



**SKILL COUNCIL for
MINING SECTOR**
Honing India's Mining Skill

IMPACT ASSESSMENT REPORT

MOIL - 2021

Short Term Training
Mine Electrician & Mechanic Fitter





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Executive Summary

Impact Assessment Study

This report details the impact evaluation and assessment study for one of the skill development projects conducted by the Skill Council for Mining Sector (SCMS) during the year 2020.

Post assessment and certification more than 85% of candidates were placed in and around the mining industries with the vendors/contractors.

MOIL Limited is a leading process performance provider, with customers in the mining, construction Areas. Moil Limited and Skill Council for the Mining Sector (SCMS) came together and managed CSR developmental training projects to skill rural youth in such as mining electrician and fitter Operator. A training academy in Nagpur, Bhandara and Balaghat district and SCMS was entrusted with the task of designing and implementing this OPO skill training programs.

Methodology

The study seeks to gauge the skill program's impact on the trainee enrolled at four centers their parents and the community. It also seeks to determine the Program's impact on other stakeholders and partners.

The research was conducted in and around one training center located in Lonara Nagpur and Balaghat mobilization was initiated with publishing the advertisement in two newspapers and received applications from 67 candidates. Their document verification and interviews were conducted at Central India Institute of Engineering, Lonara Nagpur on 2nd March, 2020. Post selection process, 29 candidates were shortlisted and their classes started on 5th March, 2020. The students are engaged in technical and soft skill classes which is held from 9.30 am to 4.30 pm.

Another mobilization drive was done to widen the program reach in the above areas. The mobilization team conducted extensive mobilization drives in the villages close to MOIL mines along with the MOIL officers. The program received an overwhelming response from the local population. As a result, the next mobilization drive was conducted on 15th March, 2020. Out of the 228 candidates showing interest in the program 204 were present for the interview at the training centres. The joint team of MOIL, SCMS and IISD review viewed the applications and selected 92 candidates.

The sampling plan was carefully formulated to interview all the successful Trainees with questionnaires covering various key evaluation factors.

Out of 67 trainees 49 successful trainees were interviewed. This was the total sample size for all qualitative social impact assessment responses. The research findings were done both qualitatively by means of in-depth interviews and quantitatively. The questions and answers were recorded verbatim in both English and Hindi as per respondents' comfort levels.



Key Findings

The major findings are as follows:

The beneficiaries are quite widespread now since the skill training started in the year 2020 and many of them have now changed place and contact numbers. Hence, reaching out to the beneficiaries was quite a rigorous exercise.

Though the program focus was to mobilize and train ITI holders approx. 41% of candidates in which graduates are 15%, 10th above is 44% .

26% of the surveyed candidates were in a private job/self-employed/employed. 91% of the surveyed candidates were student and 89% of the surveyed candidates were students before joining the training program and only 3.7% were married and the majority was unmarried.

All the interviewed respondents were in the age group of 20-25 years. OBCs constituted 52% (14) of the respondents equal to the General category had 7% (2). SBCs made up for only 3.7% (1) of the respondents. SC 22% (6) and ST is 15% (4) of the respondents.

The majority of the respondents 91% (14) said that they were students. Only one was in the wage employment and similarly only one of the total interviewed candidates was in others. There was no unemployed candidates, majority was students before joining the training program.

The quality and quantity of the training components such as training material, equipment facilities, lodging facilities, boarding, mine commuting, co-curricular activities, uniform and personal protective equipment (helmet, shoes etc.) had majority of the respondents (55.10%) giving a rating of 5 leaning towards satisfied state.

Maximum respondents gave a rating of 5 towards satisfied level with the different factors of their current job roles with aspects like working hour 33.33% (09), future scope 25.93% (7), salary 7.40% (2), overtime pay 11.11% (3), medical benefits and insurance 11.11% (03), leave or time off benefits 25.92% (07), canteen facilities 14.81% (4) and transportation services 18.51% (5).

A substantial 51.85% (14) of the respondents were satisfied with the overall training experience imparted to them in the course while 14.8% (4) were either satisfied or highly satisfied. Those stating the overall training experience as neutral or unsatisfied numbered 22.2% (06) of the respondents.

A huge 66.66% (18) of the respondents find the skill development course useful in up-skilling them. For the majority 33.33% (09) of the respondents the skill training imparted has indeed improved their income levels.

The trainees 74.07% (20) found the training relevant for the skill training in terms of industry relevance. Overall, the program is very demanding from the point of view of aspirational candidates, the requirements of skilled operators for heavy machinery and equipment in the mining sector, and lastly supported by the Government policy-Atmanirbhar Bharat to train youth for the job opportunity available within India to fulfill the trained manpower requirement and also find avenues for placement of such highly skilled trained youth abroad.

Limitations: The data and feedback received from the respondent is the core basis of serving conclusions and recommendations and therefore I do not accept or assume any liability, responsibility or duty of care for any use of or reliance on this document by anyone.



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About SCMS

Skill Council for Mining Sector (SCMS) promoted by FIMI and supported by the Ministry of Mines was established in December 2013 as the apex body to train and meet the requirement of skilled workforce for the mining industry in PPP mode, setup by National Skill Development Corporation (NSDC) under the Ministry of Skill Development & Entrepreneurship (MSDE). Ministry of Skill Development and Entrepreneurship (MSDE) in its notification dated 17th March 2015 has authorized SCMS as a non-statutory agency for certifying the mining workforce in India.

SCMS is a registered company under Section 8 of Companies' Act 2013 and has been issued 80G certificate & 12AA certificate under income tax 1961 in October 2015. This allows SCMS to undertake training under Corporate Social Responsibility (CSR) Projects for the various companies.

Ministry of Skill Development & Entrepreneurship (MSDE) vide office order MSDE-01/(3)/2018-AP(PMU) dated 12 Sept 2018 has appointed of CEO-SCMS as Joint Apprenticeship Advisors and delegated the related powers. Now, SCMS has the full authority to approve the training center and prepare new optional trades as per industry requirement and to roll out apprentices training.

The core activity of SCMS is to formulate the National Occupational Standard (NOS) for different job roles aligned to National Skills Qualifications Framework (NSQF) notified by Government of India, in December 2013. SCMS has carried out Occupational Mapping and Skills Gap studies for sector. It has developed skills competency standards and qualification packs, benchmarking it with national & international standards for operator level job roles both for opencast and underground mines and created competency standards and curriculum aligned to NSQF levels. In this context SCMS has developed 46 qualification packs for all four sub-sectors of Mining. SCMS has developed courseware (Participant Handbook, Curriculum, facilitator book, e-book etc.) for in-demand job roles. It has developed curriculum for 20 job roles, participant handbook for 10 job roles and e-book for 10 job roles, which are listed in Kaushal Mart of NSDC.

SCMS has a key mandate to create a pool of Trainers and Assessors for successfully and effectively executing the skill development programs. SCMS regularly organizes Training of Trainers (TOT) and Training of Assessors (TOA) programs to meet these requirements. As of now we have pool of +750 certified trainers and +600 certified assessors from our industry partners.

SCMS plans to up-skill and train approximately 4.50 lakhs people for mining industries including 50,000 new inductees to make them employable within a period of ten years. To address the huge requirement of skilling the Indian youths, National Skill Development and Entrepreneurship Policy, 2015 was launched on 15th July, 2015. It provides an umbrella framework for Skilling activities carried out within the country and aligns them with common standards, linking skilling with demand centers. This Policy aims at –

- Raising the quality of training and making it industry relevant
- Building the base of certified trainers and assessors, and improving the quality of training delivery
- Government plans to promote employment of certified manpower in the country.

Niti Aayog in its report “Strategy for New India @ 75” has set an objective to a) Accelerate the growth of the mining sector from 3 per cent in 2017-18 to 14 per cent, with an average growth of 8.5 per cent during 2018-23 and b) Increase the job contribution (direct, associated and indirect) from the current 10 million (2 million in coal and major metals and 8 million in minor minerals) to 15 million in 2022-23.



About MOIL

MOIL is a Schedule “A” Miniratna Category-I Company. It was originally incorporated as Manganese Ore (India) Limited in the year 1962. Subsequently, name of the Company was changed from Manganese Ore (India) Limited to MOIL Limited during the financial year 2010-11.

MOIL was originally set up in the year 1896 as Central Province Prospecting Syndicate which was later renamed as Central Provinces Manganese Ore Company Limited (CPMO), a British Company incorporated in the UK. In 1962, as a result of an agreement between the Government of India and CPMO, the assets of the latter were taken over by the Government and MOIL was formed with 51% capital held between the Govt. of India and the State Governments of Maharashtra and Madhya Pradesh and the balance 49% by CPMO. It was in 1977, the balance 49% shareholding was acquired from CPMO and MOIL became a 100% Government Company under the administrative control of the Ministry of Steel.

During the Financial year 2010-11, MOIL got listed on 15th December, 2010 on National Stock Exchange and Bombay Stock Exchange. After the listing, the shareholding in the company was Govt. of India (71.57%), Govt. of Maharashtra (4.62%) and Govt. of Madhya Pradesh (3.81%) and Public (20%). At present the shareholding pattern of the company is Govt. of India (53.35%), Govt. of Maharashtra (5.96%) and Govt. of Madhya Pradesh (5.38%) and Public (35.31%).

At present, MOIL operates 11 mines, seven located in the Nagpur and Bhandara districts of Maharashtra and four in the Balaghat district of Madhya Pradesh. All these mines are about a century old. Except 4, rest of the mines are worked through underground method. The Balaghat Mine is the largest mine of the Company. The mine has now reached a mining depth of about 383 meters from the surface. Dongri Buzurg Mine located in the Bhandara district of Maharashtra is an opencast mine that produces manganese dioxide ore used by dry battery industry. This ore in the form of manganous oxide is used as micro-nutrient for cattle feed and fertilizers. MOIL fulfils about 50% of the total requirement of dioxide ore in India. At present, the annual production is around 1.1 million tonne which is expected to grow in the coming years.

Table: 1 Details of Candidate Enrolment

1.	Online Application Received	228
2.	Total Candidates who were called	204
3.	Total Candidates appeared for written test	92
4.	Total Candidates Shortlisted for Interview	92
5.	Total Candidates Selected for the medical examination	67
6.	Total Candidates selected after Class-Room Training	29

*Source: SCMS Report

Objectives of the Study:

The impact assessment study is to evaluate and ascertain the socio-economic impact of skill development training (mining electrician and fitter Operator) provided to the trainees of 1 batch comprising of 67 students from the districts of Ionara, Nagpur and Bhalaghat of (MP)state.

Sampling Techniques:

The assessment was carried out in training center located in Nagpur, Bhandara and Balaghat district. According to the scope of the project, evaluation indicators were developed. It consists of variables such as employability, quality of employment, income, and working conditions, among others. The questionnaires were developed with an emphasis on key evaluation questions which included both quantitative and qualitative questions with open-ended answers.

The quantitative survey covered 27 successful trainees.

Approach and Methods

A holistic approach was followed for inclusiveness, independence, involving subject matter experts, and deriving sustainability for the program.

Research Methods and Tools included Desk Research, Questionnaires (online/offline), focused group discussions, and case studies with ethical considerations.

Evaluation Questions

The following key criteria have been established for the achievement of the study's objectives:

- ✓ Have job prospects improved as a result of access to training?
- ✓ Has training improved skill sets, and how has it affected job wage growth?
- ✓ Evaluation of the training quality using quantifiable criteria.
- ✓ What are the challenges and motivations for the trainees?
- ✓ Suggestions for bridging the gap in the current training program and ideas to improve the training program in the future?
- ✓ To determine whether similar training regimens would be in demand.



Findings of the Survey

The successful trainees who completed the course were all from the state of Rajasthan. All the findings stated herein are a result of the survey in legitimate responses.

1.1 Social Profile

The program was inclusive of various social groups from the state and the contribution made from different categories OBCs constituted 52% (14) of the respondents, General category had 7% (02) respondents. SBCs made up for only 3.7%(1), SC 22% (6) and ST is 15% (4) of the respondents interviewed as part of this study.

1.2 Age Group

All the interviewed respondents were in the age group of 20-25 years.

Where the majority was in between 22-23 years constituting 62.90% (17)

1.3 Religion

The majority of the respondents 96.3%(26) were Hindu and the rest 3.7% (1) were Muslims.

1.4 Educational Qualifications

The majority of the respondents 41% (11) were ITI Tradesmen and Graduate were 15%(4). There were also 10th above 44%(12). No other educational profiles were found in the respondents other than these three. This indicates that all the trainees selected were as per the prescribed criteria.

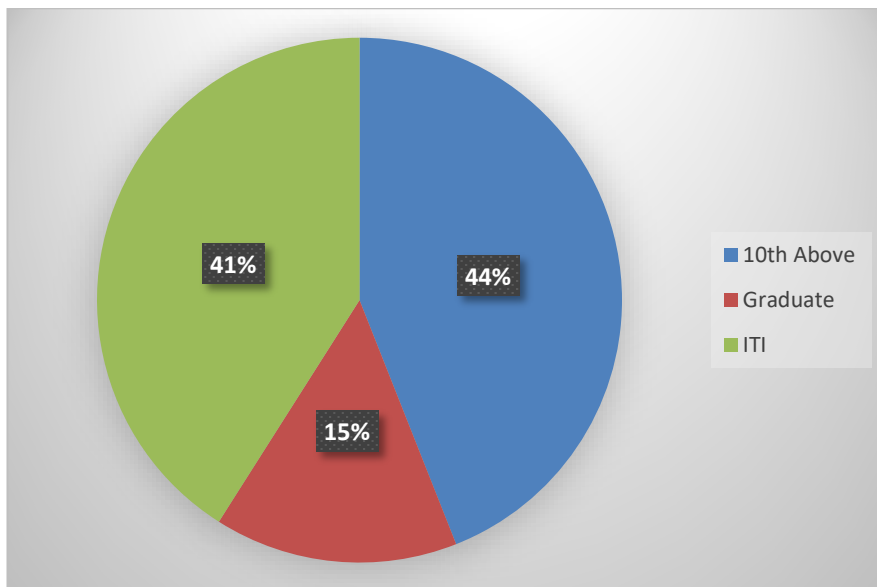


Figure 1 Educational Qualification

1.5 Marital Status

The majority of the respondents 97% (26) were singletons or unmarried. Married made up 3.7% (1) while there were no divorcees enrolled in the program.

1.6 Prior Occupation

The majority of the respondents 85.18% (23) said that they were students. Only one was in the wage employment and similarly only one of the total interviewed candidate was drop out and one was in another category of the respondents.

1.7 Family Occupation

The majority 57.85% (14) of the family was in agriculture while families in private job were 2.22% (6) other occupations such as small business 11.11%(3). Government Sector whereas one 11.11%(3) was self-employed.

1.8 Family type and size

Total of the respondents were living in Joint families 62.96% (parents, self, spouse, and kids) ostensibly. Nuclear family 33.33% only two categories were found in family type.

1.9 Monthly family income

The majority of the respondents 11.11% (3) were in the < Rs 5000 monthly income earning range. 33.33% (7) of respondents were in the Rs. 5,000 - Rs. 10,000 22.22% (3) ,10000- 20000 25.92% (7), 20000-50000, 29.63% (8),50000-100000 3.7%(1) monthly income earning range.

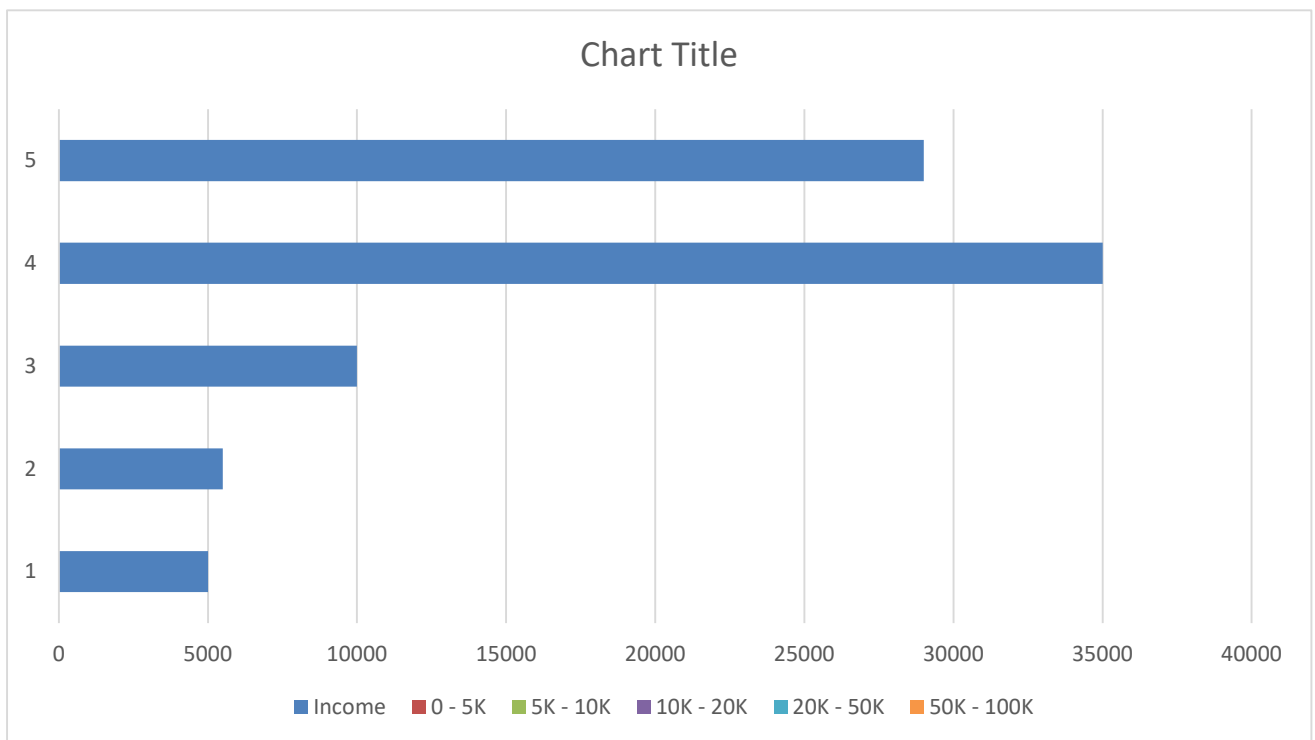


Figure 2- Monthly Family Income

Program Awareness and Mobilization

The effectiveness of the mobilization process shapes the awareness that the candidates have about the scheme and its benefits.

The program was launched by SCMS within the institutional mechanism of the National Skill Development Council (NSDC). The program requires building awareness and campaigns through various media to make reach out. Accordingly, when asked 7.40% (2) informed about knowing the program through newspaper and website advertisements while friends or relatives were the sources of information for 66.66% (13) of the respondents. All other sources of information like course mobilizers, panchayat representatives and school and college teachers, and others were not the enabling sources for enrollment as per the survey.

The nature of job prospects was the prime reason for taking up this course as pointed out by 55.55% (14) of the respondents. Financial need stated as a reason by 25.93% (7) of the surveyed. About 11.11% (3) of the surveyed took up this course because it was recommended by someone.

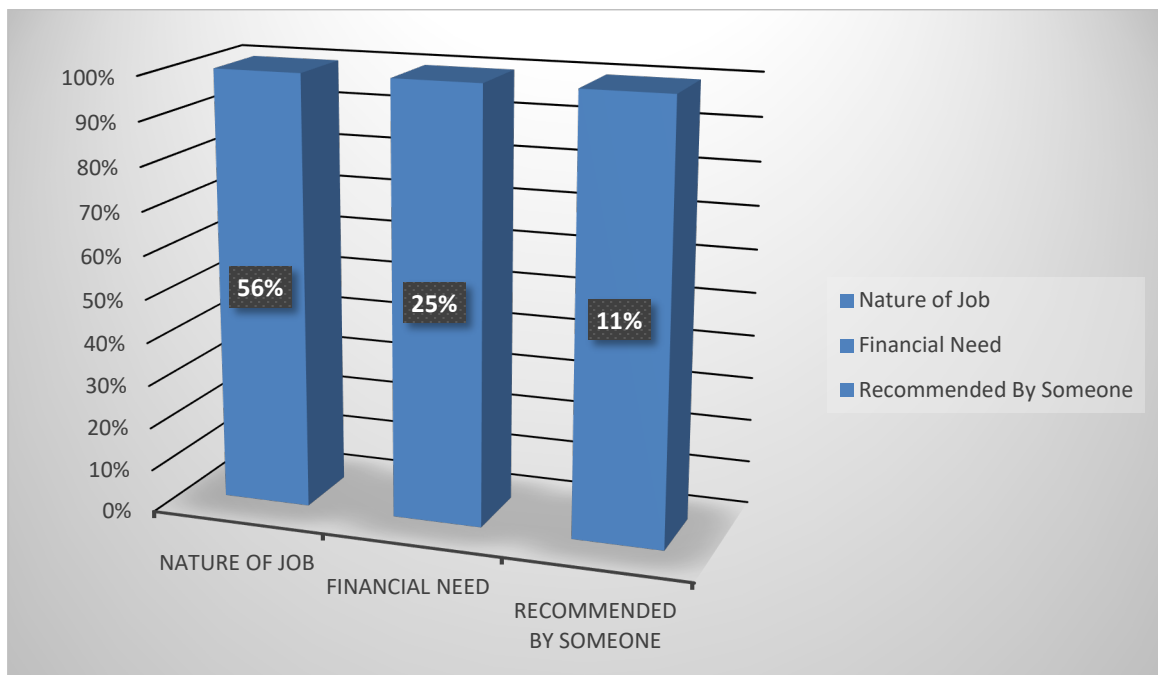


Figure 3 - Reason Behind Joining the Course

2.1 Initial assessment, screening and selection

The eventual selection is to be done on the basis of the entrance test and score obtained by the candidates to be eligible for further tests such as medical examinations and other verification.

All candidates were gone through a medical examination prior to recommendation for admission in various batches as available.

2.2 Quality and quantity of the training components

The quality and quantity of the training components such as training material, equipment facilities, lodging facilities, boarding, mine commuting, co-curricular activities, uniform and personal protective equipment (helmet, shoes, etc) had the majority of the respondents (51.85%) giving a rating of 5 leaning towards the satisfied state.

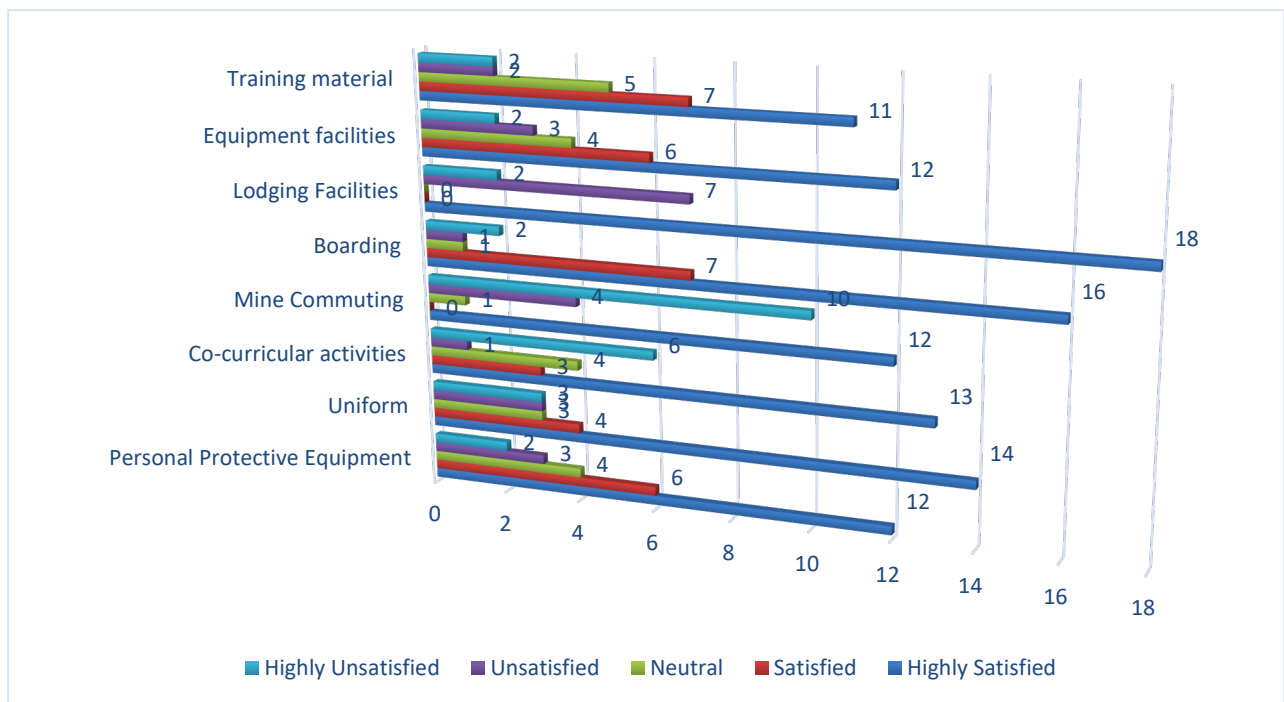


Figure 4 - Quality and Quantity of the Training Components

2.3 Difficulty level of the training course

A majority of 33.33% (09) of the respondents found it to be neither easy nor difficult. However, those who found the course to be easy were pegged at 48.15% (13) of the respondents.

The majority of the respondents rated the satisfaction level as 5 (satisfied) followed by 5 implying that they were extremely satisfied with the different factors such as knowledge level, operational skills, behavior, delivery, and additional support (extra classes, query resolution).

2.4 Satisfaction Level

This section examines the satisfaction of trainees with the knowledge of trainers on the basis of their knowledge level, behavior, operational skills, additional support and delivery on the training locations.

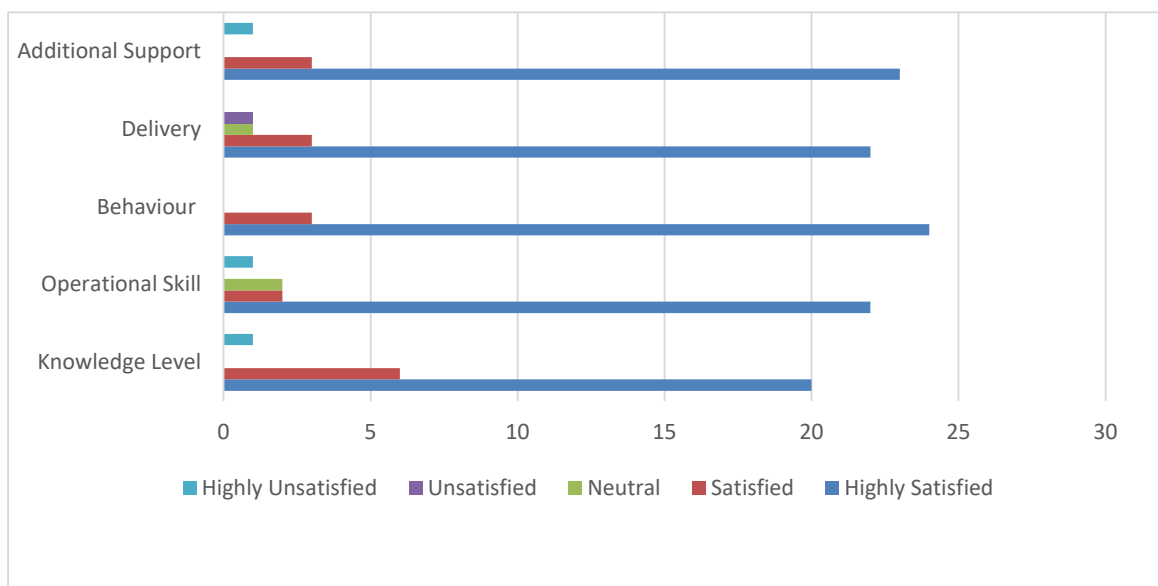


Figure 5 - Satisfaction Level

2.5 Skill training in terms of equipment practice and industry relevance

The skill training imparted in terms of hands-on practice on equipment was found to be excellent by 55.55%(14) of the respondents and adequate by 18.52%(5) and inadequate by 4.8%(1) of the rest of

them. A majority of 55.55%(15) of the trainee surveyed found the training to be relevant in terms of industry utility and relevance with another 11.11%(3) finding it to be highly relevant. Only 7.40%(2) of the respondents found it to be irrelevant.

2.6 Placement

Placement lends concreteness to skill development training and ensures initial employment for the trained candidate. The offering of jobs to candidates is the essential prerequisite for placement. Placements and absorption in the industry remain a cause for concern.

A vast majority 92.59% (25) of the respondents got their placements through the training partner and 7.40% (2) did not do so.

2.7 Acceptance of Job

Receipt of a job offer is no guarantee of placement since the candidates would not necessarily accept or take up the offered job. The data shows the extent to which beneficiaries accept the job offered by their training centers and all 14 of the respondents joined the organization that offered them job placements and 9 has not joined.

2.8 Job Role Offered

As far as job role is concerned, an overwhelming 51.85% (14) of the respondents agreed that they were not assigned the role for which they had been trained i.e., for mining electrician and fitter Operator as the case may have been. Only 18.52% (4) respondent had assigned the job role for which they had been trained. Majority of respondent 51.85% (14) had not assigned the job according to their job role.

2.9 Training enhanced employability and income

A vast majority 90% (24) of the respondents agreed that the skill training imparted to them has actually increased their employability. For 3.90% (1) of the respondents the skill training has not done so (increased their employability). For the majority, 55.55%(15) of the respondents the skill training imparted has indeed improved their income levels. 18.09%(4) of the respondents feel that the skill training has not improved their income. The trainees 55.55% (15) found the training relevant for the skill training in terms of industry relevance.

2.10 Current Employment status

Almost 37.03%(12) of the respondents was employed in a related job or were found to be continuing with the same job. Further, 3.7%(1) of the respondents were employed in the mining sector but in other job roles. Those employed but not in the mining sector were 37.03% (10) of the respondents.

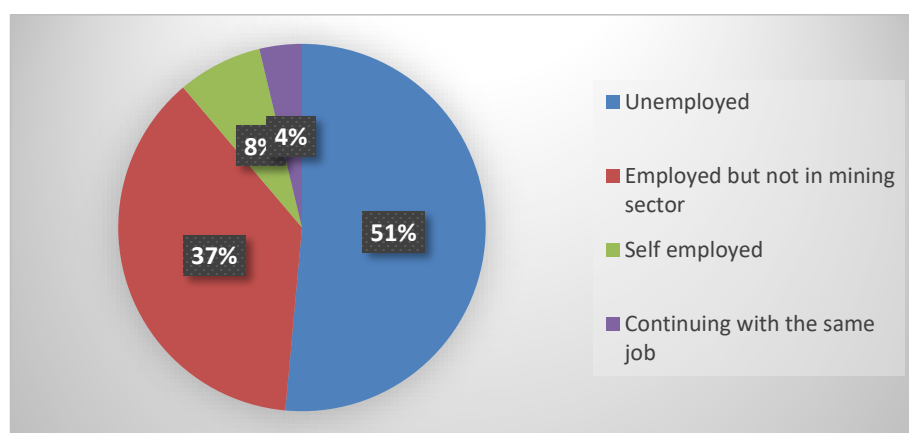


Figure 6 - Current Employment Status

2.11 Unemployment and reasons

Based on beneficiary survey data, shows that a majority of unemployed candidates stated reason such as Lack of availability of jobs, Lack of skills populated and Other reasons like low educational level, low wages, and unsafe working conditions are a veritable explanation of the present unemployed state by them.

2.12 Job satisfaction

This study found that respondents gave a rating of 4 or 5 from satisfying level to highly satisfying level with the different factors of their current job roles with aspects like working hours 33.33% (09), future scope 25.93%(07), salary 7.40% (2), overtime pay 11.11% (3), medical benefits and insurance 11.11% (03), leave or time off benefits 25.93 % (07), incentive bonus 11.11% (3), canteen facilities 14.81% (04) and transportation services 7.40 % (2). Majority of candidates had leaved the job after placement due to certain reasons which include job role, location of job, salary, and several working conditions that's why they were unable to give good ratings or reasonable ratings about job satisfaction.

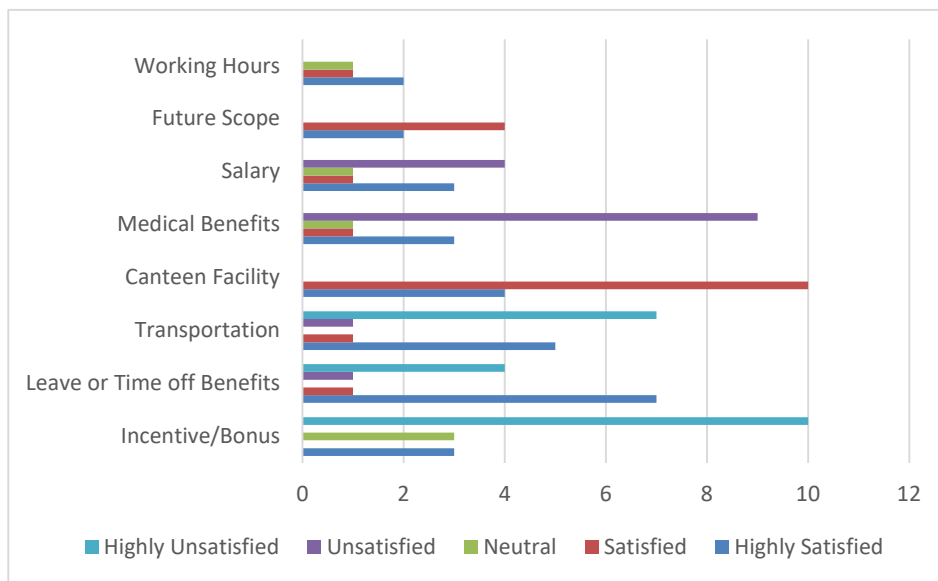


Figure 7 - Job Satisfaction

2.13 Overall training experience

A substantial 51.85% (14) of the respondents were satisfied with the overall training experience imparted to them in the course while 14.81% (4) were highly satisfied. Those stating the overall training experience as neutral numbered only 22.22% (6) of the respondent and 11.11% (3) of the respondents felt unsatisfied with the overall training experience of the course.

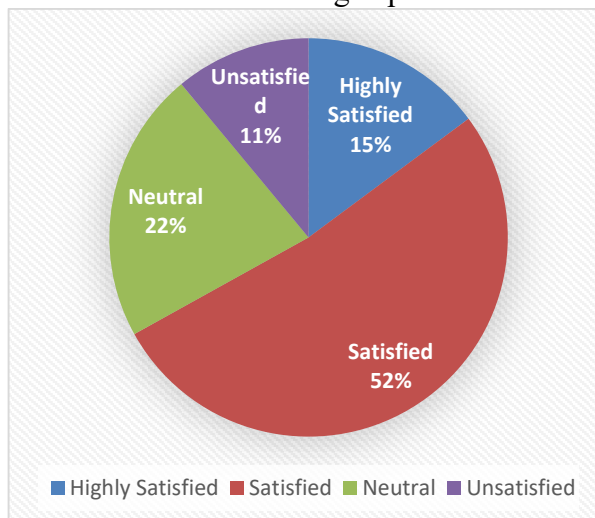


Figure 8 - Overall Training Experience

The training has a lot of positive features, including its attention to process, quality assurance framework in the form of a detailed procedure that provides great clarity for implementation partners, and placement for candidates. The quality of training and support provided by the trainers has been rated high by the beneficiaries. Significant shares of those who have benefited are from the different sections of society. The following are the recommendations based on multivariate data analysis of the study for specific stakeholders.

Overall Project

The project has succeeded in providing placement jobs to a significant share of beneficiaries with a job retention of 85% of the interviewed candidates. It is a matter of concern that a 100% or close to that couldn't be achieved.

- ❖ The number of aspiring candidates who applied for the program was 208, however only 62 were selected and trained. The program may be repeated to accommodate a greater number of candidates considering job market requirements.
- ❖ Critically review the non-placement of trained candidates for job absorption and support opportunities. The new courses or advanced courses may be conceptualized in view of high-tech equipment's availability and increased demand for occupational health and safety standards.
- ❖ Providing training in Language as a vocational skill, not just as a soft skill to the rural youth needs to be considered.
- ❖ To ensure more local employment focus, this study showed that migration and personnel was one of the most common reasons for rejecting a placement job offer. Placement support, and tracking can be extended for a longer time for ensuring job absorption for candidates who never had a first-time placement offer to work in the mining sector.
- ❖ The training program duration should not be extended beyond the planned time and Certification should be issued on time. A few of the Candidates also complained about the delay in the certification process.

Regarding SCMS:

SCMS can sign MoU's with Employer organizations for future direct trainee recruitment as this will save advertisement costs and fill vacancies quickly without any disruptions and manpower vacuum.

A reserve pool of stand-in employees can be also investigated especially amongst those trainees who have not found employment.

Sector Skill Council may investigate issues of timely release of certifications. Trainers' inputs on course content, schedule, pedagogy, practical work, and simple language manuals need to be incorporated into the Training Dockets which are to be handed over to trainees the time of the training.

For Employers:

Employers must provide relevant job role for which respondents has been trained and provide proper placements as per their convenience.

Employers should continue giving rewards, awards, incentives, and recognition to the trainees as these builds positive motivation and will motivate them to give their best.

List of Abbreviation and Acronyms

CSR : Corporate Social Responsibility

MSDE: Ministry of Skill Development and Entrepreneurship

NSDC: National Skill Development Corporation

OJT : On the Job Training

SCMS: Skill Council for Mining Sector

TOA : Training of Assessor

TOT : Training of Trainers

TP : Training Partners

OPO : Ore Processing Operator