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FINAL
REPORT

Tracer Study - Employment Outcomes of ITI Graduates in Tripura

Directorate of Industries & Commerce, Govt. of Tripura

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JULY 2023

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1. Executive Summary

The Skills Strengthening for Industrial Value Enhancement (STRIVE) project is an ambitious initiative implemented by the Ministry of Skill Development and Entrepreneurship, Government of India. Launched in 2017, the project aims to improve the quality and relevance of the skills training provided to the youth in India. The main objectives of the project include improving the delivery and effectiveness of skills training, increasing the market relevance of skills training, and enhancing the institutional capacity of the skills training system. The project is being implemented with the support of the World Bank. The project focuses on key sectors of the Indian economy, including manufacturing, construction, textiles, and services, and aims to improve the skills of millions of youths across the country. The STRIVE project utilizes a range of innovative strategies, such as outcome-based funding, public-private partnerships, and the use of technology to improve the quality and relevance of skills training. The project is expected to have a significant impact on the Indian economy by enhancing the skills of the workforce, increasing productivity, and promoting economic growth.

Directorate of Industries & Commerce, Government of Tripura is actively participating in implementing the STRIVE project in the state of Tripura. A State Steering Committee (SSC) has been formed to guide the implementation of project in the State. A State Project Implementation Unit (SPIU) has been formed, to assist the SSC for the implementation of the project. At the state level, State Project implementation Unit (SPIU) will be responsible for providing fiduciary guidance implementation, monitoring, and facilitation of STRIVE.

Tracer studies are an essential component of the STRIVE project, as they provide valuable insights into the effectiveness of skills training programs and help to ensure that the training is relevant to the needs of the local job market. Tracer studies involve tracking the employment status and career progression of skills training program graduates to determine how well their training prepared them for the job market.

The target population of the study includes trainees from ITIs who completed the CTS program in selected trades and hold the National Trade Certificate. The study includes the trainees who passed the All-India Trade Test (AITT) in the academic year 2019 i.e., candidates who appeared and passed the annual examination held in 2019. The sample of the study is drawn as per the stipulated terms indicated in the tender document.

The study encompassed all districts of Tripura, home to 20 Industrial Training Institutes (ITIs). Of these institutions, 18 are under governmental control, while two are privately owned. The commencement of the STRIVE project saw the selection of three specific ITIs for implementation: ITI Dharmanagar in North Tripura, ITI Belonia in South Tripura, and Women ITI Indranagar in West Tripura.

Half of the ITIs, i.e., 10 institutions, were chosen by the industries department to partake in the tracer study. During the delineated reference period, which encompassed the student batches of 2017-19 and 2018-19, these 10 ITIs collectively registered 737 students. From this group, a tracer study was carried out on 486 students.

State/ UT	Total ITIs	Project ITIs	Govt. Non-Project ITIs	Private ITIs	Total Passouts	Sample Size
Tripura	20	3	15	2	737*	486

*From 10 selected ITIs

Profile of the Respondents

The survey for the study captures a broad cross-section of students hailing from various districts and enrolled in different types of Industrial Training Institutes (ITIs). A majority of respondents were traced back to West Tripura district, contributing 28% of the sample, followed by Dhalai district with 19.8%, and Khowai district with 13.8%. These three districts collectively account for 61.6% of the total sample size. The total enrolment for the academic year under study in these institutes stands at 737 students, indicating that the study's sample represents about 65.8% of the total student population.

The range of ITIs represented by the respondents is diverse. Government Non-Project ITIs (GNP ITIs) have the lion's share, with 84.1% of respondents (408 students), followed by Government Project ITIs under the STRIVE project (GP ITIs) with 13.4% (65 students). A small fraction of 2.5% (12 students) represents the Private ITIs. The Project ITIs accounted for about 14% of total admissions during the study period.

The survey data also present variation in the duration of ITI courses across different types of institutes. In Project and Private ITIs, the students enrolled were engaged only in one-year courses. Conversely, in GNP ITIs, the duration of courses extended to two years as well. Respondents who undertook two-year courses were exclusively from GNP ITIs.

The gender distribution among the respondents shows a degree of imbalance. In GNP ITIs, male students significantly outnumbered female students, with an 83:17 ratio. However, the distribution is more evenly balanced in GP ITIs, where female students make up 43% of respondents, attributable to one of the ITIs being exclusively for women. Private ITIs were entirely represented by male students.

The caste composition of the respondents reveals that the ST class has the highest representation at 43%, followed by the General class at 30% and the SC class at 23%. Graduates from the OBC class comprised a mere 4% of the total. Caste representation varies widely across districts.

Trade-wise respondents:

In the engineering trades, male participation is overwhelmingly dominant, making up 98% (197 participants) of the total. Some of the most popular trades among males are "Pump Operator-Cum-Mechanic" and "Welder", each accounting for 7.6% of total participants. However, the engineering

trades, such as "Draughtsman (Civil)" and "Architectural Assistant", also have limited female participation, comprising 9.1% and 13.3% respectively of participants in these fields.

Non-engineering trades have a more balanced gender participation, but males still form the majority with 68% (192 participants). These trades show a much higher participation rate for females, at 32% (92 participants). "Computer Operator and Programming Assistant" is one of the most significant non-engineering trades, with 45% female participants. However, the most female-dominant trades are "Dress Making" and "Fashion Design & Technology", with 83.3% and 72.7% female participation respectively.

Trade Type	Trade	Female		Male		Total	
		Nos.	%	Nos.	%	Nos.	%
Engineering Trade	Pump Operator-Cum-Mechanic	0	0%	37	100%	37	7.6%
	Welder	0	0%	37	100%	37	7.6%
	Draughtsman (Civil)	2	9.1%	20	90.9%	22	4.5%
	Plumber	0	0%	21	100%	21	4.3%
	Mechanic (Diesel)	0	0%	18	100%	18	3.7%
	Architectural Assistant	2	13.3%	13	86.7%	15	3.1%
	Mechanic (Motor Vehicle)	0	0%	13	100%	13	2.7%
	Fitter	0	0%	10	100%	10	2.1%
	Carpenter	0	0%	8	100%	8	1.6%
	Electronic Mechanics	0	0%	7	100%	7	1.4%
	Mechanic (Refrigeration and Air-Conditioning)	0	0%	7	100%	7	1.4%
	Electrician	0	0%	3	100%	3	0.6%
	Turner	0	0%	2	100%	2	0.4%
	Wireman	0	0%	1	100%	1	0.2%
	Total Engineering	**4**	**2%**	**197**	**98%**	**201**	41%
Non-Engineering Trades	Surveyor	13	14.4%	77	85.6%	90	18.6%
	Computer Operator and Programming Assistant	27	45.0%	33	55.0%	60	12.4%
	Stenographer & Secretarial Assistant	12	26.1%	34	73.9%	46	9.5%
	Desktop Publishing Operator	8	30.8%	18	69.2%	26	5.4%
	Dress Making	20	83.3%	4	16.7%	24	4.9%
	Computer Hardware & Network Maintenance	0	0%	20	100%	20	4.1%
	Fashion Design & Technology	8	72.7%	3	18.2%	11	2.3%
	Computer Aided Embroidery & Designing	4	57.1%	3	42.9%	7	1.4%
	Total Non-Engineering	**92**	32%	**192**	68%	**284**	59%
	Grand Total	**96**	20%	**389**	80%	**485**	100%

The data illustrates that irrespective of gender or trade type, the top five trades significantly contribute to the total participant count of the tracer study. The "Surveyor" trade boasts the highest number of participants, at 90, which makes up 18.6% of the total. This is followed by "Computer Operator and Programming Assistant" with 60 participants, contributing 12.4% to the overall total. The "Stenographer & Secretarial Assistant" trade accounts for 9.5% of the total, with 46 participants. Lastly, both the "Pump Operator-Cum-Mechanic" and "Welder" trades each hold 7.6% of the total share, with 37 participants in each. Cumulatively, these top five trades encompass 55.7% of the total

participants in the study, underscoring their prominent role in the skills and vocational landscape as represented by this study's respondents.

Post-Training Immediate Employment: The provided data illustrates the employment outcomes for students from different types of Industrial Training Institutes (ITIs), broken down into categories: Apprenticeship, Employed, Self-employed, and Unemployed.

ITI Type	Apprenticeship		Employed		Self-employed		Unemployed		Total
GNP ITI	3	0.73%	29	7.1%	36	8.82%	340	83.3%	408
GP ITI	-	-	4	6.15%	9	13.8%	52	80.0%	65
Private ITI	-	-	2	16.7%	-	-	10	83.3%	12
Grand Total	**3**	**0.61%**	**35**	**7.22%**	**45**	**9.28%**	**402**	**82.9%**	**485**

In the Government Non-Project ITIs (GNP ITIs), the majority of participants (83.3% or 340 students) remain unemployed. A small portion found employment (7.1% or 29 students), self-employment (8.82% or 36 students), or apprenticeships (0.73% or 3 students).

For Government Project ITIs (GP ITIs), a significant percentage of students are also unemployed (80% or 52 students). However, there are more self-employed students (13.8% or 9 students) than in GNP ITIs. The percentage of students who found employment (6.15% or 4 students) is slightly less than that of the GNP ITIs.

In Private ITIs (Pvt. ITIs), the majority of students are unemployed (83.3% or 10 students), similar to the other categories. A small portion found employment (16.7% or 2 students), but there are no students in apprenticeships or self-employment.

Overall, across all ITI types, the majority of students remain unemployed (82.9% or 402 students). A small portion have found employment (7.22% or 35 students) or self-employment (9.28% or 45 students), and a very small percentage are in apprenticeships (0.61% or 3 students). These figures indicate a significant challenge in terms of employment outcomes for ITI students across all categories.

Trade-wise employment (Immediate): The data illustrates the distribution of post-training outcomes for different trades in categories such as Apprenticeship, Employed, Self-employed, and Unemployed.

Trades	Apprenticeship		Employed		Self-employed		Unemployed		Total
	No.	%	No.	%	No.	%	No.	%	No.
Pump Operator-Cum-Mechanic	0	0.0%	2	5.4%	4	10.8%	31	84%	37
Welder	1	2.7%	4	10.8%	2	5.4%	30	81%	37
Draughtsman (Civil)	0	0.0%	0	0.0%	1	4.5%	21	95%	22
Plumber	1	4.8%	4	19.0%	3	14.3%	13	62%	21
Mechanic Diesel	1	5.6%	4	22.2%	2	11.1%	11	61%	18
Architectural Assistant	0	0.0%	1	6.7%	0	0.0%	14	93%	15
Mechanic (Motor Vehicle)	0	0.0%	2	15.4%	3	23.1%	8	62%	13

Trades	Apprenticeship		Employed		Self-employed		Unemployed		Total
	No.	%	No.	%	No.	%	No.	%	No.
Fitter	0	0.0%	2	20.0%	0	0.0%	8	80%	10
Carpenter	0	0.0%	0	0.0%	0	0.0%	8	100%	8
Electronic Mechanics	0	0.0%	3	42.9%	0	0.0%	4	57%	7
Mechanic (R&AC)	0	0.0%	0	0.0%	1	14.3%	6	86%	7
Electrician	0	0.0%	1	33.3%	0	0.0%	2	67%	3
Turner	0	0.0%	0	0.0%	0	0.0%	2	100%	2
Wireman	0	0.0%	0	0.0%	0	0.0%	1	100%	1
Engineering Total	**3**	**1.5%**	**23**	**11.4%**	**16**	**8.0%**	**159**	**79%**	**201**
Surveyor	0	0.0%	3	3.3%	6	6.7%	81	90%	90
COPA	0	0.0%	3	5.0%	6	10.0%	51	85%	60
Stenographer & Secretarial Assistant	0	0.0%	1	2.2%	5	10.9%	40	87%	46
DTPO	0	0.0%	1	3.8%	2	7.7%	23	88%	26
Dress Making	0	0.0%	1	4.2%	3	12.5%	20	83%	24
Computer Hardware & Network Maintenance	0	0.0%	3	15.0%	5	25.0%	12	60%	20
Fashion Design & Technology	0	0.0%	0	0.0%	1	9.1%	10	91%	11
Computer Aided Embroidery & Designing (CAED)	0	0.0%	0	0.0%	1	14.3%	6	86%	7
Non-Engineering Total	**0**	**0.0%**	**12**	**4.2%**	**29**	**10.2%**	**243**	**86%**	**284**
Grand Total	**3**	**0.6%**	**35**	**7.2%**	**45**	**9.3%**	**402**	**83%**	**485**

In the engineering trades section, the highest rate of employment is observed in Electronic Mechanics with 42.9% of the total trainees (3 out of 7) finding jobs. However, the Electrician trade, with a third of its trainees (1 out of 3) securing employment, also demands attention. The Mechanic Diesel trade showcased a diverse spread of outcomes, with 5.6% (1 student) in apprenticeship, 22.2% (4 students) in regular employment, and 11.1% (2 students) pursuing self-employment. Still, a significant fraction of 61% (11 students) were unemployed.

Contrastingly, the trades of Carpenter and Turner noted an alarming 100% unemployment rate amongst their trainees, totalling 8 and 2 students respectively. Draughtsman (Civil) with a 95% and Architectural Assistant with a 93% unemployment rate represent the maximum unemployment percentages within the engineering trades. This category as a whole witnessed a high unemployment rate of 79%.

For non-engineering trades, the Computer Hardware & Network Maintenance trade reported a relatively moderate unemployment rate of 60%, with 15% of trainees finding employment and 25% turning towards self-employment. This finding, however, is based on a small sample size of 20 students.

On the other hand, Surveyor, which constituted the most significant chunk of the non-engineering trades with 90 students, also documented a high unemployment rate of 90%. Similarly, the COPA (Computer Operator and Programming Assistant) trade had an unemployment rate of 85%, despite 10% of students turning self-employed and 5% getting employed.

Interestingly, the Dress Making trade revealed a more evenly distributed outcome with 4.2% apprenticeships, 12.5% self-employment, and 83% unemployment. The overall unemployment rate in non-engineering trades was marginally higher than engineering trades, at 86%.

Current Employment Status: The provided data illustrates the current employment status for students from different types of Industrial Training Institutes (ITIs), broken down into categories: Apprenticeship, Employed, Self-employed, and Unemployed.

ITI Type	Apprenticeship		Employed		Self-Employed		Unemployed		Total
	N	%	N	%	N	%	N	%	
GNP ITI	5	1.23%	39	9.56%	66	16.18%	298	73.04%	408
GP ITI	0	0.00%	6	9.23%	14	21.54%	45	69.23%	65
Private ITI	0	0.00%	3	25.00%	0	0.00%	9	75.00%	12
Grand Total	**5**	1.03%	**48**	9.90%	**80**	16.49%	**352**	72.58%	**485**

For GNP ITI graduates, a significant majority (73.04%) are unemployed, which indicates a challenge in securing employment post-graduation. Only a small fraction (1.23%) are engaged in apprenticeships, while 9.56% are employed, and 16.18% have taken up self-employment.

GP ITI graduates, similarly, have a high rate of unemployment (69.23%). However, it's noteworthy that their self-employment rate is slightly higher (21.54%) than that of GNP ITI graduates. The percentage of employed GP ITI graduates is almost the same as their GNP ITI counterparts, standing at 9.23%.

Among Private ITI graduates, unemployment is still the most common outcome (75%), but a significantly larger proportion (25%) are employed compared to the other ITI types. Interestingly, none of the Private ITI graduates have chosen the path of self-employment or apprenticeship.

On an aggregate level, the data suggests a considerable challenge across all ITI types, with 72.58% of all graduates being unemployed. Only 1.03% are in apprenticeships, 9.90% are employed, and 16.49% are self-employed. This points to a need for improved strategies to enhance employment outcomes for ITI graduates.

Change in Employment and Income Scenario: The table demonstrates the change in employment status for graduates of different types of ITIs: GNP ITI, GP ITI, and Private ITI, comparing their immediate situation after training to their current employment status.

ITI Type	Immediately After Training			Current Employment		
	Apprentice	Employment	Self-Emp	Apprentice	Employment	Self-Emp
GNP ITI	0.73%	7.1%	8.82%	1.23%	9.56%	16.18%
GP ITI	0%	6.15%	13.8%	0%	9.23%	21.54%
Private ITI	0%	16.7%	0%	0%	25.0%	0%
Overall	**0.61%**	**7.22%**	**9.28%**	1.03%	9.90%	16.49%

For GNP ITI graduates, there's a slight increase in all three categories of employment status from immediately after training to the current situation. The percentage of those who opted for apprenticeships rose from 0.73% to 1.23%, employment increased from 7.1% to 9.56%, and self-employment grew from 8.82% to 16.18%.

In the case of GP ITI graduates, while there was no change in the apprenticeship rate, the employment percentage experienced a small increment from 6.15% to 9.23%. There was a significant increase in the self-employment category, going up from 13.8% to 21.54%.

For graduates of Private ITIs, the data indicates a substantial increase in the employment rate from 16.7% immediately after training to 25% currently. However, it's important to note that no graduates from Private ITIs have chosen either apprenticeship or self-employment in the current situation.

On the overall scale, while the rates for apprenticeship (from 0.61% to 1.03%) and employment (from 7.22% to 9.90%) witnessed small increases, the self-employment rate saw a larger rise from 9.28% to 16.49%. This trend suggests that more graduates are taking up entrepreneurial roles or creating their own employment opportunities over time.

ITI category-wise status of change in Income

The data indicates a substantial increase in income for ITI trainees from just after their training to their current status. Trainees largely transitioned from lower to higher income brackets, underscoring the effectiveness of ITI training in enhancing earnings. Notable shifts include a 35% reduction in trainees earning between Rs. 5000-Rs. 9999, a 5.4% increase in the Rs. 10000-Rs. 14999 bracket, a significant 26% rise in the Rs. 15000-Rs. 19999 range, and the emergence of trainees (1.5%) in the 'More than Rs. 30000' bracket, who were previously non-existent in this category. These trends collectively suggest a positive income progression among the trainees post-training.

Income Slabs	Overall			ITI Category wise changes		
	At joining	Currently	Change	GNP ITI	GP ITI	Private ITI
Rs. 5000- Rs. 9999	49%	14%	-35%	33%	59%	-33%
Rs. 10000- Rs. 14999	39%	44%	+5.4%	-6.5%	-14%	67%
Rs. 15000- Rs. 19999	6.0%	32%	+26%	-23%	-40%	-33%
Rs. 20000- Rs. 24999	3.6%	6.8%	+3.2%	-2.9%	-5.0%	0.0%
Rs. 25000- Rs. 30000	2.4%	2.3%	-0.1%	0.2%	0.0%	0.0%
More than Rs. 30000	0%	1.5%	+1.5%	-1.8%	0.0%	0.0%

Changes observed among trainees of GP ITI: Trainees from GP ITIs show a significant decrease in the lower income categories after training. The percentage of trainees earning Rs. 5000- Rs. 9999, Rs. 10000- Rs. 14999, Rs. 15000- Rs. 19999, and Rs. 20000- Rs. 24999 have decreased by 59%, 14%, 40%, and 5% respectively. This indicates a positive trend, as it suggests that fewer trainees fall in these lower income brackets post-training, pointing to an improvement in trainees' earnings. The higher income categories of Rs. 25000- Rs. 30000 and above Rs. 30000 do not show any change, indicating that these income slabs have remained relatively stable post-training.

Changes observed among trainees of GNP ITI: For trainees from GNP ITIs, there is a notable positive shift in income slabs. The percentage of trainees in the lowest income slab of Rs. 5000- Rs. 9999 has decreased by 33%, while the percentage in the Rs. 15000- Rs. 19999 slab has also decreased by 23%. This shows that fewer trainees are falling into these lower income categories after training, indicating a positive outcome from the training programs. The income slab of Rs. 10000- Rs. 14999 sees a minor decrease of 6.5%, implying that some trainees might be progressing to higher income brackets. The changes in income slabs Rs. 20000- Rs. 24999 and Rs. 25000- Rs. 30000 are minimal, suggesting a relative stability in these categories. Interestingly, the highest income slab sees a minor decrease of 1.8%.

Changes observed among trainees of Private ITI: The income trends for trainees from Private ITIs are a bit different. The lowest income slab of Rs. 5000- Rs. 9999 sees a decrease of 33%, indicating that fewer trainees are in this category after training. There is a substantial increase of 67% in the Rs. 10000- Rs. 14999 slab, suggesting that a significant proportion of trainees have moved into this income bracket from lower ones. However, there are no observed changes in the remaining income slabs (Rs. 15000- Rs. 19999, Rs. 20000- Rs. 24999, Rs. 25000- Rs. 30000 and above Rs. 30000), suggesting a stabilization of income for trainees in these categories.

Recommendations:

Promoting Gender Diversity: Endeavors should be undertaken to foster gender diversity within both engineering and non-engineering trades. While engineering trades are primarily male-dominated, there are some where female involvement is observed. Building a supportive and inclusive environment, offering mentorship programs, and addressing gender biases can help attract more females to traditionally male-dominated trades in Tripura.

Strengthening Apprenticeship Programs: A minuscule percentage of ITI trainees in Tripura get the chance for apprenticeship, which poses a critical challenge in the state. There's a need to not only provide apprenticeship opportunities to trainees but also guide and inspire them to convert apprenticeships into permanent jobs.

Improving Employment Outcomes: Tackling the obstacles faced by ITI graduates in Tripura in obtaining suitable employment opportunities is crucial. Collaborations with industry partners and local businesses can help identify and bridge the skill gaps in the state's job market. In addition, career counselling, entrepreneurship training, and job placement assistance can support ITI graduates in securing regular employment or pursuing self-employment.

Enhancing Industry-Institute Collaboration: More intimate collaboration between ITIs and industries in Tripura can ensure the training programs align with industry needs. Regular industry visits, guest lectures, and industry-sponsored projects can enhance practical learning and improve the employability of ITI graduates. Feedback from industry should be sought to update the curriculum and training methodologies to meet the evolving needs of the job market.

Skill Development for Entrepreneurship: Fostering entrepreneurship skills among ITI graduates can create opportunities for self-employment and job creation in Tripura. Introducing entrepreneurship training modules within the curriculum and providing access to resources and mentorship for

budding entrepreneurs can empower ITI graduates to start their own ventures and contribute to economic growth.

Continuous Monitoring and Evaluation: Regular monitoring and evaluation of ITI programs in Tripura, including employment outcomes, salary trends, and alumni feedback, are essential to identify areas of improvement and track the effectiveness of interventions. This data-driven approach can help in making informed decisions and implementing targeted strategies to enhance the quality and relevance of ITI training.

The absence of sufficient interaction between industries and ITIs in Tripura complicates the process of guaranteeing that all trainees secure job placements. It's thus vital to stimulate stronger industry engagement through initiatives such as On-the-Job Training (OJT) and Apprenticeships, which can contribute significantly to long-term industry involvement. Typically, ITIs in the state are constrained by issues like difficulty in identifying suitable local industries or companies for structured employment, unappealing placement offers, and limited resources to facilitate job placements. These obstacles negatively affect the employment prospects of ITI graduates.

To mitigate these challenges, it may be advantageous for the Tripura state government to issue directives and assist ITIs in identifying and establishing links with local industries and potential employers relevant to various trades. This could be achieved through the signing of Memorandums of Understanding (MoUs). The goal of these agreements could be to offer assistance in areas like on-the-job training, scheduling periodic visits from expert faculty, organizing industry or factory visits for trainees, as well as facilitating OJT and employment opportunities.

Recommendations Related to Scope of Rubber Industries in Tripura: Tripura's rubber industry holds significant potential, with 89,264 hectares of land under rubber cultivation and a total production of 93,371 tonnes. Tripura is the second-largest producer of rubber in the country, contributing to about 9% of total production, and the rubber industry impacts the state's economic progress. Nearly two lakh people in Tripura are either directly or indirectly associated with rubber cultivation, which enhances livelihoods for thousands of families. The rubber industry also holds potential for employing women as a skilled workforce. The state government has identified rubber plantation as a priority area for livelihood generation, and public sector units (PSUs) like the Tripura Forest Development Plantation Corporation Ltd. (TFDPC) and Tripura Rehabilitation Plantation Corporation Ltd. (TRPC) are working to enhance rubber plantation and sector growth.

The Directorate General of Training (DGT) under the Ministry of Skill Development & Entrepreneurship offers a Rubber Technician trade under Craftsmen Training Scheme (CTS). The course, which lasts for a year, includes both Domain area and Core area. The Domain area (Trade Theory & Practical) imparts professional skills and knowledge, while the Core area (Workshop Calculation science, Engineering Drawing, and Employability Skills) imparts requisite core skills, knowledge, and life skills. Considering the importance of the Rubber Sector in Tripura's economy and its potential for skilled manpower employment, it would be beneficial to introduce the Rubber Technician trade in the state's ITIs.

2. Introduction

2.1 Background of the scheme

The Government of India (GoI) introduced its National Policy for Skill Development and Entrepreneurship in 2015. A policy implementation framework is provided by the National Skill Development Mission (NSDM). The mission reflects the Government's commitment to skilling opportunities for poor/ underserved communities and developing a globally competitive workforce. The mission also seeks to shift toward outcome-focused training provision and establishes and enforces cross-sectoral, nationally, and internationally accepted standards for skill training by creating a sound quality assurance framework. The national Skills Strengthening for Industrial Value Enhancement (STRIVE) project has been developed by the Government of India with World Bank assistance to incentivize the critical institutional reforms required in the institutional training systems-defined as the Industrial Training Institute (ITI) and apprenticeship—to meet the central government's commitment to providing skilling opportunities for economically disadvantaged/underserved communities and developing a globally competitive workforce. STRIVE was envisaged as a five-year project, implemented by the Ministry of Skill Development & Entrepreneurship (MSDE).

The Program for Results (PforR) instrument is particularly suited to achieve the central government's results-based objectives, as it allows for the improvement of the systems and institutions that are critical to the implementation of the project. The instrument will ensure a sharp focus on the most important results the government wants to achieve (that is, improve relevance and efficiency of vocational training), allow for flexibility in the end-use of funds by states and training institutions, support the development of state-level capacities to manage ITIs more effectively, incentivize introduction of performance-based management principles, and strengthen output and outcome monitoring. Directorate of Industries & Commerce, Government of Tripura is actively participating in implementing the STRIVE project in the state of Tripura. A State Project Implementation Unit (SPIU) has been formed to guide the implementation of the project in the State of Tripura.

2.1.1 Objectives of STRIVE

The key objective of STRIVE is to improve the quality and market relevance of vocational training provided through ITIs and apprenticeship. STRIVE is divided into four results areas:

a) Improved Performance of Industrial Training Institutes
b) Increased Capacities of State Government to Support ITIs and Apprenticeship Training
c) Improved Teaching and Learning
d) Improved and Broadened Apprenticeship Training

2.1.2 Scheme Structure and Implementation Mechanism

The STRIVE project is guided at the central level by a National Steering Committee (NSC), chaired by the Secretary of Ministry of Skill Development and Entrepreneurship (MSDE), and includes representation from the industry, states and inter-ministry officials. The NSC reviews project implementation at the national level and is supported by a National Project Implementation Unit (NPIU), headed by a National Project Director (NPD). MSDE has also formed a Project Steering Committee (PSC), headed by Deputy Director General (Projects), to review functioning of the project and resolve operational issues in implementation of the project.

Directorate of Industries & Commerce, Government of Tripura is actively participating in implementing the STRIVE project in the state of Tripura. A State Steering Committee (SSC) has been formed to guide the implementation of project in the State. A State Project Implementation Unit (SPIU) has been formed, to assist the SSC for the implementation of the project. At the state level, State Project implementation Unit (SPIU) will be responsible for providing fiduciary guidance implementation, monitoring, and facilitation of STRIVE.

At the ITI level, each participating ITI would have an Institute Management Committee (IMC) (or equivalent), which comprises majorly of industry representatives. It would be chaired by an industry partner so as to enhance the industry linkages and market relevance in all aspects of the training and to ensure that training courses are fully demand driven.

2.1.3 Sub-schemes / components

The components of STRIVE aligned with the four result areas envisaged in the scheme guidelines. The structure of the scheme allows for following major components under STRIVE:

a) Performance-based grants for up-gradation of selected ITIs
b) Performance-based funding to state governments to incentivize reforms in state management of ITIs and apprenticeship training
c) Overhauling curricula and TL resources in selected key Craftsmen Training Scheme (CTS) programs
d) Enhancing distance and blended learning in pre-employment and in-service teachers training
e) Incentivizing SME participation in modern apprenticeship training through grant funding of industry apprenticeship initiatives (IAIs)
f) System development, capacity development, and advocacy for apprenticeship training.

2.1.4 Year of commencement of the scheme

The agreement for Skills Strengthening for Industrial Value Enhancement (STRIVE) project was signed between Government of India and International Bank for Reconstruction and Development (IBRD) on 19th December 2017 and the closing date of the project is November 2022. In the state of Tripura, Ministry of Skill Development and Entrepreneurship (MoSDE), Government of India has sanctioned STRIVE project during 2018, which is fully funded. Accordingly, MoU was signed between State & Central Government for its implementation in Tripura.

2.1.5 Present status with coverage of the scheme

There are 20 ITIs in Tripura of which 18 are Government ITI while two ITIs are in private sector. Among the 20 ITIs, three ITIs namely, ITI, Dharmanagar (North Tripura), ITI, Belonia (South Tripura) and Women ITI, Indranagar (West Tripura) were selected for implementation of STRIVE in the first phase. Fund for establishment of State Apprenticeship Monitoring Unit (SAMC) and fund under Result Area-2 amounting to Rs. 32.00 lakhs and Rs. 183.00 lakhs respectively have been released to the State Government under STRIVE.

2.1.6 Sustainable Development Goals (SDG) Served

	No Poverty- By ensuring the employability through skill enhancement.
	Decent work &Economic Growth- By upgrading the skills of unskilled and semi-skilled job aspirants.
	Industry innovations and infrastructure- By providing funds to support industry linkages, promotion of entrepreneurship through skill training, etc.
	Empowers lower income earners, and promote economic inclusion of all regardless of sex, race or ethnicity

2.1.7 National Development Plans (NDP) Served

The interventions under STRIVE fosters “Aatmanirbhar Bharat”, promotes “local for global” by providing funds for skilling of workforce and promoting ideas that provide an opportunity for enhancing the income of youth.

2.2 Need for Tracer Study/ Outcome Review

Tracer Studies are empirical studies that quantify the causal effects of interventions on outcomes of interest. Such studies are unique in that it is data-driven and attempt to minimize unverifiable assumptions when attributing effects. A core concept is that identified outcomes are assessed not only in magnitude but also in terms of statistical significance. Tracer studies can reveal a great deal of evidence about a wide range of effects, some of which may not have been considered while conceptualizing the project. Evidence from Tracer Studies about how an intervention fits into a broader process of development, the role of complementary interventions, and the contexts under which development effectiveness is greatest can help to improve how policy and schemes are designed and implemented.

2.3 Basis for this Report

This report is based on the proposal submitted by TransRural Agri Consulting (TRUAGRICO) in response to the invitation to tender vide Tender Reference No. 02/ITI/IND/2021-22 dated 19/02/2022 for "Conducting a Tracer Study for Technical Vocational Education and Training (TVET) Employment Outcomes of Graduates from it is in the State of Tripura". The approach to the study is based on the scope of work and methodology described briefly in the tender document and the Inception Report. Key elements of the Tender Document and where applicable, some of the verbatim text of the Tender Document and Scheme Guidelines are included in this report.

3. Objectives & Methodology

3.1 Objectives of the Study

The objective of this consulting assignment is to carry out a tracer study of trainees from the project and non-project ITIs in the state of Tripura to understand the career progression of trainees in the labour market. The overall objective is to evaluate the impact of STRIVE interventions on the beneficiaries and the training program's relevance to job markets/livelihood activities and to assess the employment status of the beneficiaries.

The Tracer Study shall try to explain the causes of employment outcomes (professional success) and shall provide feedback for improvements in various areas of training and placement at ITIs. The purpose of the tracer study is to explore changes for trainees in their professional careers after graduation from ITI and whether the interventions planned under STRIVE influenced these changes.

The information from the current tracer study will help to document and understand the long-term impacts on alumni of ITIs and what services or types of interventions work better in the long run. Knowing what seems to work better and in what circumstances is valuable in any future programme planning, policy advice and decision making.

The objectives of the current study are to measure the following:

a) To measure the labour market performance of STRIVE supported ITIs;
b) Assess the impact of the ITI training programs in terms of relevance, effectiveness, efficiency and sustainability.
c) Obtain the views and opinions of employers on the impact, quality and relevance of ITI training programs.
d) Assess the usefulness of internship training provided to trainees during the course and both employers and trainees views must be collected.
e) Assess graduate/Pass-outs satisfaction level relating to the type of ITI training attended

The focus areas of the study are:

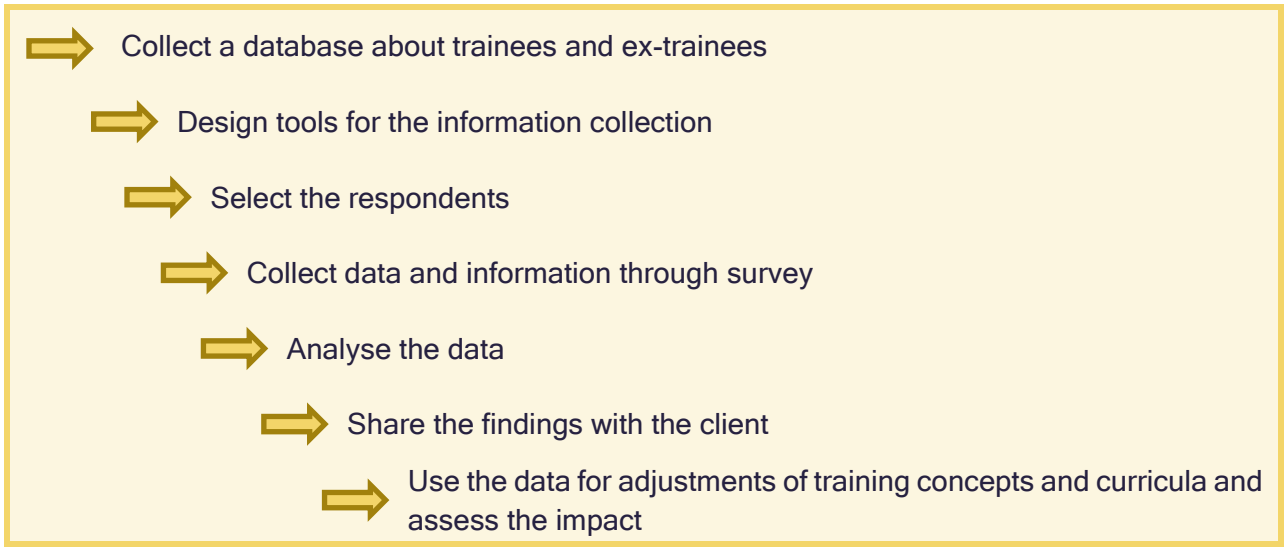
- Perceived Quality and Relevance of Skills Training Received by Candidate
- Efficiency in Securing Employment
- Candidate Satisfaction and Employment Outcomes
- Employer Satisfaction
- Skill training for entrepreneurship

3.2 Approach and Methodology

Approach of the Study

A Tracer Study is a simple tool, designed to measure the relevance of vocational training. They are seen as a management tool for planning and monitoring training programmes (e.g., which courses to add, to change or to phase out). They provide information for programmatic changes (e.g., adding new elements into the programme) and review of training curricula. They also help to monitor the delivery of training. By getting into contact with ex-trainees and by offering them support services one may improve public image and foster public relations, thus tracer studies are useful as a marketing tool as well.

The standard stages in conducting a tracer study must be followed to ensure the expected result from the study. Some of the important steps in conducting a tracer study are as follows.



SOP for conducting Tracer Study

Methodology of the Study

It is crucial to randomly select a sample from the total target population to ensure representativeness and reduce bias in the results to as much as possible. As a first step, a sampling frame of target students was developed. The target population for tracer study were the trainees from ITIs who successfully completed the CTS program in selected trades and hold the National Trade Certificate. To achieve the STRIVE KPI, the tracer study targeted the trainees who passed the All-India Trade Test (AITT) in academic year 2019 i.e., candidate who appeared and passed the annual examination held in 2019 [Admitted batch 2018-19 (1 year) & 2017-2019 (2 years)]. The table below provides the type of information which were available to develop the sampling frame.

- Gender
- Caste
- Location
- Course Type (1 Year/2Years)
- Trade Group
- Project ITI vs. Non-Project ITIs

The sample of the study were drawn as per stipulated terms indicated in the tender document. Some of the important points considered while drawing samples were:

- A minimum of 10 ITIs must be surveyed (including project and non-project ITIs)
- A minimum of 400 ITI graduates must be surveyed
- From each ITIs, a sample of 40 trainees (20 each from 1-year training and 2 years training completed in 2019) would be selected

The samples were selected randomly (from a database prepared per the sampling frame) to ensure representation of each category. The table below indicates ITI wise population and samples of the study.

Table 1: Institute wise population and sample size

Name of the ITI	Number of Students as per ITI			Number of Students Surveyed		
	2 Yr. Course	1 Yr. Course	Total	2 Yr. Course	1 Yr. Course	Total
P Women ITI Indranagar	-	40	40	-	17	17
P ITI Belonia	-	30	30	-	23	23
P ITI Dharamnagar	-	33	33	-	25	25
Total Project ITI		**103**	**103**	**0**	**65**	**65**
ITI RK Mission	-	22	22	-	12	12
Total Private ITI	**0**	**22**	**22**	**0**	**12**	**12**
ITI Jatanbari	14	58	72	7	36	43
ITI Bishramganj	-	101	101	-	47	47
ITI LT Valley	-	131	131	-	96	96
ITI Teliamura	-	94	94	-	67	67
ITI Kailashahar	27	38	65	29	19	48
ITI Indranagar	70	79	149	35	72	107
Total GNP ITI	**111**	**501**	**612**	**71**	**337**	**408**
Grand Total	**111**	**626**	**737**	**71**	**414**	**485**

A majority of students took admission in these ten ITIs in 2018-19 for one year course. Only 111 students enrolled for a 2-year course for 2017-19 session. The samples of the study were consisting of 71 students from 2017-19 batch and 414 students from 2018-19 batch.

Data Collection and Analysis tools

The data collection process started with the training of enumerators/ assessors. The assessors were trained for the field survey using the approved questionnaire. A 2-day training program was conducted for the assessors. Local assessors were appointed as they had a linguistic advantage while talking to graduates. In total, during the training program of Assessors, around 10 assessors were trained. Assessors were trained on the concepts of the project, the questionnaire, the survey methodology, the tech application and mannerisms to approach the officials of ITIs as well as graduates. Simple frequency tables and Charts, Percentages, multi-response analyses, content analyses, etc., techniques have been used to make this study simpler and to maintain clarity of understanding.

4. State Profile

Tripura is surrounded by the neighbouring country Bangladesh on its south, west and north sides. The length of its international border with Bangladesh is about 856 km, while it has 53 km border with Assam and 109 km border with Mizoram. The State has an area of 10,491.69 sq. km. distributed across 8 Districts, 23 Sub-Divisions, 58 Blocks and 1 Tripura Tribal Areas Autonomous District Council (TTAADC) created under the Sixth Schedule of the Constitution.

Tripura is the second most populous State in North-Eastern Region after Assam. The estimated population of the State in 2021 is about 4.1 million out of which male population is about 2.1 million and female population is about 2 million. Among the North-Eastern States, Tripura remained the second highest populous State after Assam. The population density of Tripura in 2011 was 350 persons per sq. km. There is a positive improvement in sex ratio in the State as it rose from 948 (per 1000 males) in 2001 to 960 in 2011.

As per Census 2011, the literacy rate of Tripura was 87.22 percentage against the population group consisting 7 years and above, which were 73.20 percentage in 2001 and 60.44 percentage in 1991. The corresponding figures in 2011 for males and females were 91.5 percentage and 82.7 percentage, respectively. At the State level, gap in male-female ratio with respect to literacy has been reduced to 8.8 percentage in 2011 as against 17.01 percentage in 2001. Tripura has achieved a high level of literacy at all India level and ranked third among the States after Kerala and Mizoram in 2011. As per report of 71st National Sample Survey (State Sector), the literacy rate of the State is 91.1 percentage in 2014.

Economy of Tripura is agrarian with more than 44 percentage of its population now directly depends on agriculture & allied activities. Only about 26 percent of the land is cultivable, rest being hilly and forested. Rice is the major crop in the State. The climate of the State is suitable for a variety of horticultural/ plantation crops, including pineapple, jackfruit, tea, Rubber, bamboo etc. A section of the indigenous population practices jhum (slash and burn) method of cultivation.

The latest Gross State Domestic Product (GSDP) with a recent 2011-12 base with the revised methodology, data base and additional area coverage shows that contribution of primary sector in Tripura has been 43.03 percentage in 2019-20 and 43.02 percentage in 2020-21 (Advance), although the land available for agricultural cultivation is relatively restricted in the State. Tripura is industrially backward and main reason for its backwardness is geographical isolation. Low availability of infrastructure has made the process of economic development and decentralization extremely difficult in the State. The un-organised manufacturing and service activities are only dominant and high in the State. The Promising Sectors of the State's Economy are presented below:

i) Natural Gas: Tripura is endowed with commercially exploitable gas resources that have not been commercially exploited till the date on account of lack of adequate road/rail infrastructure, weak transmission infrastructure and vast distances to load centres in northern, central and western India. In order to optimally utilise the gas available in Tripura, ONGC develops a 726.6 MW Combined Cycle Gas Turbine (CCGT) thermal power project close to its gas field in Tripura and supply power to the deficit areas of North-eastern States of India. The ONGC-Tripura Power Company Ltd (OTPC) was set-up in September 2008 for subscribing the equity by Oil and Natural Gas Corporation (ONGC), Infrastructure Leasing and Financial Services Ltd (IL& FS) and Government of Tripura for implementation of 726.6 MW thermal power project at Palatana in Gomati District. The natural gas is available in non-toxic form, with about 97 percentage methane. Availability of natural gas provides scope for setting up units for producing power, chemicals and fertilizer-based industries in the State.

ii) Land: High rainfall and good soil offer considerable scope for land-based economic activities. Creation of irrigation sources and intensive land utilisation can give a big boost to development of agriculture and allied activities in the State. Significant area of the State is under fruit and plantation crops.

iii) Rubber and Tea: Tripura is the second largest producer of natural Rubber after Kerala. This sector holds considerable potential for the development of the State especially in hilly rural areas. The production of Rubber in 2020-21 was 90711.54 MT in the State and area under Rubber was 86891.71 hectares. The suitable land and climate conditions offer good potential for development of tea industry in the State. There are 54-Tea Estates in the State, of which 3 Tea Estates are in Public Sector (TTDC), 12 Tea Estates in Co-operative Sector and 39 Tea Estates are in Private Sector. There are 23 Tea Processing Factories, of which 04 are in Co-operative sector, 2 in Public sector and 17 in Private Sector. The Rubber and Tea Plantation activities have a special socio-economic significance in rehabilitation of shifting cultivators, i.e., jhum cultivation done by the tribal of the State.

iv) Border Trade with Bangladesh: Tripura has 84 percentage of its border common with the neighbouring country of Bangladesh. The total volume of trade has increased manifold from a meagre Rs.4.12 crores during 1995-96 to about Rs.675.12 crores during 2019-20. Agreements and joint dialogues are on between India and Bangladesh for promotion of sustainable larger foreign trade with Bangladesh through the 8- Land Custom Stations of Tripura.

v) Tourism: Tourism based on wildlife, forest and Hindu/Buddhist religious places have good potential in the State. Presently, promotion of tourism has been affected by inadequate infrastructure. The development of tourism related infrastructure facilities are essential and prerequisite for promotion of tourism in the State. Earning of revenue from Tourist Lodges, Cafeteria, Package Tours, etc. is increasing day by day.

District wise Snapshot of the Study Area is presented in the next section.

West Tripura

Geography

Area — The district has a total geographical area of 3544 sq.km, making it largest in the state.

LL — The district is located at 22°56' Lat. 91°0' Long. and shares its border with Bangladesh. It also shares border with Khowai eastern side and Sepahijala on southern side.

AS — The district has three subdivisions, nine Community Development blocks and 87 Panchayats.

Population

9.18 Lakh

	0-14	15-29	30-64	64+
Male	123 K	135 K	183 K	23 K
Female	119 K	135 K	172 K	25 K

M/F — The sex ration in the district is 970 female per thousand male, making it performing better than the state average which is 960 female per thousand male.

Establishments

115319

Mining and Quarrying	Manufacturing	Construction	Repairing Workshops
6	7858	1270	791

Hospitality		Technical Activities	Total Non-Agri Establishments
2837	Info. and Comm. 221	541	49270

The district has a total of 6 ITIs namely, Women & men ITIs at Indranagar, ITI Khumlwng, ITI Boxanagar, ITI RK Mission, ITI Gandacherra and Swadhin Tripura Pvt. ITI

ITIs

In the 6 ITIs of the district, average number of Trader per ITI is 5.5 with a maximum of 13 trade in ITI Indranagar.

Trades

The 6 ITIs of the district have a total approved seats for 910 students. The maximum seats are in ITI Indranagar (250).

Seats

Caste wise Gender Representation

	ST	SC	OBC	General
Male	78 %	81 %	100 %	84 %
Female	22 %	19 %	0 %	16 %

Most of the students enrolled on the seats allocated to ITI (s) are from Scheduled Tribe category (42%) followed by General category (29%).

Category

Trade wise Enrollment*

- Others (7 Trades): 37 %
- Draughtsman & Fitter: 8 % each
- Plumber: 16 %
- Stenographer & Secretarial Assistant: 10 %
- Computer Hardware & Network Maintenance: 11 %
- COPA: 10 %

Dhalai

Geography

Area — The district has a total geographical area of 2523 sq.km, making it second largest in the state.

LL — The district is located at 23°56' Lat. 91°47' Long. and shares its border with Bangladesh. It also shares border with Unakoti, North Tripura Eastern side and Khowai, Gomati Western side.

AS — The district has four subdivisions, eight Community Development blocks and 41 Panchayats.

Population

3.7 Lakh

	0-14	15-29	30-64	64+
Male	51.5 K	56.7 K	76.4 K	9.7 K
Female	48.4 K	55 K	69.9 K	10.3 K

M/F — The sex ration in the district is 945 female per thousand male, making it performing poor than the state average which is 960 female per thousand male.

Establishments

52500

Mining and Quarrying	Manufacturing	Construction	Repairing Workshops
20	6298	1096	668

Hospitality	Info. and Comm.	Technical Activities	Total Non-Agri Establishments
2281	197	579	38763

The district has a total of 4 ITIs namely, ITI Ambasa, ITI L.T Valley, ITI Kamalpur and ITI Ganndacherra.

ITIs

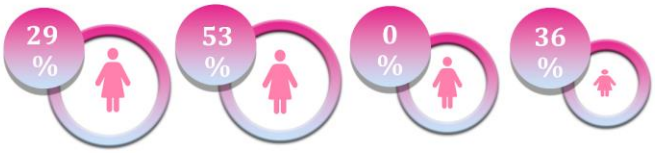
In the 4 ITIs of the district, average number of Trader per ITI is 7 with a maximum of 8 trade in ITI L.T Valley and Kamalpur.

Trades

The 4 ITIs of the district have a total approved seats for 1035 students. The maximum seats are in ITI L.T Valley and Kamalpur (320 each).

Seats

Male

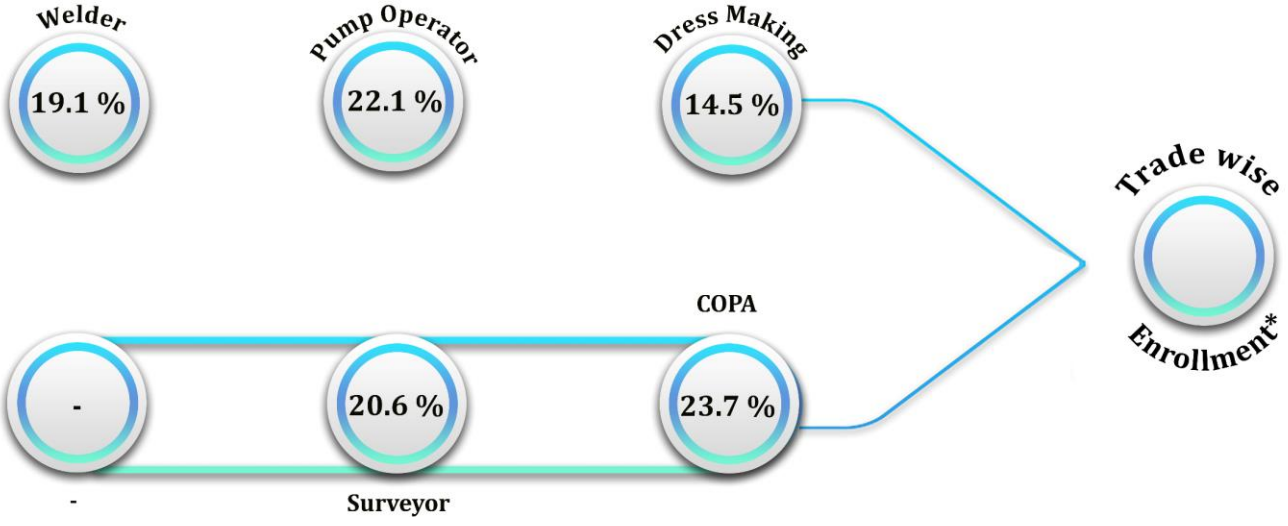


Female

Caste wise Gender Representation

Most of the students enrolled on the seats allocated to ITI (s) are from Scheduled Tribe category (50%) followed by General category (38%).

Category



Trade wise Enrollment*

North Tripura

Geography

Area — The district has a total geographical area of 1422.19 sq.km, making it 5th largest in the state.

LL — The district is located at 24°36' Lat. 92°19' Long. and shares its border with Asam, Mizoram and Bangladesh. It also shares border with Unakoti and Dhalai on western side.

AS — The district has three subdivisions, eight Community Development blocks and 70 Panchayats.

Population

4.17 Lakh

	0-14	15-29	30-64	64+
Male	56.3 K	62 K	83.6 K	10.6 K
Female	53.9 K	61.3 K	77.9 K	11.5 K

M/F — The sex ration in the district is 967 female per thousand male, making it performing better than the state average which is 960 female per thousand male.

Establishments

48359

Mining and Quarrying	Manufacturing	Construction	Repairing Workshops
2	1946	228	118

Hospitality	Info. and Comm.	Technical Activities	Total Non-Agri Establishments
639	57	95	10857

The district has a total of 2 ITIs namely, ITI Dharmanagar and ITI Kanchanpur.

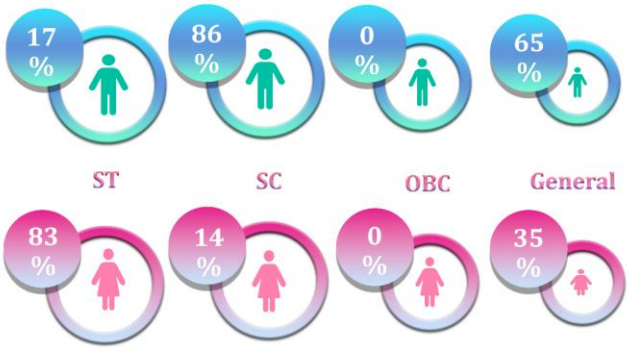
ITIs

In the 2 ITIs of the district, average number of Trader per ITI is 6 with a maximum of 7 trade in ITI Dharmanagar.

Trades

The 2 ITIs of the district have a total approved seats for 335 students. The maximum seats are in ITI Kanchanpur (200).

Seats



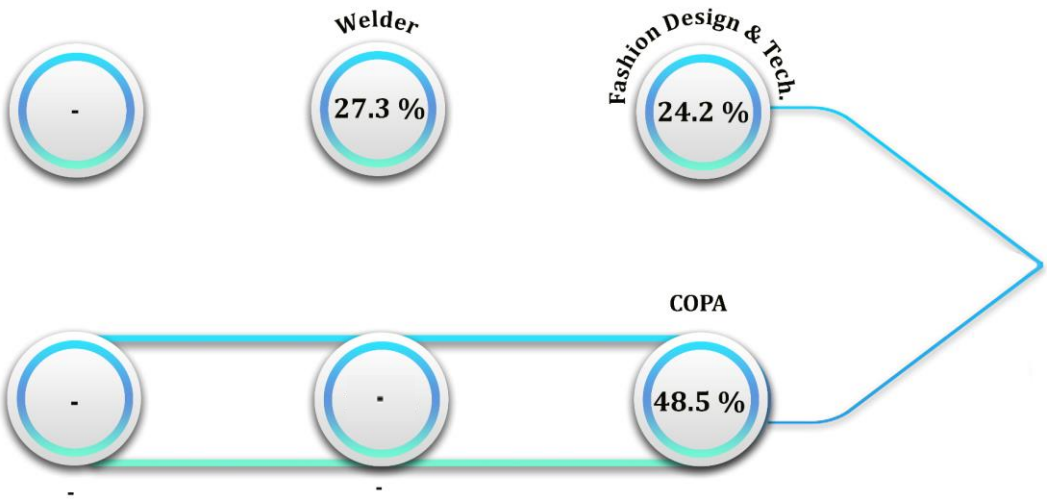
Male

Female

Caste wise Gender Representation

Most of the students enrolled on the seats allocated to ITI (s) are from General category (61%) followed by Scheduled Caste category (21%).

Category



Trade wise Enrollment*

Khowai

Geography

Area — The district has a total geographical area of 1377.28 sq.km, making it 5th largest in the state.

LL — The district is located at 24°7' Lat. 91°6' Long. and shares its border with Bangladesh on north side. It also shares border with Gomati on south side, Dhalai on eastern side and Sepahijala and West Tripura on west side.

AS — The district has two subdivisions, six Community Development blocks and 54 Panchayats.

Population

3.27 Lakh

	0-14	15-29	30-64	64+
Male	44.3 K	48.8 K	65.8 K	8.3 K
Female	42.2 K	48 K	60.9 K	9 K

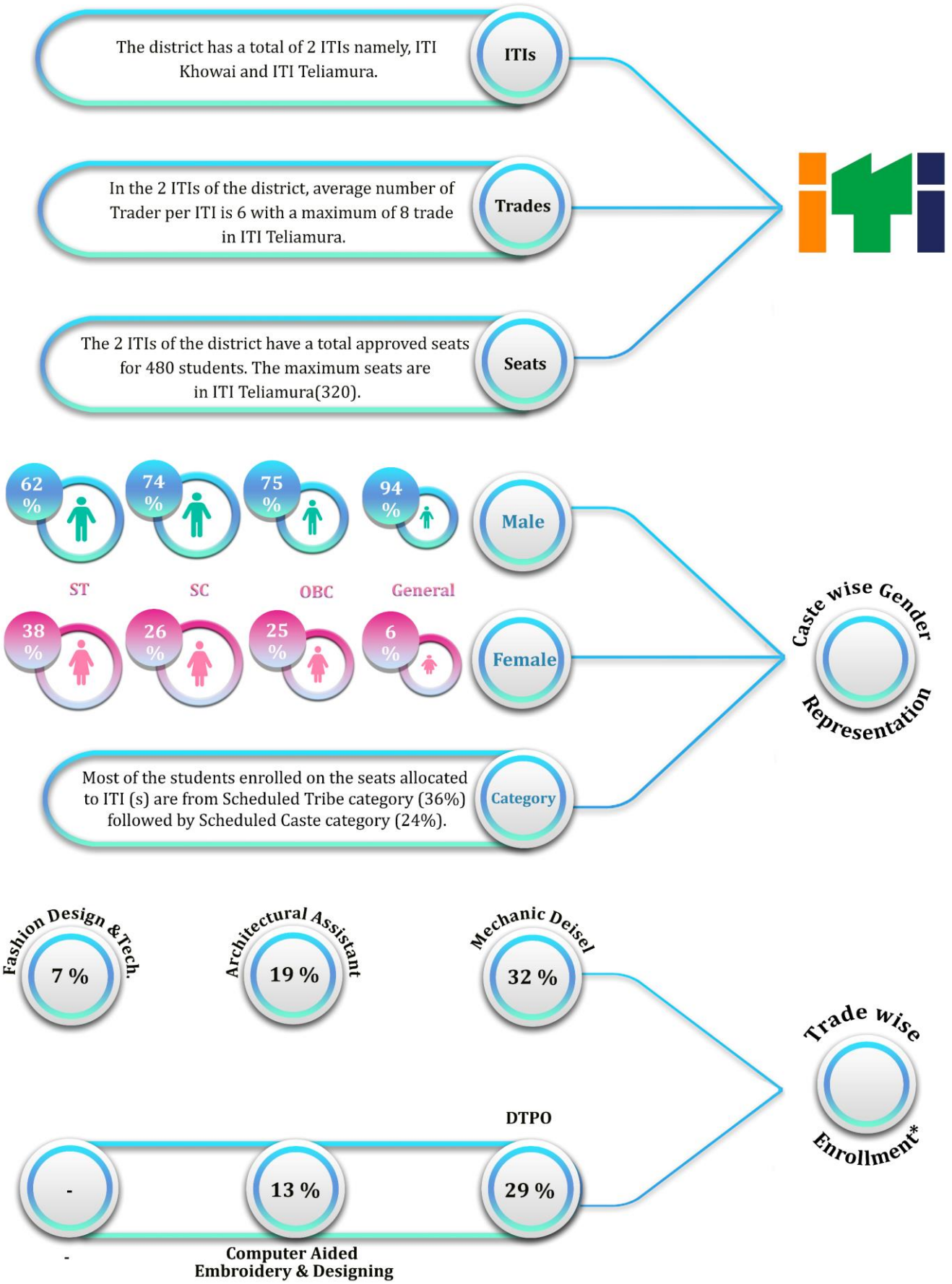
M/F — The sex ration in the district is 957 female per thousand male, making it performing poor than the state average which is 960 female per thousand male.

Establishments

36394

Mining and Quarrying	Manufacturing	Construction	Repairing Workshops
2	2480	401	250

Hospitality	Info. and Comm.	Technical Activities	Total Non-Agri Establishments
895	70	171	15549


The district has a total of 2 ITIs namely, ITI Khowai and ITI Teliamura.
ITIs
In the 2 ITIs of the district, average number of Trader per ITI is 6 with a maximum of 8 trade in ITI Teliamura.
Trades
The 2 ITIs of the district have a total approved seats for 480 students. The maximum seats are in ITI Teliamura(320).
Seats
62 %
74 %
75 %
94 %
ST
SC
OBC
General
Male
38 %
26 %
25 %
6 %
Female
Caste wise Gender Representation
Most of the students enrolled on the seats allocated to ITI (s) are from Scheduled Tribe category (36%) followed by Scheduled Caste category (24%).
Category
Fashion Design &Tech.
7 %
Architectural Assistant
19 %
Mechanic Deisel
32 %
DTPO
29 %
13 %
Computer Aided Embroidery & Designing
-
-
Trade wise Enrollment*

Gomati

Geography

Area — The district has a total geographical area of 152.8 sq.km, making it smallest in the state.

LL — The district is located at 23°59' Lat. 91°64' Long. and shares its border with Bangladesh on south side. It also shares border with Khowai on north side, Dhalai on eastern side and Sepahijala and South Tripura on west side.

AS — The district has three subdivisions, eight Community Development blocks and 70 Panchayats.

Population

4.41 Lakh

	0-14	15-29	30-64	64+
Male	59.7 K	65.7 K	88.6 K	11.2 K
Female	56.9 K	64.7 K	82.2 K	12.1 K

M/F — The sex ration in the district is 959 female per thousand male, making it performing poor than the state average which is 960 female per thousand male.

Establishments

76999

Mining and Quarrying	Manufacturing	Construction	Repairing Workshops
8	6290	761	418

Hospitality	Info. and Comm.	Technical Activities	Total Non-Agri Establishments
2054	147	327	32048

The district has a total of 2 ITIs namely, ITI Udaipur and ITI Jatanbari.

ITIs

In the 2 ITIs of the district, average number of Trader per ITI is 8 with a maximum of 9 trade in ITI Jatanbari.

Trades

The 2 ITIs of the district have a total approved seats for 315 students. The maximum seats are in ITI Jatanbari (180).

Seats

Caste wise Gender Representation

	ST	SC	OBC	General
Male	76 %	85 %	100 %	82 %
Female	24 %	15 %	0 %	18 %

Most of the students enrolled on the seats allocated to ITI (s) are from Scheduled Tribe category (46%) followed by Scheduled Caste category (28%).

Category

Trade wise Enrollment*

Surveyor 22.2 %	Electronic Mechanics 19.4 %	Carpenter 18.1 %
-	Stenographer & Secretarial Assistant 23.6 %	COPA 16.7 %

South Tripura

Geography

Area — The district has a total geographical area of 2966 sq.km, making it second largest in the state.

LL — The district is located at 23°45' Lat. 91°18' Long. and shares its border with Bangladesh on South side. It also shares border with Gomati and Sepahijala on north side.

AS — The district has three subdivisions, eight Community Development blocks and 99 Panchayats.

Population

4.3 Lakh

	0-14	15-29	30-64	64+
Male	58.3 K	64.2 K	86.5 K	11 K
Female	56.9 K	63.1 K	80.1 K	11.8 K

M/F — The sex ration in the district is 957 female per thousand male, making it performing poor than the state average which is 960 female per thousand male.

Establishments

51646

Mining and Quarrying	Manufacturing	Construction	Repairing Workshops
6	4219	510	280

Hospitality	Info. and Comm.	Technical Activities	Total Non-Agri Establishments
1377	98	220	21496

The district has a total of 2 ITIs namely, ITI Belonia and ITI Manubankul.

ITIs

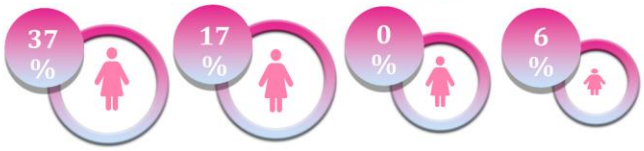
In the 2 ITIs of the district, average number of Trader per ITI is 5.5 with a maximum of 7 trade in ITI Belonia.

Trades

The 2 ITIs of the district have a total approved seats for 295 students. The maximum seats are in ITI Manubankul (160).

Seats

Male



Female

Caste wise Gender Representation

Most of the students enrolled on the seats allocated to ITI (s) are from General category (53%) followed by Scheduled Tribe category (27%).

Category

Surveyor

100 %

-

-

-

-

-

Trade wise Enrollment*

Unakoti

Geography

Area — The district has a total geographical area of 686.97 sq.km, making it second lowest in the state.

LL — The district is located at 24.23 Lat. 92.02 Long. and shares its border with Bangladesh on north and western side, Dhalai in south and North Tripura on eastern side

AS — The district has two subdivisions, four Community Development blocks and 59 Panchayats.

Population

2.76 Lakh

	0-14	15-29	30-64	64+
Male	37.1 K	40.8 K	55.1 K	7 K
Female	35.9 K	40.8 K	51.8 K	7.6 K

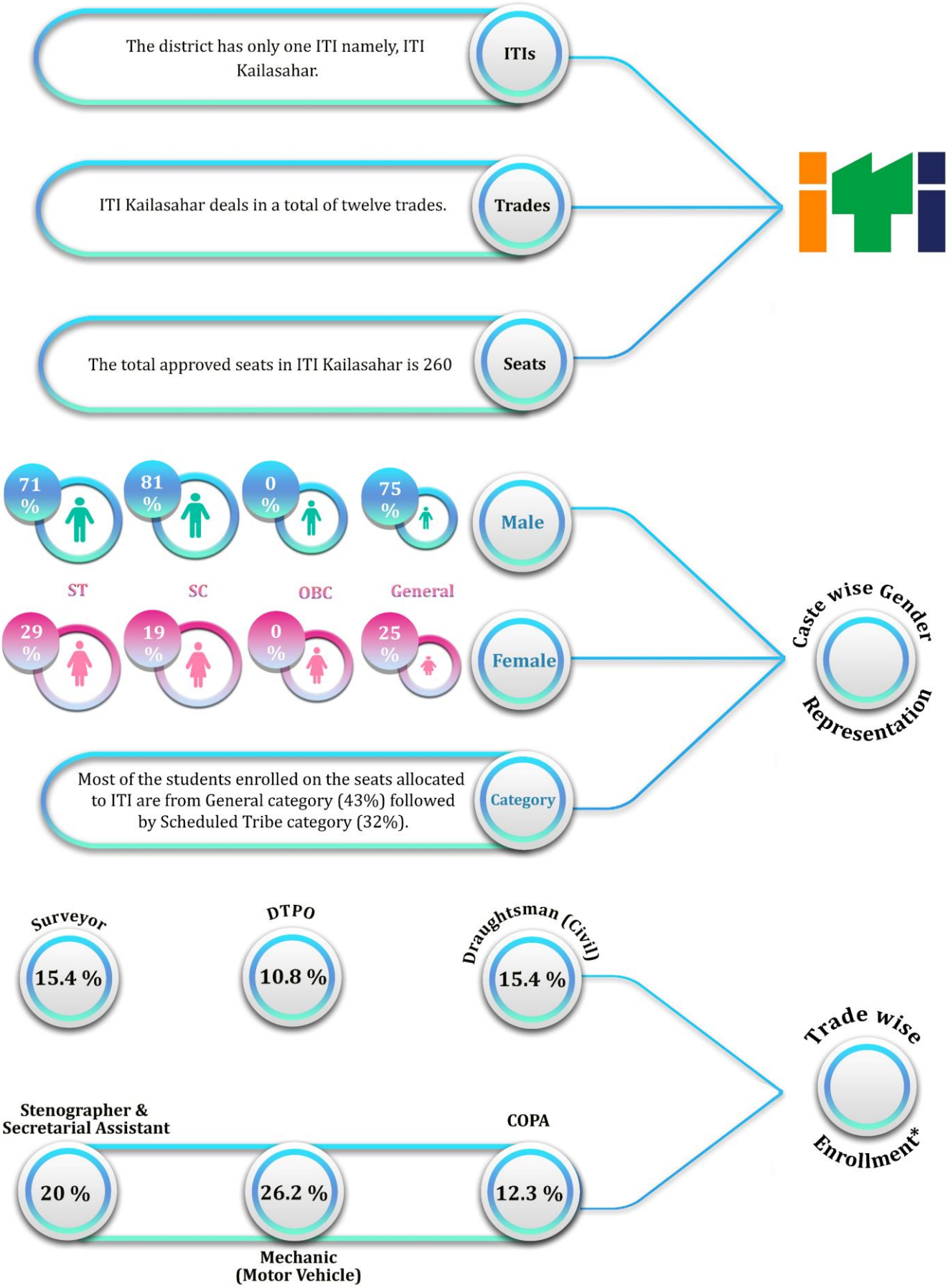
M/F — The sex ration in the district is 972 female per thousand male, making it performing better than the state average which is 960 female per thousand male.

Establishments

32118

Mining and Quarrying	Manufacturing	Construction	Repairing Workshops
2	1293	151	79

Hospitality	Info. and Comm.	Technical Activities	Total Non-Agri Establishments
425	38	63	7210


The district has only one ITI namely, ITI Kailasahar.
ITIs
ITI Kailasahar deals in a total of twelve trades.
Trades
The total approved seats in ITI Kailasahar is 260
Seats
71 %
81 %
0 %
75 %
ST
SC
OBC
General
Male
29 %
19 %
0 %
25 %
Female
Caste wise Gender Representation
Most of the students enrolled on the seats allocated to ITI are from General category (43%) followed by Scheduled Tribe category (32%).
Category
Surveyor
15.4 %
DTPO
10.8 %
Draughtsman (Civil)
15.4 %
Stenographer & Secretarial Assistant
20 %
26.2 %
Mechanic (Motor Vehicle)
COPA
12.3 %
Trade wise Enrollment*

Sepahijala

Geography

Area — The district has a total geographical area of 1043 sq.km, making it 6th largest in the state.

LL — The district is located at 23.65 Lat. 91.35 Long. and shares its border with Bangladesh on west side. It also shares border with Gomati on east side, Khowai and West Tripura on north side and South Tripura on south side.

AS — The district has three subdivisions, seven Community Development blocks and 111 Panchayats.

Population

4.83 Lakh

	0-14	15-29	30-64	64+
Male	65.7 K	72.2 K	97.4 K	12.3 K
Female	62.1 K	70.6 K	89.7 K	13.2 K

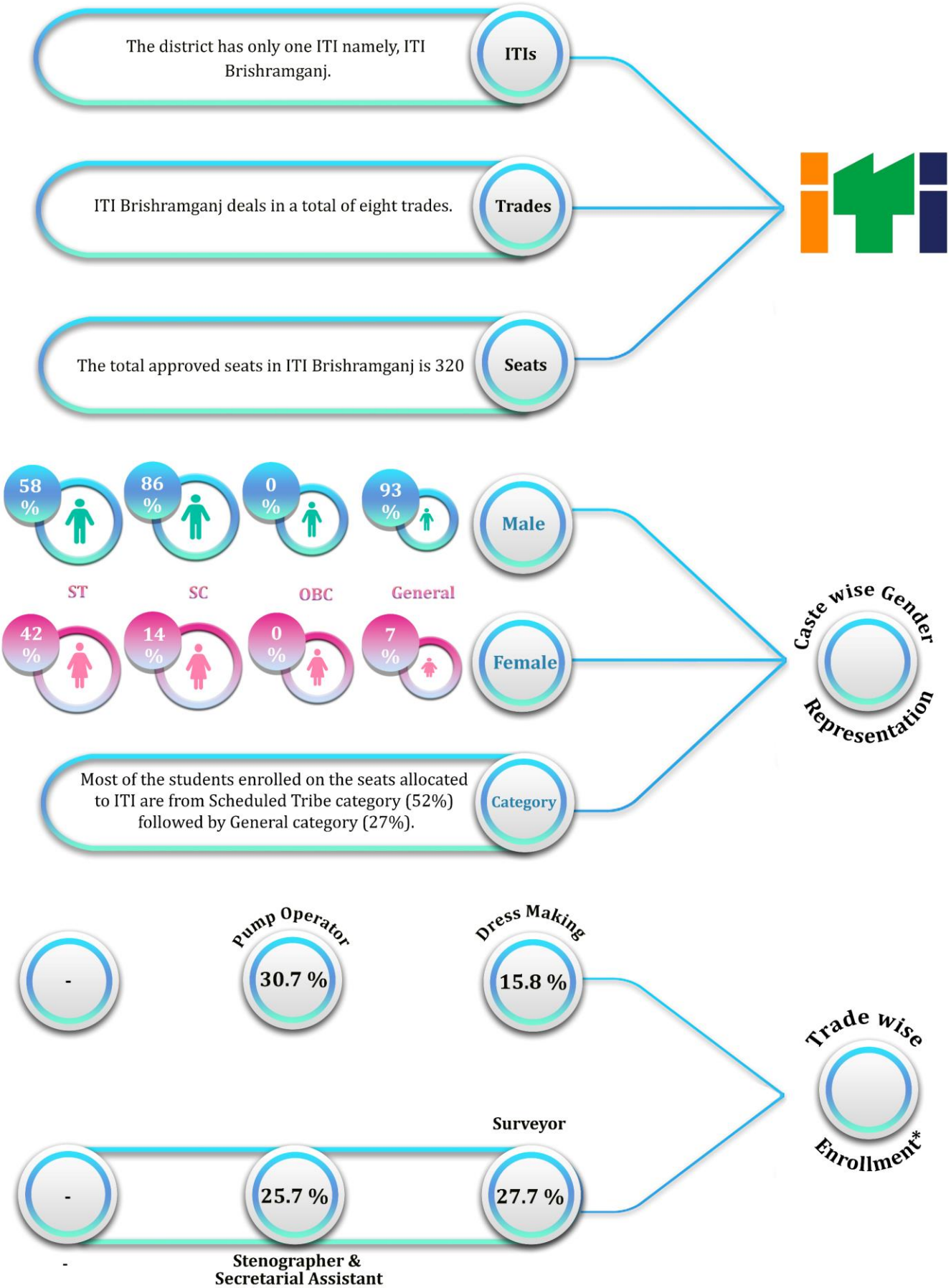
M/F — The sex ration in the district is 952 female per thousand male, making it performing poor than the state average which is 960 female per thousand male.

Establishments

97792

Mining and Quarrying	Manufacturing	Construction	Repairing Workshops
5	6663	1077	671

Hospitality	Info. and Comm.	Technical Activities	Total Non-Agri Establishments
2406	187	459	41782


The district has only one ITI namely, ITI Brishramganj.
ITIs
ITI Brishramganj deals in a total of eight trades.
Trades
The total approved seats in ITI Brishramganj is 320
Seats
58 %
86 %
0 %
93 %
ST
SC
OBC
General
Male
42 %
14 %
0 %
7 %
Female
Most of the students enrolled on the seats allocated to ITI are from Scheduled Tribe category (52%) followed by General category (27%).
Category
Caste wise Gender Representation
-
Pump Operator
30.7 %
Dress Making
15.8 %
-
25.7 %
Surveyor
27.7 %
-
Stenographer & Secretarial Assistant
Trade wise Enrollment*

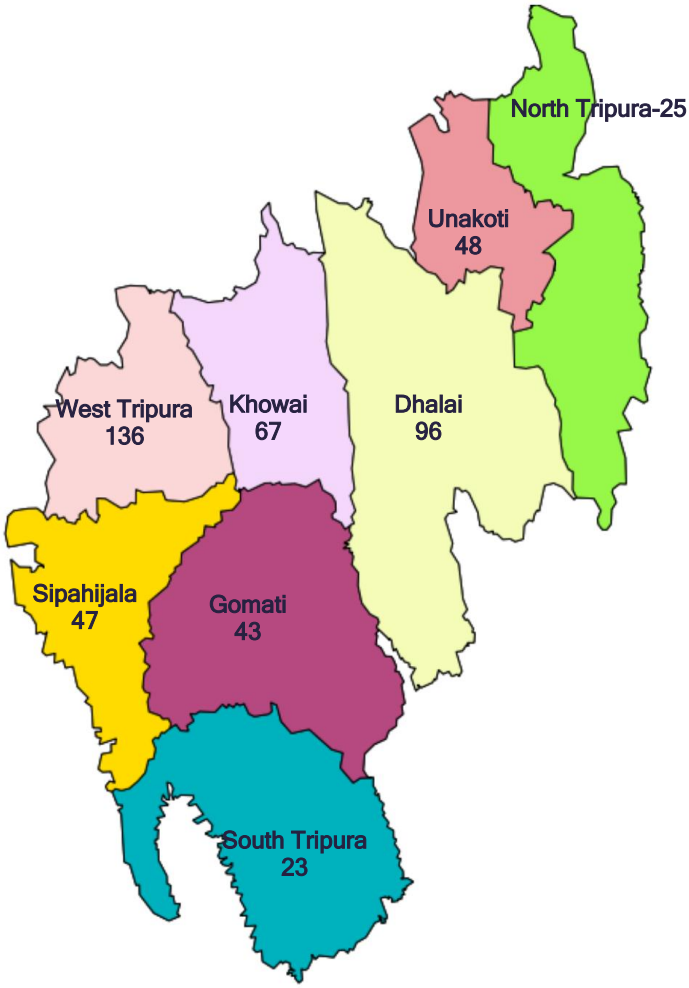
5. Findings & Observations

5.1 Profile of the Respondents

The survey of ITI graduates was conducted in all the districts of the state. District wise number of graduates surveyed from each ITI is presented in the table and map below.

District	Population (ITI Grad)	Sample Size
Dhalai	**131**	**96**
ITI L.T. Valley	131	96
Gomati	**72**	**43**
ITI Jatanbari	72	43
Khowai	**94**	**67**
ITI Teliamura	94	67
North Tripura	**33**	**25**
ITI Dharamnagar (P)	33	25
Sipahijala	**101**	**47**
ITI Bishramganj	101	47
South Tripura	**30**	**23**
ITI Belonia (P)	30	23
Unakoti	**65**	**48**
ITI Kailashahar	65	48
West Tripura	**211**	**136**
ITI Indranagar	149	107
ITI Ramakrishna Mission	22	12
Women's ITI Indranagar (P)	40	17
Total	**737**	**485**

P-Project ITI



It is evident from the above table that the maximum students were surveyed from West Tripura district (28% of the sample, 136) followed by Dhalai district (19.8%, 96) and Khowai district (13.8%, 67). The three districts have a cumulative share of 61.6 percent in total sample size of the study.

It is also worth mentioning that for the academic year for which this tracer study has been conducted, a total of 737 students took admission in these institutes. It implies that the sample of the study is around 65.8 percent of the population.

5.1.1 Institute Category Wise Respondents

The respondents for the tracer study included students from all types of Industrial Training Institutes i.e., both Project ITI as well as non-Project ITI. Project ITIs consists of Government ITIs that were covered under STRIVE project (GP ITIs) whereas Non-Project ITIs consists of Government ITIs (GNP it is) and Private ITIs that were not covered under STRIVE project. Out of the ten ITIs considered for the primary survey, three ITIs namely Women's ITI Indranagar, ITI Belonia and ITI Dharmanagar were Project ITIs. The study included 84.1 respondents (408) from GNP ITIs, followed by 13.4 percent of respondents from Project ITIs (65 students) and 2.5 percent (12) of respondents from Pvt. ITI.

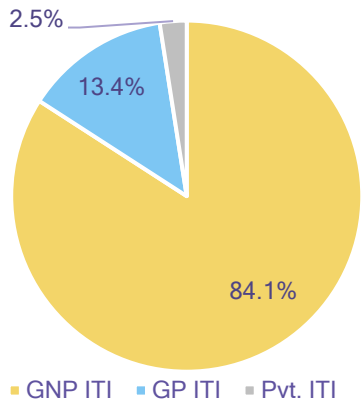


Figure 1: ITI Category wise student surveyed

The share of project ITIs in total admission during the study period was around 14 percent.

5.1.2 Distribution of Course Durations

The analysis of secondary data indicated that in Project ITIs only one-year course students were enrolled while in the case of Non-Project ITIs, the students were enrolled for two-year courses as well. Among the ITIs where students enrolled for two years course as well were ITI Indranagar, ITI Jatanbari and ITI Kailashahar. The analysis of the primary survey was also on the same line as 100 percent of the respondents of two-year courses were from Non-Project ITIs.

In the case of private ITIs also, only one year courses were undertaken.

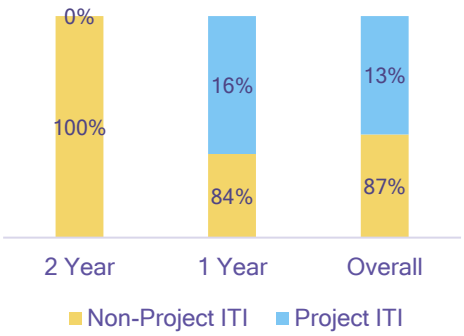


Figure 2: Course Category wise student surveyed

5.1.3 Gender Wise Respondents

In the Government Non-Project ITIs (GNP ITIs), males form the majority of the respondents, making up 83% of the total, with females representing only 17%. A different pattern can be observed in the Government Project ITIs (GP ITIs), where the gender distribution is more balanced, with females constituting 43% of the respondents and males 57% as among the three project ITIs, one ITI namely Women ITI Indiranagar was exclusively for female candidates. However, in the Private ITIs (Pvt. ITIs), the gender representation is entirely skewed towards males, with a 100% male representation and 0% female representation.

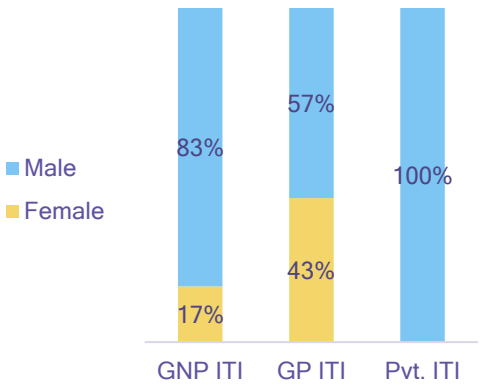


Figure 3: Gender-wise student surveyed

5.1.4 Caste wise respondents

An analysis of the caste composition of the respondents revealed that ST Class graduates have the highest presence (43%) followed by General Class (30%) and SC Class (23%). Graduates from OBC Class comprised of 4 percent of the graduates only. The share of ST graduates was found to be a maximum of 51 percent in Dhalai district and a minimum of 20 percent in North district. In the case of SC graduates, the share was maximum in South district (30%) and minimum in 11 percent in Dhalai district. The presence of OBC graduates was found to be in four districts namely Khowai (18%), West (4%), Unakoti (2%) and Gomati (2%). In the case of General category graduates, the share was maximum in North district (56%) followed by South district (48%) and Unakoti (43%). The proportion of graduates from general category was minimum in Khowai district (15%).

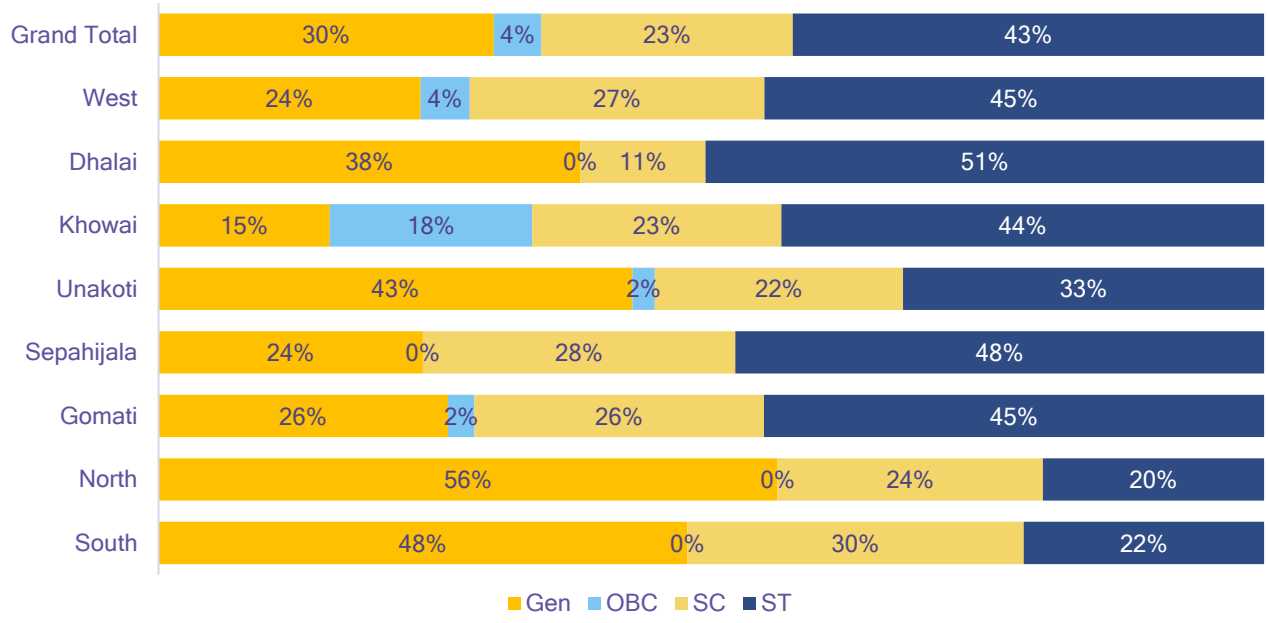


Figure 4: ITI Category-wise caste composition of respondents

5.1.5 Caste-wise female participation

An attempt was made to identify the pattern in the gender ratio of participants among various castes. It is found that female participation rate was maximum in the case of ST category graduates (23%) followed by SC category (20%) and General category (18%). Female participation rate was lowest at 14 percent among OBC category graduates.

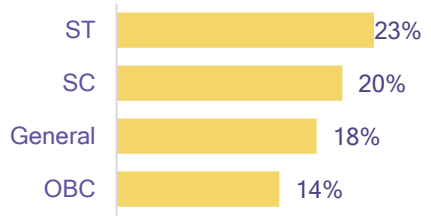


Figure 5: Caste-wise female participation

5.1.6 Trade-wise respondents

In the engineering trades, male participation is overwhelmingly dominant, making up 98% (197 participants) of the total. Some of the most popular trades among males are "Pump Operator-Cum-Mechanic" and "Welder", each accounting for 7.6% of total participants. However, the engineering trades, such as "Draughtsman (Civil)" and "Architectural Assistant", also have limited female participation, comprising 9.1% and 13.3% respectively of participants in these fields.

Table 2: Trade-wise respondents

Trade Type	Trade	Female		Male		Total	
		Nos.	%	Nos.	%	Nos.	%
Engineering Trade	Pump Operator-Cum-Mechanic	0	0%	37	100%	37	7.6%
	Welder	0	0%	37	100%	37	7.6%
	Draughtsman (Civil)	2	9.1%	20	90.9%	22	4.5%
	Plumber	0	0%	21	100%	21	4.3%
	Mechanic (Diesel)	0	0%	18	100%	18	3.7%
	Architectural Assistant	2	13.3%	13	86.7%	15	3.1%
	Mechanic (Motor Vehicle)	0	0%	13	100%	13	2.7%
	Fitter	0	0%	10	100%	10	2.1%
	Carpenter	0	0%	8	100%	8	1.6%
	Electronic Mechanics	0	0%	7	100%	7	1.4%
	Mechanic (Refrigeration and Air-Conditioning)	0	0%	7	100%	7	1.4%
	Electrician	0	0%	3	100%	3	0.6%
	Turner	0	0%	2	100%	2	0.4%
	Wireman	0	0%	1	100%	1	0.2%
	Total Engineering	**4**	**2%**	**197**	**98%**	**201**	41%
Non-Engineering Trades	Surveyor	13	14.4%	77	85.6%	90	18.6%
	Computer Operator and Programming Assistant	27	45.0%	33	55.0%	60	12.4%
	Stenographer & Secretarial Assistant	12	26.1%	34	73.9%	46	9.5%
	Desktop Publishing Operator	8	30.8%	18	69.2%	26	5.4%
	Dress Making	20	83.3%	4	16.7%	24	4.9%
	Computer Hardware & Network Maintenance	0	0%	20	100%	20	4.1%
	Fashion Design & Technology	8	72.7%	3	18.2%	11	2.3%
	Computer Aided Embroidery & Designing	4	57.1%	3	42.9%	7	1.4%
	Total Non-Engineering	**92**	32%	**192**	68%	**284**	59%
	Grand Total	**96**	20%	**389**	80%	**485**	100%

Non-engineering trades have a more balanced gender participation, but males still form the majority with 68% (192 participants). These trades show a much higher participation rate for females, at 32% (92 participants). "Computer Operator and Programming Assistant" is one of the most significant non-engineering trades, with 45% female participants. However, the most female-dominant trades are "Dress Making" and "Fashion Design & Technology", with 83.3% and 72.7% female participation respectively.

The data illustrates that irrespective of gender or trade type, the top five trades significantly contribute to the total participant count of the tracer study. The "Surveyor" trade boasts the highest number of participants, at 90, which makes up 18.6% of the total. This is followed by "Computer Operator and Programming Assistant" with 60 participants, contributing 12.4% to the overall total. The "Stenographer & Secretarial Assistant" trade accounts for 9.5% of the total, with 46 participants. Lastly, both the "Pump Operator-Cum-Mechanic" and "Welder" trades each hold 7.6% of the total share, with 37 participants in each. Cumulatively, these top five trades encompass 55.7% of the total participants in the study, underscoring their prominent role in the skills and vocational landscape as represented by this study's respondents.

5.1.7 Family Income (Excluding ITI Grad's)

The majority of the respondent's family falls under the income category of up to Rupees 15 thousand (98%) followed by 1.8 percent family under the income bracket of Rupees 15 to 30 thousand. Only around 0.2 percent families have a household income of more than Rupees 30 thousand. There is no major variation in the income of graduates' family who enrolled in project ITI and compared to non-project ITI.

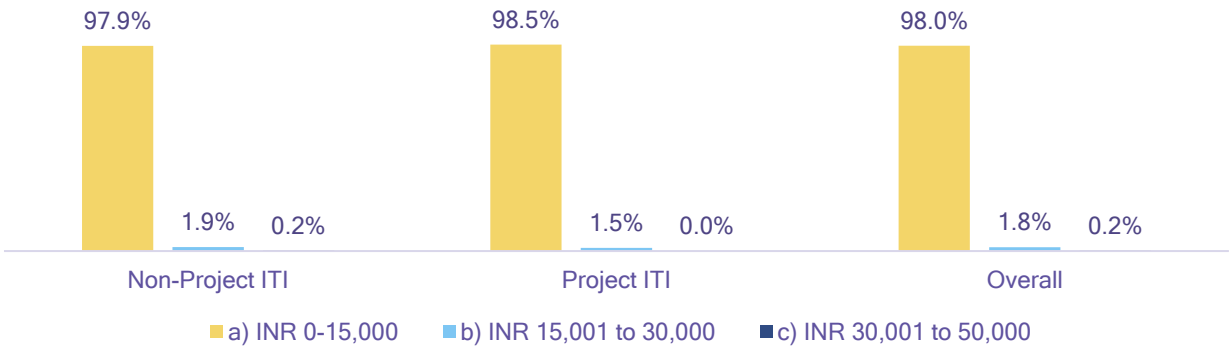


Figure 6: Household Income of family of ITI Graduates

5.2 Pre-training Employment Scenario

Out of 485 people surveyed during the study, none of them had an employment history prior to training at ITI. All the ITI graduates were freshers.

5.3 Post-training Immediate Employment Status

5.3.1 ITI Category wise employment outcomes

The provided data illustrates the employment outcomes for students from different types of Industrial Training Institutes (ITIs), broken down into categories: Apprenticeship, Employed, Self-employed, and Unemployed.

Table 3: ITI Category wise post-training immediate employment outcome

ITI Type	Apprenticeship		Employed		Self-employed		Unemployed		Total
GNP ITI	3	0.73%	29	7.1%	36	8.82%	340	83.3%	408
GP ITI	-	-	4	6.15%	9	13.8%	52	80.0%	65
Private ITI	-	-	2	16.7%	-	-	10	83.3%	12
Grand Total	**3**	**0.61%**	**35**	**7.22%**	**45**	**9.28%**	**402**	**82.9%**	**485**

In the Government Non-Project ITIs (GNP ITIs), the majority of participants (83.3% or 340 students) remain unemployed. A small portion found employment (7.1% or 29 students), self-employment (8.82% or 36 students), or apprenticeships (0.73% or 3 students).

For Government Project ITIs (GP ITIs), a significant percentage of students are also unemployed (80% or 52 students). However, there are more self-employed students (13.8% or 9 students) than in GNP ITIs. The percentage of students who found employment (6.15% or 4 students) is slightly less than that of the GNP ITIs.

In Private ITIs (Pvt. ITIs), the majority of students are unemployed (83.3% or 10 students), similar to the other categories. A small portion found employment (16.7% or 2 students), but there are no students in apprenticeships or self-employment.

Overall, across all ITI types, the majority of students remain unemployed (82.9% or 402 students). A small portion have found employment (7.22% or 35 students) or self-employment (9.28% or 45 students), and a very small percentage are in apprenticeships (0.61% or 3 students). These figures indicate a significant challenge in terms of employment outcomes for ITI students across all categories.

5.3.2 ITI-wise employment status

The data provided indicates the employment outcomes of students from various Industrial Training Institutes (ITIs) in categories such as Apprenticeship, Employment, Self-employment, and Unemployment.

Table 4: ITI wise post training immediate employment outcomes

Name of the ITI	Apprenticeship		Employed		Self-employed		Unemployed		Total
	No.	%	No.	%	No.	%	No.	%	No.
ITI Belonia	0	0%	2	8.7%	2	8.7%	19	83%	23
ITI Bishramganj	0	0%	1	2.1%	1	2.1%	45	96%	47
ITI Dharamnagar	0	0%	1	4.0%	5	20.0%	19	76%	25

Name of the ITI	Apprenticeship		Employed		Self-employed		Unemployed		Total
	No.	%	No.	%	No.	%	No.	%	No.
ITI Indranagar	2	1.9%	13	12.1%	14	13.1%	78	73%	107
ITI Jatanbari	0	0%	3	7.0%	4	9.3%	36	84%	43
ITI Kailashahar	0	0%	3	6.3%	6	12.5%	39	81%	48
ITI L.T. Valley	0	0%	3	3.1%	6	6.3%	87	91%	96
ITI Ramakrishna Mission	0	0%	2	16.7%	0	0.0%	10	83%	12
ITI Teliamura	1	1.5%	6	9.0%	5	7.5%	55	82%	67
Women's ITI Indranagar	0	0%	1	5.9%	2	11.8%	14	82%	17
Grand Total	3	0.6%	35	7.2%	45	9.3%	402	83%	485

- ITI Belonia has a total of 23 students, with the vast majority (83% or 19 students) remaining unemployed. Only two students each were employed or self-employed, which constitutes 8.7% each.
- ITI Bishramganj, with a total of 47 students, saw a significant number of its students remaining unemployed (96% or 45 students). Only one student each managed to secure employment or self-employment, accounting for a low 2.1% each.
- In ITI Dharamnagar, out of 25 students, 76% (or 19 students) are unemployed. A small percentage (20% or 5 students) managed to establish their own business, and one student was employed, making up 4% of the total.
- ITI Indranagar reported the highest total student count with 107. The majority, 73% (or 78 students), are unemployed. However, this ITI has the highest number of employed and self-employed students at 13.1% (or 14 students) and 12.1% (or 13 students) respectively. It also had two students in apprenticeships.
- ITI Jatanbari has 43 students in total, with the bulk being unemployed (84% or 36 students). It saw 7% (or 3 students) find employment and 9.3% (or 4 students) become self-employed.
- ITI Kailashahar, with 48 students, reported 81% (or 39 students) as unemployed. However, 6.3% (or 3 students) found employment and 12.5% (or 6 students) managed to become self-employed.
- ITI L.T. Valley has a total of 96 students, with 91% (or 87 students) still jobless. Only a small percentage were employed (3.1% or 3 students) or self-employed (6.3% or 6 students).
- ITI Ramakrishna Mission, which had 12 students, reported 83% (or 10 students) as unemployed. There were two students who found employment, making up 16.7%, but no student went into self-employment.
- ITI Teliamura, with 67 students, saw the majority of its students (82% or 55 students) without a job. However, 7.5% (or 5 students) managed to establish their own business, and 9% (or 6 students) secured employment. Additionally, one student was in an apprenticeship.
- Finally, the Women's ITI Indranagar, with 17 students, reported 82% (or 14 students) as unemployed. It also had two students in self-employment and one student who found a job.

5.3.3 Trade wise employment outcomes

The data illustrates the distribution of post-training outcomes for different trades in categories such as Apprenticeship, Employed, Self-employed, and Unemployed.

Table 5: Trade-wise post training immediate employment outcomes

Trades	Apprenticeship		Employed		Self-employed		Unemployed		Total
	No.	%	No.	%	No.	%	No.	%	No.
Pump Operator-Cum-Mechanic	0	0.0%	2	5.4%	4	10.8%	31	84%	37
Welder	1	2.7%	4	10.8%	2	5.4%	30	81%	37
Draughtsman (Civil)	0	0.0%	0	0.0%	1	4.5%	21	95%	22
Plumber	1	4.8%	4	19.0%	3	14.3%	13	62%	21
Mechanic Diesel	1	5.6%	4	22.2%	2	11.1%	11	61%	18
Architectural Assistant	0	0.0%	1	6.7%	0	0.0%	14	93%	15
Mechanic (Motor Vehicle)	0	0.0%	2	15.4%	3	23.1%	8	62%	13
Fitter	0	0.0%	2	20.0%	0	0.0%	8	80%	10
Carpenter	0	0.0%	0	0.0%	0	0.0%	8	100%	8
Electronic Mechanics	0	0.0%	3	42.9%	0	0.0%	4	57%	7
Mechanic (R&AC)	0	0.0%	0	0.0%	1	14.3%	6	86%	7
Electrician	0	0.0%	1	33.3%	0	0.0%	2	67%	3
Turner	0	0.0%	0	0.0%	0	0.0%	2	100%	2
Wireman	0	0.0%	0	0.0%	0	0.0%	1	100%	1
Engineering Total	**3**	**1.5%**	**23**	**11.4%**	**16**	**8.0%**	**159**	**79%**	**201**
Surveyor	0	0.0%	3	3.3%	6	6.7%	81	90%	90
COPA	0	0.0%	3	5.0%	6	10.0%	51	85%	60
Stenographer & Secretarial Assistant	0	0.0%	1	2.2%	5	10.9%	40	87%	46
DTPO	0	0.0%	1	3.8%	2	7.7%	23	88%	26
Dress Making	0	0.0%	1	4.2%	3	12.5%	20	83%	24
Computer Hardware & Network Maintenance	0	0.0%	3	15.0%	5	25.0%	12	60%	20
Fashion Design & Technology	0	0.0%	0	0.0%	1	9.1%	10	91%	11
Computer Aided Embroidery & Designing (CAED)	0	0.0%	0	0.0%	1	14.3%	6	86%	7
Non-Engineering Total	**0**	**0.0%**	**12**	**4.2%**	**29**	**10.2%**	**243**	**86%**	**284**
Grand Total	**3**	**0.6%**	**35**	**7.2%**	**45**	**9.3%**	**402**	**83%**	**485**

In the engineering trades section, the highest rate of employment is observed in Electronic Mechanics with 42.9% of the total trainees (3 out of 7) finding jobs. However, the Electrician trade, with a third of its trainees (1 out of 3) securing employment, also demands attention. The Mechanic Diesel trade showcased a diverse spread of outcomes, with 5.6% (1 student) in apprenticeship, 22.2% (4 students) in regular employment, and 11.1% (2 students) pursuing self-employment. Still, a significant fraction of 61% (11 students) were unemployed.

Contrastingly, the trades of Carpenter and Turner noted an alarming 100% unemployment rate amongst their trainees, totalling 8 and 2 students respectively. Draughtsman (Civil) with a 95% and Architectural Assistant with a 93% unemployment rate represent the maximum unemployment percentages within the engineering trades. This category as a whole witnessed a high unemployment rate of 79%.

For non-engineering trades, the Computer Hardware & Network Maintenance trade reported a relatively moderate unemployment rate of 60%, with 15% of trainees finding employment and 25% turning towards self-employment. This finding, however, is based on a small sample size of 20 students.

On the other hand, Surveyor, which constituted the most significant chunk of the non-engineering trades with 90 students, also documented a high unemployment rate of 90%. Similarly, the COPA (Computer Operator and Programming Assistant) trade had an unemployment rate of 85%, despite 10% of students turning self-employed and 5% getting employed.

Interestingly, the Dress Making trade revealed a more evenly distributed outcome with 4.2% apprenticeships, 12.5% self-employment, and 83% unemployment. The overall unemployment rate in non-engineering trades was marginally higher than engineering trades, at 86%.

Across both engineering and non-engineering categories, the data indicates a considerable concern with elevated unemployment rates. While some trades display a more balanced spread across various employment outcomes, they represent outliers. The dominant trend across trades reveals high levels of unemployment post-training, suggesting a pressing need to enhance career support and job opportunities for these trainees.

5.3.4 Range of Monthly Income (First Job, Joining Salary)

This table provides a detailed breakdown of salary ranges for trainees who graduated from different ITI types: GNP ITI, GP ITI, and Private ITI.

Table 6: ITI Category wise joining salary offered to trainees

Salary Ranges	GNP ITI		GP ITI		Private ITI		Overall	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
5000-9999	32	47%	9	69%	0	0%	41	49%
10000-14999	26	38%	4	31%	2	100%	32	39%
15000-19999	5	7.4%	0	0%	0	0%	5	6.0%
20000-24999	3	4.4%	0	0%	0	0%	3	3.6%
25000-30000	2	2.9%	0	0%	0	0%	2	2.4%
Grand Total	68	100%	13	100%	2	100%	83	100%

In the GNP ITI, most graduates (47%) fall in the salary range of 5000-9999, indicating the initial income is relatively low for a substantial portion of these graduates. A considerable segment, about 38%, earns between 10000-14999, while fewer graduates make it to the higher salary ranges: 7.4% earn between 15000-19999, 4.4% earn between 20000-24999, and a mere 2.9% earn between 25000-30000.

The income distribution among GP ITI graduates skews more heavily towards the lower end of the spectrum. A striking 69% of these graduates earn between 5000-9999, and 31% have incomes in the 10000-14999 bracket. None of the graduates from this category are reported to earn above 15000.

Graduates from Private ITIs are represented in smaller numbers. All the recorded individuals in this category (100%) earn between 10000-14999, which may suggest a more consistent, albeit limited, income range for graduates from these institutes.

The data indicate that the majority of the ITI graduates across all types (49%) start their careers with earnings in the range of 5000-9999. Around 39% earn between 10000-14999. Only a minority of graduates, constituting approximately 12%, earn more than 15000. This distribution suggests a need for strategies to increase the income prospects of ITI graduates across all categories.

5.4 Current Employment Status

5.4.1 ITI Category wise current employment status

The provided data illustrates the current employment status for students from different types of Industrial Training Institutes (ITIs), broken down into categories: Apprenticeship, Employed, Self-employed, and Unemployed.

Table 7: ITI Category wise current employment status

ITI Type	Apprenticeship		Employed		Self-Employed		Unemployed		Total
	N	%	N	%	N	%	N	%	
GNP ITI	5	1.23%	39	9.56%	66	16.18%	298	73.04%	408
GP ITI	0	0.00%	6	9.23%	14	21.54%	45	69.23%	65
Private ITI	0	0.00%	3	25.00%	0	0.00%	9	75.00%	12
Grand Total	**5**	1.03%	**48**	9.90%	**80**	16.49%	**352**	72.58%	**485**

For GNP ITI graduates, a significant majority (73.04%) are unemployed, which indicates a challenge in securing employment post-graduation. Only a small fraction (1.23%) are engaged in apprenticeships, while 9.56% are employed, and 16.18% have taken up self-employment.

GP ITI graduates, similarly, have a high rate of unemployment (69.23%). However, it's noteworthy that their self-employment rate is slightly higher (21.54%) than that of GNP ITI graduates. The percentage of employed GP ITI graduates is almost the same as their GNP ITI counterparts, standing at 9.23%.

Among Private ITI graduates, unemployment is still the most common outcome (75%), but a significantly larger proportion (25%) are employed compared to the other ITI types. Interestingly, none of the Private ITI graduates have chosen the path of self-employment or apprenticeship.

On an aggregate level, the data suggests a considerable challenge across all ITI types, with 72.58% of all graduates being unemployed. Only 1.03% are in apprenticeships, 9.90% are employed, and 16.49% are self-employed. This points to a need for improved strategies to enhance employment outcomes for ITI graduates.

5.4.2 ITI category-wise status of change in employment

The table demonstrates the change in employment status for graduates of different types of ITIs: GNP ITI, GP ITI, and Private ITI, comparing their immediate situation after training to their current employment status.

Table 8: Change in employment status of trainee

ITI Type	Immediately After Training			Current Employment		
	Apprentice	Employment	Self-Emp	Apprentice	Employment	Self-Emp
GNP ITI	0.73%	7.1%	8.82%	1.23%	9.56%	16.18%
GP ITI	0%	6.15%	13.8%	0%	9.23%	21.54%
Private ITI	0%	16.7%	0%	0%	25.0%	0%
Overall	**0.61%**	**7.22%**	**9.28%**	1.03%	9.90%	16.49%

For GNP ITI graduates, there's a slight increase in all three categories of employment status from immediately after training to the current situation. The percentage of those who opted for apprenticeships rose from 0.73% to 1.23%, employment increased from 7.1% to 9.56%, and self-employment grew from 8.82% to 16.18%.

In the case of GP ITI graduates, while there was no change in the apprenticeship rate, the employment percentage experienced a small increment from 6.15% to 9.23%. There was a significant increase in the self-employment category, going up from 13.8% to 21.54%.

For graduates of Private ITIs, the data indicates a substantial increase in the employment rate from 16.7% immediately after training to 25% currently. However, it's important to note that no graduates from Private ITIs have chosen either apprenticeship or self-employment in the current situation.

On the overall scale, while the rates for apprenticeship (from 0.61% to 1.03%) and employment (from 7.22% to 9.90%) witnessed small increases, the self-employment rate saw a larger rise from 9.28% to 16.49%. This trend suggests that more graduates are taking up entrepreneurial roles or creating their own employment opportunities over time.

5.4.3 ITI category-wise status of change in Income

The table gives an insightful perspective on the income progression of ITI trainees from immediately after their training to their current situation. The data suggests a positive shift in income levels for ITI trainees from just after their training to their current situation. Most trainees have moved up to higher income brackets, indicating the successful impact of ITI training in improving trainees' earnings potential.

Rs. 5000-Rs. 9999: A significant decrease in the percentage of trainees earning within this income range is observed. It went from 49% immediately after training to 14% currently. This change, which represents a reduction of 35%, suggests that a substantial number of trainees managed to move up from this income bracket, indicating a positive impact of the training program on their earnings potential.

Rs. 10000-Rs. 14999: There's been a slight increase (5.4%) in the proportion of trainees in this income range, from 39% to 44%. This suggests that some trainees, possibly those initially earning less than Rs. 10000, have been able to move up to this higher income bracket.

Rs. 15000-Rs. 19999: This income bracket has seen the most significant percentage increase, from 6% to 32% - a notable change of 26%. This represents a significant upward shift in the income of a substantial portion of the trainees, suggesting that their skills and capabilities have been recognized and rewarded in the job market.

Rs. 20000-Rs. 24999: A modest increase of 3.2% is observed in this income range, from 3.6% to 6.8%. This suggests a smaller proportion of trainees have been able to reach this income bracket, but it still indicates positive career and income progression.

Rs. 25000-Rs. 30000: There's been a negligible decrease of 0.1% in this income category. This indicates that the number of trainees earning within this range has remained more or less stable.

More than Rs. 30000: Although the current percentage is low at 1.5%, the change is noteworthy as there were no trainees earning this amount immediately after training. This suggests that some trainees have managed to achieve significantly higher earnings, possibly due to their skills, experiences, or job roles.

Table 9: Changes in salary ranges of ITI graduates

Income Slabs	Overall			ITI Category wise changes		
	At joining	Currently	Change	GNP ITI	GP ITI	Private ITI
Rs. 5000- Rs. 9999	49%	14%	-35%	33%	59%	-33%
Rs. 10000- Rs. 14999	39%	44%	+5.4%	-6.5%	-14%	67%
Rs. 15000- Rs. 19999	6.0%	32%	+26%	-23%	-40%	-33%
Rs. 20000- Rs. 24999	3.6%	6.8%	+3.2%	-2.9%	-5.0%	0.0%
Rs. 25000- Rs. 30000	2.4%	2.3%	-0.1%	0.2%	0.0%	0.0%
More than Rs. 30000	0%	1.5%	+1.5%	-1.8%	0.0%	0.0%

Changes observed among trainees of GP ITI: Trainees from GP ITIs show a significant decrease in the lower income categories after training. The percentage of trainees earning Rs. 5000- Rs. 9999, Rs. 10000- Rs. 14999, Rs. 15000- Rs. 19999, and Rs. 20000- Rs. 24999 have decreased by 59%, 14%, 40%, and 5% respectively. This indicates a positive trend, as it suggests that fewer trainees fall in these lower income brackets post-training, pointing to an improvement in trainees' earnings. The higher income categories of Rs. 25000- Rs. 30000 and above Rs. 30000 do not show any change, indicating that these income slabs have remained relatively stable post-training.

Changes observed among trainees of GNP ITI: For trainees from GNP ITIs, there is a notable positive shift in income slabs. The percentage of trainees in the lowest income slab of Rs. 5000- Rs. 9999 has decreased by 33%, while the percentage in the Rs. 15000- Rs. 19999 slab has also decreased by 23%. This shows that fewer trainees are falling into these lower income categories after training, indicating a positive outcome from the training programs. The income slab of Rs.

10000- Rs. 14999 sees a minor decrease of 6.5%, implying that some trainees might be progressing to higher income brackets. The changes in income slabs Rs. 20000- Rs. 24999 and Rs. 25000- Rs. 30000 are minimal, suggesting a relative stability in these categories. Interestingly, the highest income slab sees a minor decrease of 1.8%.

Changes observed among trainees of Private ITI: The income trends for trainees from Private ITIs are a bit different. The lowest income slab of Rs. 5000- Rs. 9999 sees a decrease of 33%, indicating that fewer trainees are in this category after training. There is a substantial increase of 67% in the Rs. 10000- Rs. 14999 slab, suggesting that a significant proportion of trainees have moved into this income bracket from lower ones. However, there are no observed changes in the remaining income slabs (Rs. 15000- Rs. 19999, Rs. 20000- Rs. 24999, Rs. 25000- Rs. 30000 and above Rs. 30000), suggesting a stabilization of income for trainees in these categories.

5.4.4 Employee Strength of the employing organization

The survey reveals that around 78 percent of employed ITI graduates are working in companies where the size of the organization in terms of number of employees ranges between 5 to 49. This is followed by another 11 percent of the graduates working in companies with 200 to 499 employees. In the cases of 7 percent graduates, the size of organization is between 50 to 199 employees followed by 4 percent cases where it is in the range of 500 to 999 employees.

5.4.5 Level of a match of training with current job

The table illustrates how trainees from different ITI types - GNP ITI, GP ITI, and Private ITI - fared in terms of securing jobs related to their specific trade.

Table 10: Matching of job with training courses

ITI Type	Job is unrelated to Trade	Joined a trade related job
GNP ITI	44%	56%
GP ITI	69%	31%
Private ITI	50%	50%
Grand Total	**48%**	**52%**

Trainees from GNP ITIs demonstrated a higher success rate in joining a job directly connected to their trade, with 56% managing to do so. Nevertheless, a significant portion, 44%, ended up in jobs unrelated to their trade.

In contrast, GP ITIs faced a higher discrepancy. Only 31% of trainees could secure a trade-related job, leaving a large majority (69%) in jobs unrelated to their pursued trades. This outcome underscores a substantial mismatch between the trade skills acquired and the actual jobs landed.

Private ITIs saw an even split, with half the trainees finding jobs related to their trade and the other half ending up in unrelated jobs.

On the aggregate level, the distribution is relatively balanced, with a slight lean towards trade-related jobs. Overall, 52% of trainees across all ITI types could secure trade-related jobs, whereas 48% found themselves in unrelated jobs. This nearly equal split underlines the need for these institutes to strengthen their focus on enhancing trade-specific employability and align their training more closely with the demands of the job market.

5.4.6 Time taken in securing a job after completing the course at ITI

Time taken in securing a job by trainee from GP ITI: For GP ITIs, the data indicates that 55% of students took more than a year to secure a job. This is even higher than the GNP ITIs, suggesting that the students from GP ITIs might be facing even more challenges in finding employment post-training. Interestingly, a significant 40% of students secured a job within one month, which is higher than that of GNP ITIs. However, only a very small percentage (5%) managed to find employment within one year, and none within the 3 and 6-month mark. This could imply an uneven spread in the time taken to find a job amongst GP ITI graduates.

Time taken in securing a job by trainee from GNP ITI: For GNP ITIs, the highest percentage of students (46%) took more than a year to secure a job after completion of their training. This might indicate a mismatch between the skills provided by the training programs and the market demand or perhaps, the need for better job placement services. However, 24% of students managed to secure a job within one month, demonstrating that for a significant portion of the students, the training quickly translated into employment. Smaller percentages of students found employment within a year (13%), within 3 months (5%), and within 6 months (12%). This suggests a varied job-seeking period among the students, depending on factors such as the nature of the job market, individual capabilities, and effectiveness of the training.

Time taken in securing a job by trainee from Private ITI: The distribution for Private ITI students is more balanced but based on a much smaller sample size. A third of the students took more than a year, while the other two thirds found a job within one month and within three months respectively. The more balanced distribution here might suggest a more versatile set of training programs, or different job market conditions compared to the other ITIs.

Table 11: Time taken in securing a job by ITI graduates

Time taken in securing a job	GNP ITI		GP ITI		PNP ITI		Overall	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
More than 1 year	51	46%	11	55%	1	33%	63	47%
Within 1 Month	27	24%	8	40%	1	33%	36	27%
Within 1 year	15	13%	1	5%	0	0%	16	12%
Within 3 Months	6	5%	0	0%	1	33%	7	5%
Within 6 Months	13	12%	0	0%	0	0%	13	10%
Grand Total	112	100%	20	100%	3	100%	135	100%

Looking at the overall picture, the majority of students (47%) from all ITI categories took more than a year to secure a job, emphasizing the need for better job placement strategies and possibly a revaluation of the alignment between training programs and market demand. 27% of students

secured a job within a month, indicating that for a notable number of students, the training quickly leads to job opportunities. A smaller percentage secured a job within a year (12%), within 3 months (5%), and within 6 months (10%), reflecting the diverse experiences of students across different ITI categories.

5.4.7 Method used for job search

While campus placement is one of the best ways of securing employment after graduating from ITIs, only one percent of respondents relied primarily on on-campus placements. Around 4.5 percent of respondents from Project ITIs relied upon campus interviews arranged by Training & Placement Cell of ITI as compared to 0.7 percent from Non-Project ITIs. The majority of the students (85%) primarily relied on the newspaper advertisements for job openings, followed by next 7.1 percent of the graduates who relied primarily on the place where they started to work on a part-time basis during/after the study. A separate analysis of employed students revealed the fact that those students who got employed after completing their training, they relied solely on newspaper advertisements.

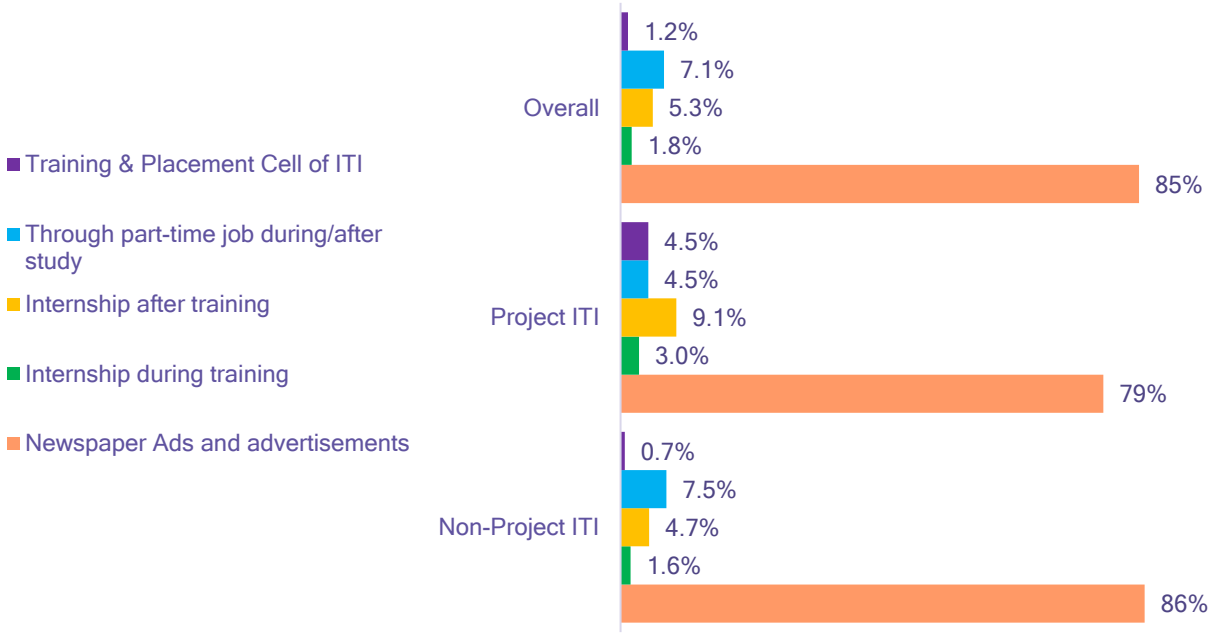


Figure 7: Method of job search used by the ITI Graduates

5.4.8 Effective Method for securing employment

Most of the graduates (97.6%) are of the view that following newspaper advertisements for searching for opportunity is most effective way for securing employment opportunities. Around 1.4 percent of graduates are of the view that the OJT opportunity provided by the Training & Placement Cell of ITI is an effective way of securing employment. The remaining 1 percent graduates are of the view that the ITI students can secure job for themselves if they start working on a part-time basis during or after completing their ITI courses.

5.5 On the Job Training and Apprenticeship trainings

Approximately 68.4% of the participants indicated that they were provided with On-the-Job Training through their organizations. The duration of this training varied among individuals, spanning from 15 to 60 days. However, on average, the trainees underwent 30 days of training.

5.6 Satisfaction with current job

While responding to the level of satisfaction with their current job, around 96 percent of ITI Graduates stated their position as 'Neutral' followed by 4 percent of respondents who were 'satisfied' with their current job.

5.7 Reasons for failing in securing employment

Among the people who could not secure a job, an attempt was made to ascertain the reasons for not getting a job. It is evident from the figure that the major reason behind the inability of graduates in securing a job is lack of work experience (94%), followed by lack of desired job (3.2%), unavailability of trade related job (1.7%), not looking for a job (0.9%), and preferred to work at home (0.2%).

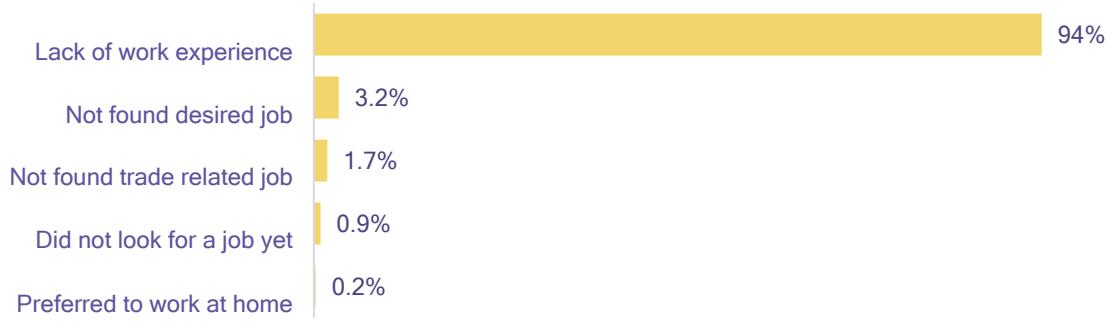


Figure 8: Reasons for unemployment

Willingness to migrate for a job: Around 99 percent of the respondents were ready to migrate to other district for a job, but not outside of the state.

Socio-economic barriers faced in securing a job

An attempt was made to understand the barriers and challenges these ITI graduates face when they look for a job or get into a job. The major barriers/ challenges endorsed are poor background (65%), language and communication barriers (15%) and lack of experience (12%). The other barriers cited by a very small fraction of graduates were social mobility, caste barriers, lack of information access and gender related issues.

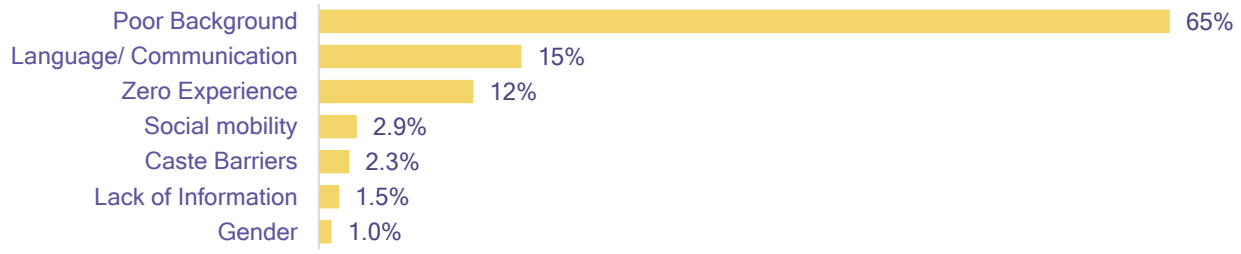


Figure 9: Socio-economic barriers faced by ITI graduates

5.8 Rating of ITIs and Trade

An attempt was made to find out the ratings which ITI graduates would like to assign to their ITI and the trade they learned. Some of the factors which were considered for rating were quality of classroom learning, supply of teaching and learning materials, quality of lectures, technical equipment, relationship between theory and practical classes and scope of employment for the selected trade.

5.8.1 Rating of ITI

The respondents were asked to rate their ITIs on a scale of 1 to 5, where 1 is the lowest rating and 5 is the highest rating, the graduates rated their ITIs. The result of the same is presented below.

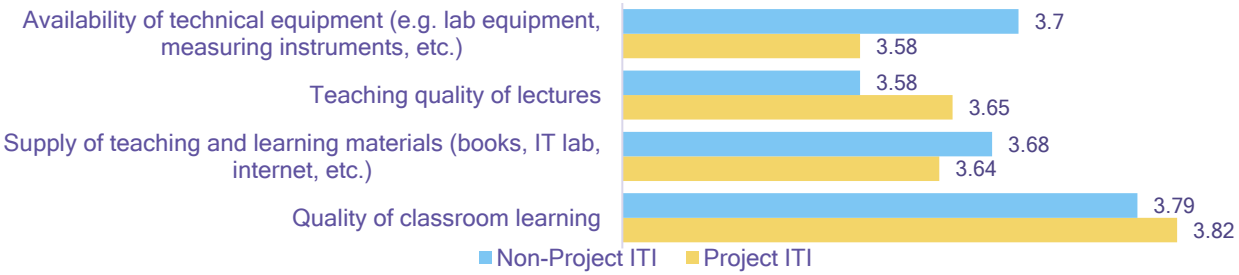


Figure 10: Rating of their ITI by Graduates

The rating of ITI was ascertained based on parameters related to enabling factors associated with a good training environment. It is evident from the above table that the average rating assigned to project ITI by their respective students is better on two parameters that are teaching quality and quality of classroom learning. The two parameters on which non-project ITIs have better ratings are availability of technical equipment and supply of teaching/ learning materials.

5.8.2 Rating of Trade and perception for alternate trades

Similar to the case of rating their ITIs, the graduates from Project ITIs have rated their trade higher in comparison to the rating assigned to their trade by Non-Project ITI graduates.

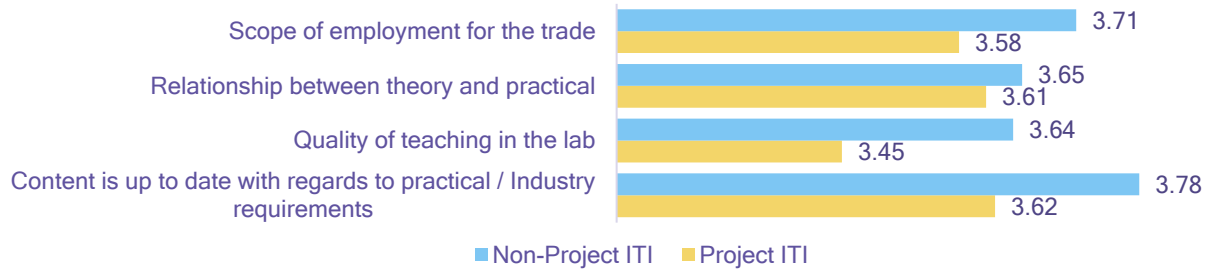


Figure 11: Rating of their trade by ITI Graduates

It is evident from the above graph that project ITIs have poor ratings on all parameters as compared to the rating assigned to non-project ITIs.

Approximately 76% of surveyed graduates expressed the view that their chosen trade offered fewer job opportunities compared to other trades. This perception was unanimous among respondents from certain trades such as Architectural Assistant, Computer Aided Embroidery & Designing (CAED), Electrician, Electronic Mechanics, Fashion Design & Technology (FD&T), and Mechanic Diesel, where 100% of respondents shared this sentiment.

There were also a significant number of trainees from other trades expressing dissatisfaction with their chosen fields due to perceived limited job prospects. These trades include Pump Operator-Cum-Mechanic (93%), Fitter (90%), Mechanic Refrigeration & Air Conditioning (86%), Desktop Publishing Operator (85%), Stenography (85%), Surveyor (83%), and Plumber (81%).

Such widespread dissatisfaction with the trades they pursued primarily stemmed from a perceived scarcity of employment opportunities following the completion of their training.

When queried further about what alternative trade they believed offered improved job prospects, respondents named a few specific fields. Approximately 32% of the respondents perceived Stenographer & Secretarial Assistant (English) to have superior job opportunities. This was closely followed by 28% of the respondents expressing optimism about the job prospects associated with the trade of Computer Operator and Programming Assistant.

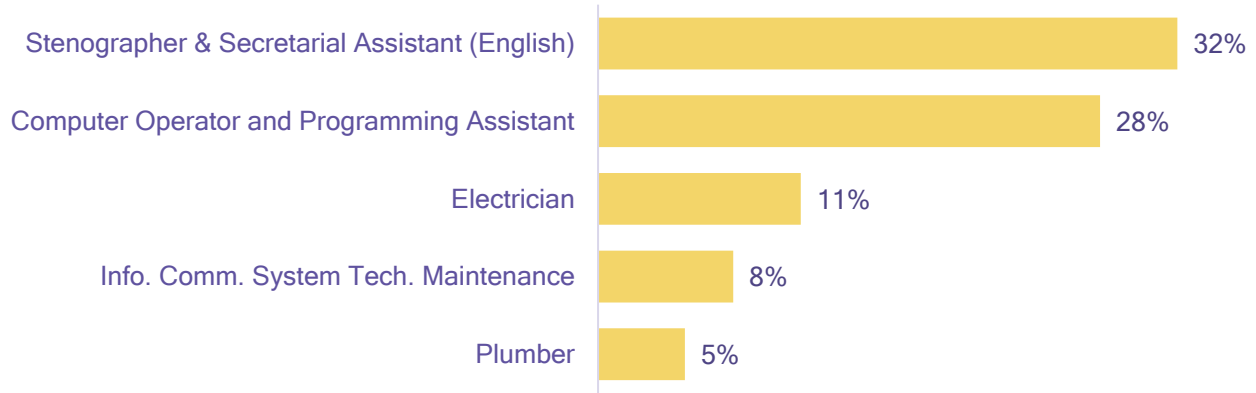


Figure 12: Preference towards alternate trades

5.9 Employers' Satisfaction

In order to assess the employers' satisfaction, employer of 20 out of 28 employed graduates were surveyed. It is found that employers are recruiting skilled workers mainly through newspaper advertisements. While recruiting ITI graduates, all the employers have responded preferring graduates from Government ITIs. The employers were asked to indicate their agreement/ disagreement with certain attributes in their ITI graduate employees. The statements and the responses are given in the graph below.

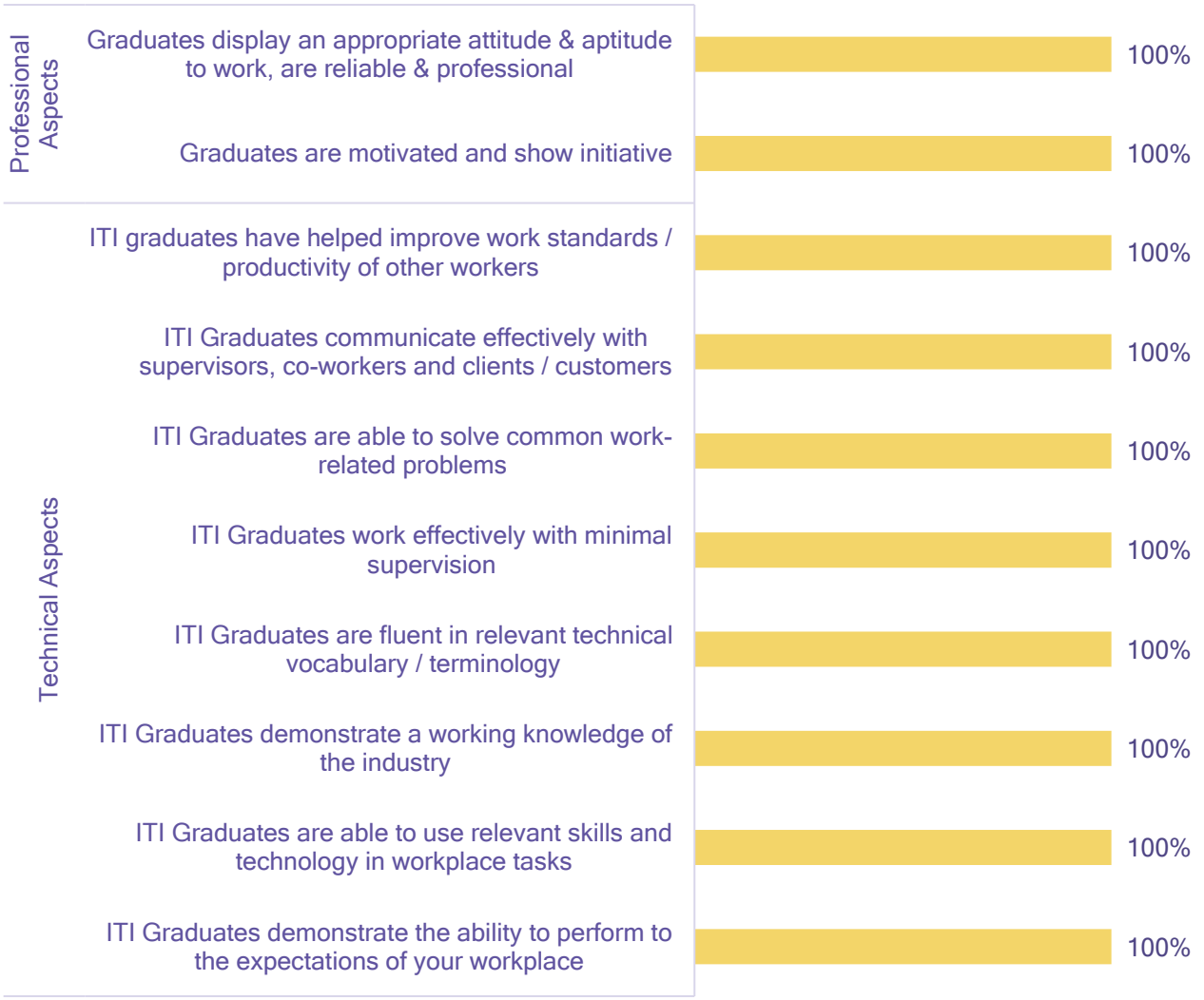


Figure 13: Employers' view on technical and professional quality of ITI Graduates

The employer's survey revealed that all the employers have agreed that the ITI Graduates demonstrate the ability to perform to the expectation of the employer's workplace on both technical as well as professional aspects.

On being asked to rate their overall satisfaction with ITIs Programs (on a scale of 1 to 10, 1 being lowest and 10 being highest satisfaction), the average rating was found to be 5.85 which indicates employers' satisfaction towards ITI Graduates and the ITI courses is a little better than indifferent.

5.10 ITIs Performance

The twin roles that ITIs are tasked with include: 1) Offering quality training to students and 2) Facilitating On-the-Job Training (OJT) and job placement opportunities for students. Despite the satisfaction of graduates from the surveyed ITIs with the training, the placement rate remains low. Upon further inquiry, the ITIs highlighted a lack of industrialization as a key reason for this issue. While the institutions believe that the government should take the initiative to enlist employers on the apprenticeship portal, they also recognize that there is a need for ITIs as well to map out potential industries or employers in their districts. An absence of formal agreements with industries or employers has further aggravated the situation, leading to poor student placements.

The ITI survey revealed that all ITIs have established Institute Management Committees composed of government representatives, local industries, ITI staff, and trainees. However, the study's survey suggests that ITIs have failed to capitalize on the advantages of industry partnerships. ITIs, with the assistance of the Institute Management Committees, should strive to secure Memorandums of Understanding (MoUs) with local industries for diverse support, particularly concerning OJT and job placements. An active engagement of industries facilitated by MoUs could aid ITIs in several areas, such as employment, on-site training, apprenticeship training, and guest faculty contributions.

6. Conclusions and Recommendations

Profile of the Respondents

The survey for the study captures a broad cross-section of students hailing from various districts and enrolled in different types of Industrial Training Institutes (ITIs). A majority of respondents were traced back to West Tripura district, contributing 28% of the sample, followed by Dhalai district with 19.8%, and Khowai district with 13.8%. These three districts collectively account for 61.6% of the total sample size. The total enrolment for the academic year under study in these institutes stands at 737 students, indicating that the study's sample represents about 65.8% of the total student population.

The range of ITIs represented by the respondents is diverse. Government Non-Project ITIs (GNP ITIs) have the lion's share, with 84.1% of respondents (408 students), followed by Government Project ITIs under the STRIVE project (GP ITIs) with 13.4% (65 students). A small fraction of 2.5% (12 students) represents the Private ITIs. The Project ITIs accounted for about 14% of total admissions during the study period.

The survey data also present variation in the duration of ITI courses across different types of institutes. In Project and Private ITIs, the students enrolled were engaged only in one-year courses. Conversely, in GNP ITIs, the duration of courses extended to two years as well. Respondents who undertook two-year courses were exclusively from GNP ITIs.

The gender distribution among the respondents shows a degree of imbalance. In GNP ITIs, male students significantly outnumbered female students, with an 83:17 ratio. However, the distribution is more evenly balanced in GP ITIs, where female students make up 43% of respondents, attributable to one of the ITIs being exclusively for women. Private ITIs were entirely represented by male students.

The caste composition of the respondents reveals that the ST class has the highest representation at 43%, followed by the General class at 30% and the SC class at 23%. Graduates from the OBC class comprised a mere 4% of the total. Caste representation varies widely across districts.

Trade-wise respondents:

In the engineering trades, male participation is overwhelmingly dominant, making up 98% (197 participants) of the total. Some of the most popular trades among males are "Pump Operator-Cum-

Mechanic" and "Welder", each accounting for 7.6% of total participants. However, the engineering trades, such as "Draughtsman (Civil)" and "Architectural Assistant", also have limited female participation, comprising 9.1% and 13.3% respectively of participants in these fields.

Non-engineering trades have a more balanced gender participation, but males still form the majority with 68% (192 participants). These trades show a much higher participation rate for females, at 32% (92 participants). "Computer Operator and Programming Assistant" is one of the most significant non-engineering trades, with 45% female participants. However, the most female-dominant trades are "Dress Making" and "Fashion Design & Technology", with 83.3% and 72.7% female participation respectively.

Irrespective of gender or trade type, the top five trades significantly contribute to the total participant count of the tracer study. The "Surveyor" trade boasts the highest number of participants, at 90, which makes up 18.6% of the total. This is followed by "Computer Operator and Programming Assistant" with 60 participants, contributing 12.4% to the overall total. The "Stenographer & Secretarial Assistant" trade accounts for 9.5% of the total, with 46 participants. Lastly, both the "Pump Operator-Cum-Mechanic" and "Welder" trades each hold 7.6% of the total share, with 37 participants in each. Cumulatively, these top five trades encompass 55.7% of the total participants in the study, underscoring their prominent role in the skills and vocational landscape as represented by this study's respondents.

Post-Training Employment: In the Government Non-Project ITIs (GNP ITIs), the majority of participants (83.3% or 340 students) remain unemployed. A small portion found employment (7.1% or 29 students), self-employment (8.82% or 36 students), or apprenticeships (0.73% or 3 students).

For Government Project ITIs (GP ITIs), a significant percentage of students are also unemployed (80% or 52 students). However, there are more self-employed students (13.8% or 9 students) than in GNP ITIs. The percentage of students who found employment (6.15% or 4 students) is slightly less than that of the GNP ITIs.

In Private ITIs (Pvt. ITIs), the majority of students are unemployed (83.3% or 10 students), similar to the other categories. A small portion found employment (16.7% or 2 students), but there are no students in apprenticeships or self-employment.

Overall, across all ITI types, the majority of students remain unemployed (82.9% or 402 students). A small portion have found employment (7.22% or 35 students) or self-employment (9.28% or 45 students), and a very small percentage are in apprenticeships (0.61% or 3 students). These figures indicate a significant challenge in terms of employment outcomes for ITI students across all categories.

Trade-wise employment (Immediate): The data illustrates the distribution of post-training outcomes for different trades in categories such as Apprenticeship, Employed, Self-employed, and Unemployed.

In the engineering trades section, the highest rate of employment is observed in Electronic Mechanics with 42.9% of the total trainees (3 out of 7) finding jobs. However, the Electrician trade, with a third of its trainees (1 out of 3) securing employment, also demands attention. The Mechanic Diesel trade showcased a diverse spread of outcomes, with 5.6% (1 student) in apprenticeship, 22.2% (4 students) in regular employment, and 11.1% (2 students) pursuing self-employment. Still, a significant fraction of 61% (11 students) were unemployed.

Contrastingly, the trades of Carpenter and Turner noted an alarming 100% unemployment rate amongst their trainees, totalling 8 and 2 students respectively. Draughtsman (Civil) with a 95% and Architectural Assistant with a 93% unemployment rate represent the maximum unemployment percentages within the engineering trades. This category as a whole witnessed a high unemployment rate of 79%.

For non-engineering trades, the Computer Hardware & Network Maintenance trade reported a relatively moderate unemployment rate of 60%, with 15% of trainees finding employment and 25% turning towards self-employment. This finding, however, is based on a small sample size of 20 students.

On the other hand, Surveyor, which constituted the most significant chunk of the non-engineering trades with 90 students, also documented a high unemployment rate of 90%. Similarly, the COPA (Computer Operator and Programming Assistant) trade had an unemployment rate of 85%, despite 10% of students turning self-employed and 5% getting employed.

Interestingly, the Dress Making trade revealed a more evenly distributed outcome with 4.2% apprenticeships, 12.5% self-employment, and 83% unemployment. The overall unemployment rate in non-engineering trades was marginally higher than engineering trades, at 86%.

Current Employment Status: For GNP ITI graduates, a significant majority (73.04%) are unemployed, which indicates a challenge in securing employment post-graduation. Only a small fraction (1.23%) are engaged in apprenticeships, while 9.56% are employed, and 16.18% have taken up self-employment.

GP ITI graduates, similarly, have a high rate of unemployment (69.23%). However, it's noteworthy that their self-employment rate is slightly higher (21.54%) than that of GNP ITI graduates. The percentage of employed GP ITI graduates is almost the same as their GNP ITI counterparts, standing at 9.23%.

Among Private ITI graduates, unemployment is still the most common outcome (75%), but a significantly larger proportion (25%) are employed compared to the other ITI types. Interestingly, none of the Private ITI graduates have chosen the path of self-employment or apprenticeship.

On an aggregate level, the data suggests a considerable challenge across all ITI types, with 72.58% of all graduates being unemployed. Only 1.03% are in apprenticeships, 9.90% are employed, and 16.49% are self-employed. This points to a need for improved strategies to enhance employment outcomes for ITI graduates.

Change in Employment and Income Scenario: For GNP ITI graduates, there's a slight increase in all three categories of employment status from immediately after training to the current situation. The percentage of those who opted for apprenticeships rose from 0.73% to 1.23%, employment increased from 7.1% to 9.56%, and self-employment grew from 8.82% to 16.18%.

In the case of GP ITI graduates, while there was no change in the apprenticeship rate, the employment percentage experienced a small increment from 6.15% to 9.23%. There was a significant increase in the self-employment category, going up from 13.8% to 21.54%.

For graduates of Private ITIs, the data indicates a substantial increase in the employment rate from 16.7% immediately after training to 25% currently. However, it's important to note that no graduates from Private ITIs have chosen either apprenticeship or self-employment in the current situation.

On the overall scale, while the rates for apprenticeship (from 0.61% to 1.03%) and employment (from 7.22% to 9.90%) witnessed small increases, the self-employment rate saw a larger rise from 9.28% to 16.49%. This trend suggests that more graduates are taking up entrepreneurial roles or creating their own employment opportunities over time.

ITI category-wise status of change in Income: Trainees largely transitioned from lower to higher income brackets, underscoring the effectiveness of ITI training in enhancing earnings. Notable shifts include a 35% reduction in trainees earning between Rs. 5000-Rs. 9999, a 5.4% increase in the Rs. 10000-Rs. 14999 bracket, a significant 26% rise in the Rs. 15000-Rs. 19999 range, and the emergence of trainees (1.5%) in the 'More than Rs. 30000' bracket, who were previously non-existent in this category. These trends collectively suggest a positive income progression among the trainees post-training.

Changes observed among trainees of GP ITI: Trainees from GP ITIs show a significant decrease in the lower income categories after training. The percentage of trainees earning Rs. 5000- Rs. 9999, Rs. 10000- Rs. 14999, Rs. 15000- Rs. 19999, and Rs. 20000- Rs. 24999 have decreased by 59%, 14%, 40%, and 5% respectively. This indicates a positive trend, as it suggests that fewer trainees fall in these lower income brackets post-training, pointing to an improvement in trainees' earnings. The higher income categories of Rs. 25000- Rs. 30000 and above Rs. 30000 do not show any change, indicating that these income slabs have remained relatively stable post-training.

Changes observed among trainees of GNP ITI: For trainees from GNP ITIs, there is a notable positive shift in income slabs. The percentage of trainees in the lowest income slab of Rs. 5000- Rs. 9999 has decreased by 33%, while the percentage in the Rs. 15000- Rs. 19999 slab has also decreased by 23%. This shows that fewer trainees are falling into these lower income categories after training, indicating a positive outcome from the training programs. The income slab of Rs. 10000- Rs. 14999 sees a minor decrease of 6.5%, implying that some trainees might be progressing to higher income brackets. The changes in income slabs Rs. 20000- Rs. 24999 and Rs. 25000- Rs. 30000 are minimal, suggesting a relative stability in these categories. Interestingly, the highest income slab sees a minor decrease of 1.8%.

Changes observed among trainees of Private ITI: The income trends for trainees from Private ITIs are a bit different. The lowest income slab of Rs. 5000- Rs. 9999 sees a decrease of 33%, indicating that fewer trainees are in this category after training. There is a substantial increase of 67% in the Rs. 10000- Rs. 14999 slab, suggesting that a significant proportion of trainees have moved into this income bracket from lower ones. However, there are no observed changes in the remaining income slabs (Rs. 15000- Rs. 19999, Rs. 20000- Rs. 24999, Rs. 25000- Rs. 30000 and above Rs. 30000), suggesting a stabilization of income for trainees in these categories.

Recommendations

Promoting Gender Diversity: Endeavours should be undertaken to foster gender diversity within both engineering and non-engineering trades. While engineering trades are primarily male-dominated, there are some where female involvement is observed. Building a supportive and inclusive environment, offering mentorship programs, and addressing gender biases can help attract more females to traditionally male-dominated trades in Tripura.

Strengthening Apprenticeship Programs: A minuscule percentage of ITI trainees in Tripura get the chance for apprenticeship, which poses a critical challenge in the state. There's a need to not only provide apprenticeship opportunities to trainees but also guide and inspire them to convert apprenticeships into permanent jobs.

Improving Employment Outcomes: Tackling the obstacles faced by ITI graduates in Tripura in obtaining suitable employment opportunities is crucial. Collaborations with industry partners and local businesses can help identify and bridge the skill gaps in the state's job market. In addition, career counselling, entrepreneurship training, and job placement assistance can support ITI graduates in securing regular employment or pursuing self-employment.

Enhancing Industry-Institute Collaboration: More intimate collaboration between ITIs and industries in Tripura can ensure the training programs align with industry needs. Regular industry visits, guest lectures, and industry-sponsored projects can enhance practical learning and improve the employability of ITI graduates. Feedback from industry should be sought to update the curriculum and training methodologies to meet the evolving needs of the job market.

Skill Development for Entrepreneurship: Fostering entrepreneurship skills among ITI graduates can create opportunities for self-employment and job creation in Tripura. Introducing entrepreneurship training modules within the curriculum and providing access to resources and mentorship for budding entrepreneurs can empower ITI graduates to start their own ventures and contribute to economic growth.

Continuous Monitoring and Evaluation: Regular monitoring and evaluation of ITI programs in Tripura, including employment outcomes, salary trends, and alumni feedback, are essential to identify areas of improvement and track the effectiveness of interventions. This data-driven approach can help in making informed decisions and implementing targeted strategies to enhance the quality and relevance of ITI training.

The absence of sufficient interaction between industries and ITIs in Tripura complicates the process of guaranteeing that all trainees secure job placements. It's thus vital to stimulate stronger industry engagement through initiatives such as On-the-Job Training (OJT) and Apprenticeships, which can contribute significantly to long-term industry involvement. Typically, ITIs in the state are constrained by issues like difficulty in identifying suitable local industries or companies for structured employment, unappealing placement offers, and limited resources to facilitate job placements. These obstacles negatively affect the employment prospects of ITI graduates.

To mitigate these challenges, it may be advantageous for the Tripura state government to issue directives and assist ITIs in identifying and establishing links with local industries and potential employers relevant to various trades. This could be achieved through the signing of Memorandums of Understanding (MoUs). The goal of these agreements could be to offer assistance in areas like on-the-job training, scheduling periodic visits from expert faculty, organizing industry or factory visits for trainees, as well as facilitating OJT and employment opportunities.

Recommendations Related to Scope of Rubber Industries in Tripura: Tripura's rubber industry holds significant potential, with 89,264 hectares of land under rubber cultivation and a total production of 93,371 tonnes. Tripura is the second-largest producer of rubber in the country, contributing to about 9% of total production, and the rubber industry impacts the state's economic progress. Nearly two lakh people in Tripura are either directly or indirectly associated with rubber cultivation, which enhances livelihoods for thousands of families. The rubber industry also holds potential for employing women as a skilled workforce. The state government has identified rubber plantation as a priority area for livelihood generation, and public sector units (PSUs) like the Tripura Forest Development Plantation Corporation Ltd. (TFDPC) and Tripura Rehabilitation Plantation Corporation Ltd. (TRPC) are working to enhance rubber plantation and sector growth.

The Directorate General of Training (DGT) under the Ministry of Skill Development & Entrepreneurship offers a Rubber Technician trade under Craftsmen Training Scheme (CTS). The course, which lasts for a year, includes both Domain area and Core area. The Domain area (Trade Theory & Practical) imparts professional skills and knowledge, while the Core area (Workshop Calculation science, Engineering Drawing, and Employability Skills) imparts requisite core skills, knowledge, and life skills. Considering the importance of the Rubber Sector in Tripura's economy and its potential for skilled manpower employment, it would be beneficial to introduce the Rubber Technician trade in the state's ITIs.

7. Successful Cases

Trainee Name	Name of the ITI	Gender & Caste	Trade	Current Salary	Company
Jemsh Debbarma	ITI Indranagar	Male, ST	Electrician	Rs. 10000	Aristo Texcon Pvt. Ltd.
Rakesh Barman	ITI Indranagar	Male, SC	Plumber	Rs. 15000	Bandhan Bank
Manabendra Sarma	ITI Dharamnagar	Male, Gen	COPA	Rs. 15000	Bandhan Bank
Ajoy Debbarma	ITI Indranagar	Male, ST	CH&NM	Rs. 14000	Eastern Technology
Kartik Das,	ITI Dharamnagar	Male, SC	COPA	Rs. 18000	Education Department
Joydwip Paul	ITI Teliamura	Male, Gen	Architectural Assistant	Rs. 16000	Hero Motors
Prasenjit Goala	ITI L.T. Valley	Male, Gen	Pump Operator-Cum-Mechanic	Rs. 26000	IDFC Bank
Santosh Saha	ITI Jatanbari	Male, Gen	Electronic Mechanics	Rs. 15000	Indus Towers Limited
Santosh Mohan Tripura	ITI Belonia	Male, ST	Surveyor	Rs. 9000	M/s Satish Prasad Construction
Anadhir Das	ITI Jatanbari	Male, SC	COPA	Rs. 18000	NEEPCO
Sourab Bhowmik	ITI Indranagar	Male, Gen	Plumber	Rs. 15000	ONGC
Ditan Debbarma	ITI Jatanbari	Male, ST	Surveyor	Rs. 14000	ONGC
Surajit Ghosh	ITI Teliamura	Male, OBC	Mechanic Diesel	Rs. 8000	ONGC
Suman Das	ITI Indranagar	Male, SC	Plumber	Rs. 15000	ONGC
Santanu Debbarma	ITI Teliamura	Male, ST	Mechanic Diesel	Rs. 10000	ONGC
Pranoy Debbarma	ITI Indranagar	Male, ST	Welder	Rs. 15000	ONGC
Dipjoy Das	ITI Teliamura	Male, SC	Mechanic Diesel	Rs. 30000	ONGC
Sumit Chakraborty	ITI Kailashahar	Male, Gen	COPA	Rs. 16000	RBL Bank
Premjit Singha	ITI Dharamnagar	Male, Gen	Fashion Design & Technology	Rs. 15000	Self-Employed
Bappaditya Tripura	ITI L.T. Valley	Male, ST	Pump Operator-Cum-Mechanic	Rs. 20000	Self-Employed
Shilpi Shil	ITI L.T. Valley	Female, Gen	Dress Making	Rs. 12000	Self-Employed
Rima Debbarma,	ITI Dharamnagar	Female, ST	COPA	Rs. 20000	Self-Employed
Animesh Sarkar	ITI Bishramganj	Male, SC	Surveyor	Rs. 30000	Self-Employed
Bishal Debbarma	ITI Indranagar	Male, ST	Plumber	Rs. 20000	Self-Employed
Priti Chakma	ITI Jatanbari	Female, ST	Surveyor	Rs. 10000	Self-Employed
Kuntal Bhattacharjee	ITI Indranagar	Male, Gen	Welder	Rs. 16000	State Bank of India
Biswajit Debbarma	ITI Teliamura	Male, ST	Mechanic Diesel	Rs. 14000	Tata Motors
Sanjib Gowala	ITI Indranagar	Male, SC	CH&NM	Rs. 15000	Tata Motors
Sankar Chowdhury	ITI Teliamura	Male, OBC	Architectural Assistant	Rs. 12000	Vedika Credit Capital

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