Project Report
RPL Training Programme for Construction Workers
Type-2 (Employer Premises)
The Impact Assessment report has been divided into 6 chapters.

1. **Introduction**: provides general information about, CREDAI, NSDC & other key stakeholders.

2. **Background**: illustrates the background and context within which this impact assessment study has been conducted.

3. **Methodology**: provides details on research methodology of the impact assessment study.

4. **Empirical Context**: deals with Socio-Economic profile of the beneficiaries and respondents.

5. **Impact Analysis**: vividly describes a handful of case studies on selected trainees/workers who have been positively impacted by this skill development programme.

6. **Summary and Conclusion**: provides summary and conclusion. Alongside, the chapter also offers some recommendations for future skill development endeavors.
Executive Summary

Evidently, India is among one of the world's biggest construction market today. The share of construction in national GDP is around 8% and in employment generation it is 14% of employable citizens. Despite a substantial increase in the past few years, demand for skilled workers still exceeds supply by a large margin. The traditional methods adopted in the Indian construction industry may not suffice the needs of this dynamic environment, as they have produced large inefficiencies. Construction sector thus requires a storing impetus to overcome these deficiencies through strategic and structured skilling initiatives for the workers.

According to KPMG report for the National Skill Development Corporation (NSDC), the Real Estate and Construction Sector in India needs 500 lakh additional skilled manpower over the next 10 years. The need for Skill Development programs thus becomes a fit case; given the shortage of skilled manpower in the construction industry on the one hand and high levels of unemployment in the country on the other. It is in this background that CREDAI has been focusing on Skill Development in the Construction and related sectors in a strategic way. CREDAI's skill development program is aimed at mobilizing large number of workers to take up skill training, become employable and earn better livelihood. With a mix of 'on-site and classroom training', the program is designed to develop technical and soft skills that enhance productivity and quality.

In 2016, CREDAI to undertake Bridge RPL on-site skill trainings of construction workers at construction sites. This training program was initiated by Ministry of Skill Development & Entrepreneurship (MSDE). The program aims to fulfill the gap and upgrade skills of the construction workers to meet global benchmarks, which in return shall increase the productivity of the workforce.

Notably, the skill trainings have helped the construction workers to gain better and more remunerative work opportunities. Once they undergo these trainings, unskilled workers would look forward to handling semi-skilled jobs and semi-skilled workers to jobs requiring skilled manpower. Nevertheless, the wage enhancement is assured for all undergoing skill trainings, without having to be enforced or stipulated in any formal manner.

On the whole, the study illustrated several positive impacts of the Bridge RPL skill development program. Over the years the programme has empowered the construction workers with enhanced skill sets and better livelihood opportunities. The programme has enthused confidence level of workers with global benchmarks and increased productivity.
1. INTRODUCTION

1.1 Introduction

Construction industry plays an important role in developing and enhancing economic growth of the country. Rapid Industrialization and population explosion in India has led to the migration of people from villages to cities which has thus increased human settlement in India's growing cities and towns. The Construction industry is the second largest industry of the country after agriculture. The construction industry generates substantial employment and provides growth impetus to other sectors through backward and forward linkages especially in rural areas.

Construction industry is unique as it:

- Absorbs large number of rural / seasonal labour.
- Absorbs unskilled labour.
- Permits large scale participation of women workers.
- Supplements the workers' seasonal income from farming.
- Has the High percentage of migrant labour.

Indian Construction Industry is rapidly growing at a rate of 9.2% as against the world average of 5.5%. Although the Construction Industry contributes to the economic development but at the same time it suffers from major time and cost overruns. Data from Government and industry reports suggest that projects suffer from 20% to 25% of time and cost overruns.

Despite a substantial increase in the past few years, demand for trained manpower in the Sector still exceeds supply by a large margin. The traditional methods adopted in the Indian construction industry may not suffice the needs of this dynamic environment, as they have produced large inefficiencies.

The basic goal of construction project is to enhance quality of product within the right time and at the right cost, which will require amongst others, a highly skilled and committed workforce. Construction sector thus requires a storing impetus to overcome these deficiencies through strategic and structured skilling initiatives for the workers.
1.2. CREDAI and Skill Development

Confederation of Real Estate Developers’ Associations of India (CREDAI) is the apex body of private real estate developers in India. CREDAI represents more than 12,000 members spread across 204 cities in 23 states. CREDAI forayed in the arena of Skilling with its training program "Kushal" in 2011 at Pune in collaboration with National Skill Development Corporation (NSDC). Since then, CREDAI is conducting regular On-site and Off-site training programs for construction workers through its member developers and training partners. The training is a fusion of 'Classroom' and 'On-the-job training' conducted at the construction sites for a period of about 12 days. CREDAI has so far trained 21219 trainees in 240+ construction sites across 50 cities under the Scheme of PMKVY Bridge RPL 2.0.

CREDAI, with its principal interest in Housing and Habitat, is primarily concerned with skill requirements of the industry. It is in this background that CREDAI has focused on skill development in the construction and related sectors. As an industry body, CREDAI has core competencies in understanding of required skills which need to be developed. Thus, CREDAI is in a position to easily absorb the trained resources in the industry itself through its members. Hence, an excellent opportunity for Industry to meet its own requirements vis-a-vis contribution to Nation building.

CREDAI played a crucial role in the initial formation of NSDC and CSDCI and holds 5.1% and 33% in these organizations. To facilitate direct implementation of skill development programs, CREDAI affiliated as an Industry partner with Construction Skill Development Council of India (CSDCI), Indian Plumbing Skill Council (IPSC) and NSDC. The following diagram reflects the approach of CREDAI for skill development of construction workers.

Recognizing CREDAI’s efforts in up-skilling of construction workers across the country, NSDC, Ministry of Skill Development & Entrepreneurship (MSDE)-GoI appointed CREDAI as the Lead Partner to train construction workers in the field of Brick Laying and Wall & Floor Tiling for the World Skills Competition.
1.3. About RPL PMKVY

The Union Cabinet had approved India's largest Skill Certification Scheme, Pradhan Mantri Kaushal Vikas Yojana (PMKVY), on 20 March, 2015. The Scheme was subsequently launched on 15 July, 2015, on the occasion of World Youth Skills Day by Honorable Prime Minister, Shri Narendra Modi. PMKVY is implemented by National Skills Development Corporation (NSDC) under the guidance of the Ministry of Skill Development and Entrepreneurship (MSDE). With a vision of a “Skilled India”, MSDE aims to skill India on a large scale with speed and high standards.

Individuals with prior learning experience or skills shall be assessed and certified under the Recognition of Prior Learning (RPL) component of the Scheme. RPL aims to align the competencies of the unregulated workforce of the country to the NSQF. RPL with Bridge Course was 68 hours duration and based on core NOSs of the job role.

1.4 Bridge RPL Training Program

The training program aims to up-skill the existing construction work force to meet global skill benchmark, which in return will increase quality and productivity of work. The skill training is provided in Assistant Mason, Assistant Bar bender & steel Fixer and Assistant Shuttering Carpenter.

The training begun in December 2016, since then, under this target allocation, CREDAI is continuously working towards upgrading the skills, necessary trainings and creating a conducive working environment with an aim to not only enhance their professional capabilities, but also to improve the quality of life of construction workers. The trainings have also led to reduction of wastage of material and a distinct improvement in the quality of work. The programme also includes soft skills training, health and sanitation awareness, aspects of workers safety etc. The assessment is carried out by the Sector Skill Council (SSC).
The above graph represents the year wise data of the workers/beneficiaries trained in the skill development program conducted by CREDAI under Bridge RPL Scheme.

Detailed analysis of PMKvy RPL programme across the various locations / states is illustrated in the subsequent chapters. It has been two years since CREDAI joined to create a meaningful impact on the lives and livelihoods of construction workers. Organization would like to analyse and understand the impact made through the skill development program and to identify areas in which improvements are necessary.
2. BACKGROUND

2.1. Background

The importance of the construction industry to national economies of the world over cannot be over emphasized. According to the study, by 2020 construction will account for 13.2% of world GDP indicating an upward trend. Despite the documented positive gains brought by the construction industry, there are negative attributes which are associated with construction work. Construction work is dangerous, the International Labour Organization (ILO) estimates at least 60,000 fatal accidents a year on construction sites around the world that is one in six of all fatal work-related accidents. Keeping numerous concerns in view, through this Skill Development Program, CREDAI attempts to enhance the knowledge, increase the skills and capacity to access resources, examine the factors, rectifying the measures in the construction sector.

CREDAI has been training construction workers through tailor-made programmes through: On-site training and Off-site training. The Bridge RPL training was conducted at construction sites of CREDAI member developers. Bridge RPL training model is a mix of ‘Classroom’ and On-the-job training (OJT) conducted at the construction sites itself. These trainings are based on National Occupational Standards (NOS) & Qualification Packs (QP) of NSQF aligned for industry specific job roles.

Off-site centers are established in the geographies from where the construction labour is traditionally sourced. The idea is to skill the unemployed youth there and then to tie up with the labour contractors to deploy such workers at CREDAI’s members sites. Aim is to make construction workers earn better remuneration, and to ensure they gain self-confidence.

2.2. Objectives of the Programme

Following are the broad objectives of the Programme:

- Skill enhancement of construction workers resulting in enhance pay.
- To improve the quality of life of the construction workers through improved social skills.
- Reduction of wastages at construction sites with improved and high quality of productivity
- To create a learning environment that is willingly embraced by construction workers from all over the country that will help them progress, prosper and achieve.
2.3. Purpose of the Impact Assessment

The proposed impact study is a descriptive cross-sectional survey carried out by using participatory tools, that intends to provide qualitative as well as quantitative information on the impact of skill development trainings undertaken by CREDAI. The following are the broad objectives of study:

- Impact created through short term skill development training on target population, namely construction workers.
- To study the current status and progress of these trainings and capture feedback from all stakeholders.
- To analyse the impact on socio-economic development of beneficiaries.
- Identify gaps in the existing model and suggest correctional steps.
- Capture of positive socio-economic impact of skill development trainings on the family of construction workers (quality of life).
- An analysis of challenges, gaps and areas of improvement.

2.5. Proposed Outcomes of the Impact Assessment Study

- The Impact Study would quantify and enables verifying the results in a statistical manner.
- Results of impact assessment would provide justification and necessity for existing/future skill development interventions.

The study would also identify gaps in existing programs and critically analyse mechanisms to overcome those deficiencies.
3. METHODOLOGY

3.1. Methodology

This Chapter presents a description of the process adopted and the methodology used to assess impact significance. The Impact assessment study employed combined methods of data collection through participatory assessment tools to obtain all possible information required to make a comprehensive analysis of impact.

3.2. Sampling

The purpose random sampling was followed for identification of beneficiaries for conducting impact assessment. The following table illustrates the chosen sample (covered through face-to-face consultations) for the impact assessment study.

<table>
<thead>
<tr>
<th>State</th>
<th>City</th>
<th>No. of Trainees</th>
<th>Developer/ Site Head/ Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maharashtra</td>
<td>Pune</td>
<td>36</td>
<td>3</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>Mumbai</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>Haryana</td>
<td>Gurgaon</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Telangana</td>
<td>Hyderabad</td>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>Vijayawada</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Karnataka</td>
<td>Bengaluru</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>Gr. Noida</td>
<td>35</td>
<td>3</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>Lucknow</td>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>201</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

Apart from the above, the study also includes inputs collected through telephonic consultations.

3.3. Methods of data collection

The study uses Exploratory Research Design method with Research tools as Semi-Structured Interviewing/Conversational Interviewing, Focus group discussions and personal observation. The following are tools and techniques for data collection.

- **Individual survey**

  The study adopted individual survey method guided through structured questionnaire as primary tool for collecting data. The questionnaires have been employed during Face-to-Face consultations with trainees at the identified field locations in the selected cities. The questionnaires enabled to collect individual responses of the trainees with regards to impact of the skill development program.
Focus Group Discussion
Focus Group Discussions (FGDs) have been conducted in few locations as a supplement to the formal questionnaires of sample survey. The FGDs were primarily conducted to obtain additional data from trainees / workers on broader issues & challenges on cultural assimilation, urban accommodation and collectively perceived impacts of this targeted intervention.

Key Informant Interview
The Key informant interviews were conducted with senior leaders, programmatic and operation teams of CREDAI, and their RPL Facilitator. Similarly, responses from Heads / In-charges / Supervisors at the developer's site were also obtained through this technique. This has been conducted in a Semi-Structured Interviewing/Conversational Interviewing method.

Telephonic consultation
The Telephonic consultations have been primarily conducted with trainees of old batches who couldn't be contacted due to personal choice of migration. However, the telephonic consultations have not been as successful, qualitative as the above methods of data collection due to individual apprehensions, non-traceability and change of contact numbers etc.

Thus, for collecting the quantitative, qualitative data at individual level, sample interviews were conducted among the target group using semi-structured questionnaire. Questionnaires included personal information, training, awareness, Health and standard of living among the target workers.

3.4. Techniques for data analysis
The data collected through field study will be analysed based on the following techniques

- **Descriptive Statistics**
  The information collected through structured interviews and baseline survey questionnaires were systematically coded, validated, analysed and tabulated. Wherever required, these observations were also supported from the information collected through desk research.

  The study used Descriptive statistics to describe the basic features of the data. It provided simple summaries about the impact blended with graphical representations thereby form the basis for quantitative analysis of data. The descriptive statistics enabled the study to present quantitative descriptions in an impactful form. Thus, the study used descriptive statistics to develop simple summary of the data so as to postulate the impact of the skill development training program.
Evidently, these cases/stories about significant change provide a rich picture of the impact of CREDAI skill development training programme for construction workers. The technique has helped us to understand the outcomes of programmes in terms of increasing employability, employment opportunities and economic development of construction workers.

3.5. Study Tools:
The tools canvassed and the informants are:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Study Tools</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Structured Interview Schedule</td>
<td>For Individual Trainees</td>
</tr>
<tr>
<td>2</td>
<td>Structured Interview Schedule</td>
<td>For RPL Facilitator (On-Site)</td>
</tr>
<tr>
<td>3</td>
<td>Semi-Structured Interview Schedule</td>
<td>For site in-charge/Manager/Head</td>
</tr>
</tbody>
</table>
4. EMPIRICAL CONTEXT

4.1. Empirical Context
This chapter would cover broader socio-economic profile of the respondents in general and selected sample in particular at the identified locations. It also describes the courses offered, coverage on type of Trades/Sectors and Training, occupational and employment details of the trainees along with emerging gender issues in the construction industry.

In hindsight, Education, skills development and continuous learning are central pillars for the sustainable employment of workers. They majorly improve their employability conditions and their quality of life, and also contribute to long-term business development. Skills development is the basis for the competitiveness of economies and enterprises. From a social perspective, they are a tool for fighting against poverty, promoting equal opportunities by means of integrating people. The CREDAI trainings aim to achieve the main objectives of the decent work strategy.

4.2 An overview of skill development trainings 2016-18
During the last two years, CREDAI has increased the total number of skill development trainings both in PMKvy Bridge RPL Programme and other CSR skill initiative. This is in line with the national mission to contribute skilling 500 million people by 2022.

4.2.1 Skill development trainings during 2017-18

<table>
<thead>
<tr>
<th>State</th>
<th>City</th>
<th>Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gujarat</td>
<td>Gandhi Nagar</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Ahmedabad</td>
<td>165</td>
</tr>
<tr>
<td></td>
<td>Mehsana</td>
<td>99</td>
</tr>
<tr>
<td>Haryana</td>
<td>Gurgaon</td>
<td>33</td>
</tr>
<tr>
<td>Karnataka</td>
<td>Bangaluru</td>
<td>232</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>Mumbai</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Pune</td>
<td>166</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>Chennai</td>
<td>152</td>
</tr>
<tr>
<td></td>
<td>Kanchipuram</td>
<td>44</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>Noida / Gr. Noida</td>
<td>216</td>
</tr>
<tr>
<td></td>
<td>Lucknow</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1269</td>
</tr>
</tbody>
</table>
The study has observed that 66% of the workers who had taken the training has passed the exam. However, 13% of workers have failed the exam and 21% of workers did not appear in the exam.

4.2.2 Skill Development Trainings during 2017-18 (Up to April 2018)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>State</th>
<th>City</th>
<th>Total Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AP</td>
<td>Guntur, Kurnool, Vijayawada &amp; Visakhapatnam</td>
<td>1265</td>
</tr>
<tr>
<td>2</td>
<td>Bihar</td>
<td>Gaya</td>
<td>130</td>
</tr>
<tr>
<td>3</td>
<td>Chhattisgarh</td>
<td>New Raipur</td>
<td>109</td>
</tr>
<tr>
<td>4</td>
<td>Delhi</td>
<td>South Delhi</td>
<td>392</td>
</tr>
<tr>
<td>5</td>
<td>Gujarat</td>
<td>Ahmedabad, Rajkot, Surat &amp; Vadodara</td>
<td>796</td>
</tr>
<tr>
<td>6</td>
<td>Haryana</td>
<td>Faridabad &amp; Gurgaon</td>
<td>1843</td>
</tr>
<tr>
<td>7</td>
<td>Karnataka</td>
<td>Bengaluru, Hassan &amp; Mangalore</td>
<td>2837</td>
</tr>
<tr>
<td>8</td>
<td>Kerala</td>
<td>Ernakulam, Kozhikode &amp; Thiruvananthapuram</td>
<td>227</td>
</tr>
<tr>
<td>9</td>
<td>MP</td>
<td>Bhopal, Jabalpur &amp; Khargone</td>
<td>912</td>
</tr>
<tr>
<td>10</td>
<td>Maharashtra</td>
<td>Mumbai, Nagpur, Nasik, Navi Mumbai, Raigarh &amp; Pune</td>
<td>5542</td>
</tr>
<tr>
<td>11</td>
<td>Punjab</td>
<td>Chandigarh</td>
<td>82</td>
</tr>
<tr>
<td>12</td>
<td>Rajasthan</td>
<td>Jaipur</td>
<td>90</td>
</tr>
<tr>
<td>13</td>
<td>Tamil Nadu</td>
<td>Kanchipuram</td>
<td>359</td>
</tr>
<tr>
<td>14</td>
<td>Telangana</td>
<td>Hyderabad, Khammam &amp; Rangareddy</td>
<td>2615</td>
</tr>
<tr>
<td>15</td>
<td>UP</td>
<td>Agra, Ghaziabad, Gorakhpur, Noida, Mathura, Lucknow &amp; Varanasi</td>
<td>2751</td>
</tr>
</tbody>
</table>

Total: 19950

It can be clearly seen that the outreach has been greatly increased by covering 15 states in 2017-18 against 6 states covered during 2016-17.

4.2.3. Overall Absent and Failure percentage

The study has observed that 66% of the workers who had taken the training has passed the exam during the overall Bridge RPL Training. It has been revealed that Absenteeism/Drop out among trainees observed is more than the failed trainees. The percentage of Absenteeism/Drop out is reported as 21% whereas fail percentage is reported 12% during same training period. This is primarily because of the work-based pressure, change of contractors and labour oscillation in the construction sites.
4.3 Socio-Economic Profile of Beneficiaries

4.3.1 Gender Profile
Though the women form a large percentage of Helpers/Assistants across job roles in the construction sector; However it has been observed that willingness to undergo a formal training programme is high amongst males than females. This clearly reflects the gender wise number where 20813 are male trainees and 406 are female trainees.

4.3.2 Experience level of Trainees/Workers
The study observed that as many as 72% of workers have more than 1 years’ prior experience in their respective trades/fields. It was only 28% of the trainees have minimum 6 months to 1 year experiences. Though all of them are experienced, but they lack the technical expertise of the concerned job which they are doing.

4.3.3. Educational qualifications of the Trainees/Workers
The impact assessment study revealed that 47% of the trainees have studied only till 5th - 8th standard and 24% of the trainees went to senior secondary level, i.e. 8th to 10th standard. Similarly 11.4% of workers have education qualification up to 12th standard, 1.9% studied up to graduation. The study also revealed that an uneducated worker consists of 14.4 % among the total workers during the study period.
As mentioned in Chapter 2, the sample for carrying out impact assessment study has been carefully selected while keeping in mind representativeness of the sample. The following table illustrates the sample of respondents for the Impact assessment study. Apart from the above; the study also includes inputs collected through telephonic consultations and mailed questionnaires.

### 4.4.1. Gender Profile of the Respondents

The Impact study revealed that male workers constitute 99% of the total sample as against to the 1% of the women workers. The construction industry is majorly employs men due to the hard or heavy nature of day-to-day tasks. Though women play a significant role in the sector, but their involvement will be majorly confined as Helpers to the men workers. However, these gender stereo types are changing with the active role of women who would like to handle main stream operational tasks like Mason etc. CREDAI through their training partners encouraging women to take up these tasks so as to improve their economic status and fostering women empowerment.

### 4.3.4. Social Categorization of Trainees

The Impact assessment study noted that 35% of the trained workers belong to general category, where in OBCs accounts for 42% of the workforce who has been trained by CREDAI during the study period. The trained workers belonging to Scheduled Caste and Tribe are 15% and 8% respectively.

The following section illustrates socio-economic profile the trained workers who are identified for the impact assessment sample survey and face-to-face consultations.

### 4.4. Socio-Economic Profile of Respondents

As mentioned in Chapter 2, the sample for carrying out impact assessment study has been carefully selected while keeping in mind representativeness of the sample. The following table illustrates the sample of respondents for the Impact assessment study.

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<td>Maharashtra</td>
<td>Nashik</td>
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<tr>
<td>Haryana</td>
<td>Gurgaon</td>
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<td><strong>Total</strong></td>
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<td></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>
4.4.2. Domicile Status
The Impact study observed that 77% of the respondents were from villages, 19% of the respondents from towns and 4% were from cities.

4.4.3. Marital Status of Respondents
The Impact studies revealed that majority of the respondents are married workers, whose family generally stays away from their place of work. It is observed that 68% of respondents are married, having an average of 2 children and living parents staying with them. The data revealed that only 32% of the respondents are single and they stay in small makeshift homes which are provided by contractors/developers.

4.4.4. Educational background of Respondents
The impact assessment study revealed that 47% of the respondents have studied till 5th - 8th standard, 28% of the respondents went to senior secondary level, i.e. 8th to 10th standard. Similarly 10% respondents have education qualification up to 12th standard, and 3% of respondents have studied up to graduation. The study also revealed that 12% of them are uneducated.

4.4.5. Social background of Respondents
The Impact assessment study noted that 27% of the trained workers belong to General category, where in OBCs account for 39% of the respondents who have been trained by CREDAI under Bridge RPL PMKVY. The workers belonging to Scheduled Caste and Scheduled Tribe are 21% and 13% respectively.
Overall, the study noted that with a favourable economic and social environment, skill development trainings by CREDAI has improved performance of workers, which resulted in increase of employment opportunities and socio-economic development of beneficiaries. The following chapter will elaborate more critical issues concerned with impact of skill development on socio-economic advancement of these respondents.
5. IMPACT ANALYSIS

5.1 Impact Analysis
This chapter aims to highlight the critical dimension of the study – impact created under this joint initiative. It vividly describes the impact based on the feedback from key stakeholders across 6 states in India. The chapter elaborates and reflects the views of selected training partners on program implementation and suggestions for further improvements in overall programmatic effectiveness. The chapter deals with impact assessment and responses of the workers from on-site locations.

5.2 Responses of trainees from Bridge RPL On-site skill development Programmes:

5.2.1 Personal and Employer satisfaction.
It is observed that the personal satisfaction of the trainees have increased substantially after completion of the training program. They feel much more empowered and confident while interacting with other workers. Also, feel happy to receive public recognition and the sense of security which they lacked earlier. Their attitude towards the Employer has also significantly changed after the training. The data revealed that more than 82% of respondents feel that they are now satisfied with their job and employer.

5.2.2 Usefulness of Training and Impact
The study observed an explicit impact of skill development training program on respondents in terms of usefulness and provision of regular employment. Most of the respondents reported high levels of satisfaction with the skill trainings offered at the site. The study noted that as many as 90% of the respondents revealed that skilling development training program has enormously developed their job-related knowledge. The respondents found the program very useful because it has addressed several pivotal issues concerned to emerging skill sets in the Indian construction sector. They have positively accorded that the training has boosted their confidence and subsequently improved work-related efficiency.

Similarly, the study highlighted that On-the-Job Training (OJT) and practical sessions have greatly enriched the knowledge and taken the skills of the trainees to next level. As many as 86% of workers have expressed that they have been greatly benefitted by the presence of trainers during the work, who have been always at the site to guide and explain various nitty-gritty's of performing concerned job/skill. Earlier, respondents were not aware of the technical approach to whatever they are working on. With OJT, respondents can now respond effectively to the requirements of the job. Also, as stated, enhanced working efficiency of the worker has been duly ratified by and their supervisors at on-site locations.

### Impact of Skill Training

- **95%** Usefulness of Training
- **86%** Working efficiency
- **93%** Job related knowledge
- **93%** Provision of regular Employment
5.2.3 Socio-Psychological Impact

The study observed a direct link between the skill development training and increased personal confidence among the respondents. Many respondents felt that skill development training has enhanced/improved their learning ability, thereby promoting a better decision making in the work and at home. Most importantly, the skill development training and subsequent certification has provided a feeling of job security in the volatile labour market in the urban India. They feel that they are no longer subjected to vagaries of labour market in the construction sector. As many as 90% of the respondents especially in the age group of 20-28 are quite positive in their outlook and feel that they are better empowered today.

### Socio-Psychological Impact

<table>
<thead>
<tr>
<th>Impact</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in Personal confidence</td>
<td>91%</td>
</tr>
<tr>
<td>Improve learning ability</td>
<td>73%</td>
</tr>
<tr>
<td>Promoting better decision making</td>
<td>78%</td>
</tr>
<tr>
<td>Job security in Urban setting</td>
<td>88%</td>
</tr>
</tbody>
</table>

5.2.4 Impact on Income and Expenditure

The impact assessment study has observed improvement in income and expenditure levels of respondents who have undergone the skill development training programs at the selected locations of study. The data revealed that there has been a significant increase in the income levels of 18.5% of respondents and expenditure levels of 19.5% of the respondents in the selected locations. The cumulative income and expenditure improvements have observed in 52% and 56.7% of respondents respectively. However, many respondents could not attribute impact of skill development training to changes in income and expenditure as there was no change in their wages.

### Change in Income and Expenditure levels

- **Improved considerable**
- **Improved marginally**
- **Cannot say**
5.2.5 Impact of Skill development – Family / Household consumption

As mentioned above, the impact assessment study observed that income and consumption levels of some respondents have increased after the skill development programs. The respondent attributes these factors to marginal growth in the income and increase in consumption patterns. The study has observed that many respondents have increased their spending on family/household needs followed by family healthcare and education needs of their children. The study also noted that none of the respondents have made any significant investments or purchased commercial goods, vehicles etc. during the last 6 to 8 months.

5.2.6 Impact of skill development Urban Assimilation and Adaptability

The study also observed that skill development training has enabled the workers to develop positive personality and confidence to earn and live in an urban area. As majority of these workers come from rural and socially marginalized background, they initially experienced cultural shock and felt insecure to live in an urban setting. However, the skill development trainings and regular income has subsequently increased their confidence and facilitated their socio-cultural process of assimilation and adaptation in the urban area. This is essential to empower the livelihoods of marginalized communities, failing which would lead to certain unintended consequences; namely, deprivation, vulnerability and often increased crime rate in the metropolitan cities.

5.3 Perception of Site Manager/Head

The site managers in selected sites could relate their performance prior to skill development training. They expressed that there has been a noticeable change in performance and skill level of the respondents who have gone through the training program. However, some managers could relate these changes to a marginal extent and skeptical about the sustainability of these habits, behavior patterns.
The site managers/supervisors also stated that trained workers are better involved in work and there has been an explicit change in at least 71% of the workforce after skill development training. The workers are now more in alignment with operational goals/targets, adhere to safety norms and also involve in group work to a significant extent. They revealed that the overall performance of trainees has increased significantly after the skill development program.

5.3.1 Changes in skill level of workers

The fundamental objective of Bridge RPL-PMKVY and CREDAI skill development intervention is to enhance the existing skill level of the workers with technical inputs during class room teaching and practical sessions on the Job. During the impact assessment study, the interactions with site level managers/heads/supervisors have clearly illustrated the improvements in skill level of the workers. The study noted that 28.4% of Managers/site supervisors have noticed an explicit change in skill levels, whereas other 71.6% of the managers also expressed similar views, however, maintained the view that skill levels of the trained workers have improved marginally. The following graph illustrates the response of site managers.

5.3.2 Promotion of workers

The majority of site level executives revealed that promotions are generally not a prevalent scenario for these workers as they generally work under a contractor and labour oscillation is quite common in the construction industry. They expressed that labour movement in this sector is in a constant state of flux and acts as major limitation to postulate such kind of positive changes.

5.3.3 Interaction with training partner

The role of training partner is essential in skill development training programs as they act as catalyst in the entire process. The response from the site level managers/heads revealed that they felt satisfied with their interactions and engagement with training partners. On the whole, 85.5% of respondents positively accorded the services offered and role played by training partner agency.
5.4 The role of RPL Facilitator

As mentioned above, the role of facilitator is intrinsic to the overall effectiveness of the skill development program in terms of quality training, strategy and intended outcomes. The study observed that all facilitators are quite proactive in their approach both in class room training and OJT demonstrations. All of them are reputed and have a strong presence in the field of skill development over the years. The staff strength and commitment levels are observed to be significantly high and they can deliver a better outcome at any given point of time. The impact assessment study has focused on examining role of training partners at various on-site locations across the country and their contribution to overall program effectiveness. These facilitators undergo due diligence rigorously before being empaneled with CREDAI. The affiliated training centers and Facilitators are also approved by the SSC on the basis of guidelines issued by NSDC. Each facilitator is responsible for the procurement of infrastructure of their training centers. Following are some key observations on the facilitators and their role in triggering socio-economic impact in the lives of the workers:

5.4.1 Infrastructure facilities

The class rooms at on-site locations are moderately good in terms of space, lighting and seating arrangement. Besides few exceptions, all classrooms have job role specific equipment available for technical demonstration and knowledge of trainees. The classrooms also have emergency equipment for first aid. The classrooms has pictorial signboards and display material to foster better learning/understanding for the workers

5.4.2 Learning environment

The learning environment is observed to be congenial and encouraging. The study noted that majority of the trainers are Knowledgeable and also accredited by respective Sector Skill Council. It is also illustrated that trainers provide adequate time for questions & discussion and clearing doubts of the trainees and workers during the class room teaching and OJT.

The data revealed that Classes are conducted regularly and for an hour every day. It is generally held after the morning assembly and during lunch break. The topics mentioned in the Course curriculum are covered in the class and good quality of training material is provided to the candidates. This marks a positive gesture and highlights the commitment of the facilitators to ensure effective program delivery.

Observations:

- Need to enhance quality of training
- Need for improvement in class room ambience
- More contemporary demonstration tools
- Lab set up should consist of all latest equipment which are practically used on-site
- Constant mechanism of interaction and feedback from training partners
- Site-Management and strong Developer support in case of On-the-Job Training to allow trainees to attend class room theory dissemination sessions.

With these major findings, it is evident that all facilitators have been effectively implementing skill development training; to meet programmatic objectives by providing quality training, assessment & certification to the trainees.
6. SUMMARY & CONCLUSION

6.1 Summary & Conclusion
It is evident from the foregoing that skill development for construction workers is a prerequisite, and not fulfilling this primary need will not only impact the quality of construction, but most importantly, the livelihood of workers. Construction industry in India; is the second largest source of livelihood, highly informal and unorganized, with unskilled and semi-skilled workers. These workers, mostly migrants, fall into the trap of contractors and middlemen and lose their jobs and a decent life. The only way to reconstruct their lives is by training them in functional skills and equipping them with safety and health information at the earliest.

6.2 Impact on Workers (Bridge RPL On-Site)
Based on the fast growth in the sector and the growing need for productivity enhancement and income increase linked to skills, there is a strong need for on-site skilling of the labour working on sites all over India in the Building & Construction sector. This is specially because the nature of work, problems and disposition of construction workers is very different from workers in other sectors. There are virtually no entry barriers in this trade and most of the workers learn the ropes of the trade from a family member or a friend. There are very few formal skilling programs available for these workers and also due to the reason that they are all from poor families they do not have the money or wherewithal to attend off site formal training courses; they would rather learn “informally’ on the job at site while they earn their wages. It is for this reason that most of the workers working on sites are not formally skilled.

It is observed that the onsite classroom & practical model of training is the best to train the workers as the workforce who are already into the job do not have the time to attend classes away from worksite considering the hectic project timelines.

The construction sector perhaps needs maximum attention as far as skilling is concerned as almost all workers, (which incidentally constitute 80% of the total workforce in the sector), are not formally skilled.

The impact study has observed the following:
- Skill development and learning are the keys to sustainable employment of workers. It also improves the employability conditions of workers and their quality of life and contribute to sustainable business for developers.
- Skill development programmes in which public funds are invested have significantly improved skills, life chances and choices of workers. These programs have created an opportunity for youth, women, minorities to access to training, decent jobs for gainful employment.
- Marginal increase in income levels of the workers as a result of the newly acquired competencies. The impact study also noted a significant improvement in the livelihood of the trainees with an increase in family income and consumption. Alongside, employability, awareness on safety, working conditions has also been improved among the workers.
- Skill development training programs organized by CREDAI under the scheme of PMKVY Bridge RPL reinforces prior learning of workers thereby includes them in the mainstream workforce to provide benefits of formal continuous employment.
- Work processes have become more efficient as a result of the development of new competencies. Face-to-face consultations with site managers have revealed that work efficiency has increased significantly.
- Innovativeness and sustainability of companies/developers as they regard workers as an important source of competitive advantage and as assets and agents of change.
- Marginal change in behavioral attitude and improvement in the salaries of the trainees after completion of the OJT.
- It is strongly RECOMMENDED that the Bridge RPL training for construction workers should be re-introduced at the earliest.

It can be concluded from the results that the skill development training provided was considered useful and empowered majority of workers with enhanced skill levels, better decision-making skills, confidence building and regular employment opportunities; which could be a great factor for their economic and social up-liftment.

6.3 Reflections of RPL Facilitators

The study observed that all RPL Facilitators have been involved in effective programmatic delivery. The study felt the need for improvement in the class room ambience. Similarly, there has been an observation by some Facilitator to have more contemporary demonstration tools. Labs should have all latest equipment which are practically used on-the-site. The study noted that constant mechanism of interaction and feedback from RPL Facilitators needs to be strengthened.

Majority of Employers expressed the need for higher level of courses especially a move from Level 2 to Level 4. To reiterate, they also highlighted the need for introduction of new courses like Block work, Mivan shuttering with the help of contemporary equipment.

Increased budgetary outlay for these skill development initiatives maybe considered. The impact assessment study found that management buy-in and commitment is critical for the success of Bridge RPL skill programmes. This has been observed that, where site level managers, supervisors constantly involve, follow-up and drive skill development interventions at their respective sites.
6.5 Other Recommendations:
The Bridge Gap enhancement programme would bring social change by creating skilled & employable workforce leading to higher employment rate, reduction of poverty, social inclusion, respect for labour rights and competitiveness in global markets. Thus, Indian Government has been stressing on the importance of vocational education and is providing support by funding skill based training centres/colleges. The youth are becoming aware of skill based training and placement in many industry sectors.

Despite of these notable efforts, there is still dearth of skilled people in India and many companies are not able to find the right match for their needs and requirements. Particularly in the construction sector, which is highly unorganized, there is huge disconnect between the industry and the availability of skilled workforce.

The NSDC's report on Human resource and Skills Requirements in the Building, Construction and Real Estate Services sector has highlighted that mechanization in the building, construction and real estate industry in India would further increase. The report states that the slab-to-slab time, i.e. the time between the laying of two consecutive slabs in erecting a building which was earlier 18 to 20 days has now come down to 10 to 12 days and even 7 to 8 days in some cases. This would further expect to go down to 4 to 5 days by 2022 due to the use of modular structures, pre-fabricated parts and pre-cast parts. This highlights a growing need for enhanced skill levels, ability to deliver quicker and quality output in the sector.

Overall, the Bridge gap skill training programs have not only ensured jobs for the workers but also allied them with registered contractors. The programme thus has helped in eliminating the petty contractors from the system, who used to exploit the workers. However, there is a need for more engagement from the developers to ensure benefits of skilling are envisaged and incremental gain wages are also ensured.
SUCCESS STORY-1

Name: Ms. Lata Devi Sahu
Trainee ID: UP0001CB-L00007E
Batch ID: 1702UP0001CBJCON/Q0102-0000C40D
Qualification: 5th to 8th
Address: W/O Jayprakash Sahu, Pisoud, Pisoud, Jangir, Janigir, Champa, Chhattisgarh-495668
Course Details: Construction, Asst. Mason Level 2

Lata Devi Sahu belongs to the BPL family. She stays with her husband and 2 children. Her husband works as a carpenter. Their income wasn't sufficient to feed children also, fulfilling basic needs of the family. So, Lata started working in construction site and she has been working from past 1.5 years. Lata heard about the PMKVY programme through other workers on site. So, she thought she should register herself in this training programme so that she can earn money and support family financially. She said, "It's a new idea of training people on the construction sites. One hour of classroom training and seven hours of on-the-job training. This is the best way to learn, we can manage our work as well as household chores."

After training, Lata became so confident about the work that she doesn't have to keep on asking the proposition that needs to be added in the mixture. Site supervisor and co-workers are proud of what she does and keeps on encouraging her of the good. Her mates on the sites have started asking whenever they face any issues in their activity. She enjoys helping them and also advises them to attend the skill training provided by PMKVY. Site supervisor has increased Lata's wages after this training and she truly feels like a skilled worker. PMKVY training has genuinely helped her family to grow financially and earn respect.

She thanks PMKVY, and CREDAI from bottom of her heart.
SUCCESS STORY-2

Name: Gayatri Sahoo  
Trainee ID: UP0001CB-L000007F  
Batch ID: 1702UP0001CBJCON/Q0102-0000C40D  
Qualification: 5th to 8th  
Address: H.N 150, Pisoud, Pithampur, Pithampur, Janigir, Champa, Chhattisgarh-495671  
Course Details: Construction, Asst. Mason Level 2

My name is Gayatree. My husband works as Mason. I have one daughter, one Son and both are studying. My colleagues informed me about the enrolments going on for PMKVY Training. It is training program conducted by government of India to make skilled workers. I discussed it with my husband and enrolled for training.

The training program enhances the skill and create skilled workers. I was happy that government of India is training us so we can learn and grow. This is the best way to learn on site. I am able to manage both work and home. I had even advice my other colleagues to join this training program. PMKVY training helped me to learn different ways to do my work. My wages has been increased because of the training program. I want to work hard and I want to get promoted to supervisor. So I can earn more money for my family. I fell proud of certificate that I have got because of PMKVY. Also, I am getting more respect from my family and relatives.

Thanks to NSDC, RAGC and PMKVY for making such training program available for us. It will really help us to enhance our knowledge and grow in the same field. I am really glad that being a women I have achieved this certificate and also want to advice all the women that there is no age to learn and even woman can do all the work other than household chores.
SUCCESS STORY-3

Name: Baria Kamleshbhai Sonabhai
Trainee ID: GJ000973-L0000041
Batch ID: 1702GJ000973JCON/Q0302-0000C610
Qualification: 9th to 10th
Address: Dahod, Devgad baria, Gujarat 389130
Course: Construction, Carpenter Level 2.
Training Partner: CREDAI- Global point, Ring Road, Surat, Gujarat

Baria Kamleshbhai Sonabhai belongs to a BPL family. His family consists of 5 members. He works at a construction site from past 3 years and supports his family with meagre money. He heard about this PMKVY programme through other workers on site. So, he thought he should attend this training programme. Earlier it was not possible for him to attend 8-hour class as being daily wages worker, his contractor was not allowing him to do so. He submitted the documents to senior on site and was excited for the training. He was very attentive during the training classes. After training he became so confident about the work that his co-workers were also motivated to take admissions in the class. He got the certificate after clearing the assessment. He wants to work with some big companies and want to get promoted as supervisor.

He said, “With the help of the certificate, my daily wages will Increase, as I am now skilled worker. I am also planning to move overseas. The overseas company will definitely select me as I have the government recognised certificate with me”.

PMKVY training has gave me a good path to grow. I want to thank CREDAI & NSDC for making us skilled!
SUCCESS STORY-4

Name: Salim Akhatar
Trainee ID: UP00037D-L0000031
Batch ID: 1702UP00037DJCON/Q0102-0000C67F
Qualification: 8th to 9th
Address: S/O-Md.Sadre Alam, Ward No1, \Bankat, Puraina, W. Champaran, Bihar 845449
Course Details: Construction, Mason Level 2.

His family consist of 6 members, Saleem, his mother, wife and 3 children. He is working at construction site from past 4 years. Initially he was working as a helper in the village, then he decided to move to Lucknow because of the financial crisis. He heard about the PMKVY programme through his supervisor on site. So, he thought he should attend this training programme to improve his skills.

The training time and days were fully planned and he learnt lot of new things while working on site in 12 days of Bridge RPL training programme.

Now, he said, he is aware about the safety rules, correct measurements and different techniques to do his job effectively. He promotes PMKVY training program to his friends so, that they should also attend this training. He hopes that this training program should continue across India.

He is thankful to Government of India, and CREDAI for taking this initiative for benefits of construction workers.