

# IMPACT ASSESSMENT PROVIDING SKILL TRAINING TO APPRENTICES AT MDL APPRENTICE TRAINING SCHOOL



***Submitted to:***

**MAZAGAON DOCK SHIPBUILDERS LIMITED  
(A Govt. of India Undertaking)  
Dockyard Road,  
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## ACKNOWLEDGEMENTS

We are grateful to the Executives of the Corporate Social Responsibility (CSR) cell, Mazagaon Dock Shipbuilders Limited (MDL), CSR for entrusting the study to AFC India Ltd.

Incharge Apprentices Training School (ATS) has always been very cooperative in periodic discussions and in introducing us to many important sources of information. The study team got benefited with the regular feedback given by the other ATS staff.

The Executives of ATS, MDL have always been very cooperative in periodic discussions and in introducing to many important sources of information. The study team got benefited with the regular feedback given by the PIA staff, on our periodical reports. We are highly thankful to all the members of PIA. We are thankful to the persons for extending their cooperation by providing us with technical data available with them and permitting us to use the same for our analysis.

AFC and its study team for this assignment has immensely benefited from the support and guidance received from the following officials in carrying out this study. The team expresses its sincere gratitude to them.

1. Mr. Shakti Topkar. Faculty Structural Fitter
2. Mr. Virendra Bhojane. Faculty Fitter
3. Mr. Vikas Malusare. Faculty Electrician, Electronic Mechanic & ICTSM
4. Mr. Vinay Thakur. Faculty Welder
5. Mr. Arif Hussain. Faculty Pipe Fitter
6. Mr. Suraj Devkate. Faculty Draftsman (Mechanical)
7. Ms. Kamini Mehra. Faculty Employability Skills
8. Ms. Sayali Parab. Faculty Interpreter Pipe Fitter
9. Mr. Rahul Jaiswal. Faculty Rigger And Carpenter
10. Mr. Saurav Sagar. Faculty Workshop Calculation
11. Mr. Prakash Bisht. Faculty Drawing

In addition to the above officials, the team got good support from the Trainees of all activities while undertaking field studies and the team wishes to acknowledge their valuable support. Last but not the least, the team places on record it's thanks to all other stakeholders who extended their time and support in providing the information designed in the tool.



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## ABBREVIATIONS AND ACRONYMS

<b>AITT</b>	<b>All India Trade Tests</b>
<b>ATS</b>	<b>Apprentices Training School</b>
<b>CAPI</b>	<b>Computer-assisted Personal Interviewing</b>
<b>CSR</b>	<b>Corporate Social Responsibility</b>
<b>ICTSM</b>	<b>Information &amp; Communication Technology System Maintenance</b>
<b>ITI</b>	<b>Industrial Training Institute</b>
<b>MDL</b>	<b>Mazagaon Dock Shipbuilders Limited</b>
<b>MOU</b>	<b>Memorandum of Understanding</b>
<b>NAC</b>	<b>National Apprenticeship Certificates</b>
<b>NCVT</b>	<b>National Council of Vocational Training</b>
<b>PIA</b>	<b>Project Implementing Agency</b>
<b>WLD</b>	<b>Welder</b>



## EXECUTIVE SUMMARY

**Mazagaon Dock Shipbuilders Limited (MDL)**, Mumbai, an ISO 9001: 2015 Company is one of the leading shipbuilding yard in India. The History of Mazagaon Dock dates back to 1774, when a small dry dock was constructed in Mazagaon. Over the years, MDL has earned a reputation for quality work and established a tradition of skilled and resourceful service to the shipping world in general and the Indian Navy & Coast Guard. It was incorporated as a Private Limited Company in 1934.

MDL has been undertaking several Corporate Social Responsibility (CSR) projects primarily in areas of Skill Development, Integrated Village Development, Health & Sanitation, Nutrition, Education and projects under Swachh Bharat Abhiyaan etc. These projects are undertaken in different parts of Maharashtra like Mumbai, Thane, Raigad and the aspirational district of Nandurbar.

The development of human resources is crucial for the industrial development of any nation. Upgradation of skills is an important component of Human Resource Development. Training imparted in institutions alone is not sufficient for acquisition of skills and needs to be supplemented by training at the workplace. The Apprentices Act, 1961 was enacted with the prime objective to utilize fully the facilities available in industry for imparting practical training to meet the requirements of skilled manpower for industry. Initially, the Act covered the apprenticeship training for trade Apprentices and was subsequently amended in 1973, 1986, and 2014 to bring the Graduates, Technician, Technician (Vocational), and Optional Trade Apprentices respectively under its purview.

To assess the effectiveness of such CSR initiatives and their impact on target groups, MDL has undertaken an Impact Assessment through third-party agencies having adequate and relevant experience and expertise in the development/CSR sector and has entrusted the task of impact assessment to AFC India Ltd. through regular selection process.

An impact assessment study helps to ensure both compliance and social relevance. This can help entailed undertaking CSR in programme mode with an objective to enhance the impact, while ensuring the impact of CSR rules. To what extent has the intervention contributed to positive changes in the lives of beneficiaries. Have any unintended or negative changes can be attributed to the intervention. Whether beneficiaries identify or notice the changes made by the intervention etc.

The following are the key findings, conclusions and recommendations from the study:

- ⇒ In the agreement between Apprentices Training School (ATS) Mumbai and MDL, the target was set to train 300 students during the academic year 2021-22. To assess the actual impact of the training program, the study encompassed 46 students (15.3% of the total), predominantly from the 2021, 2022, and 2020 batches spread over 15 districts of Maharashtra State for 12 trades have been chosen for the impact assessment study. Notably, half of the participants are from the 2021 batch.
- ⇒ A sample of 46 individuals who have undergone training was chosen, with the majority (39.1%) falling within the 20-21 age group. The next significant segment consists of 34.8% from the 22-23 age group, while the remaining 26.1% represents individuals 18-19 years' age group. And all of them are unmarried.



- ⇒ It is worth mentioning that the female sample constitutes 4%, and all female trainees selected courses in Information & Communication Technology System Maintenance (ICTSM) and Structural Fitter Ex ITI. On the other hand, male students received training in a total of 12 different trades.
- ⇒ A significant proportion (50.0%) of the trained individuals holds a 12th-grade qualification, while 26.1% have completed their 10th grade. The remaining 17.4% of the selected sample are graduates who have attracted to this training programme, and they predominantly received training in trades such as Electrician, ICTSM, Pipe Fitter, and Rigger.
- ⇒ The sample reveals an average batch size of 30 students. Among the trainees, four trades— Fitter, Pipe Fitter, Structural Fitter, and Structural Fitter Ex ITI—recorded the maximum batch size of 40 persons.
- ⇒ Structural Fitter Ex ITI accounts for the highest percentage, with 20% of students opting for this trade, followed by Fitter at 15%. Additionally, 13% of trainees chose Pipe Fitter, while Electrician has the lowest representation with only 2%.
- ⇒ All trainees actively participated in the workshops conducted during the training period, and they consistently affirmed adherence to workshop ethics, including aspects such as dress code, punctuality, and overall discipline within the training center.
- ⇒ Each trainee became acquainted with this distinctive opportunity through their network of relatives and friends. The selection process for all candidates encompassed either a conventional paper-based examination or an online assessment.
- ⇒ Cent percent (46 out of 46) of the trainees received a stipend for the entire duration. The stipend was received for an average duration of at least 18 months and a maximum of 24 months, amounting to INR 6,710/- per month. Furthermore, every trainee indicated the following;
  - Availability of career counseling services.
  - Confidence gained to work in the respective trade's company after completing the apprenticeship.
  - A high level of confidence, with 45 out of 46 trainees (97.82%) expressing, assurance in securing employment in other companies after completing MDL's apprenticeship.
  - Acquisition of soft skills such as communication, English proficiency, basic computer skills, discipline, and time management.
  - Complete satisfaction with MDL's apprenticeship program.
- ⇒ The examination of the received responses illustrates that:
  - The majority of trainees, 96% (44 out of 46), expressed their desire to continue working in the same domain where they received training. Of the trainees currently working one is with Bharat Bijali and other local company in that district and the designations are reported to be Fitter and Helper.



- The average monthly income for the trained individuals falls within the range of Rs.17,000/- to 18,000/-.
- Trainees exhibit confidence in having a promising career trajectory after completing the skill improvement training.
- ⇒ All trainees, without exception, believe that there has been a positive change in their standard of living when compared to the period before the training.
- ⇒ As a significant number of students have recently completed their training and are still awaiting expected placements or job opportunities, the predominant response to this inquiry remains largely consistent for the majority. Among the 46 respondents, only two individuals reported a positive change in their economic circumstances.



# I. INTRODUCTION

## 1.1. BACKGROUND

Mazagaon Dock Shipbuilders Limited (MDL), Mumbai, an ISO 9001: 2008 Company is one of the leading Shipbuilding Yard in India. Mazagaon Dock Shipbuilders Limited, aptly called “Ship Builder to the Nation”, is one of India’s leading Defense public sectors undertaking shipyard under the Ministry of Defense. The History of Mazagaon Dock dates back to 1774, when a small dry dock was constructed in Mazagaon. Over the years, MDL has earned a reputation for quality work and established a tradition of skilled and resourceful service to the shipping world in general and the Indian Navy and Coast Guard. It was incorporated as a Private Limited Company in 1934.

After its takeover by the Government in 1960, Mazagaon Dock grew rapidly to become the premier war-shipbuilding yard in India, producing warships for the Navy and offshore structures for the Bombay High. It has grown from a single-unit, small ship repair company, into a multi-unit and multi-product company, with a significant rise in production, use of modern technology and sophistication of products. The company's current portfolio of designs spans a wide range of products for both domestic and overseas clients. Since 1960, MDL has built a total of 795 vessels including 25 warships, from advanced destroyers to missile boats and 3 submarines. MDL has also delivered cargo ships, passenger ships, supply vessels, multipurpose support vessels, water tankers, tugs, dredgers, fishing trawlers, barges and border outposts for various customers in India as well as abroad. MDL has also fabricated and delivered jackets, main decks of wellhead platforms, process platforms, jack-up rigs etc. The main activities of MDL are the construction of warships and submarines with facilities situated at Mumbai and Nhava (under development). It has the capability to build warships, submarines, merchant ships upto 40,000 DWT since 1979.

For outfitting work, the company has a large number of workshops with sophisticated equipment and machines specific to hull fabrication and ship construction work. The Company has qualified manpower to implement CAD/CAM/CIM using the latest ship design software’s, operating from a number of work stations having the latest computer hardware to provide, up to date design and production support, commensurate with for the yard’s capabilities. The workforce is well trained in various disciplines. Regular training programmes keep the men technologically abreast of the latest techniques of their profession.

## 1.2. MDL’S CORPORATE SOCIAL RESPONSIBILITY (CSR )

The Company is committed to all its stakeholders to conduct business in an economically, socially and environmentally sustainable manner as part of its CSR & Sustainability policy. MDL is committed to undertake various programs for integrating social and business goals in a sustainable manner through inclusive growth so as to make a positive impact for the society at large. Your Company has adopted Corporate Social Responsibility & Sustainability Policy in compliance with Section 135 of the Companies Act 2013 and Rules framed there under.





Mazagaon Dock Shipbuilders Limited (MDL) is committed to undertake various programs for integrating social and business goals in a sustainable manner to create social impact through inclusive growth activities to bring about impact on people and society at large.

**1.3. PROJECT AIMS AND PURPOSES**

MDL has been undertaking several CSR projects primarily in areas of Skill Development, Integrated Village Development, Health and sanitation, Nutrition, Education and projects under Swachh Bharat Abhiyaan etc. These projects are undertaken in different parts of Maharashtra like Mumbai, Thane, Raigad and the aspirational district of Nandurbar.

To assess the effectiveness of such CSR initiatives and their impact on target groups, MDL intends to undertake an Impact Assessment through third-party agencies having adequate and relevant experience and expertise in the development/CSR sector.

**1.4. CSR ACTIVITIES UNDER THE OVERALL STUDY**

MDL has entrusted the task of impact assessment of CSR activities to AFC India selection process and awarded seven such activities and are as below:

Sr. No.	Name of Project	Project Implementation Agency (PIA)	Location	Sector/Theme
1	Comprehensive COVID Care Project in Nandurbar District	District Health Officer (DHO) Nandurbar	Nandurbar District	Health
2	Providing Skill Training to Apprentices at MDL Apprentice Training School (ATS)	Apprentices Training School (ATS), Mumbai.	Mumbai	Skill Development

**1.5. SCOPE OF WORK**

To assess the effectiveness of such CSR initiatives and their impact on target groups, MDL intends to empanel Impact Assessment Agencies having adequate and relevant experience and expertise in the development/CSR sector. Qualified agencies will be empaneled for a period of five years, and MDL may engage the services of these agencies to conduct Impact Assessments of various CSR projects. A brief scope of work for Impact Assessment is listed below, however, this varied depending on the type of intervention made in the respective sector:

- i. Impact Assessment/Evaluation of selected CSR projects taken up by MDL in different geographical areas within and outside Maharashtra.
- ii. To define and list out the tools, methodology and system to be used for impact assessment/evaluation.
- iii. To define and list out parameters of impact and indices of measurement for each project, using the above tools/methodologies/system.



- iv.** To study the direct/indirect impact of MDL's CSR projects on the lives of communities/ people within the periphery of MDL project areas and other locations concerned, using defined tools, methodology, and systems.
- v.** To study the direct/indirect impact of MDL's CSR projects on other target groups, including environment, locality, agriculture, livestock etc. other than human beings.
- vi.** Evaluation of the level of awareness of CSR projects/ initiatives amongst the target beneficiaries/concerned stakeholders and the number of beneficiaries covered in improving their socioeconomic condition
- vii.** To know the consistency in the process of project implementation together with the fulfillment of stated objectives.
- viii.** To identify the gaps in the project identification, beneficiary's involvement, implementation of projects and recommendations for improvements.
- ix.** To interact with implementation agencies, govt. officials, organizations and other stakeholders to get inputs on the projects and their impact.
- x.** To carry out a study on the effective utilization of funds allotted for each project.
- xi.** To produce high-quality impact assessment reports for wider dissemination and future reference. Reports will be prepared through field visits, collation and analysis of input data on impact.
- xii.** Both Primary and secondary data collection from various stakeholders.



## II. APPROACH AND METHODOLOGY

According to statutory regulations, MDL is currently offering apprenticeship training to 2.5% of its overall workforce at ATS in Mumbai. Additionally, in an effort to extend apprenticeship opportunities to more young individuals, Central Public Sector Enterprises (CPSEs) have been granted permission to train a supplementary number of apprentices beyond the initial 2.5% workforce allocation. These additional apprenticeship positions can be funded through Corporate Social Responsibility (CSR) expenditures, following government guidelines.

As a consequence, MDL has covered the ongoing costs associated with these extra apprentices through CSR during the fiscal year 2021-22. This initiative has facilitated the training of over 300 additional young individuals in various trades at ATS, with financial support from CSR. The salaries of trainers and stipends for the additional apprentices, exceeding the statutory norms, have been funded through MDL's CSR contributions.

### 2.1 ASSESSMENT STRATEGY

Impact assessment determines the welfare changes from a given intervention on individuals, households and institutions and whether those changes are attributable to the project, programme, or policy intervention. The assessment of impact involves understanding the nature of the change that has taken place in the beneficiary/community and to determine its significance in their life. Impacts are defined in the evaluation literature as the positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended. These effects can be economic, socio-cultural, institutional, environmental, technological or other types. An Impact assessment is required to enhance the understanding of the extent to which project, programme, and policy interventions affect the target population and the magnitude of these intervention effects on the welfare of the intended beneficiaries. Impact assessment can be used to measure the outcomes and impact of development interventions, aiming to discern intervention effects from the influence of other external factors.

In the context of impact assessment to current study, the impact of project inputs on the type of technical education, skill and training received, availability of placement training, facilities exists in the Institution where training was undertaken and student/beneficiary, career and life style including economic condition of beneficiaries has been collected through primary survey and a comparison of output/outcome parameters as between the pre-intervention situation and post-intervention situation of the individual beneficiary.

### 2.2 BROAD OBJECTIVES IMPACT ASSESSMENT STUDY

To what extent has the intervention contributed to positive changes in the lives of beneficiaries. Have any unintended or negative changes that can be attributed to the intervention. Whether beneficiaries identify or notice the changes made by the intervention.

## 2.3 TOOL DEVELOPMENT

The AFC team designed a suitable tool/questionnaire duly covering key impact parameters as indicated above through a primary survey by recall method. This data collected has been used to assess the impact of the project. Semi-structured interviews were undertaken and are a method of inquiry that combines a pre-determined set of closed-ended (with options) and open-ended questions (questions that prompt discussion) with the opportunity for the interviewer to explore particular themes or responses.

## 2.4 SAMPLING PLAN

As agreed between the ATS Mumbai and MDL supposed to train 300 students in the year 2021-22. In order to recognize the real impact of the training program, the study covered 46 Nos of the students (15.3% of the total as sample) and is mainly from years 2021, 2022 and 2020. Majority (50%) students are from 2021 batch.

Further the sample is spread over 14 districts of Maharashtra State. District and Trade wise details of sample covered are given below.

District	Car pen ter	C O P A	Elec trici an	Elect ricia n Ex ITI	Electr onic Mech anic	Fi tt er	IC T S M	Pip e fitt er	Pipe fitter Ex ITI	Ri gg ar	Struct ural fitter	Structur al fitter Ex ITI	Gra nd Tota l
Akola	-	-	-	-	-	-	1	-	-	-	-	-	1
Ahmednagar	-	-	-	-	-	-	-	-	-	-	-	1	1
Aurangabad	1	-	-	-	-	-	-	-	-	-	-	-	1
Dhule	-	-	-	-	-	1	-	-	-	-	-	-	1
Beed	-	-	-	-	-	1	-	-	-	-	-	-	1
Buldhana	-	-	-	-	-	-	1	-	1	-	-	-	2
Jalgaon	-	-	-	-	-	-	-	1	-	-	-	-	1
Mumbai	-	-	-	-	1	-	-	1	-	-	-	1	3
Nashik	-	1	-	-	-	-	-	-	-	-	-	-	1
Parbhani	1	-	-	-	-	-	-	-	-	-	-	-	1
Raigad	1	1	3	1	-	1	-	2	1	1	-	1	12
Ratnagiri	-	-	-	-	2	1	-	-	-	-	-	1	4
Satara	-	-	-	-	-	-	-	1	-	-	-	1	2
Solapur	-	-	-	-	-	1	-	-	-	-	-	-	1
Thane	-	-	-	-	1	2	-	1	-	1	5	4	14
<b>Total</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>7</b>	<b>2</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>9</b>	<b>46</b>

## 2.5 TRAINING OF DATA COLLECTION TEAMS

Subsequent to finalization and approval of the sampling plan and data collection tools, the Agency (AFC India Ltd) has engaged the enumerators for undertaking the survey. An impact assessment study programme was organized over a period of two days during July 2021 including a piloting exercise with the respective enumerators under the guidance of Supervisors. A rigorous process of monitoring and quality assurance was adopted which included with checks by supervisors on every step of process.



A Computer-assisted personal interviewing (CAPI) was designed to collect the data. Computer-Assisted Personal Interviews (CAPI) is a face-to-face data collection method in which the interviewer uses a tablet or mobile phone to record answers given during the interview.

## 2.6 DATA ANALYSIS AND REPORT WRITING

The Survey data which was checked and cleaned has been exported and analyzed on various parameters by adopting relevant statistical methods/tools. The findings made by the experts from the field visits were analyzed and synthesized with a view to identify the key concerns and recommendations and finally, the report is presented in subsequent chapters as follows.

- ⇒ **Sample Profile**
- ⇒ **Impact Assessment**
- ⇒ **Conclusions and Recommendations**



### III. SAMPLE PROFILE

The focus of the primary survey was to capture the current situation when compared to before training/ Skill Development. The data provides quantifiable information on the programme benefits.

#### 3.1 SAMPLE BY AGE AND TRADE

A sample of 46 trained persons selected comprises majority from 20-21 years age group with 39.1%, followed by 34.8% from age group 22-23, and the remaining 26.1% is of 18-19 years. The sample across various trades by age is given below at Table 3.1.

**Table 3.1: Sample Across Various Trades By Age**

Trade	18	19	20	21	22	23	Grand Total
Carpenter		1			1	1	3
COPA			1	1			2
Electrician		1	1	1			3
Electrician Ex ITI		1					1
Electronic Mechanic			1		3		4
Fitter			5	2			7
ICTSM		1			1		2
Pipe fitter	1	2	2		1		6
Pipe fitter Ex ITI					1	1	2
Rigger		1		1			2
Structural fitter				2	3		5
Structural fitter Ex ITI		4	1		2	2	9
<b>Total</b>	<b>1</b>	<b>11</b>	<b>11</b>	<b>7</b>	<b>12</b>	<b>4</b>	<b>46</b>
<b>Percentage</b>	<b>2.2%</b>	<b>23.9%</b>	<b>23.9%</b>	<b>15.2%</b>	<b>26.1%</b>	<b>8.7%</b>	<b>100.0%</b>

#### 3.2 SAMPLE BY GENDER AND TRADE

It is noteworthy that Female sample covered with 4% and all female trainees were opted for the trade information & Communication Technology System Maintenance (ICTSM) and Structural fitter Ex ITI. All Male students were trained in 12 Trades. Detail of other trades by gender is given in Table 3.2 below.

**Table 3.2 : Sample Across Various Trades By Gender**

Trade	Female (Nos)	Male (Nos)	Female (%)	Male (%)
Carpenter		3	0.0%	6.5%
COPA		2	0.0%	4.3%
Electrician		3	0.0%	6.5%
Electrician Ex ITI		1	0.0%	2.2%
Electronic Mechanic		4	0.0%	8.7%
Fitter		7	0.0%	15.2%



Trade	Female (Nos)	Male (Nos)	Female (%)	Male (%)
ICTSM	1	1	2.2%	2.2%
Pipe fitter		6	0.0%	13.0%
Pipe fitter Ex ITI		2	0.0%	4.3%
Rigger		2	0.0%	4.3%
Structural fitter		5	0.0%	10.9%
Structural fitter Ex ITI	1	8	2.2%	17.4%
<b>Grand Total</b>	<b>2</b>	<b>44</b>	<b>4.3%</b>	<b>95.7%</b>

### 3.3 SAMPLE BY EDUCATION AND TRADE

Large portions (50.0%) of the trained persons are 12th pass followed by 10th pass with 26.1%. Even though the 17.4% graduates are also joined this programme to have technical knowledge. These graduates are mainly trained in Electrician, ICTSM, Pipe fitter and Rigger. Details of trades by education status of Trainees are given in Table 3.3.

**Table 3.3 : Sample Across Various Trades By Education Status**

Trade	10	11	12	Graduation	Grand Total
Carpenter	33.3%	0.0%	33.3%	33.3%	100.0%
COPA	100.0%	0.0%	0.0%	0.0%	100.0%
Electrician	0.0%	0.0%	33.3%	66.7%	100.0%
Electrician Ex ITI	100.0%	0.0%	0.0%	0.0%	100.0%
Electronic Mechanic	0.0%	0.0%	100.0%	0.0%	100.0%
Fitter	0.0%	0.0%	100.0%	0.0%	100.0%
ICTSM	50.0%	0.0%	0.0%	50.0%	100.0%
Pipe fitter	16.7%	0.0%	33.3%	50.0%	100.0%
Pipe fitter Ex ITI	0.0%	0.0%	100.0%	0.0%	100.0%
Rigger	50.0%	0.0%	0.0%	50.0%	100.0%
Structural fitter	40.0%	60.0%	0.0%	0.0%	100.0%
Structural fitter Ex ITI	33.3%	0.0%	66.7%	0.0%	100.0%
<b>Total</b>	<b>26.1%</b>	<b>6.5%</b>	<b>50.0%</b>	<b>17.4%</b>	<b>100.0%</b>

### 3.4 SAMPLE BY MARITAL STATUS AND TRADE

Cent percent of the trained persons are unmarried only, in all the 12 trades selected under the study.



## IV. IMPACT ASSESSMENT

MDL has consistently demonstrated its commitment to the training of apprentices by maintaining its in-house Apprentice Training School (ATS). This unwavering support underscores MDL's dedication to nurturing and developing skilled individuals within its workforce. The Apprentice Training School serves as a valuable resource, providing a structured and comprehensive learning environment for apprentices. Through this initiative, MDL not only invests in the professional growth of its employees but also contributes to the overall development of a skilled and competent workforce. MDL has continued its support to for training of apprentices through the in-house Apprentice Training School (ATS).

### A. Technical Education, Skill and Trade Selection & Training

In recent times, a significant transformation has been observed in the Indian industry, marked by impressive growth over the past decade and a half. The proliferation of industries in India, particularly in the services and manufacturing sectors, has been substantial. Recognizing that elevating skill levels, including a greater involvement of apprentices, is pivotal for India's journey towards prosperity and modernization, emphasis has been placed on fostering collaboration between industry stakeholders and trainees. This collaborative approach is essential to ensure a steady supply of skilled workers, thereby driving development through increased employment opportunities.

To facilitate rapid industrialization and enhance the industrial landscape in India, various initiatives have been implemented. MDL's support to the Apprentice Training School (ATS) aligns with this broader initiative. While ATS operates as a pre-designed program with established systems, an evaluation of its impact includes the examination of information related to the skills and training aspects covered in the courses. It has been observed that the majority of these aspects align with the agreed terms between MDL CSR and MDL ATS, demonstrating a harmonious synergy in their collaborative efforts. This collective commitment aims not only to meet the immediate demands of a skilled workforce but also to contribute to the overarching goal of sustainable and inclusive industrial development in India.

#### 4.1 BATCH YEAR AND SIZE

In all the selected sample represents in four years the entire target is achieved. Sample selected indicates that the average number of students in this batch is reported to be 30 numbers. By trainees the maximum batch size of 40 persons was found in four trades namely Fitter, Pipe fitter, Structural fitter and Structural fitter Ex ITI. Overall in any of the batches the average size of students is in the range of 9-45. Details are given at Table 4.1 and 4.2.

Batch Start Year	No. of Students	Ave. No of students /batch
2020	2	15.0
2021	23	35.8
2022	21	24.4
<b>Total</b>	<b>60</b>	<b>30.0</b>

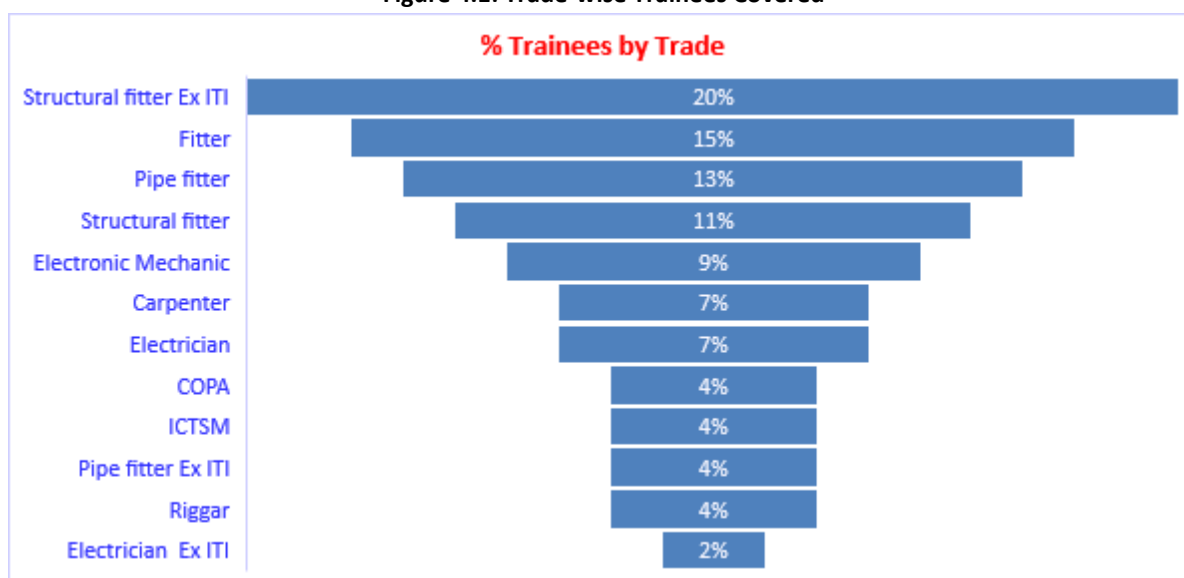




Table 4.2 : Trade wise trainees Batch Size		
Trainee Trade	Nos.	Ave. No of students /batch
Carpenter	3	10.00
COPA	2	15.00
Electrician	3	9.00
Electrician Ex ITI	1	10.00
Electronic Mechanic	4	15.00
Fitter	7	44.57
ICTSM	2	14.00
Pipe fitter	6	42.67
Pipe fitter Ex ITI	2	12.00
Riggarr	2	14.00
Structural fitter	5	40.00
Structural fitter Ex ITI	9	40.00
<b>Total</b>	<b>46</b>	<b>29.67</b>

There are 12 major trades selected by the trainees. All those trades have been selected for the impact assessment study. Majority of the students were undertaken training in Structural fitter Ex ITI with 20% followed by Fitter with 15% and 13% in pipe filter and lowest in Electrician cadre with only 2%. Trade wise trainees interviewed are given at Figure 4.1.

Figure 4.1: Trade-wise Trainees Covered



## 4.2 SOURCE OF MDL OPPORTUNITY AND SELECTION

All trainees became aware of this unique opportunity through their connections with relatives and friends. The selection process for all candidates involved either a traditional paper-based examination or an online assessment.

## 4.3 OTHER ASPECTS

Cent percent of the trainees were in reported the following aspects.

- Held one full-day workshop from 7:30 AM to 5:00 PM.
- Maintained a Dress Code
- All are Aware that getting funded under MDL CSR



## B. Institution Facility/ Carrier counseling/ placement and Training

Ergonomics is extremely important; classroom seating must also be flexible in terms of functionality. In other words, it has to complement the curriculum. Educators and Trainers felt that classrooms of today have become active learning environments. This requires portable (in weight and design) chairs that students of all age groups can quickly and easily move, arrange, stack and store.

Furniture, often overlooked as an environmental factor, holds significant sway over the efficacy of a trainee's learning experience. This oversight presents an opportunity for schools and educational institutions to enhance student's learning and engagement by prioritizing appropriate classroom furniture. A comprehensive survey indicated that the institute boasts a 100% satisfaction rate in terms of facilities, including a well-equipped playground, meticulous hygiene maintenance in all areas, well-furnished classrooms with adequate lighting and fans, water facilities, and a dedicated workshop hall. Based on discussions it is found that facilities provided with MDL funding like Solar lighting systems in the campus, garden development, construction of monuments, RO systems, medical facility to trainees, library upgradation/ development, sports facilities, renovation of borewells etc. have been used by the students while undertaking the course. Audio Visual Aids which are also called instructional material endeavor to make the knowledge clear through our sense. It is sensed from the respondents that all those learning material make the learning situations as real as possible and give us firsthand knowledge through the organs of hearing and seeing.

### 4.4 STIPEND

A stipend is a regular fixed sum of money paid for services or to defray expenses, such as for scholarship, internship, or apprenticeship. It is often distinct from an income or a salary because it does not necessarily represent payment for work performed. Each and every trainee has received a stipend depend on their qualification. Details of stipend received by various trades of trainees are given at Table 4.4. On average a minimum of 18 Months and a maximum of 24 months this stipend was received with INR 6,710/- per month.

**Table 4.4 : Details of Stipend received**

Trade	Ave No of months received	Ave INR per month received
Carpenter	12.0	7,700
COPA	12.0	5,058
Electrician	24.0	5,925
Electrician Ex ITI	24.0	5,925
Electronic Mechanic	12.0	8,050
Fitter	24.0	5,925
ICTSM	12.0	8,050
Pipe fitter	24.0	5,893
Pipe fitter Ex ITI	12.0	7,700
Rigger	24.0	4,938
Structural fitter	24.0	5,775
Structural fitter Ex ITI	12.0	8,050
<b>Total</b>	<b>18.3</b>	<b>6,710</b>



Besides, cent percent of the trainees reported the following.

- Availability of carrier counseling facility.
- Almost all trainees have gained confidence to work in the any industrial company with the trade they trained.
- Learned the soft skills like Communication, English speaking, Basic computer, discipline, Time management.
- Fully satisfied with the apprentice's program of MDL.

### C. Student Career & Life style

Career and lifespan development theories and skills, including how personal growth and life stages impacts individuals trained. Hence, emphasis was also given in studying and understanding career and job choices and personal strategies for career decision-making. Trainee students were no become acquainted with print and electronic resources, counseling techniques, and assessment instruments. Vocational education consists basically of practical courses through which one gains skills and experience directly linked to a career in future. It helps students to be skilled and in turn, offers better employment opportunities.

The analysis of responses received depicts that

- The majority of trainees, 96% (44 out of 46), expressed their desire to continue working in the same domain where they received training.
- Of the trainees currently working one is with Bharat Bijali and other local company in that district and the designations are reported to be Fitter and Helper.
- The average monthly income for the trained individuals falls within the range of Rs.17,000/- to 18,000/-.
- They are confident that they will have a good career after completing this skill improvement training.
- In addition to apprenticeship almost all apprentice pursues additional courses such as BA / BSC / BCOM part time or online to enrich their qualification.
- Cent 100% believe that there is a positive change in the standard of living when compared to before training.

### D. Family Background of the Trainees

Some aspects of the trainees' family background were also explored, and the details obtained are as follows.

- The average family size is 4.59 members
- 90% of the mothers are either housewives or home makers



Table 4.5: Family Details of Trainees

Trade	Family Size	Annal HH Income, INR
Carpenter	4.33	1,90,000
COPA	4.00	1,75,000
Electrician	4.00	2,00,000
Electrician Ex ITI	5.00	2,00,000
Electronic Mechanic	5.00	1,80,000
Fitter	4.71	3,50,000
ICTSM	4.50	1,50,000
Pipe fitter	4.83	3,74,000
Pipe fitter Ex ITI	4.50	1,75,000
Rigger	3.00	1,15,000
Structural fitter	5.00	3,44,800
Structural fitter Ex ITI	4.67	1,92,222
<b>Grand Total</b>	<b>4.59</b>	<b>2,49,304</b>

#### 4.5 CHANGE IN ECONOMIC CONDITION

Given that a considerable number of individuals have recently concluded their training and are still awaiting anticipated placements or job opportunities, the predominant response to this inquiry remains unchanged for the majority. Out of the 46 respondents, only two indicated a positive shift in their economic circumstances.



## V. RECOMMENDATIONS

The primary survey with students trained and analysis of the responses lead to the following conclusions and recommendations/action points emerged based on the FGDs/feedback undertaken by the supervisors/team members suggestions given by Trainees during the study, along with experience of the key staff involved in data collection from the previous cross learning's from similar studies etc.

- ➡ MDL's support to its Apprentice Training School (ATS) Mumbai has facilitated in improving the mandate due to this CSR activity Skill Training to Apprentices at MDL ATS.
- ➡ As of November 2023, the majority of trainees undergone a skill-oriented training programme are in search of jobs.
- ➡ Periodical assessment of all the interventions in terms of their utility, functioning, timely completion etc. may be undertaken through concurrent monitoring and evaluation exercises instead of only taking up studies after completion.
- ➡ Likewise, other MDL ATS may initially tie up with a few industries and customize the program trades as per their requirements, in the process it may expect more placement immediately after completion of the development programs.

## VI. HIGHLIGHTED CASE-STUDIES

### Case Study 1 – Trade Structural Fitter

Labesh Patil is a 20-year candidate living at, Thane west, Mumbai is now an entrepreneur, due to the collaborative efforts taken by MDL, CSR and ATS, MDL Mumbai.

Lobesh is 10<sup>th</sup> passed student from the school of Thane west. Labesh's family is one of the common middle-class family living at Thane west His father is working at private company and his mother is housewife. His family's financial condition was not that strong to educate him further. So, he has been worried about his future, as no one giving a job to him. However, he wants to do something for his family and himself.

*"I am very grateful to ATS MDL and CSR MDL for support during the apprentices' program".*

**Labesh Patil.**



He came to know about the MDL apprentices' program for the 10<sup>th</sup>, 12<sup>th</sup>, and ITI students through Relatives and Friends. After a successful entrance test and interview, he joined the course of a Structural fitter for batch 2022-2023.

Since the stipend during the course year had been approved under the apprentices training program by the MDL CSR, Labesh abruptly joined the Structural fitter course.

During the course, he learns all the skills required for a good carpenter. Also, with the support of the trainers; he learned the skills of cutting, drawing, fitting, etc. and hence improved his confidence to work anywhere in the field of Structural fitter.

After 2 years he completed his course. due to his good skills in Structural fitting, he got a job as a Structural fitter at "Bharat Bijali Ltd", Mumbai. Now he has a salary of Rs. 17000 per month. This job makes Labesh self-sufficient and very confident. Now his family is very happy about the future of Labesh and the point of view of his family and society has changed.

This job helps him a lot to support himself and his family too. He is very grateful to ATS, MDL and CSR, MDL for their special support.



## Case Study 2 – Trade ICTSM

Shubham Ashok Nikash is a 22-year candidate living at, Mankhurd building no. 21, Mumbai is now an entrepreneur, due to the collaborative efforts taken by MDL, CSR and ATS, MDL Mumbai.

Shubham is B.Com passed student from the collage of Buldhana Shubham's family is one of the common middle-class family living at Buldhana Mehakar His father is farmer and his mother is house-wife. His family's financial condition was not that strong to educate him further. So, he has been worried about his future, as no one giving a job to him. However, he wants to do something for his family and himself.

He came to know about the MDL apprentices' program for the especially 10th, 12th, B.com and ITI students through the Relative and Friends. After a successful entrance test and interview, he joined the course of a ICTSM for batch 2022-2023.

Since the stipend during the course year had been approved under the apprentices training program by the MDL CSR, Shubham abruptly joined the ICTSM course.

"I am very grateful to  
ATS MDL and CSR  
MDL for support  
during the  
apprentices'  
program".

**Shubham Nikash.**



During the course, he learns all the skills required for a good carpenter. Also, with the support of the trainers; he learned the skills of computer software and hardware etc. and hence improved his confidence to work anywhere in the field of ICTSM

After 2 years he completed his course. due to his good skills in ICTSM, he got a job as Dex top support Engineer "At Locuz Company Pvt, Ltd Parel Motilal Oswal tower", Mumbai. Now he has a salary of Rs. 18000 per month. This job makes Shubham self-sufficient and very confident. Now his family is very happy about the future of Shubham and the view of his family and society has changed.

This job helps him a lot to support himself and his family too. He is very grateful to ATS, MDL and CSR, MDL for their special support.



### Case Study 3 – Pipe Fitter

Chwtan Ishwar Patil is a 20-year candidate living at, Borkheda budruk Chalisgaon is now an entrepreneur, due to the collaborative efforts taken by MDL, CSR and ATS, MDL Mumbai.

Chwtan is B.C.S. passed student from the collage of Chalisgaon Chwtan’s family is one of the common middle-class family living at Borkheda budruk Chalisgaon His father is farmer and his mother is house-wife. His family’s financial condition was not that strong to educate him further. So, he has been worried about his future, as no one giving a job to him. However, he wants to do something for his family and himself.

He came to know about the MDL apprentices’ program for the especially 10th, 12th, B.C.S. and ITI students through the Relative and Friends. After a successful entrance test and interview, he joined the course of a Pipe Fitter for batch 2022-2023.

Since the stipend during the course year had been approved under the apprentices training program by the MDL CSR, Chwtan abruptly joined the ICTSM course.

During the course, he learns all the skills required for a good carpenter. Also, with the support of the trainers; he learned the skills of Pipe Fitter etc. and hence improved his confidence to work anywhere in the field of ICTSM.

After 2 years he successfully completed his course. Now he is doing SSCGD Exam preparation This Exam makes Shubham self-sufficient and very much confident. Now his family is very happy about the future of Shubham and point of view of his family and society has been changed.

This SSCGD Exam helps him getting good job a lot to support himself and his family too. He is very grateful to ATS, MDL and CSR, MDL for their special support.

*“I am very grateful to  
ATS MDL and CSR  
MDL for support  
during the  
apprentices’  
program”.*

**Chwtan Patil**







## VII. VISIT TO ATS TRAINEES UNDER MDL-CSR.







Latitude: 18.971097  
Longitude: 72.846837  
Elevation: 24.49±60 m  
Accuracy: 3.9 m  
Azimuth: 226° (SW)  
Pitch: -5.8° (2.2°)  
Time: 27-10-2023 14:09  
Note: MDL ELECTR  
Welding WORK SHOP  
CLASS MUMBAI

Powered by AngleCam



Latitude: 18.972036  
Longitude: 72.846154  
Elevation: 23.0±94 m  
Accuracy: 600.0 m  
Azimuth: 183° (S)  
Pitch: -4.9° (1.8°)  
Time: 27-10-2023 14:24  
Note: MDL draft  
CLASS MUMBAI

Powered by AngleCam