does the youth of Mangalajodi to skilling programs has and how effective are these programs in enhancing youths' skills?

1.3. Scope of Work:

The study aimed to identify major needs as well as livelihood options at Mangalajodi Gram Panchayat in Odisha to implement development programmes including skill development programme. It tried to cover all relevant stakeholders both from the supply side as well as demand side. The scope of work included:

- Baseline study and need assessment of 100% households of Mangalajodi GP
- Village development plan with a focus on Skill Development for the households.

2. METHODOLOGY

This section of the report presents details of the methodology followed in doing the needs assessment and baseline survey, steps followed in preparing a roadmap for the skill development as well as village development planning in Mangalajodi.

2.1. Approach:

To capture the needs of the households in Mangalajodi, a mix of both qualitative and quantitative methodology was adopted for the study. It relied on secondary as well as primary sources of data collection:

Desk Research was undertaken with various secondary sources—academic papers, policies, reports (reports of stakeholders like National Skill Development Corporation (NSDC), Ministry of Skill Development & Entrepreneurship, Ernst & Young, International Labour Organization etc). The academic papers helped understand the correlation between skills, individual and national growth from a theoretical framework's perspective. The reports and policies informed about the ongoing employment and skill building trends from demand and supply perspective especially in Khordha district, Odisha state and India and to identify government and private stakeholders. These reviews informed the designing of the primary data collection tools.

2.2. Sampling:

The baseline aimed to cover all the households of Mangalajodi Gram Panchayat. The projected number of households for the survey in the terms of reference was approximately 1000. During the key informant interviews of elected representatives, it was revealed that the number of households in the GP as per survey done for ONGC toilets was around 1400 that may have increased by about a 100 or so. The actual number of households covered in the survey came out to be 1736 with a population of about 8016 persons in Mangalajodi gram panchayat. About four to five households refused to participate in the survey wanting not to disclose any details of their households. Similarly, out of 8016 persons, details of 9 persons could not be included due to inconsistent reporting of their details. Total households included in the survey, therefore, were 1736 with a population size of 8007 persons. This substantial increase in the scope of coverage pushed the timeline by one month. Besides, the unpredicted low pressure in the region, cyclonic depressions causing heavy rainfall over the two-month period also slowed down the actual data collection. Details of households covered in the survey has been presented in the table below:

Ward No.	Number of Households	Ward No.	Number of Households
1	74	9	108
2	82	10	106
3	90	11	98
4	114	12	84
5	122	13	74
6	129	14	138
7	133	15	118
8	155	16	111

Table 1: Households covered in the survey

2.3. Tools of data collection:

Three key primary data collection tools were designed for the study—Household survey tool, focused group discussion guidelines and semi-structured interview guidelines. These tools were informed by

not only the policy and academic documents, but also similar skill gap analysis reports and questionnaires devised by NSDC for estimating the skill gap analysis. Case studies and photographs of evidence were collected as and when available and necessary.

Type of Tool	Description of Tools	Target group	Purpose/Expected Outcomes
Quantitative	Secondary data review	-	Context of the study; Skilling environment and Market assessment
	Household Survey Tool (Android based)	Community	- Household Profile; - Demographic Profile; - Youth Profile - Access to skill training - Awareness of schemes and - Aspiration of skill training
Qualitative	Focused Group Discussion - Paired Ranking tool - Visioning tool for village development by NIRD	Community- Youth Groups, SHGs, PRI Ward members, Health Frontline workers	- Substantiate findings from household survey - Skill aspiration mapping - Prioritization of skills for skill development planning - Identifying and prioritizing village development agenda
	Key Stakeholder Interviews	- Govt. Representatives - Sarpanch - Employers - Skill provider institutions - Eco-tourism projects - School Teachers - Key informants from the village	- Understanding dynamics of the village - Market Assessment - Skill training sectors available - Skills in demand - Village development agenda - Livelihood options- potential areas of development

Table 2: Tools of data collection

2.3.1. Household survey tool:

For conducting household survey, a structured questionnaire was drafted based on the inputs gained from desk research. The questionnaire was developed, finalized in consultation with NSDC and digitized for mobile/android-based data collection. The features of the android based data capture tool may be summed up as:

- Provided online/offline capabilities
- Captured text, numbers, images, location data
- Enabled branching and skipping for data validation at source
- Supported language customization and the tool was made available in Odia language.

The household survey instrument focused on household demography, education of members, sources of livelihood, access to basic services in the village, access to formal and informal skilling of the youth, awareness on government skilling programmes, employment, migration, and aspirations mapping for skill development. Apart from these details, other household related metadata like picture of the household, GPS location, surveyor's name, date of survey etc. were also captured in the tool. The tool went through several rounds of internal testing as well as pilot testing at the field level before final roll out of data collection.

2.3.2. Focused Group Discussion:

Guidelines for focused group discussion with different stakeholders were developed to guide the FGDs. The key stakeholder groups with whom the FGDs were conducted are: Elected representatives, SHG group members, Health Frontline workers, Youth groups (Male, Female, mixed groups) etc. The findings of household survey were extensively discussed with these groups not only for validation but also to capture the perception of youth & women towards skilling and potential employment avenues. These discussions focused on understanding the livelihood options in the village, the awareness and access to skill development opportunities and prioritizing aspirations and planning for holistic development of the village.

Picture 3: Focussed Group Discussions

2.3.3. Paired comparison/ranking:

Participatory tool of paired comparison or paired ranking was used for skill development planning. This is a very effective method of decision making in situations where there are multiple options that are far apart, and it is difficult to choose the best option. The tool compares each option against all others leading to an overview that immediately shows the right decision. Skill sectors were compared against each other to prioritise the potential skill development sectors for youth (both women and men) of Mangalajodi. The sectors for paired ranking were decided based on the existing sectors of skilling in Mangalajodi, the aspired sectors of skilling as well as the key PMKVY sectors of skill development available in Odisha. The youth groups in these discussions were asked to prioritise one sector of skill development over the other presented in each pair. An analysis of this helped identify the key aspirational sectors of skill development in Mangalajodi.

2.3.4. Village development planning:

Adapted version of '*Dream village analysis format*' developed by National Institute of Rural Development and Panchayati Raj (NIRD) was used for visioning exercise with the youth. This primarily focussed on their vision of a developed Mangalajodi village in the coming decade or so. Different components of development were covered to assess the present condition and against each identifying the ideal condition that would demonstrate development of Mangalajodi. The key areas of development covered are—infrastructure, health, education, livelihoods and agriculture, markets, sanitation and environment, roads and transport, electricity, irrigation, food security, status of girls and women, status of disadvantaged sections (SC, ST, people with disability), and status of elderly/widows/destitute. The proposed village development plan would need to include the suggestions received against each of these key development areas.

2.3.5. In-depth interviews:

Semi-structured interview tool for in-depth interview of community representatives, government and private stakeholders (Government officials, Employers, Educational Institutions, PRI representatives, School Teachers etc.) was also designed for collecting information from different sources to inform and corroborate the findings of the survey. Government officials, training centres, educational institutes and sector specific industries were interviewed for getting a comprehensive idea about employment and skilling as well as for exploring various types of challenges and opportunities both from demand and supply's perspective. At community level, key stakeholders like sarpanch, ward members, village leaders, SHG leaders, anganwadi workers, health workers, school teachers were also interviewed for more holistic understanding of the needs and challenges related to employment and skilling. Details of the stakeholders interviewed are attached in annexure 2.

2.4. Selection and training of research investigators:

Ten research investigators and one local research coordinator were hired from Mangalajodi Gram Panchayat and trained on data collection on the household survey instrument using mobile application. Hiring local investigators was a part of the strategy to build skills locally and develop a cadre of youth research investigators who would be oriented on social development issues and planning. Robust training and orientation into the social development paradigm was followed through multiple rounds of formal as well as informal handholding training support.

The first round of one full day formal training was provided at SDRC office in Bhubaneswar. At the end of the training programme, the participants were expected to have developed a shared understanding on the topics covered. The agenda of the training attempted to cover the following:

- Introduction to social change agenda within social development sector
- Understanding of survey context and background- introducing NSDC and why this skill survey
- Issues of quality and ethics
- Understanding of the survey instrument
- How to use Android tools for data capture
- Hands-on-experience of mock survey.

Followed by this orientation and mock data collection, after one day's gap, the team sat at Puja Committee centre. The team reviewed each question to doubly ensure shared understanding of the tool. This was followed by pilot round of data collection which was reviewed in presence of SDRC representatives in the evening. The doubts were clarified to reduce scope of misinterpretations in household interviews, explanations offered to demonstrate explaining of questions to the household members. Input was given to them to make them understand difference between probing and leading question. The pilot phase of data collection was done for one week and tabulations were generated based on the pilot data. The first round of data collection, tabulations and feedback from investigators helped improve the survey instrument and necessary changes were made in the household survey tool. A dedicated team of 8 members from SDRC was appointed temporarily at Panchayat level for providing handholding support to the data collectors during data collection exercise.

Besides being available for support to the research investigators at the field level, the SDRC team carried out the FGDs and interviews parallelly with different stakeholders for analysing the demand and supply situation with reference to the skill environment at Mangalajodi.

Picture 4: 2nd round training of investigators in field

2.5. Data analysis:

The android-based household survey tool was designed using ODK platform with inbuilt constraints, validations and data consistency checks. The output generated from the system was a CSV raw data file that was run through programming to convert the raw data into decoded excel format. The excel data was then used in SPSS to generate tables for analysis. Charts were created using these tables in excel.

The analysis of data was done in two sections—demographic profile of households and youth profile. The household profile covered the details of the household demography while the youth profile section covered the access to skill and youth aspirations.

Analysis from different participatory tools—FGDs and key stakeholder interviews have been weaved into findings and analysis as and when necessary to substantiate the findings from the household survey tool as well as to come up with appropriate recommendations for village development planning as well as skill development planning.

2.6. Limitations:

The study was initiated in the month of July 2018 which is peak monsoon time in Odisha. The data collection and timeline for the study was impacted by the following:

1. The timeline was prepared keeping in mind approximately 1000 households in the Gram Panchayat. The actual number of households covered in the survey turned up to be 1736.
2. Heavy rains during the months of August-September slowed down the household level data collection and focussed group discussions.
3. Odisha also experienced extended monsoons with a series of low-pressure depressions and heavy rainfall upto the month of October.
4. Local festivals – Ganesh Puja, Vishwakarma Puja, Durga Puja and leave of field investigators during this time
5. Odisha also experienced Cyclone- Titli during October.
6. Skill training information of youth not available in the village at the time of data collection has not been included in the analysis.

3. FINDINGS AND ANALYSIS

This section of the report deals with findings from all the tools of data collection compiled together to present comprehensive analysis in one section. The analysis covers all the key aspects of the supply side i.e. basic demographic details of households, population profile, youth profile, their education, vocational/technical training, livelihood, awareness on skill development programmes and aspiration for skill development. Findings from FGDs and key stakeholder interviews have been weaved in as and when applicable to corroborate and strengthen the findings from household survey tool and vice-versa. It presents the analysis of both the demand side as well as the supply side for a comprehensive picture of the context.

3.1. Household Profile:

The survey aimed to cover all the households of the panchayat in the present baseline and needs assessment study. Except for the four-five households who refused to participate in the survey, all the households have been covered from all the wards. Complying to the ethics of consent and data sharing, the identity of these households will not be revealed and no reference to these households will be made in the findings. The household characteristics have been presented in table 3.

Figure 1 presents the **structure of the households** in Mangalajodi. The chart shows that more than 70 percent of households live either in pucca and semi pucca houses indicating that majority of households have favourable housing conditions. Many of the houses that have benefitted from Indira Awas Yojana or other housing schemes have chosen tin or asbestos roofing due to lack of adequate funding for concrete roofing. However, there are still more than one-fourth of the houses in the village that are still kachcha houses.

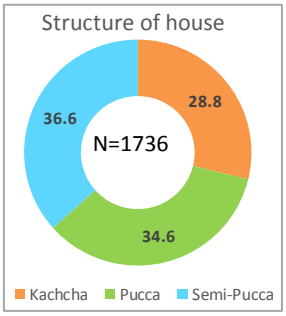


Figure 1: Household Structure

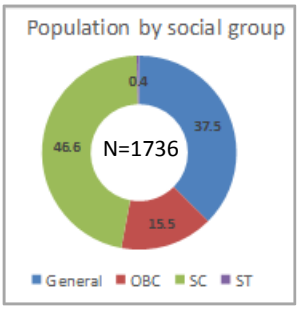


Figure 2: Population by social group

The **social group wise distribution** of the households shows that while Census 2011 data reported 34.5% SC population for the Panchayat (09 revenue villages combined), the survey reported 46.6% SC population in Mangalajodi Panchayat. General castes constitute the

Indicator	Data (%)
Households by social group	
SC	44.5
General	38.4
OBC	16.6
ST	.5
Religion	
Hindu	99.8
Muslim	.2
Structure of households	
Semi-Pucca	36.6
Pucca	34.6
Kachcha	28.8
Main source of drinking water (Multiple Response)	
Uncovered well	61.8
Handpump/Tubewell/ Borewell	31.4
Covered well	13.3
Tap	4.5
Other	.1
Location of the main source of drinking water	
Near premises (within 500m)	68.5
Within premises	24.9
Away from premises (more than 500m)	6.6
Access to toilet	
Exclusive latrine within premises	68.7
Not available within premises	28.7
Shared latrine within premises	1.5
Shared latrine outside premises	1.1
Access to source of lighting	
Electricity	92.9
Kerosene	6.5
Any other	.6
Other oil	.1
Cooking fuel sources	
Firewood	80.9
LPG	59.6
Kerosene	6.9
Cow dung cake	2.2
Crop residue	.2
Coal or Charcoal	.1
Any other	.1
Type of LPG connection	
Ujjwala	36.9
Private	62.2
Both	.9

Table 3: Household Profile

second highest representation by social group category (figure 2). Except for three Muslim households out of these, all households (99.8%) were reported to be Hindu households. Only eight Scheduled Tribes households were found in the village.

3.1.1. Access to basic services:

Odisha has a "State Water Policy" since 2007 that keeps allocation of **drinking water** and water for domestic use (human and animal consumption) at the top of priority. Despite this, according to NFHS 4 report[3], 88.8% households in Odisha and 84.6% households in Khordha (only 72.8% rural households in Khordha) have access to improved source[4] of drinking water. Less than one third households in Odisha have access to drinking water within premises. Out of 89% households in Odisha using an improved source of drinking water, only one-tenth of the households have water piped into their dwelling, yard, or plot; only 21% treat their drinking water to make it potable (mostly strain through cloth or boiling).

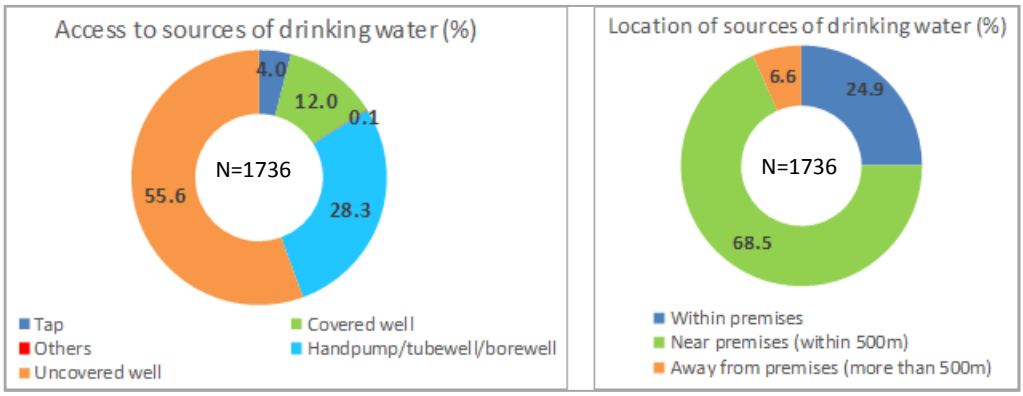


Figure 3: Access to safe drinking water

Figure 3 clearly shows lack of access to safe drinking water in Mangalajodi. Only 34.3% households reported access to tap, covered well and handpump/tubewell/borewell as source of drinking water. Majority of the households reported using uncovered well as source of drinking water. Besides while approximately one third households in Odisha have access to drinking water within premises, in Mangalajodi only 24.9% households reported access to drinking water within premises. Majority reported access within 500 meters of their households. Purification by boiling is practiced by some selected households but not significant enough to be reported in percentage. Such type of drinking water practice reveals a big challenge in terms of public health as drinking from uncovered well increases the possibility of suffering from water borne diseases.

Picture 5: Sources of drinking water in Mangalajodi

[3] National Family Health Survey- IV (2015-16), Ministry of Health and Family Welfare, Govt. of India

[4] Improved source of drinking water- Piped water into dwelling/yard/plot, public tap/standpipe, tube well or borehole, protected dug well, protected spring, rainwater, community RO plant.

National Family Health Survey 4 (2015-16) reported only 29.4% households with access to improved sanitation facility exclusively for the households in Odisha. The same for Khordha was reported as 47%. With ONGC's intervention in Mangalajodi, all the households were targeted to be provided with toilet facility. However, within this period, there has been a significant increase in the number of households. Some households reported not having access to toilet within their premises or having shared toilets with other households (mostly within family). More than one fourth of households still reported not having access to toilets within their premises (figure 4).

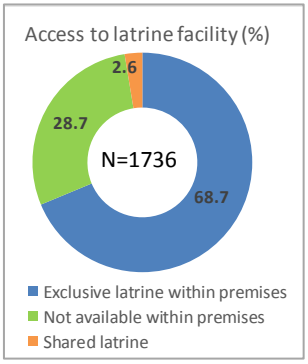


Figure 4: Access to toilets

Electricity was reported as main **source of lighting** by 92.9% of households in Mangalajodi, as shown in figure 5. Almost all the households have electricity connection and the other sources that were reported as source of lighting were reported primarily as back up sources in case of light failures. These additional sources were kerosene, other oils, candles etc. Access to electricity was reported by almost all the households covered in the survey.

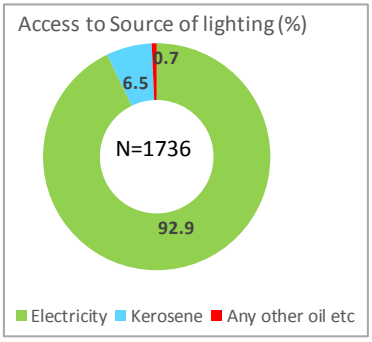


Figure 5: Sources of lighting

As per NFHS-4 report (2015-16), less than one-fifth of households (19%) in Odisha use clean fuel for cooking and only 17.3% households have access to LPG connections. Khordha, on the other hand reported better access to clean fuel with more than 46% households using clean fuel for cooking. Mangalajodi, in the survey, reported better access to clean fuel with atleast 59.6% households with access to LPG connections (figure 6).

It's worthwhile noting the fact that out of these 1035 households having gas connections (figure 7), 62.2% have Ujjwala connections and 36.9% have private LPG connections. Another 1% have access to both Ujjwala and private LPG connections. This shows that while Ujjwala scheme has given access to clean cooking fuel to majority of the households, behavioural change is still questionable. There is over dependence on solid fuels for cooking despite access to improved fuel. Success of Ujjwala would be realized if access gets translated into practice.

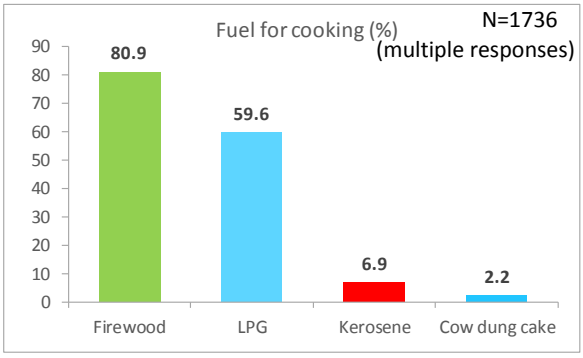


Figure 6: Fuel for cooking

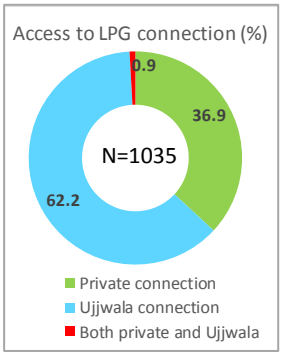


Figure 7: Type of LPG connection

It is also important to note that while LPG has been made accessible to about 60% households through schemes like Ujjwala, firewood (80.9%) continues to remain the most popular fuel for cooking in the community. Further probing into the high usage of firewood despite access to LPG revealed that LPG is much expensive compared to firewood or dry leaves. LPG is mostly used by young female members

and in case of quick necessities. Cooking rice and dal takes much time and women prefer to use firewood to save LPG cost.

3.1.2. Land ownership:

Analysis of the land ownership pattern in Mangalajodi shows that 56.7% households reported owning some or the other type of land—agricultural land, homestead land, government plot, pasture land, mango orchard etc. No land ownership was reported by 43% households. The type of land ownership has been presented in table 4.

The chart below shows that out of the 985 households that reported owning some land, majority reported owning homestead land (64.5%). Only 35% households reported owning agricultural land (420 households). Out of the households that reported owning agricultural land, about 50% reported owing less than 0.5 acres of land. Another 39% reported owning 0.5 to 1-acre land. Only 11.6% households reported owning more than one-acre land. This finding related to agricultural land holding resonates with the pattern observed for Khordha as a district where majority of agricultural land owners have landholding of less than one acre.

Household having land ownership	
Yes	56.7
No	43.3
Type of land owned (Multiple Response)	
Homestead land	64.5
Agricultural land	35.0
Others	0.5
Area of agricultural land owned	
Below 0.5 acres	49.5
0.5 -1 acres	38.8
1 - 2 acres	9.0
2 - 5 acres	2.6
Source of livelihood (Multiple response)	
Other IGA	2.7
Horticulture	0.3
Forest Produce	0.5
Animal Husbandry	0.7
Priest	0.9
Driving	1.7
Pension Holder	2.8
Government Service	3.7
Business	4.3
Shop/kiosk/petty vending	4.5
Private Service	7.4
Agriculture	10.9
Fishing	16.7
Wage labour	43.1

Table 4: Land ownership and sources of livelihood

3.1.3. Source of livelihood:

The main sources of livelihood presented in figure 8 show that wage labour (44.3%) is the main source of livelihood for majority of the households in Mangalajodi followed by fishing (17.1%). Wage labour includes agricultural labour as well as construction labour. Agriculture is the third most important source of livelihood. The small size of agricultural land holdings presented above justifies the reason for agriculture being the third important source. Private service, small petty vending, business and government service together were sources of livelihood for 20% households.

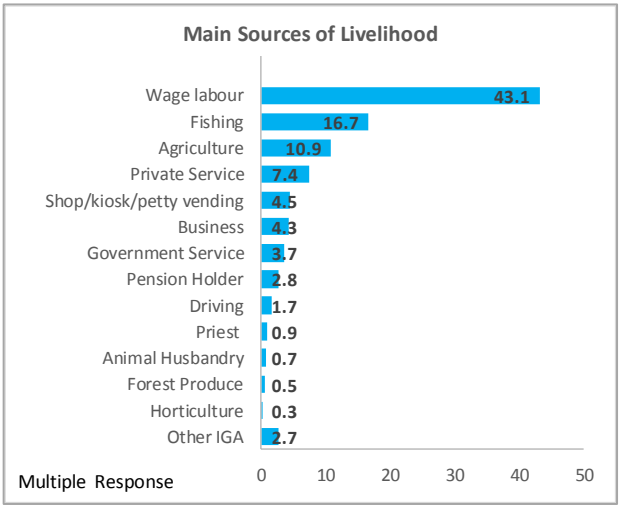


Figure 8: Sources of livelihood

Out of 1736 households surveyed, 88.9% reported depending on only one source of livelihood in which wage labour, fishing and agriculture were still the most important source.

"If we don't work every day, we'll not be able to get our meals for that day"
"Birds and cattle destroy the crops". *(Source: FGD)*

Fishermen community and Chilika: a dying relationship through eyes of Mahar Behera

Shri Mahara Behera, an old fisherman, 85 years of age narrated the history of the dependency of the fishermen community on Chilika. With sparkle in his eyes he listed many varieties of fishes that they used to catch in their times and now are rarely seen in Chilika. Some of these in the local language are— *Khainka, Bekata, Rohi, Dangara, Kabala, Ilisi, Khoranta, Kundala machha, Danti machha, Sabala machha etc*. The size of many of these used to be very big and enough for many at a time. Bekata found in Chilika, for example, used to be around 10-15 kgs in weight. He narrated that when they used to go for fishing, they didn't need rice for lunch; they just used to bake the fishes in sand *(Balipoda)* and eat; it used to be enough for the day. Crabs in those days were disposed or sold just for rupees five or so.

It was interesting to listen to his belief in Goddess of Chilika, *Maa Kali Jai*. During low pressures, no matter what the speed of the wind was, they just used to pray to Goddess *Maa Kali Jai* and look for a light on the *Kali Jai* island. The moment they saw a light on the top of Kali Jai island, they would know that they were safe, and the goddess would protect them. He tells that new generations do not believe in these stories but people of his generation and above have lived these as realities. They offered their best catch to the Goddess in her praise after the rescue and she was always there to protect them. Neither did they disturb the nature, nor did the nature disturb their lives. With middlemen coming in with greed of trade and money, the whole eco-system got disturbed. The mother nature that provided enough for the communities around Chilika, has now started punishing them. The business communities brought with them smaller size nets that caught the seeds, other fish varieties that were of no value to them. These were thrown away as the fishermen community also did not eat them.

With decrease in the varieties of fish as well as other people coming into the trade, fishing no more was a viable trade for the community and people were forced to think of alternatives. The new generation fishermen population are not even interested in learning how to hold the net. Shri. Behera's own children and gran children have opted for other sources of livelihood. Only one of his sons is still engaged in fishing but it is not the main source anymore.

The survey also attempted to capture the income from each source of livelihood (as reported by the key respondents). It is important to note that the households were generally hesitant to disclose their incomes. It is only through probing on the different sources of income and the earnings from them that majority households reported the income that is presented in table 5. The table presents different ranges of income groups for different sources of livelihood in Mangalajodi Panchayat. It is evident from the table that majority of the households earn between Rs.30,000 to Rs.50,000 per annum (36%) followed by Rs.50,000 to Rs. one lakh (22.1%) and Rs.10,000 to 30,000 (20.3%). Income from agriculture was reported by majority of the households within the range of Rs.10,000 to 30,000. It was also noticed that the production from agriculture or similar sources that are for consumption purpose are generally not considered as income and may have been skipped from reporting deliberately by the respondents. Some respondents were also hesitant from reporting their income with the concern for tax implications. Annual income of above rupees two lakh was reported by majority households whose source of livelihood was government service or pension. Some households depending on forest produce, private service, business and fishing also reported income above rupees two lakh per annum.

The table also shows that out of the households with main source of income as government service, only 30.3% households reported income below rupees one lakh per annum. These households are better off with more than 2/3rd households earning above one to two lakh a year. For private service and carpentry, more than 50% households reported income above Rs.50,000 per annum. In all other sources of livelihood more than half of the households reported earning less than Rs.50,000 per annum. About ninety percent of these families reported annual income below rupees one lakh.

Sources of income	Income in INR per annum						
	Below 10,000	10000-30000	30001-50000	50001-1 lakh	Above 1 lakh	Cant Say	Total
Agriculture	7.1	55.6	26.5	10.2	0.0	0.5	100.0
Horticulture	40.0	40.0	20.0	0.0	0.0	0.0	100.0
Wage labour	4.5	31.9	38.8	22.5	1.9	0.4	100.0
Forest Produce	11.1	0.0	44.4	22.2	11.1	11.1	100.0
Animal Husbandry	23.1	7.7	53.8	7.7	0.0	7.7	100.0
Fishing	3.3	21.3	45.2	26.9	3.3	0.0	100.0
Government Service	0.0	7.6	3.0	19.7	69.7	0.0	100.0
Private Service	1.5	9.8	31.6	37.6	18.0	1.5	100.0
Shop or kiosk or petty vending	3.7	29.6	49.4	11.1	6.2	0.0	100.0
Business	2.6	21.8	30.8	29.5	14.1	1.3	100.0
Pension Holder	36.0	12.0	8.0	6.0	38.0	0.0	100.0
Driving	3.2	25.8	22.6	35.5	6.5	6.5	100.0
Priest	6.3	0.0	81.3	12.5	0.0	0.0	100.0
Carpenter	6.7	6.7	33.3	40.0	6.7	6.7	100.0
Other IGAs	12.1	39.4	33.3	9.1	3.0	3.0	100.0
Total	**5.4**	**28.3**	**36.0**	**22.1**	**7.5**	**0.7**	**100.0**

Table 5: Distribution of income by type of income source

3.2. Population Profile:

This section of the report deals with the socio-economic profile of the population in Mangalajodi. For detailed skill needs assessment and aspiration mapping, the section is divided into three parts—child population, youth population and population above 34 years. Information on youth (population between 15-34 years), disability and migration in the village will be presented separately for an in-depth issue-based analysis. The section will not only have details of the educational profile, access to vocational/technical training, employment etc but will also try to understand the aspiration of the population in these age groups for a better skill development planning.

As per the census conducted, the aggregate population of Mangalajodi gram panchayat stands at 8007 out of which 3867 (48.3%) are female and 4140 (51.7%) are male. The sex ratio is slightly tilted in favour of men with 934 females per thousand males which is less than Census 2011 sex ratio of 937 females per thousand males. This is also much lower than the rural average for the Tangi block and the Khordha district (959 females per thousand males each for rural Tangi sub-district and rural Khordha district as per Census 2011).

Out of 8007 persons in the households included in the survey, 15.1% (1207 persons) have migrated out of the village. Only 84.9% of the population (6800) are presently residing in the village. As discussed above, the details of the migrated population will be dealt with separately in the following sections.

3.2.1. Population by age, sex and location of stay:

Location-wise analysis of the population at an aggregate level and by age also shows clearly that out of the total population of Mangalajodi, while at an aggregate level, 15.1% have migrated out of the village (seasonal and permanent included), maximum migration has happened in the youth

population. The distribution of population by location of stay and age categories has been presented in figure 9.

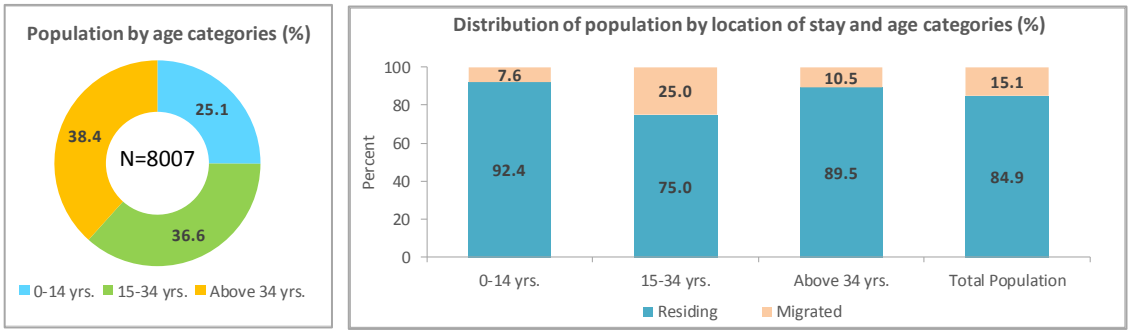


Figure 9: Age-wise distribution of population and migration across age categories

Mangalajodi gram panchayat is home for 65.5% (5243) population belonging to working age group (15-59 years). **The distribution of population by age** group category has been shown in table 6.

Population	Residing in village			Migrated out of village			Total Population		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Chidlren (0-14 years)	25.7	29.1	27.3	21.2	10.4	12.7	25.4	24.8	25.1
Youth (15-34 years)	35.0	29.3	32.3	56.1	61.8	60.6	36.4	36.7	36.6
Above 34 years	39.3	41.6	40.4	22.7	27.8	26.8	38.2	38.5	38.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table 6: Age-wise distribution of population

The table above shows that out of the total population of 8007 persons (residing + migrated), around 36.6% (2928 persons) population are youth (15-34 years) and another significant 38.4% population are above 34 years of age. About one fourth of the population is below 15 years (2008 children). Out of the total child population in Mangalajodi, majority (38.9%) were reported to be in the age group 10-14 years.

In the population residing in the village, majority (both women and men) are above 34 years of age followed by youth and children. An analysis of the migrated population shows that majority in this category are youth (60.6%), both at an aggregate level as well as among women and men. These people have mostly migrated either in search of employment, or for education or other reasons which primarily includes family reasons (mostly for women). The reasons for migration in detail have been discussed in the following section on migration profile.

Distribution of population by sex across the different age group categories has been presented in table 7. The table shows that male-female ratio at an aggregate level across all age group categories is almost similar with a greater number of male members than female members across all categories. While male-female ratio of Mangalajodi is tilted slightly in favour of men, that is, with 51.7% men and 48.3% women, the distribution of population by sex by location shows that in the migrated population of 1207 persons, 78.9% (952) are men. More women (53.1%) are residing in Mangalajodi at present than men (46.9%) as more men have migrated out. This trend is similar across all age group categories but more obvious in the youth group.

Population	Population residing in the village			Migrated Population			Total Population		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Chidlren (0-14 years)	50.0	50.0	100.0	35.3	64.7	100.0	48.9	51.1	100.0
Youth (15-34 years)	57.5	42.5	100.0	19.6	80.4	100.0	48.1	51.9	100.0
Above 34 years	51.7	48.3	100.0	18.0	82.0	100.0	48.2	51.8	100.0
Total	**53.1**	**46.9**	**100**	**21.1**	**78.9**	**100.0**	**48.3**	**51.7**	**100.0**

Table 7: Age-wise distribution of population by sex

3.2.2. Disability Profile:

The disability profile of Mangalajodi presented in table 8 shows that while at an aggregate level, the percentage of population with disability is reported slightly below the state average of 3%, it is slightly higher than the district average of 2.8% of Khordha. The table clearly shows more disability among population residing in the village (3.2%) than the migrated population (1.3%). Further analysis of the age and sex-wise disaggregated data shows clear difference in disability by age and sex.

Diability among	Residing in village			Migrated out of village			Total Population		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Chidlren (0-14 years)	1.4	2.8	2.1	1.9	3.0	2.6	1.4	2.8	2.1
Youth (15-34 years)	1.5	3.3	2.3	1.4	1.0	1.1	1.5	2.4	2.0
Above 34 years	3.8	5.8	4.8	3.4	0.8	1.2	3.8	5.0	4.4
Total	**2.4**	**4.2**	**3.2**	**2.0**	**1.2**	**1.3**	**2.4**	**3.5**	**2.9**

Table 8: Age-wise distribution of people with disability

Sex disaggregated analysis at an aggregate level shows more male population with disability (3.5%) compared to female population with disability (2.4%). Similar trend was observed among population residing in the village—male population with disability was reported as 4.2% compared to 2.4% female population with disability. Among migrated population, more female population was reported with disability (2%) compared to male population (1.2%).

Age-wise analysis of disability profile shows that population with disability was reported highest in people above 34 years of age (4.4%) at an aggregate level and among people residing in the village (4.8%). Among the migrated population, it was reported highest in children below 15 years (2.6%). The data also shows that across all age groups while disability was reported higher among male population at an aggregate level, male population residing in the village and migrated children below 15 years, it was reported slightly higher among migrated female youth and migrated women above

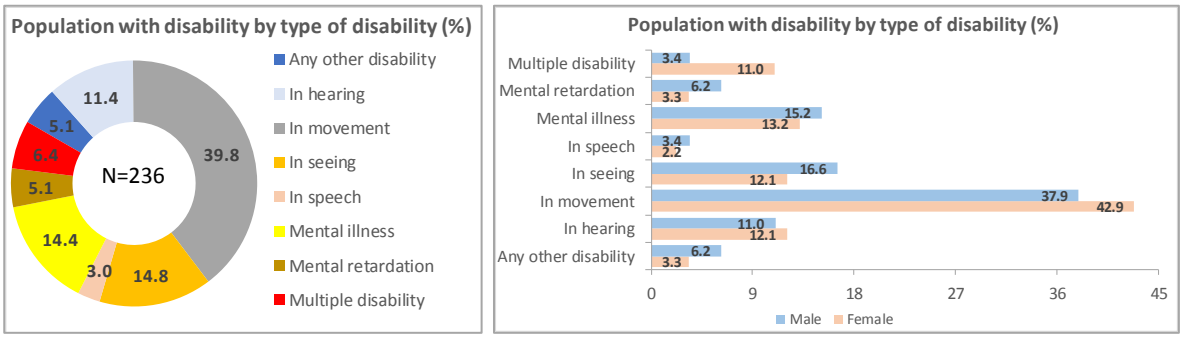


Figure 10: People with disability by type and disability disaggregated by sex

34 years of age. Disability among men above 34 years was reported 5.8% among people residing in the village.

Lack of community-based rehabilitation for people with disabilities:

Tiki, a 7-year-old boy in Mangalajodi, was born with partial visual impairment and has not been able to access any treatment till now. Although he goes to school and studies in class II, his condition and orientation has taught him to ask for money from any stranger he meets. Every time he met the members of the research team, the first thing he says is, "Paisa diya (Give money)". No community-based rehabilitation programme has been undertaken in the Panchayat for people with disabilities.

Analysis of the population with disability by **type of disability** has been presented in figure 10. Out of the total 236 persons with disability, majority reported disability in movement followed by disability in seeing, mental illness and disability in hearing. Sex disaggregated analysis of the data shows that while disability in movement (42.9%), disability in hearing (12.1%) and multiple disability (11%)was reported higher in female population, disability in seeing (16.6%), mental illness (15.2%), disability in hearing (11%), mental retardation (6.2%), any other disability (6.2%) and disability in speech (3.4%) was reported higher among male population.

3.2.3. Migration Profile:

As discussed in the population profile section, 15.1% population of Mangalajodi were reported migrated either on a seasonal basis or on a permanent basis. Age-wise migration was also discussed in the previous section. Figure 11 presents distribution of the migrated population by age. The chart shows that out of the total migrated population, 12.7% are children below 15 years, 60.6% are youth between 15-34 years and 26.8% are people above 34 years of age. This section will deal with the migration profile in detail.

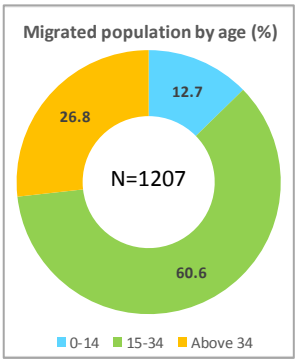


Figure 11: Migrated population by age

Analysis of **place of migration** shows that majority of the migrated population has migrated out of the state (63.7%) as shown in figure 12. Sex disaggregated analysis of place of migration shows that while at an aggregate level majority reported migrating out of state (mostly to Gujarat), this migration was reported more for men (70.5%). The remaining migrated men reported migrating to other districts (15.2%) and within district (12.5%). Women's migration to other states was reported less than half (34.8%) compared to men's migration.

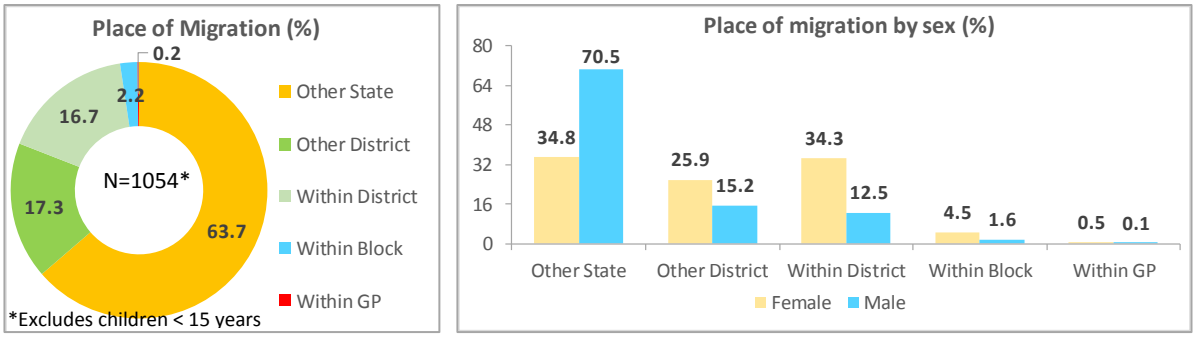


Figure 12: Place of migration

Places of migration reported higher by women are within district (34.3%), other districts (25.9%) and within block (4.5%).

Nature of migration	Female	Male	Total
Permanent	34.5	25.4	26.9
Seasonal	65.5	74.6	73.1

Table 9: Nature of Migration

Analysis of data on nature of migration (table 9) shows that out of the 923 persons who migrated either for job or other reasons, 73.1% migrated only on a seasonal basis. Permanent migration was reported by 26.9% population. Population migrating for studies have been excluded from this analysis.

Reason for migration presented in table 10 shows that while at an aggregate level out of the 731 migrated youth, majority (71%) migrated from the village for job, migration for job was more common among men (83.3%). Among women, the main reason for migration was reported as other reasons (42.7%). Among the 'other reasons for migration' the main reason reported was 'family reasons' for 98.4% women and 60% men. Other reasons for migration also included 'search of job'. Similarly, among migrated population above 34 years of age, the main reason for migration was reported as job (84.2%) followed by other reasons (15.8%). While job was reported more by men (97.4%) than women (24.1%) as reason for migration, 75.9% women reported other reasons for migration. "Other reasons' for women in this age group also included 'family reasons', that is, migration with the spouse.

Purpose of Migration			
Indicator	**Female**	**Male**	**Total**
Youth (15-34 years)			
Job	20.3	83.3	71.0
Other	42.7	3.4	11.1
Study	37.1	13.3	17.9
Total Youth (15-34 years)	**100.0**	**100.0**	**100.0**
Population above 34 years			
Job	24.1	97.4	84.2
Other	75.9	2.6	15.8
Total population above 34 years	**100.0**	**100.0**	**100.0**
Total Migrated Population			
Job	21.4	87.7	75.0
Other	52.2	3.2	12.5
Study	26.4	9.1	12.4
Total Migrated Population	**100.0**	**100.0**	**100.0**

Table 10: Purpose of migration

Out of the population who migrated for job (presented in figure 13), 39.9% were employed as wage labourers (daily wage labourers and contractual labourers together) followed by private service (37.3%). Employment options reported by women were primarily private service (53.5%) followed by daily wage labour (23.3%), government service (18.6%) and other jobs. Among men, daily wage labour was reported highest (40.8%) followed by private service (36.4%) and contractual labour (10.6%). Contractual labour and business were not reported by women at all. For men, other jobs included art work, carpentry, driving, fishing, contractor and tuition while for women fishing and tuition were the reported other jobs.

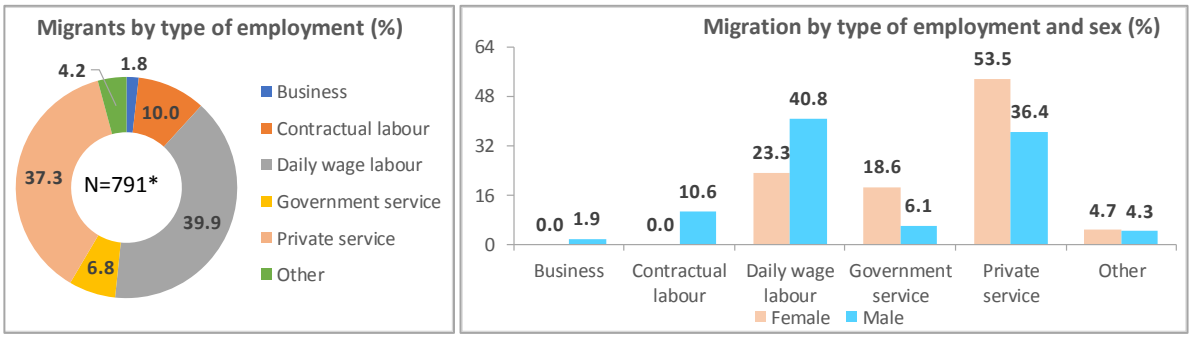


Figure 13: Type of employment and employment by sex among migrant population

Migration for study was reported only by 131 youth. Out of those who had migrated for educational/training courses (17.9%), the analysis of the **type of courses** shows that at an aggregate

level, graduation was reported to be the most important course for which youth had migrated. Figure 14 presents sex disaggregated analysis of migration for courses. It shows that majority of boys (37.2%) migrated to get enrolled in ITI/Polytechnic/Vocational training. Graduation (technical or non-technical) was reported more among girls migrating for study. More than a quarter of youth also migrated for intermediate courses. Intermediate and graduation courses were reported more for girls and ITI courses along with graduation seems preferred choice for boys.

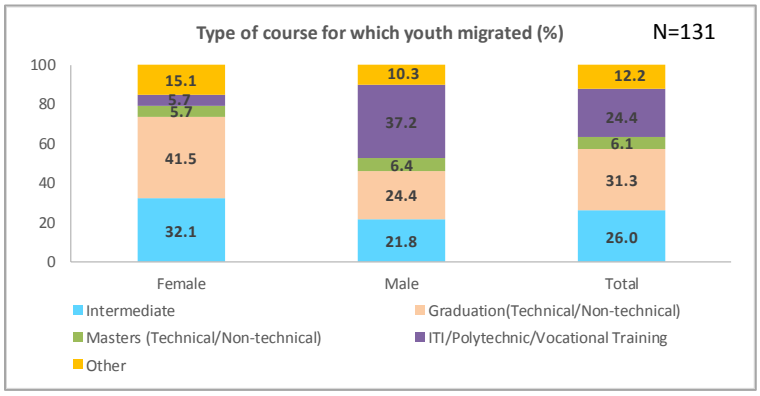


Figure 14: Migration among youth for type of courses by sex

On access to **vocational/technical training,** it was reported that only 6.4% migrated population (67 persons) had received such trainings. While 89.2% reported that they had not received any vocational/technical training, for 4.5% migrated population who were not available for interview, the key respondent was not able to tell whether the person had received any training or not. Vocational/technical training among migrant population was reported more among women than men (figure 15).

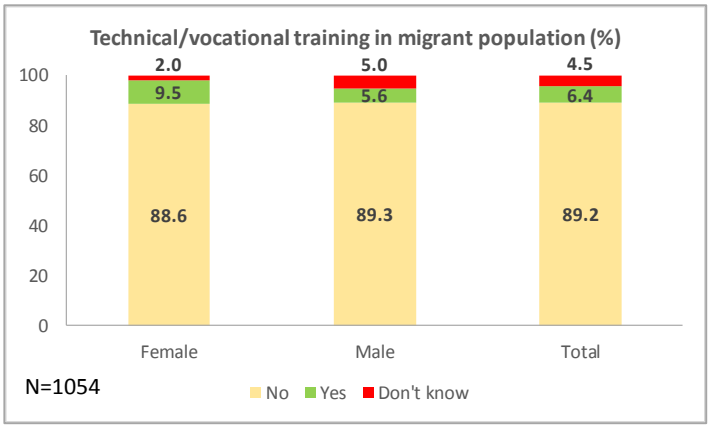


Figure 15: Access to technical vocational training in migrant population

Picture 6: Boat manufacturing at Mangalajodi

Sector of technical/vocational training	Female	Male	Total
Apparel Made-Ups & Home Furnishing	5.3	2.1	3.0
Automotive	0.0	18.8	13.4
Banking, Financial services and Insurance (BFSI)	5.3	2.1	3.0
Don't know	0.0	2.1	1.5
Education	10.5	2.1	4.5
Electronics	5.3	2.1	3.0
Healthcare	21.1	0.0	6.0
IT-ITeS	42.1	31.3	34.3
Others	0.0	4.2	3.0
Plumbing	0.0	12.5	9.0
Power	5.3	14.6	11.9
Security	0.0	2.1	1.5
Sports, Physical Education, Fitness & Leisure	0.0	2.1	1.5
Tourism & Hospitality	0.0	2.1	1.5
Don't know	5.3	2.1	3.0
Total	**100.0**	**100.0**	**100.0**

Table 11: Sector of technical/vocational training for migrant population

Out of the 6.4% migrant population who received some vocational/technical training, majority were trained in IT/ITeS (34.3%) skills. Table 11 shows that while IT-ITeS (31.3%), automotive (14.6%), power (14.6%) and plumbing (12.5%) were key sectors of training for men, for women, IT-ITeS, referring mostly to diploma in computer application (42.1%), Healthcare (21.1%) and Education (10.5%) were reported as the key sectors of training. While none of the women had received any training in automotive, plumbing, security, tourism/hospitality and sports, physical education, fitness & leisure sectors, men had not undertaken any training on healthcare.

All male migrants who reported having received some skill training had not received the training under any skill training scheme of the government. Only 5.3% women (1 woman) reported having received the training under Deen Dayal Upadhyay Gramin Kaushal Yojana (DUGKY) scheme. Figure 16 shows poor awareness and access to the government skilling programmes/schemes among the migrant population of Mangalajodi. During the FGDs, when this question was further probed, it was revealed that even if people would have enrolled under any scheme, they may not have been aware of the scheme name but only the person/institution that would have facilitated the training. This may be one of the reasons for low reporting on enrolment under any government scheme/programme.

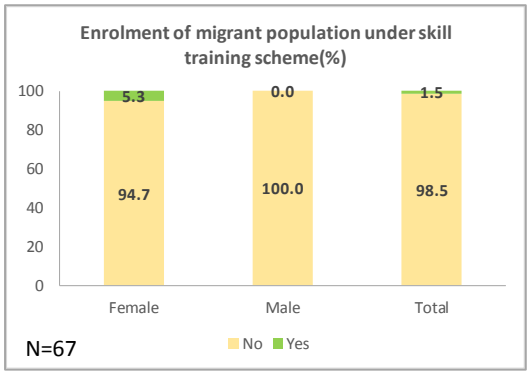


Figure 16: Enrollment under skill training scheme

3.2.4. Educational Profile:

The Panchayat has nine Anganwadi Centres and one mini anganwadi for pre-school education and maternal and child health care. It has three primary schools and two ME schools. The High school is located in Sundarpur, the Panchayat from which Mangalajodi was carved out. While it does not have any college, a private ITI was opened few years back which closed due to non-enrolment of students and lack of funds. The building still exists and is closed. For higher education, students go to Tangi, Khordha or Bhubaneswar. The educational profile of population in Mangalajodi has been segregated by age groups and location of stay in this section. This has been done purposefully to understand if

there is any difference in educational attainment of people residing in the village and those who've migrated out of the village. Table showing educational profile of the total population by age group categories has been given in Annexure.

Analysis of **educational profile of children below 15 years** excludes children below 3 years (residing in the village and those who've migrated). The details of educational level of the children below 15 years has been presented in figure 17. The figure clearly shows that there is not much difference between the education of children residing in the village and migrated children, except for the never enrolled category. The chart shows that the percentage of children never enrolled was higher in migrated children.

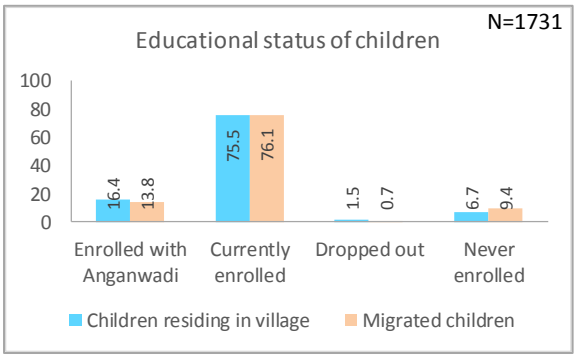


Figure 17: Educational status of children below 15 years

> *"While the panchayat has three primary and two ME schools, the quality of education is not very good. Teachers now a days give more importance to Mid-day-meal than giving attention to the education of their children. The school management is not done properly…"*
> *"If the girls get educated, they'll not get boys to marry them"*
> *"Our boys have dropped out after 10th; why should we educate our girls more" (Source: FGD)*

There isn't much difference between percentage of currently enrolled children residing in the village and migrated children. While dropout among children was reported very low at an aggregate level, dropout among children residing in the village was reported as double the dropout among migrated children (1.5% among children residing in the village and 0.7% in migrated children).

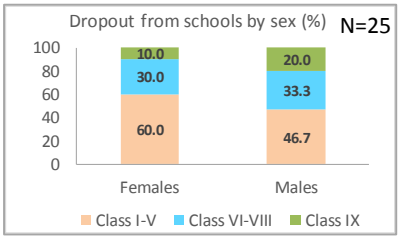


Figure 18: Dropout by class and sex (%)

The grade/class wise analysis has been presented in figure 18 that clearly shows maximum dropout among boys and girls both happened at the primary school level itself followed by upper primary level. Dropout at secondary level mostly includes those who did not complete matriculation and had passed class IX only. Since there was only one dropout in migrated children that data is included in the analysis. Out of the total children residing in the village, 12 children (0.6%) reported assisting their parents in their income generation activities on a seasonal basis.

The **educational attainment level of the youth** in the village has been presented in figure 19. The chart clearly shows that about j.

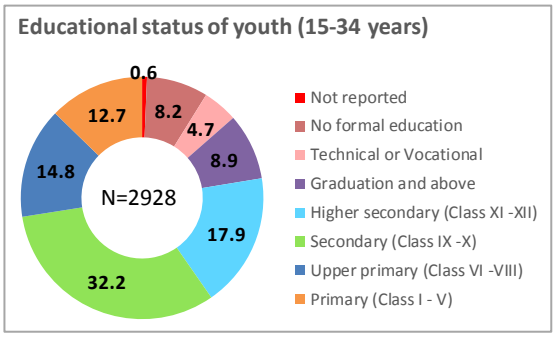


Figure 19: Educational status of youth

Distribution of youth within educational grades by sex has been presented in figure 20. The chart clearly shows that while vocational education was reported by only 4.7% youth, it is clearly an education pursued mostly by men (86.9%). Only 13.1% girls reported having taken vocational/technical education. Similarly, graduation was clearly being pursued by girls (55.8%) more than boys. This was also reported in the FGD for youth group (Girls).

The FGD had revealed that girls aspiring to go for higher education in Mangalajodi opt for graduation and boys opt for technical education. This is primarily because technical education for boys is valued more than graduation. Besides, the FGDs also revealed that pursuing graduation will not help them get jobs and will be a waste of three years. Pursuing technical degree/certification will atleast give them job. Graduation would also mean more labour in studies than in vocational/technical courses.

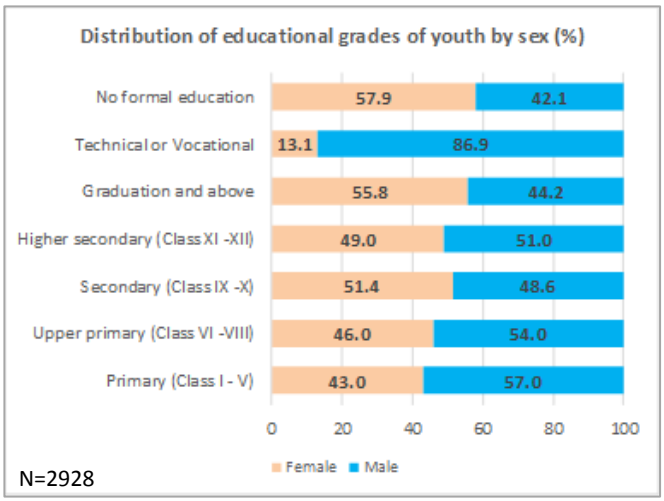


Figure 20: Distribution of youth across educational grades by sex

Analysis of education of youth residing in the village and those who've migrated did not show much difference except in vocational/technical education category. Majority in both the categories reported pursuing secondary education or had dropped out after completing secondary education. Graduation and Technical/Vocational education were reported more for migrated youth (figure 21). Migration for higher studies has also been stated as one of the reasons for migration, the details of which will be presented in the following sections. The youth FGD with boys had revealed that youth prefer to go to Bhubaneswar, Cuttack or Puri for higher education although the block has options for higher education. This was primarily because they think that quality of teaching and career prospects after completing education from the institutions within the block is not very good.

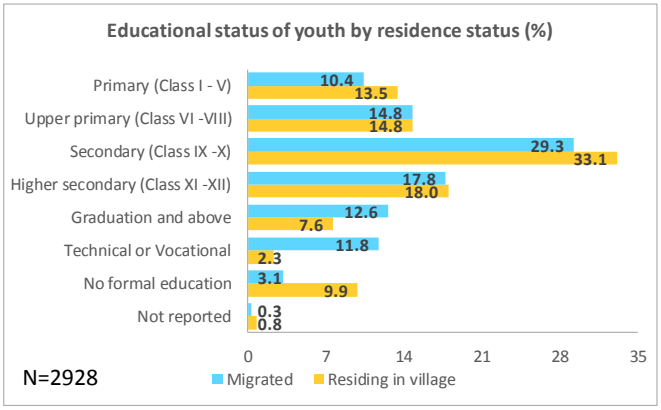


Figure 21: Educational profile of youth by residence (%)

"After plus two I would enrol in ITI and after passing out from ITI I will get a job. Any other stream of education requires a lot of effort and will be painful"....Soumyajit Das, Youth FGD

The **educational attainment level of the population above 34 years** in this age group has been presented in figure 22. As seen in the chart, 37.3% reported not having received any formal education followed by 28.6% people educated till class V, 12.4% people educated till class VIII and 11% educated till class X. In absence of the members for interview, educational level of 43 members (1.4%) was not reported by their family members. Only 0.5% reported undertaking technical or vocational education in this age group.

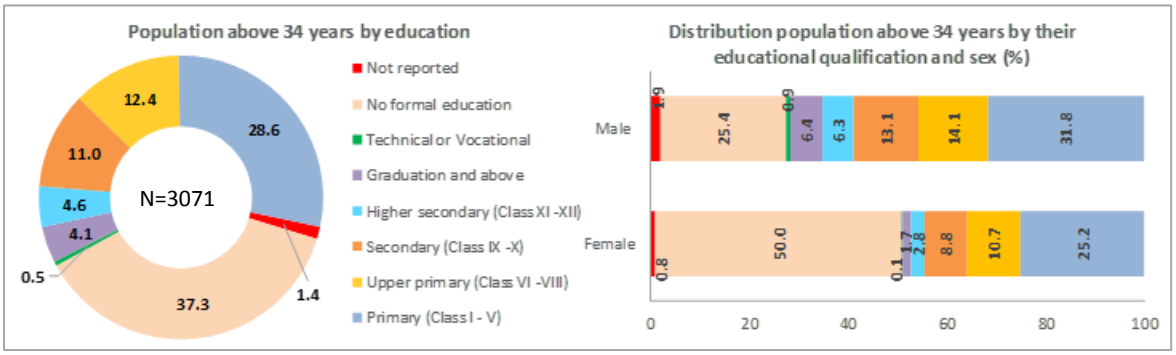


Figure 22: Educational attainment level of the population above 34 years and by sex

Sex disaggregated analysis of educational qualification of population shows that while half of the women in this age did not receive any formal education, a quarter of men also did not receive any formal education. Representation of men in each grade of education was reported more than women. Technical education was also reported more in men. While there were atleast 14 men who reported having received some technical/vocational education, there was only one woman who had received technical/vocational education. For the persons who were not available for interview and for whom the key respondent was not able to report educational qualification were put under not reported category which was seen more in case of men (1.9%) than women (0.8%).

3.2.5. Employment Profile:

Total number of youths residing in the GP is 2197 of which 204 were reported enrolled in school/college for studies. For analysis of **employment profile**, their data was not included.

Out of the youth currently residing in the village and not currently enrolled, only 7.4% were reported employed. Around 83.7% i.e., 1668 youth residing in the village were reported unemployed (figure 23). These numbers, further disaggregated by sex, show that only 1.3% women residing in the village are employed. Unemployment among women (96.8%) was reported much higher than the male unemployment. Self-employment was reported by 18.7% male members of this age group.

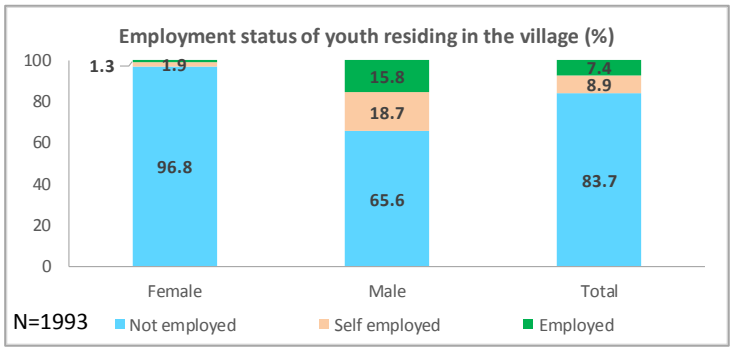


Figure 23: Employment status of youth residing in the village

An analysis of the **employment status by level of education** as shown in figure 24 does not show any significant difference between level of education and employment status. Data for youth who were not available for interview (15 members) and for whom the key respondent could not give appropriate education details were not included for this analysis.

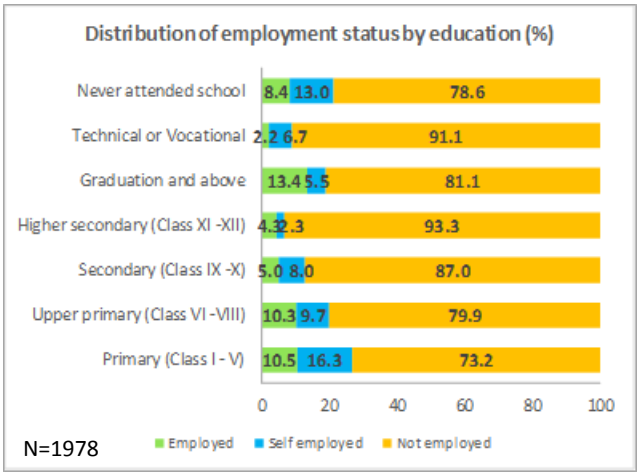


Figure 24: Distribution of employment status by education

Out of those who were not pursing any education, employment among youth across all completed levels of education was reported low. While maximum employment was reported among youths who had completed graduation or higher degree, (13.4%), maximum self-employment was reported among youth who had completed primary education (16.3%). Out of the youth who had completed vocational education/training only 2.2% were employed. Unemployment was reported highest among youth who had completed higher secondary education (93.3%) and youth who had received technical/vocational education (91.1%). When youth in FGDs were probed regarding lack of interest in higher studies, 'no employment opportunity' was reported as the main reason. The youth also reported that if they pursued technical course, they would atleast be able to get employed outside the state (Gujarat, Goa, Kerala etc.)

Occupational detail of the youth residing in the village who reported being either employed or self-employed has been presented in figure 25.

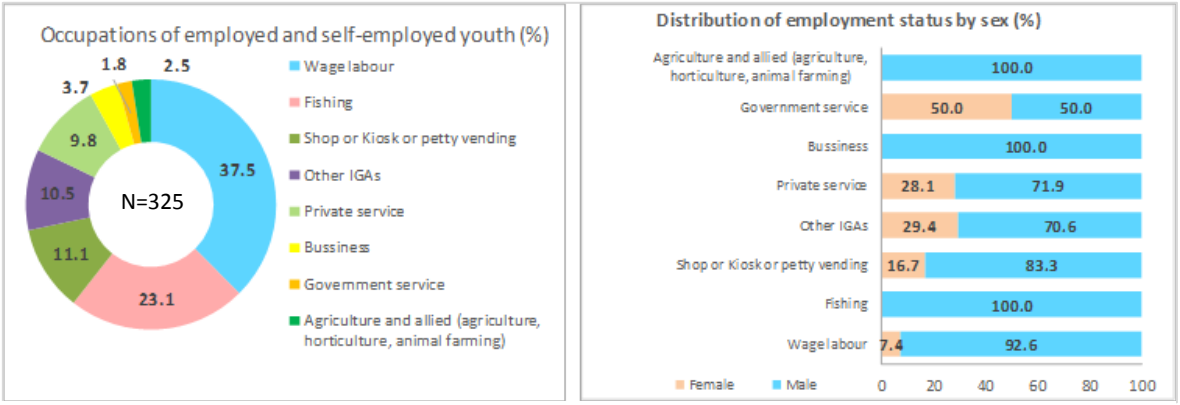


Figure 25: Occupation of youth residing in the village

The chart clearly shows that like migrant youth, wage labour (37.5%) was the highest reported occupation of the youth residing in the village. For the youth residing in the village, fishing (23.1%) was the second most important occupation. Sex disaggregated analysis of the same data shows that women were totally missing from agriculture and allied activities, business and fishing as a profession (employed or self-employed). In government services both women and men were reported in equal number. Other than government service (29.4%) other IGAs were reported as occupation of women. Among other IGAs, tailoring for women and carpentry for men were the highest reported occupations.

An analysis of the occupation of population above 34 years residing in the village (2748 persons) is presented in Figure 26.

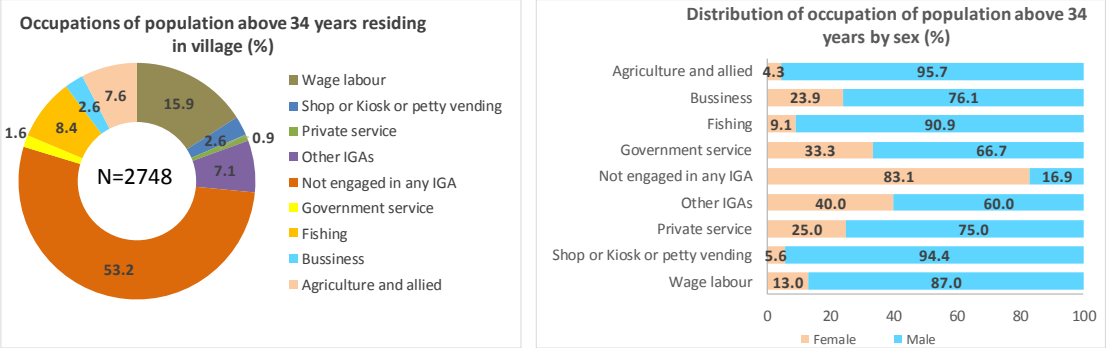


Figure 26: Distribution of occupation (population > 34 years) residing in the village by sex (%)

The chart clearly shows that more than half of the population (53.2%) above 34 years reported not being engaged in any income generating activity implying they were unemployed. In this age group, wage labour (15.9%) was the highest reported occupation of the people residing in the village followed by fishing (8.4%), agriculture (7.6%) and private service (7.1%) as the main occupations. Business or petty vending/shop/kiosk were reported by only 2.6% population each. Sex disaggregated analysis of the occupations data shows that only unemployed mass has more women (83.1%) than men. All other occupational categories have more representation of men than women. Women have a considerable representation in other IGAs. Among other IGAs, pension/allowance holder for both men and women was the highest reported occupation.

3.3. Youth Profile:

Out of the 2197 youth, only 7.8% (171 youth) reported having received some technical/vocational training (78 female and 93 male) and another 2% reported currently being enrolled in vocational training course (18 female and 25 male). More than 90% reported not having received any type of technical/vocational training ever. The distribution of access to technical/vocational training by sex has been presented in figure 27

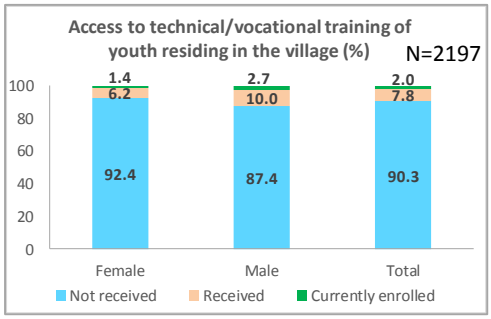


Figure 27: Access to Technical/vocational training

3.3.1. Profile of Youth who received skill training or are enrolled for skill training:

3.3.1.1 Sector of skill training:

Out of the total youth either already received skill training or currently enrolled for skill training, 40.7% reported receiving training in IT-ITeS sector. Analysis of the sector of technical/vocational training has

been presented in Figure 28. The top five sectors reported are IT-ITeS, Apparel Made-Ups & Home Furnishing, Plumbing, Power and Automotive.

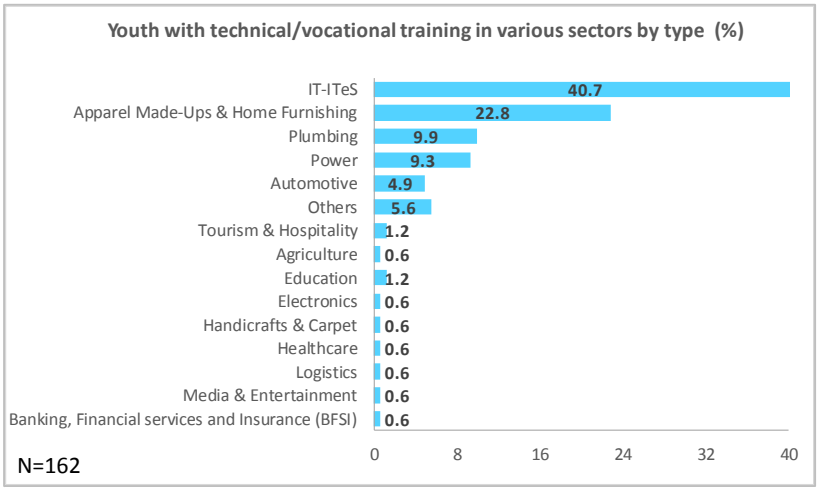


Figure 28: Different sectors of technical/vocational training by youth

The key reasons behind enrolling for IT/ITeS courses stated by participants of youth FGD are:

"Interest in technical education; interest in defence service; for engineering degree later; Non-technical degree does not help get job easily; all boys in village opt for it; pursuing non-technical bachelor course is more demanding and expensive without any employment outcome; Girls enrol in PGDCA as it is easily available on low cost at Tangi and is basic skill required for competitive exams…" (Source: Village Youth FGD)

The distribution of men and women in these sectors has been presented in figure 29 to understand if there is any gender difference in choices/availability of skill training sectors. The chart shows sex disaggregation in sectors of skill training. Sectors traditionally dominated by women or men continue

to be sectors of priority for them in Mangalajodi. Training in sectors like automotive, agriculture, media & entertainment, logistics and electronics were reported only by men (100%).

Similarly, in sectors of education, handicraft/carpet, banking and healthcare, the sectors traditionally considered suitable for women, were reported taken up only by women (100%).

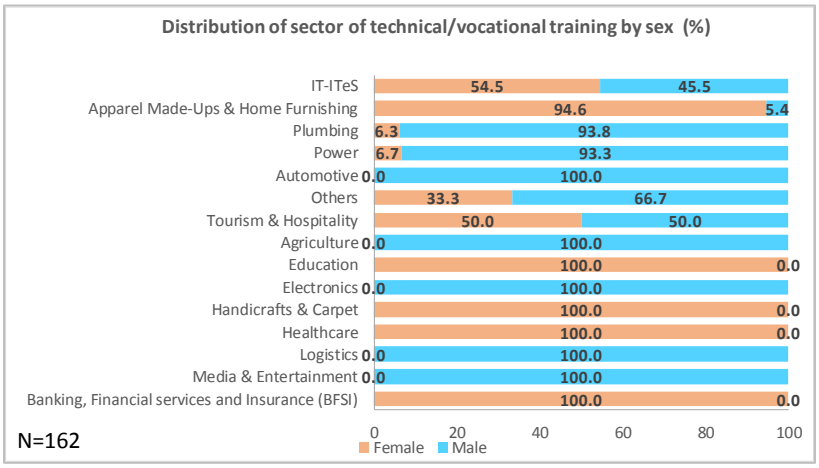


Figure 29: Distribution of sector of technical/vocational training by sex

While IT/ITeS as a sector in Mangalajodi is dominated by men (migrated + residing youth), out of the youth residing in the village who received training or are enrolled for training in this sector, majority are women (54.5%). Most of these women opted for computer training (PGDCA) to develop their basic computer skills as it is an important skill for filling up forms for competitive exams online. Probing in FGDs revealed that even if they do not get through a government job, computer skill will help them get data entry operator job (private job) at the block level.

The second sector in which about a quarter of the youth have received training, Apparel Made-Ups & Home Furnishing sector (22.8%) is clearly dominated by women (94.6%). FGDs on this revealed that it is easy for women to get such a training within the GP or nearby areas. It is not only a skill that can help them earn for themselves but also a life skill that women are already trained at home, if not professionally. Plumbing (9.9%), power (9.3%) and automotive sector (4.9%) were the sectors that reported training mostly taken by men. Out of the youth trained in plumbing and power sectors, more than 93% were men, that is in line with the traditional job structures dominated by men.

3.3.1.2 Reason for skill training:

The reasons for opting technical/vocational training by youth presented in Figure 30 shows that 91.4% opted for the technical vocational training for "better job opportunities" and hence higher income opportunities. Better job opportunity was reported highest among both women and men. 'Higher education' as reasons for choosing the course was reported more by men (8.8%) compared to women (3.7%). Some reported lack of clarity in choosing the

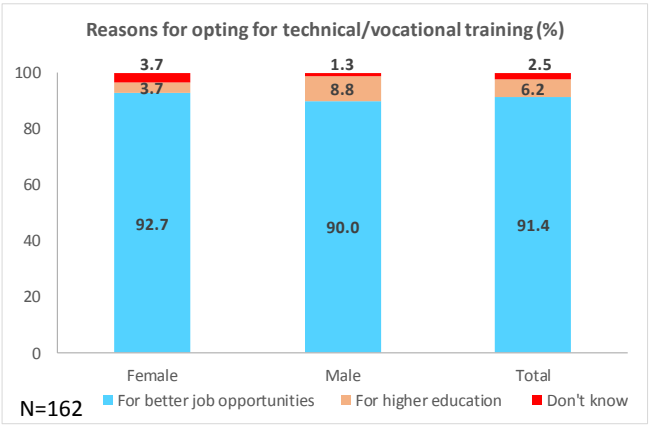


Figure 30: Reasons for opting technical vocational training

course and shared that they didn't know why they opted for the course. FGDs revealed that they sometimes just do what the peers are doing or what the parents say.

3.3.1.3 Access to skill training under government programme/scheme:

To assess the access to training under government programmes/schemes, the respondent youth were asked if they had attended these trainings under any programme. As presented in figure 31, Only 4.3% i.e., 7 out of 162 youth reported of having enrolled for the training course under a specific scheme. This indicates that majority of the youth did not have access to any training under government programmes/schemes. Out of those who reported having undertaken the training under government schemes, 83.3% of the youth i.e., 6 out of 7 youth had enrolled under Deen Dayal Upadhyay Gramin Kaushal Yojana (DDUGKY) scheme. Only one out of the seven (14.3%) reported having enrolled under Pradhan Mantri Kaushal Vikas Yojana (PMKVY) scheme.

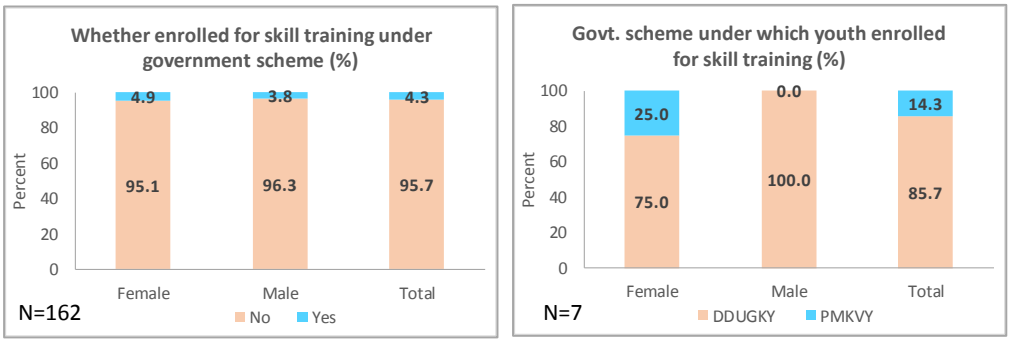


Figure 31: Youth enrolled under skill training schemes

Further probing was done on access to government skilling programmes in all the youth FGDs with the youth residing in the village and similar responses were reported by all the groups. The participants of the FGDs stated that as they were not aware of any skill training schemes, they enrolled in training courses which do not come under any government schemes. They further informed that the youth who have migrated for vocational/technical education may have been enrolled in the courses under government programme, but there was no awareness on the scheme or programme among them.

3.3.1.4 Cost of training:

Figure 32 presents an analysis of the percentage of youth enrolled under paid training course and its fee structure. Out of the 162 youth currently enrolled or already received skill training, only 25.3% reported having enrolled for courses free of cost. The course fee reported by the youth varied within the range of rupees four hundred to rupees 3 lakh. The fee paid by the respondents has been clubbed into different categories as presented in figure 32 The chart clearly shows that at an aggregate level, 43.8% of the youth paid course fee less than rupees 5,000 followed by the range rupees 5,000 to rupees 10,000 (24%). Only 9% youth paid fee above rupees 50000.

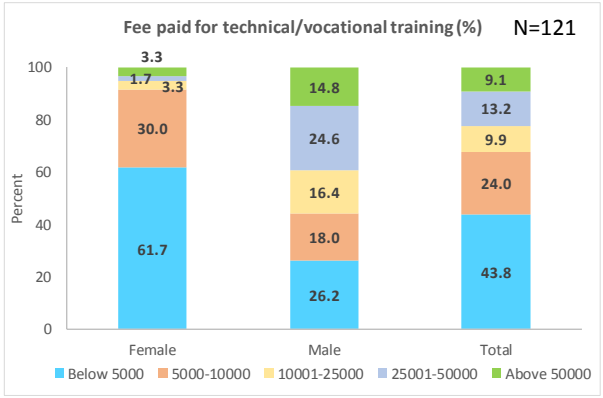


Figure 32: Cost of training for youth residing in the village

Sex disaggregated analysis of the same shows that while number of women and men opting for paid courses was almost similar (69 women and 67 men), the fee paid by men was much higher than the

fee paid by women. More than half of the women received training with cost within rupees 5,000. While about 80% women paid less than rupees 10,000 as fees, approximately 60% men paid fees more than rupees 10,000. Only 3.3% women compared to 14.8% men paid fee above rupees 50,000. This was also discussed during the FGDs that families prefer spending on boy's training than girls.

3.3.1.5 Place of training and boarding:

An analysis of the place of skill training of the youth has been presented in Figure 33. At an aggregate level, majority (32.7%) received the training within the district followed by training within the block (27.8%). Training within GP (17.9%), training in other districts (16.7%) and training in other states (4.9%) were reported lower. Sex disaggregated analysis of the place of training shows that access to training within GP and within block was reported much higher among women (29.3% and 36.6% respectively) than men (6.3% and 18.8% respectively). Distance of place seems to impact preference of training for women. The figure clearly shows that the percentage of women in training beyond block reduced significantly. Men had more access to training within district, in other districts or other states and the percent point difference between women and men is significantly high.

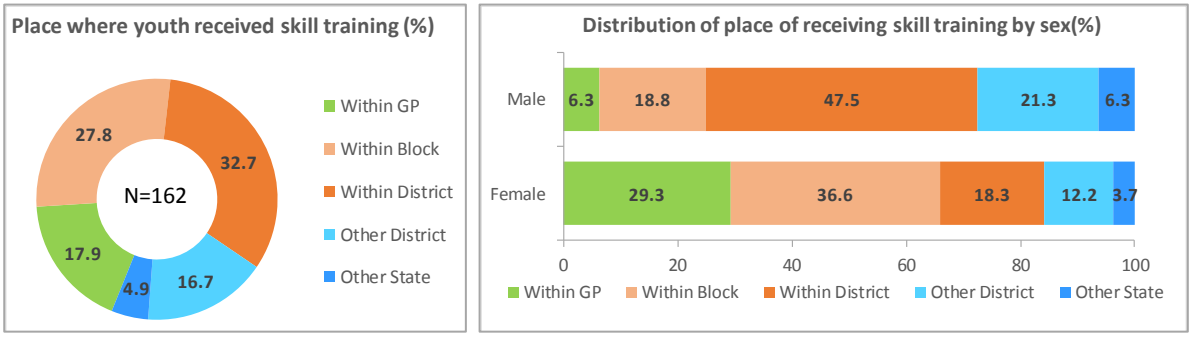


Figure 33: Place of training

The marked difference in access to training beyond block level makes it important to understand the related factors. Figure 34 presents distribution of boarders and day scholars by sex and aggregate level to find out relationship between access to training and distance as a contributing or hindering factor.

The figure clearly shows that while training as day scholar was reported higher at an aggregate level, atleast more than one fourth of the trainees were boarders, that is, they had to migrate for the training and stay at the location of the training. Sex disaggregated analysis, however, shows that while 41.3% men migrated out of the village and stayed at the location of training for the course, only 13.4% women stayed at the location of training. More women (86.6%) compared to men (58.8%) got the training while staying in the village. This explains the finding of the above section on place of training, that is, high concentration of women in GP level and block level trainings. More men, on the other hand, reported getting the trainings as boarders and hence access to trainings beyond block and district.

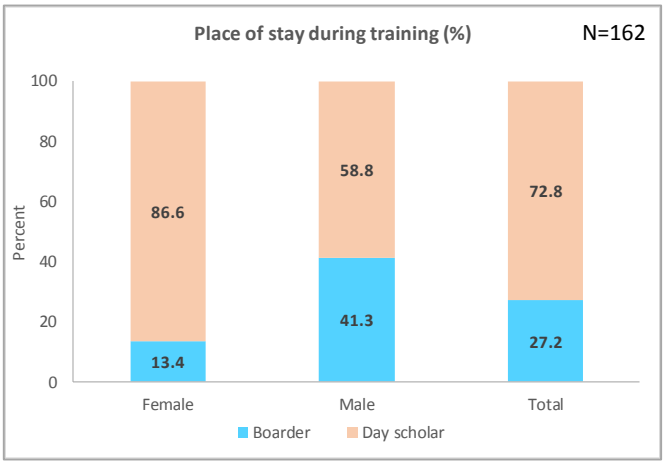


Figure 34: Boarding status of youth trainees

Further probing on this was done during the FGDs with youth and other groups that testify the fact that for girls in Mangalajodi, location of the training centre/institute within GP or block was an enabler. For men, distance was not much of a hindering factor like women as they preferred to move out of the block for training, if they could afford, for better quality of training and better future prospect.

3.3.1.6 Type of training institution:

Figure 35 presents an analysis of the type of institutions to which youth went for the trainings. The chart shows that at an aggregate level, 61.7% of the youth reported enrolling in private institutes for technical/vocational training. Private ITIs (18.5%) were reported as the type of institution in which second highest enrolment was done for technical/vocational training. Only 8.6% of the youth reported enrolling in Government ITIs. Remaining youth had received the training from either college, NGOs or schools. Sex disaggregated analysis of the data shows that out of the total female youth who reported having received training, majority (75.6%) reported having received training from private Institutes. Among men, 47.5 % reported of going to private institutes followed by 33.8% going to private ITIs to receive technical/vocational training. Training in government ITIs (12.5%) and private ITIs (33.8%) by men was reported much higher than women. Vocational training at school was not reported by men.

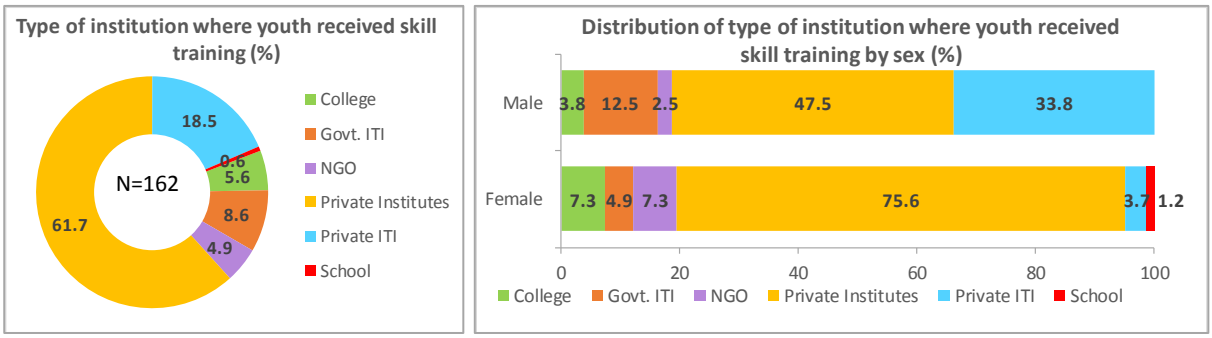


Figure 35: Type of institutions where youth received skill training

3.3.1.7 Completion status of training:

Out of those who were enrolled for some or the other vocational/technical training, only 85% youth reported having completed their training. This analysis does not include the youth currently enrolled for technical/vocational training. While only 15% dropout was reported at an aggregate level, sex disaggregated analysis shows more dropout from such training among women (21.4 %) than men (7.4%). More than 90% men completed their technical/vocational training. Status of completion of trainings has been presented in figures 36.

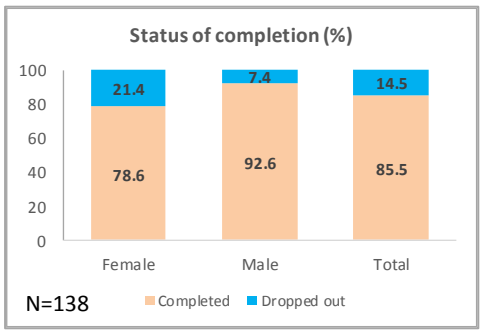


Figure 36: Status of completion training

"Drop out is mostly due to financial constraints/need to earn for the family" (Source: Village Youth FGD)

3.3.1.8 Aspiration of youth post completion of training:

The respondents were also asked about their aspiration after completion of the training (both for those who had completed training as well as those currently enrolled for training) that has been presented in figure 37. Getting into fulltime employment was reported as aspiration by 61.7% youth. Only 3.1% of them wanted to have their own business (full time or part-time). Pursuing higher education was reported aspiration by another 8.6% youth while another 9.3% were not clear about their aspirations. Sex disaggregated analysis of the aspiration shows that while majority of both men (82.5%) and women (41.5%) wanted to get engaged in full time employment, a significantly higher percentage of women (26.8%) wanted to go for part-time employment. Additional training/higher studies (9.8%) and full-time business (2.4%) was also reported higher among women than men (7.5% and 1.3% respectively). Part time business was reported only by women.

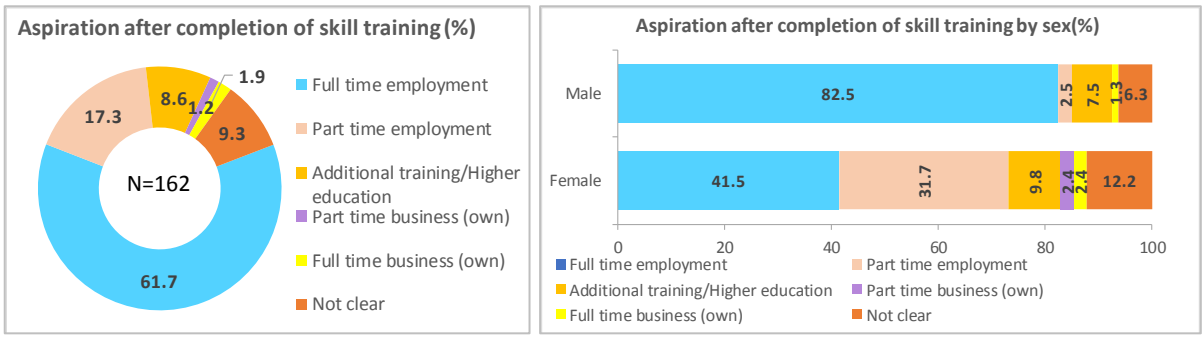


Figure 37: Aspiration after completion of skill training

In the FGD with women SHG group members, women had shared that given an opportunity to get engaged in a part-time business, all of them would be willing. They have time to do it but not the skills to get into viable trades. If training was provided in a sector which helped them get engaged in part-time business, while staying at their homes, they could balance work and family better. Market linkage, however, was reported as a major challenge in getting engaged in any such activity.

Promoting entrepreneurship among women's groups through training on handicraft on theme of migrant birds:

During discussion with the SHG group members, one of the Women SHG members enquired about possibility of in training on handicraft items (on theme of migrant birds) as souvenirs for tourists to Mangalajodi. Other participants of the FGD from other SHGs also showed some excitement on the idea but while some showed hesitation in being able to go outside the village to get the training others showed concern on being able to sell it themselves. They suggested exploring possibility of linkage with the eco-tourism projects of the village but were not very confident of the buy in.

Discussion with one of the Eco-tourism projects in the village also revealed that at present they were procuring souvenirs from nearby places and making them available for the tourists at the eco-tourism center. If training was provided to the villagers on making small souvenirs on the theme of migrant birds, it would give income opportunity to the local villagers as well as promote tourism at Mangalajodi. The products made on the theme of migrant birds could be marketed in and around Chilika and Puri area for promotion. The Government shops, too, may promote the sales if a good venture comes up within the village.

Out of the youth who had already completed their trainings and had aspired to start their own business (3.1%), all reported that they were not able to do so. Details of youth who aspired to get employed after completing the training has been discussed in the following section:

a. *Placement status of the youth who aspired to get a job after training:*

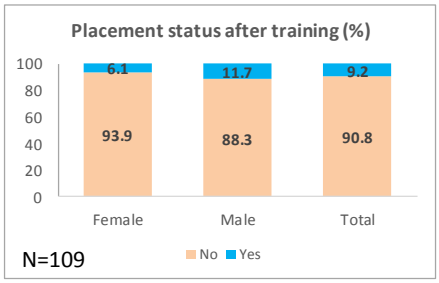


Figure 38:Placement status after training

An analysis of the status of placement after completion of training has been presented in figure 38. Out of the youth who had completed training and wanted to get into full/part time employment, only 9.2% i.e., 10 of them got employed in the sector in which they received training. More than 90% reported not getting employed in the sector in which they received training. This question was further probed during the youth FGDs. All the groups had the same opinion that the sector in which people get trained and the sector in which they get employed is generally not the same. There are jobs available in different sectors where they can easily be accommodated after passing out. Contractors can help them get the job immediately. However, there may not be a match between their training and the job.

It is important to note that this analysis does not include the migrated population or those who were not available for interview.

b. *Place of employment:*

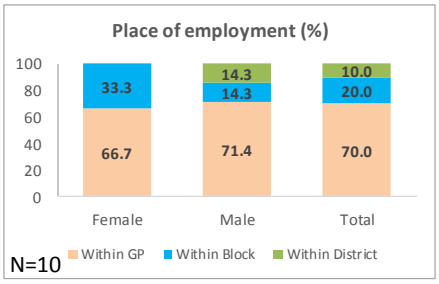


Figure 39: Place of employment

Out of 10 youth who had got employed in the same sector in which they received skill training, 70% of them had got employed within the Mangalajodi gram panchayat, 20% got placed in Tangi Block and 10% in Khordha district (figure 39). Among women, none reported of being placed outside Tangi block. It is important to note again that the place of employment for those not available for interview has not been included in this analysis.

Employment prospects after completion of technical/vocational education:

- *"There is no campus placement opportunity from the private ITIs.*
- *If the career graph is good, there is some probability of getting selected on campus right after the 3rd year in institutions based in Berhampur, Puri, Cuttack, Bhubaneswar.*
- *Employment is not a problem if one is willing to migrate; we can get it through references (family and friends); the sector of employment, however, may not be the same as the course.*
- *Friends in Gujarat and Goa will help get employment*
- *Girls' enrolment in ITIs want to either go for a career of railway loco pilot or for banking and service staff selection.." (Source: Youth FGDs)*

c. *Time lapse between completion of training and getting employment:*

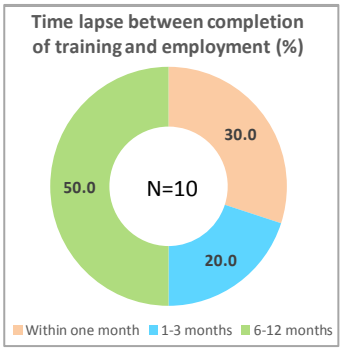


Figure 40: Time lapse in getting employment

An analysis of the time lapse between completion of training and getting employment has been presented in figure 40. Since the number of respondents is very less, sex disaggregated analysis is not presented. Out of the youth who got employed in the same sector of training, 30% were able to find employment within one month after completion of training, 20% youth got employed within 1-3 months after completion of training and rest 50% got employed within 6-12 months.

d. Continuation status of the employment received after training:

It is interesting to note that out of the total youth who had got employed in the sector of training, only 50% could continue the job. The remaining 50% couldn't continue the job due to various reasons. Some reported that it was a contractual job and when it got over, the same opportunity was not available to them. Some also left the job due to hardship and because they could not cope with the demands of the job. This non-continuity was higher among women (figure 41).

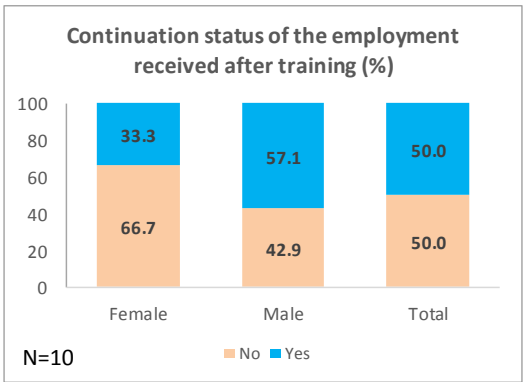


Figure 41: Continuation status of the employment

3.3.2. Profile of Youth who have not received any skill training:

This section presents an analysis for youth who have not received any technical vocational training. As mentioned earlier, out of the 2197 youth of Mangalajodi, 90.3% (1983 persons) youth reported not having received any training. Out of these, 65.8% (1304 persons) were available for interview and their perception, aspiration and skills have been analysed in this section separately. Figure 42 presents distribution of youth who did not receive any formal training by sex. The chart shows that out of the youth who have not received any formal training, 70% are women.

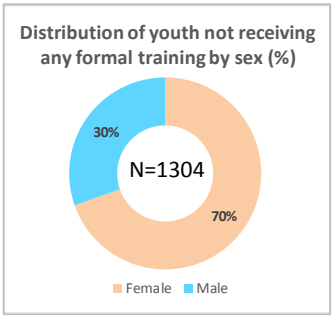


Figure 42: Youth who did not receive any training

Picture 7: Aakash Behera, Class VIII student converts waste to art without any training

3.3.2.1.Interest in receiving any formal skill training:

The youth who had not received any technical/vocational training till now were asked if they would be interested in receiving any formal skill training. Their responses have been analysed and presented in figure 43. The chart clearly shows that out of these untrained youth, 74.2% (968 persons) reported that they would be interested in taking up any vocational/technical training if made available to them. There wasn't' much difference between interest shown by men and women. Lack of clarity in response, however, was found more in men than women.

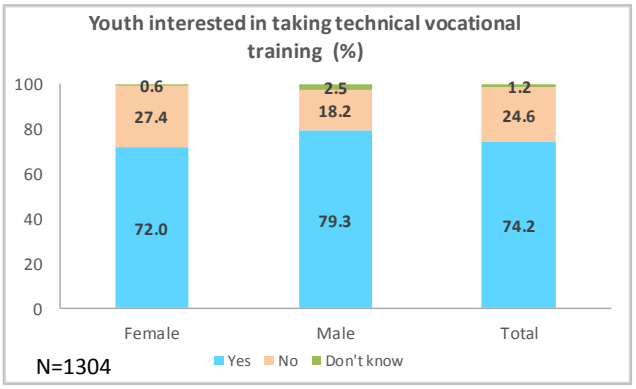


Figure 43: Interest in receiving skill training by sex

Sector of training preference for women:

"Tailoring is the most preferred sector for young married women as it allows them to work within their premises on a part time basis and make an earning for themselves. There was a mushroom cultivation training given at Sundarpur Panchayat and the women SHG members opted not to go for it given the distance. Women would be participating in stuffed toy making training in November. They had taken tailoring training but only the teacher is able to stitch; for others it is just a life skill. If any training is organised in Mangalajodi on any sector that has potential for good income generation and can be done at home on a part-time basis while balancing their household responsibilities, women will be able to take it up…" (FGD with SHG members)

Picture 8: FGD with SHG women leaders

Picture 9: Curious school going children

3.3.2.2.Sector of skill training in which the untrained youth aspire to get skilled in:

When asked about the sectors in which these 968 youth would be interested to receive training, a list of 34 sectors came up. The top 10 sectors of interest for vocational/technical skill training reported by youth not trained are highlighted in the table below:

Sector of interest in technical/vocational training	Sex		
	Female	Male	Total
Aerospace and Aviation	0.0	0.4	0.1
Agriculture	1.3	5.4	2.6
Apparel Made-Ups & Home Furnishing	34.6	0.8	23.6
Automotive	0.0	3.8	1.2
Banking, Financial services and Insurance (BFSI)	5.5	5.0	5.3
Beauty & Wellness	3.1	0.4	2.2
Chemical & Petrochemicals	0.0	0.8	0.2
Construction	0.4	10.0	3.5
Culture	0.0	1.2	0.4
Domestic Workers	6.8	2.3	5.3
Education	8.6	3.1	6.8
Electronics	0.2	12.3	4.1
Food Industry	3.9	5.8	4.5
Furniture & Fittings	0.0	6.5	2.1
Furniture and Fittings	0.0	0.4	0.1
Gems & Jewellery	1.8	0.0	1.2
Handicrafts & Carpet	13.2	0.4	9.1
Healthcare	4.2	0.4	3.0
Indian Iron & Steel	0.0	0.8	0.2
IT-ITeS	4.4	18.1	8.8
Leather	0.0	0.8	0.2
Life Sciences	0.2	1.2	0.5
Management & Entrepreneurship and Professional Skills	0.0	0.8	0.2
Others	0.7	2.3	1.2
Paints & Coatings	0.2	3.5	1.2
Plumbing	0.2	3.1	1.1
Power	0.0	1.2	0.4
Retail	0.4	1.5	0.7
Security	0.0	2.3	0.7
Sports, Physical Education, Fitness & Leisure	0.2	1.9	0.7
Telecom	0.0	1.2	0.4
Textile & Handlooms	9.2	0.0	6.2
Tourism & Hospitality	0.9	2.7	1.5
Total	100.0	100.0	100.0

Table 12: Sectors of interest in technical/vocational skill training

The table above shows that the top five sectors of interest in skill training at aggregate level appeared to be Apparel Made-Ups & Home Furnishing (23.6%), Handicrafts & Carpet (9.1%), IT-ITeS (8.8%), Education (6.8%) and Textile & Handlooms (6.2%). Sex disaggregated analysis, however, shows some difference in selection of sectors by women and men. For women, Apparel Made-Ups & Home Furnishing (34.6%) was the priority sector followed by Handicrafts & Carpet (13.2%), Textile &

Handlooms (9.2%), Education (8.6%) and domestic workers training (6.8%). The same for men was IT-ITeS (18.1%) followed by Electronics (12.3%), Construction (10%), Furniture and Fittings (6.5%) and Food Industry (5.8%). Other five priority sectors by sex and aggregate level have been highlighted in light green in the table above. The table also shows that while textile and handloom was a priority sector for women, none of the men reported interest in that sectors. Similarly, while furniture/fitting was reported as a priority sector by men, women did not report any interest in that sector. ***There seems to be a strong need for counselling and orientation on the possible sectors of skilling and employability in those sectors. Youth in Mangalajodi neither are aware of the important skilling programmes nor have much idea about skilling environment and employability. The sectors traditionally dominated by women and men continue to be a priority for them.***

3.3.3. Traditional or informal skills:

3.3.3.1. Availability of traditional skill in family and informal training received

To understand and recognize informal skill training among youth in the village they were asked if there was any traditional skill in the family or whether they had received any informal skill training for which they may not have received any certificate or recognition. An analysis of these questions has been presented in this section. Figure 44 shows that 17.4% of the youth reported having traditional skill in the family and only 5.8% youth reported of having received either traditional or informal skill training.

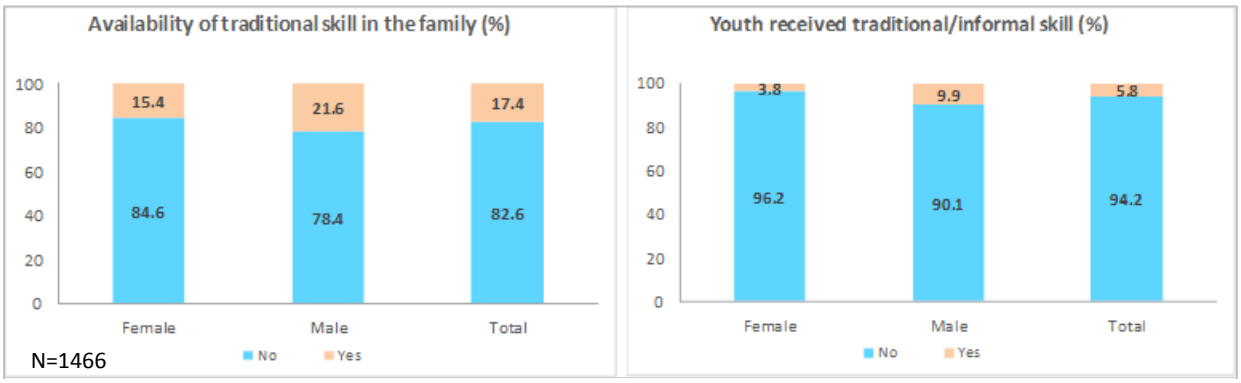


Figure 44: Availability of traditional skills and access to such training by youth

3.3.3.2. Traditional or informal skill in which training was received

Out of those who reported having received some **informal training,** majority (45.9%) reported being trained in fishing in the family. Other main skills in which youth reported being trained are tailoring (21.2%) and carpentry (12.9%). Family occupations of barber, agriculture, handloom, priest, astrology, construction/masonry were few other traditional or informal skills that youth reported of having received training in. The details of the informal trainings received have been presented in figure 45.

Sex disaggregated analysis of the informal skill trainings shows that while fishing was reported as the main skill for majority of the men (57.4%), for women the main informal skill was tailoring (47.4%). While training in skills of a barber, mason/construction and pujari/priest was totally missing in women, the skill training received by women in tailoring and handloom was also found missing in training of men. This reconfirms sex disaggregated training for youth in Mangalajodi and not

aptitude-based training to the youth. Other skills reported by the youth included training in cooking, astrology, bamboo craft making and selling etc.

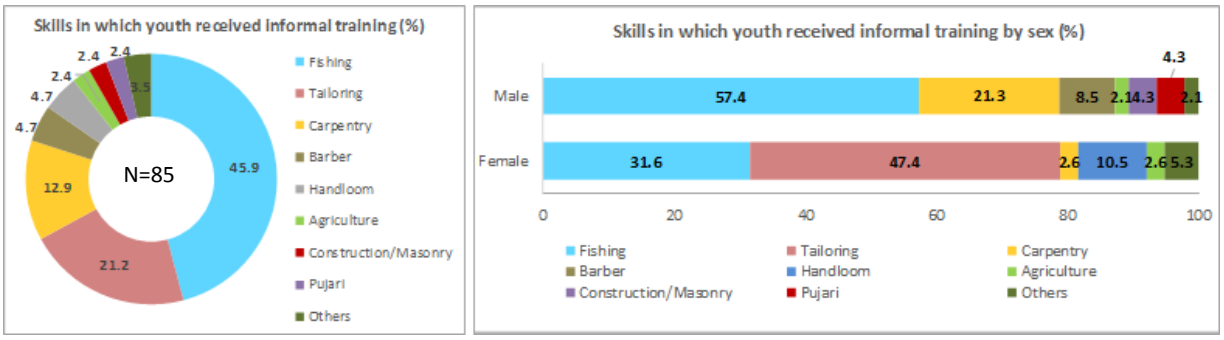


Figure 45: Informal skill trainings received by youth

3.3.3.3. Scope for income enhancement using the *traditional/informal skills*

Out of the total youth respondents who either reported having any traditional skills in the family or having received any informal skill training, 29.2% believed that there was scope for income enhancement using traditional skill (figure 46). Sex disaggregated analysis of the perception among youth on scope for income enhancement using traditional/informal skills, however, shows a slightly more positive belief of men towards traditional skills. While majority of both women and men reported not having belief in value addition of the traditional skills, more men reported positively to scope of income enhancement using traditional/informal skills.

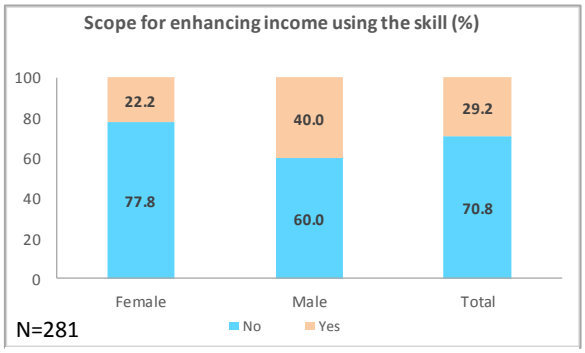


Figure 46: Perceived scope for income enhancement using traditional skills

3.3.3.4. Need for additional skill training in the sector to enhance income

The scope for enhancing income through traditional/informal skills was further probed to understand if the youth felt any need for additional training in the sector. The analysis has been presented in figure 47. The chart shows that 70.8% of the youth reported an additional training in the traditional skill that they have received informally will help them enhance their income. Sex disaggregated analysis of the responses shows more positive perception among men than women in scope of income enhancement through an additional training. The chart clearly shows that 82.7% men and 63.2% women reported that they believe an additional training would help them enhance their income levels.

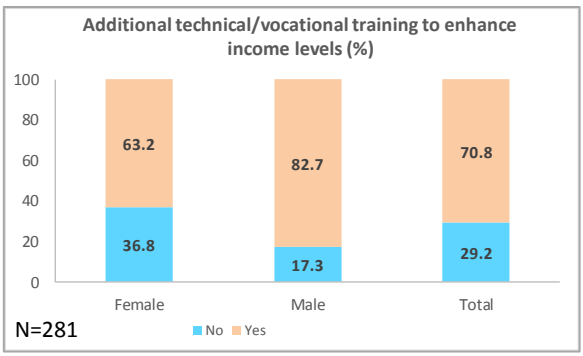


Figure 47: Need for additional training for income enhancement

3.3.3.5. Interest in getting additional training

After capturing their perceptions related to the scope of income enhancement through additional training, all the youth members present for interview were asked if they would be interested to take up additional training if it was made available to them. The responses have been analysed and presented in figure 48. The chart shows that 65.2% showed interested in receiving additional technical/vocational training. While the interest in such training was reported by both women and men, the percentage of men was higher.

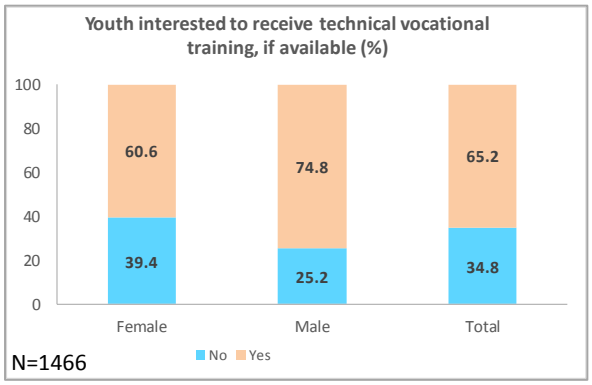


Figure 48: Interest in additional skill training in traditional sectors

3.3.3.6. Key enablers in receiving additional training

The youth who showed interest in additional training (956 persons) were further asked about the enabling factors that would help and motivate them to go for the training. The analysis of the response has been presented in figure 49 that clearly shows that for majority of the respondents (77.9%), location of the training institute in near proximity to the panchayat would be the key enabling factor. Other enabling factors in order of preference were stipend (16.3%) and sponsorship (5.5%). An additional 0.2% respondents were not able to think of any enabling factor for undertaking such a training.

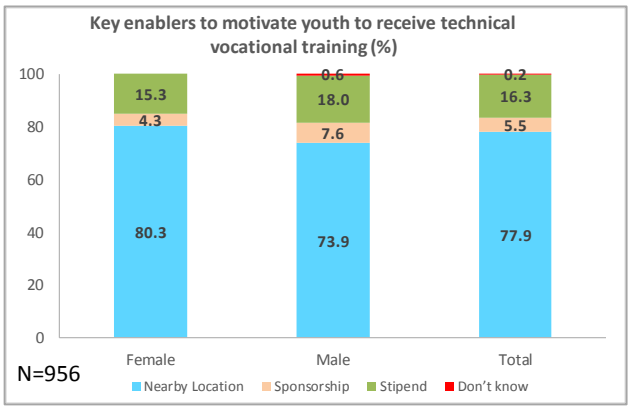


Figure 49: Key enablers in receiving additional training

3.3.4. Educational aspirations:

3.3.4.1. Aspiration for highest level of education

Highest level of educational aspiration was captured for all the youth who were available for interview. They were asked about the highest degree they would aspire for. The analysis of the responses has been presented in figure 50. Majority of the youth (73.7%) reported having no further educational aspiration. Out of the remaining quarter, 10.2% reported aspiration to complete their graduation and 5.2% aspired to complete their post-graduation. Other educational aspirations included completing technical/vocational training (4.7%), completing 12th board exam (4.2%) and 10th board exam (1.9%).

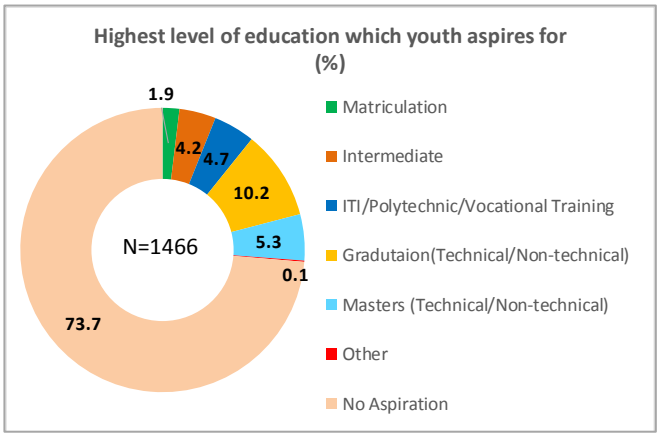


Figure 50: Highest level of educational aspiration of youth

The distribution of the responses by sex has also been presented in figure 51. Other than technical/vocational training, aspiration for higher studies was reported more by women.

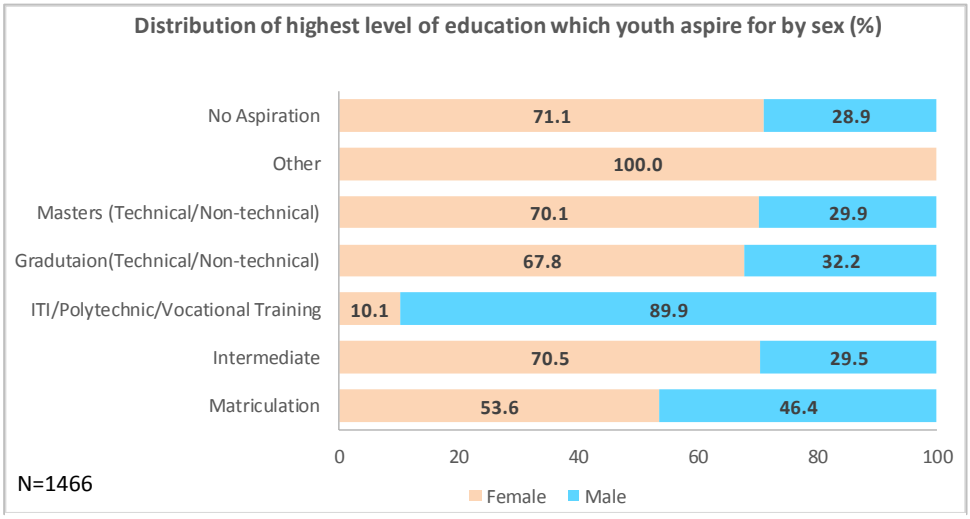


Figure 51: Distribution of highest educational aspiration by sex

3.3.4.2. Hindrances in attaining the higher education aspiration

An analysis of the hindrances in pursuing higher level of educational aspiration has been presented in figure 52. Out of the total youth, 26.3% had shared aspiration for higher studies. When asked about the hindrances, 85.5% of them reported 'financial problem' as one of the main hindrances in pursuing their educational goal. Few other hindrances that were reported by youth are lack of guidance, health issues, family problems etc. Sex disaggregated analysis of the hindrances did not show much difference between the hindrances reported by women and men. Women reported slightly higher percentage of factors like family problem, and other hindrances like lack of guidance and distance. Health issues, although a very insignificant hindering factor, was reported slightly higher by men.

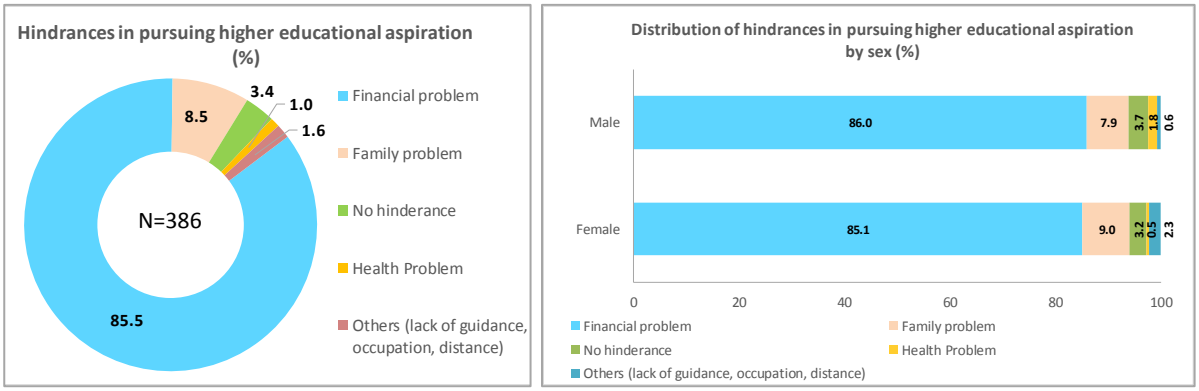


Figure 52: Hindrances faced in pursuing higher educational aspirations

3.3.4.3. Enabling factors in attaining the higher education aspiration

An enquiry into the enabling factors in pursuing the higher education aspiration has been analysed and presented in figure 53. 'Stipend' (43.3%) followed by 'location of the institute nearby' (37.3%) were reported as the most important enabling factors that would help them pursue the higher education goal. Sponsorship was also reported by 13.7% of youth as an enabler. While 1% reported other enablers such as part-time class option, there were about 4.7% respondents who were not sure what the enablers could be.

Sex disaggregated analysis of the enabling factors shows that while 'nearby location' was reported higher among women as an enabler, for men, stipend (47%) was a more important enabler.

Sponsorship (15.3%) was reported more by women and lack of clarity in enabling factor was reported more by men. Other factor such as availability of part time course was reported by men (2.4%).

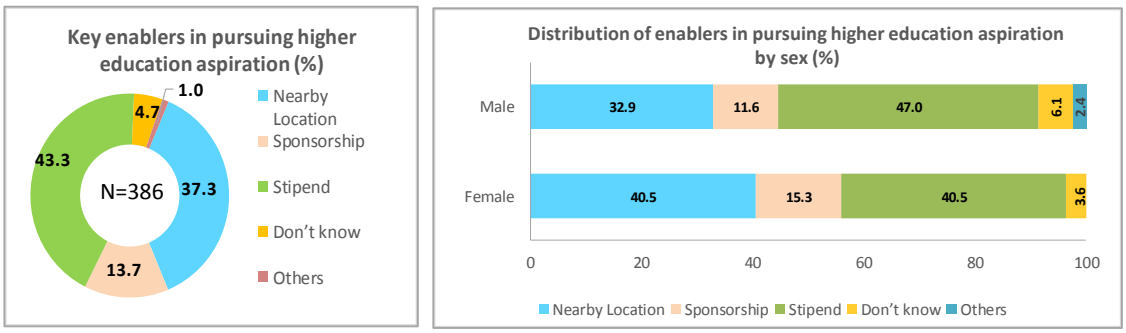


Figure 53: Enabling factors in pursuing higher education aspirations

3.3.5. Awareness of schemes for skill development of youth:

Awareness of government programmes/schemes for skill developed was found low among youth while dealing with questions on enrolment under different schemes. When the question was specifically asked to assess the awareness of youth on different skill development schemes, the responses weren't much different. The analysis of the responses has been presented in figure 54. Out of the total youth interviewed in the survey, 95% reported not having heard of any scheme that provided skill training. Out of the remaining 5% youth who reported having heard of schemes for skill development of youth, 32.4% youth reported having heard of PMKVY scheme, 27% had heard of DDUGKY and 40.5% had heard of both the schemes.

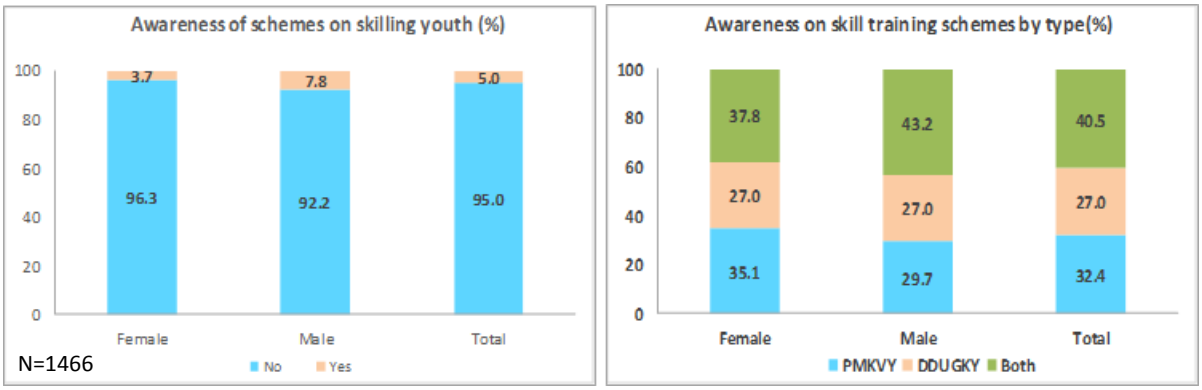


Figure 54: Awareness of government schemes for skill development of youth

Sex disaggregated analysis of awareness does not show significant difference between level of awareness of youth about skill development schemes. While more women (35.1%) reported knowing about PMKYV, more men reported having heard of both PMKVY and DDUGKY. It is important to note that the overall awareness is very low (only 5%), that is only 74 youth out of 1466 youth reported having heard of either one of these schemes or both the schemes.

The FGDs had also revealed similar findings, wherein, the respondents shared that if they had known about the schemes, they would have got enrolled in skill training through them for better employment opportunities. They also shared that in some cases, they get enrolled through an NGO or individual contacts and are not aware of the names of the schemes, if at all they were under any scheme.

4. DEMAND-SUPPLY ANALYSIS

The previous section described the details of the context of Mangalajodi and its demographic profile with focus on youth population. It primarily dealt with data collected from primary sources- the household survey tool and focussed group discussions designed for the study. This chapter deals with analysis of market/demand sourced from secondary review as well as key stakeholder interviews.

4.1 Sectoral Analysis of Odisha Economy:

The economy of Odisha has been moving a path of steady growth exhibiting strong catch-up growth contributing to transformation of the State from a lagging State to a State on the move. According to the Economic Survey, 2017-18[5], the GSDP growth rate was reported at 7.14 percent in 2017-18 as against the national average of 6.5 percent for India. At present services account for 45 percent of the GSDP, followed by industry (35%) and agriculture sector (19.98%). The share of industry in output is shrinking and agriculture continues to account for an imposing 62 percent of the total unorganized workforce in Odisha. While the economic survey reports concerns related to performance of the agriculture sector, it suggests a strong rebound in the services sector with a double-digit growth of 12.4 percent. It reports improvement of performance in finance, infrastructure and social sectors.

4.1.1 Agriculture Sector:

Despite decline in share of State's agriculture in GSDP, the sector continues to absorb more than 62 percent of total workforce in the unorganized sector. This also reflects disguised employment in the form of lower income and productivity of labour in the unorganized sector in rural Odisha. The government has been taking strategic policy initiatives for agriculture sector to address the inherent constraints that have been impacting the performance of the sector—over dependence on rainfed farming, inadequate irrigation coverage, low level of capital formation, over dependence on paddy cultivation, slow pace of modernization, small land holdings, continued prevalence of old tenancy practices in some areas and above all frequent occurrence and impact of natural calamities. However, it will require more focused and intensified interventions to achieve the desired results.

The Government has been promoting agro-based and food processing industries to provide ample alternative employment opportunities to the surplus labour in the agriculture sector. Besides, launching of Centrally Sponsored e-platform for setting up national agriculture market by Odisha State Agriculture Marketing Board is expected to provide remunerative prices to the agriculture producers and accessibility to a wider market across the nation particularly for agricultural produce like Maize, Cotton, Onion, Coconut and Turmeric. In order to promote enterprises within agricultural sector, Odisha government has set up Agricultural Promotion & Investment Cooperation of Odisha Limited (APICOL). Areas like rice/dal/maize milling, dehydration of vegetables, cattle, poultry, cotton/coconut/ groundnut oil, mushroom cultivation, sugar mill, potato chips and fruit processing have potential where agro based industries can be set up[6].

4.1.2 Services:

The services sector comprises a growing component of Odisha's economy that accounted for about 43 percent of GSDP in 2016-17 and it is estimated to be over 45 percent in 2017-18. The sub-sectors Trade & hotels (10%), Transport & communication (7.5%), Real Estate (7.8%), and Other Services like education & health (8.4%) are the main drivers of the services sector in the State. The sector exhibited

[5] Odisha Economic Survey (2017-18), Directorate of Economics and Statistics, Govt. of Odisha.
[6] Skill gap assessment for the State of Odisha: A district-wise analysis, Ernst & Young

an accelerated growth rate of 10.7 percent in 2016-17 and is estimated to grow at 12.4 percent in 2017-18.

Odisha is endowed with promising tourism potential in terms of tourism resources, income generation and employment generation. The State Government has been promoting tourism in the State through improved institutional mechanisms, marketing support and expanded hotel industry, under the guidance of State Tourism Policy 2013. Hotel industry registered a growth of 12.3%in 2016-17. The domestic tourist flow from within and outside the State increased by 8.97% and 8.95% respectively during 2016 over the previous year. Air transport connectivity of the State expanded to cover additional national and international destinations. This will help improve the foreign tourist flows into the State. Tourism in the State also has a large potential for expansion once the destinations in less-frequented parts of the State (the western and southern parts) are developed adequately in terms of connectivity, tourism infrastructure and promotion.

4.1.3 Industry:

Industry sector, with a share of 35% in the State GSDP has a unique importance for Odisha's economy. Odisha has 252 large and medium industries in 22 districts with a total investment of `92,788 crore and employment of 1.18 lakh persons as of March 2017. Odisha is the leading State in the country in aluminum, both in terms of production and reserve capacity. Two of the larger aluminum companies in Odisha produce more than 50 percent of total aluminum production in India. Despite availability of mineral resources, water and power and above all, investor friendly policy of the State Government, a declining share of the industry in the GSDP from 43.6 percent in 2011-12 to an estimated 34.8 percent in 2017-18 has been a disconcerting issue.

The State Government envisions a massive expansion of MSMEs in Odisha while addressing the problem of industrial sickness in the State. Odisha has established 4 Investment Regions in the focus sectors, that is, National Investment & Manufacturing Zone (NIMZ) at Kalinganagar, Petroleum, Chemicals and Petrochemicals Investment Region (PCPIR) at Paradeep, Port Based Manufacturing Zone at Dhamra and Information Technology Investment Region at Bhubaneswar. This will transform Odisha into the industrial gateway to eastern India. Besides, with an average contribution of 9.5% in the State GSDP, the mining sector needs to harness the huge employment potential as well as adopt more capital-intensive technologies to improve global competitiveness.

4.2 Employment and skilling in Odisha: Trends and Opportunities:

Skill development and entrepreneurship efforts across the country have been highly fragmented so far. As per the NSSO, 2011-12 (68th round) report on Status of Education and Vocational Training in India, among persons of age 15-59 years, about 2.2% reported to have received formal vocational training and 8.6% are reported to have received nonformal vocational training. There is a need for speedy reorganization of the ecosystem of skill development and entrepreneurship promotion in the country to suit the needs of the industry and enable decent quality of life to its population[7].

From skilled workforce supply's perspective, the human resource requirement report commissioned by the National Skill Development Corporation (NSDC) under the Ministry of Skill Development and Entrepreneurship to assess the incremental human resource requirement across states across 24 high priority sectors between 2013-17 and 2017-22[7]. The research provides a detailed overview of the sector from a skills perspective, assesses the demand for skills, highlights key job roles, maps the available supply side infrastructure and suggests actionable recommendations for the stakeholders

[7] Annual Report (2017-18), Skill India, Ministry of Skill Development and Entrepreneurship, Govt. of India.

in the system. The study reports Incremental Human Resource Requirement in Odisha to be 33.45 lakh during 2013-2022.
Odisha is following the national trend where the State's total incremental demand-supply gap for skilled jobs is estimated to grow from 20 lakhs by 2021 to 40 lakhs by 2026 and given the existing number of institutions, addressing the fore mentioned skill development requirement is impossible. Some key concerns highlighted in the skill gap assessment for the state of Odisha report are:

1. This estimated skill gap is dominant across several service sectors namely construction materials and building hardware, banking, financial services and insurance, education and skill development, healthcare, IT and ITES industry, Media and entertainment, tourism, travel, hospitality and trade.
2. Vacant seats in ITI courses strongly indicate towards the mismatch between the course offering and expectation of people. Apart from low enrollment, other infrastructure and HR related issues like limited number of institutions and lack of teachers also act as major factor in the skill gap.
3. Another major concern for this skill gap is lack of motivation among youths in acquiring new skills. Majority of youths discontinue and drop out from their respective jobs even after receiving training due to numerous factors namely fear of moving out of their area of comfort, inadequate wages, limited exposure and caste factors.

As agriculture dominated workforce, there is a strong need to diversify the existing skill level of workforce to other allied areas to help them get better economic return for their efforts. Focus needs to be given on agro-based processing trades and to upgrade the traditional skill base. A comprehensive skilling approach for creating workforce who can provide multi-faceted services like veterinary, agriculture-based information, implement repairing etc. is the need of the hour[6]. Besides, there is scope for skill development in integrated farming and so that the farmers move beyond their area of familiarity. This will encourage them to follow other allied activities like vegetable growing, bee keeping and animal husbandry in addition to growing the crops.

There is scope for enhancing the skills of local people, especially the youth, and develop a workforce of 'para agriculturists' and 'para vets' who can provide multi-faceted services— veterinary, agro based info, repairing of implements etc. These skilled resources can provide services to the families on a sustained basis and address minor problems in the sector locally. The youth may also be given skills in the area of information technology to act as facilitators in improving access to information in relevant areas related to the primary sector[6].

4.3 Employment and skilling in Khordha: Trends and Opportunities:

With 79.9% of main workers to total workers population and with a work participation rate of 35.2%, Khordha contributes almost 7.4% of the State's GDP. While contribution of agriculture sector to the Gross District Domestic Product (GDDP) is just 12%, the service sector contributes 74% to the GDDP[6]. District's high urbanization rate has triggered demand for quality service in numerous sectors like healthcare, hospitality, education, retail, IT space which in turn has raised the investment by large corporate bodies. According to the Odisha Economic Survey Report (2017-18) [5], Khordha reported second highest number of MSME units, that is, 3704 MSME units in the year 2016-17. Khordha also reported second highest number of private health institutions (254) and highest number of government hospitals (21). The district is also one of the top six districts of the state of tourist destination. The 'Golden Triangle' of Bhubaneswar-Puri-Konark is the biggest tourist attraction of the state and has huge employment potential.

Characterized by good infrastructure, communication, surge in working age group population, high urbanization, the district has high potential for opportunities across the agriculture, industrial and service sectors. The total workforce demand for skilled jobs in Khordha is expected to grow from 3.9 lakhs in 2011 to 8.2 lakhs in 2026[6]. The prominent sectors in which there will be a high demand for skilled workforce include banking, financial services and insurance (1.9 lakh); tourism, travel, hospitality & trade (1.7 lakh), education & skill development (0.8 lakh), and IT & ITeS industry (0.8 lakh)[6].

In continuation to current trend, majority of this demand seems to be from the service sector. Some **potential demand areas** for Khordha district have been given below:

1. Given the district's increasing urbanisation and growth in service sector, there will be potential market for fruits, vegetables, dairy products, fish and meat.
2. Cashew nut plantation is highly practiced in the district (and in state). There is scope for cashew nut as well as cashew-based products processing units.
3. Good infrastructure, storage and communication facilities can be optimally utilized through increased skilling on food processing and other value addition techniques.
4. With focus on agri-processing and integrated farming with a strong supply chain network, agriculture has the potential of becoming more viable in terms of employment creation and revenue generation.
5. Real estate and infrastructure development, one of the booming sectors in the district with increased urbanisation has potential of increasing demand of skilled masons, electricians, modern engine operators, architects, interior designers, plumbers etc.
6. The Odisha Tourism Policy 2016 declared tourism as a priority industry. Promoting sustainable and green tourism with a view to create employment opportunities and to bring about socio-economic benefits to the community have been a part of the key objectives. Skill development of youth in tourism and hospitality sector will be an important area with high potential.

Optimal utilisation and growth in the above sectors, however, will require advanced training, financial support and proactive involvement from various concerned private and government stakeholders. The district has largest number of technical and professional colleges along with Industrial Training Centres (ITCs) in state. However, these infrastructures remain underutilized due to numerous reasons:

- Maintaining quality of training provided by these institutes is a challenge.
- Many colleges and training centres remain vacant even after completion of admission process.
- The vocational training institutes in the district provide skill development training in limited industrial based trades which is not in accordance to service sector's majority in the state.

Some **challenges in the skilling and entrepreneurship landscape** in the country[7] are also relevant in the context of Odisha in general and Khordha in particular, a few of which are enumerated below:

i. Public perception that views skilling as the last option meant for those who have not been able to progress or have opted out of the formal academic system.
ii. Skill development programmes of the Central Government are spread across more than 20 Ministries/ Departments without any robust coordination and monitoring mechanism to ensure convergence.
iii. Multiplicity in assessment and certification systems that leads to inconsistent outcomes and causes confusion among employers.
iv. Paucity of trainers, inability to attract practitioners from industry as faculty.
v. Mismatch between demand and supply at the sectoral and spatial levels.
vi. Limited mobility between skill and higher education programs and vocational education.
vii. Very low coverage of apprenticeship programs.

viii. Narrow and often obsolete skill curricula.
ix. Declining labour force participation rate of women.
x. Predominant non-farm, unorganized sector employment with low productivity but no premium for skilling.
xi. Non-inclusion of entrepreneurship in formal education system.
xii. Lack of mentorship and adequate access to finance for startups.
xiii. Inadequate impetus to innovation driven entrepreneurship.

In order to understand the demand side, various key stakeholders at state and district level were interviewed and the analysis of their responses are presented below. The details of the stakeholders interviewed are provided in Annexure:

The table below presents summary of the top sectors and job roles in Khordha's district reported by the key stakeholder's interviewed:

Top sectors of the district (Khordha)	**Key Job Roles in demand**	**High demanding jobs in market**	**Emerging sectors**
Retail	Sales attendant	Data entry operator	Tourism & Hospitality
Apparel	Receptionist	Plumber	Mining
Tourism & Hospitality	Back office executives	Domestic electrician	Healthcare
Construction	Mason	Sewing machine operator	
Healthcare	Electrician	Retail	
Electrician	Plumber	Healthcare	
Manufacturing	Technician		
Mining			

(Source: Key stakeholder interview)

The key job roles in demand presented in the table above provide an average salary ranging from Rs. 8000 to Rs. 10,000. With the changing development scenario, the job roles in the market that are in high demand were reported to be jobs like data entry operator, plumber, domestic electrician and sewing machine operator. Apart from these specific jobs, jobs in Retail and Healthcare sector were reported as the high demanding jobs in the market.

Sectors like Tourism & Hospitality, Mining and Healthcare were reported as the **emerging sectors and are likely to receive key investments in next 3 to 5 years.** The key investments in Khordha district are most likely to give attention to the industry set up for job opportunity creation, entrepreneurship development, self-employment, on job training along with special focus on dropout students, women and youths with disability.

To understand the **needs and demands of employers**, five employers operating in Retail, Manufacturing, Tourism & Hospitality, Green business sector were interviewed. While the employer operating in Tourism & Hospitality and Retail sector were large scale enterprises, the employer operating in Manufacturing sector was a medium scale enterprise and the green business employer was a small-scale enterprise.

An analysis of the responses received from the employers interviewed shows that all of them offer basic entry level and middle level jobs. The educational qualification that these employers look for before employing are Polytechnic and ITI graduates and general education like intermediate degree or general graduation degree.

- Entry level jobs: Salaries range from Rs. 7000 to Rs. 9000 and need minimum educational level of higher secondary;
- Middle level jobs: Salaries range from Rs. 15000 to Rs. 25000 and the minimum educational qualification of these jobs range from intermediate to graduation.
- Computer literacy was reported as an added advantage and was being sought for skill.

The most common challenges faced by the employers interviewed are:

- Inadequate training and sector/domain specific skills provided in their institution of training
- Lack of interpersonal/communication skills
- Lack of practical experience in the sector of employment
- Job hopping after adequate on the job training
- Lack of awareness on climate change and environment sustainability in the traditional curriculum.

In order to understand the sectors, courses and placement offered by the educational institutes providing technical vocational training, seven educational institutes were interviewed. Out of the seven, three were government and rest four were private institutes. Except for three private institutes, all other institutes are struggling with low admission rate. The seven institutes interviewed reported offering 35 courses in eight different sectors. The eight sectors reported are:

- Manufacturing
- Construction
- Plumbing
- Automotive
- Tourism & Hospitality
- Apparel
- IT-ITeS
- Electronics

Majority of the courses are offered in Manufacturing (10 courses), IT-ITeS (8 courses) and Tourism & Hospitality (5 courses) sector.

From placement's perspective, out of the seven institutions interviewed, six institutes reported that they did not achieve hundred percent placement in last academic year. Four private institutes provided detailed information on placement. The placement analysis of these institutes has been presented below:

- 100% employment was available to students passing out from only one of these institutes. One institute reported 57% placement while the other two reported placement of only 25% and 27.8% students.
- Five institutes out of seven reported providing placements out of State.
- Four institutes reported more than 50% of the students being placed outside Odisha.
- One institute reported of not having any placement cell.

- Six institutes reported organizing/participating in Job Mela, Campus Interview and Direct Engagement with Employers as the mode of employment.

The newly added **Green business sector** is a broad sector that has many sub sectors like green energy (geo thermal, wind, solar, bio mass etc.), organic farming, waste management (composting, bio gas etc.). This sector presents comprehensive employment opportunities to population from any educational background—engineering, ITI, polytechnic, management etc. Green business sector also has scope of employment for an uneducated person as wage labour/foot worker for carrying out daily basis
activities like waste segregation.
The key recommendations for optimum utilization of the potential were:

- The current education system needs to migrate from linear economic development approach to circular sustainable approach.
- Educational courses should emphasize on various aspects of environmental sustainability like:
  o Waste management and minimization, toxicity minimization.
  o Recycling and disposal.
  o Efficient use of resource and energy utilization.
  o Basic behavioural change for awareness generation and attitude alteration.

4.4 Employment and skilling in Mangalajodi: Trends and Opportunities:

From the different tools used for data collection in the survey, key highlights of the employment and skill landscape in Mangalajodi have been presented below:

In Mangalajodi, while more than 83% youth were reported unemployed, the key **employment** options reported by youth were wage labour, fishing, shop/kiosk/petty vending and other income generating activities (traditional occupations of carpenter, barber, priest, astrologer etc). At a household level, the main occupations were reported to be wage labour, fishing, agriculture, private service and kiosk/shop/petty vending. About 70% households reported the household income to be less than Rs.50,000 per annum.

Access to **technical/vocational skill training** was reported only by 4.7% youth. The skill sectors in which the youth have received training mainly included IT/ITeS sector and Apparel Made-ups and home furnishing. Sectors dominated by men were reported to be IT/ITeS, automotive, plumbing, logistics and electronics. Sectors dominated by women are Apparel Made-ups and home furnishing, handicraft/carpet, banking and healthcare. There seems to be a clear gender-based prioritisation of sectors of skill training in sectors traditionally dominated by men or women. Access to apparel made-up was mostly limited to tailoring/stitching training as a life-skill (compulsory for girls) and IT/ITeS was mostly limited to PGDCA or Data entry course for basic computer skills required for any job role.

Location of training was reported to play an important role in deciding for the course. Men had more access to training within district, in other districts or other states and the percent point difference between women and men on access to training outside block was significantly high. While more than 86% women received training while staying in the village, more than 58% men reported boarding at the location of training. Youth also reported preferring institutes at Bhubaneswar, Cuttack or Puri for higher education or technical/vocational training although the block has options for the same. Quality of teaching and employability was reported as the main reason for this preference.

Cost of training was also a limiting factor related to technical/vocational training. Not all in the village could afford training outside the block or district. Besides, lower cost trainings were taken up more by women than men. While more than half of the women paid a cost within rupees 5,000 for their training, approximately 60% men paid fees more than rupees 10,000.

Access to skill **training under government programme/scheme** was reported only by seven youth members. Lack of awareness about skill development programmes was revealed by all the survey tools.

While **dropout from technical/vocational course** was reported by only 15% youth, it was reported more among women (21.4 %) than men (7.4%).

Preferred employment after completion of training was mostly reported as full-time employment by both men (82.5%) and women (41.5%). However, a significantly higher percentage of women (26.8%) wanted to go for part-time employment. Part time business was reported only by women as they could balance work and family better by engaging in part-time business at home. Market linkage was reported as a major challenge in getting engaged in any such activity.

Skill training aspiration mapping among youth who had not received any training till now revealed interest for training under government programme/scheme (low or no-cost training) by 74.2% (968 persons). The top five sectors of interest in skill training at aggregate level appeared to be Apparel Made-Ups & Home Furnishing (23.6%), Handicrafts & Carpet (9.1%), IT-ITeS (8.8%), Education (6.8%) and Textile & Handlooms (6.2%). For women, Apparel Made-Ups & Home Furnishing (34.6%) was the priority sector followed by Handicrafts & Carpet (13.2%), Textile & Handlooms (9.2%), Education (8.6%) and domestic workers training (6.8%). The same for men was IT-ITeS (18.1%) followed by Electronics (12.3%), Construction (10%), Furniture and fittings (6.5%) and Food industry (5.8%).

There are **traditional skills** in the village like fishing, tailoring, carpentry, saloon, agriculture, handloom, priest, astrology and construction/masonry etc in which there is scope for recognition of prior learning and enhancement of skills. Other skills reported by the youth included training in cooking, astrology, bamboo craft etc. Key enabler for receiving any skill training was reported by majority of the respondents (77.9%) as location of the training institute in near proximity to the panchayat. Other enabling factors in order of preference were stipend (16.3%) and sponsorship (5.5%).

4.5 Prioritization of sector of skill development by through paired ranking method:

Different tools used in the survey revealed varied sectors of skill training aspirations of the youth in Mangalajodi. While youth aspirations in formal training prioritised sectors like Apparel made-ups and home furnishing, IT/ITeS, Handicrafts & Carpets, Education, Electronics, furniture and fittings, food industry etc, there were also traditional skills like fishing, agriculture, beauty and wellness etc that were reported as areas of interest. For a clear skill development planning, **paired ranking**

method was used with five separate groups. The analysis of the finding has been presented in figure 55.

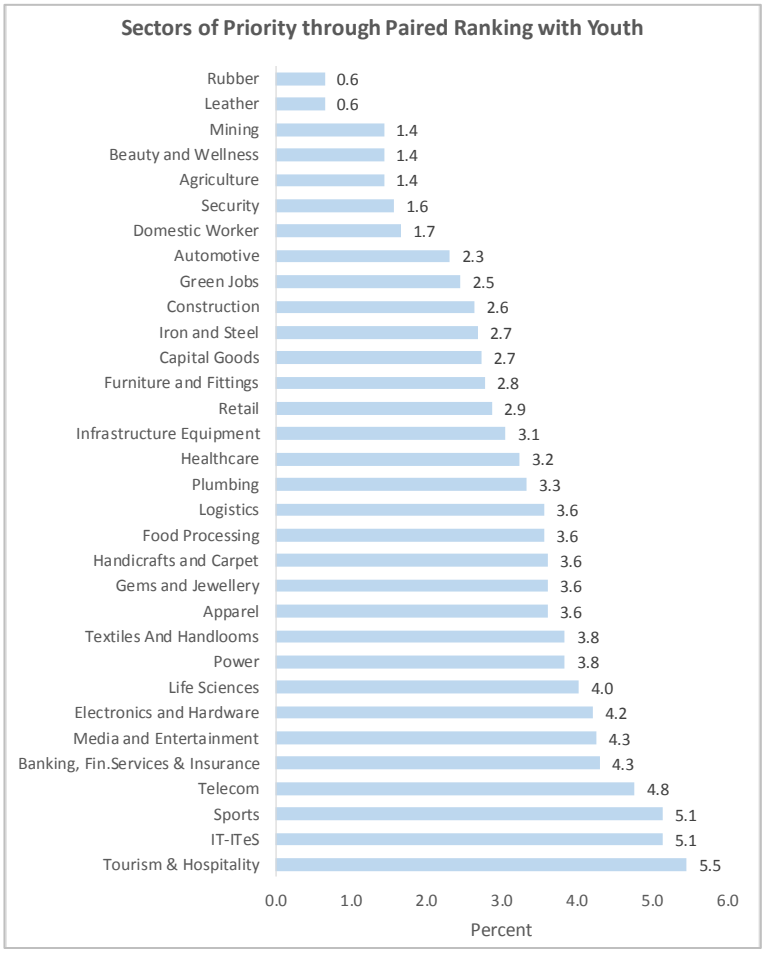


Figure 55: Prioritization of sector of skill training through paired ranking method

The figure clearly shows varied interest in skill training among the youth in Mangalajodi. The top five sectors of interest in skill training reported through paired ranking tool are Tourism & Hospitality, IT/ITeS, Sports, Telecom, Banking Finance Services & Insurance. Detailed paired ranking outcomes have been presented in Annexure.

It is interesting to note that while Mangalajodi is a famous tourist destination of the district, tourism and hospitality did not appear as a sector of priority in the household surveys. But when each sector of training was paired with all other sectors of skill training available, tourism appeared as the most sought-after sector of skill training.

4.6 Opportunity for Skill development under PMKVY:

India's largest Skill Certification Scheme, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) was launched in July 2015. PMKVY is implemented by National Skills Development Corporation (NSDC) under the guidance of the Ministry of Skill Development and Entrepreneurship (MSDE). Review of the scheme guidelines highlights many features out of which the two below are relevant to the context of Mangalajodi:

(i) Short Term Training:

The Short-Term Training imparted at PMKVY Training Centers (TCs) is expected to benefit candidates of Indian nationality who are either school/college dropouts or unemployed. Apart from providing

training according to the National Skills Qualification Framework (NSQF), TCs shall also impart training in Soft Skills, Entrepreneurship, Financial and Digital Literacy. Duration of the training varies per job role, ranging between 150 and 300 hours. Upon successful completion of their assessment, candidates shall be provided placement assistance by Training Partners (TPs). Under PMKVY, the entire training and assessment fees are paid by the Government. Trainings imparted under the Short-Term Training component of the Scheme shall be NSQF Level 5 and below.

According to the PMKVY dashboard (September 2018), In Odisha, there are 199 PMKVY training centers, 78 training partners providing training on 83 job roles. In Khordha alone there are 32 PMKVY Centers, 24 training partners providing short term training on 49 job roles.

(ii) Recognition of Prior Learning (RPL):

While the objective of this Skill Certification Scheme is to enable a large number of Indian youths to take up industry-relevant skill training that will help them in securing a better livelihood, it includes assessment and certification of individuals with prior learning experience or skills under the Recognition of Prior Learning (RPL) component of the Scheme. RPL mainly focuses on the individuals engaged in unregulated sectors (e.g. manufacturing sector and service sector). The objectives of RPL are primarily three-fold: (i) to align the competencies of the un-regulated workforce of the country to the standardized National Skills Qualification Framework (NSQF), (ii) to enhance the career/employability opportunities of an individual as well as provide alternative routes to higher education and (iii) to provide opportunities for reducing inequalities based on privileging certain forms of knowledge over others.

All RPL candidates shall undergo a five-step RPL process—i. Mobilization, ii. Counselling and Pre-Screening, iii. Orientation, iv. Final Assessment and v. Certification and Payout. In Odisha, there are 137 training centers and 16 training partners available to provide RPL trainings on 30 job roles. In Khordha alone, there are 27 training centers and 10 training partners providing RPL trainings on 18 job roles.

(iii) Special Projects

The Special Projects component of PMKVY envisages the creation of a platform that will facilitate trainings in special areas and/or premises of Government bodies, Corporates or Industry bodies, and trainings in special job roles not defined under the available Qualification Packs (QPs)/National Occupational Standards (NOSs). Special Projects are projects that require some deviation from the terms and conditions of Short-Term Training under PMKVY for any stakeholder. A proposing stakeholder can be either Government Institutions of Central and State Government(s)/Autonomous Body/Statutory Body or any other equivalent body or corporates who desire to provide training to candidates.

There is scope for linking the unemployed and dropped out youth in Mangalajodi with the short-term training or RPL training courses of the PMKVY. The scheme was designed as a skill certification and reward scheme with an aim to enable and mobilize large number of Indian youths to take up skill training and become employable for sustainable livelihood. A total of 252 job roles were taken up for implementation in the first two years of PMKVY 2016-20. After two years of scheme implementation, around 15.4 Lakhs candidates have been certified with around 5.8 lakh reported placements under 198 job roles out of the 252 job roles under the short-term training component of the scheme. Looking at the changing needs of the skills required in the market and the performance of the previously existing job roles, it was decided to analyze the existing list as well to include any new job roles as per market demand and to exclude those where the placements have not been up to the mark. The new list also includes job roles which are NAPS scheme (Apprenticeship Model) enabled (Embedded or

Paired) for better exposure to the candidates and increased absorption with hands-on experience in Industry. This section of the report presents the revised applicable job roles[8] of the top priority sectors of skill development identified through various tools (paired comparison, key stakeholder interviews and focused group discussions):

	1. Tourism and Hospitality
1	Front Office Associate
2	Commi 1
3	Commis Chef
4	Counter Sale Executive
5	Food & Beverage Service-Steward
6	Food and Beverage Service Trainee
7	Front Office Associate
8	Home Delivery Boy
9	Housekeeping Attendant (Manual Cleaning)
10	Kitchen Steward
11	Multi-cuisine Cook
12	Room Attendant
13	Street Food Vendor-Standalone
14	Trainee Chef
15	Travel Consultant

	2. IT/ITeS
1	CRM Domestic Non -Voice
2	CRM Domestic Non-Voice
3	CRM Domestic Voice
4	Domestic Biometric data operator
5	Domestic Data entry Operator
6	Domestic IT Helpdesk Attendant
7	Junior Software Developer

	3. Sports *
1	Dealership Telecaller Sales Executive - Level - 4
2	Fitness Trainer - Level - 4
3	Lifeguard - Level 4
4	Sports Masseur - Level - 4
***These job roles are not there in revised list of PMKVY; The list is as per the Sports Sector Skill Council**	

	4. Telecom/Telecom Sector Skill Council
1	Broadband Technician
2	Customer Care Executive (Call Centre)
3	Customer Care Executive (Relationship Centre)
4	Customer Care Executive (Repair Centre)
5	Distributor Sales Representative
6	Field Sales Executive-Telecom Plan & Services
7	Grass Root Telecom Provider (GRTP)
8	Handset Repair Engineer
9	ICT Technician
10	Optical Fibre Splicer
11	Optical Fibre Technician
12	Sales Executive (Broadband)
13	Telecom Board Bring-UP Engineer
14	Telecom -In-store promoter
15	Telecom Terminal Equipment Application Developer (Android Application)
16	Telecom Tower / Bay Installation Supervisor
17	Telecom- Tower Technician

[8] Source: http://pmkvyofficial.org/App_Documents/News/Revised_applicable_Job_Roles_for_PMKVY_FY_2018-20.pdf

5. Banking, Financial Services and Insurance	
1	Goods & Services Tax (GST) Accounts Assistant

6. Media and Entertainment	
1	Animator
2	Assistant Camera man
3	Character Designer
4	Compositor
5	Editor
6	Hairdresser
7	Make-up artist
8	Modeler
9	Production Assistant
10	Roto Artist
11	Sound Editor
12	Voice Over Artist

7. Electronics and Hardware			
1	Access Controls Installation Technician	16	Field Technician - UPS and Inverter
2	and Place Assembly Operator	17	Installation Technician - Computing and Peripherals
3	Assembly Operator - Energy Meter	18	In-Store Demonstrator
4	Assembly Operator - RAC	19	IT Coordinator in School
5	Assembly Operator - TV	20	LED Light Repair Technician
6	Assembly Operator - UPS	21	Mechanical Fitter – Control Panel
7	Box-building Assembly Technician	22	Mobile Phone Hardware Repair Technician
8	CCTV Installation Technician	23	PV System Installation Engineer
9	Circuit Imaging Operator	24	Sales Executive
10	DTH Set Top Box Installation & Service Technician	25	Service Engineer
11	Field Engineer - RACW	26	Solar Panel Installation Technician
12	Field Technician - AC	27	Through-hole Assembly Operator
13	Field Technician - Computing and Peripherals	28	TV Repair Technician
14	Field Technician - Networking and Storage	29	Wireman – Control Panel
15	Field Technician - Other Home Appliances		

8. Life Sciences	
1	Chemist/ Supervisor/ In charge - Finished Goods - Life Sciences
2	Fitter Mechanical - Life Sciences
3	Lab Technician/ Assistant - Life Sciences
4	Medical Sales Representative
5	Production/ Machine Operator - Life Sciences
6	QC Chemist
7	Quality Assurance Chemist- Life Sciences
8	Research Associate/ Associate Scientist - Product Development
9	Store Assistant-Life Sciences
10	Telesales Executive - Life Sciences
11	Validation Supervisor/ In charge - Life Sciences

Besides the above eight sectors identified through paired ranking the other potential sectors of skill development identified through focused group discussions and key stakeholder interviews are presented below:

9. Agriculture/Agriculture and Allied			
1	Animal Health Worker	19	Marine Capture Fisherman cum Primary Processor
2	Aqua Culture Worker	20	Micro irrigation Technician
3	Artificial Insemination Technician	21	Neera Technician
4	Assistant gardener	22	Nursery worker
5	Bamboo Grower	23	Organic Grower
6	Beekeeper	24	Packhouse Worker
7	Broiler Poultry Farm Worker	25	Paddy Farmer
8	Bulb Crop Cultivator	26	Quality Seed Grower
9	Cotton Cultivator	27	Seed Processing Worker
10	Dairy Farmer/Entrepreneur	28	Sericulturist
11	Floriculturist - Open cultivation	29	Service & Maintenance Technician-Farm Machinery
12	Floriculturist - Protected cultivation	30	Shrimp farmer
13	Friends of Coconut Tree	31	Small poultry farmer
14	Gardener	32	Solanaceous crop cultivator
15	Greenhouse Operator	33	Solar Pump technician
16	Hatchery In-charge	34	Sugarcane Cultivator
17	Hatchery Operator	35	Tractor Mechanic
18	Layer Farm Worker	36	Tractor operator

10. Power	
1	Assistant Technician -Street Light Installation & Maintenance
2	Assistant-Electricity-Meter-Reader-Billing-and-Cash-Collector
3	Assistant-GIS-Mapping-Power-Distribution
4	Attendant Sub-Station (66/11, 33/11 KV)- Power Distribution
5	Cable Jointer Electrical Power System
6	Consumer Energy Meter Technician
7	Distribution Lineman
8	Electrician Domestic Solutions
9	Engineer (JE)-Power Distribution
10	Engineer –Power Distribution
11	Lineman Distribution (Multi-Skilled)
12	Senior Lineman Distribution
13	Technician- Distribution Transformer Repair

11. Food Processing			
1	Assistant Lab Technician - Food and Agricultural Commodities	17	Ice Cream Processing Technician
2	Baking Technician	18	Jam, Jelly and Ketchup Processing Technician
3	Butter and Ghee Processing Operator	19	Milk Powder Manufacturing Technician
4	Cold Storage Technician	20	Milling Technician
5	Convenience Food Maker	21	Mixing Technician
6	Cottage Cheese Maker	22	Modified Atmosphere Storage Technician
7	Dairy Processing Equipment Operator	23	Multi Skill Technician (Food Processing)
8	Dairy Products Processor	24	Offal Collector
9	Fish and Sea Food Processing Technician	25	Pickle Making Technician
10	Food Products Packaging Technician	26	Plant Biscuit Production Specialist
11	Fruit Pulp Processing Technician	27	Pulse Processing Technician
12	Fruits and Vegetables Drying/ Dehydration Technician	28	Purchase Assistant - Food and Agricultural Commodities
13	Fruits and Vegetables Canning Technician	29	Soya beverage making technician
14	Fruit Ripening Technician	30	Spice Processing Technician
15	Fruits and Vegetables Selection In-Charge	31	Squash and Juice Processing Technician
16	Grain Mill Operator	32	Traditional Snack and Savoury Maker

12. Apparel, Made-Ups & Home Furnishing	
1	Export Assistant
2	Export Executive
3	Fabric Checker
4	Hand Embroiderer
5	Inline Checker
6	Layerman
7	Machine Maintenance Mechanic-Sewing Machine
8	Packer
9	Pressman
10	Production Supervisor (Sewing)
11	Self Employed Tailor
12	Sewing Machine Operator
13	Sewing Machine Operator -knits
14	Sewing Machine Operator- Knits
15	Washing Machine Operator

13. Retail	
1	Distributor Salesman
2	Individual Sales Professional/ Self-employed Retailer
3	Retail Sales Associate
4	Retail Team Leader
5	Retail Trainee Associate
6	Seller Activation Executive

14. Healthcare			
1	Diabetes Educator	5	General Duty Assistant
2	Diet Assistant	6	Home Health Aide
3	Emergency Medical Technician - Basic	7	Pharmacy Assistant
4	Front Line Health Worker	8	Vision Technician

15. Mining			
1	Dumper/Tipper Operator	7	Mining - Mechanic / Fitter
2	Explosives Handler	8	Mining - Safety Operator
3	Mine Electrician	9	Mining - Wire saw Operator
4	Mine Machinist	10	Mining Shot Firer/Blaster
5	Mine Welder	11	Mining-Bulldozer Operator
6	Mining - Loader Operator	12	Sampler

16. Green Jobs	
1	Solar PV Installer – Civil
2	Solar PV Installer – Electrical
3	Solar PV Installer (Suryamitra)

4.7 Opportunity for Skill development under OSDA:

Odisha Skill Development Authority was established to provide overall direction, guidance & implementation of skill development programs in the State by converging different sectors. OSDA works with an overarching mission to bring transformative human development through skilling of youth and making Skilled-in-Odisha-a Global Brand. With 61 training partners for imparting skill training on 196 trades in 36 sectors of employment and 39 placement linked training programmes, Odisha Skill Development Authority has been providing overall direction, delivering convergence and driving accountability for all skill related planning and activities. Besides, with 49 Government ITIs, 35 Government Polytechnics, and 526 private ITIs it aims to train 2.5 lakh youth by the year 2018-19. The number of courses under all these sectors of employment has been given in Annexure. The qualification for undertaking these courses varies from Non-Matric and Matric to Class XII.

Job roles for which skill training courses are available:

An analysis of the various job roles for which skill training is provided under OSDA was undertaken to understand the sectors of skill training focussed at the state level. Green jobs sector course for solar panel installer was found under power sector. No specific sports related job role course was available like PMKVY revised list of job roles. In the sectors of priority identified in the survey, the job roles for which training is provided under Skilled in Odisha programme are given below:

1. Tourism and Hospitality					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Tourism and Hospitality	Non-Matric	9	Front Office Associate	Non-Matric
2	Cook (Continental)	Non-Matric	10	Front Office Executive	Non-Matric
3	Cook (General)	Non-Matric	11	Front Office cum Receptionist	10th Standard
4	Cook (Indian Cuisine)	Non-Matric	12	Hospitality Assistant	10th Standard
5	Food and Beverages services	Non-Matric	13	Housekeeping Assistant (Manual Cleaning)	Non-Matric
6	Food and Beverages services (Hospitality)	Non-Matric	14	Housekeeper	Non-Matric
7	Food and Beverages Services (Steward)	Non-Matric	15	Room Attendant	Non-Matric
8	Food and Beverages Services (Trainee)	Non-Matric	16	Tour Assitant	10th Standard
Long Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Hotel Management and Catering Technology	12th Standard	2	Stenographer and Secretarial Assistant (English)	10th Standard

2. IT/ITeS					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Accounts Assistant using Tally	10th standard	9	Customer Relation Executive	Non-matric
2	BPO Non-Voice	10th standard	10	Domestic Data Entry Operator	10th standard
3	BPO Voice	10th standard	11	Domestic Helpdesk Attendant	Non-matric
4	BPO Voice and Non Voice	10th standard	12	Domestic IT Helpdesk Attendant	Non-matric
5	Computer Hardware Assistant	10th standard	13	DTP and Print Publishing Assistant	10th standard
6	Computer Network Assistant	10th standard	14	Junior Software Developer	Non-matric
7	CRM Domestic Non-Voice	10th standard	15	Technical Support Executive Non Voice	Non-matric
8	CRM Domestic Voice	10th standard	16	Web Designing and Publishing Assistant	10th standard
Long Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Computer Hardware and Networking	10th standard	4	Information Technology	10th standard
2	Computer Operator and Programming Assistant (COPA)	10th standard	5	Information Technology and Electronics System Maintenance (IT & ESM)	10th standard
3	Computer Science & Engineering	10th standard			

3. Telecom					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Customer Care Executive	Non-Matric	4	Telecom	Non-matric
2	Field Sales Executive–Telecom Plans and Services	Non-Matric	5	Telecom–In Store Promoter	Non-matric
3	In-store Promoter	Non-Matric			

4. Banking, Financial Services and Insurance (BFSI)					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Accounting	12th Standard	5	GST Accounts Assistant	Non-matric
2	Banking and Accounting	Non-Matric	6	Quality Assessor	Non-matric
3	Banking Association	12th Standard	7	Senior Sales Person (Non life Insurance)	10th Standard
4	Business Correspondence and Business Facilitator	Non-Matric			

5. Electronic Media and Film Industry					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Animator	Non-Matric			
Long Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Cinematography	10th standard		Sound & TV Engineering	10th standard
	Film & Video Editing	10th standard			

6. Electronics and Hardware					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	CCTV Installation Technician	Non-Matric	5	Field Technician and Other Home Appliances	Non-Matric
2	DTH Set Top Box Installation and Service Tech	Non-Matric	6	Installation Technician and Computing and Peripherals	Non-Matric
3	Field Technician and Computing and Periphera	Non-Matric	7	LED Repair Technician	Non-Matric
4	Field Technician and Networking and Storage	Non-Matric	8	Mobile Phone Hardware Repair Technician	Non-Matric
Long Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Applied Electronics and Instruments	10th standard	4	Mechanic Consumer Electronics	10th standard
2	Electronic Mechanic	10th standard	5	Mechanic Mechatronics	10th standard
3	Electronics & Telecommunication Engineering	10th standard	6	Mechatronics Engineering	10th standard

7. Life Sciences					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Medical Sales Representative	Non-Matric			

8. Agriculture					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Agriculture extension Service Provider	Non-Matric	4	Organic Grower	Non-Matric
2	Dairy Farmer/ Entrepreneur	Non-Matric	5	Quality Seed Grower	Non-Matric
3	Gardener	Non-Matric	6	Small Poultry Farmer	Non-Matric

9. Power Generation, Transmission, Distribution, Wiring and Electrical Equipments					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Consumer Energy Meter Technician	10th Standard	4	Solar PV Installer (Suryamitra)	Non-Matric
2	Distribution Lineman	Non-Matric	5	Solar PV Technician	ITI
3	Solar Panel Installation Technician	Non-Matric			
Long Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	CoE BBBT (Electrical)	10th Standard	3	Wireman	Non-Matric
2	Electrician	10th Standard			

10. Food Processing and Preservation					
Long Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Food Processing and Preservation (SCTE&VT)	10th Standard	2	Food Technology	10th Standard

11. Textile and Apparel					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Apparel Finisher and Checker	Non-Matric	7	Line Supervisor Stiching	Non-Matric
2	Fabric Cutter	Non-Matric	8	Sampling Tailor	Non-Matric
3	Garment Construction Techniques	Non-Matric	9	Self Employed Tailor	Non-Matric
4	Hand Embroider	Non-Matric	10	Sewing Machine Operator	Non-Matric
5	Hand Embroiderer	Non-Matric	11	Sewing Machine Operator (Kints)	Non-Matric
6	Industrial Sewing Machine Operator	Non-Matric			
Long Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Dress Making	10th Standard	3	Textile Engineering	10th Standard
2	Sewing Technology	10th Standard	4	Textile Wet Process Technology	10th Standard

12. Retail					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Departmental Manager	Non-Matric	6	Retail (Showroom)	Non-Matric
2	Distributor Salesman	Non-Matric	7	Retail Sales Associate	Non-Matric
3	Retail (Auto)	Non-Matric	8	Retail Trainee Associate	Non-Matric
4	Retail (Fastfood)	Non-Matric	9	Senior Sales Person	10th Standard
5	Retail (Operations)	Non-Matric	10	Trainee Associate	10th Standard

13. Health Care					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Bedside Assistant	Non-Matric	5	Health Care Multipurpose Worker	10th Standard
2	Cardiac Care Technician	12th Standard	6	Medical Laboratory Technician	Non-Matric
3	Dialysis Technician	12th Standard	7	Multi Purpose Health Worker	Non-Matric
4	General Duty Assistant	Non-Matric	8	Pharmacy Assistant	10th Standard
Long Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Pharmacy	10th Standard			

14. Mining					
Short Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Mine Electrician	Non-Matric	2	Mining–Safety Operator	Non-Matric
Long Term Courses					
Sl. No.	Job Role	Qualification	Sl. No	Job Role	Qualification
1	Blaster Short Firer (SCTE&VT)	10th Standard	5	Mechanic Mining (MC)	10th Standard
2	Drilling Engineering	10th Standard	6	Metallurgy Engineering	10th Standard
3	Mate Mines (SCTE&VT)	10th Standard	7	Mining Engineering	10th Standard
4	Mechanic Earth Moving (MC)	10th Standard			

Linking skills with entrepreneurship through 'Nano Unicorn' programme:

The Nano-Unicorn Project under the banner of OSDA is an experiment that links skill training with entrepreneurship by engaging with philanthropic capital. It revolves around the idea of empowering the youth to become the game-changers of future. The possible candidates for entrepreneurship in ITIs and Short-term skill centres are asked for their "Dream Statement" that explains what the person would want to do if she or he was given access to a capital of Rs.1 lakh without any collateral or paperwork beyond a single page. The person is then asked to defend the Dream Statement much like a case study competition in B-School. Those who qualify are then sent to a week-long residential training programme. They are taught by real entrepreneurs as faculty. At the end of the journey, the aspirants revise their plan, fine tuning it based on inputs received. At the same time, capital of Rs.1 lakh from a philanthropic source is made available with students the condition that if the money is returned within one year, there will be no interest payable. The idea here is that as and when the money comes back, the same amount can be extended to another, future small entrepreneur who has promised to become a Nano-Unicorn. The programme isn't just about making the capital available to the youth for business, but it also is about capturing the journey from the idea to the inception of a successful, small businessman. The goal is also to make the narrative widely available to inspire many more skilled individuals to start their own enterprises.

4.8 Tourism Development in Mangalajodi:

Odisha's golden history coupled with its strategic location, diverse demography and natural landscape makes it a rich tourist hub. **The tourism sector in Odisha** on the whole has rich potential for employment—direct and indirect. According to the Economic Survey 2017-18, by an estimate, tourism sector creates 89 jobs as against 45 jobs in primary sector and 13 jobs in secondary sector for an investment of `One million. The ratio of indirect jobs to direct jobs in tourism sector is approximately 3:1. In Odisha, tourism is a labour intensive sector. The sector contributes significantly to the economy, from local to state level in terms of employment and income generation, foreign exchange earnings and value addition for the State economy. Odisha has a high intensity of overnight domestic tourism, with an average of 541 trips per 100 households, as compared to the all India average 418 trips per 100 households as per National Council of Applied Economic Research, 2015 report.

To understand the **tourism in Mangalajodi,** key stakeholders interviewed in the panchayat also included representatives of the three eco-tourism projects—Godwit Cottage, Mangalajodi Eco Tourism and Eco tourism conservation venture. Key points emerging out of the discussion with these project representatives is given below:

1. The projects provide employment opportunity to about 200 households directly and indirectly. Direct employment opportunity has been provided to boatmen and guides who have been trained on operating tourist boats, knowledge on photography, names of bird in English and basic orientation on pollution and sanitation.

2. While some boats have been provided through the local NGO others use their own boats. About 30-40 boatmen are directly engaged in these projects and earn wage of Rs.300 per trip of the boat. The guides also earn Rs.300 per ride. Indian Institute of Tourism and Travel Management has facilitated some training programmes for the guides.
3. There is scope for widening the livelihood options under the tourism project through strengthening of local handicraft/handloom/art of the nearby villages. If Government incentivizes these skills and creates opportunities for bringing them together, people can generate income throughout the year.
4. Skill development in traditional art, culture, building boats and fishing related activities will yield better result for all. The fishermen community, primarily living in Ward no 9 should be given priority as majority in this ward are people below poverty line. Their livelihood has traditionally been dependent on fishing and they do not have land ownership. With shrinking livelihood option in Chilika and bird conservation project, their livelihood is affected most. In promoting livelihood options for them, they should be given financial assistance.
5. Massive plantation is required in the area for balancing the negative impacts of climate change. This will help reduce increasing heat in the area as well as help the rain-fed agricultural economy.
6. ONGC's support in developing eco-tourism is an opportunity that needs to be utilized properly for improving lives of people.

The major **challenges** faced in the area during the season are:

- Some local people do not support the eco-tourism projects due to vested interests.
- Birds entering the paddy fields destroy the crops by eating grains;
- Sanitation and hygiene are major challenges that needs to be maintained by the villagers and the tourists; Strict monitoring and pollution control mechanisms need to be set up. While the projects try to ensure that, tourists and local people, sometimes, do not follow the rules.
- As per the conservationists, fishermen should not be fishing in all parts of the lake as it disturbs the birds. However, the fishermen community is not ready to move out from their traditional way of fishing. There is scope for balancing the needs of people and the bird conservation through:
  - Implementation of guidelines and issuing of Identity card and license by the forest department.
  - Proper training and orientation to the community by Government.
  - There is also need for clear instructions and orders for tourists as they do not realise that they scare away the birds by not following instructions properly. If people do not disturb birds, birds will be comfortable with people.

5 ENVISIONING A DEVELOPED MANGALAJODI GRAM PANCHAYAT

This section of the report presents analysis of the collective vision of the residents of Mangalajodi for the village development. A visioning exercise named "OUR FUTURE (DREAM/VISION) VILLAGE 2030", an adapted version of the visioning exercise in a village developed by NIRD, was done with the villagers in different groups to identify major challenges that the villagers are currently facing and what changes they would want to see in future. Different sectors were predefined to allow reflection by the participants of the focused group discussions. An option to add any other areas of development was left open ended for the participants to decide and mention, if any.

Besides this, the key stakeholders interviewed in the village were also asked about their dream vision of a developed Mangalajodi as well as identify the key challenges faced by the village at present. The information collected from the key stakeholder interviews is given at an aggregate level in section 5.1.

5.1 Envisioning of dream village by key stakeholders:

5.1.1 Challenges faced in Mangalajodi:

While Mangalajodi is known as a tourist destination at the national and international level, lack of access to basic tourist infrastructure and facilities is a major impediment in development of the village as an ideal tourism center. The key challenges related to this are:

1. ***Water***: Absence of proper irrigation facility for agriculture as well as lack of access to improved sources of drinking water.
2. ***Toilets:*** There has been increased access to household toilets through ONGC intervention. However, a well-maintained toilet facility is not available for tourists in public location.
3. ***Tourism*** is a source of livelihood for 4 months for about 270 households directly (Boatmen, Guide, boat owners etc.) and 250 households indirectly (suppliers of food and other facilities for the tourists).
4. ***Lack of work opportunities for youth*** in the GP and nearby areas forces 50-60% youth to migrate outside the village in search of employment (permanent as well as seasonal) for about 8 months during the year. They migrate mostly to work as wage labourers in construction sector, saree mills, and fishing sector in the states of Gujarat, Tamil Nadu and Kerala.
5. ***Employment*** under MGNREGA is also not available in the village and people also are not forthcoming to take up employment under this scheme.
6. ***Alcohol*** consumption is one of the factors that affects productivity in the village.
7. Performance of government ***education*** system available to the GP is also challenged as teachers are over burdened with other activities and are not able to give attention to student's education.
8. There is no ***health facility*** in the panchayat. For any health emergency, people prefer to visit district hospital at Khordha or private health facilities in Bhubaneswar than rely on the PHC at Tangi. In the absence of the doctor most of the times at Tangi PHC, the quality of care is compromised in the public health facilities.
9. ***Political interference*** and influence are another major hindering factor for optimal utilization of resources available for development of the GP.

5.1.2 Village development in view of the key stakeholders:

Envisioning of a dream village of Mangalajodi for the key stakeholders, especially the elected representatives, reported development in the following:

1. **Infrastructure development:**
   - Availability of professionally managed community hall/meeting halls, marriage mandap, market complex etc. that would employ youths locally.

- Beautification of Railway station and setting up more tourist cottage for tourist.

2. **Access to basic services:**
   - Proper irrigation system through canals for round the year agriculture and access to improved sources of drinking water for all.
   - Well-equipped Health facility at the Panchayat level with adequate human resources.
   - Improving education quality and setting up skill training centers.
3. **Employment opportunities:**
   - Income opportunity to the youth through setting up an Industry nearby and to reduce migration. The sector of trade, however, needs to be well thought of. ITI pass outs should have options to get locally employed.
   - During peak season tourists can have food from village temple and experience village life. More households may be able to engage in tourism support activities during the season with more professional orientation and training.
4. **Better cooperation and control mechanisms in place:**
   - Closing of the liquor shops in the area and ban on alcohol consumption.
   - Setting up police out post to control the drunkards as well as the bird hunters.
   - More cooperation among panchayat office bearers for village development. Caste and Party politics affects effective coordination among the PRI representatives.

5.2 Envisioning of dream village by community members in FGDs:

The findings of the envisioning village development tool of NIRD have been presented below classified by the sectors of development identified in the tool—infrastructure, education, health, roads, women, people with disability etc. The villagers participating in the discussion identified some of the challenges related to the sectors and shared their future aspiration to make Mangalajodi a dream village against the challenges. The future aspirations in this section have been stated as 'realized dreams' for Mangalajodi. These are given below:

5.2.1 Infrastructure

Present situation	Aspiration
• Unfavorable **housing** conditions translating to absence of pucca houses was reported as one of the infrastructure related challenges by people of Mangalajodi village. • Acute shortage of **drinking water** in summers. Though piped water is available in some of the wards, it hasn't reached every ward/every household. Usually people depend upon other wards for water. During summer season, supply of pipe water completely stops forcing people to resort to drink water from uncovered wells. • Poor **mobile connectivity** due to a smaller number of mobile towers in the village as it may harm the birds. • Absence of **Bank** and ATM in the village. • Absence of **Police station** in the village. • Absence of **Playground** in the village for the kids.	• A well-maintained tap water supply system available to every household. • Developed roads, ATM facility, child friendly playground/parks in the village ***"Development of infrastructure like roads, water, etc. can be easily taken care of if the BDO wants to. Since the development of Mangalajodi is not a priority for the BDO, its neglected"***

5.2.3 Health

Present situation	Aspiration
• Absence of health facility in the village. • There is a CHC in Tangi block where doctor is not available every day. • The quality of care provided at the CHC is not very good. • People of Mangalajodi village often go to either Khordha or Bhubaneswar to access medical facilities.	• Well-equipped health facility in the village with adequate human resources and facilities so that people do not need to go to Bhubaneswar for primary health care.

5.2.4 Education

Present situation	Aspiration
• There are 9 Anganwadi centers, 1 mini Anganwadi center, 3 Primary schools (Up to class V), 2 Middle English school (VI – VIII) and one Secondary school (IX – X). The Secondary school is shared between two Gram Panchayats- Mangalajodi GP and Sundarapur. The quality of education imparted in these educational institutes is not up to the mark. • There is no separate girl's toilet in the schools. • For higher education (graduation and above), youth migrate out of village as there are no educational institutes nearby. • To pursue technical/vocational education youth, have to travel long distances (e.g., Retang, 46 km) as there are no technical vocational institutes near the village. • Good computer education facility is not available. • Financial constraint of families is main obstacle for education • Lack of quality teachers in village schools.	• Quality primary education imparted in schools. • All students complete their education atleast upto Class X. • An engineering and ITI college near the village. (the ITI opened near GP got closed due to low enrolment, poor quality of teaching and delayed payment of salary even to peon) • Improved teaching quality in village schools • Teachers not overburdened with other work of government.

5.2.5 Livelihood

Present situation	Aspiration
• Lack of irrigation facilities leading to poor agricultural productivity • People of Mangalajodi entirely depend on rain for agricultural produce. • Lack of employment opportunity for youth in the nearby areas forces them to migrate • People pump water to irrigate their lands from ponds using their own motors. • Birds and cattle destroy crops in the field. • Tourism employs many households during the season, but eco-tourism is not a livelihood option for majority of the households. • Traditional trades of boat making, carpentry and fishing are dying out in the village with youth not taking up family occupation as they are no more profitable.	• A factory/company in or near the village that creates job opportunities for people and people do not need to go out in search of job. (Some people go out by choice and that should be fine) • Technological intervention is introduced in agriculture sector/traditional trades and people use modern technology for increased productivity. • Youth are trained on modern agricultural practices and are motivated to engage in agriculture as a profitable livelihood option. • Hotel facility near and in the village provides employment to youth and gives good lodging and boarding facility for local tourists. • Alternative sources of income available to people engaged in tourism during off season also.

5.2.6 Markets

Present situation	Aspiration
• Absence of daily vegetable market in the village. • People need to travel 7 to 10 kilometers to have access to market. • Villagers get vegetables from outside and sell in the village.	• Need a daily market in the village. (Mandi or hat). ***"The Sarpanch, if s/he is capable, can do it but if s/he is not able to take care of Panchayat office work, how can the villagers expect her/him to get market facility in the village?"***

5.2.7 Sanitation and Environment

Present situation	Aspiration
• Unhygienic and untidy village environment. • With ONGC's intervention, while 68.7% households have exclusive latrine within premises, people are not using them properly. • Absence of proper drainage system in the village. • Lack of proper waste management system (e.g., dustbins) leading to littering and pollution.	• A person appointed to look after the cleanliness of the village. • Proper drainage system made available with intervention of the Panchayat and other departments • A clean and litter free Mangalajodi

5.2.8 Roads and Transport

Present situation	Aspiration
• Bad unsafe road conditions with cracks and potholes. • Few of the roads have no street lights at all. Even after ONGC's effort to provide 100% solar lights in the village streets, many of the lights were stolen. • Poor connectivity from Mangalajodi GP to Tangi block—people walk for almost 4 kms to find some mode of transport. • No bus stops in the Panchayat.	• Better roads right upto the hamlet level. • Streets of Mangalajodi lit with more solar panel lights and no stealing of the streetlights happens. • Transportation linkages from the village to the main city available • Local bus stop at Panchayat available for better connectivity.

5.2.9 Electricity

Present situation	Aspiration
• The solar lights that have been installed by ONGC are stolen by the people of Mangalajodi. • Power cut for 4-5 hours daily. • Meter reading is taking by electric department in gap of 2-3 months and people are burdened with heavy bills at a time.	• Streets of Mangalajodi lit with more solar panel lights and no stealing of the streetlights happens. • 24 x 7 electricity facility available for all households. • CCTV/watchman available for safeguarding theft of installed solar lights and batteries. This will also provide security to tourists. • Regular meter reading is done for ease in payment.

5.2.10 Food security

Present situation	Aspiration
• Not enough food grain is produced locally to meet villagers' food requirement • Unavailability of nutritious food as most of the agriculture is contaminated with chemical pesticides. • Some households need to work daily to ensure food for the day.	• A borewell or a canal is constructed to irrigate the agricultural land for increased productivity in agriculture. • People are sensitized on the nutritional aspect of food they consume and follow it in their diet. • Alternative livelihood options ensure food security of the poor households.

5.2.11 Girls and Women

Present situation	Aspiration
• Unsafe environment for girls to attend schools/colleges due to eve teasing. • Lack of availability and maintenance of street lights creates an unsafe atmosphere for girls during night. • Orthodox thinking of parent's towards educating girls. The common thinking that prevails in the village is, *"Afterall girls have to get married and take care of their families at home. What will they do with higher education?"* • Around 50% of the women feel insecure being around their alcoholic husbands. • Pregnant women can't often access health services due to absence of a health facility in the village.	• A health facility in the village is available for better maternal and child care. • Street lights ensure safety of girls during night. • Alcohol is banned in the village. - No agreed upon aspiration was seen for educating girls and help them move towards an independent career woman role.

5.2.12 Disadvantaged sections—SCs, STs, Persons with disability (PWDs)

Present situation	Aspiration
• While atleast 2.9% of the population are differently abled, there is no disabled-accessible infrastructure in the village. • The disability pension is only Rs.300 per month. • Getting disability pension requires running to the govt. offices multiple times and getting it is not ensured. • There are no job opportunities for the differently abled people. • Caste discrimination prevails in the village where people belonging to SC-ST caste are considered as untouchables. • Fishing is the only occupation for the SCs in the village.	• There's a need to create job opportunities for the differently abled people. • Community based rehabilitation should be planned for differently abled people. Wheel chair, hearing aids etc. should be made available to them. • The pension amount needs to be increased. • Need to change the mindsets of people.

5.2.13 Disadvantaged sections— Elderly/aged/widows/destitute

Present situation	Aspiration
• There is no support system available for these people • Some of these get a pension of only Rs.300 per month • Women abandoned by their spouse are not even taken care of by their brothers and their families • Old parents, dependent on their children, suffer • Widow pension is not available properly	• Work for them is available within the village for their livelihood. • Pension amount is enough for their sustenance.

5.2.14 Others

Present situation	Aspiration
• Alcohol consumption is a major threat	• Closure of illegal wine shops and alcohol free Mangalajodi.

6 CONCLUSION AND WAY FORWARD

6.1 Issues and Challenges:

6.1.1 Access to basic services

- ***Drinking water:*** Only 34.3% households in Mangalajodi reported access to improved source of drinking water—tap, covered well and handpump/tubewell/borewell. Majority households reported using uncovered well as a source of drinking water. Out of the total households, only 24.9% have access to water within premises. Purification by boiling is practiced by some selected households; others just strain it using cloth or use the water as available, risking their health and well-being.
- ***Sanitation:*** More than one fourth households (28.7%) reported not having access to **toilet facility** within their premises. These are primarily the households that do not own any land or do not have any area within their homestead land as per the requirements for individual household toilets. Besides, while 71.3% households reported access to latrine (exclusive or shared), behavioural change is still an important component to be worked on.
- ***Fuel for cooking:*** It is also important to note that while LPG has been made accessible to about 60% households through schemes like Ujjwala, firewood (80.9%) continues to remain the most popular **fuel for cooking** in the community. Despite having access to improved fuel, there is over dependence on solid fuels and access to LPG through Ujjwala has not got translated into practice.

6.1.2 Livelihood dependent primarily on seasonal rainfed agricultural labour and fishing leading to seasonal migration of the working age group population

While agriculture was reported to be the third most important source of livelihood of households in Mangalajodi, about 88.3% of the households reported owning land less than one acre. Only 11.6% households reported owning more than one-acre land. In absence of land ownership, wage labour/agricultural labour becomes the obvious main source of livelihood for the people of Mangalajodi. Fishing used to be the main source of livelihood for the people of Mangalajodi due to its location on the banks of Chilika lake in Odisha. However, with shrinking of the lake, restrictions imposed on the villagers for protection of migrant birds and commercialized fishing by business houses, fishing has not remained the most reliable source for poor households of Mangalajodi anymore. Seasonal migration in search of work is common for almost all households of the GP. Majority of the households reported income below Rs.50,000 per annum.

6.1.3 High rate of migration of youth and people in the productive age group

While Mangalajodi Panchayat is home for 65.5% population belonging to the working age group (15-59 years), at an aggregate level, out of the total population about 15.1% were reported to have migrated out of the village. Age disaggregated analysis of the migrated population shows high level of migration among youth, that is, 61% of the migrated population belonged to the age group 15-34 years.

Analysis of migration profile also reveals that while 63.7% of the migrant population migrated outside the state and about 75% of these migrated for work, the nature of migration was reported to be mostly seasonal (73.1%). Migration outside the state was reported more among men (70.5%). Besides, while reason for migration for men was reported to be work (87.7%), among women, the reason reported was mostly ‘other reason’ (52.2%), that generally included family reasons or migration with spouse.

6.1.4 High proportion of population with disability

A significant proportion of the population (3.2%) residing in Mangalajodi were reported living with some or the other form of disability. This was reported higher among male population (4.2%) and in

population above 34 years of age (4.8%). Besides, while disability in movement was reported highest among both male and female population, mental illness and disability in seeing was reported higher among men, disability in hearing and multiple disability was reported higher among women. Access to rehabilitation programmes for people with disability was clearly missing in the Panchayat.

6.1.5 Low educational attainment and lack of aspiration for higher studies

Atleast one third youth of Mangalajodi reported attending school up to secondary level (32.2%) followed by higher secondary level (17.9%). A significant proportion also reported dropping out after completing upper primary education (14.8%) and primary education (12.7%). At an aggregate level only 4.7% youth (majority being men, 87%) reported undertaking technical or vocational education. Girls' education did not emerge as a priority and those who aspire to study, choose graduation. Boys value technical/vocational education more than graduation as with technical course they would atleast be able to get employed outside the state (Gujarat, Goa, Kerala etc.). Youth in Mangalajodi were also found to have very low aspiration for higher education. Out of the youth currently residing in the village, while majority had already dropped out after upper-primary, secondary or higher secondary, about 73.7% reported having no further educational aspiration. 'No employment opportunity' was reported as the main reason for lack of interest in pursuing higher education among youth. The youth also reported that pursuing graduation or higher education does not guarantee employment and may be a waste of three or more years of their work life.

6.1.6 High unemployment among youth

At an aggregate level, out of the total youth residing in the village and not currently enrolled in school/college, only 16.3% were gainfully employed/self-employed. While unemployment was reported high among youth in general (83.7%), about 65.6% men and 96.8% women were reported unemployed in the GP. Analysis of employment by education revealed that unemployment was reported highest among youth who had completed higher secondary education and the youth who had received some technical/vocational education. The occupational profile of the youth also revealed that while wage labour continues to be the main occupation followed by fishing, women were totally found missing from agriculture, business and fishing as an occupation. Among other income generating activities, tailoring for women and carpentry for men were the highest reported occupations.

6.1.7 Very low access to Technical Vocational Education

Out of the youth residing in Mangalajodi, only 9.8% (12.7% men and 7.6% women) reported access to technical/vocational education. The top five sectors of technical/vocational training reported are IT-ITeS, Apparel Made-Ups & Home Furnishing, Plumbing, Power and Automotive. Sex disaggregated analysis shows that sectors traditionally dominated by women or men continue to be sectors of priority for them in Mangalajodi. Training in sectors like automotive, agriculture, media & entertainment, logistics and electronics were reported only by men (100%). Similarly, in sectors of education, handicraft/carpet, banking and healthcare, the sectors traditionally considered suitable for women, were reported taken up only by women (100%).

6.1.8 Lack of awareness on skill development programmes & the different skill sectors

One of the major reasons for lack of access to the technical vocational training was revealed to be lack of awareness on the skill development programmes/schemes, the different sectors for skill development and related potential employment/entrepreneurship options. Out of the total youth interviewed in the survey, 95% reported not having heard of any scheme that provided skill training. Out of the remaining 5% youth who reported having heard of schemes for skill development of youth,

32.4% youth reported having heard of PMKVY scheme, 27% had heard of DDUGKY and 40.5% had heard of both the schemes. It becomes important to understand here, that because of lack of awareness on the different sectors of skill development and their potentials, youth end up getting enrolled in sectors of skill training undertaken by other youth or in the sectors that are available in the nearest ITI/Polytechnics. They do not explore options of training on other trades which may be more suitable to their aptitude and may have better prospects for them.

6.1.9 Gap between sector of training and sector of employment

Out of those who've received technical/vocational training, only 9.2% youth reported getting employed in the sector in which they received training. The sector in which people got trained and the sector in which they got employed were generally not the same for the youth in Mangalajodi. Availability of contractual labour job does not seem to be much of a challenge as after passing out contractors help them get the job immediately. However, continuity on the job has been a challenge. In almost 50% cases, with end of the contractual term, the youth again become unemployed again. In some other cases, youth were also found unemployed because they could not cope with the hardships and demands of the job.

6.2 Opportunities:

6.2.1 Employment aspirations of youth and potential for skill development

While analysis of career aspirations of youth reveals that more than 60% reported interest in full time **employment after completion of their skill training**, sex disaggregated analysis presents a slightly different picture. Majority of both men (82.5%) and women (41.5%) reported aspiration to get engaged in full time employment, but a significantly higher percentage of women (26.8%) wanted to opt for part-time employment. This was also substantiated through FGDs with women SHG group members. Women (mostly young married women who're presently housewives) shared interest in getting engaged in a part-time business. They shared their constraint that while they are educated and have time for getting engaged in income generating activities, they do not have the skills to get into viable trades. If training was provided in a sector which helped them get engaged in part-time business, while staying at their homes, they could balance work and family better. Market linkage, however, was reported as a major challenge in getting engaged in any such activity.

6.2.2 Informal training received by youth and potential for recognition of prior learning

Out of the total youth residing in Mangalajodi, 17.4% reported having traditional skills in the family and only 5.8% reported having received informal skill training. Informal skill training on traditional skills was found lower among women (3.8%) than men (9.9%). Sex disaggregated analysis of the informal skill trainings received also shows that while for men the main informal skill training was in fishing (57.4%), for women it was tailoring (47.4%). Besides, youth also reported being trained in family occupations of agriculture, barber, handloom, priest, astrology, construction/masonry, cooking, astrology, bamboo craft etc. Informal trainings found among youth were either in traditional occupations or were given as life-skills.

The traditional sectors of employment in Mangalajodi are not the most preferred sectors of employment for the youth anymore. There isn't much awareness on potential skill trainings in these traditional skill sectors. There is opportunity for building on the traditional/informal skills of the youth towards making them employable or better equipped for setting up an enterprise of their own. Some youth in the village shared that despite having interest in agriculture, it does not become a viable

option for them due to lack of irrigation facility. They do not have modern skills to enhance productivity given the constraints of small land holdings. They were curious to know if there were possibilities of enhancing their agricultural skills through any skill training. Children of fishermen community could be trained in modern packaging and storage practices for more profit in the trade but in absence of awareness on other options, they end up choosing IT/ITeS, if they can afford. Boat making, furniture making etc. too are skills available in the village that are not being taken up by the youth in absence of proper counselling and guidance. These trades could be promoted with formal training and access to better tools.

6.2.3 Unskilled youth and aspirations for formal skill training

Skill training aspiration mapping among youth who had not received any training till now revealed the top five sectors of interest in skill training at aggregate level to be Apparel Made-Ups & Home Furnishing, Handicrafts & Carpet, IT-ITeS, Education and Textile & Handlooms in the household survey. The sectors traditionally dominated by women and men continue to be a priority by sex. For women, the aspired sectors of skill training were Apparel Made-Ups & Home Furnishing, Handicrafts & Carpet, Textile & Handlooms, Education and domestic workers training. The same for men were IT-ITeS, Electronics, Construction, Furniture and fittings and Food industry. Lack of awareness does not allow them to think beyond the skills they have heard of or seen their seniors in the village undertake.

For skill development planning in order to prioritize the skill sectors, a participatory tool of paired ranking was used. The youth groups were asked to prioritize one sector of skill development all other sectors presented to them in pair one by one. This tool was useful in identifying the most preferred sector of skill development by the youth (both women and men) of Mangalajodi.

The results revealed from the paired ranking tool not only surprised the researchers but the youth themselves. They could understand how they could randomly think about just the trades their friends or family members had taken up. When forced to prioritize one sector against other sector separately, the top five sectors revealed were Tourism & Hospitality, IT/ITeS, Sports, Telecom, Banking Finance Services & Insurance. Besides these top priority sectors, Apparel Made-ups & Home furnishing, Handicrafts & Carpet, Food processing, and Healthcare were sectors prioritized more by women in the groups. Sports as a sector of priority was voted more by men.

6.2.4 Skill development framework of PMKVY

PMKVY, implemented by National Skills Development Corporation (NSDC) under the guidance of the Ministry of Skill Development and Entrepreneurship (MSDE) brings opportunity for school dropouts and unemployed youth and increase their employability or skills to enhance their incomes. According to the PMKVY dashboard (September 2018), for **Short Term Training courses** under PMKVY, in Odisha, there are 199 training centers, 78 training partners providing training on 83 job roles. In Khordha alone there are 32 training centers, 24 training partners providing short term training on 49 job roles.
Under **Recognition of Prior Learning** component of the programme, all RPL candidates shall undergo a five-step RPL process—i. Mobilization, ii. Counselling and Pre-Screening, iii. Orientation, iv. Final Assessment and v. Certification and Payout. In Odisha, there are 137 training centers and 16 training partners available to provide RPL trainings on 30 job roles. In Khordha alone, there are 27 training centers and 10 training partners providing RPL trainings on 18 job roles. The **Special Projects component** of PMKVY envisages the creation of a platform that will facilitate trainings in special areas and/or premises of Government bodies, Corporates or Industry bodies, and trainings in special job roles not defined under the available Qualification Packs (QPs)/National Occupational Standards (NOSs).

There seems to be a strong need for counselling and orientation on the possible sectors of skilling and employability in those sectors. Youth in Mangalajodi neither are aware of the important skilling programmes nor have much idea about skilling environment and employability. The sectors traditionally dominated by women and men continue to be a priority for them. There is scope for both Short Term Training and RPL Training programmes in Mangalajodi that may be facilitated taking into account the sectors prioritized by youth in paired ranking, the potential areas of development identified by the key stakeholders and the growing demand for skilled workforce in the service sector with the increase in urbanization of the district.

6.2.5 Skill development under OSDA

Besides the national level skill development programmes, the Government of Odisha also has a focused State level "Skilled in Odisha" programme under the OSDA. For each sector of priority identified by the youth and other stakeholders, different types of skill trainings courses are also provided under OSDA. There is opportunity to link the youth to these programmes and develop their skills. Besides, the "Nano-Unicorn" programme of OSDA also brings with it, opportunity for potential entrepreneurs in the area. Again, there is need to awareness on the different sectors of skill and related benefits among the youth for proper access and utilization of the same.

6.3 Way Forward for Skill Development:

The opportunities identified by the key stakeholders and prioritized skills by youth can be the initiation point for strengthening the livelihood base of the people of Mangalajodi. It can start with skill planning for the youth of Mangalajodi. As suggested in the previous section, there is a strong need for counselling and orientation on other possible sectors of skilling and employability in those sectors. Awareness generation on the schemes, sectors of skill development, possible job roles, benefits under the schemes, opportunity for entrepreneurship development etc need to be done on a large scale for proper utilisation of the opportunities brought by schemes of the Central as well as the State Governments. There is need for breaking the gender-based skill barrier, explore new horizons and achieve success in career options decided not based on sex but by aptitude. Skill development on unfamiliar potential areas of income generation and sustainable livelihood need to be taken up.

6.3.1 Action Points:

1. Immediate Steps (within 3 months):
    a. Counselling Sessions organised for youth of Mangalajodi
    b. Information on all skill development programmes and provisions under each to be available with the Gram Panchayat Office
    c. Facilitate participation of youth of Mangalajodi in Job Melas being organised by NSDC.
2. Short Term (3 to 6 months):
    a. Awareness generation on different sectors of skill development and employability on a campaign mode to reach out to the last mile.
    b. Bring the unskilled youth under skill development programmes
    c. Organise skill training for women SHG members and other women members inside the village for entrepreneurship development.
    d. Explore options of skill building in handicraft related to the bird sanctuary theme
    e. Explore avenues of financial linkage for these groups to support the willing women entrepreneurs.
3. Long Term (Above 6 months to a year)
    a. Create a cadre of skilled workforce among the unemployed and untrained youth of Mangalajodi

b. Promote eco-tourism as a village enterprise owned by and run by trained village entrepreneurs.
c. Investment in beautification of the Panchayat for all year tourism promotion. The funds under "Mo Adarsh Gaon" (40 lakhs as per Sarpanch) could be used for this purpose in a more planned manner.
d. Focus on infrastructure development and developing Mangalajodi as a model village for eco-tourism. This will not only help develop tourism as an all year tourism spot but with linkage to schools and colleges, it could be a place of exposure visit to a model village and village-based livelihoods.

6.3.2 Promoting Eco-Tourism and green skills in Mangalajodi:

The Odisha Tourism Policy 2016 declared tourism as a priority industry. Promoting sustainable and green tourism with a view to create employment opportunities and to bring about socio-economic benefits to the community have been a part of the key objectives. Skill development of youth in tourism and hospitality sector will be an important area with high potential. The survey in Mangalajodi also reveals eco-tourism as a feasible village enterprise run and owned by the trained village entrepreneurs of Mangalajodi.

With norms of conservation imposed on the villages of Mangalajodi, fishermen are restricted from entering certain parts of the lake for fishing during the season. There is resistance from the community because they do not see tourism as a more profitable trade during the season. If tourism in Mangalajodi must become a profitable trade for all the communities living in the village, rather than the selected households involved in it, there must be a balance between the needs of the fishermen community as well as requirements of conservation. This balance will motivate the communities to make conservation a part of their lives. This will not only help conserve the area but also help balance the needs of the birds as well as the communities dependent on fishing in the lake. The following may be important steps in achieving this goal:

1. Conservation:

- Proper implementation of the guidelines of conservation; Notice boards at all public places to remind the commitment to the purpose
- Proper training and orientation to the community on norms of conservation, waste management and maintaining cleanliness in and around the village.
- There is also need for clear instructions and orders for tourists as they do not realise that they scare away the birds by not following instructions properly. If people do not disturb birds, birds will be comfortable with people. Penalty must be levied on breaking the norms.

2. Study of Ornithology:

People in Mangalajodi have been observing birds since long and are mostly aware of the type of birds that come during the season. Proper training of the community on the varieties of birds visiting Mangalajodi, pictures with description of these birds at different places would help people and tourists understand the birds better. Educating the youth on the specialized science of birds may also be one of the areas of skill development that will generate sector specialists in bird conservation. They grow watching birds, ornithology could be a potential area of skill development for them.

3. **Developing Mangalajodi as a model eco-tourism destination of Odisha:**

Mangalajodi attracts photographers and tourists from all over the world for bird watching and hosts more than 300,000 birds during October to March and the region, that is about 100 species of birds from far off areas Russia and Mongolia. Reaching the tourist point in the village for a stranger, however, isn't an easy task. The local bird poachers turned conservationists group called *Sri Mahavir Pakshi Suraksha Samiti* and other eco-tourism projects, supported by several wildlife, tourism and development groups, are promoting eco-tourism in a small way. The three eco-tourism projects are available for stay on a package basis (inclusive of food, bird watching etc). A government eco-tourism

project is also under construction. However, for tourists visiting Mangalajodi on day tour, there aren't any decent facility for toilets, food joints rest rooms etc. To develop Mangalajodi as a model eco-tourism destination of Odisha, the following would be needed:

Investment in beautification: One of the important factors in tourism is related to the overall clean and hygienic environment of the location. There is scope for investment on beautification of the Panchayat for all year tourism promotion. The funds allocated for the Panchayat under "Mo Adarsh Gaon" (40 lakhs) could be effectively used for this purpose in a more planned manner.

Investment on infrastructure of the village to make it a model village for eco-tourism would also need ensuring availability of basic services for the tourists like clean toilets and rest rooms, availability of clean and hygienic food for tourists locally and easy access to the tourist point from the main access road.

Behaviour change: Investment in infrastructure development and beautification of the village- would also need to be complemented with responsible management of the same by the villagers. Awareness generation on environment conscious lifestyle, plastic free village and village surroundings, cleanliness and proper disposal of waste would need to be integral part of the management of the 'Model village' infrastructure. Protection of the street lights, and maintenance of the infrastructure may also be an employment opportunity for some and this will happen only through awareness, sensitization and behaviour change.

4. Promoting village-based cottage industries:

Skill development in handicraft to promote cottage industries manufacturing local souvenirs on the theme of Chilika, migrant birds and the religious places of importance around could be a profitable trade for the women's self-help groups and individuals. While women's SHG groups have shown keenness in receiving such trainings for income generation, linkage of these groups under finance schemes would help develop group enterprises within the village. The products could also be marketed outside Mangalajodi in other places of tourist importance. This would also useful in branding of Mangalajodi as a bird's paradise.

Mangalajodi **boat manufacturing** units supply boats to most of the nearby villages. Handicraft on boat/bird watching on boat could be another area of handicraft promotion enterprise. Advocacy for incentivizing these skills would create opportunities for bringing them together and could be an important source of income generation throughout the year.

While fishing is a traditional occupation in the region and it is no more the main occupation of the households. Promoting pisciculture and linking them with the Odisha Pisciculture Development Organisation would not only help recognize the traditional skills in the families but also provide the fishing community with income generation throughout the year and prevent migration.

Food processing as a trade is almost invisible in the area. **Skill development in food processing, packaging and preservation** could be another area that will help strengthen income generation of the local people all round the year. Entrepreneurship promotion in agri-based products, fish-based products and their packaging could create employment opportunities for local people and help check seasonal migration.

There is also scope for **skill training on apparel made-ups and home furnishing** with branding of Mangalajodi. Young girls and young married women have shown interest in such trainings in the village. They want to get engaged in part-time income generation activities through skill training in such trades.

5. Scope for Green skills and waste management:

Promoting green skills, bio-manuring, organic farming, agri-based skills could be another area of skill development for the people of Mangalajodi. Developing skills in this sector would be a perfect blend with the eco-tourism promotion. The skills that may develop sector experts at village level in agriculture could include knowledge on soil health, crop rotation planning and farm mechanization for value edition (sorting and grading) etc. Marketing arrangement (like the demand and venue of market) can benefit them.

Green skills and waste management in the village could also help develop the village as a model village for exposure of school and college students to the green village way of life. Promoting local enterprises, local skills, locally made food and beverages in a clean environment friendly surrounding is the need of the hour especially with the increasing urbanisation and stressful work life Mangalajodi could be developed as the most preferred weekend get-away destination. This would also support livelihood throughout the year for the local people.

Massive plantation, as suggested by the key stakeholders in the village is required in the area for balancing the negative impacts of climate change. This will help reduce increasing heat in the area as well as help the rain-fed agricultural economy.

Last but not the least, the fishermen community, primarily living in Ward no 9, should be given priority in these village development and skill development activities as majority in this ward are people below poverty line. Their livelihood has traditionally been dependent on fishing and they do not have land ownership. With shrinking livelihood option in Chilika and bird conservation project, their livelihood is affected most. In promoting livelihood options for them, they should be given financial assistance.

Annexure 1: Detailed tables from household survey tool

Table 1a: Disability Profile: Population with disability (PWD) by age and location:

Population with disability	Residing in village			Migrated out of village			Total Population		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Chidlren (0-14 years)	1.4	2.8	2.1	1.9	3.0	2.6	1.4	2.8	2.1
Youth (15-34 years)	1.5	3.3	2.3	1.4	1.0	1.1	1.5	2.4	2.0
Above 34 years	3.8	5.8	4.8	3.4	0.8	1.2	3.8	5.0	4.4
Total	**2.4**	**4.2**	**3.2**	**2.0**	**1.2**	**1.3**	**2.4**	**3.5**	**2.9**

Table 1b: Disability Profile: Distribution of PWD by age group and type of disability:

Type of disability	Residing in village			Migrated out of village			Total Population		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Children									
Any other disability	7.7	15.4	12.8	0.0	0.0	0.0	7.1	13.8	11.6
In hearing	0.0	11.5	7.7	0.0	0.0	0.0	0.0	10.3	7.0
In movement	30.8	26.9	28.2	0.0	33.3	25.0	28.6	27.6	27.9
In seeing	15.4	15.4	15.4	100.0	33.3	50.0	21.4	17.2	18.6
In speech	7.7	3.8	5.1	0.0	0.0	0.0	7.1	3.4	4.7
Mental illness	15.4	19.2	17.9	0.0	0.0	0.0	14.3	17.2	16.3
Mental retardation	0.0	3.8	2.6	0.0	0.0	0.0	0.0	3.4	2.3
Multiple disability	23.1	3.8	10.3	0.0	33.3	25.0	21.4	6.9	11.6
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Youth									
Any other disability	5.3	6.5	6.0	0.0	50.0	37.5	4.8	13.5	10.3
In hearing	5.3	6.5	6.0	50.0	0.0	12.5	9.5	5.4	6.9
In movement	47.4	35.5	40.0	0.0	16.7	12.5	42.9	32.4	36.2
In seeing	5.3	6.5	6.0	50.0	16.7	25.0	9.5	8.1	8.6
In speech	5.3	3.2	4.0	0.0	16.7	12.5	4.8	5.4	5.2
Mental illness	10.5	22.6	18.0	0.0	0.0	0.0	9.5	18.9	15.5
Mental retardation	5.3	12.9	10.0	0.0	0.0	0.0	4.8	10.8	8.6
Multiple disability	15.8	6.5	10.0	0.0	0.0	0.0	14.3	5.4	8.6
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Population above 34 years									
Any other disability	1.9	0.0	0.8	0.0	0.0	0.0	1.8	0.0	0.7
In hearing	16.7	13.0	14.5	0.0	50.0	25.0	16.1	13.9	14.8
In movement	46.3	45.5	45.8	50.0	0.0	25.0	46.4	44.3	45.2
In seeing	11.1	19.5	16.0	0.0	50.0	25.0	10.7	20.3	16.3
In speech	0.0	2.6	1.5	0.0	0.0	0.0	0.0	2.5	1.5
Mental illness	13.0	13.0	13.0	50.0	0.0	25.0	14.3	12.7	13.3
Mental retardation	3.7	5.2	4.6	0.0	0.0	0.0	3.6	5.1	4.4
Multiple disability	7.4	1.3	3.8	0.0	0.0	0.0	7.1	1.3	3.7
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Total population with disability by type of disability									
Any other disability	3.5	4.5	4.1	0.0	27.3	18.8	3.3	6.2	5.1
In hearing	11.6	11.2	11.4	20.0	9.1	12.5	12.1	11.0	11.4
In movement	44.2	39.6	41.4	20.0	18.2	18.8	42.9	37.9	39.8
In seeing	10.5	15.7	13.6	40.0	27.3	31.3	12.1	16.6	14.8
In speech	2.3	3.0	2.7	0.0	9.1	6.3	2.2	3.4	3.0
Mental illness	12.8	16.4	15.0	20.0	0.0	6.3	13.2	15.2	14.4
Mental retardation	3.5	6.7	5.5	0.0	0.0	0.0	3.3	6.2	5.1
Multiple disability	11.6	3.0	6.4	0.0	9.1	6.3	11.0	3.4	6.4
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 2a: Migration Profile: Purpose of migration

Indicator	Female	Male	Total
Purpose of Migration			
Youth			
Job	20.3	83.3	71.0
Other	42.7	3.4	11.1
Study	37.1	13.3	17.9
Total	**100.0**	**100.0**	**100.0**
Population above 34 years			
Job	24.1	97.4	84.2
Other	75.9	2.6	15.8
Total	**100.0**	**100.0**	**100.0**

Table 2b: Migration profile: People migrating for jobs by type of employment

Type of employment for which people have migrated			
Type of employment of migrant population	Female	Male	Total
Youth			
Business	0.0	1.2	1.2
Contractual labour	0.0	12.7	12.0
Daily wage labour	13.8	43.5	41.9
Government service	27.6	4.1	5.4
Other	3.4	5.5	5.2
Private service	55.2	33.1	34.4
Total	**100.0**	**100.0**	**100.0**
Population above 34 years			
Business	0.0	3.1	2.9
Contractual labour	0.0	6.6	6.3
Daily wage labour	42.9	35.7	36.0
Government service	0.0	10.1	9.6
Other	7.1	1.9	2.2
Private service	50.0	42.6	43.0
Total	**100.0**	**100.0**	**100.0**
Total Migrated Population			
Business	0.0	1.9	1.8
Contractual labour	0.0	10.6	10.0
Daily wage labour	23.3	40.8	39.8
Government service	18.6	6.1	6.8
Private service	**53.5**	36.4	37.3
Other	4.7	4.3	4.3
Total	**100.0**	**100.0**	**100.0**

Table 2c: Migration Profile: People migrating for studies by type of course:

Type of course for which people have migrated			
Type of course	Female	Male	Total
Youth			
B.A/B.Sc/B.com	30.2	9.0	17.6
B.Tech	11.3	15.4	13.7
Intermediate	32.1	21.8	26.0
ITI	0.0	20.5	12.2
M.A/M.sc/M.com	5.7	5.1	5.3
M.Tech/MBA	0.0	1.3	0.8
Other	15.1	10.3	12.2
Polytechnic	5.7	16.7	12.2
Total	**100.0**	**100.0**	**100.0**

Table 2d: Migration Profile: Place of migration

Place of Migration			
Place of Migration	Female	Male	Total
Youth			
Other State	36.4	71.9	65.0
Other District	22.4	12.8	14.6
Within District	38.5	13.6	18.5
Within Block	2.8	1.5	1.8
Within GP	0.0	0.2	0.1
Total	**100.0**	**100.0**	**100.0**
Population above 34 years			
Other State	31.0	67.2	60.7
Other District	34.5	20.8	23.2
Within District	24.1	10.2	12.7
Within Block	8.6	1.9	3.1
Within GP	1.7	0.0	0.3
Total	**100.0**	**100.0**	**100.0**
Total Migrated Population			
Other State	34.8	70.5	63.7
Other District	25.9	15.2	17.3
Within District	34.3	12.5	16.7
Within Block	4.5	1.6	2.2
Within GP	0.5	0.1	0.2
Total	**100.0**	**100.0**	**100.0**

Table 2e: Migration Profile: Nature of Migration

Nature of migration			
Nature of migration	Female	Male	Total
Youth			
Permanent	35.6	23.1	25.0
Seasonal	64.4	76.9	75.0
Total	**100.0**	**100.0**	**100.0**
Population above 34 years			
Permanent	32.8	29.8	30.3
Seasonal	67.2	70.2	69.7
Total	**100.0**	**100.0**	**100.0**
Total Migrated Population			
Permanent	34.5	25.4	26.9
Seasonal	65.5	74.6	73.1
Total	**100.0**	**100.0**	**100.0**

Table 2f: Migration Profile: Access to skill training by migrated population

Access to skill training			
Access to skill training	Female	Male	Total
Youth			
Don't know	2.1	3.1	2.9
No	85.3	91.0	89.9
Yes	12.6	6.0	7.3
Total	**100.0**	**100.0**	**100.0**
Population above 34 years			
Don't know	1.7	9.4	8.0
No	96.6	85.7	87.6
Yes	1.7	4.9	4.3
Total	**100.0**	**100.0**	**100.0**
Total Migrated Population			
No	88.6	89.3	89.2
Yes	9.5	5.6	6.4
Don't know	2.0	5.0	4.5
Total	**100.0**	**100.0**	**100.0**

Table 2g: Migration Profile: Sector of skill training by migrated population

Sector in which technical vocational training received			
Sector of technical/vocational training	Female	Male	Total
Youth			
Apparel Made-Ups & Home Furnishing	5.6	0.0	1.9
Automotive	0.0	20.0	13.2
Banking, Financial services and Insurance (BFSI)	5.6	2.9	3.8
Don't know	5.6	2.9	3.8
Education	11.1	0.0	3.8
Electronics	5.6	2.9	3.8
Healthcare	16.7	0.0	5.7
IT-ITeS	44.4	31.4	35.8
Others	0.0	2.9	1.9
Plumbing	0.0	14.3	9.4
Power	5.6	14.3	11.3
Security	0.0	2.9	1.9
Sports, Physical Education, Fitness & Leisure	0.0	2.9	1.9
Tourism & Hospitality	0.0	2.9	1.9
Total	**100.0**	**100.0**	**100.0**
Population above 34 years			
Apparel Made-Ups & Home Furnishing	0.0	7.7	7.1
Automotive	0.0	15.4	14.3
Domestic Workers	0.0	7.7	7.1
Education	0.0	7.7	7.1
Healthcare	100.0	0.0	7.1
IT-ITeS	0.0	30.8	28.6
Others	0.0	7.7	7.1
Plumbing	0.0	7.7	7.1
Power	0.0	15.4	14.3
Total	**100.0**	**100.0**	**100.0**
Total Migrated Population			
Apparel Made-Ups & Home Furnishing	5.3	2.1	3.0
Automotive	0.0	18.8	13.4
Banking, Financial services and Insurance (BFSI)	5.3	2.1	3.0
Don't know	0.0	2.1	1.5
Education	10.5	2.1	4.5
Electronics	5.3	2.1	3.0
Healthcare	21.1	0.0	6.0
IT-ITeS	42.1	31.3	34.3
Others	0.0	4.2	3.0
Plumbing	0.0	12.5	9.0
Power	5.3	14.6	11.9
Security	0.0	2.1	1.5
Sports, Physical Education, Fitness & Leisure	0.0	2.1	1.5
Tourism & Hospitality	0.0	2.1	1.5
Don't know	5.3	2.1	3.0
Total	**100.0**	**100.0**	**100.0**

Table 2g: Migration Profile: Enrolment under specific skill training scheme

Enrolment under any specific skill training scheme			
Enrolment under any specific skill training scheme	Female	Male	Total
Youth			
No	94.4	100.0	98.1
Yes	5.6	0.0	1.9
Total	**100.0**	**100.0**	**100.0**
Population above 34 years			
No	100.0	100.0	100.0
Yes	0.0	0.0	0.0
Total	**100.0**	**100.0**	**100.0**
Total migrant population			
No	94.7	100.0	98.5
Yes	5.3	0.0	1.5
Total	**100.0**	**100.0**	**100.0**

Table 2g: Migration Profile: Paid or free of cost course

Enrolment under paid or free of cost course			
Enrolment under paid or free of cost course	Female	Male	Total
Youth			
Free of cost	27.8	22.9	24.5
Paid	72.2	77.1	75.5
Total	**100.0**	**100.0**	**100.0**
Population above 34 years			
Free of cost	0.0	53.8	50.0
Paid	100.0	46.2	50.0
Total	**100.0**	**100.0**	**100.0**
Total migrant population			
Free of cost	26.3	31.3	29.9
Paid	73.7	68.8	70.1
Total	**100.0**	**100.0**	**100.0**

Table 2g: Migration Profile: Cost of training

Fee Paid for course			
Cost of training	Female	Male	Total
Youth			
Under 5000	30.8	18.5	22.5
5000-25000	30.8	25.9	27.5
25001-50000	15.4	33.3	27.5
50001-100000	15.4	14.8	15.0
Above 1 lakh	7.7	7.4	7.5
Total	**100.0**	**100.0**	**100.0**
Population above 34 years			
Under 5000	0.0	40.0	28.6
5000 - 20000	50.0	60.0	57.1
Above 20000	50.0	0.0	14.3
Total	**100.0**	**100.0**	**100.0**
Total migrant population			
Under 5000	26.7	21.9	23.4
5000-25000	33.3	31.3	31.9
25001-50000	20.0	28.1	25.5
50001-100000	13.3	12.5	12.8
Above 1 lakh	6.7	6.3	6.4
Total	**100.0**	**100.0**	**100.0**

Table 3a: Education Profile of children

Education	Residing in village			Migrated out of village			Total Population		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Children									
Currently enrolled	77.1	73.8	75.5	73.5	77.5	76.1	76.9	74.2	75.5
Dropped out	1.1	1.9	1.5	2.0	0.0	0.7	1.2	1.7	1.4
Enrolled with Anganwadi	15.9	16.8	16.4	14.3	13.5	13.8	15.8	16.5	16.2
Never enrolled	5.9	7.5	6.7	10.2	9.0	9.4	6.1	7.6	6.9
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 3a: Education Profile of population aged 15 years and above

Population 15 years and	Residing in village			Migrated out of village			Total Population		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
No formal Education	**32.4**	20.0	**26.7**	4.5	6.3	6.0	**30.5**	16.3	**23.1**
Primary (Class I - V)	19.0	**26.4**	22.4	10.9	14.2	13.6	18.4	**23.1**	20.8
Upper primary (Class VI -VIII)	12.9	13.6	13.2	5.5	17.6	15.3	12.4	14.7	13.6
Secondary (Class IX -X)	20.9	19.6	20.3	**26.9**	**26.4**	**26.5**	21.3	21.4	21.4
Higher secondary (Class XI -XII)	9.4	11.0	10.1	22.9	14.1	15.7	10.3	11.9	11.1
Graduation and above	4.6	5.3	4.9	22.9	11.5	13.7	5.9	7.0	6.5
Technical or Vocational	0.2	2.3	1.2	6.5	9.4	8.8	0.7	4.3	2.5
Don't know	0.6	1.8	1.2	0.0	0.6	0.5	0.6	1.4	1.0
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 4a: Employment Profile: Youth residing in the village

Employment status	Youth residing in the village		
	Female	Male	Total
Not employed	96.8	65.6	83.7
Self employed	1.9	18.7	8.9
Employed	1.3	15.8	7.4
Total	100.0	100.0	100.0

Table 4b: Employment Profile: Occupation of youth residing in the village and distribution of occupational categories by sex:

Occupation of employed and self-employed youth	Distribution by sex		Total
	Female	Male	
Wage labour	7.4	92.6	37.5
Fishing	0.0	100.0	23.1
Shop or Kiosk or petty vending	16.7	83.3	11.1
Other IGAs	29.4	70.6	10.5
Private service	28.1	71.9	9.8
Bussiness	0.0	100.0	3.7
Government service	50.0	50.0	1.8
Agriculture and allied (agriculture, horticulture, animal farming)	0.0	100.0	2.5
Total	7.4	92.6	100.0

Table 4c: Employment Profile: Occupation of population above 34 years residing in the village and distribution of occupational categories by sex:

Occupation	Distribution by sex		Total
	Female	Male	
Wage labour	13.0	87.0	15.9
Shop or Kiosk or petty vending	5.6	94.4	2.6
Private service	25.0	75.0	0.9
Other IGAs	40.0	60.0	7.1
Not engaged in any IGA	83.1	16.9	53.2
Government service	33.3	66.7	1.6
Fishing	9.1	90.9	8.4
Bussiness	23.9	76.1	2.6
Agriculture and allied	4.3	95.7	7.6
Total	51.7	48.3	100

Table 5a: Youth Profile: Youth residing in the village by access to technical/vocational training:

Technical/Vocational training status	Female	Male	Total
Not received	92.4	87.4	90.3
Received	6.2	10.0	7.8
Currently enrolled	1.4	2.7	2.0
Total	100.0	100.0	100.0

Table 5b: Youth Profile: Sector of technical/vocational training:

Sector of training	Distribution by sex		Total
	Female	Male	
Banking, Financial services and I	100.0	0.0	0.6
Media & Entertainment	0.0	100.0	0.6
Logistics	0.0	100.0	0.6
Healthcare	100.0	0.0	0.6
Handicrafts & Carpet	100.0	0.0	0.6
Electronics	0.0	100.0	0.6
Education	100.0	0.0	1.2
Agriculture	0.0	100.0	0.6
Tourism & Hospitality	50.0	50.0	1.2
Others	33.3	66.7	5.6
Automotive	0.0	100.0	4.9
Power	6.7	93.3	9.3
Plumbing	6.3	93.8	9.9
Apparel Made-Ups & Home Furnish	94.6	5.4	22.8
IT-ITeS	54.5	45.5	40.7
Total	**50.6**	**49.4**	**100**

Annexure 2: Key Stakeholders Interviewed

Government:

Name of respondent	Department/organization	Designation
B. N. Das	ORMAS	Executive Director
Subhash Chandra Behera	District Employment Exchange	District Employment Officer
Mamata Behura	State Employment Exchange	State Employment Officer
Dharashree Mahapatra	District Labour Office	Assistant Labour Officer
Dr. B.B. Acharya	Labour Commissionerate	Technical consultant to state for child labour and inter state migration
Nirakar Mishra	District Industrial Center	General Manager
Shri Pranab Jyoti Nath	Directorate of Industries	Director of Industries
P.C. Nayak	National Small Industries Corporation	Director

Employers:

Name of respondent	Department/organization	Designation	Sector
Dr. Alok Mishra	OTDC ltd.	Marketing Manager	Tourism and Hospitality
B.K Mohanty	Alfa Transformers	HR manager	Manufacturing
Satya Swarup Biswal	Big Bazaar	Visual Merchandizer	Retail
Chidananda Mahapatra	Suryansh Hotel	Assistant General Manager	Tourism and Hospitality
Rudra Prasad Sahani	Suburban Industries Pvt. Ltd.	Manager (personal & Admin)	Manufacturing
Narasingha Panigrahi	SGR Pvt. Ltd (e-waste Management)	Managing Director	Green Business

Technical/Vocational Educational Institutions

Name of respondent	Department/organization	Designation
Debasish Panda	Gram tarang	Company HR
Dilip Kumar Muli	IL&FS	placement Officer
Rastra Ranjan Mohanty	IMB school of hospitality	Principal
Chinmay Kumar Barik	NIIT	Senior Faculty
Ranjit Kumar Swain	DDUGKY	Project Coordinator
Debaprasad Nayak	Bharat Pvt. ITI	Senior Office establishment officer
Rajan K.M	CTTC	Sr. manager

PRI Members: (Six ward members from this group also participated in FGD)

Name	Designation	Sex	ward No.
Jyotirmayee Behera	Sarpanch	Female	9
Bikas Chandra Pattnaik	Ward Member	Male	16
Satyabhama Dei	Ward Member	Female	7
Bidyadhar Biswal	Ward Member	Male	14
Jogendra Swain	Naib Sarpanch	Male	15
Rachana Mallick	Panchayat Samiti Member	Female	6
Mrutyunjay Mallick	Ward Member	Male	8
Panchanan Behera	Ward Member	Male	11
Jitu Behera	Ward Member	Male	8

Eco Tourism Projects of Mangalajodi

Name	Designation	Sex	Project Name
Rabindra Nayak	Manager	Male	Godwit Eco Cottage
Reena Sahu	Manager	Female	Mangalajodi Eco Tourism
Madhu Behera	Trustee	Male	Mangalajodi Conservation Venture

Annexure 3: Participants of Focus Group Discussions

Type of Group Activity	Numbers
FGD with Youth	10
FGD with women SHGs	1
FGD with ward members	1
FGD with front line workers	1
Paired ranking exercise	5
Visioning Village development exercise	4

FGD 1				
Name	**Age**	**Education**	**Gender**	**Occupation**
Soumyajit Das	26	Plus 2	Male	Mecine Shop
Subhashis Behera	16	Plus 2	Male	Student
Jagannath Panda	22	Engineering Diploma	Male	Student
Rajendra Moharana	27	10th	Male	Carpenter
Milan Barik	21	Diploma in Mechanical	Male	Completed
Satyaranjan Pradhan	22	Plus 2	Male	Unemployed
Deepak Barik	24	Matric	Male	Saloon
Ajit Das	33	Matric	Male	Driving
Rakesh Behera	16	Plus 2	Male	Student
Bipin B	18	Plus 2	Male	Student
Tapas Ku Mallick	17	Plus 2	Male	Student
Pikun Senapati	16	Plus 2	Male	Student
Sambit mallick	15	10th	Male	Student

FGD 2				
Name	**Age**	**Education**	**Gender**	**Occupation**
Swarnalata Barik	20	Plus 3 complete	Female	PGDCA pursuing at Tangi
Rojalin Mallick	23	Graduate	Female	(Completed PGDCA)CT training for 2 years (for primary teacher
Sanjukta Behera	21	9th pass	Female	Household chores
Rajashree Behera	17	10th pass	Female	Household chores
Priyanka Behera	21	Graduate	Female	PGDCA pursuing at Tangi
Pramodini Senapati	18	Plus 2	Female	dropout (couldn't study further due to monetary constraint)
Kabita pradhan	20	Plus 2	Female	Survey
Jyotssasna Rani Pradhan	22	Graduate	Female	PGDCA Complete from Tangi

FGD 3				
Name	**Age**	**Education**	**Gender**	**Occupation**
Rajesh Samantaray	27	ITI	Male	Job seeker
Dibyasingha Pradhan	26	10th Pass	Male	Unemployed
Rakesh Swain	22	10th Fail	Male	Unemployed
Managobinda Pradhan	34	10th Fail	Male	Agriculture
Bipin Bihari Biswal	21	ITI	Male	Studying Diploma
Bhaskara Behera	28	9th	Male	Garage
Jitendra Biswala	25	Plus 2 Pass	Male	Unemployed
Sumanta Maharana	17	Graduation First Year	Male	Studying

FGD 4				
Name	**Age**	**Education**	**Gender**	**Occupation**
Siba Prasad Behera	18	10th Pass	Male	Studying
Ramesh Pradhan	22	10th	Male	L&T
Sisira Raula	25	10th Fail	Male	Heavy Vehicle Operator
Prakash Kumar Sahoo	18	Plus 2	Male	Studying
Rama Chandra Sahoo	17	Diploma	Male	Studying
Kanhu Gaudu	19	8th	Male	Crane Operator
Soumya Ranjan Mahapatı	18	Graduation Second Yeai	Male	Studying

FGD 5				
Name	**Age**	**Education**	**Gender**	**Occupation**
Bijaya Kumar Pradhan	26	Plus 2	Male	Unemployed
Gopabandhu Sethi	28	10th	Male	Marble Mason
Manoj Kumar Behera	17	10th	Male	Marble Mason
Santosh Dalei	19	Graduation Arts	Male	Studying
Bijaya Kumar Raula	29	5th	Male	Heavy Vehicle Operator
Sesha Deva Sahoo	26	Plus 2 Diploma	Male	Unemployed
Alok Pradhan	24	10th	Male	Unemployed

FGD 6				
Name	**Age**	**Education**	**Gender**	**Occupation**
Kanha Behera	14	9th	Male	Studying
Binod Ku Mohapatra	17	Plus 2	Male	Studying
Sangram Keshari Panda	16	Plus 2 First Year	Male	Studying
Kunal Raula	17	Plus 2	Male	Studying
Manoj Swain	16	Plus 2 First Year	Male	Studying
Milan Maharana	16	10th	Male	Studying
Amaresh Biswal	16	Plus 2 First Year	Male	Studying
Smuti Kumar Swain	23	10th	Male	Business

FGD 7				
Name	**Age**	**Education**	**Gender**	**Occupation**
Liza Biswal	17	Plus 2	Female	Studying
Mamata Pradhan	18	Graduation Second Yeai	Female	Studying
Lipsa Maharana	17	Plus 2	Female	Studying
Fina Biswal	21	9th	Female	Unemployed
Sandhya Rani Biswal	28	10th	Female	Unemployed
Anita Raula	14	9th	Female	Studying

FGD 8				
Name	**Age**	**Education**	**Gender**	**Occupation**
Prangya P.Sahoo	15	Plus 2 First Year	Female	Studying
Smurti Sikha Swain	15	Plus 2 First Year	Female	Studying
Shruti Swain	17	Plus 2	Female	Studying
Anaswiya Swain	19	Graduation Second Yeai	Female	Studying
Sarmistha Swain	19	Graduation Second Yeai	Female	Studying
Tejaswini Palavi	19	Graduation Final Year	Female	Studying

FGD 9				
Name	**Age**	**Education**	**Gender**	**Occupation**
Ahaliya Swain	16	Plus 2	Female	Studying
Sasmita Maharana	23	9th Pass	Female	Unemployed
Sangeeta Swain	18	Plus 2 Over	Female	Unemployed
Manoj Swain	19	Plus 2 Over	Male	PGDCA Cource
Deeptimayee Sahoo	20	Btech	Female	Studying

FGD 10				
Name	**Age**	**Education**	**Gender**	**Occupation**
Sujata Grahacharya	35	10th Pass	Female	Unemployed
Gitanjali Mahapatra	18	10th Pass	Female	Studying
Jhunamani Mahapatra	17	10th Pass	Female	Unemployed
Swarnalata Mahapatra	21	Plus 2 Pass	Female	Unemployed
Sonalika Padhi	24	Graduation	Female	Unemployed
Meena Dalai	26	10th Pass	Female	Unemployed
Chitaranjan Mahapatra	30	Graduation	Male	Unemployed
Sashikanta Mahapatra	25	ITI	Male	Unemployed
Rashmi Ranjan Samantara	17	Plus 2 Pass	Male	Unemployed
Sasmita Grahacharaya	23	Graduation	Female	Unemployed
Chitaranjan Sahoo	19	ITI	Male	Studying
Soumya Ranjan Pattnaik	18	Graduation First Year	Male	Studying
Susama Sahoo	19	10th Pass	Male	Unemployed

FGD 11: Self Help Group	
Name	Designation
Members of Jagannath SHG	
Basanti Moharana	President
Pratima Barik	Secretary
Basanti Gouda	Member
Manju Gauda	Member
Basanti Biswal	Member
Sukanti Swain	Member
Jayanti Pradhan	Member
Rasmita Biswal	Member
Members of Narayani SHG	
Sulochana Swain	President
Kuni Gouda	Secretary
Sulochana M	Member
Laxmi Priya	Member
Ambika T	Member
Adarsh SHG (6-7 years)	
Sarojini Pradhan	President
Srimati Biswal	Secretary

FGD 12: Health Frontline Workers (Anganwadi)		
Sl. No.	Name	Age
1	Prabhati Samantara	45
2	Subasini Dalai	42
3	Prabhati Pattnaik	45
4	Janaki Parida	36
5	Tuni Behera	45

Annexure 4: Participants of Paired Ranking and Envisioning Village Development Exercise

Group 1			
SL no.	**Name**	**Age**	**Qualification**
1	Gobinda Chualasingh	19	ITI Continuing
2	Suryakanta Sundraray	18	ITI Completed
3	Subrata Jena	18	ITI Completed
4	Debaraj Jajarasingh	18	Plus 2 arts completed
5	Alok Samantray	17	Plus 2 Science Continuing
6	Somanatha Martha	23	9th pass
7	Jitendra Martha	19	8th pass
8	Kartika Behera	19	ITI Completed
9	Amara Routaray	19	ITI Completed
10	Maheswara Behera	27	Plus 3 Arts Continuing
11	Sapneswara Behera	17	ITI Completed
12	Darshana Ku. Samantasinhara	23	ITI Completed
13	Ajit Behera	19	Plus 2 Completed
14	Pabitra Behera	17	8th pass
15	Rajiba Kalasi	18	Plus 3 Science Continuing
16	Ranjana Routaray	17	Plus 2 Continuing
17	Chinmaya Jajarasingh	16	Plus 2 arts Continuing
18	Soumya Ranjana Chhotaray	16	Plus 2 Science Continuing
19	Khirod Prashad Routaray	18	Plus 2 Completed
20	Rabin Chhulasingh	23	10th pass

Group 2		
SL no.	**Name**	**Age**
1	Malati Dei	34
2	Sebati Samantaray	30
3	Nayana Samantaray	34
4	Kagaji Chhulasingh	28
5	Jharana Chhulasingh	30
6	Prajati Routaray	33
7	Tilotama Routaray	32
8	Urmila Behera	32
9	Namita Behera	33
10	Pusi Routaray	17

Group 3			
SL no.	Name	Age	Qualification
1	Badal Behra	22	Plus 3 arts completed
2	Sankar Behera	18	Diploma Continuing
3	Bidyadhar Behera	20	B-tech Continuing
4	Dhaneswar Behera	26	Plus 2 & ITI
5	Subash Behera	25	Plus 3 Arts
6	Bhagirathi Behera	21	Diploma completed
7	Ranjan Behera	19	ItI Continuing
8	Lakshmidhar Behera	20	MBA Continuing
9	Chaitanya Behera	20	9th Pass
10	Bijay Behera	18	8th Pass
11	Gagan Behera	24	Plu 2 science & ItI
12	Hullas Behera	24	MBA Continuing

Group 4		
SL no.	Name	Age
1	Satya Ranjan Pradhan	22
2	Srikanata Maharana	21
3	Chinmaya Maharana	19
4	Manas Gauda	28
5	Bijay Pradhan	27
6	Bikram Pradhan	26
7	Bhaskar Behera	29
8	Banka Pradhan	26
9	Lala Biswal	26
10	Alok Pradhan	24

Group 5		
SL no.	Name	Qualification
1	Upendra Maharana	8th pass
2	Suresh Samantary	9th pass
3	Manoj Swain	Plus 2 pass, PGDCA
4	Sangita Swain	Plus 2 pass, PGDCA
5	Manoj Swain	Plus 2 continuing
6	Tejaswini Patei	Plus 3 3rd year, Computer
7	Shruti Swain	Plus 2 2nd year
8	Ahalya Swain	Plus 2 2nd year
9	Sharmistha Swain	Plus 3 2nd year
10	Anusya Swain	Plus 2 2nd year
11	Smruti Sikha Swain	Plus 2 first year
12	Pragya Sahoo	Plus 2 first year
13	Susanta Maharana	9th pass

Annexure 5: Samples of Paired Ranking tables

angalajodi Skill Needs Assessment Survey, SDRC | galajodi Skill Needs Assessment Survey, SDRC

Prioritization of sector of training- Paired Ranking | ioritization of sector of training- Paired Ranking

Sector of Skill training		Agriculture	Apparel	Automotive	Beauty and Wellness	Banking, Financial services and Insurance	Capital Goods	Construction	Domestic Worker	Hardware	Food Processing	Furniture and Fittings	Gems and Jewellery	Green Jobs	Handicrafts and Carpet	Healthcare	Equipment	Iron and Steel	IT-ITeS	Leather	Life Sciences	Logistics	Media and Entertainment	Mining	Plumbing	Power	Retail	Rubber	Security	Sports	Telecom	Textiles And Handlooms	Tourism & Hospitality	Others (Specify if more)									Total	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33										
Agriculture	1		2	2	4	5	6	7	1	9	1	11	1	13	14	15	16	17	18	1	20	21	22	1	24	1	1	1	1	29	30	31	32	1										10
Apparel	2	-		2	4	2	2	2	2	2	2	2	2	2	2	15	2	2	18	2	2	2	22	2	2	2	2	2	2	2	30	2	2	2										27
Automotive	3	-	-		4	5	4	3	3	9	10	3	12	13	14	15	16	3	18	3	20	21	22	3	24	3	26	3	3	29	30	31	32	3										10
Beauty and Wellness	4	-	-	-		4	4	4	4	4	4	4	4	4	4	15	4	4	18	4	4	4	22	4	4	4	4	4	4	4	4	4	4	4										29
Banking, Financial services and Insurance (BFSI)	5	-	-	-	-		5	5	5	5	5	5	5	5	5	5	5	5	18	5	5	5	22	5	5	5	5	5	5	5	5	31	5	5									26	27
Capital Goods	6	-	-	-	-	-		6	6	9	10	11	12	13	14	15	16	6	18	6	20	21	22	6	6	6	26	6	6	29	30	31	32	6										11
Construction	7	-	-	-	-	-	-		7	9	10	11	12	13	14	15	16	7	18	7	20	21	22	7	24	7	26	7	7	29	30	31	32	7										9
Domestic Worker	8	-	-	-	-	-	-	-		9	10	8	12	13	14	15	16	8	18	8	20	21	22	8	8	8	8	8	8	29	30	31	32	8										10
Electronics and Hardware	9	-	-	-	-	-	-	-	-		9	9	9	13	9	15	9	9	18	9	20	21	22	9	9	9	9	9	9	29	30	31	32	9										19
Food Processing	10	-	-	-	-	-	-	-	-	-		11	12	13	14	15	16	10	18	10	20	21	22	10	10	10	26	10	10	29	30	31	32	10										12
Furniture and Fittings	11	-	-	-	-	-	-	-	-	-	-		12	13	14	15	11	11	18	11	20	12	22	11	11	11	26	11	11	29	30	31	32	11										13
Gems and Jewellery	12	-	-	-	-	-	-	-	-	-	-	-		13	14	15	16	12	18	12	20	21	22	12	12	12	12	12	12	29	30	31	32	12										15
Green Jobs	13	-	-	-	-	-	-	-	-	-	-	-	-		14	15	16	13	18	13	20	21	22	13	24	13	26	13	13	29	30	31	32	13										16
Handicrafts and Carpet	14	-	-	-	-	-	-	-	-	-	-	-	-	-		15	14	14	18	14	20	14	22	14	14	14	14	14	14	29	30	31	32	14										20
Healthcare	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-		15	15	18	15	20	15	22	15	15	15	15	15	15	29	30	31	32	15										24
Infrastructure Equipment	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		16	18	16	20	16	22	16	24	16	16	16	16	29	30	31	32	16										17
Iron and Steel	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		18	17	20	21	22	17	24	17	26	17	17	29	30	31	32	17										7
IT-ITeS	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		18	18	18	18	18	18	18	18	18	18	18	18	18	18	18										32
Leather	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		20	19	22	19	24	19	26	19	19	29	30	31	32	19										6
Life Sciences	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		20	22	20	20	20	20	20	20	29	20	20	20	20										26
Logistics	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		22	21	21	21	26	21	21	29	30	31	21	21										17
Media and Entertainment	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		22	22	22	22	22	22	29	22	22	32	22										29
Mining	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		24	23	26	23	23	29	30	31	32	23										4
Plumbing	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		24	26	24	24	29	30	31	32	24										12
Power	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		26	25	25	29	30	31	32	25										3
Retail	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		26	26	29	30	31	32	26										15
Rubber	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		27	29	30	31	32	27										2
Security	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		29	30	31	32	28										1
Sports	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		30	31	32	29										25
Telecom	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		31	32	30										25
Textiles And Handlooms	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		32	31										26
Tourism & Hospitality	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		32										26
Others (Specify if more)	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											0
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Total			1	#	3	2	1	1	#	5	4	4	6	9	9	#	#	1	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#										

angalajodi Skill Needs Assessment Survey, SDRC | galajodi Skill Needs Assessment Survey, SDRC

Prioritization of sector of training- Paired Ranking | ioritization of sector of training- Paired Ranking

Sector of Skill training		Agriculture	Apparel	Automotive	Beauty and Wellness	Banking, Financial services and	Capital Goods	Construction	Domestic Worker	Hardware	Food Processing	Furniture and Fittings	Gems and Jewellery	Green Jobs	Carpet	Healthcare	Equipment	Iron and Steel	IT-ITeS	Leather	Life Sciences	Logistics	Entertainment	Mining	Plumbing	Power	Retail	Rubber	Security	Sports	Telecom	Handlooms	Tourism & Hospitality	Others (Specify if more)									Total	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33										
Agriculture	1		1	3	1	5	6	7	1	9	10	11	12	1	14	15	16	17	18	1	20	21	22	23	24	25	26	1	1	29	30	31	32	1										8
Apparel	2	-		3	2	5	6	7	8	9	10	11	12	13	2	15	16	17	18	2	20	21	22	2	24	25	26	2	2	29	30	31	32	2										7
Automotive	3	-	-		3	5	3	7	3	9	3	11	3	3	3	3	16	3	18	3	20	21	22	3	24	25	26	3	3	29	30	31	32	3										16
Beauty and Wellness	4	-	-	-		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	4										1
Banking, Financial services and Insurance (BFSI)	5	-	-	-	-		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5									28	32
Capital Goods	6	-	-	-	-	-		6	6	6	6	11	6	6	6	6	6	6	18	6	6	6	6	6	24	25	6	6	6	29	30	6	32	6										23
Construction	7	-	-	-	-	-	-		7	9	7	7	7	7	7	7	7	17	18	7	7	7	7	7	24	25	26	7	7	29	30	7	32	7										21
Domestic Worker	8	-	-	-	-	-	-	-		9	10	11	12	13	14	15	16	17	18	8	20	21	22	8	24	25	26	8	8	29	30	31	32	8										7
Electronics and Hardware	9	-	-	-	-	-	-	-	-		9	11	9	9	9	9	9	9	18	9	9	9	9	9	24	25	26	9	9	29	30	31	32	9										21
Food Processing	10	-	-	-	-	-	-	-	-	-		11	12	13	10	15	16	10	18	10	20	21	22	10	24	25	26	10	10	29	30	31	32	10										11
Furniture and Fittings	11	-	-	-	-	-	-	-	-	-	-		11	11	11	15	16	11	18	11	20	21	22	11	24	25	26	11	11	29	30	31	32	11										17
Gems and Jewellery	12	-	-	-	-	-	-	-	-	-	-	-		12	12	15	16	12	18	12	20	21	22	12	24	25	26	12	12	29	30	31	32	12										13
Green Jobs	13	-	-	-	-	-	-	-	-	-	-	-	-		14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	13										5
Handicrafts and Carpet	14	-	-	-	-	-	-	-	-	-	-	-	-	-		15	16	17	18	14	20	21	22	14	24	25	26	14	14	29	30	31	32	14										9
Healthcare	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-		15	15	18	15	20	21	22	15	24	25	26	15	15	29	30	31	32	15										16
Infrastructure Equipment	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		17	18	16	20	21	22	16	24	25	26	16	16	29	30	31	32	16										15
Iron and Steel	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		18	17	20	21	22	17	24	25	26	17	17	29	30	31	32	17										13
IT-ITeS	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		18	18	18	18	18	18	18	18	18	18	18	18	18	18	18										31
Leather	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		20	21	22	19	24	25	26	27	28	29	30	31	32	19										4
Life Sciences	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		21	22	20	24	25	26	20	20	29	30	31	32	20										18
Logistics	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		21	21	24	25	26	21	21	29	30	31	32	21										20
Media and Entertainment	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		22	24	25	22	22	22	29	30	31	32	22										20
Mining	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		24	25	26	23	23	29	30	31	32	23										6
Plumbing	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		24	24	24	24	29	30	31	32	24										26
Power	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		25	25	25	29	30	31	32	25										25
Retail	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		26	26	29	30	31	32	26										22
Rubber	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		27	29	30	31	32	27										5
Security	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		29	30	31	32	28										4
Sports	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		30	31	32	29										27
Telecom	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		31	32	30										28
Textiles And Handlooms	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		32	31										27
Tourism & Hospitality	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		32										30
Others (Specify if more)	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											0
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Total			#	2	#	4	3	4	2	6	4	#	5	4	4	9	#	#	#	2	#	#	#	3	21	#	#	3	3	#	#	#	#	#										

Annexure 6: Number of training courses provided under OSDA Skilled in Odisha programme:

Sl. No.	Sectors	Short Term Courses	Long Term Courses	Total Courses
1	Agriculture	6	-	6
2	Automobile	14	9	23
3	Automotive	4	-	4
4	Banking, Financial Services and Insurance (BFSI)	7	-	7
5	Beauty and Wellness	4	1	5
6	Biotechnology	-	1	1
7	Chemical	-	3	3
8	Construction, Construction Material and Real Estate	15	7	22
9	Electrical	6	1	7
10	Electronic Media and Film Industry	1	3	4
11	Electronics and Hardware	8	6	14
12	Fabrication	7	3	10
13	Food Processing & Preservation	-	2	2
14	Fire and Safety Engineering	1	-	1
15	Healthcare	8	1	9
16	Iron and Steel	2	-	2
17	IT and ITES	16	5	21
18	Leather	4	-	4
19	Life Sciences	1	-	1
20	Marine Engineering	-	2	2
21	Logistics	6	-	6
22	Mining	2	7	9
23	Office Management	-	1	1
24	Paint	-	2	2
25	Plastic Processing	12	1	13
26	Power Generation, Transmission, Distribution, Wiring and Electrical Equipments	5	3	8
27	Process Instrumentation	-	1	1
28	Production and Manufacturing	6	8	14
29	Refractories and Ceramic	-	1	1
30	Refrigeration and Air Conditioning	7	-	7
31	Retail()	10	-	10
32	Security	2	-	2
33	Service	2	-	2
34	Telecom	5	-	5
35	Textile and Apparel	11	4	15
36	Tourism and Hospitality	16	3	19
Total		**188**	**75**	**263**

Annexure 5: Research Team

Siddha Development Research and Consultancy Private Limited (SDRC):

Sl. No.	Research and Data Team
1	Ranjana Pandey Panigrahi
2	Sourish Bose
3	Dimple Pattnaik
4	Ajitanshu Rout
5	Nigamananda Swain
6	Biswajit Behera
7	Swagatika Mishra
8	Subhashree Dash
9	Debashish Das
10	Rakesh Sharma

Investigators during pilot and final roll out phases:

Sl. No.	Investigators
1	Rozalin Mallick
2	Swarnalata Barik
3	Priyanka Behera
4	Manoj Ku. Mahapatra
5	Manas Ku. Maharana
6	Suryakanta Routaray
7	Subhashree Sundaray
8	Pramod Ku. Routaray
9	Deepak Ranjan Maharana
10	Sushant Dash
11	Chandan Behera
12	Babul Behera
13	Linkan Mohapatra

Investigators of pilot phase:

Sl. No.	Investigators
1	Jyoshnarani Pradhan
2	Kabita Pradhan
3	Arpita Nayak

301, 3rd Floor, West Wing, World Mark 1, Asset 11, Aerocity, New Delhi – 110037
Tel: +91-11-47451600-10 | Fax: +91-11-46560417
Website: www.nsdcindia.org

May 2018

About National Skill Development Corporation (NSDC): National Skill Development Corporation, working under the aegis of Ministry of Skill Development & Entrepreneurship, is a unique public-private-partnership which aims to catalyze creation of quality vocational training ecosystem in India. The organisation provides funding to build scalable and profitable vocational training initiatives. Its mandate is also to enable support system which focuses on quality assurance, information systems and train-the-trainer academies either directly or through partnerships. Since establishment in 2009, NSDC has trained more than 2 crore people through its partnership with 600+ training partners, wide a robust network of 11,000+ training centers spread over 600 districts across the country. NSDC has institutionalized 37 Sector Skill Councils and is also implementing Government's flagship skill development schemes such as Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Pradhan Mantri Kaushal Kendra (PMKK), National Apprenticeship Promotion Scheme (NAPS), among others.

CONTACT US

NSDC's Skills Intelligence Platform at skillsip@nsdcindia.org