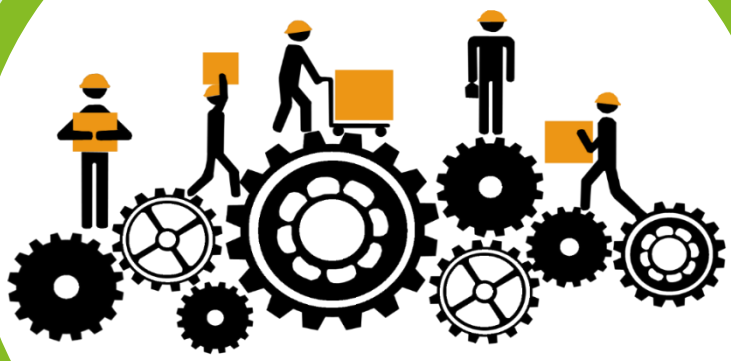
Tracer Study to Assess Employment Outcomes of ITI Pass Outs from Skills Strengthening for Industrial Value Enhancement (STRIVE) Project

Directorate General of Training (DGT),
Ministry of Skill Development and Entrepreneurship (MSDE)

May 2024



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Project Team
National Tracer Study Project
May 27, 2024

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List of Abbreviations

AVTS	Advanced Vocational Training Scheme
CAPI	Computer Assisted Personal Interviewing
CATI	Computer Assisted Telephone Interviewing
CSTARI	The Central Staff Training and Research Institute
CTA	Craftsmen Training Scheme
DGT	Directorate General of Training
DJSS	Directorate of Jan Shikshan Sansthan
DST	Dual System of Training
DVET	Directorate of Vocational Education and Training
FQ	Field Questionnaires
GIS	Geographic Information System
IBRD	International Bank for Reconstruction and Development
IC	Industry Cluster
IIE	Indian Institute of Entrepreneurship
IIS	Indian Institute of Skill
IMF	International Monetary Fund
IT	Information Technology
ITI	Industrial Training Institute
JSS	Jan Shikshan Sansthan
KIIs	Key Informant Interviews
KPI	Key Performance Indicator
MoU	Memorandum of Understanding
MSDE	Ministry of Skill Development and Entrepreneurship
NAPS	National Apprenticeship Promotion Scheme
NCVET	National Council for Vocational Education and Training
NEET	Not in Education, Employment or Training
NIESBUD	National Institute of Entrepreneurship and Small Business Development
NIMI	National Instructional Media Institute
NPIU	National Project Implementation Unit
NSC	National Steering Committee
NSDC	National Skill Development Corporation
NSDF	National Skill Development Fund
NSDP	National Skill Development Policy
NSQF	National Skills Qualification Framework
NSTI	National Skill Training Institute
OBC	Other Backward Classes
OJT	On-the-Job Training
PBGA	Performance-Based Grant Agreement

PDOT	Pre-Departure Orientation Training
PMKK	Pradhan Mantri Kaushal Kendras
PMKVY	Pradhan Mantri Kaushal Vikas Yojana
QA	Quality Assurance
QC	Quality Control
QMT	Quality Management Team
RDSDE	Regional Directorate of Skill Development and Entrepreneurship
SC	Scheduled Caste
SCTVET	State Council for Technical Education and Vocational Training
SOP	Standard Operating Procedures
SSCs	Sector Skills Councils
ST	Scheduled Tribe
STRIVE	Skills Strengthening for Industrial Value Enhancement
TCPC	Training, Counselling and Placement Cell
ToR	Terms of Reference
TVET	Technical and Vocational Education and Training
UT	Union Territory
VET	Vocational Education and Training

Executive Summary

Executive Summary

Education and skill development play vital roles in advancing a nation's human resources, thereby driving social and economic progress. Technical and vocational education forms the cornerstone of human resource development, with the Directorate General of Training (DGT) under Ministry of Skill Development and Entrepreneurship (MSDE) spearheading vocational training efforts through Industrial Training Institutes (ITIs) in India.

Study objective and Sample: To enhance the effectiveness and relevance of skills training provided by the ITIs, the DGT, with funding assistance from the World Bank is executing the Skills Strengthening for Industrial Value Enhancement (STRIVE) project in 500 ITIs across 34 states and Union Territories (UTs). As part of this initiative, a tracer study was commissioned to assess the employment outcomes of ITI pass outs, evaluate the impact of ITI training on job market, and gather feedback for enhancing training and placement processes. The study encompassed of 11,136 ITI pass outs from 424 STRIVE-supported ITIs across 33 states and UTs, employing a mixed methodology involving quantitative and qualitative analysis. Alongside ITI pass outs, the study also engaged 43 principals,156 employers, and representatives from 16 industry clusters to comprehensively evaluate the effectiveness of ITI training programs.

Key study findings:

Pass outs' profile - Out of the overall ITI pass outs covered, 67.7 per cent were from rural areas and 32.3 per cent were from urban areas. The proportion of male pass outs was higher (75.2 per cent) than female pass outs (24.8 per cent). Overall, about three-fourth (75.5 per cent) of ITI pass outs were from engineering-related trades out of which male pass outs were 89.4 per cent as compared to proportion of female pass outs at 33.5 per cent.

In the context of social distribution, 41.5 per cent of ITI pass outs belonged to Other Backward Classes (OBC) category, followed by 27.7 per cent from general category, 21.9 per cent from Scheduled Caste (SC) category and 7.9 per cent from Scheduled Tribe (ST) category. Age-wise distribution showed that 63.6 per cent of the ITI pass outs belonged to the age bracket of 18-21 years, followed by 27 per cent in 22-25 years age group, and 7.5 per cent above 25 years of age.

Analysis of ITI pass outs based on their **educational background** reveals that 54.3 per cent completed Class 12 prior to joining ITI, while 35.9 per cent had education up to Class 10, and a small fraction (7.2 per cent) completed a graduation or equivalent degree before enrolling into the ITI. Additionally, 80.6 per cent of ITI pass outs did not pursue further qualification post- ITI training. In terms of course duration, 57 per cent completed two-year course while 43 per cent completed one year course.

Regarding **family household income**, 36.2 per cent had reported monthly earnings between INR 10,001 and 20,000, followed by 26.6 per cent with income up to INR 10,000, while 17.8 per cent reported a monthly income of INR 20,001-30,000, ,7.3 per cent reported an income of INR 30,001-40,000 and 7.4 per cent reported more than INR 40,001. Approximately 4.7 per cent were unaware of their family household income.

Economically active/part of labour force pass outs – As per the definitions given in the Periodic Labour Force Survey (PLFS) Annual Report 2023, ITI pass outs engaged in any form of economic activity like wage employment, self-employment, apprenticeship or not engaged in any economic activity but actively seeking work (unemployed) were considered a part of the labour force, while those who were not engaged in any

form of economic activity and neither were available for work nor sought any work due to any reason including marriage, domestic duties, personal choice, being current students[1] etc. were classified as 'being out of labour force'.

Out of the 11,136 ITI pass outs surveyed, 9,495 (85.3 per cent) were economically active (i.e., part of the labour force), while 1,641 (14.7 per cent) were economically inactive (i.e., not available for work and were out of labour force).

Out of the total economically active ITI pass outs, 49 per cent (4,649 out of 9,495) were either into wage employment, self-employment, or apprenticeship. 31.6 per cent (2,997 ITI pass outs) were into wage employment, 7.9 per cent (749 ITI pass outs) were into self-employment and 9.5 per cent (903 ITI pass outs) were doing apprenticeship. The remaining 51 per cent were unemployed but available for wage employment or self-employment at the time of survey. The category-wise data of the above is as follows-

i. **Wage employed pass outs**: Within the economically active group (2,997 ITI pass outs), 31.6 per cent were wage-employed, with 20.6 per cent of females and 34.9 per cent of males engaged in wage employment. Among wage-employed ITI pass outs, 81.7 percent were from engineering trades and 18.3 per cent from non-engineering trades. Additionally, 46.1 per cent found employment within 1-3 months, with 45.1 per cent earning monthly income of INR 5,001 to 10,000 and 47.8 per cent earning above INR 10,000.
ii. **Self-employed pass outs** – Overall, 7.9% of economically active ITI pass outs were self-employed, with 9.5% females and 7.4% males in self-employment. In engineering trades, 6.9% were self-employed, compared to 11% in non-engineering trades. Among self-employed ITI pass outs, 20.4% initiated self-employment within the first month, and 24.2% and 32.7% within 1-3 months and 4-6 months, respectively. Further analysis shows that 12.6 per cent of pass outs and 13.5 per cent of pass outs took 7-12 months or more than 12 months to start their self-employment journey. Additionally, 58.9% earned monthly income of INR 5,001 to 10,000, while 41.1% earned above INR 10,000.
iii. **Apprenticeship** – Economically active ITI pass outs in apprenticeship accounted for 9.5 per cent, with a slight difference between females (9.5 per cent) and males (10 per cent). Among apprentices, 32.5 per cent commenced within a month of completing the course, while 19.8 per cent started within 4-6 months. In apprenticeships, 71.9 per cent of males and 65.2 per cent of females received stipends ranging from INR 7,000 to INR 10,000.
iv. **Unemployed** – Among the economically active ITI pass outs, 51% (4,846 ITI pass outs) were unemployed but actively seeking employment at the time of the survey. The primary challenges in securing employment included a lack of job opportunities in their hometown (56%), followed by dissatisfaction with offered salaries (42.1%), and a lack of information about job vacancies (37.8%).

Economically inactive/not part of labour force pass outs: Among those not part of labour force (1,641 ITI pass outs), 43.1 per cent were unwilling to work due to lack of interest in working or for personal reasons, including marriage related reasons. Around 31.4 per cent were pursuing further studies, 20.3 per cent were undergoing additional skill training, and 5.2 per cent were preparing for government jobs. A gender-wise analysis revealed that a higher proportion of males were pursuing further education (34.6 per cent) compared to females (25.0 per cent). Additionally, 6.1 per cent males were preparing for government while only 3.3 per cent of females were engaged in similar preparation.

Training relevance- Among the ITI pass outs surveyed 79.4 per cent believed that ITI training significantly contributed to their technical knowledge, while 76 per cent ITI pass outs felt that the training enhanced their soft skills and 73 per cent pass outs acknowledged enhancement in their IT skills. Additionally, 78.8 per cent of the respondents expressed satisfaction with the infrastructure at ITI. ITI pass outs from engineering (79.6

[1] Students includes those who were into further education, additional skill training and preparing from government jobs.

per cent pass outs) and non-engineering trades (76 per cent pass outs) reported alignment of ITI training with industry requirements.

On the Job Training (OJT): 54.2 per cent of the ITI pass outs covered under the study had undertaken on-the-job training (OJT), with 56.3 per cent male pass outs and 47.7 per cent female pass outs undertaking OJT. The percentage of ITI pass outs undertaking OJT from engineering trades was at 58 per cent as compared to 42 per cent from non-engineering trades. Among the ITI pass outs who had undertaken OJT, for about 46 per cent, the training duration was 1-2 weeks.

Placement methods: The most common method for securing placement was campus recruitment, cited by 74.4 per cent of respondents, followed by job fairs/rozgar melas (48.1 per cent). Additionally, 34.6 per cent of ITI pass outs independently contacted employers through walk-in interviews, online job portals, newspapers, etc., while 19.9 per cent got job through online state government job portals.

Employer Feedback: Under the study, 156 employers were interviewed to get their feedback and suggestion for the improvement of training in ITIs. Out of the total employers, 41 per cent mentioned a lack of interest among ITI pass outs for jobs as a recruitment challenge, followed by 34.6 per cent citing student's non-attendance at placement drives. Furthermore 45.5 per cent of employers rated the relevance of the ITI training to the actual skill requirement as average and 84 per cent of the employers emphasized the necessity of hands-on training for ITI pass outs for them to meet skills industry demands.

Inclusivity in hiring process: A notable observation was the commitment of many employers towards inclusivity by hiring female and Divyangjan ITI pass outs for apprenticeship, as reported by 51.2 per cent and 29 per cent employers, respectively. Moreover, 94.8 per cent of the employers expressed intent to continue hiring ITI pass outs in future with 94.2 per cent employers indicating their willingness to recommend hiring ITI pass outs to other employers as well.

Principal involvement and feedback: Principals played a pivotal role in the study, with 46 principals being interviewed. About 69.5 per cent noted an increase in overall ITI enrolment due to the support through the STRIVE project. They emphasized the significance of various interventions being carried out under the project targeted towards awareness generation and for greater mobilisation of trainees through social media platforms, IEC materials, and collaboration with officials and other local stakeholders.
Over 90 per cent of the principals observed a positive trend in female enrolment crediting measures like infrastructure upgradation, introduction of new trades, awareness campaigns, and provision of travelling allowance for OJTs to improve retention. Almost all the principals agreed with the effective role of rozgar melas, placement drives and of collaboration with industries in recruitment while stressing the need for continued efforts in these areas.

Key Recommendations: Based on the inputs received from the stakeholders during the study, the following could be helpful for enhancing the effectiveness of ITIs in delivering quality training:

- **Enrollment**
  - Implementing measures to boost female enrollment in the ITIs, such as introducing new courses, providing support for female candidates to ensure course completion, and establishing minimum targets for female enrollment in each ITI through enhanced collaboration with communities and key stakeholders.
  - Prioritizing courses that align with female employment opportunities and increasing seats in such courses based on local demand.
- **Training**

- Enhancing focus on developing soft skills and communication abilities as integral part of curriculum.
- Conducting refresher training and capacity building session for the ITI faculty members on advanced industry technologies and inviting visiting faculties / professionals from industries.
- Strengthening industry partnerships to implement the dual system of training - combining classroom training and practical training.
- Promoting online and digital learning for ITI students and trainers.
- Incorporating advanced courses in emerging areas like IoT, automation.

- **Infrastructure**
  - Review of equipment / machinery at the labs and upgrading them to align with industry standards.
  - Collaborating with industries to utilize their training facilities for providing advanced machines training to students.
  - State skill departments assessing the existing infrastructure in ITIs and allocating sufficient funding for upkeeping and maintenance.

- **OJT and Apprenticeship**
  - Providing travel allowance to students for OJT completion/ participation.
  - Inviting industry experts to deliver lectures at ITIs and to counsel the students on the long-term advantage of apprenticeship.
  - Linking OJT to issuance of NCVET trade certificate
  - Ensuring timely disbursal of stipend to the ITI pass outs and enhancing stipend rate.

- **Placement assistance**
  - Establishing a database of placed ITI pass outs by TCPC, including organization name, location, employment level and salary earned for at least two years.
  - TCPCs to ensure proper dissemination of information about job opportunities / Rozgar mela through various channels including email/WhatsApp.
  - Regularly counselling ITI pass outs about the benefits of employment continuity and career progression.

- **Certification and Overall skilling**
  - Incorporating industry representatives in the practical examinations at ITIs.
  - Aligning courses and trades with the needs outlined in District Skill Development plans.
  - Enhancing the monitoring system for ITIs to encompass key performance indicators.
  - Recognizing and rewarding exceptional performance by ITIs and faculty members.

The study is anticipated to provide valuable insight for policy formulation in skill development at ITIs and for the management of ITIs.

Introduction

Chapter 1: Introduction

Education and skills are crucial pillars for social and economic progress, especially for a developing country like India. Better educated and skilled people are imperative for a faster and more sustainable growth, both for the family and the nation. India, with nearly 65 per cent of population within the working age group, makes a perfect case for harnessing the demographic advantage of this young population. One of the ways to achieve this is through skill development and making available better earning opportunities. This would lead not only to individual growth of the youth, but also to the economic growth of country. The role of technical and vocational education, thus, becomes vital in developing human resources of the country by creating skilled manpower, leading to enhanced industrial output and improved quality of life.[2]

This chapter broadly presents the formal scenario of skilling interventions and development in India, with an introduction to Technical and Vocational Education and Training (TVET) and draws comparison to understand how India stacks up against other countries in terms of skilling of labour force. The long-term and short-term programmes undertaken by MSDE are discussed. Further, the chapter describes the functioning of ITIs, provides a brief description about the STRIVE project, highlights key take-aways from the state-wise tracer studies and provides the rationale for a nation-wide tracer study.

1.1 Background of the study

1.1.1 Need for skilling the youth

India has moved from being the tenth largest economy in the world to the fifth largest economy in the last ten years and aspires to become the third largest economy, with a GDP of $5 trillion, by 2027.[3] The global economy was projected to grow at the rate of 3.2 per cent in 2023, with large economies like China projected to grow at 4.4 per cent, the United States at 1 per cent, Japan at 1.6 per cent and the United Kingdom at 0.3 per cent. India, slated as one of the fastest growing economies, was projected to grow at 6.1 per cent in 2023 (IMF projections).[4]

India became the most populous nation in the world in 2023. According to UN projections, population of India was estimated at 1,429 million people, surpassing China's population of 1,426 million.[5] More than 62 per cent of India's population is part of the working age group, i.e., between 15-59 years of age. India's future growth is dependent on investment in its human capital. However, India's working-age population is behind other nations in terms of attainment of formal skill training. Only 4.9 per cent of the country's workforce has undergone formal skill training, which pales in comparison to the developed nations, such as the United States of America (52 per cent), the United Kingdom (68 per cent), Germany (75 per cent), Japan (80 per cent) and South Korea (96 per cent).[6]

Skill development plays a pivotal role in the economic growth of a country. It requires close coordination with other economic growth strategies. To address the challenges of skilling and improve the skilling landscape in the country, National Skill Development Policy (NSDP) was formulated in 2009, followed by new NSDP in 2015. The objectives of the NSDP 2015 are to provide an umbrella framework to all skilling activities carried out in the country, to align them to common standards, to link the skilling with demand

[2] https://dtetodisha.gov.in/wp-content/uploads/2023/05/Pass outs-ITI-Report_13.05.2023_1.pdf
[3] https://indbiz.gov.in/india-to-become-a-us-5-trillion-economy/
[4] Economic Survey of India (2022-23)
[5] https://www.un.org/development/desa/dpad/publication/un-desa-policy-brief-no-153-india-overtakes-china-as-the-worlds-most-populous-country/
[6] National Skill Development Policy 2015. https://www.msde.gov.in/sites/default/files/2019-09/National%20Policy%20on%20Skill%20Development%20and%20Entreprenurship%20Final.pdf (Accessed on 17.01.2024)

centers and to identify various institutional frameworks which can act as vehicles to reach the expected outcomes. NSDP 2015 provides clarity and coherence on how skill development efforts across the country can be aligned within the existing institutional arrangements. One of the key objectives of the policy is to safeguard the skilling needs of the women, Scheduled Castes (SCs), Scheduled Tribes (STs), Other Backward Classes (OBC)s, minorities and Divyangjan, as well as of those living in remote areas.

1.1.2 Short-term and long-term skill training programmes – Role of MSDE

The Department of Skill Development was created on 31st July 2014, and later converted to Ministry of Skill Development and Entrepreneurship in November 2014. For the first time, a Ministry focussed on skill development and entrepreneurship was formed, with the objective of enhancing employability of the youth through skill development. The MSDE is responsible for co-ordination of all skill development efforts across the country; removal of disconnect between demand and supply of skilled manpower; building a vocational and technical training framework; skill upgradation; building of new skills; and innovative thinking, not only for existing jobs but also for jobs that may be created in future.

MSDE aims at skill development on a large scale with speed and high standards in order to achieve its vision of a 'Skilled India'. It is aided in these initiatives by its functional arms –DGT, National Council for Vocational Education and Training (NCVET), National Skill Development Corporation (NSDC), National Skill Development Fund (NSDF), Sector Skill Councils (SSCs), National Skill Training Institutes (NSTIs), and Industrial Training Institutes (ITIs) under DGT, and other institutions like Central Apprenticeship Council. The MSDE has initiated multiple programmes to provide skill training to the youth of the country through skilling initiatives. Some of the major programmes under the Skill India Mission are depicted in Figure 1.

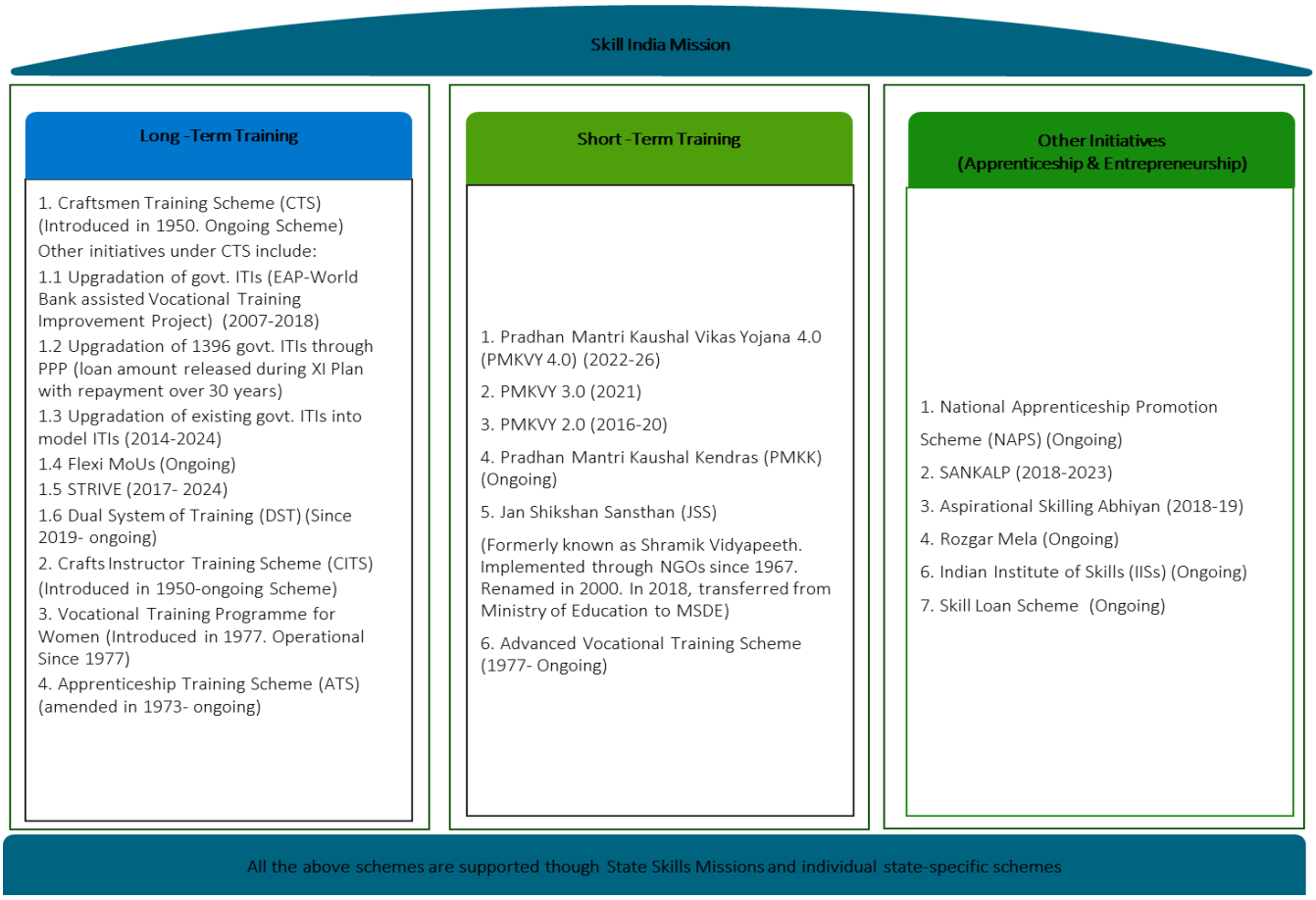


Figure 1: Major Skill Development Programmes under Skill India Mission

1.1.3 Industrial Training Institutes: Government and Private

The DGT in MSDE is the apex organisation for development and coordination of the programmes related to vocational training at the national level at ITIs. Established in the 1950s, ITIs are a major component of the long-duration VET system in India. ITIs are responsible for delivering vocational training through one-year and two-year courses under Craftsman Training Scheme (CTS). The training courses in ITIs are designed to impart skills and knowledge, mainly in engineering trades, to prepare trainees for employment as semiskilled/skilled workers in industrial set-ups or for self-employment.[7] Among the most popular trades chosen at ITIs are Electrician, Fitter, Machinist, Welder, Mechanic Motor Vehicle, Draughtsman, etc. Non-engineering trades like Cosmetology, Cutting and Sewing, Dress Making, Food Production Technology (general), Baker and Confectioner, etc. are also offered at several ITIs. While NCVET prescribes the standard vocational training curriculum that makes up the content of the CTS at the national level, the states are entrusted to monitor the implementation of the curriculum at ITIs.

[7] https://dgt.gov.in/Strive. Accessed on 19.1.2024

1.1.4 About STRIVE project

The key objective of STRIVE project is to improve the relevance and efficiency of skills training provided through ITIs and apprenticeships.[8] It aims to do so by establishing outcome-focussed training, and by enforcing cross-sectoral and nationally and internationally acceptable standards for skill training by creating a sound quality assurance framework. STRIVE project has four results areas:

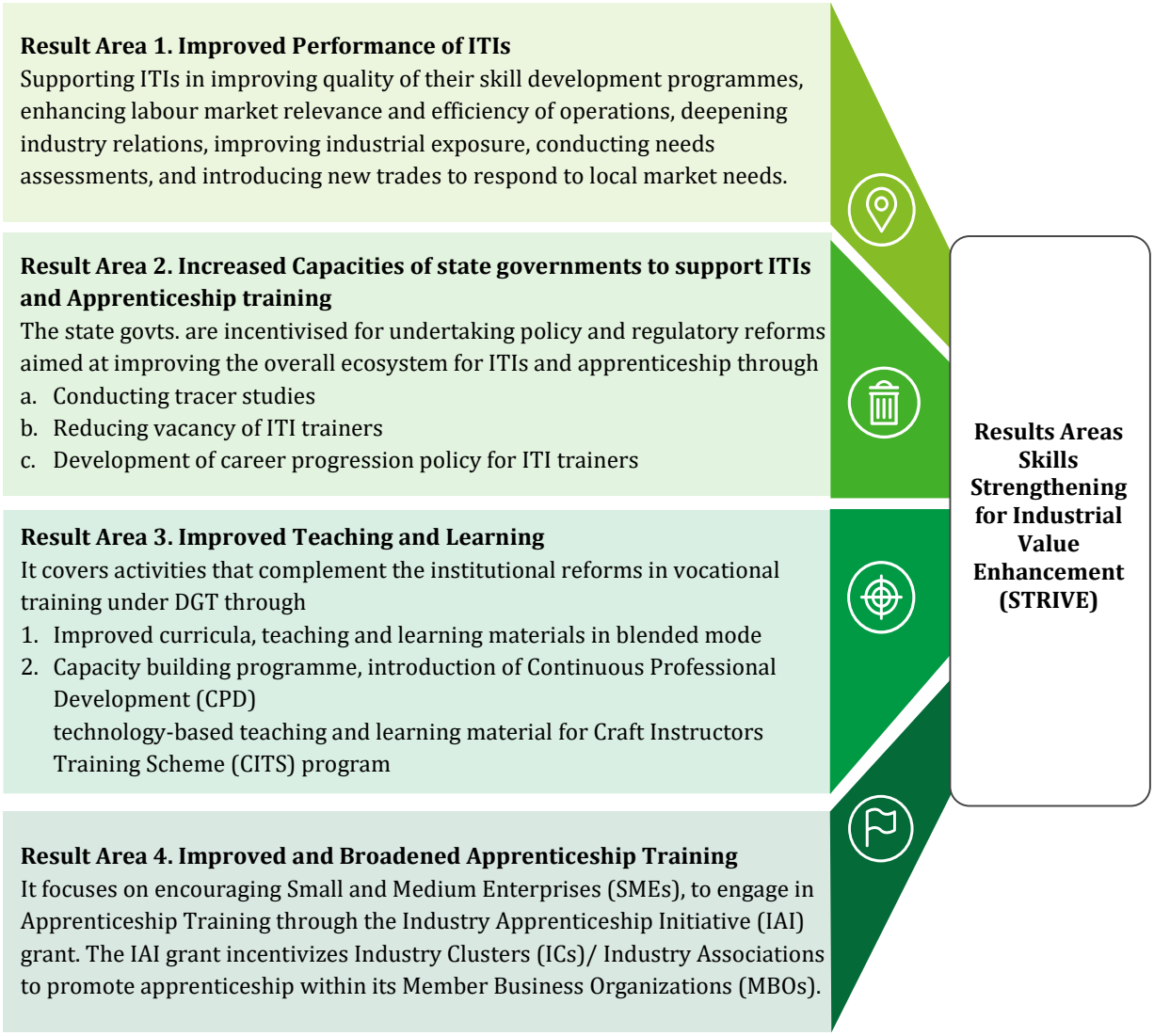


Figure 2: Outcomes of STRIVE project

[8] STRIVE Operational Manual.

1.1.5 Key takeaways from the state-wise tracer studies

This section presents a brief overview of the outcomes of tracer studies conducted by states under Result Area 2 of the STRIVE scheme.

Context: 14 states have undertaken tracer studies of ITI pass outs with the objective of assessing the training quality and outcomes in terms of placement. The table below presents a summary of state-level tracer studies:

Table 1: Details of 14 state-level tracer studies

S. No.	State	Year of report publishing	Sample size	ITIs sampled	Trades covered (No.)
1.	Assam	2023	367	10	30
2.	Goa	2023	200	8	20
3.	Haryana	2020	2,005	94	41
4.	Himachal Pradesh	2021	1,129	36	34
5.	Maharashtra	2021	25,459	878	63
6.	Meghalaya	2023	381	12	19
7.	Mizoram	2023	735	3	23
8.	Nagaland	2023	201	10	17
9.	Odisha	2022	8,090	49	29
10.	Puducherry	2023	1,433	15	22
11.	Rajasthan	2023	9,012	167	29
12.	Telangana	2022	4,482	34	20
13.	Tripura	2023	486	10	22
14.	Uttarakhand	2023	738	36	24

Key suggestions from tracer studies

A) Training related

- The course curriculum needs to be more market-oriented, which is critical to bridging the gap between skills for which training is imparted and those required by the industry. Collaboration and partnership with industries and, if need be, re-framing the course contents and training to suit the needs of industries emerged as the need of the hour.
- There is a need for integrating TVET offerings with the overall trends in skilling and employment. It is important to align the courses and trades with the respective overall district skill development plans, as recommended in tracer studies of states like Odisha and Meghalaya. The annual district skilling plans should be formulated keeping the local industry trends in consideration.
- Soft skill training modules must encompass personality development of trainees, which must include important professional skills such as communication skills, ways of dealing with clients, ability to work under pressure, discipline, professional dressing sense, etc.
- It is important to leverage digital content and virtual training to improve overall training quality.
- There is a need to consider strengthening pedagogical approaches and introduce new methodologies for soft skills and for enhancing work readiness. Shop floor discipline is a key soft skill requirement, along with safety, work ethics, punctuality, personal appearance and ability to adjust to the work environment.

B) Employment/placement related

- It is important to engage in discussions with employers to understand the placement channels, i.e., online, local agencies, newspaper advertisements or private contractors.
- There is a high potential for job creation in sectors like renewable energy, service sectors and semi-conductor industry. The players in these sector need to be connected with the placement cell in ITIs for better employment opportunities for the ITI pass outs.
- The placement cell of ITIs should be revamped and become proactive in organising career fairs, orientation meetings, internship fairs for the students to have access to a wider variety of placement options/channels.
- The state government should issue guidelines and assist ITIs in their states in mapping local industries/potential employers for various trades and sign MoUs with industry players. The purpose of such MoUs could be to seek assistance with OJTs, periodical visit of guest faculty, industry visits for trainees, and for assistance with internships and jobs.
- The role of the TCPC should be broadened to include acting as incubation centers providing technical and financial guidance to students for setting-up businesses by availing subsidised loans under various schemes such as Mudra Loans. The TCPC officer should also guide and assist the passouts in setting up of their buseinses enterprise.

1.1.6 Rationale For the national tracer study

The key objective of STRIVE is to improve the relevance and efficiency of skill training provided through ITIs. To assess the performance of ITIs in terms of teaching learning process, connect of curriculum with industry needs, and modernisation of infrastructure, state level tracer studies have been conducted in the recent years. However, the sample size of such studies is limited to the state ITIs.

Further, the previous national level tracer study was conducted for the ITI pass outs of 2012 batch under the World Bank funded - Vocational Training Improvement Project (VTIP). The study covered 11,028 pass outs from 500 ITIs spread over 20 states.

As a part of its continuous pursuit towards betterment of teaching and learning methods and as per the objectives of the STRIVE scheme, DGT commissioned the current tracer study of ITI pass outs from project ITIs spread across the country to understand their career progression in the labour market.

Approach and Methodology of the study

Chapter 2: Approach and Methodology

2.1 Objectives of the study

The tracer study has been conducted in pursuance of the following broad objectives:

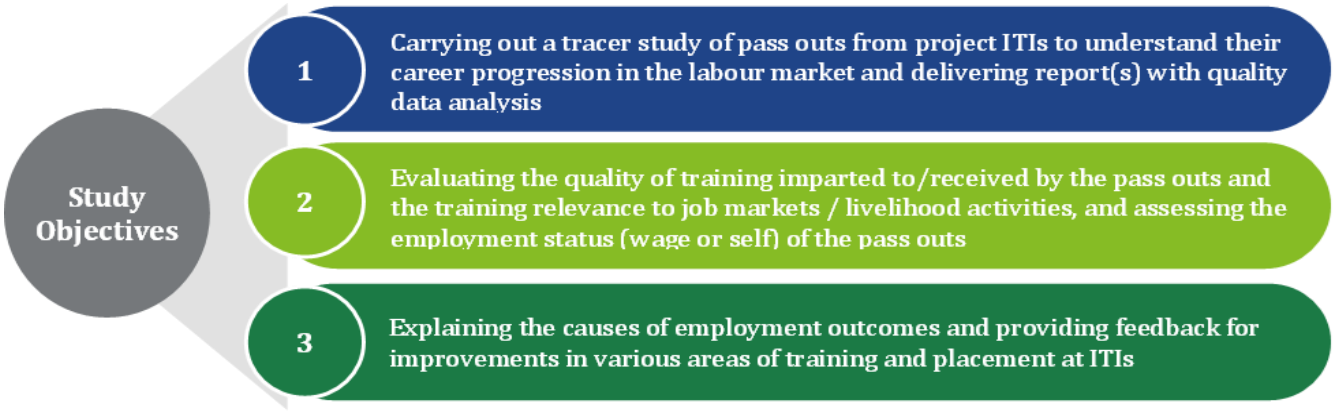


Figure 3: Objectives of the study

2.2 Scope of work

The study attempts to assess the impact of trainings on the ITI pass outs and also identifies the various enablers and barriers that affect their ability to secure employment. Additionally, the study involved assessing the relevance and quality of training, OJT status, employment opportunities, previous experience, unemployment and challenges faced in job search. To address the objectives of the study, the following key target respondents and indicators were covered in the scope of the study -

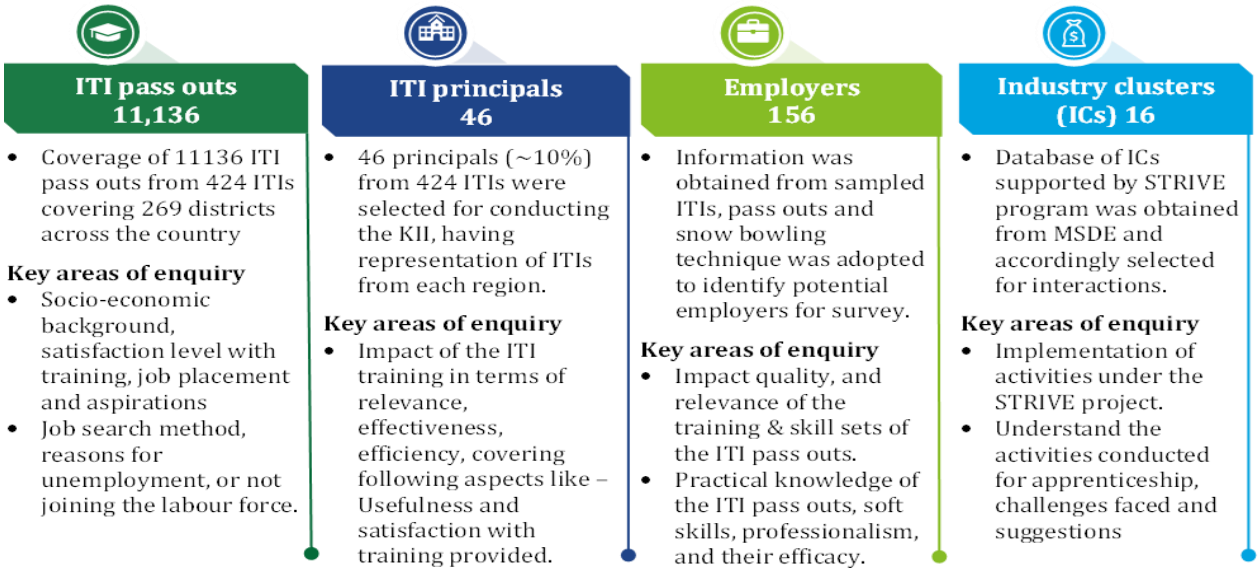
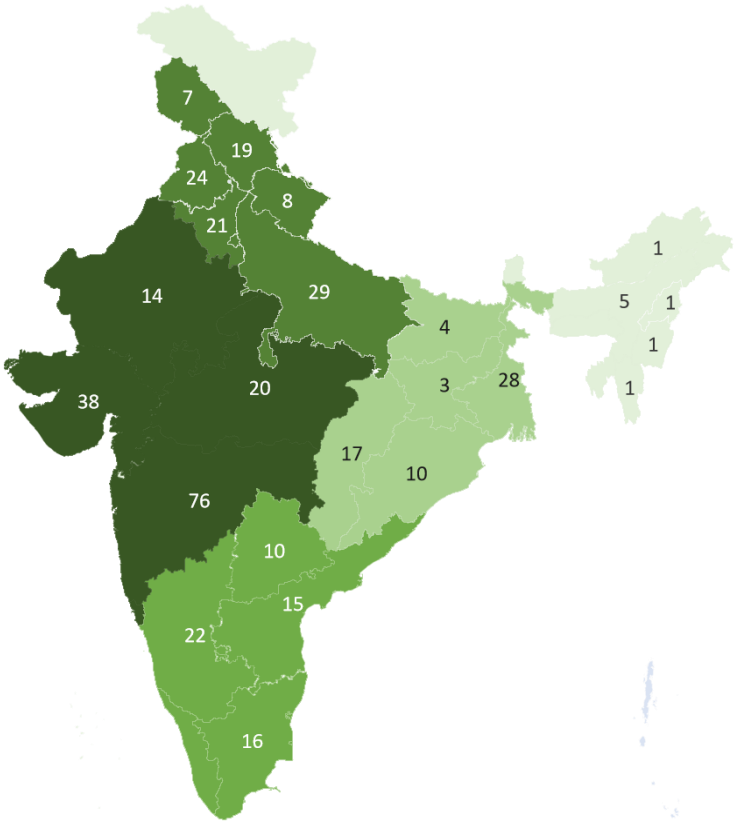


Figure 4: Scope of work

A region-wise distribution of the ITIs across states is provided below. A state/UT-wise distribution of districts and ITIs covered has been provided in **Annexure I**.



Sr.No	Regions	Count of ITIs	Colour Code
1	North-East Region	14	
2	East Region	62	
3	South Region	85	
4	North Region	113	
5	West Region	150	
Total		424	

Figure 5: Geographical scope

2.3 Study approach

To achieve the scope and objectives of the study, a participatory and consultative[9] mixed-method approach was deployed. Participatory approaches allow for the collection of qualitative insights that go beyond quantitative metrics, providing a holistic view of the participants' experiences, while consultative approaches allow for the collection of feedback on the programme's strengths and weaknesses, informing future programme design and improvements.

The study comprised of both secondary research and primary research.

[9] https://www.iied.org/sites/default/files/pdfs/migrate/9095IIED.pdf

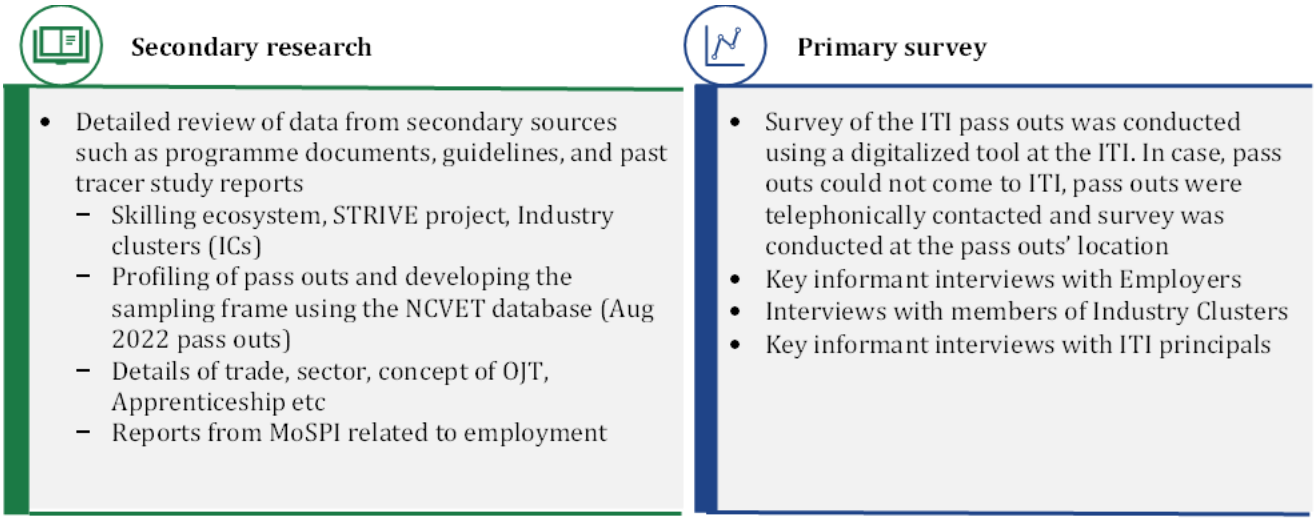


Figure 6: Scope of secondary and primary approaches

2.4 Sampling framework and coverage

A sample of 11,136 ITI pass outs was covered across 424 (80 per cent) out of 500 ITIs under the project spread over 269 districts. The study was conducted across the project ITIs to assess the impact of long-term training interventions on students who completed their ITI training in August 2022 (batch of 2021-22 for the one-year course and batch of 2020-22 for the two-year course). This section outlines the stakeholders and sample covered for the study.

A. Selection of ITIs: The first stage of sampling involved selection of ITIs for the quantitative study.

Calculating the sample size in terms of number of ITIs

To provide reliable estimates with a high precision level, the following calculation for sample size has been made:

Where n = estimated sample size

$$n = \frac{t^2 \times p(1-p)}{m^2} \times df$$

t = Z value at 95% confidence level (1.96)
p = population proportion (assumed as 50%)
m = margin of error (assumed as 5%)
df = design effect (considered as 2)

Using the above formula and considering the universe of STRIVE ITIs **as 500**, the minimum sample size came **to 218.** However, considering the district level variations among ITIs, to account for the range of enrollment, and considering trades diversity, as well as to include larger SC/ST/ People with Disability (PwD)/women representation, a larger sample of **424 ITIs (85 per cent of 500 ITIs**) was selected for this tracer study **across 269 districts**. Therefore, the number of ITIs covered under the study is statistically significant.

Further, **the sample of ITIs** was categorised into five **groups based on the range of enrollment** and a sample **of 11,136** ITI pass outs were selected from across these 424 ITIs.

B. Selection of ITI pass outs: A stratified sampling[10] approach was adopted to ensure representation of various categories in terms of rural-urban divide, social categories, trades, education levels, gender, etc.

- The database of the ITI pass outs who completed their training in August 2022 (batch of 2021-22 for the one-year course and batch of 2020-22 for the two-year course) was obtained from DGT and the required stratification was done.
- The universe of ITI pass outs from STRIVE ITIs was 1,14,716 for 2022; the sample calculation was done at 95 per cent confidence level and ±1 per cent margin of error which translated into a minimum sample size of 8,863 pass outs for conducting the survey.
- The stratification of the sampling frame was done at multiple level to provide adequate representation of the population to cover data based on gender, caste, location (rural/urban), education level, and household economic status.
- Approximately 5-10 per cent of enrollment was covered as sample to ensure representation from each of the strata. Hence, the total ITI pass outs sample came to 11,136 pass outs.

The table below represents the break-up of sample based on the number of pass outs from the project ITIs.

Table 2: ITIs sample distribution

Enrollment range of pass outs	Number of ITIs as per the enrollment range	Sample size chosen per ITI	Total pass outs sampled
1-100	69	20	1380
100-250	192	20	3840
250-500	109	26	2834
500-1000	52	55	2860
>1000	2	111	222
Grand Total	**424**		**11,136**

- The weights have been implicitly assigned to larger ITIs through the design of the sampling frame.
- Stratified random sampling approach was adopted to select the pass outs with an effort to ensure representation of all major strata of the population at the state level.
- To accommodate the cases of refusal and of untraceable pass outs, the study captured an additional ~10 per cent buffer sample at an overall level.
- In case of shortfall in a particular ITI, efforts were made to cover the shortfall from another ITI within the same district.

For the sample to be representative for each strata at the state level, an attempt was made to select a sample from each category.

[10] https://online.stat.psu.edu/stat506/lesson/6/6.1

Figure 7: Sample classification under categories

Additionally, the study included participants from other groups such as employers, members from industry clusters, and principals of the sampled ITIs.

C. Selection of employers: Information on employers was obtained from sampled ITIs, and a snowball sampling technique was used to identify other potential employers for interviews. Employers were shortlisted only if they had recruited a minimum of 15 ITI pass outs in the recent past. Key Informant Interviews (KIIs) were conducted with 156 employers meeting the above criteria. The sample covered employers spread across 15 states/UTs and included representation from MSMEs as well.

D. Selection of industry clusters: The database of all industry clusters supported by the STRIVE programme was obtained from DGT, and KIIs were conducted with representatives of 16 industry clusters.

E. Selection of ITI principals: A sample consisting of 46 principals (10 per cent of the 424 sampled ITIs) were considered for conducting KIIs, spread across 9 states/UTs. If a principal was unavailable for the interview, an official nominated by the principal was interviewed.

Sector-wise coverage of employers, state-wise coverage of ICs and principals has been provided in **Annexure II.**

2.5 Study framework

The study focussed on assessing the below-mentioned key information areas to achieve the objectives of the study. The data collection was aligned with these information areas.

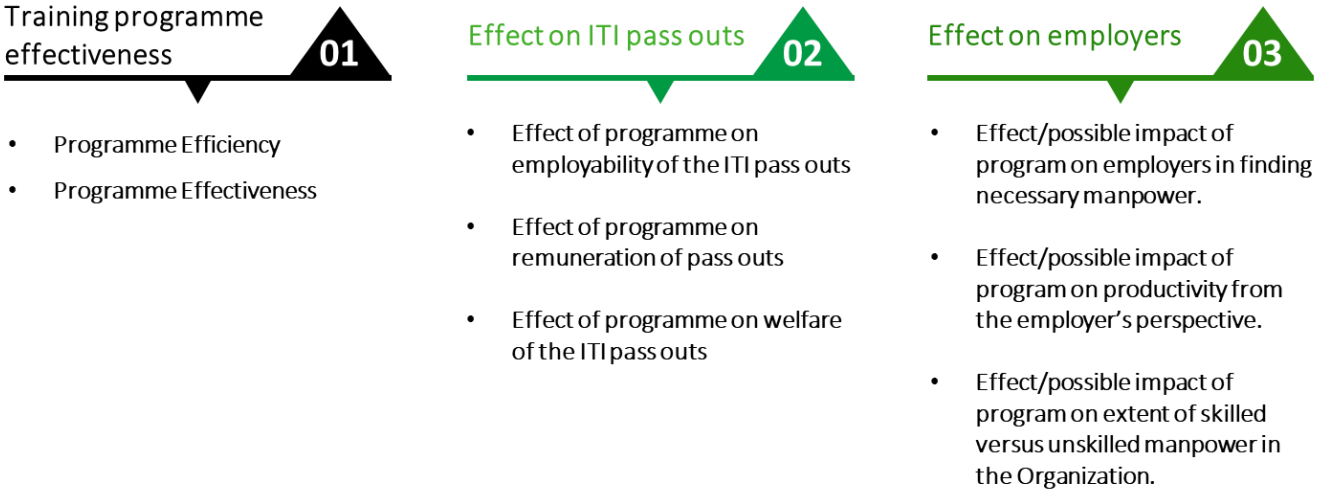


Figure 8: Key information areas

The following key indicators were assessed in passout questionnaire (detailed stakeholder questionnaire is provided in **Annexure III)**:

Socio-economic profile
- Gender, age, marital status
- Education
- Social category
- Household income

Training details
- Type of ITI and trade of training, duration
- OJT
- Placement cell and counsellor, placement assistance
- Satisfaction and suggestion

Employment details
- Previous employment experience before joining ITI
- Current employment outcome- wage, self or apprenticeship
- Time taken
- Duration of work
- Income
- Reasons for unemployment

Perception on training programme
Infrastructure availability for women/SC/ST/Divyangjan ITI pass outs

Note: The data collection for the tracer study was done after one year of passing out of 2022 batch students, i.e., from August 2023 till December 2023. The primary survey of pass outs focussed on the employment outcomes from the time they passed out till the date of interview.

2.6 Work Plan

The study was executed in a phased manner with the following four phases.

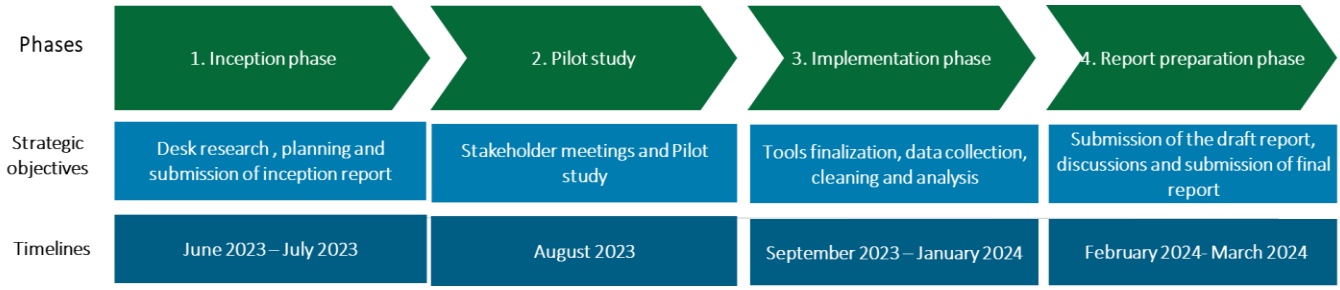


Figure 9: Timelines and phases - Execution of the study

2.7 Tools for the study

Development of data collection tools: In designing the questionnaire, adherence to the principles of good questionnaire design[11] was ensured. Some of these principles included:

- Ensuring short questions
- Using simple language throughout the questionnaire
- Providing clear and simple instructions for completion where necessary
- Structuring questions in a pre-coded prompted nature

Four sets of questionnaires were developed (refer section 2.4.). One structured questionnaire was administered to ITI pass outs, and another questionnaire/interview guide was developed for KIIs with employers. There were separate sets of questionnaires/semi-structured interview guides for ICs and principals of ITIs respectively.

Data collection tool: The study team used a mobile application for the data collection process with the ITI pass outs and for KIIs with employers. The salient features of the data collection tools are given below:

[11] https://thedocs.worldbank.org/en/doc/20f02031de132cc3d76b91b5ed8737d0-0050012017/related/lecture-4-1.pdf

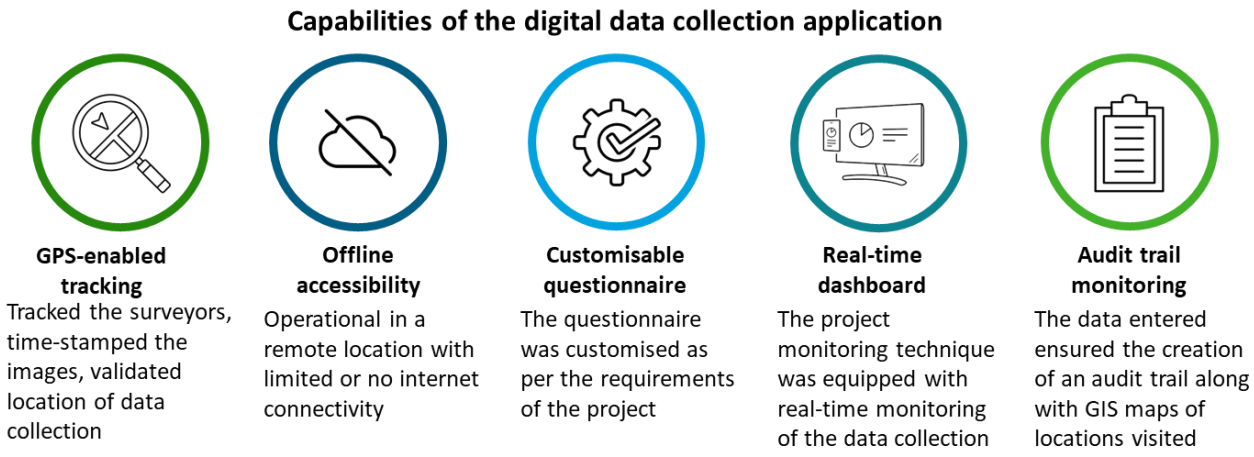


Figure 10: Capabilities of the data collection tool

Extensive use of technology and telephonic reach: To cover the required number of samples, the team reviewed the existing database of the ITI pass outs from August 2022 batch from the selected project ITIs. After mapping the candidate locations, a comprehensive field plan was made and field visits were scheduled. The customised online data collection tool was mapped with the enumerators deployed in the study. The survey application could be accessed only by the enumerators having valid user credentials.

2.8 Tool testing

Pre-testing of questionnaires: Following the finalisation of the sample frame, 5 per cent of the sample was selected for pre-testing the questionnaires and conducting a pilot survey.

As a part of the pilot testing, quantitative surveys were conducted among the sample ITI pass outs and qualitative feedback was gathered from both ITI principals and employers during the months of August-September 2023.

1. Questionnaire-based survey was carried out with a sample of 550 ITI pass outs (representing about five per cent of the total sample size of 11,136 pass outs) from 78 ITIs spread across 18 states. Please refer to district-wise ITI coverage in **Annexure-IV**.
2. Qualitative surveys in the form of stakeholder interviews were conducted with five principals, four employers and one IC. Details of samples covered in the pilot stage is provided in **Annexure IV**.

The pilot was conducted by the field team with the objective of ensuring that the questions were appropriately worded for easy comprehension from the respondent's viewpoint. The findings of the pilot were collated and necessary modifications in the questionnaire were done. The finalised questionnaire was used for the main survey.

2.9 Data collection

Development of training manuals: A training manual was developed for enumerators on using the quantitative survey tool.

Recruitment and training of the field team: The enumerators were selected based on their knowledge of specific geography, prior experience in interviewing respondents for surveys, and familiarity with mobile-based data collection tools. A total of 176 team members were deployed for data collection, with one

supervisor assigned for each state. The main data collection took four months(September 2023 to January 2024).

A training programme was organised for the enumerators by the study team. The training programme was conducted in batches for a period of two days. The training batches were grouped based on zonal distribution of states and commonality of language. On the first day of the training enumerators were briefed about the study background, objectives, sampling methods and questionnaires. On the second day mock calls were conducted, doubts were clarified and orientation session was organised to familiarise the enumerators with the mobile application for data collection.

Fieldwork for the main survey: The fieldwork was launched as per the field implementation plan immediately after the completion of enumerator training. While undertaking a Computer Assisted Personal Interviewing (CAPI) survey, an additional task was to maintain a log of the beneficiaries surveyed and their contact details (the identity number of the questionnaire, the location details – state, district, ITI names, employer name, and the telephone number). Informed consents were taken before each interview.

The survey process included the following steps:

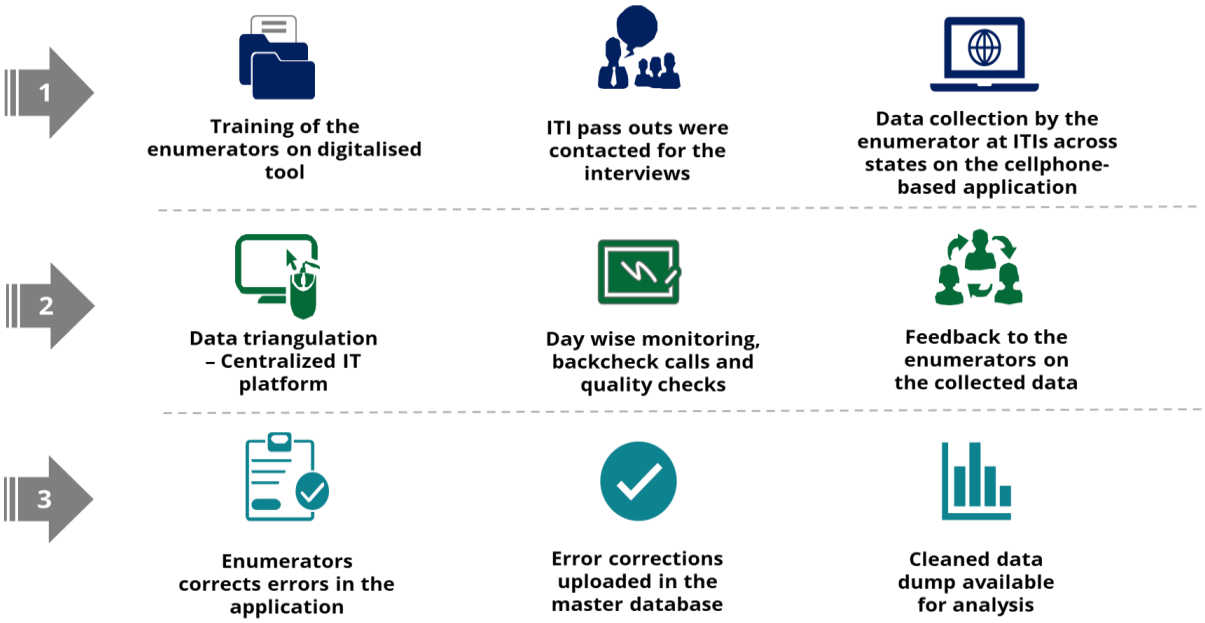


Figure 11: Steps undertaken to conduct surveys

2.10 Data privacy

Arrangements were made by the study team for ensuring security and privacy of the data collected, stored, and analysed. The entire process of data collection was encrypted, the data was uploaded on a secure server and was user restricted and the access was password-controlled. The following were some of the key components for data security:

- Systems for survey software security
- Server security procedures and processes
- Network isolation
- Respondent security

- Hardware redundancy and recovery procedures
- System back-ups

The secure process followed for data collection through the survey application is presented below:

1. The survey application for quantitative tools was developed and tested for security.
2. For each enumerator, user login credentials were created and mapped to their respective states. This ensured that enumerators could view the information only for their respective states.
3. The personal information of the pass outs from the database was pre-fed into the survey form, hence it was auto filled during the interview, and was only verified by the enumerators.
4. At the server end, only the authorised team members had the permission to download/upload data/ applications.
5. Enumerator had uploading rights only. The downloading rights through the main dashboard were provided to authorised team members through password protected login credentials.

Setting-up the server: The systems that were used for the server were protected against unauthorised access. The online survey systems functioned from a network of high-performance web and database servers.

Daily synchronisation of data in the server: At the end of the day or once the interview was over, the interviewer had to synchronise the device which would transfer, or upload data to the server through a secure file transfer protocol.

Data privacy of sensitive personal information: The privacy policy for use of personal information was strictly followed as per the standard privacy protocols.

- Only relevant personal information necessary for the purpose of the study was collected.
- The survey did not capture sensitive personal information like financial details or any identity documents or details (Aadhar, PAN, voter card, etc.).
- The database was encrypted and shared with the intended stakeholders along with a disclaimer that "data sets have Personally Identifiable Information (name, mobile number, gender, etc.) of the stakeholders as per the requirements of the study, hence it is requested not to share it with any third party in order to protect the identity of the individuals".

2.11 Data analysis and reporting

Data analysis: The analysis of the quantitative data was undertaken after the development of the analysis plan for each of the questionnaires/respondent categories. It focussed on process and outcome indicators, along with findings.

Submission of report: A detailed chapterisation plan was prepared before developing the report. The chapterisation followed the outcomes expected from the programme and the key indicators to be measured through this study.

2.12 Quality assurance

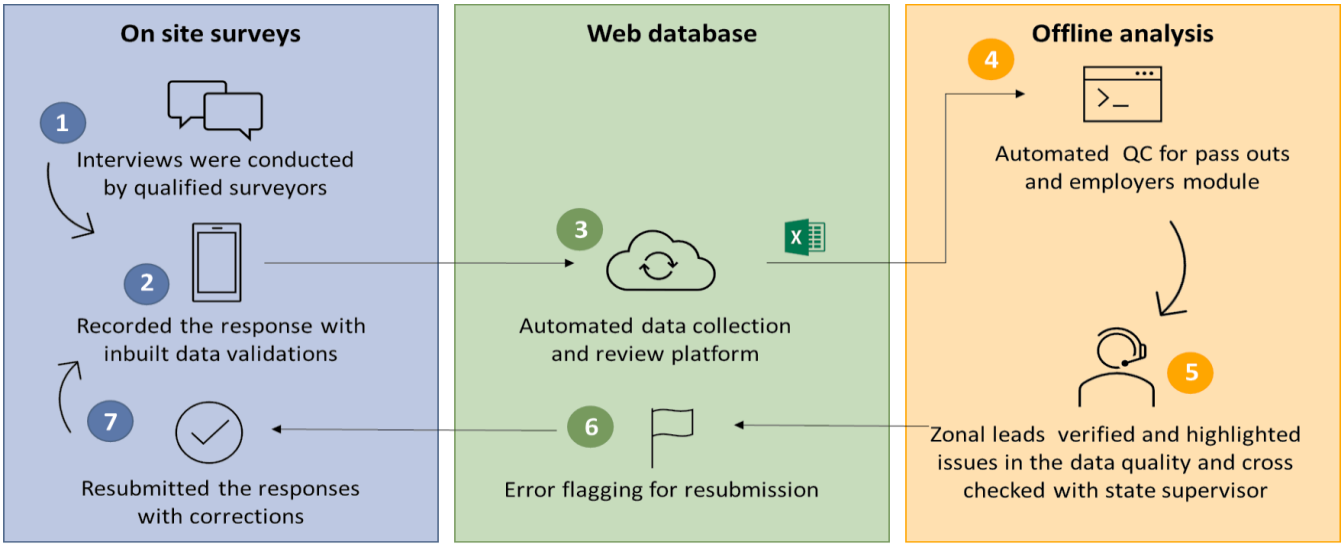


Figure 12: Quality assurance mechanism

A robust quality assurance mechanism was put in place for quality output in accordance with the survey requirements.

Field data collection – Extensive training and capacity building of the field staff i.e. both enumnerators and supervisors was done. Periodic feedback sessions and refereshser trainings were also conducted so that the quality of the data collected was mainitined.

Quality assurance was done on two levels: survey monitoring and response monitoring.

Figure 13: Levels of survey monitoring and response monitoring

Data analysis – Triangulations and cross-verifications were done to identfy the outliers and data discrepancy. Two levels of reviews were conducted for the data analysis.

2.13 Limitations of the study

Dependency on primary data: Interactions were conducted with the stakeholders (ITI pass outs, principals, employers and ICs) who voluntarily participated in the data collection process. As the information was provided orally, unintended accuracy, recall lapses and casual approach on the part of the respondent is likely to some extent.

Nature of survey data: The data collection was done from September 2023 till January 2024. The employment status of the student was recorded as on the day of interview and a possibility of change in status afterwards remains.

Employer Survey: Employers fulfilling the criteria of employing a minimum of 15 pass outs were identified based on the snowballing technique and on information collated in discussion with ITI principals and pass outs.This criterion might have impacted the selection of employers representing sectors and geographies.

Shortfall in sample coverage: To counter the shortfall in the sample coverage either due to low attendance, refusals or unreachable numbers, the enumerators had contacted the pass outs over telephone to ensure their turn-out on the day of the survey at the agreed location. Also, in case of shortfall in a particular ITI, efforts were made to cover the shortfall from another ITI within the same district. In the absence of any sampled ITI within the same district, the shortfall was compensated for from any other ITI at the state level.

Profile of ITI Pass Outs

Chapter 3: Profile of ITI Pass Outs

This chapter provides the profile of ITI pass outs and their trades. It includes details on gender, location, region, type of ITI, household income, course (including duration) and educational levels. Additionally, profile of *Divyangjan ITI pass outs* is also presented in this section.

3.1 Overall profile of STRIVE ITI pass outs (population universe of the ITI pass outs)

Within the framework of STRIVE, there are around 424 supported ITIs with a combined enrollment of 1,14,715 students. This section provides an overview of the total STRIVE ITI pass outs, distributed across various types of ITIs, locations, trades, social categories and course durations.

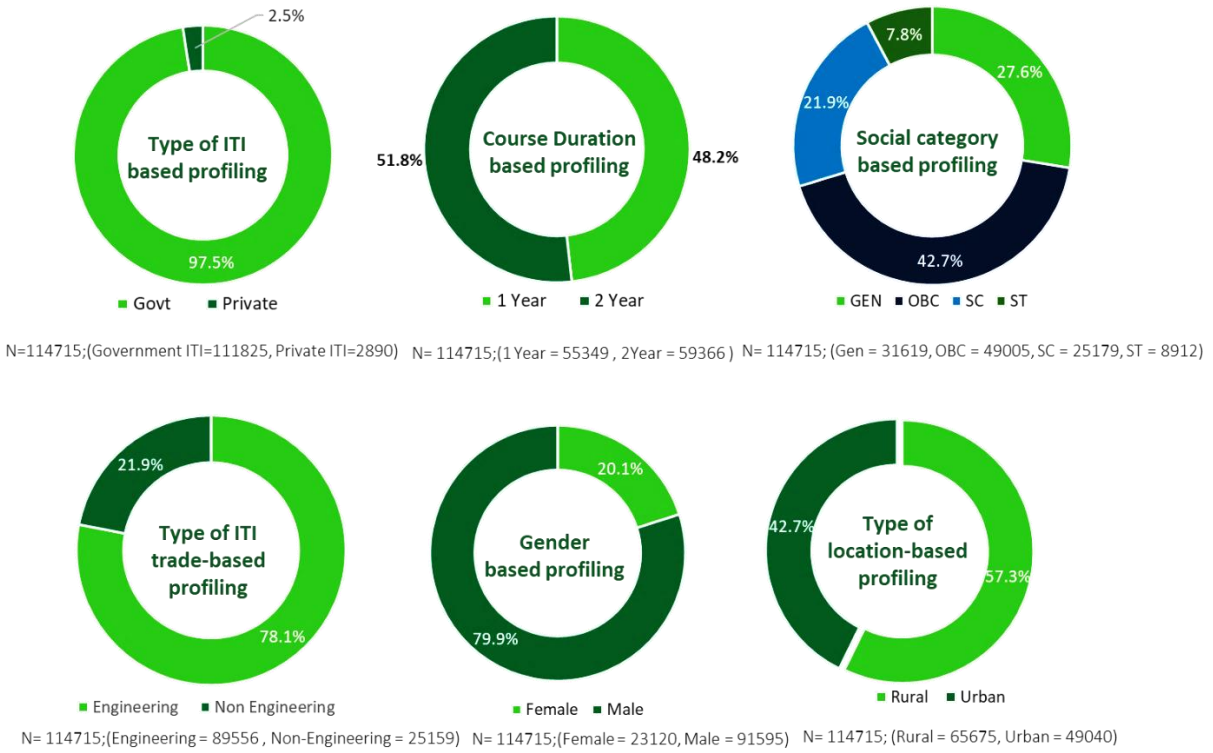
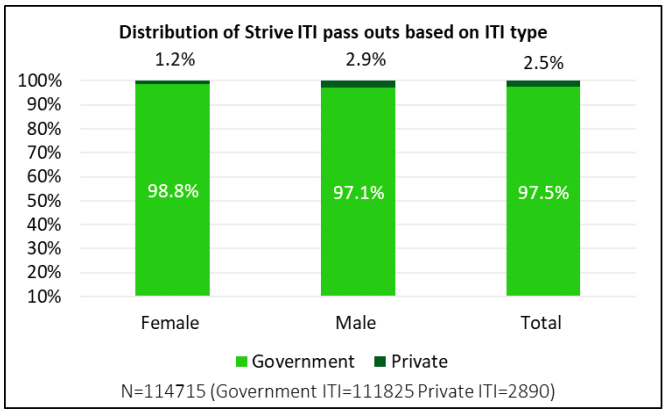


Figure 14: Profiling of STRIVE pass outs

As evident from the above figure, enrollment rate was highest for government ITIs at 97.5 per cent out of 1,14,715 ITI pass outs, while it was negligible for private ITIs (2.5 per cent). This could be attributed to a larger proportion of government ITIs being covered under the STRIVE project as compared to private ITIs. Gender-wise comparison shows 20.1 per cent enrollment of females as compared to 79.9 per cent males. In private ITIs, female enrollment was 9.0 per cent, while male enrollment was 91.0 per cent.

Of the total enrollments, 57.3 per cent were from rural areas, with the remaining 42.7 per cent hailing from urban areas. Gender-wise comparison in enrollment across locations depicts a nuanced picture, of all the female ITI pass outs, 54.7 per cent belonged to rural areas while out of the total male 57.9 per cent hailed from rural areas.



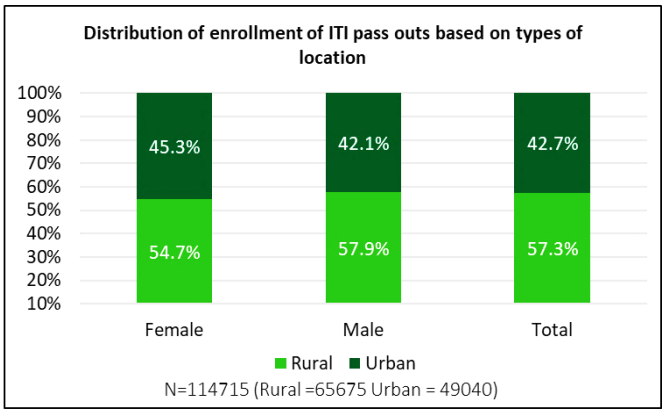
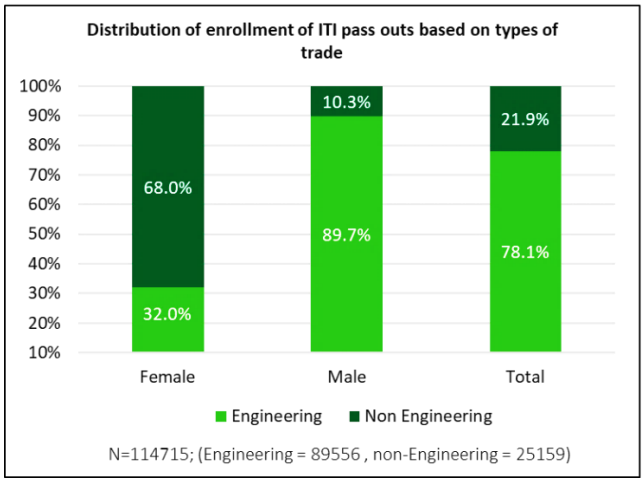


Figure 15: Distribution of ITI pass outs based on type of ITI and location

Overall, 78.1 per cent of the ITI pass outs were enrolled in engineering trades, while 21.9 per cent were in non-engineering trades. Amongst the females, majority belonged to non-engineering trades (68 per cent) whereas amongst the males, the enrollment rate in engineering trades was notably high (89.7 per cent).

Among the social categories, 27.6 per cent of the ITI pass outs belonged to the general category, 42.7 per cent to OBC, 21.9 per cent to SC category, and 7.8 per cent to ST category. While there were no gender variations within the general category, minor variations were observed with 38 per cent of females (out of the total females) belonging to OBC compared to 43.9 per cent males (out of the total males), further 24.2 per cent females and 21.4 per cent males belonged to SC and 10.2 per cent females 7.2 per cent males were from ST category.



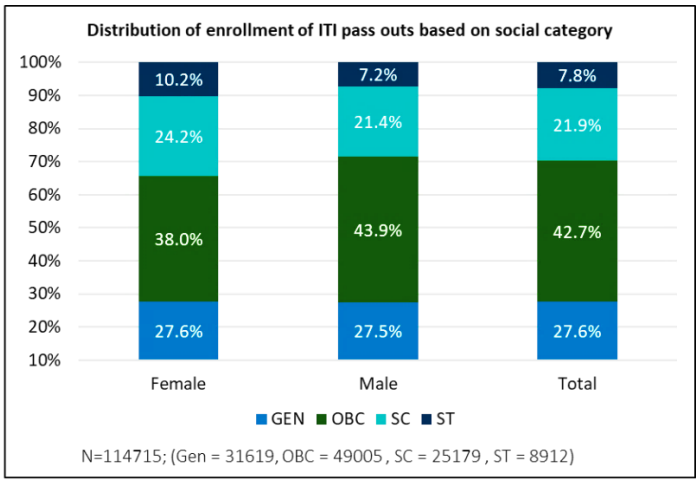


Figure 16: Distribution of enrollment of ITI pass outs based on trades and social category

In terms of course duration, 48.2 per cent of ITI pass outs were enrolled in one-year courses, while 51.8 per cent were in two-year courses. Higher proportion of females were enrolled in one-year course (72.9 per cent), as compared to two-year course, whereas for male enrollment for one-year course stood at 42 per cent. The preference for two-year courses was higher for males at 58 per cent as compared to females (27.1 per cent).

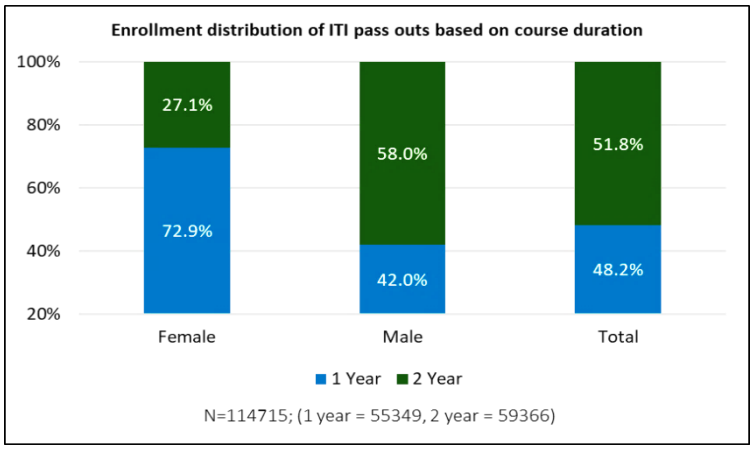


Figure 17: Distribution of ITI Pass outs based on course duration and gender

It is also imperative to highlight that cent per cent non-engineering trades were of one year duration, whereas engineering trades had representation across one year (33.7 per cent) and two year duration (66.3 per cent). For one-year courses, 54.5 per cent ITI pass outs were from engineering trades and 45.5 per cent from non-engineering trades whereas two year courses comprised only engineering trades.

3.2 Overall profile of STRIVE ITI pass outs (study sample)

Presented below is the overall profile of the 11,136 ITI pass outs covered under the study, which is 10 per cent of the overall universe of the STRIVE pass outs. Of the total sample covered, majority belonged to rural area (67.7 per cent), as compared to 32.3 per cent from urban areas.[12] Gender-wise profile shows males dominating the sample (75.2 per cent) compared to their female counterparts (24.8 per cent).

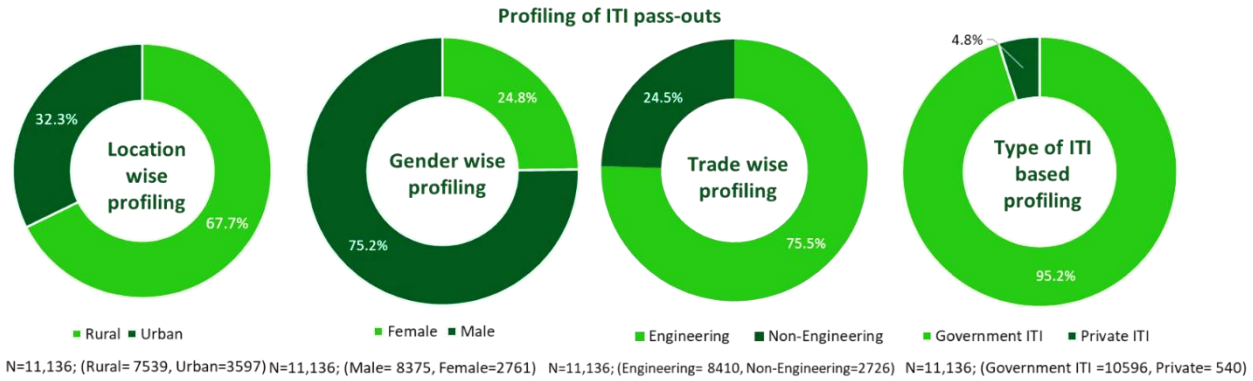


Figure 18: Profiling of ITI pass outs

Trade-wise profile shows 75.5 per cent ITI pass outs from engineering trades in comparison to non-engineering (24.5 per cent) thereby mirroring the overall STRIVE population. Government ITIs were

[12] *The rural urban bifurcation was done based on the data captured from the pass outs on where do they belong to rural or urban.*

predominately covered as part of the study (95.2 per cent: N- 397) while representation of private ITIs was 4.8 per cent (N- 27)

As depicted in the table below, majority of the ITI pass outs (94.3 per cent) were unmarried at the time of survey, with only 5.5 per cent reporting being married. Gender-wise comparison showed higher proportion of females (11.8 per cent) being married as compared to males (3.4 per cent).

Table 3: Distribution of female ITI pass outs by marital status and gender

Distribution of ITI pass outs by marital status and gender						
Marital Status	**Female**		**Male**		**Total**	
	%	**N**	**%**	**N**	**%**	**N**
Unmarried	87.9	2426	96.4	8070	94.3	10496
Married	11.8	326	3.4	285	5.5	611
Divorced/separated	0.1	4	0.1	6	0.1	10
Not willing to disclose	0.1	3	0.2	13	0.1	16
Widow/Widower	0.1	2	0.0	1	0.0	3
Total	**100.0**	**2761**	**100.0**	**8375**	**100.0**	**11136**

Further comparison of the portrayed distribution of female ITI pass outs by their marital status and educational qualification reveals, as evident from the table below, that of those who had completed class 12, considerably higher proportion were unmarried (91.1 per cent) while only 8.5 per cent of married females had completed class 12 at the time of enrollment at the ITI.

Table 4: Distribution of female ITI pass outs by marital status and educational qualification

Distribution of female ITI pass outs by marital status and educational qualification								
Education qualification	**Unmarried**		**Married**		**Others***		**Total**	
	%	**N**	**%**	**N**	**%**	**N**	**%**	**N**
Class 10	87.3	600	12.5	86	0.1	1	100.0	687
Class 11	95.2	20	4.8	1	0.0	0	100.0	21
Class 12	91.1	1465	8.5	136	0.4	7	100.0	1608
Class 8	57.1	4	42.9	3	0.0	0	100.0	7
Class 9	92.3	12	7.7	1	0.0	0	100.0	13
Graduation	75.4	31	24.4	4	0.3	1	100.0	390
Diploma	88.6	294	11.4	95	0.0	0	100.0	35
Total	**87.9**	**2426**	**11.8**	**326**	**0.3**	**9**	**100.0**	**2761**

**Others include divorced/separated, widow/widower, and not willing to disclose*

3.3 Trade-wise and course-wise profile of ITI pass outs

3.3.1 Gender-wise distribution of ITI pass outs

The study focused on capturing the gender distribution among ITI pass outs. Among the 11,136 ITI pass outs covered under the study, 2,761 were female ITI pass outs (24.5 per cent), while 8,375 were male ITI pass outs (75.5 per cent). It was reported that 89.4 per cent of the male ITI pass outs (of the total 8,377) had opted for engineering trades while only one-third of the female ITI pass outs (33.5 per cent of the total 2,759) had opted for similar trades. Overall, about three-fourth (75.5 per cent, N=11,136) of the ITI pass outs had opted for engineering trades.

At an aggregate level, majority of the ITI pass outs were males (75.2 per cent). (Refer Annexure V for sector, trades and course coverage).

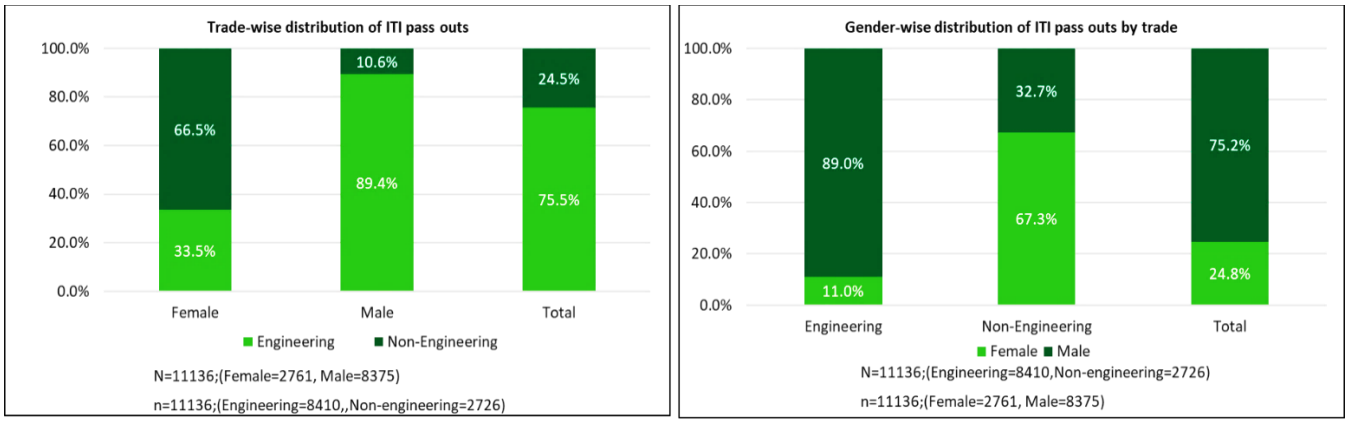


Figure 19: Trade-wise distribution of ITI pass outs by gender and distribution of trade by gender

3.3.2 Gender-wise distribution top trades in which ITI pass outs received training

The study looked into the distribution of top trades of receiving training by gender. As depicted from the figure below, amongst the females, the top trades of training were Computer Operator and Programming assistance (COPA) – 21.9 per cent, followed by Sewing Technology (11.8 per cent), Cosmetology (8.3 per cent) and Electrician (7.9 per cent). In contrast to females, higher proportion of males had undergone training in trades such as Fitter (14.6 per cent), Electrician (14.2 per cent), Welder (11.1 per cent), COPA- 5.9 per cent and Wireman (5.5 per cent). Gender-wise comparison highlighted that the common trades across males and females were COPA, Fitter and Electrician.

Delving further into trade wise distribution portrayed minor variations with 54.9 per cent females undertaking training in COPA as compared to males at 45.1 per cent. However female dominated trades like Cosmetology (females 99.5 per cent and males 0.5 per cent) and Dress Making (95.4 percent females and 4.6 per cent males) saw minimal participation of males. In contrast, male dominated trades like Electrician had 84.5 per cent males vis-a-vis 15.5 per cent females; whereas for Fitter, the distribution was further skewed to 92 per cent males and 8 per cent females.

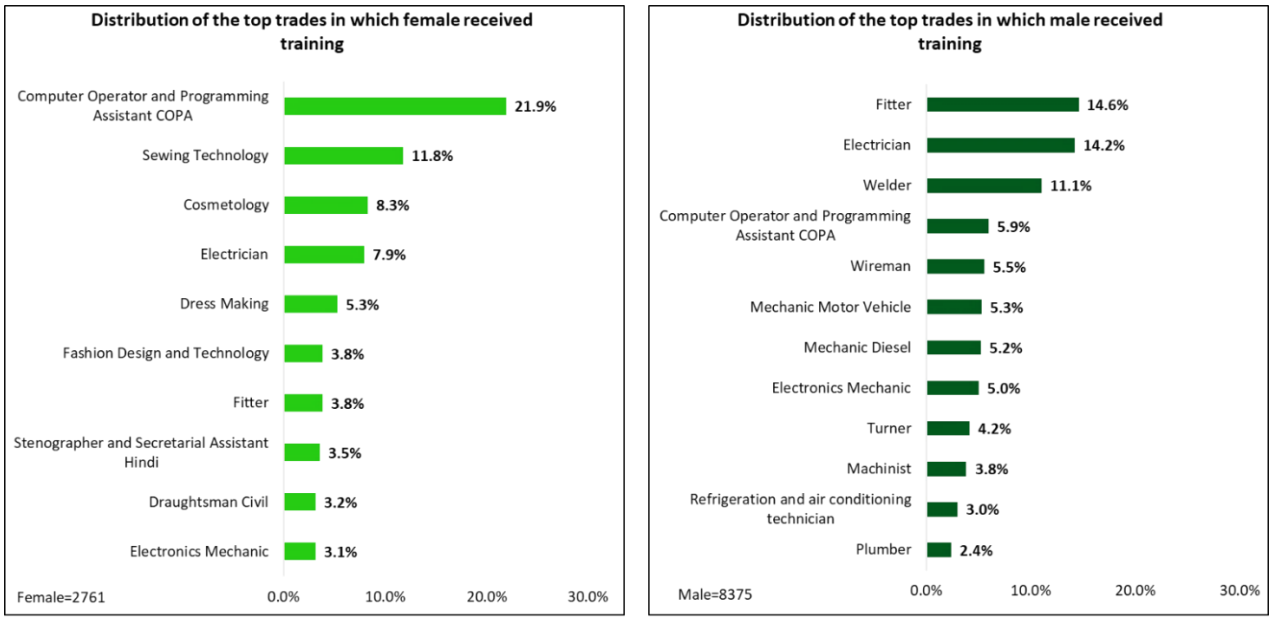


Figure 20: Distribution of top trades in which ITI pass outs received training

3.3.3 Location-wise distribution of ITI pass outs

The study documented the classification of type of ITIs and the place where they were located (rural/ urban areas). Additionally, it also recorded chosen trade categories of these ITI pass outs. Out of the total surveyed sample of 11,136 ITI pass outs, majority (95.2 per cent) were from government ITIs while only a small proportion of 4.8 per cent belonged to private ITIs. This could be attributed to the larger proportion of government ITIs in the overall sample distribution, wherein out of 424 ITIs, only 27 were private ITIs.

Location-wise comparison reveals that out of the total ITI pass outs from government ITIs, 67.6 per cent and private ITIs (70.2 per cent) were from rural area. Overall, close to three-fifth (67.7 per cent) of ITI pass outs belonged to rural areas, while 32.3 per cent belonged to urban areas. The study shows that among pass outs from engineering trade, and non-engineering trade 68.1 per cent and 66.3 per cent belonged to rural areas respectively.

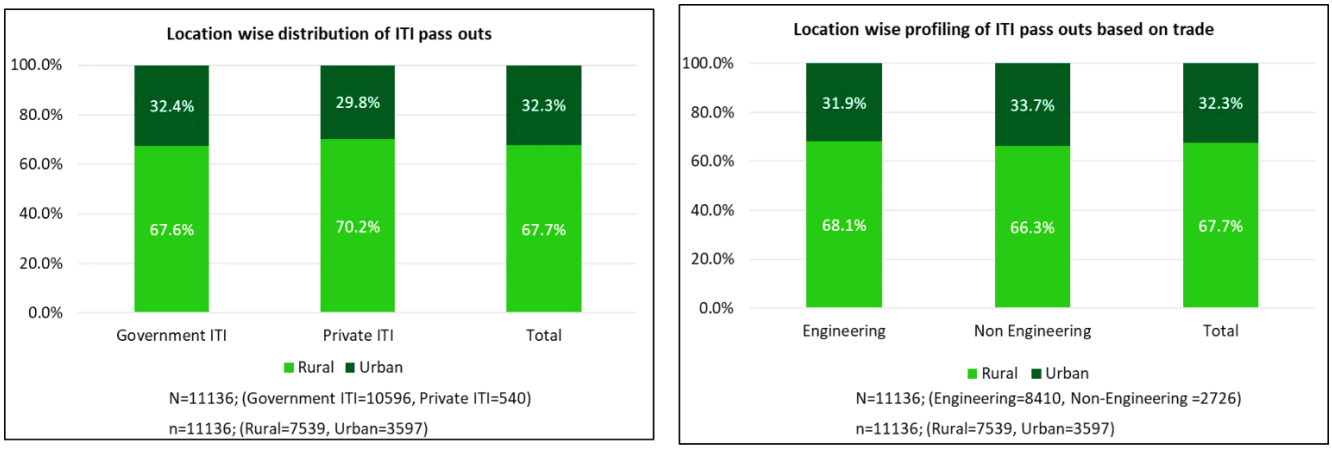


Figure 21: Distribution of ITI pass outs by location and type of ITI

Comparison across trades shows a similar trend with 75.5 per cent of ITI pass outs at an aggregate level from engineering trades irrespective of the type of ITI. Across both government ITIs (75.1 per cent) and private ITIs (83.5 per cent), majority of pass outs pursued engineering trades, while the remaining (24.9 per cent in government and 16.5 per cent in private) were from non-engineering trades.

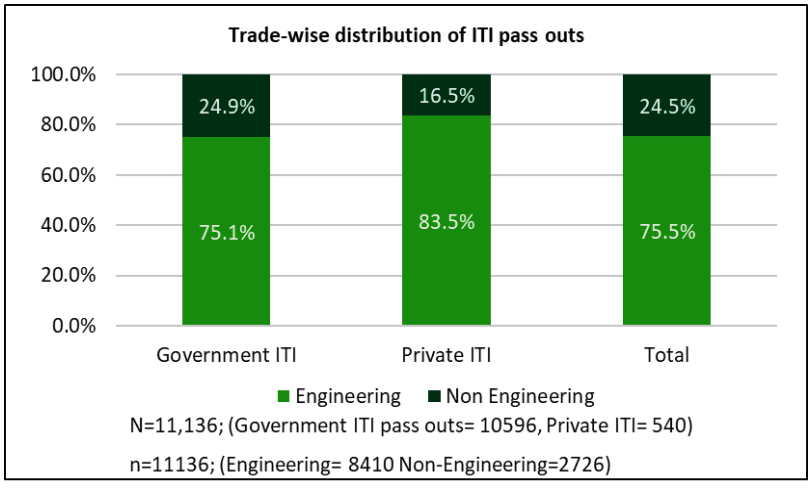


Figure 22: Distribution of ITI pass outs by trade and type of ITI

In addition to location, further segregation was done across regions where the sample ITIs were located. The table below shows the geographical spread of the ITIs. Among the total sample (N=11,136), the majority of ITI pass outs were from the west region (36.6 per cent), followed by the north (27.1 per cent) and south (19.9 per cent). Trade-wise comparison shows a larger proportion of ITI pass outs from west region being from non-engineering trades (40.1 per cent), followed by those in north region (33.8 per cent).

Table 5: Distribution of ITI pass outs by region and trade

Region	Engineering		Non-Engineering		Total	
	%	N	%	N	%	N
East	14.9	1251	10.3	281	13.8	1532
North	25.1	2110	33.8	921	27.1	3031
North-East	2.2	187	3.6	99	2.6	286
South	22.4	1884	12.2	332	19.9	2216
West	35.4	2978	40.1	1093	36.6	4071
Total	**100.0**	**8410**	**100.0**	**2726**	**100.0**	**11136**

Comparison across gender and region showed that out of the total female ITI pass outs, majority hailed from west (35.9 per cent) and north (33.1 per cent). Amongst the ITI male pass outs, the proportion was highest for west (36.8 per cent) followed by north (25.3 per cent) and south (22.1 per cent).

Table 6: Distribution of ITI pass outs by region and gender

Region	Female		Male		Total	
	%	N	%	N	%	N
East	13.9	385	13.7	1147	13.8	1532
North	33.1	914	25.3	2117	27.2	3031
North-East	3.8	104	2.2	182	2.6	286
South	13.3	366	22.1	1850	19.9	2216
West	35.9	992	36.8	3079	36.6	4071
Total	**100.0**	**2761**	**100.0**	**8375**	**100.0**	**11136**

3.3.4 Age-wise distribution of ITI pass outs

It was noted that a majority of the ITI pass outs (63.6 per cent,) belonged to the age bracket of 18-21 years, followed by 27 per cent between 22 and 25 years of age.

Table 7: Age-wise distribution of ITI pass outs

Age Group (years)	Percentage of ITI pass outs (%)	N
17 and below	1.9	210
18-21	63.6	7087
22-25	27.0	3010
26-30	5.2	580
31-35	1.5	162
Above 35	0.8	87
Total	**100.0**	**11136**

Further, the study looked into the gender proportions within each age bracket. At an overall level, majority of the ITI pass outs were in the age bracket of 18-21 years (63.6 per cent), followed by ITI pass outs in the age bracket of 22-25 years (27 per cent). Gender-wise comparison showed that a majority of ITI pass outs across both genders were in the age group of 18-21 years (male 66.6 per cent and female 54.7 per cent). It was, however, noted that for higher age brackets, there was higher female participation.

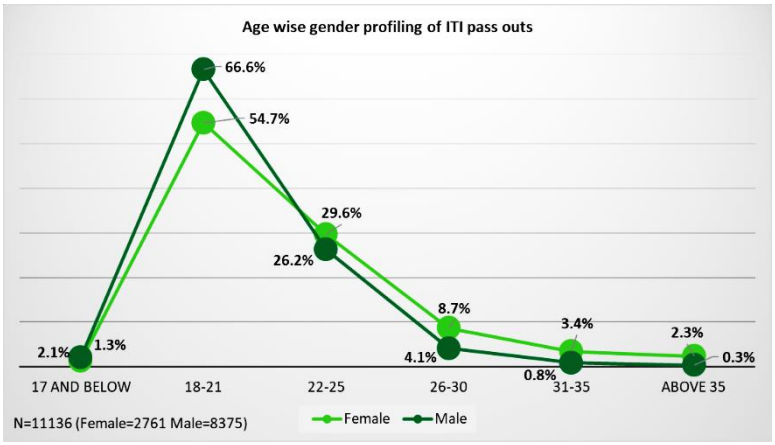


Figure 23: Distribution of ITI pass outs by age and gender

The study also examined the age of ITI pass outs at the time of enrollment with respect to their highest educational qualification at the time. Most students enrolled in ITIs had educational qualifications up to Class 12 (54.3 per cent), followed by qualifications up to Class 10 (35.9 per cent). Among those aged 17 years and below, majority had completed upto class 10 (87.6 per cent) followed by pass outs aged 18-21 years who had completed class 12 (53.3 per cent) or class 10 (42.9 per cent). While less than a tenth (7.1 per cent) had completed graduation the proportion was higher with an increase in age.

Table 8: Distribution of ITI pass outs by age and education profile

Age bracket	Class 8	Class 9	Class 10	Class 11	Class 12	Graduation	Diploma	Total	
	%	%	%	%	%	%	%	%	N
17 and below	1.4	0.0	87.6	1.4	9.0	0.0	0.5	100.0	210
18-21	0.4	1.1	42.9	0.9	53.3	0.9	0.4	100.0	7087
22-25	0.3	0.4	19.7	0.4	62.9	15.3	1.1	100.0	3010
26-30	0.7	0.0	19.3	0.2	45.5	33.1	1.2	100.0	580
31-35	1.2	0.0	24.7	0.0	45.1	27.2	1.9	100.0	162
Above 35	0.0	0.0	35.6	0.0	28.7	35.6	0.0	100.0	87
Total	**0.4**	**0.8**	**35.9**	**0.7**	**54.3**	**7.1**	**0.7**	**100.0**	**11136**

3.3.5 Distribution of ITI pass outs by social category and trades

The study also analysed the information regarding the social category of ITI pass outs in relation to their trades. At an overall level, majority of ITI pass outs (41.7 per cent) belonged to OBC category followed by 28.1 per cent from general category, 22.0 per cent from SC and 8.0 per cent from ST category.

Table 9: Overall distribution of social category among ITI pass outs

Social category	%	N
General	28.1	3127
SC	22.0	2445
ST	8.0	888
OBC	41.7	4639
Others/Not willing to disclose	02	37
Total	**100.0**	**11136**

Majority of the ITI pass outs from both engineering (42.6 per cent) and non-engineering categories (38.2 per cent) belonged to OBC category, followed by general category accounting for 27.4 per cent in engineering and 28.8 per cent in non-engineering trades.

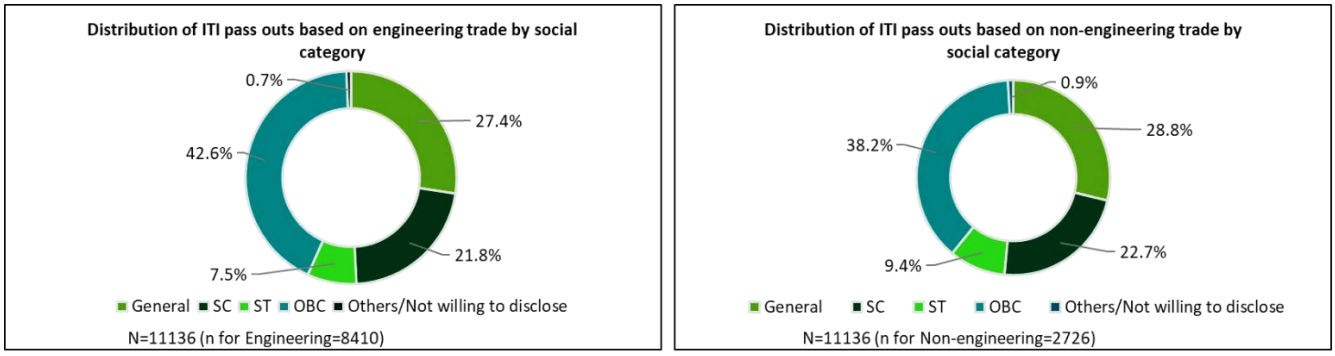


Figure 24: Distribution of ITI pass outs based on trades and social category

The study also observed that a majority ITI pass outs across all social categories opted for engineering trades (75.5 per cent). At an overall level, only one-fourth (24.5 per cent) ITI pass outs opted for non-engineering trades.

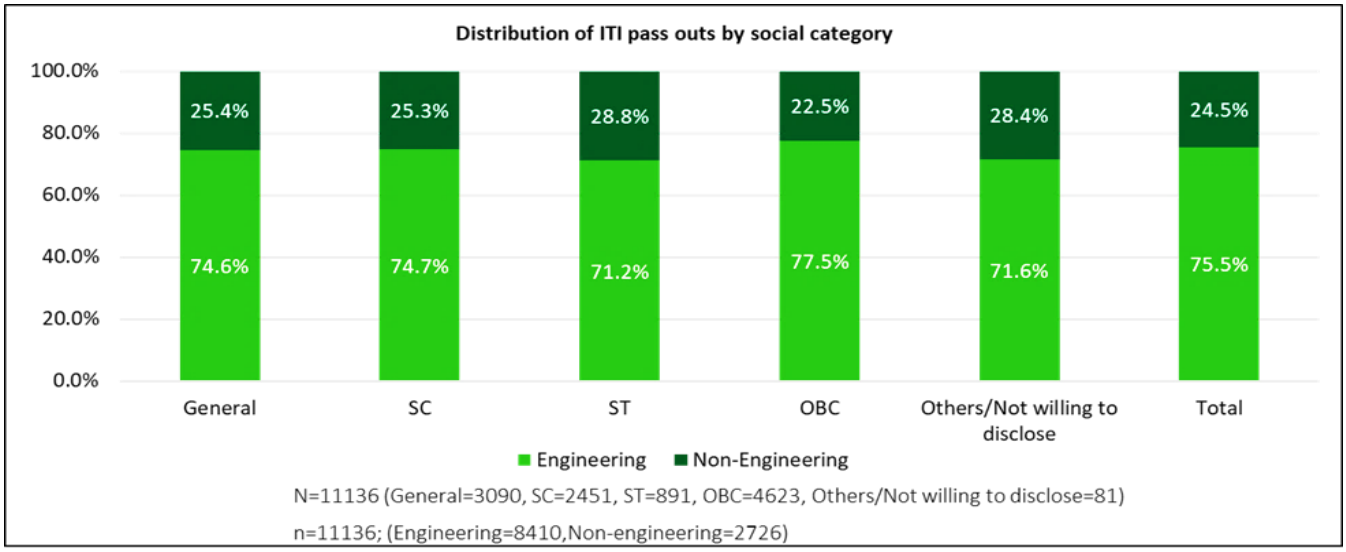


Figure 25: Distribution of ITI pass outs by social category

3.3.6 Level of education by social category

Data on educational levels before enrolling in the ITIs across various social categories forms the demographic make-up of ITI pass outs.

Table 10: Distribution of ITI pass outs by social category based on highest level of education post ITI completion

Social category	Class 8	Class 9	Class 10	Class 11	Class 12	Graduation	Diploma	Total	
	%	%	%	%	%	%	%	%	N
NGeneral	38.6	36.2	25.6	33.3	28.9	31.6	35.6	28.1	3127
SC	20.5	12.8	21.4	23.5	22.0	25.2	24.7	22.0	2445
ST	4.5	22.3	6.5	9.9	8.7	8.5	5.5	8.0	888
OBC	36.4	28.7	45.9	33.3	40.2	34.6	34.2	41.7	4639
Others/Not willing to disclose	0.0	0.0	0.6	0.0	0.2	0.1	0.0	0.2	37
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**11136**

Observations indicate that among ITI pass outs who had completed class 10, majority belonged to general category and OBC (33.3 per cent). 40.2 per cent of the pass outs from OBC category had completed class 12 and 34.6 per cent had completed graduation.

3.3.7 Distribution of monthly household income of the ITI candidates

The study captured data on monthly household income of the family members of ITI pass outs. It was observed that out of the total sample, most of the ITI pass outs (36.2 per cent) had a monthly household income ranging between INR 10,001 and 20,000, followed by 26.6 per cent having a monthly household income of up to INR 10,000.

A similar trend was reported across trades. Out of 8,410 ITI pass outs from engineering trades, a majority reported a monthly household income in the range of INR 10,001-20,000 (36.9 per cent), followed by household income up to INR 10,000 (25 per cent). The proportion was also replicated amongst ITI pass outs from non-engineering trades.

Table 11: Distribution of ITI pass outs by monthly household income (INR)

Monthly household income (INR)	Engineering		Non-Engineering		Total	
	%	N	%	N	%	N
Up to 10,000	25.0	2103	31.4	857	26.6	2960
10,001-20,000	36.9	3108	33.8	922	36.2	4030
20,001-30,000	18.5	1553	15.8	431	17.8	1984
30,001-40,000	7.2	604	7.7	211	7.3	815
40,001-50,000	3.5	296	3.7	100	3.6	396
50,001-75,000	2.1	175	1.8	50	2.0	225
75,001-1,00,000	1.4	114	0.7	16	1.2	130
More than 1,00,000	0.5	46	0.8	23	0.6	69
Don't know	4.9	411	4.3	116	4.7	527
Total	**100**	**8410**	**100**	**2726**	**100**	**11136**

Location-wise comparison depicted minor variations, with higher proportion of ITI pass outs from rural set-up reporting a monthly household income of up to 10,000 (29.2 per cent) as compared to urban (21 per cent). The monthly household income is marginally higher among pass outs from urban areas with 37.7 per cent reporting incomes in the INR 10,001-20,000 range and 20.5 per cent reporting INR 20,001-30,000 and 9.1 per cent mentioning INR 30,001-40,000. Around 2.9 per cent ITI pass outs from urban areas also reported having a monthly household income of INR 75,001 or more while for rural areas the same was 1.3 per cent.

Table 12: Distribution of monthly household income by location

Monthly income	Rural		Urban		Total	
	%	N	%	N	%	N
Up to 10,000	29.2	2204	21.0	756	26.6	2960
10,001-20,000	35.5	2679	37.7	1351	36.2	4030
20,001- 30,000	16.5	1246	20.5	738	17.8	1984
30,001-40,000	6.4	486	9.1	329	7.3	815
40,001-50,000	3.4	255	3.9	141	3.6	396
50,001-75,000	1.7	125	2.8	100	2.0	225
75,001-1,00,000	0.9	65	1.8	65	1.2	130
More than 1,00,000	0.4	29	1.1	40	0.6	69
Don't know	6.0	450	2.1	77	4.7	527
Grand Total	**100.0**	**7539**	**100.0**	**3597**	**100.0**	**11136**

3.4 Course duration-wise profiling of ITI pass outs

3.4.1 Duration of the course by type of ITI and gender

Data on course duration was gathered from both male and female ITI pass outs to analyse preferences between one-year and two-year courses offered by private and government ITIs. The study revealed that on an overall scale, 57 per cent of ITI pass outs opted for two-year course, while 43 per cent chose one-year course. Among those who selected one-year courses, 96.9 per cent were from government ITIs, with only 3.1 per cent from private ITIs. Similarly, among those who opted for two-year courses, 93.8 per cent were from government ITIs and 6.2 per cent were from private ITIs.

It can be inferred from the graph that among the total pass outs from government ITIs, 43.8 per cent were from one-year courses, while a majority (56.2 per cent) were from the two-year courses. Similarly, among

the total ITI pass outs from private ITIs, only 27.4 per cent belonged to one-year courses, while a majority (72.6 per cent) had enrolled for two-year course.

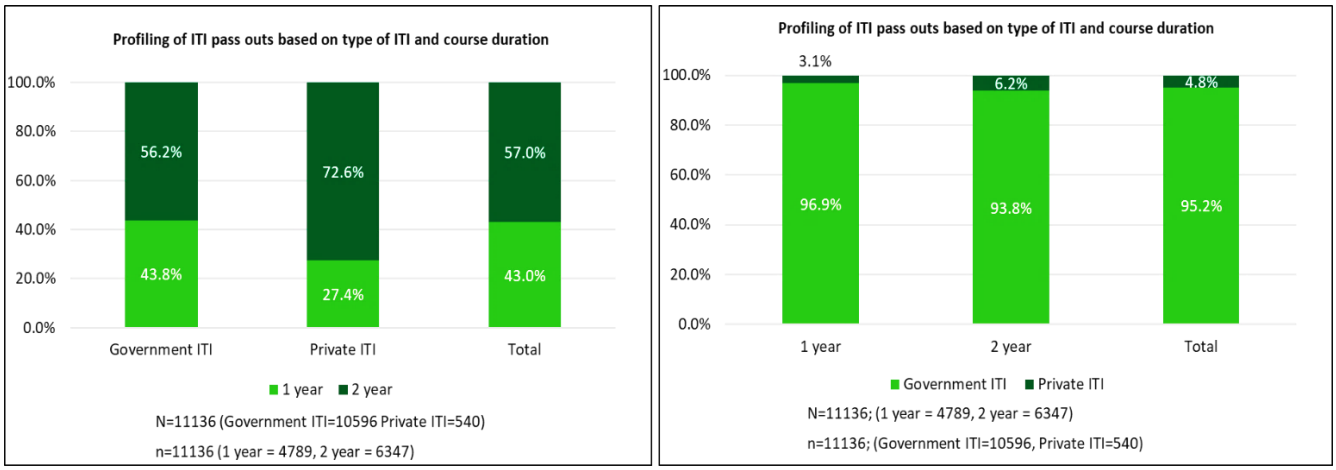


Figure 26: Distribution of ITI type and course duration

Gender-wise comparison highlighted that among the total number of female ITI pass outs, (2,761) 69.6 per cent had opted for one-year courses, while only 30.4 per cent had enrolled in two-year courses. In contrast, majority of male pass outs (65.8 per cent, N= 8,375) had completed two-year courses, while approximately one-third (34.2 per cent) had completed one-year courses.

Duration-wise comparison across gender showed that in two-year courses, the female enrollment was 13.2 per cent of the total enrollment of two-year courses (6,347), whereas the proportion was higher across one year courses (40.2 per cent females, N=4,789).

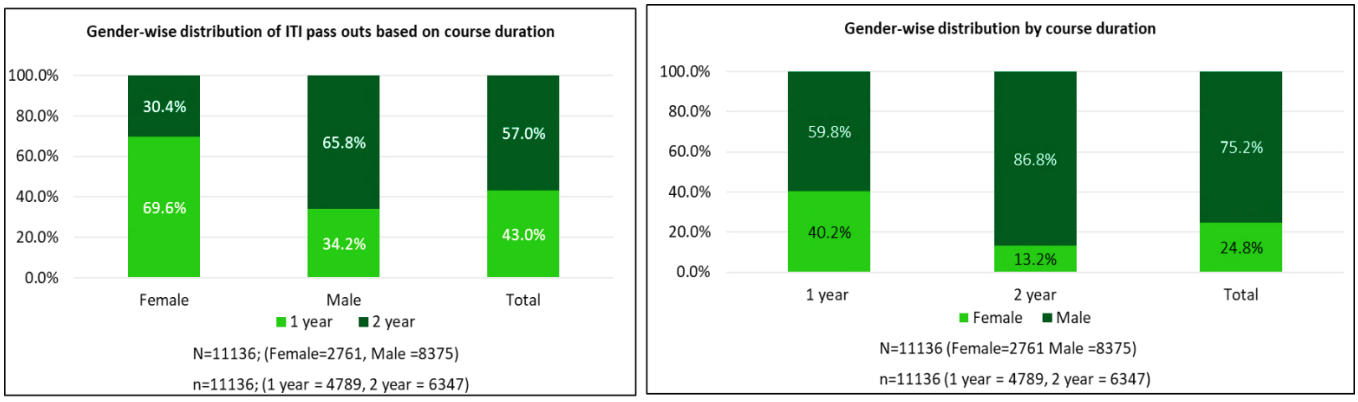


Figure 27: Gender-wise distribution of ITI pass outs based on course duration

3.4.2 Distribution of ITI pass outs based on course duration and age

The study collated and cross-referenced information regarding the age group of the ITI pass outs at the time of enrollment and the course duration they had opted for to understand age-specific preferences and trends in STRIVE training. At an overall level, 43 per cent of ITI pass outs completed one-year courses, while more than half (57 per cent) had opted for two-year courses.

Age-wise comparison indicates that out of the total ITI pass outs aged 17 years and below, majority had opted for two-year courses (69.2per cent). Conversely, for other age groups, the proportion of ITI pass outs opting for two-year courses decreased with increase in age. Of ITI pass outs aged more than 35 years, majority opted

for one-year courses, the proportion being similar for pass outs between 31-35 years (85.1 per cent). Close to three-fifth of pass outs (59.4 per cent) aged 18-21 years and 59.9 per cent aged 22-25 years had completed two-year courses.

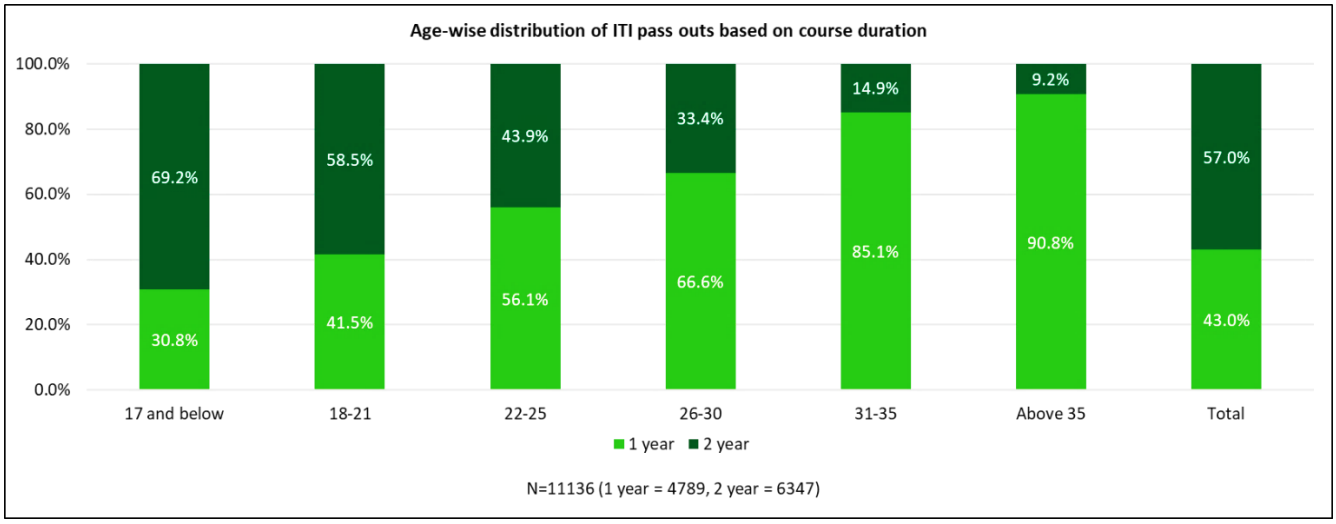


Figure 28: Age-wise distribution of ITI pass outs based on course duration

Across the board, majority of the females (1,922) had completed one-year courses, while a fewer number of females (839) had enrolled for two-year courses.

Among female pass outs who chose the one-year course (N=1,922), the majority were within the age bracket of 18-21 years (51.8 per cent), followed by 29.9 per cent in the age bracket of 22-25 years. Among the total male pass outs who completed the two-year course, the majority were in the age brackets of 18-21 years (67.1 per cent) and 22-25 years (28.3 per cent). Slightly higher proportion of females above 26 years had opted for one-year and two-year courses (16.4 per cent) and (9.7 per cent) respectively, in contrast to males (6.9 per cent and 4.3 per cent respectively).

Table 13: Age-gender-wise distribution along with course duration

Age Bracket	Female				Male				Total	
	1 year		2 year		1 year		2 year			
	%	N	%	N	%	N	%	N	%	N
Below 17	1.9	37	0.0	0	5.5	158	0.3	15	1.9	210
18-21	51.8	995	61.3	515	65.6	1881	67.1	3696	63.6	7087
22-25	29.9	575	29.0	243	22.1	633	28.3	1559	27.0	3010
26-30	9.3	179	7.2	60	5.0	143	3.6	198	5.2	580
31-35	4.0	77	2.0	17	1.2	36	0.6	32	1.5	162
Above 35	3.1	59	0.5	4	0.6	16	0.1	8	0.8	87
Grand Total	**100**	**1922**	**100**	**839**	**100**	**2867**	**100**	**5508**	**100.0**	**11136**

3.4.3 Region-wise distribution of ITI pass outs based on course duration

The study assessed regional variations in course duration preferences.

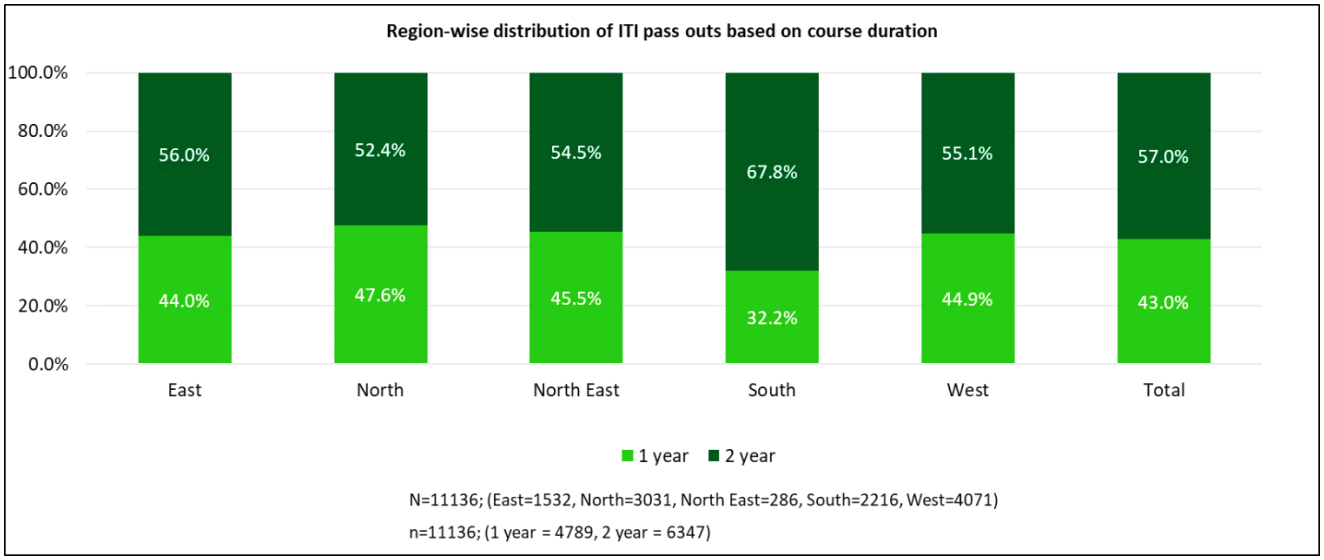


Figure 29: Region-wise distribution of ITI pass outs based on course duration

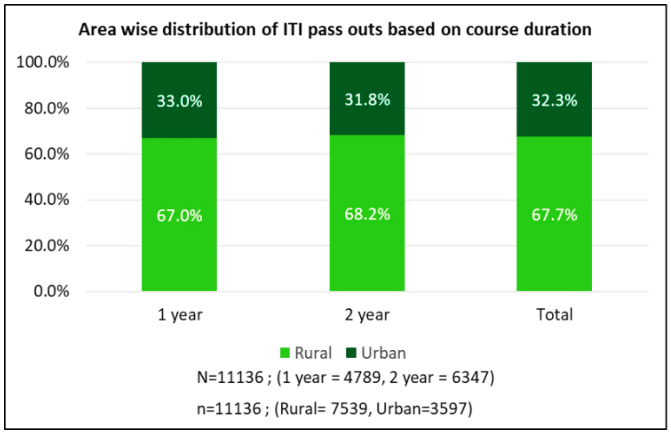
The findings show that across all regions, less than half of ITI pass outs had opted for one-year courses, while a majority (56 per cent in east, 52.4 per cent in north, 54.5 per cent in north-east, 67.8 per cent in south, and 55.1 per cent in west) had chosen two-year courses. Notably, the south region exhibited the highest proportion of students (67.8 per cent) completing two-year courses.

Table 14: Region-wise distribution of ITI pass outs based on course duration and gender

Region-wise distribution of ITI pass outs based on course duration and gender								
Region	**Female**				**Male**			
	1 Year		**2 Year**		**1 Year**		**2 Year**	
	%	**N**	**%**	**N**	**%**	**N**	**%**	**N**
East	11.7	224	19.2	161	15.8	453	12.6	694
North	38.5	740	20.7	174	24.4	700	25.7	1417
North- East	4.0	76	3.3	28	1.9	54	2.3	128
South	8.8	171	23.2	195	18.9	542	23.7	1308
West	37.0	711	33.6	281	39.0	1118	35.7	1961
Total	**100.0**	**1922**	**100.0**	**839**	**100.0**	**2867**	**100.0**	**5508**

The study shows that among the total number of ITI pass outs completed one-year (N=4,789) and two-year courses (N=6,347), approximately 67.0 per cent from one-year and 68.2 per cent from two-year courses belonged to rural backgrounds, while 33.0 per cent from one-year and 31.8 per cent from two-year belonged to urban settings.

Further, among the total number of ITI pass outs from rural (7,539) and urban areas (3,597), less than half (42.6 per cent in rural and 43.9 per cent in urban) completed one-year courses, while a majority (57.4 per cent in rural and 56.1 per cent in urban) had opted for two-year courses.



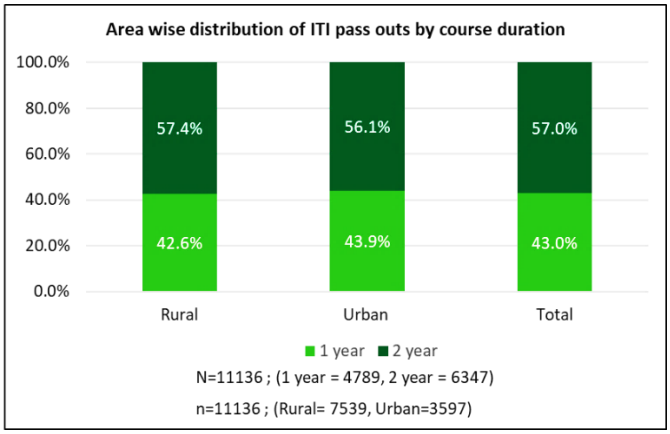
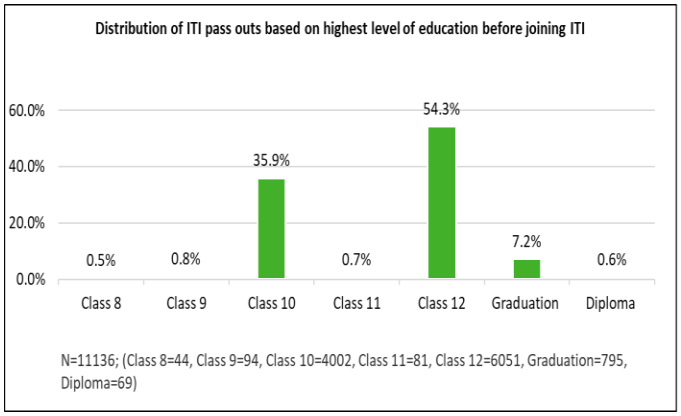


Figure 30: Distribution of ITI pass outs based on course duration and area

3.5 Level of education of ITI pass outs

This section lays out the profile of ITI pass outs based on their level of education before enrolling for and after completion of ITI courses.



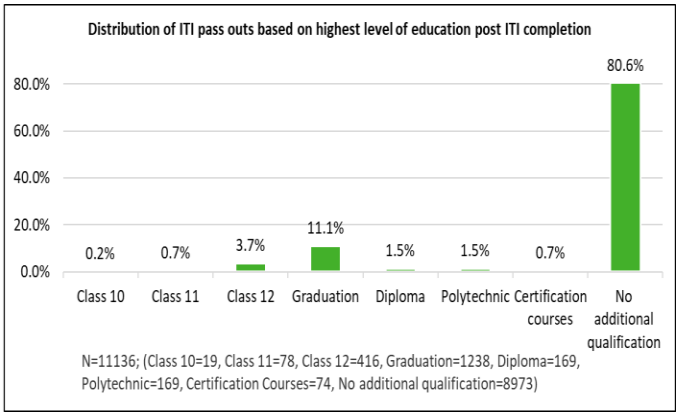


Figure 31: Distribution of ITI pass outs based on highest level of education before and after enrolling in ITI

It was noted that 54.3 per cent of the ITI pass outs had completed education till Class 12 before enrolling into ITI, followed by 35.9 per cent ITI pass outs with education qualification up to Class 10. Only few (7.2 per cent) had completed graduation or equivalent prior to enrolling into ITIs. Further, it was noted that 80.6 per cent of ITI pass outs did not pursue any additional qualification after completing course from ITI. However, 11.1 per cent pursued graduation (in Arts, Commerce, Computer Applications, Education and Science). 3.7 per cent completed education till class 12 after completing ITI courses.

3.5.1 Distribution of ITI pass outs based on level of education by gender and trades

The study sought to examine the influence of educational levels before entering ITI and after passing out from ITI on future employment opportunities for both male and female pass outs.

Table 15: Gender-wise distribution of highest qualifications before enrolling to course at ITIs

Gender-wise distribution of highest qualifications before enrolling to course at ITIs						
Highest level of education completed before joining ITI	Female		Male		Total	
	%	N	%	N	%	N
Class 8	0.3	7	0.4	37	0.5	44
Class 9	0.5	13	1.0	81	0.8	94
Class 10	24.9	687	39.6	3315	35.9	4002
Class 11	0.8	21	0.7	60	0.7	81
Class 12	58.2	1608	53.1	4443	54.3	6051
Graduation	14.1	390	4.8	401	7.2	791
Diploma	1.3	35	0.5	38	0.6	73
Grand Total	**100.0**	**2761**	**100.0**	**8375**	**100.0**	**11136**

Among the total female ITI pass outs, more than half (58.2 per cent) had completed education till class 12 at the time of enrollment into ITI, while 53.1 per cent of males had a similar educational background. A higher proportion of females (14.1 per cent) had completed graduation prior to enrolling at the ITIs as compared to males (4.8 per cent).

Table 16: Location-wise distribution of highest qualifications before enrolling for course at ITIs

Location-wise distribution of highest qualifications before enrolling to course at ITIs						
Highest level of education completed before joining the ITI	Rural		Urban		Total	
	%	N	%	N	%	N
Class 8	0.4	30	0.4	14	0.5	44
Class 9	1.0	73	0.6	21	0.8	94
Class 10	36.2	2730	35.4	1272	35.9	4002
Class 11	0.8	61	0.6	20	0.7	81
Class 12	54.8	4135	53.3	1916	54.3	6051
Graduation	6.2	467	9.0	324	7.2	791
Diploma	0.6	43	0.8	30	0.6	73
Grand Total	**100.0**	**7539**	**100.0**	**3597**	**100.0**	**11136**

Location-wise analysis showed out of 7,539 pass outs from rural (54.8 per cent) and out of 3,597 pass outs from urban areas (53.3 per cent) had completed class 12 before enrolling into the ITI. 36.2 per cent from rural and 35.4 per cent from urban areas had completed class 10.

Table 17: Gender-wise distribution of highest qualifications during ITI course

Gender-wise distribution of highest qualifications during ITI course						
Gender-wise distribution of highest education during ITI course	Female		Male		Total	
	%	N	%	N	%	N
Class 9	0.0	0	0.0	2	0.0	2
Class 10	0.1	4	0.1	11	0.2	15
Class 11	0.9	25	0.7	56	0.7	81
Class 12	5.3	146	3.8	321	4.2	467
Diploma	0.7	20	0.5	39	0.5	59
Graduation	6.7	184	4.5	379	5.1	563
No additional qualification	86.3	2382	90.4	7567	89.3	9949

Grand Total	**100.0**	**2761**	**100.0**	**8375**	**100.0**	**11136**

It was also observed that majority of ITI pass outs (89.3 per cent) did not pursue any additional qualifications during their ITI course. A small percentage (5.1 per cent) pursued graduation, with 6.7 per cent females (total number of female pass outs N=2,761) and 4.5 per cent males (total number of male pass outs N=8,375) pursuing graduation parallelly.

Table 18: Trade-wise distribution of highest qualifications before enrolling for course at ITI

Trade-wise distribution of highest qualifications before enrolling for course at ITI						
Highest level of education completed before joining the ITI	**Engineering**		**Non-Engineering**		**Total**	
Level of education	**%**	**N**	**%**	**N**	**%**	**N**
Class 8	0.4	38	0.3	6	0.4	44
Class 9	1.0	79	0.5	15	0.8	94
Class 10	38.6	3247	27.7	755	36.0	4002
Class 11	0.8	64	0.7	17	0.7	81
Class 12	53.5	4507	56.6	1544	54.3	6051
Graduation	5.3	437	13.0	354	7.2	791
Diploma	0.4	38	1.2	35	0.6	73
Grand Total	**100.0**	**8410**	**100.0**	**2726**	**100.0**	**11136**

More than half of the pass outs from both engineering (53.5 per cent) and non-engineering (56.6 per cent) had educational qualifications up to Class 12, followed by 38.6 per cent from engineering and 27.7 per cent from non-engineering trades with educational qualifications up to Class 10.

Table 19: Trade-wise distribution of highest qualifications during ITI course

Trade-wise distribution of highest qualifications during ITI course						
Highest level of education completed during ITI course	**Engineering**		**Non-Engineering**		**Total**	
	%	**N**	**%**	**N**	**%**	**N**
Class 9	0.0	2	0.0	0	0.0	2
Class 10	0.1	11	0.1	4	0.1	15
Class 11	0.7	56	1.0	25	0.7	81
Class 12	4.1	346	4.4	121	4.2	467
Diploma	0.5	39	0.7	20	0.5	59
Graduation	4.7	398	6.1	165	5.1	563
No additional qualification	89.9	7558	87.7	2391	89.4	9949
Grand Total	**100.0**	**8410**	**100.0**	**2726**	**100.0**	**11136**

Among those who selected engineering trades, a high proportion (89.9 per cent) did not pursue any additional qualifications during their ITI course. A small percentage (4.7 per cent) pursued graduation, while a few (4.1 per cent) pursued Class 12 education. Similarly, among those who opted for non-engineering trades, the majority (87.7 per cent) did not pursue any additional qualifications, while some chose to pursue graduation (6.1 per cent) and Class 12 (4.4 per cent) during their ITI course.

3.5.2 Level of education by location

The study documented data on the education levels of ITI pass outs, taking into account their respective regions and locations.

Table 20: Location-wise distribution of highest qualifications during course at ITI

Location-wise distribution of highest qualification during course at ITI

Highest level of education during joining the ITI	Rural		Urban		Total	
	%	N	%	N	%	N
Class 9	0.0	1	0.0	1	0.0	2
Class 10	0.1	10	0.1	5	0.1	15
Class 11	0.8	59	0.6	22	0.7	81
Class 12	4.5	338	3.5	126	4.2	464
Graduation	4.4	332	6.4	231	5.1	563
Diploma	0.5	34	0.7	25	0.5	59
No additional qualification	89.7	6765	88.6	3187	89.4	9952
Grand Total	**100.0**	**7539**	**100.0**	**3597**	**100.0**	**11136**

3.6 Profile of the Divyangjan ITI pass outs

The study documented information about *Divyangjan ITI pass outs* from ITIs, including age, gender, trade type and course duration (Annexure – VI).

Out of the total 88 *Divyangjan ITI pass outs*, 10 were females and 78 were males. The study shows that 60.2 per cent (N=88) of *Divyangjan ITI pass outs* completed two-year courses at ITI, while 39.8 per cent opted for one-year courses. Among the pass outs, 39.8 per cent each were in the age bracket of 18-21 years and 22-25 years, while 13.6 per cent were in the age bracket of 26 -30 years. Majority of *Divyangjan ITI pass outs* (69.3 per cent,) chose engineering trades, with the remaining 30.7 per cent choosing to pursue non-engineering trades. Additionally, the study found that 38.6 per cent of the pass outs had a monthly household income of up to INR 10,000; 33 per cent fell within the income range of INR 10,001-20,000; and only 2.3 per cent reported a monthly household income in INR 50,001-75,000 range. Comparison of household income of *Divyangjan ITI pass outs* with the other pass outs potrayed considerable variations with higher proportion of *Divyangjan ITI pass outs* reporting a monthly household income of upto INR 10,000 (38.6 per cent) compared to other ITI pass outs (26.6 per cent). This necessitates the need for more inclusive guidelines for providing financial assistance to the disadvantaged groups to improve their enrollement and retaintion at ITI.

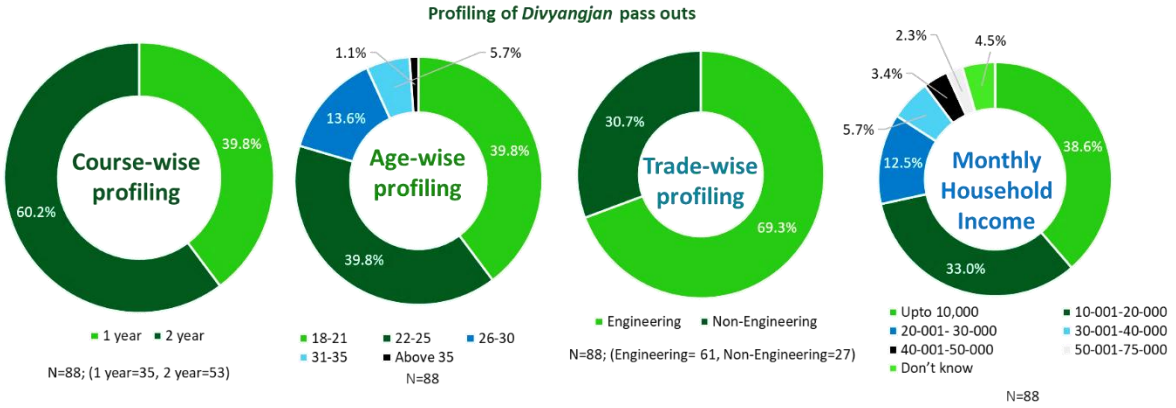


Figure 32: Profile of *Divyangjan ITI pass outs*

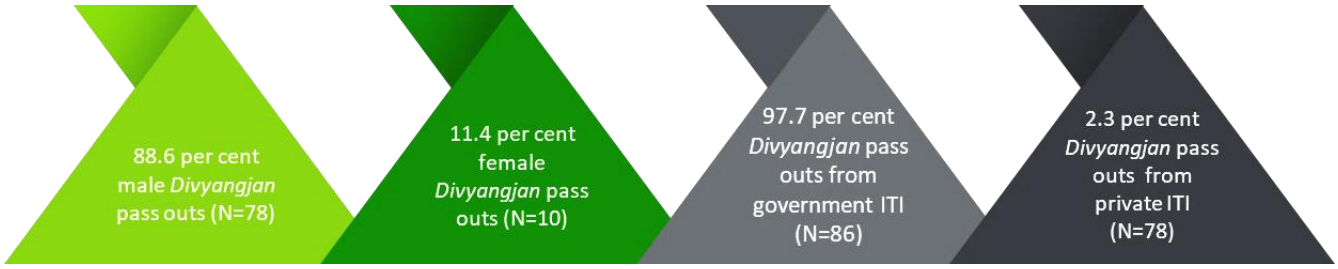


Figure 33: Profile of *Divyangjan ITI pass outs* based on gender and type of ITI

The table below provides state-wise distribution of *Divyangjan ITI pass outs*. While most of the States had low representation of *Divyangjan ITI pass outs*, Maharashtra stood out with around 35.3 per cent (31) representation compared to other States.

Table 21: State and UT-wise distribution of *Divyangjan ITI pass outs*

State/UT	State and UT-wise disability (N)	%
Andaman And Nicobar Islands	1	1.1
Andhra Pradesh	1	1.1
Assam	1	1.1
Bihar	1	1.1
Chhattisgarh	2	2.3
Delhi	2	2.3
Gujarat	1	1.1
Haryana	1	1.1
Himachal Pradesh	3	3.4
Karnataka	9	10.3
Kerala	6	6.8
Madhya Pradesh	4	4.5
Maharashtra	31	35.3
Odisha	1	1.1
Punjab	1	1.1
Rajasthan	2	2.3
Telangana	2	2.3
Uttar Pradesh	7	8.0
West Bengal	12	13.7
Total	**88**	**100.0**

The study also captured highest level of education procured by *Divyangjan ITI pass outs* before enrolling into ITI course as well as educational qualification they pursued during their ITI training.

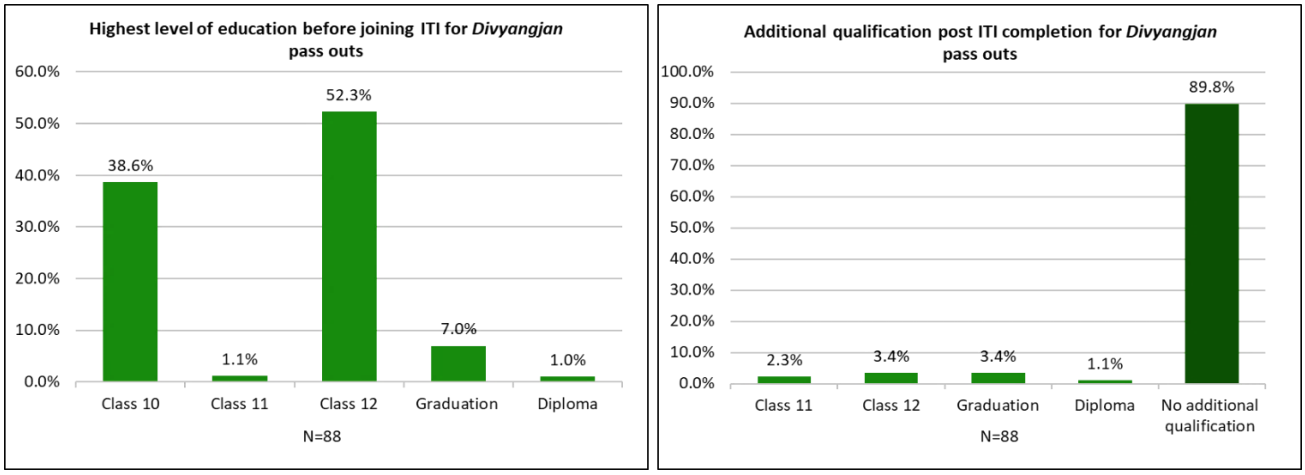


Figure 34: Education qualifications before enrolling in and after completing ITI course

Among the Divyangjan ITI pass outs, 52.3 per cent had completed education up to class 12 before enrolling, while 38.6 per cent had completed education up to class 10. A small percentage (seven per cent and one per cent) had completed graduation and diploma (respectively) before joining the ITI course.

Majority of pass outs (89.8 per cent) did not pursue any additional qualifications after completing the ITI course. Only 10.2 per cent of the pass outs had opted for diploma, graduation, Class 12, or Class 11 studies.

Of the total sample, 89.6 per cent *Divyangjan ITI pass outs* had opted for non-engineering trades. While a majority of male *Divyangjan ITI pass outs* (75.6 per cent out of the total male Divyangjan -78) had opted for engineering courses, a majority of female *Divyangjan ITI pass outs*, 80 per cent out of only 10 female *Divyangjan* had opted for non-engineering trades.

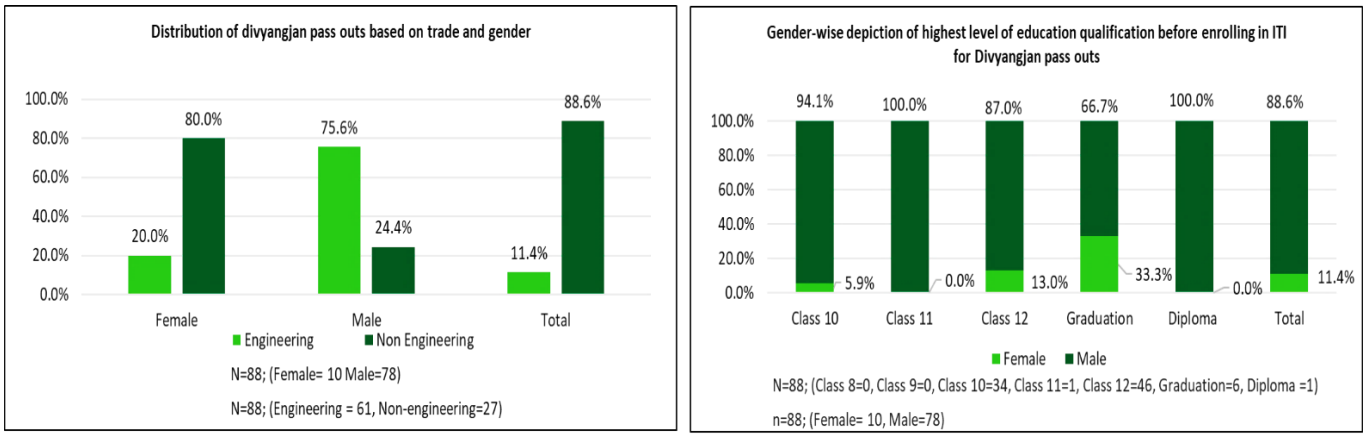


Figure 35: Distribution of *Divyangjan pass outs* based on trade and education qualifications before ITI enrollment

Further, it was observed that a majority of male *Divyangjan ITI pass outs* (66.7 per cent) chose two-year courses at ITI, while only 10 per cent of female *Divyangjan ITI pass outs* had opted for this duration course. Conversely, majority of females (90 per cent) chose one-year courses at ITI, compared to only 33.3 per cent of males.

Out of the total *Divyangjan ITI pass outs* within the age group of 18-21 years, majority were males (97.1 per cent). Among the female pass outs in the same category, the highest proportion was seen in the age group of 31-35 years (40 per cent).

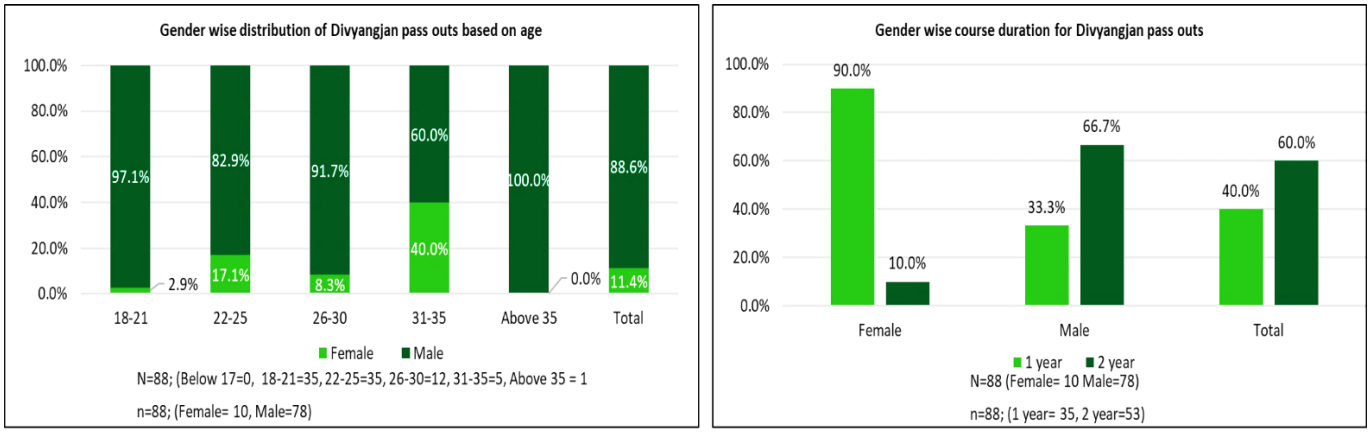


Figure 36: Distribution of *Divyangjan ITI pass outs* based on age, gender and gender-wise course duration

Quality & Relevance of ITI Training

Chapter 4: Quality and Relevance of ITI Training

The current chapter encapsulates the perception of ITI pass outs with respect to relevance and quality of ITI training programme. Aspects such as enhancement of technical knowledge, skills, availability of adequate infrastructure facilities, etc. have been focussed upon for insights into quality. The relevance of ITI training has been examined based on parameters such as the course's usefulness to and connect with industrial requirement, as well as its contribution to enhancing employability and income. Further, the chapter includes suggestions from ITI pass outs for improving the training to better suit the market requirements.

4.1 Perception of ITI pass outs on quality of the training programme

The first part of this chapter deals with understanding the quality of training and infrastructure availability at ITIs from the perspective of ITI pass outs.

4.1.1 Perception regarding the quality of training programme at ITI by type of ITI

The ITI pass outs were asked to rate the quality of training programme. The findings revealed that at an overall level 79.4 per cent of the total ITI pass outs believed that ITI training helped them gain technical knowledge. Perceived enhancement of soft skills and IT skills was highlighted by 76 per cent and 73 per cent of the ITI pass outs respectively. 80 per cent of the ITI pass outs agreed that training had improved their confidence to achieve their future goals, while 81.7 per cent of the ITI pass outs expressed willingness to recommend the training programme to others.

The analysis by type of ITIs depicted a similar pattern. Positive perception was observed among the pass outs towards the effectiveness of the programme in improving technical knowledge, soft skills and IT skills. Among the pass outs from government ITIs, 79 per cent reported an improvement in technical knowledge, 76 per cent in soft skills and 72 per cent in IT skills. Further, training contributed to 79.3 per cent of the ITI pass outs feeling more confident, and 81.1 per cent ITI pass outs stated that they would recommend others to join the training programmes at ITIs.

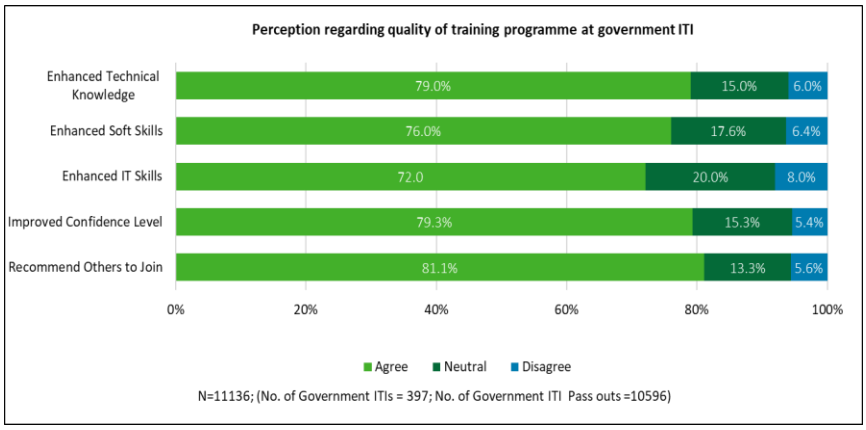


Figure 37: Training programme at government ITIs

93 per cent of private ITI pass outs indicated that their technical knowledge improved as a result of the training programme, while 88 per cent and 82 per cent reported an improvement in soft skills and IT skills respectively. 94 per cent of the ITI pass outs were satisfied with the trainings at ITI and were willing to recommend others to join.

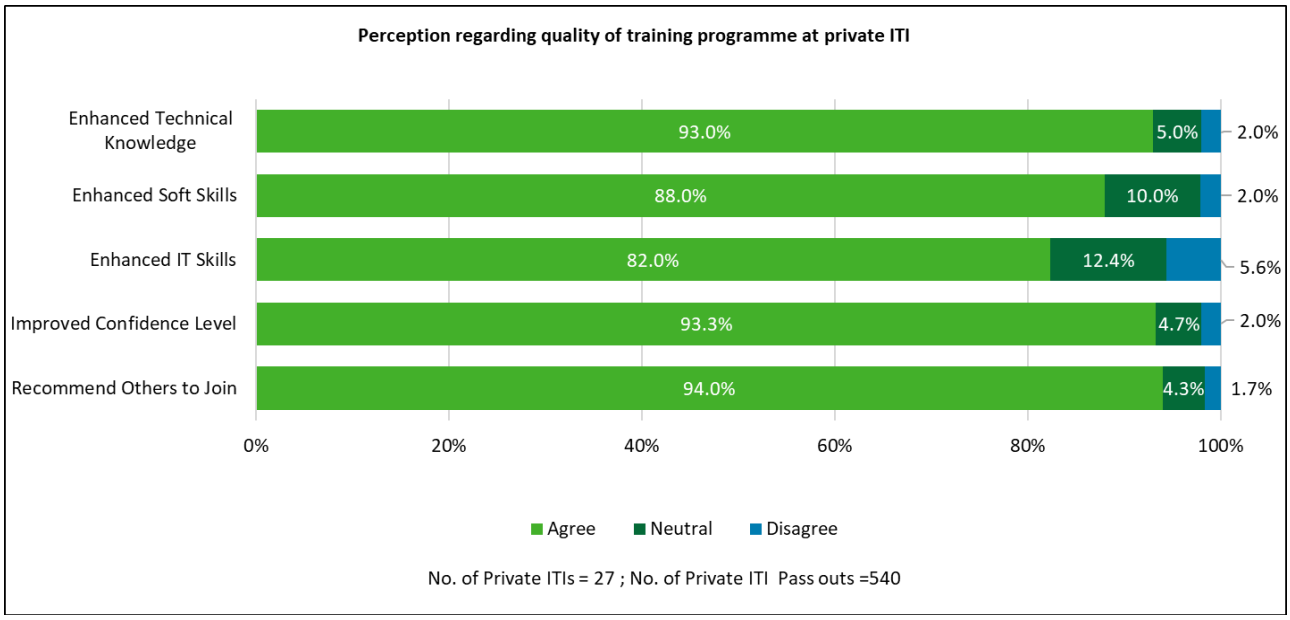


Figure 38: Training programme at private ITIs

4.1.2 Infrastructure availability at ITIs

Quality of infrastructure, for the purpose of this study, has been measured through perception of the pass outs on availability of sufficient machinery and equipment; sufficient classrooms, laboratories and workshops for training; and availability of raw materials at laboratories/workshops. Besides, details were also captured regarding condition of toilet facilities, condition of residential facilities (wherever applicable), cleanliness at campus and residential facilities, and the availability and quality of overall infrastructure.

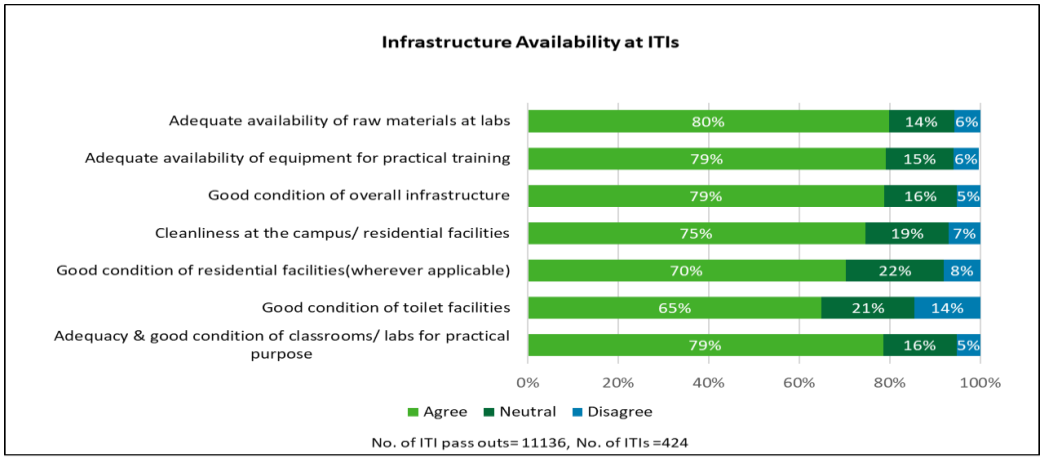


Figure 39: Infrastructure availability at ITIs

78.5 per cent of the ITI pass outs perceived the classrooms/laboratories for practical classes as adequate and in good condition. 70.3 per cent of the ITI pass outs considered the condition of residential facilities to be

good. Similarly, 78.8 per cent of the ITI pass outs agreed that the overall infrastructure was in good condition. Cleanliness in the campus and residential facilities was seen as good by 74.6 per cent of the ITI pass outs. Toilet facilities were said to be in good condition by 65 per cent of ITI pass outs, with 20.5 per cent neither agreeing nor disagreeing and 14.5 per cent expressing their dissatisfaction. Adequate availability of equipment and raw materials for practical classes was reported by 79.9 per cent and 79.1 per cent of the ITI pass outs respectively.

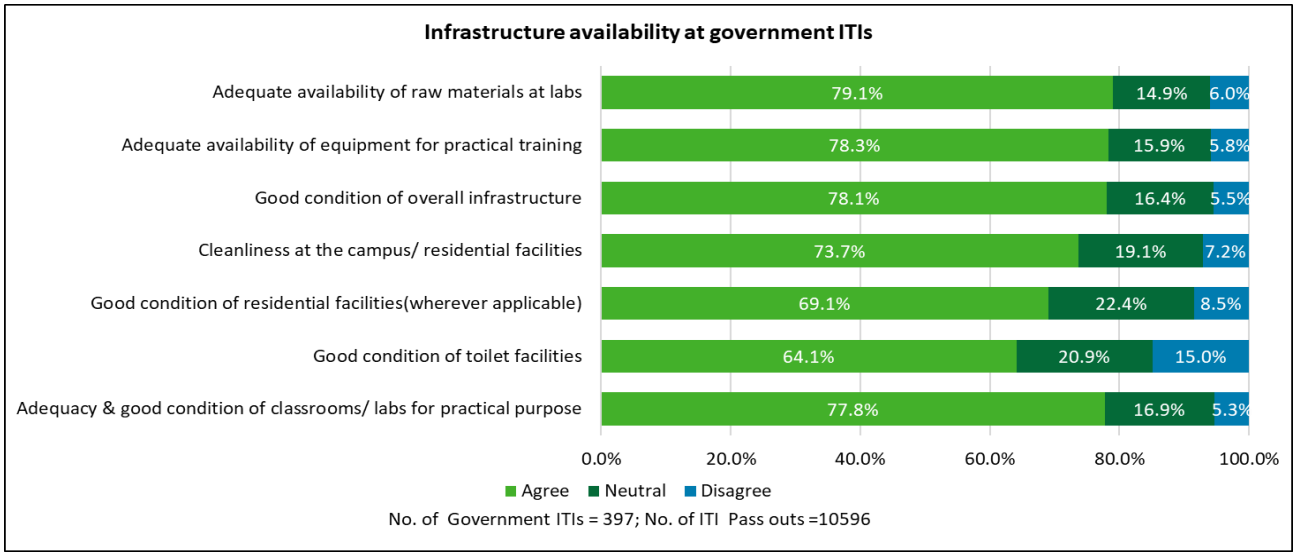


Figure 40: Infrastructure availability at government ITIs

Based on analysis by type of ITIs, a similar pattern was observed across government ITIs as well. Considerable proportion of pass outs (64.1 per cent) agreed on the cleanliness of toilets whereas 35.8 per cent of the pass outs either took a neutral stance or disagreed on the good condition of the toilet facilities.

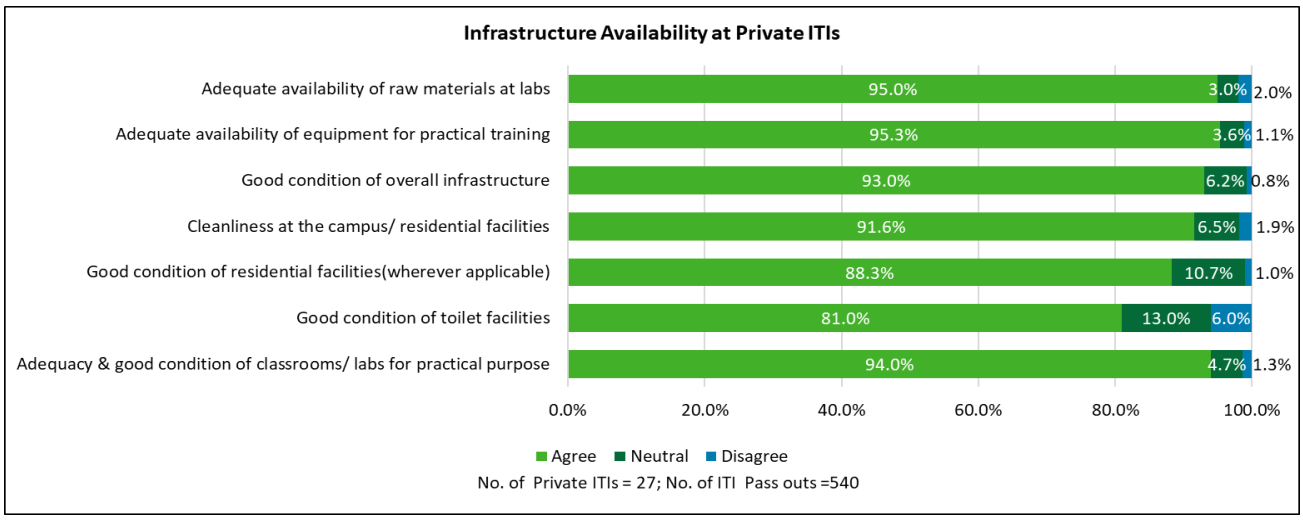


Figure 41: Infrastructure availability at private ITIs

Private ITIs performed well on almost all the parameters related to infrastructure availability. Classrooms and laboratories were considered sufficient and in good condition by 94 per cent pass outs from private ITIs. 88.3 per cent of the ITI pass outs agreed that condition of residential facilities was good. About 95.3 per cent of the ITI pass outs sampled reported adequate availability of equipment for practical training and were

satisfied with the availability of raw materials. Toilets and residential facilities were considered in good condition by 81 per cent, and 88.3 per cent of the ITI pass outs respectively.

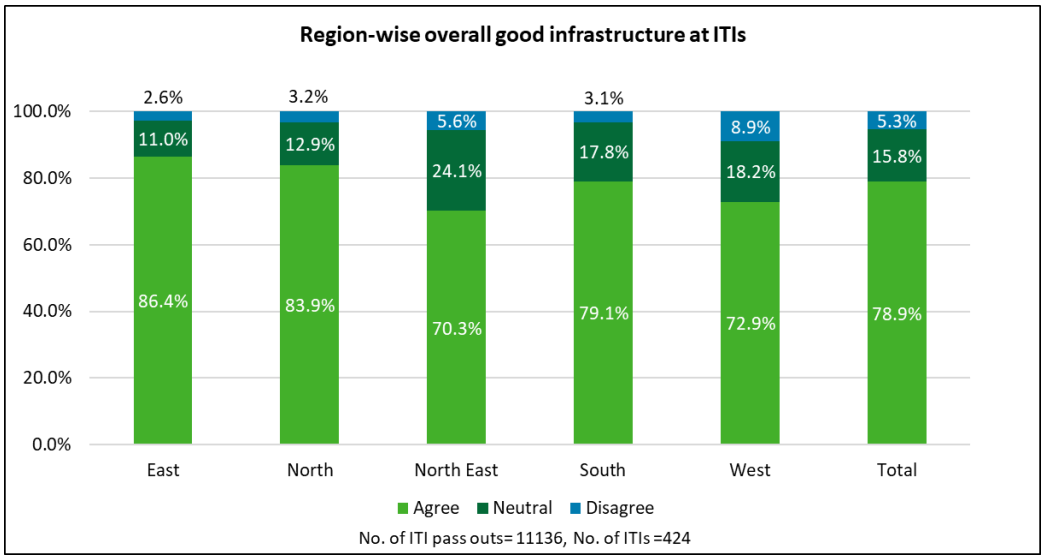


Figure 42: Overall good physical infrastructure at ITIs by region

Regional analysis on perception of overall infrastructure facilities shows that ITIs in the eastern region and northern region are slightly better in terms of infrastructure. 86.4 per cent of ITI pass outs from ITIs in eastern region mentioned that overall physical infrastructure at ITIs was in good condition. In northern region, 83.9 per cent of the ITI pass outs reported the condition of overall physical infrastructure as satisfactory.

The overall condition of physical infrastructure was relatively better across urban ITIs. 83.1 per cent of the urban ITI pass outs and 76.1 per cent of rural ITI pass outs termed the condition of ITIs as satisfactory.

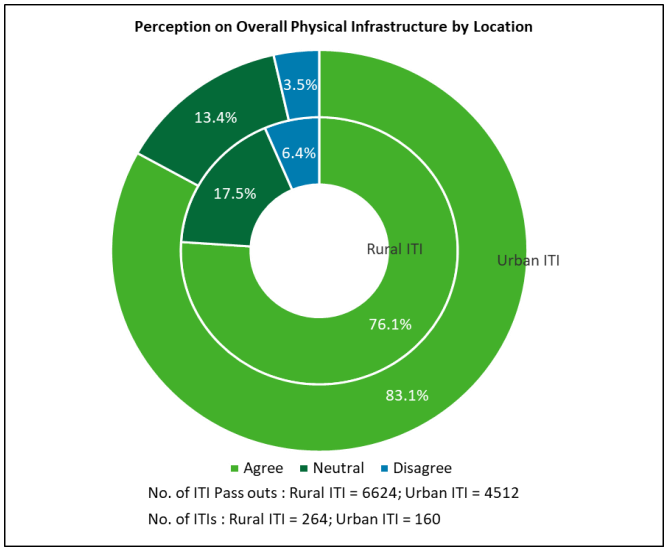


Figure 43: Perception on overall physical infrastructure by location

4.1.3 Facilities for SC/ST, women and Divyangjan ITI pass outs

In this section, the perception of ITI pass outs related to the provision of facilities to SC/ST, women and *Divyangjan ITI pass outs* has been captured through parameters such availability of transport facilities and stipend for female, *Divyangjan* and SC/ST pass outs. This section was administered to all the ITI pass outs. However, in case of certain questions related to perception of ITI pass outs on availability of transport facilities and stipend for women, SC/ST and *Divyangjan ITI pass outs*, responses were captured only in those ITIs where the facilities were applicable.

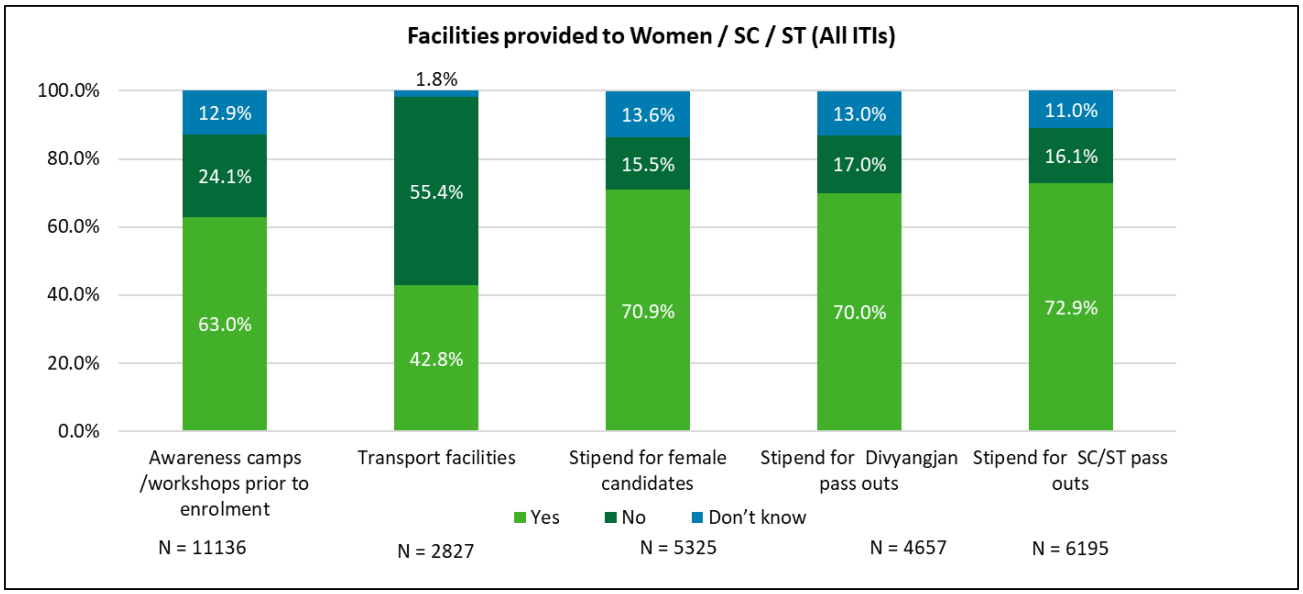


Figure 44: Facilities provided to women, SC/ST and Divyangjan (all ITIs)

Note: Total of each sub-group is used to compute the percentages.

Out of the total responses (N=11,136), 63 per cent of the ITI pass outs reported that awareness campaigns and workshops were organised to ensure enrollment of women, SC/ST and *Divyangjan ITI pass outs*. Out of 5,325 ITI pass outs who reported that stipend for female pass outs was applicable at their ITI, 70.9 per cent agreed that stipend was available. Regarding the stipend for *Divyangjan ITI pass outs*, 4,657 ITI pass outs reported that it was applicable. Of these ITI pass outs, 70 per cent confirmed availability of stipend for *Divyangjan ITI pass outs*. 72.9 per cent of the ITI pass outs (wherever applicable, n=6,195), mentioned that stipend was available for SC/ST pass outs. Majority of the ITI pass outs reported availability of stipends (wherever applicable) to financially incentivise marginalised sections of the society. Transport facilities for women, *Divyangjan* and SC/ST pass outs were considered applicable at their ITIs by 2,827 ITI pass outs. Among these, 42.8 per cent stated that transport facilities were available.

4.2 Perception of ITI pass outs on relevance of ITI training

Perception of ITI pass outs regarding relevance of ITI training has been measured through the parameters such as relevance to industrial requirements, usefulness in increasing income, impact on employability and imparting relevant knowledge and skills.

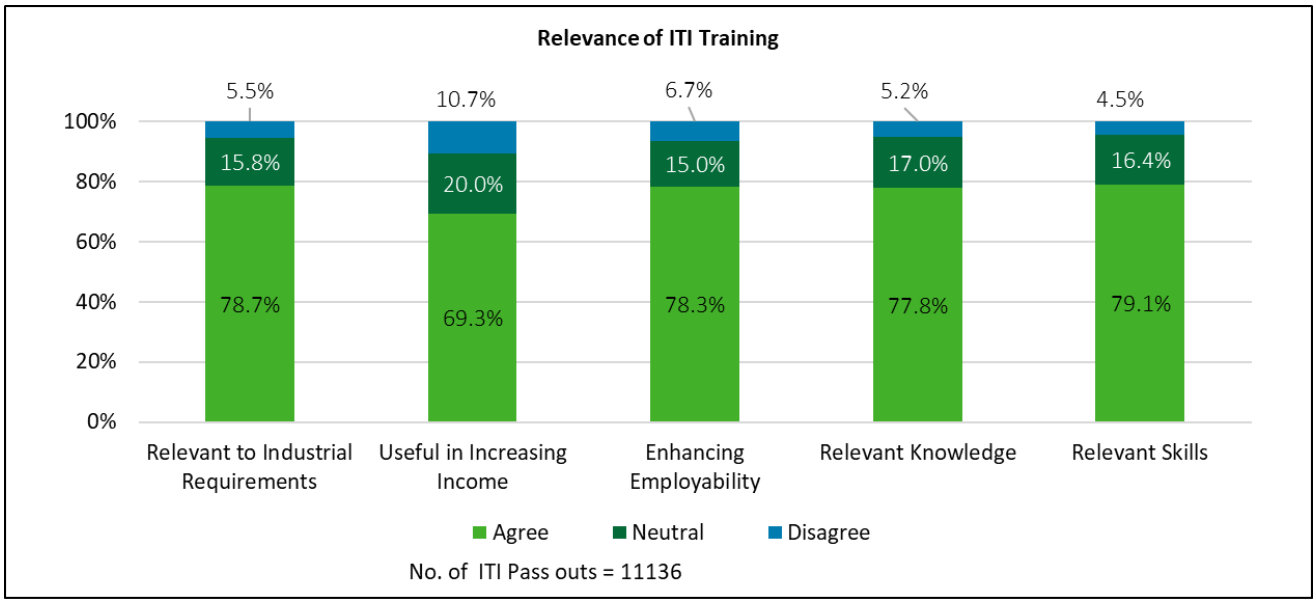


Figure 45: Relevance of ITI training

4.2.1 Perception on relevance of training to industrial requirements

78.7 per cent of the ITI pass outs perceived the training to be relevant to industrial requirements. Further, across both engineering (79.6 per cent) and non-engineering trades (76 per cent), majority of the ITI pass outs perceived that ITI training was aligned with the industry requirements.

4.2.2 Perception on usefulness of training in increasing income levels

The study highlighted that 69.3 per cent of ITI pass outs perceived that ITI training has been useful in increasing their income levels. Trade-wise analysis revealed a similar pattern. For pass outs from engineering trades, positive impact of training programme on income levels was perceived by 70.3 per cent of the ITI pass outs whereas the corresponding figure for non-engineering trades was 66.2 per cent.

4.2.3 Perception on enhanced employability

78.3 per cent of ITI pass outs perceived the ITI course to be helpful in enhancing their employability. A similar pattern was observed across both trade types, i.e., engineering (78.7 per cent) and non-engineering (77.1 per cent).

4.2.4 Perception on relevant knowledge and skills

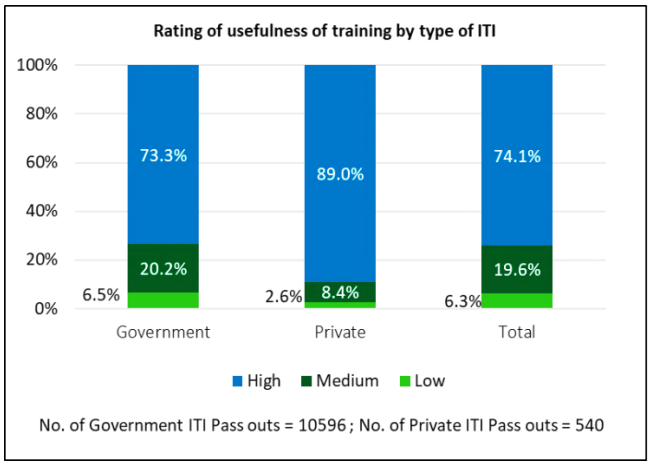
The study showed that 77.7 per cent of ITI pass outs held the perception that ITI training provided them with the required knowledge. Similarly, 79.1 per cent of the ITI pass outs also perceived that ITI training provided them with relevant skills.

4.3 Overall usefulness of ITI training and suggestions for improvement

To gauge the overall usefulness of ITI training programme, the respondents were requested to rate usefulness on a scale of 1 to 5, with 1 being lowest and 5 the highest in terms of usefulness. For the purpose of analysis of data, ratings 1 and 2 are combined as low, 3 is taken as medium and 4 and 5 as high.

4.3.1 Usefulness of ITI training

The ITI respondents were asked to rate the usefulness of ITI training. 74.1 per cent of the ITI pass outs assigned a high rating to the training at ITI, with 19.6 per cent assigning medium and 6.3 per cent assigning a low rating. Further analysis by type of ITI shows that similar findings were reported by government ITI pass outs. In case of private ITIs, 89 per cent of the ITI pass outs rated their training as high, whereas 11 per cent rated it as either medium or low.



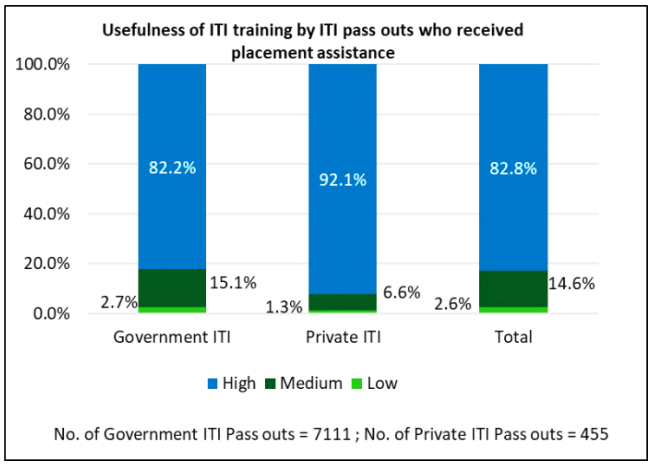


Figure 46: Rating of usefulness of training and placement assistance of ITI

Majority of the ITI pass outs who received placement assistance rated their training high. Of those who received placement assistance, 82.8 per cent rated their training at ITI as high, 14.6 per cent assigned medium rating and 2.6 per cent gave it a low rating.

4.3.2 Reasons for considering ITI training useful

The ITI pass outs who assigned high rating to usefulness of training were further probed on the reasons for considering the training useful. 35.9 per cent stated that it proved useful as it helped them secure a job; 28.7 per cent mentioned that they got a better job as a result of the training; 36.6 per cent said they gained technical skills; 22.7 per cent reported that they acquired soft skills; 18.6 per cent felt it helped them gain practical exposure to industries; 25.7 per cent said that the course was helpful in obtaining a certificate, which is essential for securing government jobs; and 14.8 per cent felt it helped in pursuing additional diploma courses.

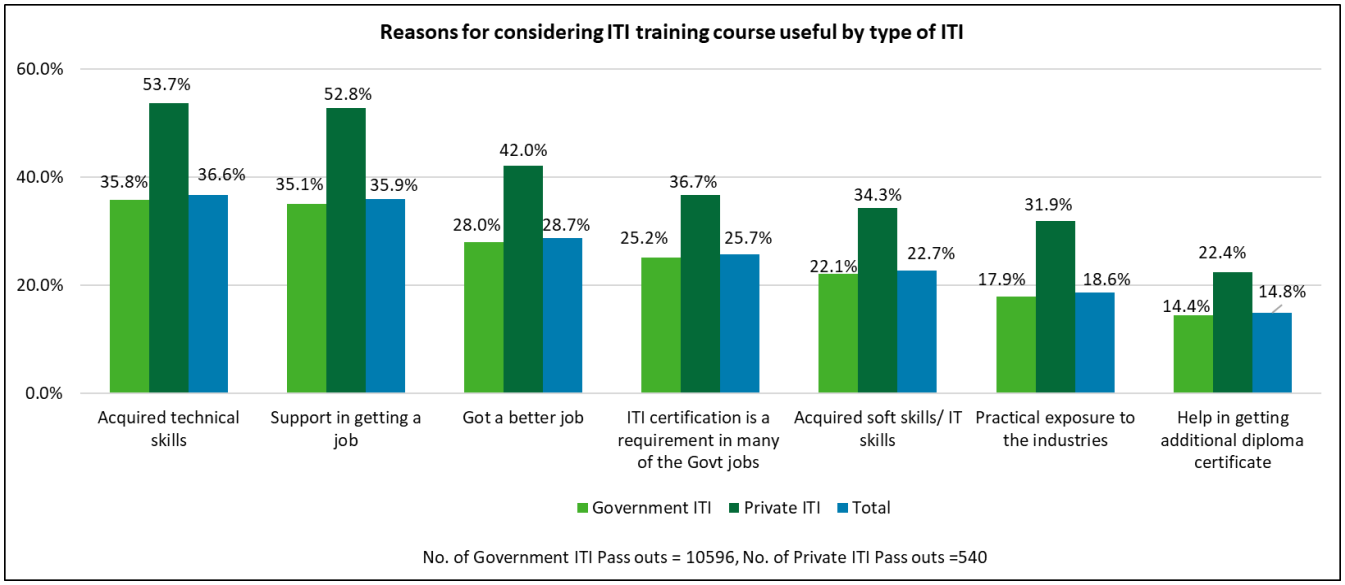


Figure 47: Reasons for considering ITI training course useful by type of ITI
(**The numbers will not add up to 100 as it was a multiple response question)*

4.3.3 Suggestions for improvement of ITI training

The respondents were asked their views on how the ITI training may be further improved. Around 47 per cent pass outs suggested that laboratory facilities/workshops should be improved. Need for improvement in quality of teaching and availability of better faculty and instructors was stated by 28.2 per cent pass outs. Other important suggestions to improve training programme included conducting placement activities (24.7 per cent); convenient locations of ITIs (23 per cent); updating course content and teaching relevant skill courses (22.8 per cent); provision of transport facilities (20.5 per cent); and focus on soft skills training (19.8 per cent). No significant variations was seen across gender wise comparison in terms of suggestion for improving the training.

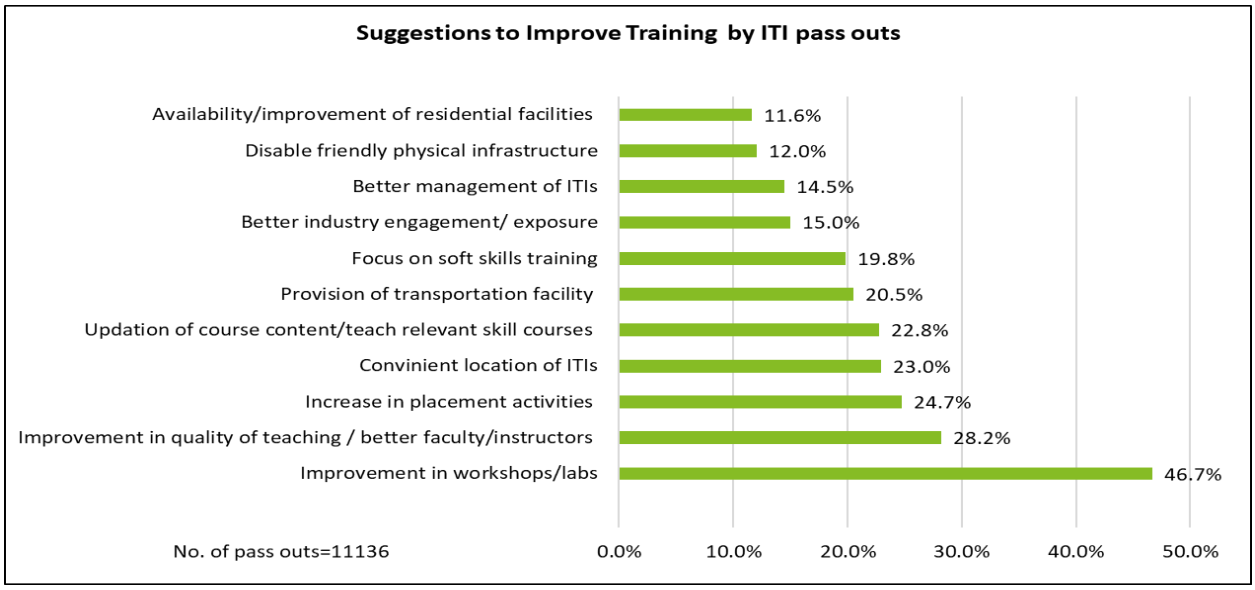


Figure 48: Suggestions for improving ITI training by gender (*Multiple response question)*

4.4 Quality and relevance of ITI training and suggestions for improvement - Divyangjan

4.4.1 Quality and relevance of ITI training -Divyangjan

***Perception of Divyangjan* ITI pass outs:** Majority of *Divyangjan* ITI pass outs had a positive perception of the quality of training programme at ITIs. Among the *Divyangjan* ITI pass outs, 76.1 per cent reported that their technical skills were enhanced through the training programme at ITIs. Improvement in soft skills and IT skills was reported by 70.5 per cent and 75 per cent *Divyangjan* respectively. 78.4 per cent of the *Divyangjan* ITI pass outs felt that they became more confident post completion of their training and 76.1 per cent were willing to recommend others to join the training programme.

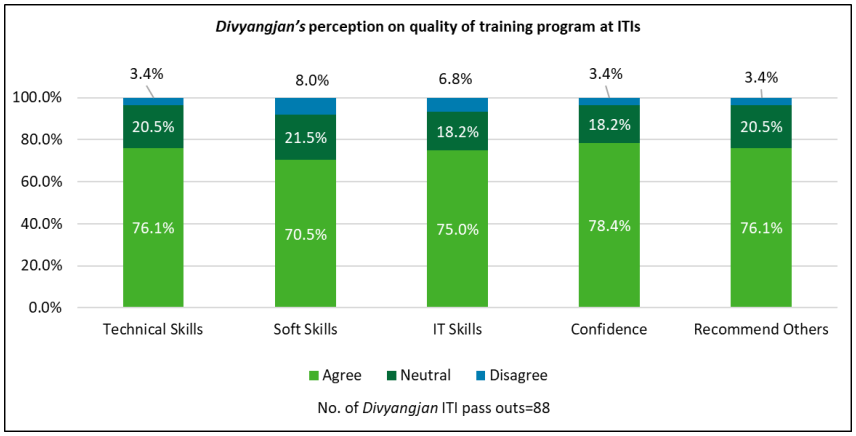


Figure 49: Perception of *Divyangjan* on Quality of Training Programme at ITIs

72.7 per cent of *Divyangjan* ITI pass outs stated that the overall physical infrastructure was in good condition.

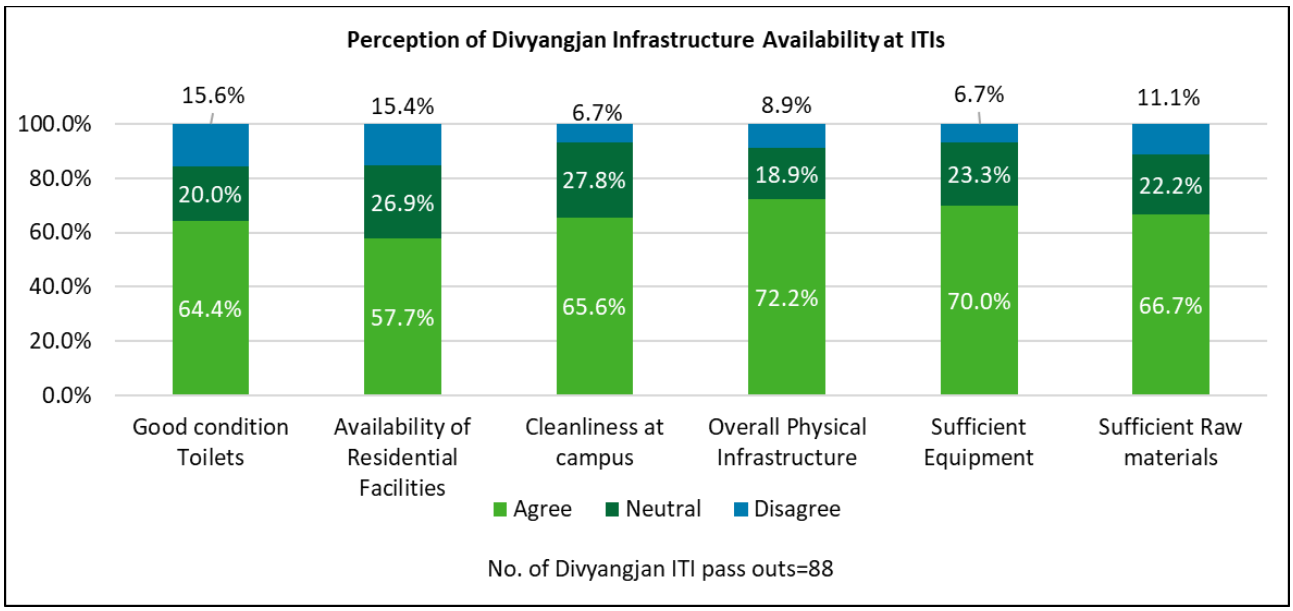


Figure 50: Perception of *Divyangjan* on infrastructure availability at ITIs

Perception of *Divyangjan* ITI pass outs regarding relevance of ITI training: 75 per cent Divyangjan ITI pass outs perceived ITI training to be relevant to the industrial requirements. While 64.8 per cent considered training to be helpful in increasing income, 70.5 per cent reported it as relevant in enhancing employability. Relevance of ITI training in providing required knowledge and skills was perceived by 69.3 per cent and 77.3 per cent Divyangjan ITI pass outs respectively.

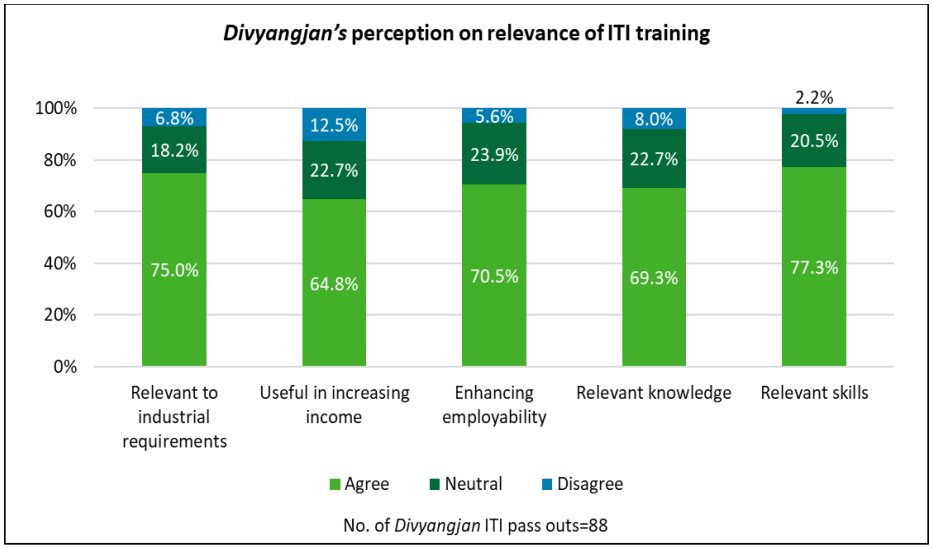


Figure 51: Perception of *Divyangjan* ITI Pass outs on Relevance of ITI Training

Perception of *Divyangjan* ITI pass outs regarding usefulness of ITI training: 61 per cent *Divyangjan* ITI pass outs assigned a high rating to usefulness of ITI training programme in securing placement. Among the reasons stated by *Divyangjan* ITI pass outs for considering ITI training course as useful, 26.1 per cent mentioned getting better job post completion of training at ITI. Besides, 23.9 per cent reported that they acquired technical skills and 22.7 per cent felt the training supported them in getting jobs. A smaller percentage of *Divyangjan* ITI pass outs considered the training useful in gaining practical exposure to industries (15.9 per cent), gaining certification for government jobs (15.9 per cent), acquiring soft skills/IT skills (12.5 per cent), and in getting additional diploma certificates (9.1 per cent).

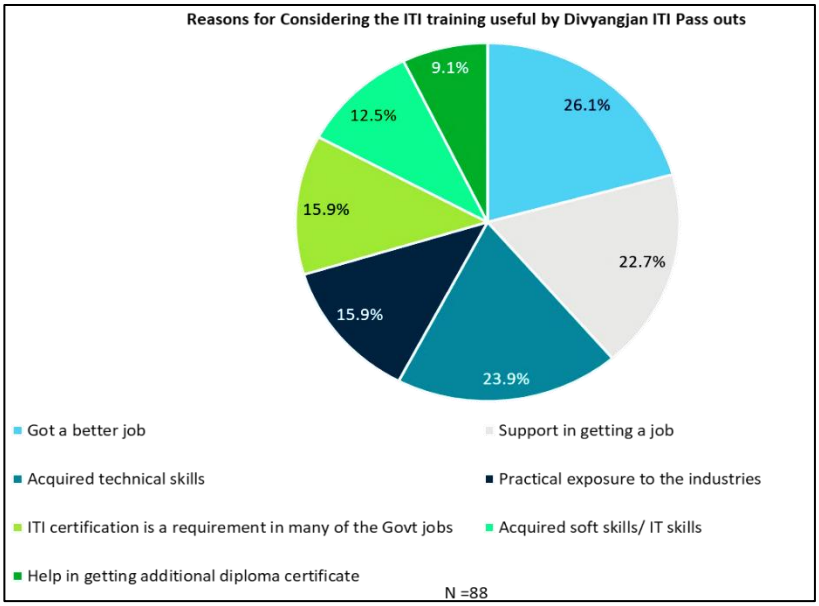


Figure 52: Reasons for considering the ITI training useful by Divyangjan ITI Pass outs

Suggestions by *Divyangjan* ITI pass outs for improving ITI training: 46.6 per cent of Divyangjan ITI pass outs suggested improvement in workshops, followed by 30.7 per cent who highlighted that more placement activities should be conducted. While 28.4 per cent mentioned that ITI location should be convenient, 26.1 per cent felt a need for improvement in quality of teaching and 21.6 per cent each suggested, provision of transportation facility and updating of course content.

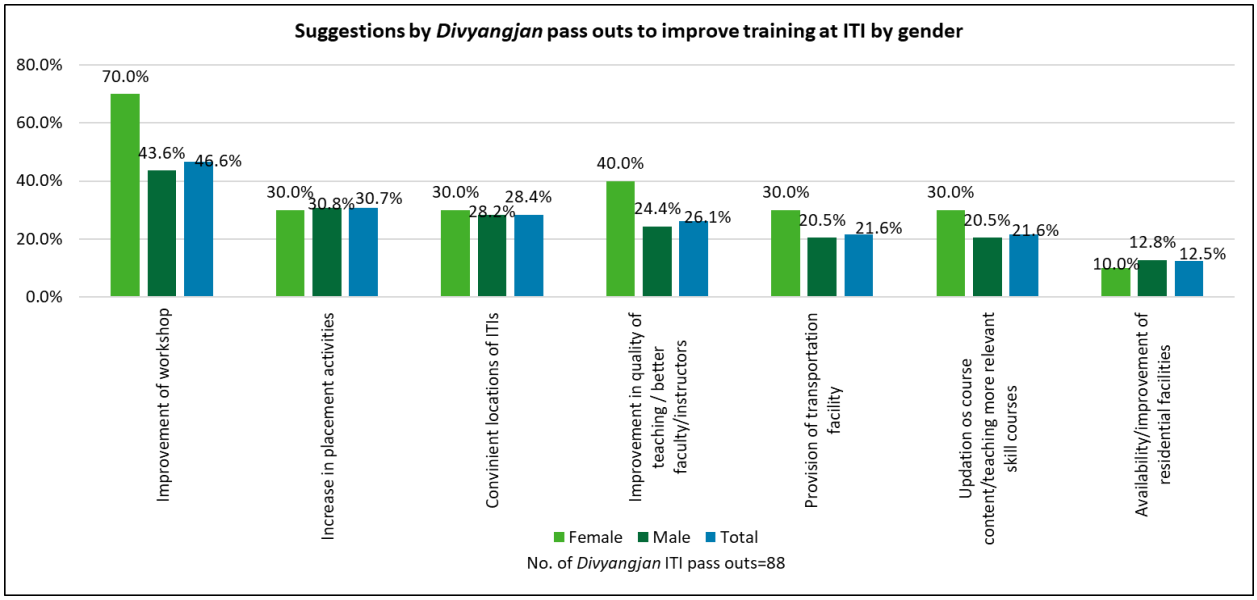


Figure 53: Suggestions by *Divyangjan* ITI pass outs to improve training

On-the-Job-Training

Chapter 5: On-the-Job Training (OJT)

5.1 Status of on-the-job training

OJT is an important component of ITI training, and it gives an exposure of workplace to ITI students and helps in development of new skills. The relevant factors influencing On-the-Job Training (OJT) were noted. Availability of TCPC at ITIs, reasons for finding the On-the-job training useful at ITI and suggestions for improvement of training are discussed below:

5.1.1 OJT by type of trade and Gender

Overall, 54.2 per cent of the ITI pass outs had undertaken OJT. Among the male ITI pass outs, around 56.3 per cent undertook OJT, which was slightly higher than 47.7 per cent female ITI pass outs who undertook OJT. With reference to trades of training, around 58 per cent of engineering trades pass outs undertook OJT as compared 42.3 per cent of the non-engineering ITI pass outs.

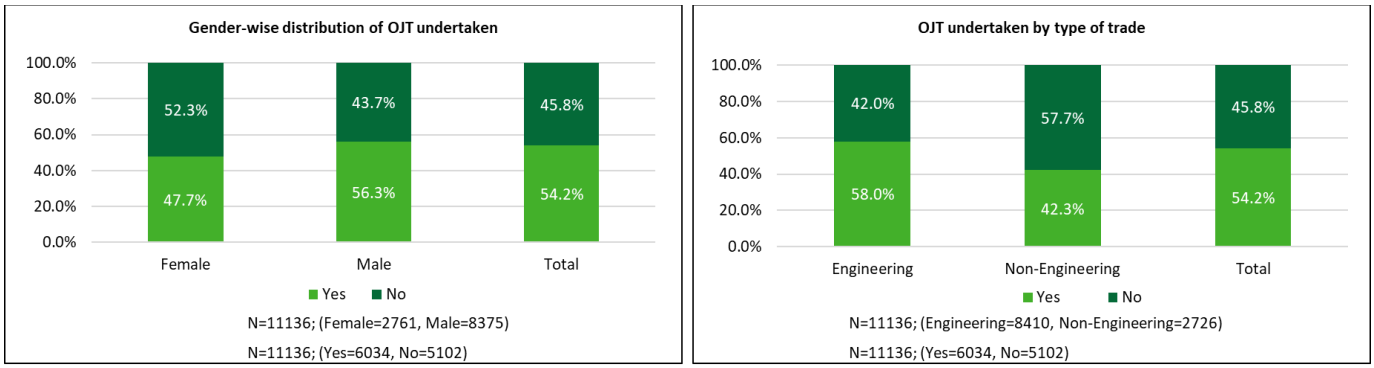


Figure 54: Distribution of OJT undertaken by gender and trade

45.9 per cent of ITI pass outs undertook OJT for 1-2 weeks; 35.3 per cent for 2-4 weeks; and 18.8 per cent for more than four weeks. Gender-wise comparison depicts a contrasting picture, with higher proportion of females undertaking OJT for 1-2 weeks (52.1 per cent) as compared to their male counterparts (44.2 per cent). Almost same percentage of male (35.9 per cent) and female ITI (33.1 per cent) pass outs undertook training for 2-4 weeks. Slightly higher proportion of male ITI pass outs got the opportunity to undertake OJT for more than four weeks (19.9 per cent) as compared to 14.8 per cent of female ITI pass outs.

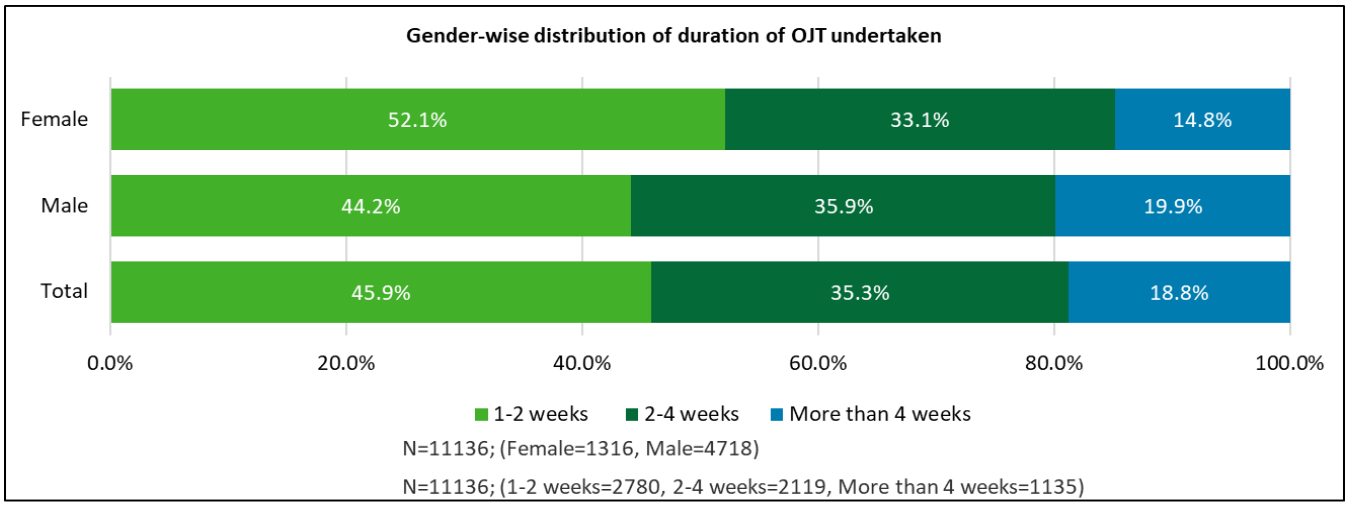


Figure 55: Distribution of duration of OJT by gender

Regional analysis shows that a higher proportion of ITI pass outs from the north region (68.9 per cent) had undertaken OJT, followed by ITI pass outs from the southern region at 56 per cent. Higher rates of OJT were recorded for states like Delhi (90 per cent), Uttar Pradesh (79 per cent), Punjab (74 per cent), and Himachal Pradesh (66 per cent). In north-eastern region, very few students undertook OJT (21.3 per cent) in the period under consideration. Lesser percentage of ITI pass outs undertook OJT[13] in states such as Gujarat (42 per cent), Karnataka (38 per cent), and Telangana (36 per cent).

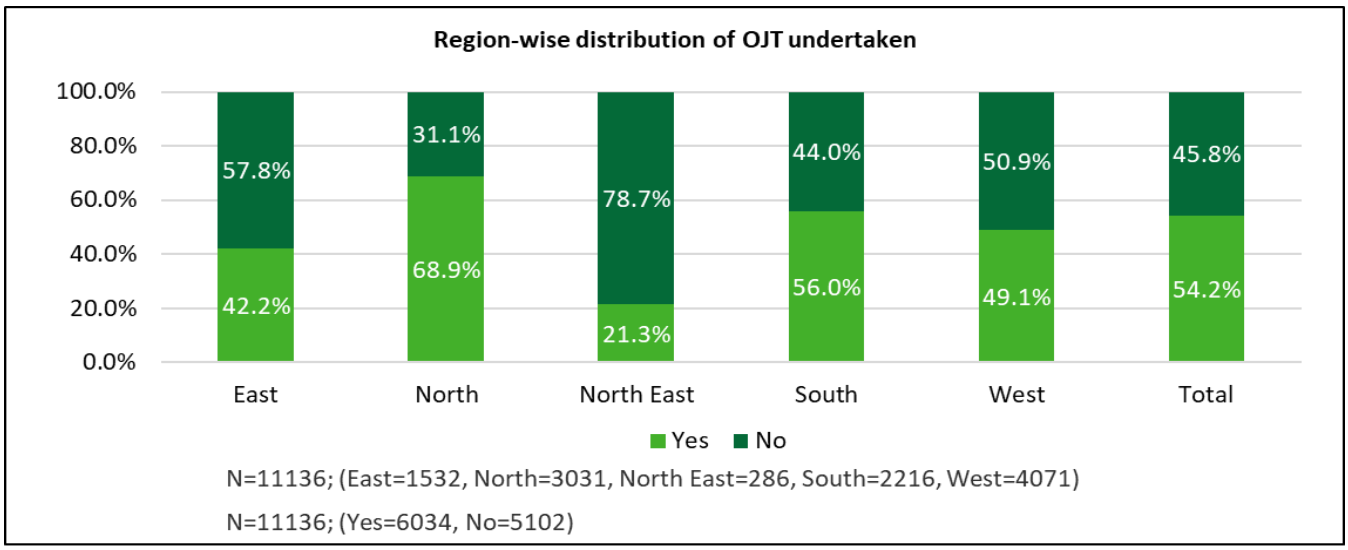
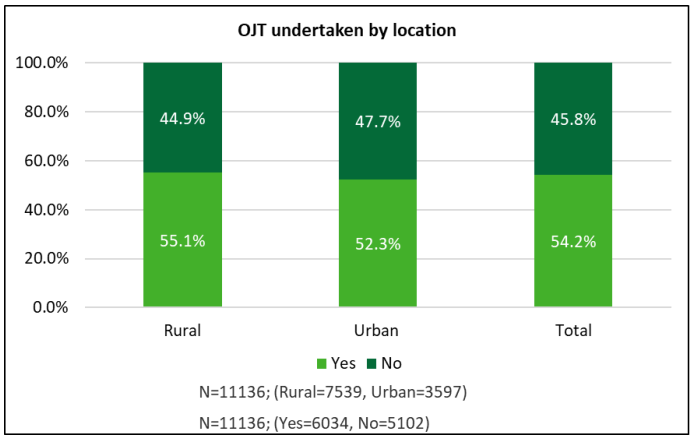


Figure 56: Region-wise distribution of OJT undertaken

Almost an equal proportion of ITI pass outs from rural and urban ITIs undertook OJT – 55.1 per cent from rural ITIs and 52.3 per cent from urban ITIs.

Analysing OJT numbers by type of ITI reveals that 63.3 per cent of private ITI pass outs and 53.7 per cent of government ITI pass outs undertook OJT. (Refer Annexure VII for state-wise OJT coverage)

[13] Figures in parenthesis are the percentage of ITI pass outs who undertook OJT.



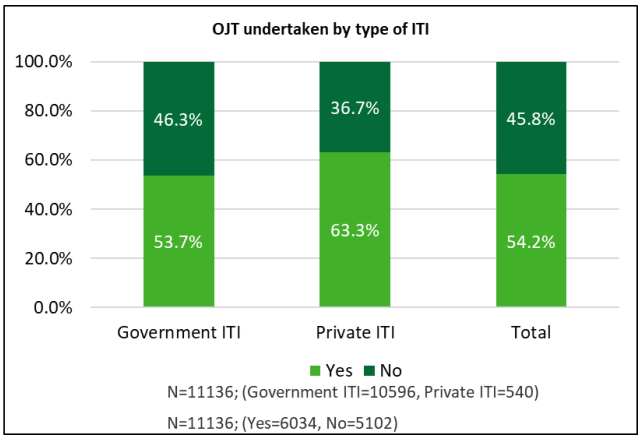
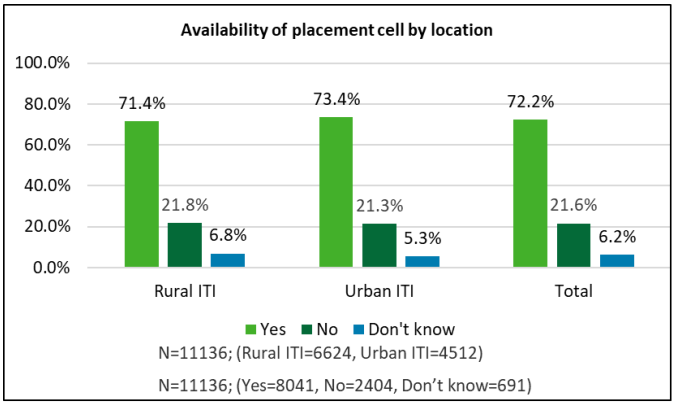


Figure 57: OJT undertaken by type of ITI

5.1.2 Availability of Training Counselling and Placement Cell (TCPC)

72.2 per cent of ITI pass outs reported the existence of placement cell and 72.9 per cent confirmed availability of placement counsellor at their ITIs. Similar findings were reported from government ITI pass outs. In case of private ITIs, availability of placement cell and placement counsellor was reported by 88.5 per cent and 85.6 per cent ITI pass outs respectively. No major differences were observed between availability of TCPC in rural ITIs and urban ITIs. 71.4 per cent of ITI pass outs from rural ITIs and 73.4 per cent of the ITI pass outs from urban ITIs reported having TCPC in their respective ITIs.



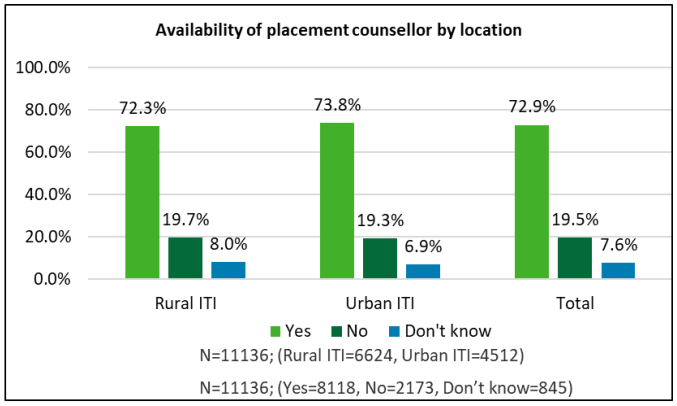


Figure 58: Availability of placement cell and counselor by type of ITI and location

5.1.3 OJT undertaken by Divyangjan ITI pass outs

54.5 per cent of Divyangjan ITI pass outs undertook OJT during their training at ITI. Of these, 81.3 per cent were from engineering trades and 18.7 per cent from non-engineering trades.

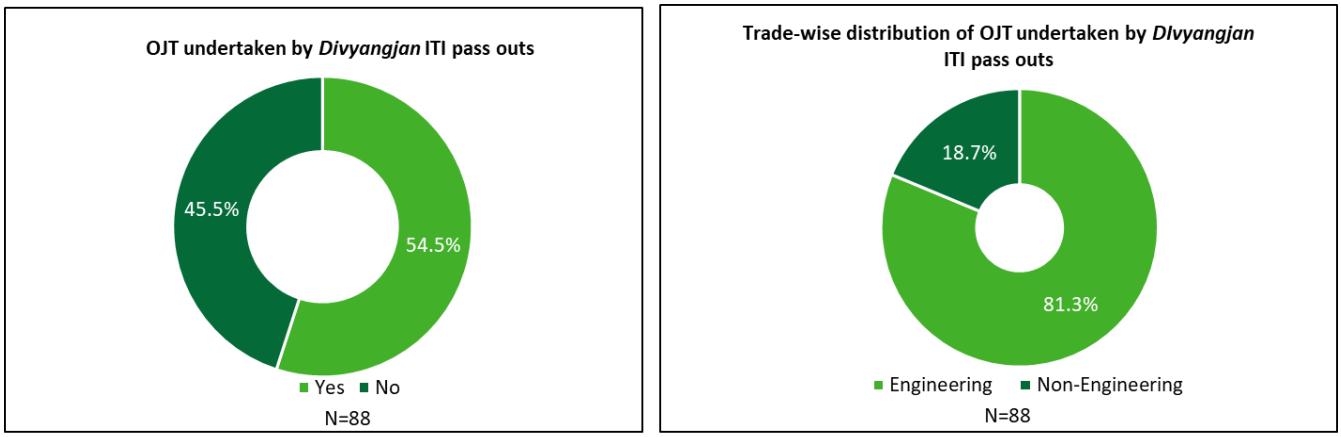


Figure 59: OJT undertaken by *Divyangjan ITI pass outs*

Of the *Divyangjan* ITI pass outs who undertook OJT, 52.1 per cent undertook it for 1-2 weeks; 35.4 per cent for 2-4 weeks; and only 12.5 per cent for more than four weeks. In comparison to male *Divyangjan* ITI pass outs (48.9 per cent), a lower percentage of female *Divyangjan ITI pass outs* (33.3 per cent) undertook OJT for a duration of more than two weeks.

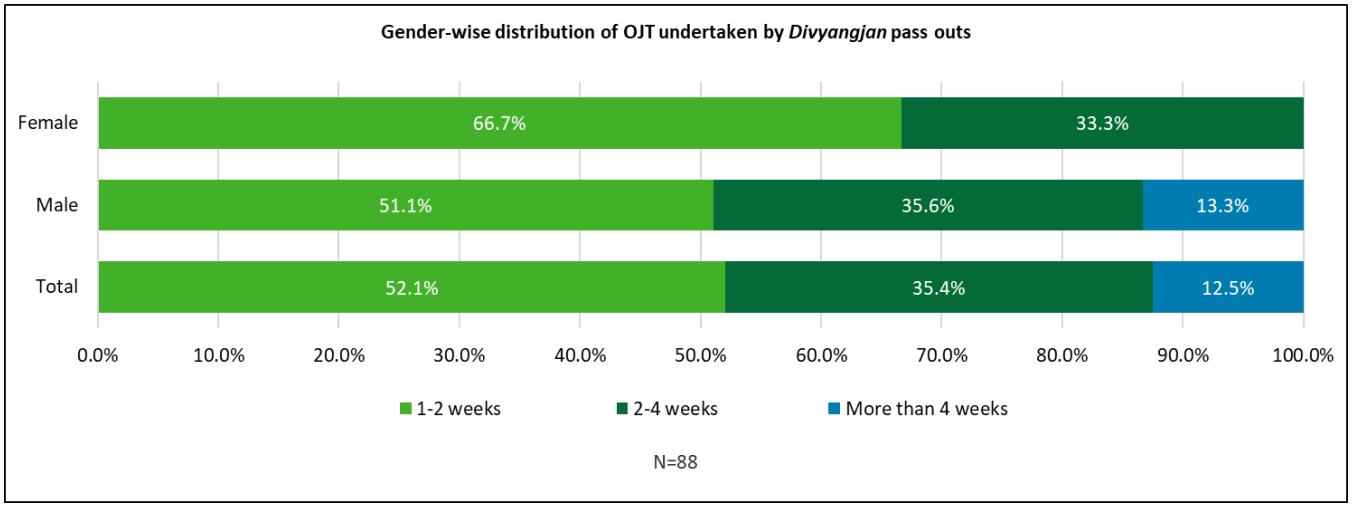


Figure 60: Duration of OJT undertaken by *Divyangjan* ITI pass outs

Employment Status before Enrolling for Courses at ITIs

Chapter 6: Employment Status before Enrolling for Courses at ITIs

This chapter provides an analysis of the employment status of sampled ITI pass outs before enrolling into ITIs. It explores the pass out's previous employment in terms of nature, type of employment (permanent/temporary), and the form of employment (full time/ part time).

From the total sample of 11,136 ITI pass outs, 10.4 per cent (N=1,159) had prior employment experience. Out of these previously employed pass outs, majority (972, 83.8 per cent) were male pass outs and the remaining (187, 16.2 per cent) were female pass outs. Further, 11.6 per cent of the total male pass outs had prior employment experience before joining ITIs while only 6.7 per cent of total female pass outs had prior experience. Among total pass outs who were previously employed , 762 were wage employees, while 397 were self-employed. Notably, only 82 female pass outs were self-employed, in contrast to 315 male pass outs.

Table 22: Distribution of ITI pass outs by their previous employment

Previously Employed	Self-Employed	Wage Employed	Total	Overall Sample	Previous Employment Percentage (%)
Female	82	105	187	2761	6.7
Male	315	657	972	8375	11.6
Total	**397**	**762**	**1159**	**11136**	**10.4**

The findings show that 11.6 per cent of the total pass outs previously employed (N=1,159) were employed as electricians (refer Annexure VIII). Of this, 63 per cent were wage employed and 37 per cent were self-employed. This was followed by fitter at 11 per cent of the total previously employed sample; with 75 per cent (of the 11 per cent) wage employed and 25 per cent self-employed. The complete list of all sectors/professions wherein ITI pass outs were previously employed is provided in Annexure VIII.

Table 23: Employment trades of ITI pass outs before joining ITIs

Trades of ITI pass outs before joining ITI	Wage employment %	Self-Employment %	Employed %
Electrician	11.2	12.3	11.6
Fitter	12.7	8.1	11.1
Welder	7.9	8.1	7.9
Mechanic Motor Vehicle	7.2	3.0	5.8
Mechanic Diesel	5.0	7.1	5.7
Wireman	5.6	3.8	5.0
Computer Operator and Programming Assistant (COPA)	5.8	3.0	4.8
Electronics Mechanic	4.7	3.3	4.2
Carpenter	2.0	7.3	3.8
Plumber	2.5	5.0	3.4
Machinist	3.5	1.0	2.7
Turner	3.0	2.0	2.7

The figure below presents the gender-wise distribution of the top five employment trades of the ITI pass outs before joining the ITI. While Dress Making was the top trade amongst females (10.2 per cent), for males it was Electrician (10.4 per cent).

Employment trades of female ITI pass outs before joining ITI- Top 5

- Dress making-10.2%
- Cosmetology- 7.5%
- Computer Operator and Programming Assistant COPA- 7.0%
- Sewing Technology- 6.4%
- Electrician- 5.9%

Employment trades of male ITI pass outs before joining ITI - Top 5

- Electrician- 10.4%
- Fitter- 9.6%
- Welder-6.9%
- Mechanic Diesel- 5.9%
- Mechanic Motor Vehicle – 5.1%

Figure 61: Gender-wise distribution of employment trades of ITI pass outs

Within the subset of previously employed pass outs, out of the 762 engaged in wage employment, 82 per cent opted for engineering and the remaining 18 per cent had opted for non-engineering trades. Similarly, among those who were previously self-employed (397 out of 1,159), 77.3 per cent chose engineering trades, while less than one-fourth (22.7 per cent) chose non-engineering trades.

Among the wage employed pass outs, approximately three-fourths (73.1 per cent) worked full-time, while around one-fourth (26.9 per cent) held part-time jobs. Additionally, it was observed that 74.7 per cent (N=762) of pass outs had temporary employment, while only 25.3 per cent had permanent employment before enrolling in ITIs.

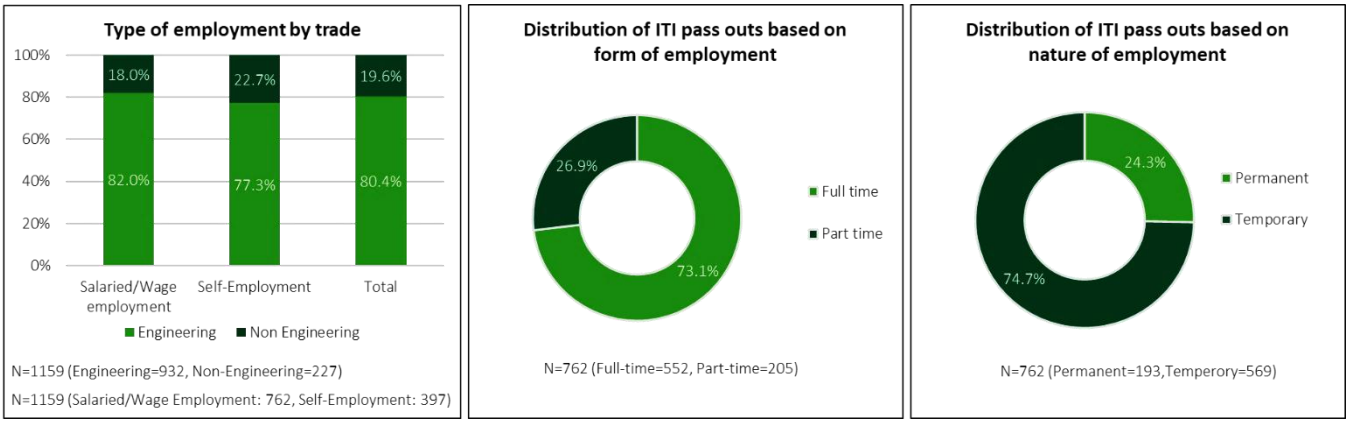


Figure 62: Distribution of pass outs by trades, form of employment and nature of employment

Employment Outcomes of ITI Pass Outs

Chapter 7: Employment outcomes of ITI Pass Outs

By focusing on skill development and practical training, ITIs enhance the employability of students and contribute to economic growth of the country. For this study the focus has been to analyse the labour outcome of ITI pass outs from STRIVE ITI. In this section, the economic engagement of ITI pass outs at the time of the survey has been analysed.

7.1 Classification into economically active and inactive pass outs

For the purposes of this tracer study, ITI pass outs engaged in any form of economic activity like wage employment, self-employment, apprenticeship and unemployed (not engaged in economic activity but actively seeking work) were considered a part of the labour force, while those who were not engaged in any form of economic activity either not available for work due to multiple factors including students[14] were classified as being out of labour force.

For the discussion on employment and unemployment classification, The Annual Report on Periodic Labour Force Survey (PLFS) by NSSO/MOSPI 2022-2023, as stated below, has been referred.[15]

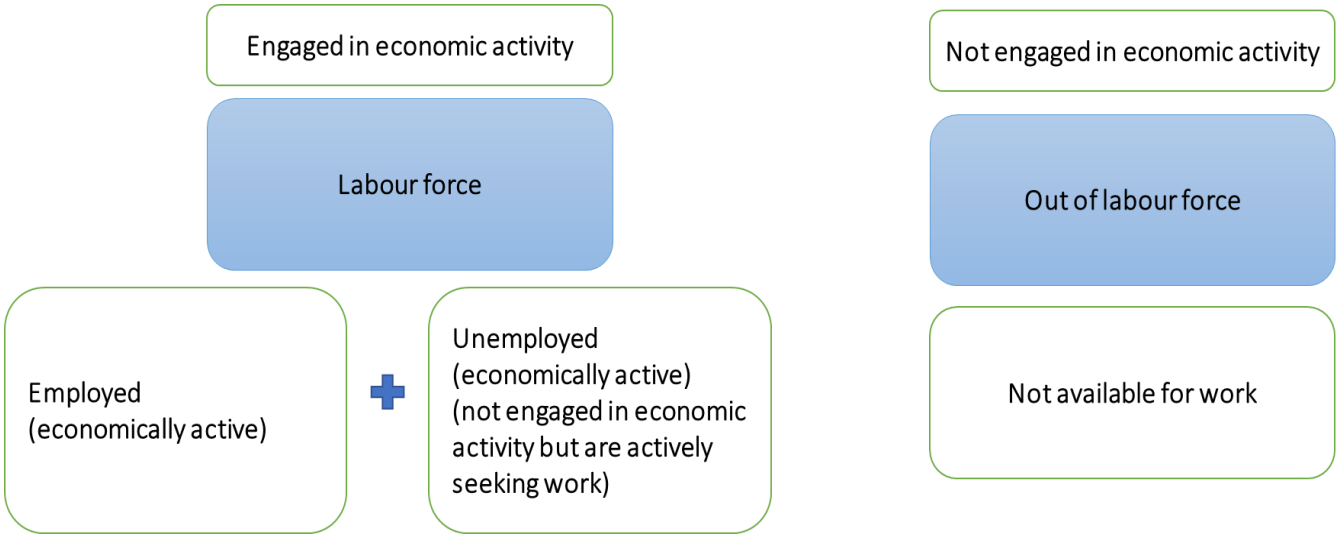


Figure 63: Classification of employment and unemployment

Wage employment: These were persons who worked and, in return, received salary or wages. This category includes not only the persons getting time wage, but also persons receiving piece wage or salary, and also includes paid apprentices, both full-time and part-time.

Self-Employed: Persons who operated their own enterprises or were engaged independently in a profession or trades on their own account or with one or a few partners were deemed to be self-employed. The

[14] Students includes those who were into further education, additional skill training and preparing from government jobs.
[15] https://dge.gov.in/dge/sites/default/files/2023-10/Annual_Report_PLFS_2022-23.pdf

remuneration of the self-employed consists of a combination of two parts: a reward for their labour and profit for their enterprise.

Unemployed: Persons who, owing to lack of work, had not worked but either sought work through employment exchanges, intermediaries, friends or relatives; or by making applications to prospective employers; or expressed their willingness or availability for work under the prevailing conditions of work and remuneration were considered as those 'seeking or available for work' (or unemployed).

Not available for work: Persons who were neither 'working' nor 'seeking work or were not available for work' for various reasons such as personal reasons, underdoing additional skill training, pursuing further studies, preparing for government jobs, etc. were considered 'not available for work'**.**

7.2 Status of economic engagement of ITI pass outs

As depicted in table below, out of 11,136 ITI pass outs surveyed, 9,495 (85.3 per cent) were economically active/part of the labour force, while 1,641 (14.7 per cent) were not available for work/out of labour force. 39.5 per cent of the total ITI pass outs surveyed were employed either in wage employment (31.6 per cent) or in self-employment (7.9 per cent). 9.5 per cent of the ITI pass outs were engaged in apprenticeship while 51 per cent were unemployed/looking for job and available to work. Of those who were out of the labour force, 43.1 per cent were not willing to work either due to lack of interest or personal reasons; 31.4 per cent were enrolled into further studies; 20.3 per cent were into additional skill training; and around 5.2 per cent reported that they were preparing for government jobs.

Table 24: Current engagement of the ITI pass outs

Current Engagement of the ITI Pass Outs		
	Total	
Indicators	**N**	**%**
a) Pass outs available in job market/ labour force (Economically active)	**9495**	**85.3**
Total employed	**3746**	**39.5**
Wage employed	*2997*	*31.6*
Self-employed	*749*	*7.9*
Apprenticeship	**903**	**9.5**
Unemployed and looking for job	**4846**	**51.0**
b) Not available for work/out of labour force (economically inactive)	**1641**	**14.7**
Not willing to work	708	43.1
Undertaking further studies	515	31.4
Undertaking training	333	20.3
Preparing for government jobs	85	5.2
Grand Total	**11136**	

7.3 Comparative analysis of employment outcomes of current (2024) and previous (2018) Tracer Study

A comparative analysis was conducted on the employment outcomes of the current tracer study and previous tracer study conducted for the ITI pass outs of 2012.

The coverage in both the studies was as following:

Table 25: Sample coverage of ITIs covered in current and previous tracer study 2018

Particulars	Tracer Study 2018 (study of 2012 pass outs)	Tracer Study 2024 (study of 2022 pass outs)
Number of states and UTs covered	21	33
Number of ITIs covered	500	424
ITI pass out sample covered	11,208	11,136
Type of ITIs covered	200 govt. ITIs supported under Vocational Training Improvement Plan, 200 govt. ITIs and 100 private ITIs	397 govt. and 27 private ITIs supported under the STRIVE project

Employment outcomes - As the time period during which data collection for both the studies was done was different (four years for previous study and one year for the current study), the comparison of outcomes was done by the common timeframes of 'one year' and 'more than one year' .

Table 26: Comparison of employment between Tracer Study 2018 and Tracer Study 2024

Employment Status	Tracer Study 2018				Tracer Study 2024			
	Total	Employment within 1 year	%	After 1 year	Total	Employment within 1 year	%	After 1 year
A. Wage employed/ salaried	5131	3763	41.7	1368	2997	2922	30.8	75
B. Self-employed/ family business	608	426	4.7	182	749	648	6.8	101
C. Apprenticeship[16]	-	-	-	-	903	903	9.5	
D. Economically engaged (A+B+C)	**5739**	**4189**	**46.4**	**1550**	**4649**	**4473**	**47.2**	**176**
E. Unemployed and looking for job	3288	4838	53.6	-	4846	4995	52.7	-
F (D+E) Pass outs available in job market (part of labour force)	**9027 (81.9%)**	**9027**	**100.0**	-	**9495 (85.3%)**	**9468**	**100.0**	
G. Pass outs not available in job market (Not in the labour force)	**2001 (18.1%)**	**2001**	**18.1**	-	**1641 (14.7%)**	**1668**	-	
H. Grand Total (F+G)	**11028**	**11028**	-	-	**11136**	**11136**		-

The ITI pass outs in both the studies were categorised into two groups: part of the labour force/available in job market (economically active) and not in the labour force/not available in job market (economically

[16] Apprenticeship was not captured during the tracer study of 2018

inactive). The 2018 study identified 9027 ITI pass outs in the labour force and 2001 as not in labour force, while the current study identified 9468 ITI pass outs in the labour force and 1668 not in labour force. In the comparison above, employment calculations in both studies were based on ITI pass outs who secured jobs within one year of completing their ITI training for a like-to-like comparison. It is also imperative to highlight that in the current study, majority of the ITI pass outs sample (67.7 per cent) belonged to the rural ITIs, whereas in the previous tracer study of 2018, around 90 per cent of the sample belonged to urban areas, which played a critical role in influencing the employment outcomes.

The overall percentage of ITI pass outs economically active in the previous tracer study was 46.4 per cent, with 41.7 per cent engaged in wage employment and 4.7 per cent in self-employment; whereas for the current study, the overall percentage of economically active ITI pass outs was 47.2 per cent, with 30.8 per cent engaged in wage employment and 6.8 per cent in self-employment.

7.4 Economic engagement/employment outcome details

7.4.1 Distribution of ITI pass outs in labour force by gender, trades, location and region

Further analysis into labour force participation by gender reveals a nuanced scenario of gender variations in the employment outcome as 80.3 per cent of female ITI pass outs out of 2,761 females surveyed were economically active and part of the labour force, in comparison to 86.9 per cent males out of 8,375 males surveyed who were economically active and part of the labour force. Considerably higher proportion of males were engaged in employment (42.3 per cent) *vis-a-vis* females (30.1 per cent). Similar trend was seen in wage employment, with higher proportion of males engaged in wage employment (34.9 per cent N= 8,375) as against 20.6 per cent females (N=2,761). This was followed by apprenticeship (males 10.2 per cent and females 7.4 per cent), the proportion of females in self-employment was 9.5 per cent and males at 7.4 per cent. 62.5 per cent of females were unemployed in comparison to 47.5 per cent of males being unemployed.

Analysis across trades shows that participation in labour force was higher amongst pass outs from engineering trades at 86.4 per cent (out of 8,410), while it was 81.7 per cent (2,726) for non-engineering trades. 33.7 per cent from engineering trades were engaged in wage employment, while the number stood at 24.7 per cent for non-engineering trades. Self-employment was 11 per cent among ITI pass outs from non-engineering trades and 6.9 per cent for ITI pass outs from engineering trades. Apprenticeship opportunity presented a similar distribution across engineering (9.8 per cent) and non-engineering (8.5 per cent) trades.

Location-wise analysis shows negligible variations, out of 7,539 ITI pass outs from rural, 49.8 per cent were engaged in employment while 11.2 per cent was engaged in apprenticeship. Whereas amongst the urban ITI pass outs (3,597), 47.3 per cent were engaged into employment and 6.0 per cent in apprenticeship. Wage employment (rural- 31.2 per cent, urban-32.3 per cent) and Self-employment (rural- 7.3 percent, urban- 9.0 per cent) was similar across both areas. Comparison across regions shows that ITI pass outs engaged in employment was highest in southern region (57.2 per cent, N=2,216), while apprenticeship was highest amongst ITI pass outs from west (14.2 per cent, N=4,071).

Table 27: Labour force participation by gender, trades, location and region

Parameters		Labour force participation by gender, trades, location and region														
		Total Employment		Wage employment		Self-employment		Apprenticeship		Unemployment		Total pass outs in labour force		Total pass outs not in labour force		Grand Total
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
Total		**3746**	**39.5**	**2997**	**31.6**	**749**	**7.9**	**903**	**9.5**	**4846**	**51**	**9495**	**85.3**	**1641**	**14.7**	**11136**
Gender	**Female**	667	30.1	456	20.6	211	9.5	164	7.4	1385	62.5	2216	80.3	545	19.7	2761
	Male	3079	42.3	2541	34.9	538	7.4	739	10.2	3461	47.5	7279	86.9	1096	13.1	8375
Trades	**Engineering**	2952	40.6	2448	33.7	504	6.9	713	9.8	3604	49.6	7269	86.4	1141	13.6	8410
	Non-Engineering	794	35.7	549	24.7	245	11	190	8.5	1242	55.8	2226	81.7	500	18.3	2726
Location	**Rural**	3185	49.8	1998	31.2	469	7.3	718	11.2	3216	50.2	6401	84.9	1138	15.1	7539
	Urban	1464	47.3	999	32.3	280	9.0	185	6.0	1630	52.7	3094	86.0	503	14.0	3597
Region	**East**	391	34.4	302	26.6	89	7.8	69	6.1	675	59.5	1135	74.1	397	25.9	1532
	North	835	30.7	652	24	183	6.7	235	8.6	1647	60.6	2717	89.6	314	10.4	3031
	North-East	126	49	100	38.9	26	10.1	5	1.9	126	49	257	89.9	29	10.1	286
	South	1099	57.2	957	49.8	142	7.4	101	5.3	721	37.5	1921	86.7	295	13.3	2216
	West	1295	37.4	986	28.5	309	8.9	493	14.2	1677	48.4	3465	85.1	606	14.9	4071

7.4.2 Distribution of ITI pass outs not part of labour force by gender, trades, location and region

Of the 1,641 ITI pass outs who were out of labour force, a considerable proportion was enrolled into further studies (34.6 per cent males, N= 8,375) and (25 per cent females, N=2,761). Those enrolled in further studies pursued courses such as diploma programmes in Computer Education or Engineering, Hotel Management, CITS-Craft Instructor Training, or were enrolled for graduation courses. Further, the findings indicate out of total female pass outs (18.3 per cent), and out of total male pass outs (21.3 per cent) were pursuing additional skill training and preparing for government jobs (6.1 per cent males compared to 3.3 per cent females). Lack of willingness to work was reported by notably higher proportion of females (53.4 per cent) as compared to males (38 per cent). (For state-wise percentage for employment, unemployment, apprenticeship, further studies, and skill training, refer to Annexure IX)

Comparison across trades shows that higher proportion of ITI pass outs from engineering trades were pursuing further education (34.7 per cent for engineering versus 23.8 per cent for non-engineering trades). 6.7 per cent of the ITI pass outs from engineering trades were preparing for government jobs, while 22 per cent were into additional skill training.

20.9 per cent ITI pass outs from rural areas reported pursing additional skill training compared to urban areas (18.9 per cent). Higher proportion reported not willing to work across rural areas (rural 46.6 per cent and urban 35.4 per cent).

Table 28: Distribution of ITI pass outs not in Labour force by gender, trades, location and region

Parameters		Distribution of ITI pass outs not in labour force by gender, trades, location, and region												
		Further education		Skill training		Preparing for government jobs		Not willing to work		Total pass outs not in labour Force		Total in Labour Force		Grand total
		N	%	N	%	N	%	N	%	N	%	N	%	N
Total		**515**	**31.4**	**333**	**20.3**	**85**	**5.2**	**708**	**43.1**	**1641**	**14.7**	**9495**	**85.3**	**11136**
Gender	**Female**	136	25.0	100	18.3	18	3.3	291	53.4	545	19.7	2216	80.3	2761
	Male	379	34.6	233	21.3	67	6.1	417	38	1096	13.1	7279	86.9	8375
Trades	**Engineering**	396	34.7	251	22	76	6.7	418	36.6	1141	13.6	7269	86.4	8410
	Non-Engineering	119	23.8	82	16.4	9	1.8	290	58	500	18.3	2226	81.7	2726
Location	**Rural**	330	29.0	238	20.9	40	3.5	530	46.6	1138	15.1	6401	84.9	7539
	Urban	185	36.8	95	18.9	45	8.9	178	35.4	503	14.0	3094	86.0	3597
Region	**East**	137	34.5	102	25.7	47	11.8	111	28	397	25.9	1135	74.1	1532
	North	15	4.8	39	12.4	1	0.3	259	82.5	314	10.4	2717	89.6	3031
	North-East	15	51.7	4	13.8	0	0	10	34.5	29	10.1	257	89.9	286
	South	132	44.7	83	28.1	9	3.1	71	24.1	295	13.3	1921	86.7	2216
	West	216	35.6	105	17.3	28	4.6	257	42.4	606	14.9	3465	85.1	4071

7.4.3 Distribution of ITI pass outs available in labour force having previous employment experience by gender

The study gathered information on previous employment experience of the ITI pass outs who were currently available in the labour force. Majority of ITI pass outs across both genders currently employed did not have any prior experience (71.9 per cent males and 75.2 per cent females). 4.1 per cent males and 3.8 per cent females were currently unemployed but had previous work experience.

Table 29: Distribution of ITI pass outs available in labour force having previous employment experience by gender

Distribution of ITI pass outs available in the labour force having previous employment experience by gender						
Employed Ever	**Male**		**Female**		**Total**	
	N	**%**	**N**	**%**	**N**	**%**
Currently employed without any experience	2310	71.9	521	75.2	2831	72.5
Currently employed with one previous job	769	23.9	146	21.1	915	23.4
Currently unemployed but previously employed	133	4.1	26	3.8	159	4.1
Total	**3212**	**100.0**	**693**	**100.0**	**3905**	**100.0**

Employment Status after Completion of Training at ITIs

Chapter 8: Employment Status after Completion of Training at ITIs

ITI pass outs were asked to indicate the type of employment they had taken up post completion of training at ITI. This chapter delves into the insights gathered on the employment status of ITI pass outs at the time of the survey, whether wage or self-employment, and details on some key indicators such as employment in the same skill trades as the trades of training; method and time taken to search for jobs; career progression; career changes; increment in income over time; and overall satisfaction with work.

8.1 Wage employment

The post-training employment status of ITI pass outs was a comprehensive exploration attempting to unfold various aspects which collectively contributed to a holistic understanding of their professional journey.

8.1.1 Wage employment by gender, location and trades

A detailed analysis of the career path pursued by ITI pass outs immediately after course completion indicated that 31.6 per cent of the ITI pass outs (out of 9,495 economically active ITI pass outs) were into wage employment. Further analysis brought forth that 20.6 per cent females were engaged in wage employment as compared to 34.9 per cent males in their respective cohorts of (2,214 and 7,281 ITI pass outs respectively).

Table 30: Gender-wise distribution of ITI pass outs in wage employment

Gender	ITI pass outs in wage employment (n)	Economically active ITI pass outs (N)	% ITI pass outs in wage employment (n/N)
Female	456	2216	20.6
Male	2541	7279	34.9
Total	**2997**	**9495**	**31.6**

Out of 2,997 ITI pass outs engaged in wage employment, higher proportion of males (84.8 per cent) were in wage employment as against 15.2 per cent females.

Table 31: Gender-wise distribution of wage employed pass outs

Gender	ITI pass outs in wage employment (n)	% ITI pass outs in wage employment
Female	456	15.2
Male	2541	84.8
Total	**2997**	**100.0**

Further comparison across locations depicts no contrasting variations in employment opportunities across rural and urban areas, with similar proportion of ITI pass outs from rural (31.2 per cent) and urban (32.3 per cent) areas getting into wage employment, and at a percentage similar to the overall aggregate (31.6 per cent).

Table 32: Location-wise distribution of ITI pass outs in wage employment

Location	ITI pass outs in wage employment (n)	Economically active ITI pass outs (N)	% ITI pass outs in wage employment (n/N)
Rural	1998	6401	31.2
Urban	999	3094	32.3
Total	**2997**	**9495**	**31.6**

Of the total sample of wage employed, higher proportion of ITI pass outs from rural areas (66.7 per cent) were into wage employment compared to those in urban areas (33.3 per cent).

Table 33: Location-wise distribution of wage employed

Location	ITI pass outs in wage employment (n)	% ITI pass outs into wage employment
Rural	1998	66.7
Urban	999	33.3
Total	**2997**	**100.0**

Region-wise comparison shows that higher proportion of ITI pass outs from south (49.8 per cent) and north-east (38.9 per cent) had taken up wage employment, and at levels slightly higher than the overall average. This proportion was slightly low for east (26.6 per cent), while west and north were comparatively better at 28.5 per cent and 24 per cent respectively.

Table 34: Region-wise distribution of ITI pass outs engaged in wage employment

Location	ITI pass outs in wage employment (n)	Economically active ITI pass outs (N)	% ITI pass outs
East	302	1135	26.6
North	652	2717	24.0
North- East	100	257	38.9
South	957	1921	49.8
West	986	3465	28.5
Total	**2997**	**9495**	**31.6**

Data shows significant differences in employment outcomes between engineering and non-engineering trades. Looking at the engineering trades, it was observed that 33.7 per cent ITI pass outs, out of the total engineering trades sample (7,269 into economic activity), secured wage employment after completing their training at ITI. In contrast, 24.7 per cent pass outs of (2,226) from non-engineering trades had secured wage employment.

Table 35: Trade-wise distribution of ITI pass outs engaged in wage employment

Trades	ITI pass outs into wage employment (n)	Economically active ITI pass outs (N)	% ITI pass outs into wage employment (n/N)
Engineering	2448	7269	33.7
Non-Engineering	549	2226	24.7
Total	**2997**	**9495**	**31.6**

The primary data revealed a higher participation of ITI pass outs from engineering trades (81.7 per cent) in wage employment as compared to those from non-engineering (18.3 per cent).

Table 36: Trade-wise distribution of wage employed pass outs

Trades	ITI pass outs in wage employment (n)	% ITI pass outs in wage employment
Engineering	2448	81.7
Non-Engineering	549	18.3
Total	**2997**	**100.0**

8.1.2 Wage employment by OJT undertaken and placement assistance received

The data highlights that out of 2,997 ITI pass outs into wage employment, 60.5 per cent had undergone OJT. Majority of the wage employed pass outs (81 per cent) had received placement assistance from the ITIs.

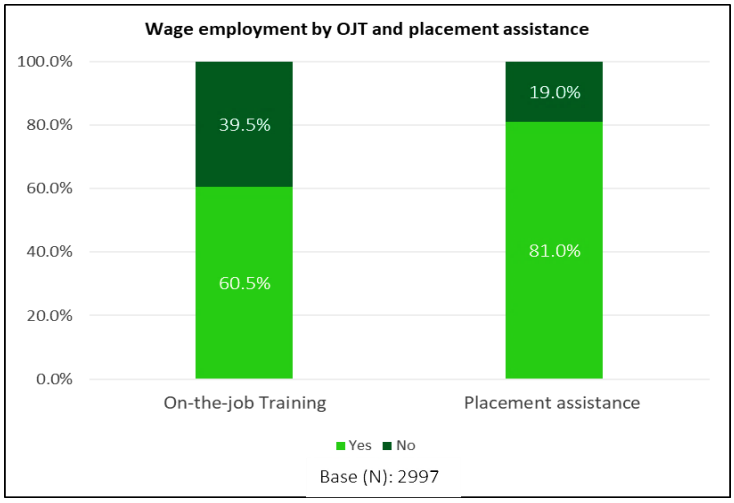


Figure 64: Wage employment by OJT and placement assistance

Wage employment by age

65.5 per cent of the wage employed ITI pass outs were in the age-bracket of 18-21 years, followed by 26.1 per cent in the age group of 22-25 years. Less than a tenth (seven per cent) of the total wage employed ITI pass outs were more than 26 years of age. This highlights that the major share of the working-age population of the ITI pass outs were aged between 18 and 25 years (91.6 per cent). Proportion of wage employed ITI pass outs of age group '17 year and below' was 1.4 per cent.

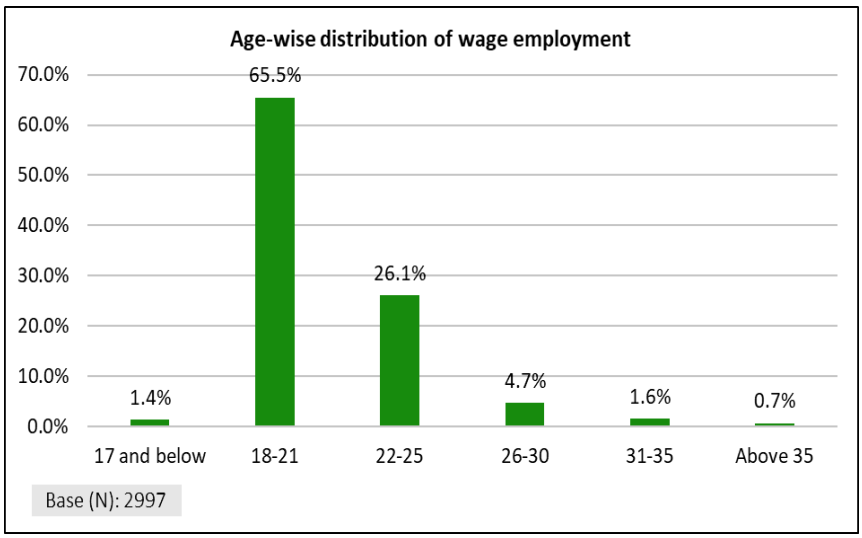


Figure 65: Age-wise distribution of wage employed pass outs

8.1.3 Wage employment by trades of training and trades of employment

75.5 per cent of the wage-employed ITI pass outs were employed in the same trades as that of their training, the proportion being slightly higher amongst male (76.5 per cent) as compared to females (70.3 per cent).

Table 37: Gender-wise distribution of pass outs by trades of employed vs. trades of training

Gender-wise distribution of pass outs by trades of employment vs. trades of training					
Gender	**Current job related to ITI trades**		**Current job not related to ITI trades**		**Total**
	%	**N**	**%**	**N**	**N**
Female	70.3	320	29.7	135	455
Male	76.5	1944	23.5	598	2542
Total	**75.5**	**2264**	**24.5**	**733**	**2997**

8.1.4 Method of job search

The exploration of job search strategies among ITI pass outs was crucial in understanding the diverse approaches used by ITI pass outs to gain employment.

Method to search for jobs by gender: No clear variations were observed with almost similar proportions of female (39.3 per cent) and male (42.4 per cent) finding employment through placement cell/*rozgar mela* organised by training center/ principal/ faculty of ITI, followed by personal connections (friends and family reference for job) as reported by 35.3 per cent female and 32.2 per cent male pass outs. Getting employment opportunities by independently contacting employers was mentioned by 10.5 per cent females as compared to 8.8 per cent males.

Table 38: Gender-wise distribution of job search method

Method for job search	Female		Male		Total	
	%	N	%	N	%	N
Placement cell/*rozgar mela* by the training center/ through principal/faculty of ITI	39.3	179	42.4	1077	41.9	1256
Personal connections - friends and family referred me for the job	35.3	161	32.2	819	32.7	980
Independent contact to employers	10.5	48	8.8	223	9.0	271
Other employment exchanges/job fairs	4.0	18	4.4	112	4.3	130
Through internship during/after training	2.8	13	3.5	88	3.4	101
Walk-in interviews/recruitment drives by organisations	2.9	13	2.4	62	2.5	75
Job portals/websites (Naukri/Monster.com, etc.)	2.4	11	2.2	56	2.2	67
Newspaper advertisements	1.5	7	2.2	57	2.1	64
Through part-time job during/after training	0.7	3	1.6	40	1.6	43
Others (please specify)	0.6	3	0.3	7	0.3	10
Total	**100.0**	**456**	**100.0**	**2541**	**100.0**	**2997**

Method to search for jobs by location: The given table highlights the varied approaches ITI pass outs in rural and urban areas employed in their job search endeavours. Notably, training centers/job fairs, principals and faculty at ITI played a significant role, facilitating 42.9 per cent of rural job seekers, while for urban job seekers it is slightly less at 39.8 per cent. Securing jobs through personal connections and referrals was a prominent contributor as mentioned by 32.8 per cent in in rural and 32.5 per cent in urban areas. Urban areas exhibited a slightly higher reliance on independent contact with employers (10.7 per cent), as compared to rural areas (8.2 per cent).

Table 39: Location-wise distribution of job search method

Method for job search	Rural		Urban		Total	
	%	N	%	N	%	N
Placement cell/rozgar mela by the training center/ through principal/faculty of ITI	42.9	858	39.8	398	41.9	1256
Personal connections - friends and family referred me for the job	32.8	655	32.5	325	32.7	980
Independent contact to employers	8.2	164	10.7	107	9.0	271
Other employment exchanges/job fairs	4.9	98	3.2	32	4.3	130
Through internship during/after training	3.2	63	3.8	38	3.4	101
Walk-in interviews/recruitment drives by organisations	2.1	41	3.4	34	2.5	75
Job portals/websites (Naukri/Monster.com, etc.)	2.1	42	2.5	25	2.2	67
Newspaper advertisements	2.5	50	1.4	14	2.2	64
Through part-time job during/after training	1.1	22	2.2	21	1.5	43
Others (please specify)	0.2	5	0.5	5	0.3	10
Total	**100.0**	**1998**	**100.0**	**999**	**100.0**	**2997**

Understanding these methods of job search is crucial for policymakers, educational institutions, and job seekers alike, as these can inform the development of targeted initiatives and strategies to enhance employment prospects across gender and locations.

8.1.5 Time taken to find employment

The time taken to secure employment is a critical metric in assessing the challenges of ITI pass outs' entry into the workforce.

Time taken to find employment by gender: 21.0 per cent of ITI pass outs at an overall level found employment within 1 month, while 46.1 per cent had secured within 1-3 months. Amongst females, 17.1 per cent of ITI pass outs managed to secure employment within the first month, while 48.2 per cent found jobs within the subsequent 1-3 months. Further, 25.2 per cent landed employment within 4-6 months, 5.7 per cent took 7-12 months, and 3.7 per cent spent more than a year in the job search. Across males, a slightly higher percentage (21.7 per cent) secured employment within the initial month, followed by 45.7 per cent within 1-3 months, and 24.5 per cent within 4-6 months. Further 5.7 per cent of males had spent 7-12 months, and 2.3 per cent were in job search for more than a year. Overall, the analysis underscores the variations in the employment-seeking timelines for pass outs across gender.

Table 40: Time taken to find employment by gender

Time taken	Female		Male		Total	
	%	N	%	N	%	N
Within 1 month	17.1	78	21.7	552	21.0	630
1- 3 months	48.2	220	45.7	1162	46.1	1382
4- 6 months	25.2	115	24.5	623	24.6	738
7-12 months	5.7	26	5.7	146	5.7	172
More than 12 months	3.7	17	2.3	58	2.6	75
Total	**100.0**	**456**	**100.0**	**2541**	**100.0**	**2997**

Time taken to find employment by location: 21.0 per cent of ITI pass outs at an overall level had found employment within 1 month, while 46.1 per cent had secured within 1-3 months. In rural areas, 20.9 per cent of pass outs managed to secure employment within the first month, while 46.9 per cent found jobs within the subsequent 1-3 months. Further, 24.7 per cent landed employment within 4-6 months, 5.3 per cent took 7-12 months, and 2.2 per cent spent more than a year in the job search. In urban locations, a slightly higher percentage (21.3 per cent) secured employment within the initial month, followed by 44.4 per cent within 1-3 months, and 24.5 per cent within 4-6 months. In urban areas, 6.7 per cent spent 7-12 months, and 3.1 per cent were in job search for more than a year. Overall, the analysis underscores the variations in the employment-seeking timelines for pass outs in different areas, with 65.8 per cent of urban area pass outs and 67.8 per cent of rural area pass outs securing employment within three months.

Table 41: Time taken to find employment by location

Time taken	Rural		Urban		Total	
	%	N	%	N	%	N
Within 1 month	20.9	417	21.3	213	21.0	630
1- 3 months	46.9	938	44.4	444	46.1	1382
4- 6 months	24.7	493	24.5	245	24.6	738
7-12 months	5.3	105	6.7	67	5.7	172
More than 12 months	2.2	45	3.1	30	2.6	75
Total	**100.0**	**1998**	**100.0**	**999**	**100.0**	**2997**

Time taken to find employment by trades: In the engineering trades, 21.3 per cent found employment within one month, 46 per cent within 1-3 months, and 24.6 per cent within 4-6 months. In non-engineering trades, the corresponding proportion is similar, with 19.9 per cent, 46.8 per cent, and 24.8 per cent securing employment within the same respective timeframes. Further, 5.6 per cent of pass outs from engineering and 6.4 per cent from non-engineering spent 7-12 months seeking employment, while 2.5 per cent pass outs in engineering and 2.1 per cent in non-engineering took more than 12 months.

Overall, the data shows little variation in the timeframes for job acquisition based on trades categories, with a total of 67.3 per cent in engineering and 66.7 per cent in non-engineering securing employment within three months.

Table 42: Time taken to find employment by trades

Time taken	Engineering		Non-Engineering		Total	
	%	N	%	N	%	N
Within 1 month	21.3	521	19.9	109	21.0	630
1- 3 months	46.0	1125	46.8	257	46.1	1382
4- 6 months	24.6	602	24.8	136	24.6	738
7-12 months	5.6	137	6.4	35	5.7	172
More than 12 months	2.5	63	2.1	12	2.6	75
Total	**100.0**	**2448**	**100.0**	**549**	**100.0**	**2997**

Time taken to find employment by type of employer: 22.4 per cent of ITI pass outs employed in private companies and 18.5 per cent in public companies had found employment within one month of completion of ITI training. Majority of the pass outs across different forms of employers were able to secure employment within 1-3 months.

Overall, the data depicts substantial variations in the amount of time taken in securing a job across different types of employers.

Table 43: Time taken to find employment by type of employer

Time taken	Government department		NGO/charity organisation		Private company		Public company		Others		Total	
	%	N	%	N	%	N	%	N	%	N	%	N
Within 1 month	13.4	43	9.1	1	22.4	540	18.5	36	17.9	10	21	630
1- 3 months	38.2	123	9.1	1	47.5	1146	43.1	84	50	28	46.1	1382
4- 6 months	31.1	100	54.5	6	23.2	561	30.8	60	19.6	11	24.6	738
7-12 months	9.9	32	18.2	2	5.1	122	5.6	11	8.9	5	5.7	172
More than 12 months	7.4	24	9.1	1	1.8	44	2	4	3.6	2	2.6	75
Total	**100**	**322**	**100**	**11**	**100**	**2413**	**100**	**195**	**100**	**56**	**100**	**2997**

8.1.6 Monthly income

Analysing monthly income patterns is instrumental in understanding the economic aspects of salary/wage employment for ITI pass outs.

Monthly income by gender: Out of the ITI pass outs who were wage employed, 45.1 per cent lie within the monthly income bracket of INR 5,001 to 10,000, while 47.8 per cent reported earnings of more than INR 10,000. The percentage of female ITI pass outs earning a monthly income of more than INR 10,000 was around 32.7 per cent whereas it was 50.5 per cent for male ITI pass outs. More than half of the females (52.4 per cent) earned in the range of INR 5,000- INR 10,000, while 14.9 per cent received a monthly income of up to INR 5,000. g

Table 44: Monthly income by gender

Income	Female		Male		Total	
	%	N	%	N	%	N
Up to INR 5000	14.9	68	5.6	143	7.1	211
INR 5001- 10000	52.4	239	43.9	1115	45.1	1354
INR 10001-20000	28.9	132	45.0	1143	42.5	1275
INR 20001- 30000	2.9	13	4.5	115	4.3	128
More than 30000	0.9	4	1.0	25	1.0	29
Total	**100.0**	**456**	**100.0**	**2541**	**100.0**	**2997**

Overall, the average monthly income of the ITI pass outs was reported as INR 11,403. Wide variations were reflected in the average monthly income across gender, with females earning an average of INR 9,769 per month and males INR 11,695 per month.

Table 45: Average monthly income by gender

Average monthly wages earned by gender (current job) (in Rs.)			
	Female	**Male**	**Total**
Average monthly income	9769	11695	11403

Monthly Income by trades in which employed: The table below reflects the differential pattern of income for ITI pass outs across engineering and non-engineering trades. Overall, majority of ITI pass outs (87.8 per cent) from both the trades fell within the monthly income range of INR 5,001-20,000. 44.6 per cent of ITI pass outs from engineering trades earned a monthly salary of INR 10,000-20,000, which was notably low for those from non-engineering trades (33.3 per cent). INR 5,001-10,000 was the average monthly income received by half of the non-engineering pass outs (50.6 per cent) in contrast to engineering pass outs (43.9 per cent). 5.5 per cent from engineering trades received monthly income of more than INR 20,000, as against their counterparts from non-engineering trades (4.4 per cent).

Table 46: Monthly income by trades

Income	Engineering		Non-Engineering		Total	
	%	N	%	N	%	N
Up to INR 5000	6	148	11.7	64	6.8	212
INR 5001- 10000	43.9	1075	50.6	278	44.6	1353
INR 10001-20000	44.6	1092	33.3	183	43.2	1275
INR 20001- 30000	4.6	111	3.1	17	4.4	128
More than 30000	0.9	22	1.3	7	1.0	29
Total	**100.0**	**2448**	**100.0**	**549**	**100.0**	**2997**

Wide variations were reflected in the average monthly income across trades, with pass outs from engineering trades earning an average of INR 11,627 per month in contrast to those from non-engineering trades who were earning an average of INR 10,403 per month.

Table 47: Average monthly income by gender

Average monthly wages earned by trades (current job) (in Rs.)			
	Engineering	**Non-Engineering**	**Total**
Average monthly income	11627	10403	11403

8.1.7 Type of career progression

Examining the type of career progression among ITI pass outs, based on parameters like increment in income, promotion in job, shift from part time to full time, temporary to permanent or any other changes, is integral to understanding their professional development.

The findings portrays that out of the total female pass outs engaged in wage employment, 34.7 per cent reported an increase in wage/salary, as compared to their male counterparts (39.7 per cent). Comparison across other parameters of career progression reveals a nuanced picture with slightly higher proportion of males reporting promotion (23.2 per cent) and shift from temporary to permanent (10.7 per cent) as compared to females (19.6 per cent and 7 per cent respectively. It is also interesting to note that out of 456 females and 2,541 males, 46.4 per cent and 43.3 per cent respectively reported no change in career.

Table 48: Type of career progression by gender

Types of career progression	Female		Male		Total	
	%	N	%	N	%	N
Increase in the wage/salary	34.7	158	39.7	1009	39	1167
Promotion in job role	19.6	89	23.2	591	23	680
Shifted from part time to full time	10.8	49	13.5	344	13	393
Shifted from temporary to permanent role	7.0	32	10.7	272	10	304
Other	2.4	11	1.1	29	1	40
No change	46.4	211	43.4	1104	44	1315
Total	**100.0**	**456**	**100.0**	**2541**	**100.0**	**2997**

**percentage will not add up to 100 as it was a multiple response question*

Data reveals a positive correlation between the duration of work, and both increment of wage/salary and job role promotions. 40.3 per cent who had worked for a period of 6-12 months reported an increase in wage/salary. A notable trend was observed in the shift from part-time to full-time roles, with an increased duration of work indicating that ITI pass outs tend to transition to full-time employment as they accumulated more work experience. Duration of work played an important role in career progression, with longer-term employment leading to higher probability of increase in wage/salary, promotions, and transitions to more stable roles.

Across trades, 39.6 per cent pass outs from engineering trades received an increment in wages, while for non-engineering it was 35.9 per cent. 23.2 per cent of engineering trade pass outs received promotions in job roles, as against non-engineering (20.2 per cent).14.2 per cent engineering pass-outs shifted from part-time to full-time employment while it was 8.2 per cent for non-engineering . Trade-wise 22.6 per cent and 22.1 per cent females from COPA reported increase in wage, promotion in job and shifted from permanent to temporary role. For males, majority from fitter trade had received increase in wage (15.3 per cent).

Out of the 1,167 ITI pass outs who reported to have received increase in wage/salary, majority received an increment of up to 10 per cent followed by up to 11-15 per cent (20.2 per cent). Gender-wise comparison showed that slightly higher proportion of females witnessed an increase in their income by 10 per cent, (58.2 per cent females and 53.6 per cent males). However, further comparison shows no notable variations, with similar proportion of both genders reporting an increment of 11-15 per cent (20.3 per cent females, 20.2 per cent males). Negligibly higher proportion of females (16.5 per cent) reported a 16-20 per cent increment in comparison to males (14.2 per cent). However, more males reported an increment of 21 per cent and more (12 per cent) than females (5.1 per cent).

Table 49: Career progression by percentage increment in income

Percentage of increment	Female		Male		Total	
	%	N	%	N	%	N
Up to 10%	58.2	92	53.6	541	54.2	633
11-15%	20.3	32	20.2	204	20.2	236
16-20%	16.5	26	14.2	143	14.5	169
21%-30%	3.2	5	6.7	68	6.3	73
31%-50%	0.6	1	2.7	27	2.4	28
More than 50%	1.2	2	2.6	26	2.4	28
Total	**100.0**	**158**	**100.0**	**1009**	**100.0**	**1167**

8.1.8 Details on career change

Out of the total 2,997 ITI pass outs engaged in wage employment, only 31 pass outs (1 per cent) had gone on to second wage job after leaving their first wage job from ITI. Gender-wise comparison depicts that out of the 31 pass outs, majority were males (27), compared to only 4 females.

Comparison across trades shows that majority of the pass outs from non-engineering trades (93.5 per cent) opted for second job in comparison to those from engineering trades (6.5 per cent).

Table 50: Details of career change by gender and trade

Second Employment by Gender					
		Second Job		Total first job	Wage Employed
		N	%	N	%
Gender	**Female**	4	12.9	455	0.9
	Male	27	87.1	2542	1.1
	Total	**31**	**100.0**	**2997**	**1.0**
Trade	**Engineering**	2	6.5	2448	0.1
	Non-Engineering	29	93.5	549	5.3
	Total	**31**	**100.0**	**2997**	**1.0**

Out of the 31 ITI pass outs who underwent career change, only 16 had reported an increase in income, the proportion being considerably higher among male pass outs (14) as compared to females (2). Across trades, none of the pass outs from non-engineering trade had reported increase in income in their second job.

Table 51: Gender-wise and trade-wise income increase data for ITI pass outs in their second job

Gender					Trades	
Income Increase	**Female**		**Male**		**Engineering**	
	N	**%**	**N**	**%**	**N**	**%**
Up to 10%	1	50.0	3	21.4	4	25.0
11 to 15%	1	50.0	5	35.7	6	37.5
16- 20%	0	0.0	5	35.7	5	31.3
21%-30%	0	0.0	1	7.1	1	6.3
Total	2	100.0	14	100.0	16	100.0

8.1.9 Satisfaction with the job

Assessing satisfaction with job is important for understanding the overall well-being of ITI pass outs in their work.

Satisfaction with job by career progression: Factors such as an increase in wage/salary contributed to the high levels of satisfaction, with 82.6 per cent expressing high or very high satisfaction. Similarly, promotions in job roles resulted in 82.5 per cent reporting high or very high satisfaction. Notably, individuals who shifted from part-time to full-time roles or from temporary to permanent positions also exhibited relatively high satisfaction levels, with 80.7 per cent and 79.9 per cent reporting high or very high satisfaction, respectively. Additionally, those who experienced career progression through other means also showed high satisfaction.

Satisfaction with job by gender: The data looks into job satisfaction with a gender-specific lens. Both males (76 per cent) and females (74.5 per cent) reported high or very high satisfaction levels with their jobs. Similarly, there emerged a comparable trend with 18.7 per cent females and 18.3 per cent males reporting neither low nor high satisfaction. Less than 10 per cent pass outs across genders had low satisfaction level (6.8 per cent females and 5.7 per cent males).

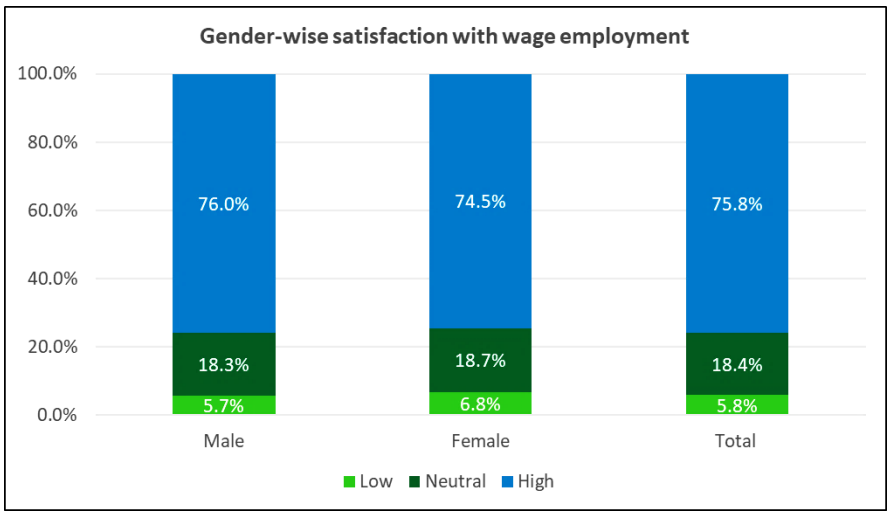


Figure 66: Gender-wise satisfaction with job

8.2 Self-employment

Out of the total pass outs employed, 7.9 per cent or 749 ITI pass outs had chosen self-employment.

8.2.1 Status of self-employment by gender, location and trades

7.9 per cent of the ITI pass outs (out of 9,495 pass outs currently into labour force) went into self-employment, with marginally higher proportion of females (9.5 per cent) than males (7.4 per cent) in their respective cohorts.

Table 52: Gender-wise distribution of ITI pass outs engaged in self-employment

Gender	ITI Pass outs in self-employment (n)	Economically active ITI pass outs (N)	% ITI pass outs in self-employment (n/N)
Female	211	2216	9.5
Male	538	7279	7.4
Total	**749**	**9495**	**7.9**

Comparison across overall level shows minor variations, with nine per cent of pass outs from urban areas engaged in self-employment at a level slightly higher than pass outs from rural areas (7.3 per cent).

Table 53: Location-wise distribution of ITI Pass outs engaged in self-employment

Location	ITI pass outs into self-employment (n)	Economically active ITI pass outs (N)	% ITI pass outs into self-employment (n/N)
Rural	469	6401	7.3
Urban	280	3094	9.0
Total	**749**	**9495**	**7.9**

Region-wise comparison of the self-employed pass outs reflects no major variations.

Table 54: Region-wise distribution of ITI pass outs engaged in self-employment

Location	ITI pass outs into self-employment (n)	Economically active ITI pass outs (N)	% ITI pass outs
East	89	1135	7.8
North	183	2717	6.7
North- East	26	257	10.1
South	142	1921	7.4
West	309	3465	8.9
Total	**749**	**9495**	**7.9**

The findings also show significant differences in employment outcomes between pass outs from engineering and non-engineering trades, with 11 per cent non-engineering pass outs at an overall level engaged in self-employment while it was 6.9 per cent for those from engineering trades.

Table 55: Trade-wise distribution of ITI pass outs into self-employed

Trades	ITI pass outs in self-employment (n)	Economically active ITI pass outs (N)	% ITI pass outs into self-employment (n/N)
Engineering	504	7269	6.9
Non-Engineering	245	2226	11.0
Total	**749**	**9495**	**7.9**

The table below shows trade-wise distribution of self-employed pass outs. Out of the 749 pass outs, a higher proportion of pass outs were from engineering trades (67.3 per cent), in comparison to pass outs from non-engineering trades (32.7 per cent).

Table 56: Trade-wise distribution of self-employed pass outs

Trades	ITI pass outs in self-employment (n)	% ITI pass outs in self-employment
Engineering	504	67.3
Non-Engineering	245	32.7
Total	**749**	**100.0**

Figure 67: Age-wise distribution of self-employment

As shown in the graph, 56.2 per cent of the self-employed pass outs were in the age-bracket of 18-21 years, followed by 27 per cent in the age group of 22-25 years. 14.8 per cent of the total self-employed pass outs were more than 26 years of age. This highlights that the major share of the working-age population of the pass outs were aged between 18 and 25 years (83.2 per cent). A negligible proportion of self-employed pass outs were below 17 years of age (two per cent).

8.2.2 Reasons for taking up self-employment

Gender-wise reasons for taking up self-employment: 58.3 per cent of females emphasised greater independence, more than that males at 43.7 per cent, as a primary driver for choosing self-employment. Flexible working hours were also more important for females (40.3 per cent) as compared to males (26.4 per cent). On the other hand, males were slightly more motivated by the prospect of higher income (43.3 per cent) than females (36 per cent). Family preferences, cited by 31.8 per cent of females and 33.8 per cent of males, indicates the significance of family business backgrounds in this decision. The influence of successful friends was relatively low for both groups, being 14.7 per cent for females and 16.2 per cent for males overall. 15.2 per cent females and 11.3 per cent males opted for self-employment because they did not feel like working for others. Other factors, such as government or bank incentives have minimal impact overall in driving individuals towards self-employment.

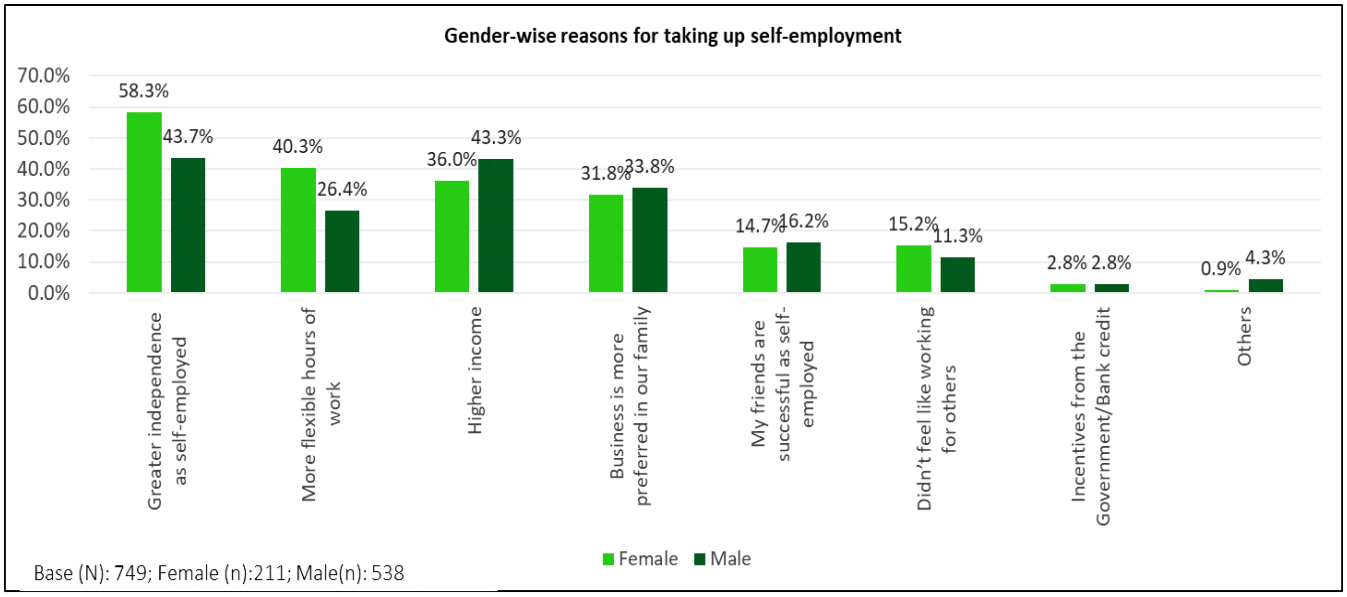


Figure 68: Gender-wise reasons for taking up self-employment

Location-wise reasons for taking up self-employment: Preference for greater independence was less prevalent in ITI pass outs from rural areas (48.6 per cent) compared to those from urban areas (81.4 per cent). 51.1 per cent ITI pass outs from urban areas placed more emphasis on flexible working hours compared to their rural area counterparts (30.5 per cent). The pursuit of higher income emerged as a stronger motivator for pass outs in urban areas (68.6 per cent) as compared to those from rural areas (40.9 per cent). Family business preferences were a considerable factor among pass outs from both rural (33.5 per cent) and urban (56.1 per cent) areas. The success of friends in self-employment was more influential for pass outs in urban areas (25 per cent) than those in rural ones (14.9 per cent).

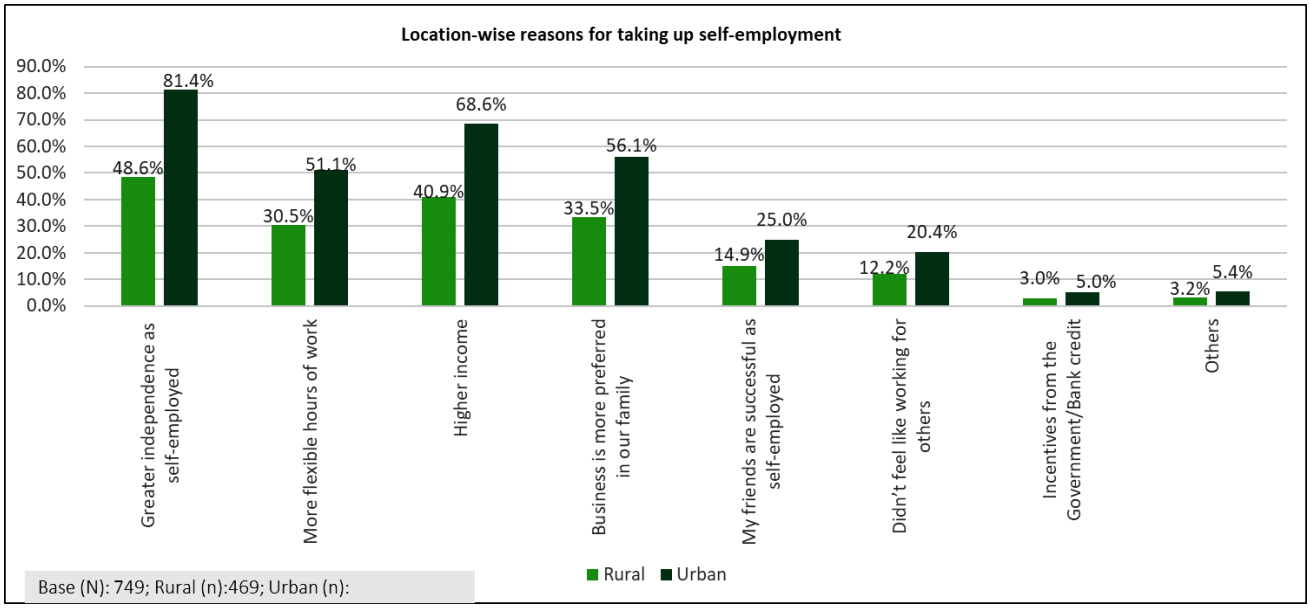


Figure 69: Location-wise reasons for taking up self-employment

8.2.3 Gender-wise distribution of top sectors in which pass outs were self-employed

The data shows gender-wise preference for sectors in self-employment

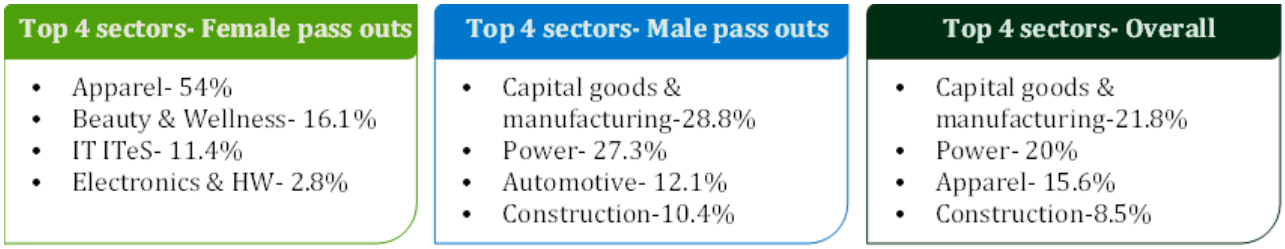


Figure 70: Gender-wise distribution of top sectors in which pass outs were self-employed

8.2.4 Self-employment by trades of training and trades in employment

75 per cent of the self-employed ITI pass outs were employed in the same trade as that of their training, the proportion being substantially higher amongst females (87 per cent) as compared to males (71 per cent).

8.2.5 Gender-wise time taken to start self-employment

21.3 per cent of female pass outs initiated self-employment within the first month, and 24.2 per cent and 32.7 per cent did so within 1-3 months and 4-6 months respectively. Male pass outs show a similar trend, with 20.1 per cent, 26 per cent, and 26.2 per cent commencing self-employment within the corresponding timeframes. Further analysis shows that 11.8 per cent of female pass outs and 12.8 per cent of male pass outs take 7-12 months to start their self-employment journey, while 10 per cent of female pass outs and 14.9 per cent of male pass outs exceed 12-month.

Table 57: Gender-wise time taken to start self-employment

Time	Female		Male		Total	
	%	N	%	N	%	N
Within 1 month	21.3	45	20.1	108	20.4	153
1- 3 months	24.2	51	26.0	140	25.5	191
4- 6 months	32.7	69	26.2	141	28.0	210
7- 12 months	11.8	25	12.8	69	12.6	94
More than 12 months	10.0	21	14.9	80	13.5	101
Total	**100.0**	**211**	**100.0**	**538**	**100.0**	**749**

8.2.6 Monthly income

Gender-wise monthly income through self-employment: The data presented here provides a glimpse into the monthly income distribution among self-employed pass outs, categorised by gender. Among female pass outs, 39.8 per cent were earning up to INR 5,000, and 37.9 per cent fell in the INR 5,001-10,000 range. Additionally, 18.5 per cent earned between INR 10,001-20,000, with 3.8 per cent earning more than INR 20,000. Among the male pass outs, 16.5 per cent earned up to INR 5,000, and 34.9 per cent were earning

between INR 5,001-10,000. Further, 34.4 per cent were in the INR 10,001-20,000 income bracket, with 14.2 per cent earning above INR 20,000.

The data indicates that a considerable portion of both genders earned within the INR 5,001-10,000 range, but there is a noticeable gender disparity in higher income brackets, with more male pass outs in the INR 10,001-20,000 and above categories.

Table 58: Monthly income by gender

Income range	Female		Male		Total	
	%	N	%	N	%	N
Up to INR 5000	39.8	84	16.5	89	23.1	173
INR 5001- 10000	37.9	80	34.9	188	35.8	268
INR 10001-20000	18.5	39	34.4	185	29.9	224
INR 20001- 30000	2.9	6	9.5	51	7.6	57
More than 30000	0.9	2	4.7	25	3.6	27
Total	**100.0**	**211**	**100.0**	**538**	**100.0**	**749**

Overall, the average monthly income of the ITI pass outs engaged in self-employment was reported as INR 13,096. Wide variations were seen in the average monthly income across gender, with female pass outs earning an average of INR 8,026 per month in comparison to that for male pass outs at INR 15,209 per month.

Table 59: Average monthly income by gender

Average monthly income earned by gender (self-employment) (in Rs.)			
	Female	Male	Total
Average monthly income	8026	15209	13096

8.2.7 Details on career change

This section examines whether self-employed pass outs had undergone any subsequent career change.

- The data depicts that out of 749 ITI pass outs currently in self-employment, around 12 pass outs (1.6 per cent) underwent career change at the time of survey.
- Trade-wise comparison indicates no major variations, with 1.8 per cent pass outs from engineering trades opting for career change in contrast to 1.2 per cent from non-engineering trades.

8.2.8 Increase in income

Gender-wise increase in income: The data shows that a similar percentage of ITI pass outs from both genders witnessed an increase in their income by 10 per cent (38.4 per cent for females and 36.6 per cent for males). However, further comparison brings forth a noticeable gender disparity in percentage change in income, with more males reporting an increment by 11-15 per cent (20.4 per cent) and 16-20 per cent (10 per cent), higher than increments for female pass outs (18 per cent and 2.8 per cent respectively). A larger proportion of female pass outs (27.5 per cent) mentioned no change in comparison to their male counterparts (21.4 per cent).

Table 60: Gender-wise increase in income

Change in Income	Female		Male		Total	
	%	N	%	N	%	N
Increased by more than 50%	6.6	14	5.6	30	5.9	44
Increased by 21% - 50%	6.2	13	5.4	29	5.6	42
Increased by 16% - 20%	2.8	6	10.0	54	8.0	60
Increased by 11% - 15%	18.0	38	20.4	110	19.8	148
Increased by Up to 10%	38.4	81	36.6	197	37.1	278
Reduced by up to 20%	0.5	1	0.4	2	0.4	3
Reduced by more than 20%	0.0	0	0.2	1	0.1	1
No change	27.5	58	21.4	115	23.1	173
Total	**100.0**	**211**	**100.0**	**538**	**100.0**	**749**

Trade-wise increase in income: The study reveals minor variations in this category, with 38.5 per cent ITI pass outs from engineering trades reporting an increase in their income by 10 per cent as compared to 34.3 per cent pass outs from non-engineering trades. Further comparison brings forth a trade-wise disparity in percentage change in income, with more ITI pass outs from non-engineering trades reporting an increment by 11-15 per cent (21.6 per cent) - higher than that for ITI pass outs from engineering trades (18.8 per cent). Nearly equal proportion of pass outs across trades reported increase in income by 16 per cent-20 per cent (8.7 per cent for engineering trades pass outs and 6.5 per cent for pass outs from non-engineering trades). This change in income analysis highlights the differences within self-employment, with slightly larger proportion of non-engineering trades pass outs (26.2 per cent) citing no change in comparison to their engineering trades pass outs counterparts (21.6 per cent).

Table 61: Trade-wise increase in income

Change in Income	Engineering		Non-engineering		Total	
	%	N	%	N	%	N
Increased by more than 50%	6.0	30	5.7	14	5.9	44
Increased by 21% - 50%	5.8	29	5.3	13	5.6	42
Increased by 16% - 20%	8.7	44	6.5	16	8.0	60
Increased by 11% - 15%	18.8	95	21.6	53	19.8	148
Increased by Up to 10%	38.5	194	34.3	84	37.1	278
Reduced by up to 20%	0.4	2	0.4	1	0.4	3
Reduced by more than 20%	0.2	1	0.0	0	0.1	1
No change	21.6	109	26.2	64	23.1	173
Total	**100.0**	**504**	**100.0**	**245**	**100.0**	**749**

8.2.9 Gender-wise satisfaction level with self-employment

Among male pass outs who took up self-employment, 71.1 per cent reported high or very high satisfaction levels with their self-employment/entrepreneurship. Close to nine per cent expressed low or very low satisfaction level. Similarly, among female pass outs who took up self-employment, 73 per cent indicated high or very high satisfaction.

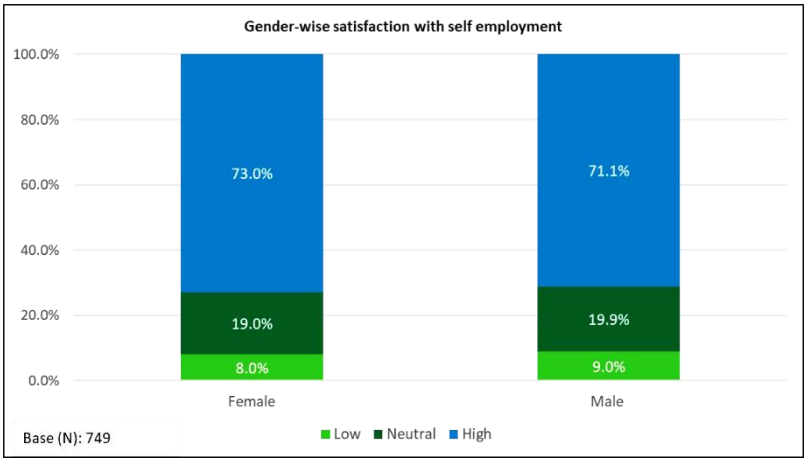


Figure 71: Gender-wise satisfaction level with self-employment

8.3 Status of Divyangjan ITI pass outs (wage and self-employment)

The employment status of *Divyangjan ITI pass outs*, encompassing both wage employment and self-employment, post completion of ITI courses provides a perspective on their professional journey.

Wage Employment: The data shows that out of 88 *Divyangjan ITI pass outs*, around 13 pass outs (14.8 per cent of the total surveyed pass outs) were into wage employment at the time of survey.

Self-Employment: Out of 88 *Divyangjan ITI pass outs* interviewed, around 12 pass outs (14 per cent of the total surveyed pass outs) were into self-employment at the time of survey.

Method to search job by *Divyangjan ITI pass outs*: The figure below presents the techniques adopted by the male and female *Divyangjan ITI pass outs* across rural and urban to search for employment.

- 33.3 per cent female *Divyangjan* reported to have found employment through facilitation and support of ITI principal/placement cell, through internship during/after training and through employment exchange/job fairs.
- Majority of males 40. 0 per cent found employment through placement cell/Rozgar mela/principals of ITI, followed by 30.0 per cent who got it through personnel connections of family and friends.
- Similar job search methods was reported by *Divyangjan ITI pass outs* across locations.

Apprenticeship

Chapter 9: Apprenticeship

This chapter presents an analysis of the apprenticeship status of ITI pass outs, factors affecting the time taken to find the apprenticeship post completion of training, duration of apprenticeship, the stipend received, and the status of *Divyangjan* ITI pass outs who undertook the apprenticeship.

9.1 Status of Apprenticeship

Post completion of training and certification at ITIs, the ITI pass outs look out to get employed or undertaking apprenticeship.

9.1.1 Gender-wise status of apprenticeship

Out of the total sample of 9,495 pass outs who were into labour force, around (903) 9.5 per cent were in apprenticeships at time of interview / data collection.

Table 62: Gender-wise distribution of ITI-pass outs in Apprenticeship

Gender	ITI pass outs in apprenticeship (n)	Economically active ITI pass outs (N)	% ITI pass outs in apprenticeship (n/N)
Female	164	2216	7.4
Male	739	7279	10.2
Total	**903**	**9495**	**9.5**

Out of the total apprenticeship sample of 903, 164 (18.2 per cent) were females and 739 (81.8 per cent) were males.

Table 63: Gender-wise distribution of ITI Pass outs in Apprenticeship

Gender	ITI pass outs in apprenticeships (n)	% ITI pass outs in apprenticeship
Female	164	18.2
Male	739	81.8
Total	**903**	**100.0**

9.1.2 Location-wise status of apprenticeship

Table below presents location disaggregated percentage distribution of ITI pass outs who underwent apprenticeship. More pass outs belonging to rural areas (11.2 per cent) were in apprenticeship as compared to pass outs from urban areas (six per cent).

Table 64: Location-wise distribution of ITI pass outs in apprenticeship

Location	ITI pass outs in apprenticeship (n)	Economically active ITI pass outs (N)	% ITI pass outs in apprenticeship (n/N)
Rural	718	6401	11.2
Urban	185	3094	6.0
Total	**903**	**9495**	**9.5**

Out of the total sample (903), a higher proportion of pass outs went into apprenticeship from rural areas (718, 79.5 per cent), compared to those from urban areas (185, 20.5 per cent). Further analysis of data illustrates variations in apprenticeship percentages across regions, with the west region at 14.2 per cent, followed by the north (8.6 per cent), east (6.1 per cent), south (5.3 per cent) and north-east (1.9 per cent).

Table 65: Location-wise distribution of Apprenticeship

Location	ITI pass outs into apprenticeship (n)	% ITI pass outs into apprenticeship
Rural	718	79.5
Urban	185	20.5
Total	**903**	**100.0**

9.1.3 Trade-wise status of apprenticeship

Data shows differences in apprenticeship outcomes between pass outs from engineering and non-engineering trades. Of the total sample of ITI pass outs, 9.8 per cent from engineering trade secured apprenticeship opportunity as against 8.5 per cent pass outs from non-engineering trades (6.1 per cent).

Table 66: Trade-wise distribution of ITI pass outs into apprenticeship

Trades	ITI pass outs in apprenticeship (n)	Economically active ITI pass outs (N)	% ITI pass outs in apprenticeship (n/N)
Engineering	713	7269	9.8
Non-Engineering	190	2226	8.5
Total	**903**	**9495**	**9.5**

Further analysis shows that out of the total apprenticeship sample of 903, 713 (79 per cent) were from engineering trades and 190 (21 per cent) from non-engineering trades.

Table 67: Trade-wise distribution of apprenticeship

Trades	ITI pass outs in apprenticeship (n)	% ITI pass outs in apprenticeship
Engineering	713	79.0
Non-Engineering	190	21.0
Total	**903**	**100.0**

9.2 Time taken to find apprenticeships

9.2.1 Time taken to find apprenticeships by gender

Many of the ITI pass outs (47.1 per cent) secured apprenticeships within 1-3 months, followed by 19.8 per cent who secured it in 4-6 months.

Gender-wise analysis highlights that a higher proportion of female pass outs (26.2 per cent) secured apprenticeship within the first month as compared to 16 per cent male pass outs. Slightly higher proportion of male pass outs (47.9 per cent) secured apprenticeship within the 1-3 month timeframe as against the those by female pass outs (43.3 per cent).

Table 68: Gender-wise distribution of time taken to find apprenticeship

Time taken	Female		Male		Total	
	%	N	%	N	%	N
Within 1 month	26.2	43	16.0	118	17.8	161
1-3 months	43.3	71	47.9	354	47.1	425
4-6 months	16.5	27	20.6	152	19.8	179
7-12 months	8.5	14	10.3	76	10.0	90
More than 12 months	5.5	9	5.2	39	5.3	48
Total	**100.0**	**164**	**100.0**	**739**	**100.0**	**903**

9.2.2 Time taken to find Apprenticeship by trades

ITI pass outs from engineering trades and non-engineering trades had found apprenticeships within 1-3 months, at 47.4 per cent and 45.8 per cent, respectively. Almost a fifth of the ITI pass outs had taken 4-6 months, proportion being higher amongst engineering trades pass outs (20.5 per cent) as compared to non-engineering pass outs (17.4 per cent). A substantial difference is observed in the 7-12 months category, where pass outs from engineering trades (11.4 per cent) exceeded those from the non-engineering trades (4.7 per cent).

Table 69: Distribution of time taken to find apprenticeship by trades

Time taken	Engineering		Non-engineering		Total	
	%	N	%	N	%	N
Within 1 month	16.8	120	21.6	41	17.8	161
1-3 months	47.4	338	45.8	87	47.1	425
4-6 months	20.5	146	17.4	33	19.8	179
7-12 months	11.4	81	4.7	9	10.0	90
More than 12 months	3.9	28	10.5	20	5.3	48
Total	**100.0**	**713**	**100.0**	**190**	**100.0**	**903**

9.2.3 Relation between time taken and source for finding apprenticeship

More than three-fifth of the ITI pass outs had found apprenticeship opportunity through principal/faculty of ITI (62.5 per cent), followed by those who found it through portal/websites (15.1 per cent) and those who found them through personal connections-friends and family reference (11.7 per cent).

Table 70: Time taken to find apprenticeship by source for finding

Source of finding Apprenticeship	Within 1 month	1- 3 months	4- 6 months	7-12 months	More than 12 months	Total	
	%	%	%	%	%	%	N
Through principal/faculty of ITI	73.3	68.0	51.4	48.9	43.8	62.5	564
Portals/websites (NAPS portal, etc.)	13.7	14.6	13.4	12.2	35.4	15.1	136
Personal connections - friends and family referred me for the apprenticeship	8.7	8.9	19.6	18.9	4.2	11.7	106
Independent contact to employers	3.1	4.0	8.9	11.1	4.2	5.5	50
NAPS mela/awareness/ newspaper advertisements/ campaign by government	1.2	2.8	5.0	7.8	8.3	3.8	34
Through drives by ICs	0.0	1.6	1.7	1.1	4.2	1.4	13
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**903**

9.3 Relationship between ITI trades and apprenticeship trades

Data shows that 94.5 per cent of ITI pass outs were engaged in the same course during apprenticeships in which they had undergone ITI training. 96.9 per cent of the pass outs from engineering trades underwent apprenticeship in the same trades, while 85.3 per cent of non-engineering pass out did apprenticeship in same trade.

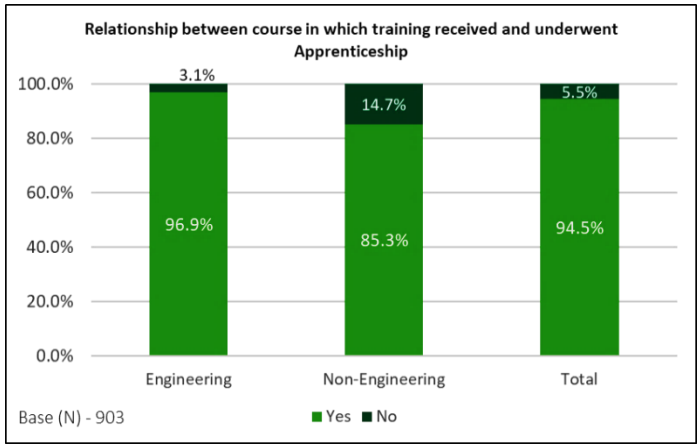


Figure 72: Relationship between ITI trades apprenticeship trades.

9.4 Duration of Apprenticeship

The duration of apprenticeship ranged from six months to two years, depending on the trades and course. 86.7 per cent of the pass outs had undertaken apprenticeship for 6-12 months.

Table 71: Gender-wise distribution of duration of apprenticeship

Time taken	Female		Male		Total	
	%	N	%	N	%	N
Up to 6 months	11.6	19	8.9	66	9.4	85
6-12 months	84.7	139	87.2	644	86.7	783
13-24 months	3.7	6	3.9	29	3.9	35
Total	**100.0**	**164**	**100.0**	**739**	**100.0**	**903**

9.5 Monthly income (stipend) by trades in which pass outs undertook apprenticeships

Majority of the male pass outs (71.9 per cent) who underwent apprenticeship had received a stipend in the range of INR 7000 to INR 10,000, while 65.2 per cent female pass outs fell within the same income bracket. Further analysis into monthly stipend by trades shows little variation, with trades like machinist (13.8 per cent), fitter (11.9 per cent) and electrician (11.3 per cent) drawing a monthly stipend of above INR 10,000. Trades like electrician (16.5 per cent) and COPA (13 per cent) had received monthly stipend of INR 7000-10,000. (Refer **Annexure X**).

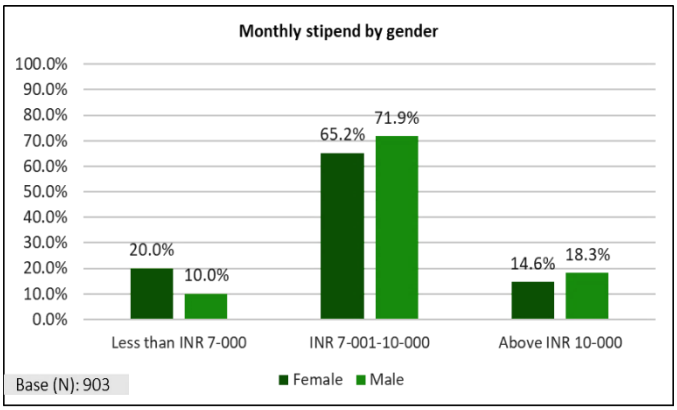


Figure 73: Monthly income received during apprenticeship

Unemployment

Chapter 10: Unemployment

This chapter details the status of unemployment among ITI pass outs and their opinions on seeking a job, at the time of the survey. It also includes ITI pass outs' views on challenges faced in job search. For the purpose of the study, unemployed ITI pass outs was defined as those ITI pass outs who were not employed (neither wage nor self) at the time of interview and were still seeking job opportunities after passing out from ITIs. It also includes ITI pass outs who want to pursue self-employment or entrepreneurship only.

10.1 Status of unemployment

To understand the status of unemployment of the ITI pass outs after completion of ITI course, it was assessed if the ITI pass outs were economically active or if they were economically inactive. Of the total 11,136 pass outs, 9,495 were economically active and were part of labour force. Out of the total economically active/part of labour force pass outs, 4,846 ITI pass outs were found to be unemployed as they did not get any job after passing out and were seeking jobs as on the date of interview. This also includes ITI pass outs who were not looking for any job but wanted to pursue self-employment or entrepreneurship options.

Majority of unemployed (87.2 per cent) belonged to category 'unemployed, whereas 'unemployed - want to pursue self-employment' comprised of only 12.8 per cent of the total unemployed pass outs.

Table 72: Status of unemployment

Unemployment classification			Unemployed	Unemployed- want to pursue self-employment	Total
			%	%	N
Gender	**Female**	**%**	81.2	18.8	**1384**
		N	1124	260	
	Male	**%**	89.7	10.3	**3462**
		N	3104	358	
Location	**Rural**	**%**	88.3	11.7	**3216**
		N	2840	376	
	Urban	**%**	85.2	14.8	**1630**
		N	1388	242	
Total		**%**	87.2	12.8	**4846**
		N	4228	618	

10.1.1 Gender-wise and area-wise distribution of unemployed pass outs

Out of 9,495 ITI pass outs in the labour force, 4,846 pass outs (51 per cent of the total surveyed pass outs) were noted as unemployed at the time of survey. Out of total female pass outs, 62.5 per cent were unemployed, while the unemployment rate for males stood at 47.5 per cent.

Table 73: Gender-wise distribution of unemployed ITI pass outs

Gender	ITI pass outs unemployed (n)	Economically active ITI pass outs (N)	% ITI pass outs unemployed (n/N)
Female	1385	2216	62.5
Male	3461	7279	47.5
Total	**4846**	**9495**	**51.0**

Out of the total unemployed sample, 1,385 (28.6 per cent) were female pass outs, while 3461 (71.44 per cent) were male pass outs.

Table 74: Gender-wise distribution of unemployed pass outs

Gender	ITI pass outs unemployed (n)	% ITI pass outs unemployed
Female	1385	28.6
Male	3461	71.4
Total	**4846**	**100.0**

10.1.2 Location-wise distribution of unemployed

The location-wise analysis indicates no differences between ITI pass outs from rural and urban areas, with an almost an equal proportion of pass outs being unemployed (50.2 per cent and 52.7 per cent respectively).

Table 75 : Location-wise distribution of ITI pass outs unemployed

Location	ITI pass outs unemployed (n)	Total economically active ITI pass outs (N)	% ITI pass outs unemployed (n/N)
Rural	3216	6401	50.2
Urban	1630	3094	52.7
Total	**4846**	**9495**	**51.0**

Out of the total unemployed sample, 3,216 (66.4 per cent) were from rural areas and 33.6 per cent were from urban areas.

Table 76: Location-wise distribution of unemployed pass outs

Location	ITI pass outs unemployed (n)	% ITI pass outs unemployed
Rural	3216	66.4
Urban	1630	33.6
Total	**4846**	**100.0**

10.1.3 Trade-wise distribution of unemployed

Table 77: Trade-wise distribution of ITI pass outs unemployed

Trades	ITI pass outs unemployed (n)	Total economically active ITI pass outs (N)	% ITI pass outs unemployed (n/N)
Engineering	3604	7269	49.6
Non-Engineering	1242	2226	55.8
Total	**4846**	**9495**	**51.0**

Out of the total unemployed pass outs, 3,604 (74.7 per cent) were from engineering trades and 1,242 (25.6 per cent) were from non-engineering trades.

Table 78: Trade-wise distribution of unemployed

Trades	ITI pass outs unemployed (n)	% ITI pass outs unemployed
Engineering	3604	74.4
Non-Engineering	1242	25.6
Total	**4846**	**100.0**

10.1.4 Distribution of unemployed pass outs by OJT undertaken

Out of the total unemployed pass outs, 54.4 per cent of the pass outs had undergone OJT.

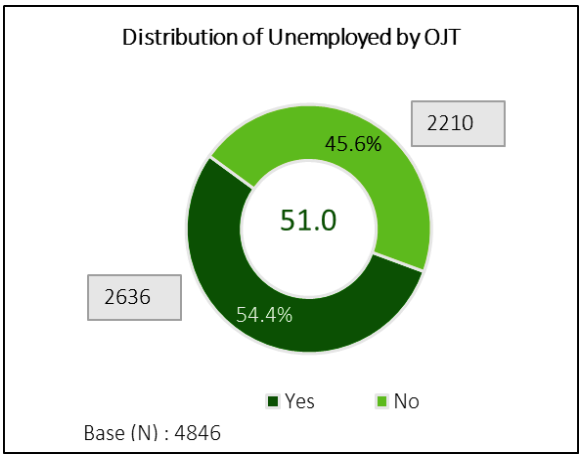


Figure 74: Distribution of unemployed by OJT

10.2 Challenges faced in job search

The study analysed the information collected from the 4,846 pass outs who were unemployed and were looking for jobs after completing their ITI course. The respondents were permitted to provide one or more challenges.

10.2.1 Gender-wise distribution of challenges faced in job search

The table below illustrates the various challenges faced by the unemployed pass outs. The most commonly cited challenge was lack of job opportunities in hometown, with 56.0 per cent pass outs mentioning this as a challenge. This was followed by salary not being as per expectations (42.1 per cent) and lack of information about job vacancies (37.8 per cent). Slightly more than a tenth of the pass outs (10.7 per cent) mentioned lack of adequate skills to get employment.

Gender-wise comparison showed minor differences with slightly higher proportion of female pass outs (60.2 per cent) citing lack of job opportunities in hometown as compared to their male counterparts (54.4 per cent). 38.8 per cent of female and 37.8 per cent male pass outs reported lack of information about job vacancies.

Table 79: Gender-wise distribution of challenges faced in job search

Challenges	Female		Male		Total*	
	%	N	%	N	%	N
Lack of job opportunities in hometown	60.2	676	54.4	1682	56.0	2358
Salary not as per the expectations	42.9	482	41.7	1290	42.1	1772
Lack of information about job vacancies	38.8	436	37.4	1157	37.8	1593
Not enough job vacancies as per the skill set	34.1	383	31.0	957	31.8	1340
Lack of connectedness/contact to find a job/lack of support from friends and family	23.5	264	24.2	747	24.0	1011
Don't have adequate skills to get employment	10.9	122	10.6	328	10.7	450
No challenges faced	6.9	77	6.5	200	6.6	277

**The total will not add up to 100% as it was multiple response question*

10.2.2 Location-wise distribution of challenges faced in job search

A similar proportion of pass outs from rural areas (55.0 per cent) and urban areas (57.8 per cent) mentioned lack of job opportunities in hometown as a major challenge, followed by salary not being as per expectations (rural-40.3 per cent, urban-45.6 per cent), and lack of information about job vacancies (rural-37.5 per cent, urban-38.3 per cent).

Table 80: Location-wise distribution of challenges faced in job search

Challenges	Rural		Urban		Total*	
	%	N	%	N	%	N
Lack of job opportunities in hometown	55.0	1557	57.8	801	56.0	2358
Salary not as per the expectations	40.3	1141	45.6	631	42.1	1772
Lack of information about job vacancies	37.5	1062	38.3	531	37.8	1593
Not enough job vacancies as per the skill set	31.5	892	32.3	448	31.8	1340
Lack of connectedness/contact to find a job/lack of support from friends and family	24.3	688	23.3	323	24.0	1011
Don't have adequate skills to get employment	10.1	287	11.8	163	10.7	450
No challenges faced	7.3	206	5.1	71	6.6	277

**The total will not add up to 100% as it was a multiple response question*

Lack of job opportunities in hometown was a prominent challenge faced by ITI pass outs in the east (67.4 per cent) and the north (61.2 per cent) regions, while salary not as per the expectations was more pronounced in the north (55.1 per cent) and the west (37.0 per cent) regions. The north-east region stands out with the highest percentage in 'not enough job vacancies as per the skill set' category at 68.5 per cent and 'lack of information about job vacancies' which is notably high (58.9 per cent). 19.4 per cent reported facing no challenges in the south region.

Table 81: Region-wise distribution of challenges faced in job search

Challenges	East	North	North-East	South	West	Total*	
	%	%	%	%	%	%	N
Lack of job opportunities in hometown	67.4	61.2	36.3	37.4	57.2	56.0	2358
Salary not as per the expectations	49.3	55.1	22.6	26.9	37.0	42.1	1772
Lack of information about job vacancies	43.4	19.0	58.9	27.4	54.0	37.8	1593
Not enough job vacancies as per the skill set	40.0	37.8	68.5	17.9	27.0	31.8	1340
Lack of connectedness/contact to find a job/lack of support from friends and family	25.1	13.1	33.1	25.7	30.9	24.0	1011
Don't have adequate skills to get employment	15.2	7.5	10.5	10.9	11.	10.7	450
No challenges faced	4.3	2.2	3.2	19.4	5.5	6.6	277

**The total will not add up to 100% as it was a multiple response question*

10.2.3 Location-wise distribution of unemployed ITI pass outs by duration of job search

The table below shows the duration for which unemployed ITI pass outs[17] were searching for job opportunities at the time of survey, categorised by rural and urban locations. The majority of pass outs, accounting for 52.2 per cent, had been seeking employment for more than six months. However, the distribution across different time frames shows relatively similar patterns across pass outs from rural and urban areas.

[17] Unemployed pass outs also includes those who were in between jobs or were into further studes/additional skill training post completion of ITI training and were currently looking for jobs at the time of survey.

Table 82: Location-wise distribution of ITI pass outs by duration of looking for job

Duration of looking for work	Rural		Urban		Total*	
	%	N	%	N	%	N
Up to 1 month	5.2	146	6.5	90	5.6	236
1-3 months	19.5	551	16.9	234	18.6	785
4-6 months	23.7	670	23.3	323	23.6	993
More than 6 months	51.6	1462	53.3	738	52.2	2200
Total	**100.0**	**2829**	**100.0**	**1385**	**100.0**	**4214**

Those who were actively looking for jobs at the time of survey.

10.3 Status of pass outs 'not available for work'

There were 708 ITI pass outs who were not actively seeking employment after completing their training. They mentioned reasons such as:

- They either got married or were getting married.
- They were not getting jobs related to their skill set.
- They were not willing to work due to other personal reasons.

Around 43.1 per cent of the total pass outs out of labour force (1,641) were not willing to work post completion of ITI, proportion being considerably higher among females (53.4 per cent) as compared to males (38 per cent).

Table 83: Gender-wise distribution of ITI pass outs not willing to work

Gender	ITI pass outs not willing to work (n)	Total ITI pass outs out of labour force (N)	% ITI pass outs out of labour force not willing to work (n/N)
Female	291	545	53.4
Male	417	1096	38.0
Total	**708**	**1641**	**43.1**

Out of the total 708 unemployed pass outs who were not willing to work, 41.1 per cent were females as compared to 58.9 per cent males.

Table 84: Gender-wise distribution of ITI pass outs not willing to work

Gender	ITI pass outs not willing to work (n)	% ITI pass outs not willing to work
Female	291	41.1
Male	417	58.9
Total	**708**	**100.0**

Further analysis of the unemployed pass outs who were out of the labour force showed that 36.6 per cent pass outs belonged to engineering trades while 58 per cent belonged to non-engineering trades.

Table 85: Trade-wise distribution of ITI pass outs not willing to work

Trades	ITI pass outs not willing to work. (n)	Total ITI pass outs of labour force (N)	% ITI pass outs out of labour force not willing to work (n/N)
Engineering	418	1141	36.6
Non-Engineering	290	500	58.0
Total	**708**	**1641**	**43.1**

Out of the total 708 unemployed pass outs who were not willing to work, 59 per cent were from engineering trades and 41 per cent were from non-engineering trades.

Table 86: Trade-wise distribution of not willing to work

Trades	ITI pass outs not willing to work (n)	% ITI pass outs not willing to work
Engineering	418	59.0
Non-Engineering	290	41.0
Total	**708**	**100.0**

Of the unemployed pass outs who were out of labour force and not willing to work, proportion was slightly higher among pass outs from rural areas (46.6 per cent) as compared to pass outs from urban areas (35.4 per cent).

Table 87: Location-wise distribution of ITI pass outs not willing to work

Location	ITI pass outs not willing to work. (n)	Total ITI pass outs out of labour force (N)	% ITI pass outs out of labour force not willing to work (n/N)
Rural	530	1138	46.6
Urban	178	503	35.4
Total	**708**	**1641**	**43.1**

Out of the total 708 unemployed pass outs who were not willing to work, 74.9 per cent were from rural areas and 25.1 per cent from urban area.

Table 88: Location-wise distribution of ITI pass outs not willing to work

Location	ITI pass outs not willing to work (n)	% ITI pass outs not willing to work
Rural	530	74.9
Urban	178	25.1
Total	**708**	**100.0**

10.4 Reasons for not looking for a job

10.4.1 Gender-wise distribution of reasons for not looking for job

The study sought to explore the motivation of ITI graduate who were not actively seeking employment immediately after completing their ITI training. From the table below, it can be seen that 36.9 per cent of ITI

pass outs out of labour force did not get jobs as per their skill set. This was followed by ITI pass outs out of labour force mentioning that they were not willing to work due to personal reasons (35.3 per cent) and the pass outs mentioning marriage as the reason for not willing to work (27.8 per cent).

The analysis of data on reasons for not actively searching for jobs highlights distinct trends between genders. More female pass outs cited getting married/marriage being fixed as the reason (40.2 per cent) as compared to males (19.2 per cent). Males more frequently mentioned reasons like not getting jobs as per skill set (42.7 per cent). Personal reasons for not willing to work was reported by both genders but was more pronounced among male pass outs (38.1 per cent) compared to female pass outs (31.3 per cent).

Table 89: Gender-wise distribution of reasons for not looking for job

Reasons for not looking for job	Female		Male		Total	
	%	N	%	N	%	N
Getting married/marriage is fixed	40.2	117	19.2	80	27.8	197
Not getting jobs as per skill set	28.5	83	42.7	178	36.9	261
Not willing to work (personal reasons)	31.3	91	38.1	159	35.3	250
Total	**100.0**	**291**	**100.0**	**417**	**100.0**	**708**

10.4.2 Location-wise distribution of reasons for not looking for job

Getting married/marriage being fixed was reported as the major reason for not seeking employment by 31.1 per cent pass outs from rural areas, compared to it being reported by 18 per cent pass outs from urban areas. Not getting jobs as per skill set was cited as the reason by both rural (36.8 per cent) and urban pass outs (37.1 per cent).

Table 90: Location-wise distribution of reasons for not looking for job

Reasons for not looking for job	Rural		Urban		Total	
	%	N	%	N	%	N
Getting married/marriage is fixed	31.1	165	18.0	32	27.8	197
Not getting jobs as per skill set	36.8	195	37.1	66	36.9	261
Not willing to work (personal reasons)	32.1	170	44.9	80	35.3	250
Total	**100.0**	**530**	**100.0**	**178**	**100.0**	**708**

The data on reasons provided by ITI pass outs for not looking for jobs shows notable patterns across regions. While in the north region, 47.1 per cent of ITI pass outs mentioned getting married/marriage being fixed as a reason, and in north-east and south regions, not getting jobs as per skill set was stated as a prominent challenge. In the east region, 52.3 per cent of the pass outs mentioned that they were not willing to work due to personal reasons and, hence, not looking for jobs.

Table 91: Region-wise distribution of challenges faced in job search

Time taken	East	North	North-East	South	West	Total	
	%	%	%	%	%	%	N
Getting married/marriage is fixed	18.0	47.1	20.0	4.2	19.5	27.8	197
Not getting jobs as per skill set	29.7	37.1	50.0	50.7	35.4	36.9	261
Not willing to work (personal reasons)	52.3	15.8	30.0	45.1	45.1	35.3	250
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**708**

10.5 Status of Divyangjan ITI pass outs

Overall, 71 (57.7 per cent of the *Divyangjan ITI pass outs* interviewed) were unemployed, of which 87.32 per cent (62) were males and 22.68 per cent (9) were females.

Majority of them belonged to the engineering trades (57.4 per cent, N-47) compared to those from non-engineering trades (58.3 per cent, N-24). The proportion of unemployed *Divyangjan ITI pass outs* was slightly higher across rural areas (62.5 per cent) in comparison to those from urban areas (37.5 per cent).

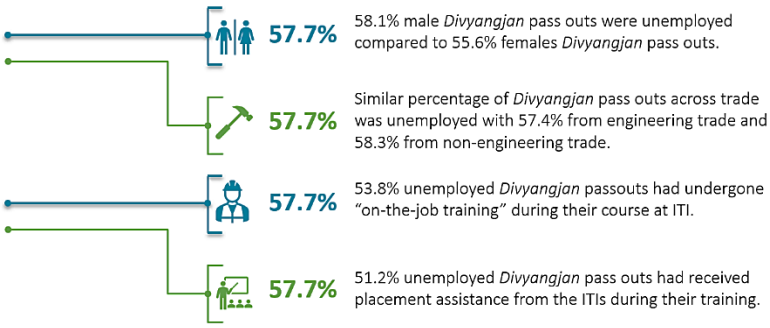


Figure 75: Status of *Divyangjan ITI pass outs*

The graph below shows the challenges faced by the *Divyangjan ITI pass outs* while looking for a job. The top three challenges cited by the *Divyangjan ITI pass outs* were lack of job opportunities in hometown (58.5 per cent), followed by 'lack of information about job vacancies (46.3 per cent) and salary not being as per expectations (29.3 per cent).

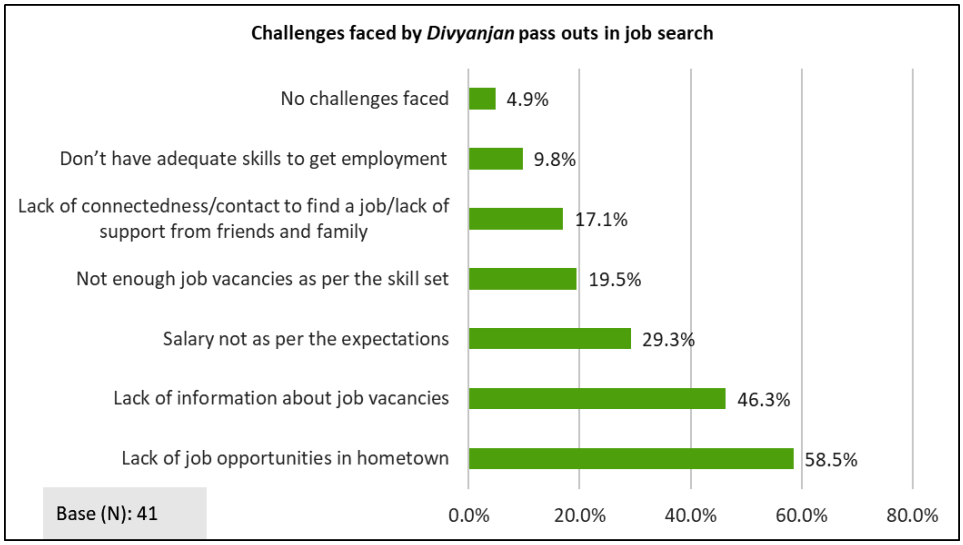


Figure 76: Challenges faced by unemployed *Divyangjan ITI pass outs* while looking for a job

**The total will not add up to 100% as it was a multiple response question*

63.9 per cent male *Divyangjan ITI pass outs* reported lack of job opportunities in hometown as a challenge as compared to 20 per cent female *Divyangjan ITI pass outs*. Location-wise analysis showed major variations with 61.9 per cent of pass outs from rural areas citing lack of job opportunities in hometown as against 55 per cent from urban areas. This was followed by salary not being as per expectation, as reported by 33.3 per cent of *Divyangjan ITI pass outs* from rural areas and 25 per cent *Divyangjan ITI pass outs* from urban areas.

Further Studies, Skill Training, and Preparation for Government Jobs

Chapter 11: Further Studies, Skill Training, and Preparation for Government Jobs

This chapter analyses the details for the out of labour force ITI pass outs. These include pass outs who went on to pursue either further studies or additional skill training or were preparing for government jobs post completion of training at the ITI.

11.1 Course of study

11.1.1 Gender-wise course of study

31.4 per cent (out of 1,641 pass outs who were not in labour force) had enrolled into further studies, the proportion being lower among females (25 per cent) as compared to males (34.6 per cent). Furthermore, 333 pass outs or 20.3 per cent of the total sample of ITI pass outs reported to have gone for additional skill training during the time of study.

Table 92: Gender-wise distribution of ITI pass outs enrolled into further studies

Gender	ITI pass outs into further studies (n)	Total ITI pass outs out of the labour force (N)	% ITI pass outs into further studies (n/N)
Female	136	545	25.0
Male	379	1096	34.6
Total	**515**	**1641**	**31.4**

Of the total 515 ITI pass outs who were into further studies, 136 (26.4 per cent) were females and 379 (73.6 per cent) were males.

Table 93: Gender-wise distribution of ITI pass outs into further studies

Gender	ITI pass outs into further studies (n)	% ITI pass outs into further studies
Female	136	26.4
Male	379	73.6
Total	**515**	**100.0**

20.3 per cent of the ITI pass outs had joined additional skill training programme post completion of ITI course (the percentage being 18.3 per cent for female pass outs and 21.3 per cent for male pass outs).

Table 94: Gender-wise distribution of ITI pass outs enrolled into additional skill training

Gender	ITI pass outs into additional skill training (n)	Total ITI pass outs out of the labour force (N)	% ITI pass outs into additional skill training (n/N)
Female	100	545	18.3
Male	233	1096	21.3

Total	**333**	**1641**	**20.3**

Of the total 333 ITI pass outs who were into additional skill training, 100 (30 per cent) were females and 233 (70 per cent) were males.

Table 95: Gender-wise distribution of additional skill training

Gender	ITI pass outs into additional skill training (n)	% ITI pass outs into additional skill training
Female	100	30.0
Male	233	70.0
Total	**333**	**100.0**

11.1.2 Course of study by trades

At an aggregate level, considerable proportion of pass outs across trades had reported pursuing further studies (engineering trades 34.7 per cent, non-engineering trades 23.8 per cent).

Table 96: Trade-wise distribution of ITI pass outs enrolled into further studies

Trades	ITI pass outs into further studies (n)	Total ITI pass outs out of the labour force (N)	% ITI pass outs into further studies (n/N)
Engineering	396	1141	34.7
Non-Engineering	119	500	23.8
Total	**515**	**1641**	**31.4**

Out of the total pass outs pursuing further studies, a higher proportion of ITI pass outs belonged to engineering trades 396 (76.9 per cent) while 119 (23.1 per cent) belonged to non-engineering trades.

Table 97: Trade-wise distribution of further studies

Trades	ITI pass outs into further studies (n)	% ITI pass outs into further studies
Engineering	396	76.9
Non-Engineering	119	23.1
Total	**515**	**100.0**

It would be interesting to highlight that around 20.3 per cent of the total pass outs who were out of labour force had joined additional skill training programme post completion of ITI, 22 per cent engineering and 16.4 per cent non-engineering pass outs.

Table 98: Trade-wise distribution of ITI pass outs enrolled into additional skill training

Trades	ITI pass outs into additional skill training (n)	Total ITI pass outs out of the labour force (N)	% ITI pass outs into additional skill training (n/N)
Engineering	251	1141	22.0
Non-Engineering	82	500	16.4
Total	**333**	**1641**	**20.3**

Of the total 333 ITI pass outs who were into additional skill training, 251 (75.4 per cent) were from engineering trades and 82 (24.6 per cent) were from non-engineering trades.

11.1.3 Location-wise course of study

Location-wise analysis shows variations with 29 per cent of ITI pass outs **out of the labour force** from rural areas enrolling in higher studies compared to 36.8 per cent from urban areas.

Table 99: Location-wise distribution of ITI pass outs enrolled into further studies

Location	ITI pass outs into further studies (n)	Total ITI pass outs out of the labour force (N)	% ITI pass outs into further studies (n/N)
Rural	330	1138	29.0
Urban	185	503	36.8
Total	**515**	**1641**	**31.4**

Of those who pursuing further studies, higher proportion (330, 64.1 per cent) belonged to rural areas in comparison to urban areas (185, 35.9 per cent).

Table 100: Location-wise distribution of further studies

Location	ITI pass outs into further studies (n)	% ITI pass outs into further studies
Rural	330	64.1
Urban	185	35.9
Total	**515**	**100.0**

20.3 per cent of the total ITI pass outs out of the labour force had joined additional skill training programme post completion of ITI, proportion being almost similar across rural (20.9 per cent) and urban pass outs (18.9 per cent).

Table 101: Location-wise distribution of ITI pass outs enrolled into additional skill training

Location	ITI pass outs into additional skill training (n)	Total ITI pass outs out of the labour force (N)	% ITI pass outs into additional skill training (n/N)
Rural	238	1138	20.9
Urban	95	503	18.9
Total	**333**	**1641**	**20.3**

Of the total 333 pass outs who were enrolled in additional skill training, 238 (71.5 per cent) were from rural areas and 95 (28.5 per cent) were from urban areas.

Table 102: Location-wise distribution of additional skill training

Location	ITI pass outs into additional skill training (n)	% ITI pass outs into additional skill training
Rural	238	71.5
Urban	95	28.5
Total	**333**	**100.0**

Comparison across the regions of the country reflects considerable variations in the pattern of enrollment into further studies and additional skill training. Proportion of ITI pass outs out of the labour force enrolled in further studies was high across north-east (51.7 per cent), south (44.7 per cent), west (35.6 per cent), followed by east (34.5 per cent) and north regions (4.8 per cent). A higher proportion of pass outs from south

(28.1 per cent) and east (25.7 per cent) had opted for additional skill training, which was higher than other regions.

Table 103: Distribution of further studies by region

Trades	Further studies		Additional Skill training		
	%	ITI pass outs into further studies (n)	%	ITI pass outs into additional skill training (n)	Total ITI pass outs out of the labour force (N)
East	34.5	137	25.7	102	397
North	4.8	15	12.4	39	314
North-East	51.7	15	13.8	4	29
South	44.7	132	28.1	83	295
West	35.6	216	17.3	105	606
Total	**31.4**	**515**	**20.3**	**102**	**1641**

11.1.4 Gender and location- wise details of the courses for further studies

The table below shows the educational distribution of pass outs across gender and trades. Notably, diploma/polytechnic courses stood out with the highest overall percentage at 53.8 per cent, suggesting a pronounced focus on this educational path as preferred by ITI pass outs. However, considerable variations were seen across genders for the graduation and post-graduation categories, with females comprising 41.2 per cent and 4.4 per cent, respectively, in contrast to males with 30.6 per cent and 1.1 per cent respectively. Pass outs from urban areas showed a higher preference for diploma/polytechnic courses (54.6 per cent) and graduation courses (35.1 per cent).

Table 104: Details of the course of further studies by gender and location

Courses	Female		Male		Rural		Urban		Total	
	%	N	%	N	%	N	%	N	%	N
Class 11th	0.7	1	1.3	5	1.8	6	0.0	0	1.2	6
Class 12th	6.6	9	10.8	41	11.5	38	6.5	12	9.7	50
Graduation	41.2	56	30.6	116	32.4	107	35.1	65	33.4	172
Post Graduation	4.4	6	1.1	4	0.9	3	3.8	7	1.9	10
Diploma/Polytechnic	47.1	64	56.2	213	53.4	176	54.6	101	53.8	277
Total	**100.0**	**136**	**100.0**	**379**	**100.0**	**330**	**100.**	**185**	**100.0**	**515**

11.2 Preparation for government jobs

A small proportion 5.2 per cent (out of 1,641 pass outs who were not in labour force) were preparing for government jobs.

11.2.1 Gender-wise distribution of ITI pass outs preparing for government jobs

Among the total sample of 1,641 pass outs out of labour force, 5.2 per cent reported preparing for government jobs, the proportion being lower among females (3.3 per cent) as compared to that among males (6.1 per cent).

Table 105: Gender-wise distribution of ITI pass outs preparing for government jobs

Gender	ITI pass outs preparing for government jobs (n)	Total ITI Pass outs out of labour force (N)	% ITI pass outs preparing for government jobs (n/N)
Female	18	545	3.3
Male	67	1096	6.1
Total	**85**	**1641**	**5.2**

Of the total 85 pass outs who were into further studies, 18 (21.2 per cent) were females and 67 (78.8 per cent) were males.

Table 106: Gender-wise distribution of preparing for government jobs

Gender	ITI pass outs preparing for government jobs (n)	% ITI pass outs preparing for government jobs
Female	18	21.2
Male	67	78.8
Total	**85**	**100.0**

11.2.2 Trade-wise distribution of ITI pass outs preparing for government jobs

A higher proportions of pass outs from engineering trades reported preparing for government jobs (6.7 per cent) as compared to those from non-engineering trades (1.8 per cent).

Table 107: Trade-wise distribution of ITI pass outs preparing for government jobs

Trades	ITI pass outs preparing for government jobs(n)	Total ITI pass outs out of labour force (N)	% ITI pass outs preparing for government jobs (n/N)
Engineering	76	1141	6.7
Non-Engineering	9	500	1.8
Total	**85**	**1641**	**5.2**

A higher proportion of ITI pass outs preparing for government jobs belonged to engineering trades (76, 89.4 per cent) as compared to those from non-engineering trades (9, 10.6 per cent).

Table 108: Trade-wise distribution of pass outs preparing for government jobs

Trades	ITI pass outs preparing for government jobs (n)	% ITI pass outs preparing for government jobs
Engineering	76	89.4
Non-Engineering	9	10.6
Total	**85**	**100**

11.2.3 Location-wise distribution of ITI pass outs preparing for government jobs

Location-wise analysis shows slight variations with higher proportion of pass outs from urban areas preparing for government jobs (8.9 per cent) than from rural areas (3.5 per cent).

Table 109: Location-wise distribution of pass outs preparing for government jobs

Location	ITI pass outs preparing for government jobs (n)	Total ITI pass outs out of labour force (N)	% ITI pass outs preparing for government jobs (n/N)
Rural	40	1138	3.5
Urban	45	503	8.9
Total	**85**	**1641**	**5.2**

Of those preparing for government jobs, a slightly higher proportion (45, 52.9 per cent) belonged to urban areas in comparison to those from rural areas (40, 47.1 per cent).

Table 110: Location-wise distribution of ITI pass outs preparing for government jobs

Location	ITI pass outs preparing for government jobs (n)	% ITI pass outs preparing for government jobs
Rural	40	47.1
Urban	45	52.9
Total	**85**	**100.0**

Qualitative Observations

Chapter 12: Qualitative Observations

12.1 Insights from interactions with employers

12.1.1 Profile

A total of 156 employers from 15 states were covered in this study and key informant interviews (KIIs) were conducted to obtain insights related to recruitment process for ITI pass outs, skills possessed by ITI pass outs and suggestions for overall improvements in the ITI ecosystem.

Table 111: Employers covered

Sr. No	Region	States	No. of employers
1	North	Delhi	10
2	North	Haryana	11
3	North	Jammu And Kashmir	4
4	North	Punjab	1
5	North	Uttar Pradesh	16
6	North	Uttarakhand	8
7	West	Gujarat	18
8	West	Madhya Pradesh	6
9	West	Maharashtra	35
10	West	Rajasthan	13
11	South	Karnataka	3
12	South	Tamil Nadu	9
13	South	Telangana	1
14	East	Odisha	6
15	East	West Bengal	15
	Total		**156**

The above table depicts state-wise distribution of employers covered under the study. Five states from which employers were interviewed are Maharashtra (35), Gujarat (18), Uttar Pradesh (16), West Bengal (15) and Rajasthan (13).

Interviews were conducted with 156 employers. 69 per cent of employers interviewed had their units in urban areas, whereas 31 per cent employers had their units in rural areas.

Private companies constituted 79.5 per cent of recruiters, followed by public sector units (9.0 per cent), and government organisations such as state electricity departments, state transport departments, municipal corporations, etc. (7.7 per cent).

The employers covered represented diverse industry types. 37 per cent employers were from the automotive industry, followed by 13 per cent from capital goods and manufacturing industries. Additionally, nine per cent of recruiters were from the agro processing industry, and eight per cent from electronics and hardware industries. The remaining employers represented various sectors including power, IT, construction, chemical, agriculture, safety and security, textile, dairy, handloom, etc.

From the 156 employers interviewed, 31 per cent (49) were from the MSMEs category while others were from large scale private and government entities. The pie-chart below represents MSME's composition by their size.

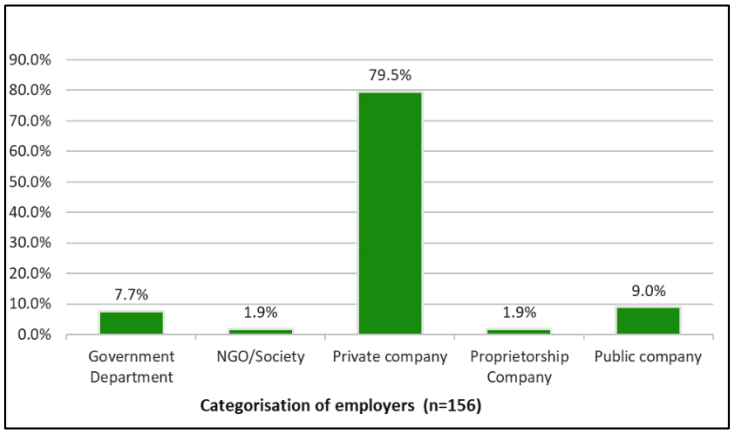


Figure 77: Type of employers interviewed

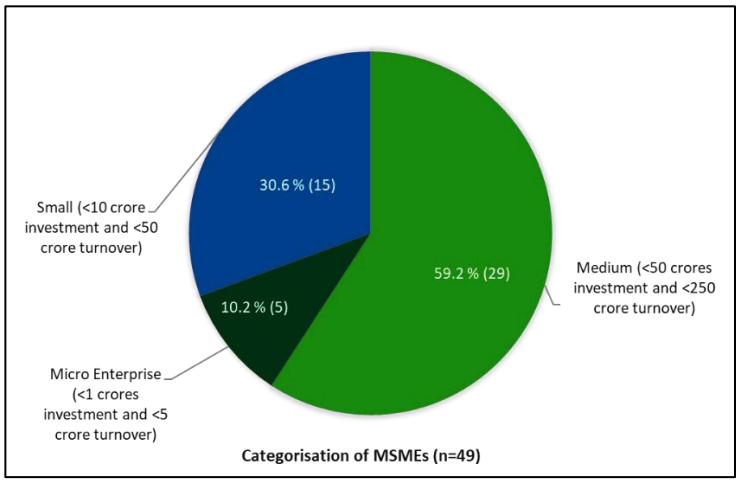


Figure 78: Categories of the employers interviewed

12.1.2 Association with the STRIVE project

Employers were asked whether they were a part of ICs formed under the STRIVE project and if they were part of Institute Management Committees (IMCs) of any ITIs.

- 34 per cent of employers stated that they are a part of the ICs formed under the STRIVE project. 49 per cent employers stated they were not a part of ICs formed under the STRIVE project and 17 per cent employers did not know if they were part of any IC under the STRIVE project.
- 30 per cent of employers stated that they were part of IMCs of government ITIs. 54 per cent employers stated that they were not a part of IMC of any ITI and 16 per cent employers stated that they were not aware if they were a part of IMC of any ITI.

12.1.3 Recruitment of ITI pass outs

Employers were asked to indicate their methods of recruiting ITI pass outs. Employers reported multiple ways of recruiting pass outs.

Campus recruitment process facilitated by ITI placement cell emerged as the most preferred mode of recruitment of ITI pass outs by the employers (74.4 per cent). This was followed by placement through job fairs/*rozgar mela* (48.1 per cent). 34.6 per cent of the pass outs independently contacted employers (through walk-in interviews/online job portals/newspapers, etc.) and 19.9 per cent were recruited through online state government job portals. 13.5 per cent and 10.9 per cent responses respectively were for recruitment through manpower contractors and recruitment through placement agencies.

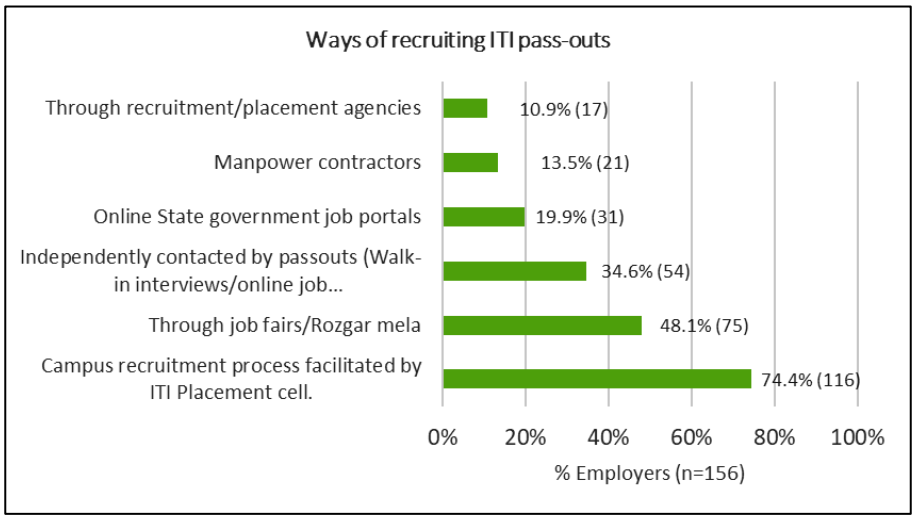


Figure 79: Ways of recruiting ITI Pass outs by employers
**percentage will not add up to 100% as it was a multiple response question.*

Employers were also asked about the challenges being faced by them while recruiting ITI pass outs. Majority (41 per cent) of employers stated lack of interest in jobs offered (due to low salary, location constraints, shift timing, nature of job, etc.) as a major challenge, while 34.6 per cent employers stated that students do not turn up at placement drives conducted by employers. 36.5 per cent employers stated that they did not face any challenge in recruiting ITI pass outs and nine per cent employers stated that students did not have necessary documents required for the employers to onboard the ITI pass outs.

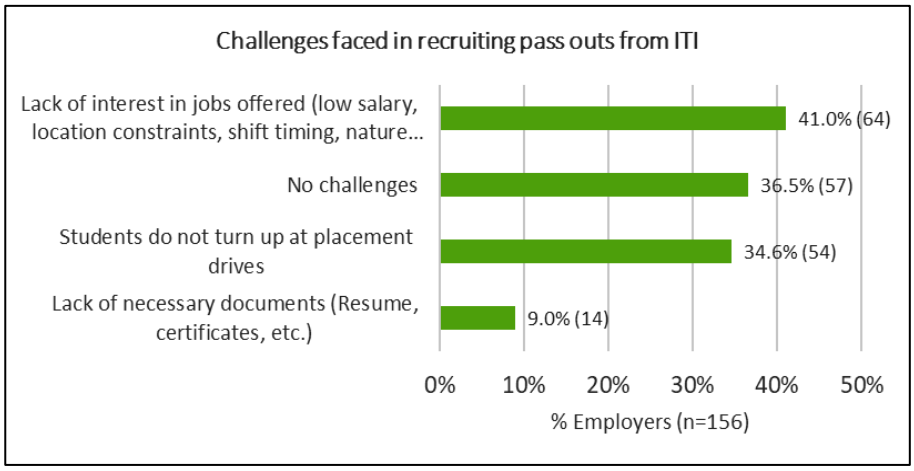


Figure 80: Challenges faced in recruiting pass outs from ITI

64 per cent employers stated that nature of employment provided to the ITI pass outs was temporary /term-based (less than 11 month). 24 per cent employers mentioned that the employment was permanent (on payrolls of the firm)'. 12 per cent employers stated that they hired candidates on temporary as well as on permanent basis.

12.1.4 Employers' insights on technical knowledge of ITI pass outs

Technical competency is one of the most important attributes that employers look for while recruiting pass outs from ITIs . Almost all the employers stated that ITI pass outs have basic knowledge of the trades they have been trained in. However, 22.7 per cent of the employers also suggested a need for practical training to

the ITI pass outs to match the industry requirement. About 15 per cent of employers stated that the machinery which was used at the ITIs for training students needed upgradation since many of those had become technologically obsolete and were not being used in the industries any more.

79 per cent of the employers agreed that the ITI pass outs fulfilled the skills requirement of the industry. However, a large section of the employers (84 per cent) expressed the need for basic technical training or hands-on training for ITI pass outs.

Employers appreciated the initiative of promotion of OJT. They shared that OJTs, industry visits, etc. would help ITI students to understand the organised sector working, their requirements, technologies used, work etiquette, etc. They suggested that OJT period may be increased for better exposure and hands-on trainings for ITI students on the latest machinery used by the industries.

It was also suggested by a few employees that students should be connected with companies for OJTs from the inception of their course. This would enhance practical learning of the students by allowing them to use latest machinery and technologies from the beginning of the course .

- Majority of employers (71.2 per cent) preferred hiring ITI pass outs primarily due to their enhanced technical skills, practical exposure and soft skills.

"We prefer recruiting ITI candidates over non-ITI candidates because ITI pass outs have better technical skills. They get exposed to the industries during OJTs and apprenticeship during their course. Hence, training them is easier."

- An employer from the automotive sector

Some of the employers stated that they did not have preference for hiring only ITI pass outs as they easily get unskilled manpower at lower salaries who give them similar output during production

12.1.5 Hiring female pass outs

51.2 per cent of the employers stated that they were already recruiting female pass outs for apprenticeship whereas 48.8 per cent were not in favour of hiring female pass outs, holding the perception that due to the nature of some jobs, female candidates would find it difficult to work in certain roles. Out of the 48.8 employers who preferred not to hire females, around 19.7 per cent reported that female pass outs hesitate to work in night shifts and, hence, they limit themselves from hiring female pass outs.

- Some of the employers stated that the reason for not hiring females was that many of them could not perform trade related tasks, followed by 30 per cent of the employers who stated that many of the female pass outs were not able to work night shifts.
- However, many employers who did not hire female pass outs expressed their willingness to hire or provide apprenticeship to female pass outs in future.

12.1.6 Hiring Divyangjan

Some of the employers stated that they did not hire PwDs due to the nature of their industry wherein the work environment may not be suitable for a person with disability. Also, the kind of work being offered includes lot of physical activity, which might be difficult for a person with physical disability.

- 29 per cent of the employers stated that they were hiring PwDs. These employers were from diverse sectors such as electronics, automotive, construction, capital goods, manufacturing, apparel, etc.

Employers reported hiring PwDs for administrative jobs, IT-based jobs, jobs which did not include physical work. Some of the employers also stated that they have hired PwD candidates for non-engineering trades such as horticulture and engineering trades such as electrical for assembling jobs.

- Primary reason quoted by employers for not hiring PwDs was that they would be unable to perform the trade-related tasks (this was the response from 65 per cent of the respondents).

"The production factory set-up is not safe for persons with disability. Also, shop floor jobs involve a lot of physical work which may be difficult for a person with disability."

- *An employer*

Though very few employers stated to have taken apprentices or have given employment to *Divyangjan*, many of them expressed a willingness to do so.

12.1.7 Views on ITI pass outs

The employers were asked the reason for imparting additional training to ITI pass outs through a multiple response question. 84 per cent of the employers stated that they had to provide additional training to the ITI pass outs pertaining to techniques of machine handling, on-floor safety measures and code of conduct. 72 per cent of the employers (94 employers) stated that training was required to be given to the ITI pass outs for handling machines and technologies being used by the industries. 51 per cent of the employers (67 employers) stated that ITI pass outs were well-versed with theoretical knowledge of the subject but lacked practical experience of advance machine handling.

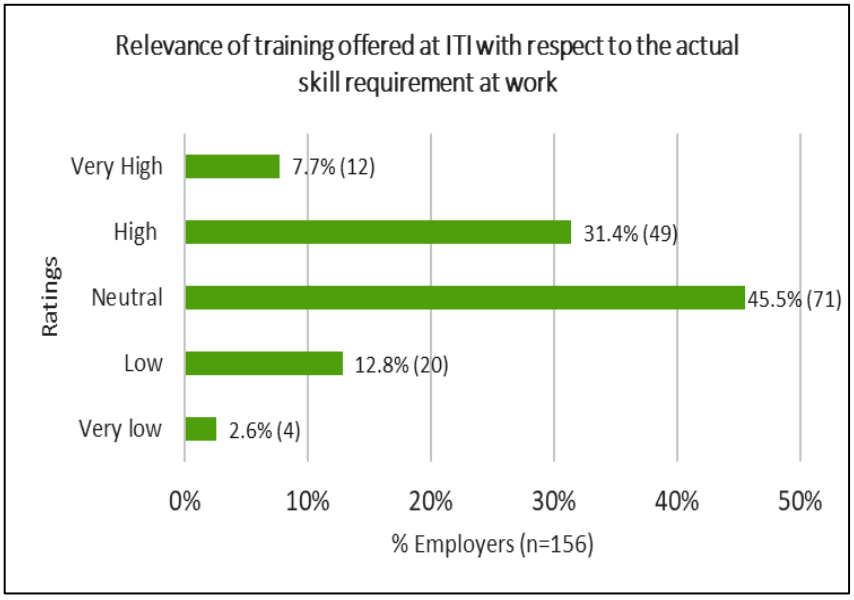


Figure 81: Employers view on relevance of training offered at ITIs

45.5 per cent of employers rated the relevance of the training with respect to actual skill requirement as neutral whereas 31.4 per cent of employers rated it as high and 7.7 per cent rating it as very high, while the remaining 15.4 per cent of employers gave ITI training a low rating.

51.2 per cent of the employers rated the quality of technical skills possessed by ITI pass outs as high or very high, 35.3 per cent rated it average and remaining 13.5 per cent of employers rated it as low.

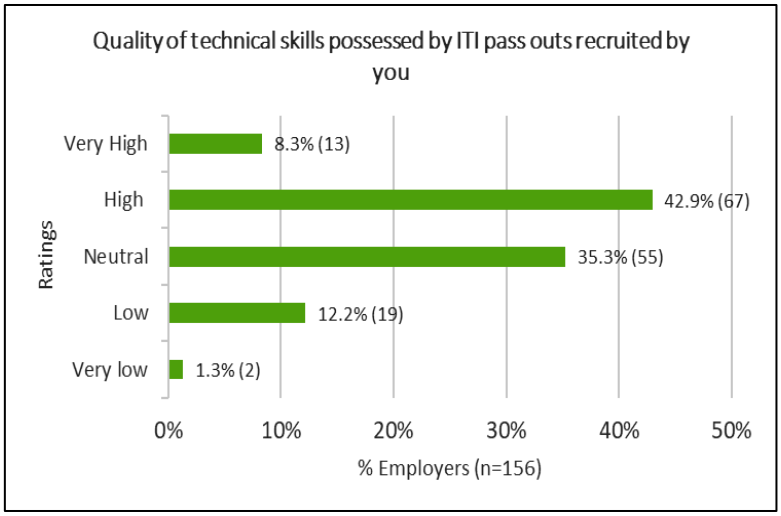


Figure 82: Employers view on quality of technical skills of ITI pass outs

Communication skills play an integral part in ensuring effective interactions within a team as well as with clients. 56.4 per cent of the employers rated the communications skills in local language as high or very high, 27.6 per cent of employers, rated it as average and 16 per cent rated the skills as low.

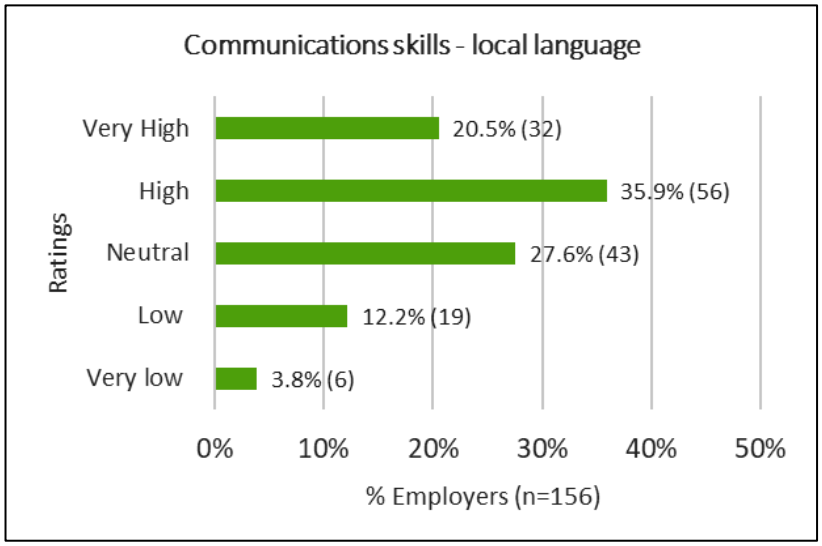


Figure 83: Employers view on communication skills of ITI pass outs for local language

35.1 per cent of employers rated the communications skills in English as low while 31.2 per cent of employers rated it as average and remaining 22.7 per cent rated itas high or very high.

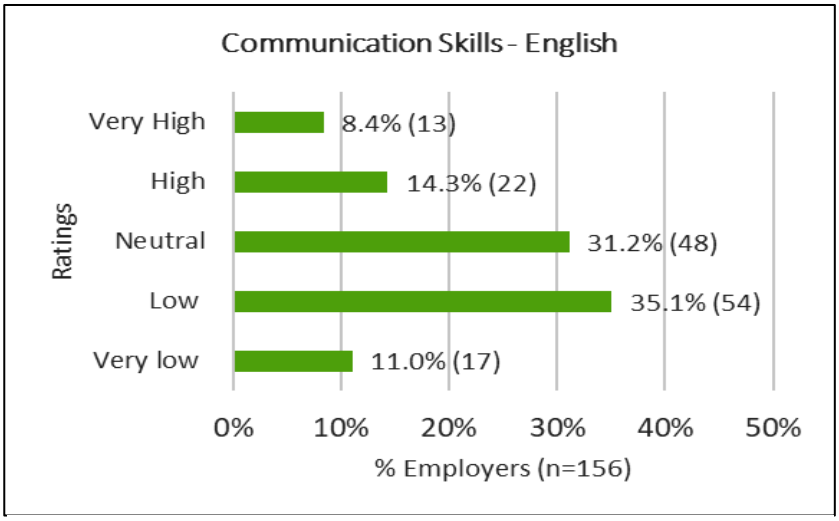


Figure 84: Employers view on communication skills of ITI pass outs for English language

51.9 per cent of the employers rated ITI pass outs' behavioural skills (such as active listening, interpersonal communication, anger management, conflict resolution, etc.) as high or very high, followed by 30.8 per cent of employers who rated it as average and 17.3 per cent employers who rated it low.

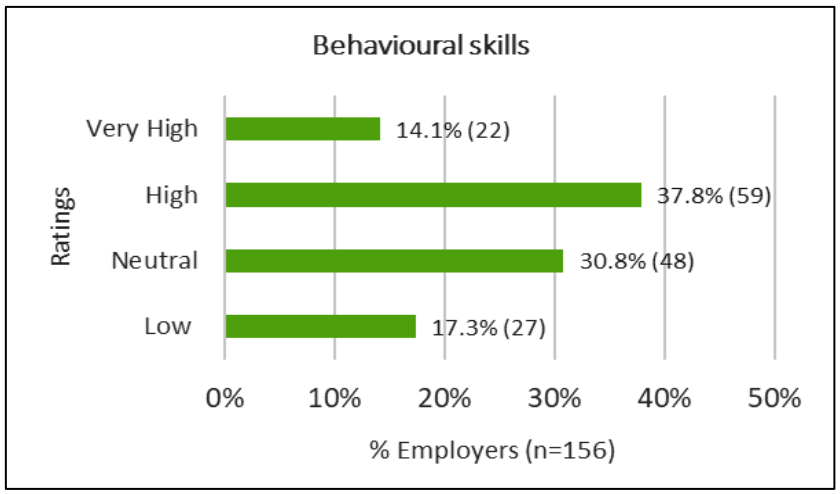


Figure 85: Employers view on ITI pass outs for Behavioral skills

Adaptability, flexibility, time management and discipline are core components of success which help foster healthy work culture, ability to learn new skills and openness to new ideas. 33.3 per cent of the employers rated time management, discipline, and work ethics of ITI pass outs as high while 16 per cent rated it as very high; 32.1 per cent of the employers rated it

Figure 86: Employers view on skills of ITI pass outs on time management, discipline and work ethics

as average and 16.7 per cent rated it as low .

37.8 per cent of employers rated the teamwork skills among ITI pass outs as high and 12.2 per cent as very high, while 32.1 per cent of the employers rated it as average and the remaining 15.4 per cent gave it a low rating.

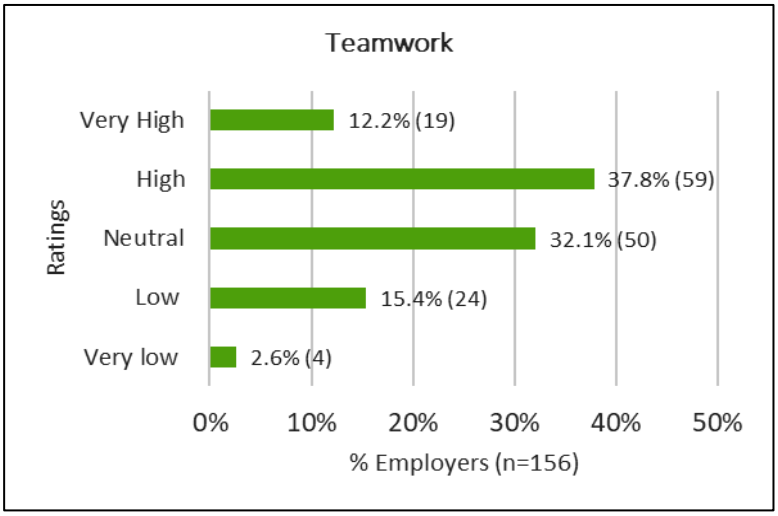


Figure 87: Employers view on ITI pass outs skills on teamwork

Employers were asked about their overall experience of recruiting ITI pass outs. 45.8 per cent of employers rated their overall experience of recruiting ITI pass outs as high, 30.3 per cent of employers rated it as average and only 5.2 per cent gave a low rating to the experience of recruiting ITI pass outs.

94.8 per cent of the employers stated that they would continue to hire ITI pass outs and 94.2 per cent employers stated they would also recommend other employers to hire ITI pass outs.

Figure 88: Overall satisfaction from recruiting ITI pass outs

Employers have several expectations from ITI pass outs before recruiting and the ability to meet the expectations plays a critical role in ensuring career growth and stable employment opportunity for the pass outs. Some of the key suggestions proposed by the employers towards enhancing the quality and relevance of the ITI training were upgradation of course content and curriculum in line with the market demand, compulsory OJT before passing out and devoting more time towards development of soft skills like punctuality, work ethics, code of conduct and basic safety measures.

12.2 Insights from interactions with representatives of ICs

The representatives of the ICs below were interviewed to understand their perspective on training and placements of pass outs from ITIs under STRIVE.

Table 112: ICs covered

S. No	Region	State	Name of the Industry Cluster (IC)
1	North	Haryana	Rai Industries Association
2	West	Maharashtra	Chamber of Marathwada Industries and Agriculture - CMIA
3	West	Maharashtra	Ahmednagar Auto and Engineering Association
4	West	Gujarat	Surat Jewellery Manufacturers' Association
5	West	Gujarat	GIDC Lodhika Industrial Association from Rajkot
6	West	Gujarat	Shaper Veraaval Industrial Association
7	West	Madhya Pradesh	Security and Social Welfare Association
8	South	Karnataka	Electronics City Industries Association
9	South	Telangana	Association of Lady Entrepreneurs of India - ALEAP
10	South	Telangana	Confederation of Women Entrepreneurs of India Telangana Chapter Begampet - COWE
11	South	Telangana	Mallapur Industrial Units Welfare Association
12	South	Kerala	Malappuram Metals and Engineering Consortium -MECON
13	South	Kerala	Aluva Consortium Ltd.
14	South	Kerala	North Malabar Consortium
15	South	Kerala	Kerala Hotels and Restaurant Association
16	East	Odisha	North Odisha Chamber of Commerce and Industry – NOCCI

12.2.1 Apprenticeship awareness programmes

ICs mentioned that they have conducted training programmes for representatives from the industry on apprenticeship awareness, project STRIVE, apprenticeship trades and requirements, quality management and labour control, energy management, etc. Some of the objectives of these training programmes are as follows:

- Creating awareness on National Apprenticeship Promotion Scheme (NAPS) and its provisions
- Encouraging MSMEs to register on NAPS portal and promoting them to provide apprenticeship
- Basic Training Programme (BTP) models rules and regulations (for trainers)
- Increasing overall awareness amongst industries

"We reached out to panchayats around us for the mobilisation of students. Benefits of joining the trades under STRIVE were conveyed during these activities. Benefits such as the stipend, safety equipment, NSQF certificate, etc. were communicated to people during awareness drives. We also made advertisements through social media, posters, newspapers, etc. District administration also supported us for the mobilisation activities."

- An IC representative from Kerala

12.2.2 Providing apprenticeship to female trainees

- Few of the IC representatives shared that more than 50 per cent of the people trained by the IC were women and that desktop publishing trades being run by the IC receives overwhelming response from the female candidates.

- ICs imparting training in engineering trades shared that female enrollment was low and the drop-out rate was higher among female candidates.

> *"We have not faced any challenges in providing apprenticeship to female candidates in women oriented trades. Most of the female candidates were offered apprenticeship after completion of OJT. Other than those female candidates who opted for higher studies, majority have been employed."*
>
> *An IC representative from Kerala*

12.2.3 Measures to mobilise and train female apprentices

Mixed response was received from IC representatives across different states. While some states were able to mobilise and provide apprenticeship opportunities to females, a few states faced challenges in mobilising and retaining females in apprenticeship due to multiple factors like the nature of the job, timings, safety measures, family obligations, etc.

Representatives stated that they have conducted mobilisation drives in women ITIs, women universities, in NGOs working with women, schools, and have also introduced new courses like 'PCB assembly operator' especially for females and provided travelling allowance to female trainees during apprenticeship as they had to undertake inter-district travel.

> *"The nature of these trades is not suitable for the females, hence there is low share of females in the total enrollment. The jobs offered involve a lot of physical work, and so, females do not prefer it. Hence, enrolling females in these trades is not possible. Even if we motivate females to join the trades, they won't take it up because of the nature of trades."*
>
> *An IC representative from Maharashtra*

Placement assistance to apprentices

IC representatives stated that they are able to provide placement assistance to the trainees. The representatives also stated that they conducted soft skills and employability skills training for trainees to prepare them for placements.

> *"Usually, most of the students are absorbed wherever they are completing their apprenticeship. But there were instances where post apprenticeship students were not provided with employment and they had approached us. Because of our strong industry connects, we could immediately provide employment to these students."*
>
> *An IC representative*

12.2.4 Challenges faced by the ICs

a. **Initiation of project STRIVE during pandemic:** Many IC representatives stated that a considerable period of STRIVE project was lost due to pandemic restrictions. Despite that, some IC representatives managed to achieve 100 per cent KPIs. IC representatives suggested that the project should be extended to gauge the actual impact of the activities being implemented. They shared that they were more aware of the project activities and were better equipped with implementation infrastructure, and that they would be able to perform better going forward.

> *"STRIVE is an excellent programme designed by Government of India and promoted by World Bank. We have got comparatively lesser time to implement the project. Still, we could train and place 69 candidates. These are not just individuals, but 69 families will benefit because of the initiative. This is an achievement for us."* *An IC representative*

b. **Delays in fund disbursement:** Many of the IC representatives stated that fund disbursement mechanism to ICs could be improved. IC representatives shared that delays in fund disbursement delayed some of the activities. However, these were carried out from the reserve funds of the parent institution (society) under which the ICs is functioning .

c. **Portal for students' details:** IC representatives suggested that current portal needed improvements, especially for seamless registration of students and for updating their profiles.

12.3 Insights from interactions with ITI principals

12.3.1 Profile of the principals interacted with

Consultations and in-depth interviews were conducted with principals of ITIs to understand their opinion on enrollment of students, relevance of the training, improving rate of pass outs, quality of infrastructure, industry linkages, capacity building of trainers, placement assistance provided at the ITI, and various enablers and barriers encountered by the principals in execution and implementation of the STRIVE project. Given below is the state-wise coverage of ITI principals.

Table 113: State-wise ITI principals covered under study

S. No	Region	States	No. of ITI principals
1	East	Chhattisgarh	2
2	East	Jharkhand	2
3	East	Odisha	1
4	East	West Bengal	9
5	North	Delhi	2
6	North	Haryana	1
7	West	Gujarat	8
8	West	Maharashtra	12
9	West	Rajasthan	1
10	South	Karnataka	6
11	South	Telangana	2
	Total		**46**

12.3.2 Enrollment

Insights on enrollment since the STRIVE project: Majority of the ITI principals agreed that enrollment in ITIs has increased since inception of STRIVE project. The increase in enrollment was attributed to the support provisions for female students under STRIVE like travelling allowance; upgradation of laboratories and infrastructure; rigorous awareness campaigns; and introduction of new courses at ITIs, etc.

- Out of 46 principals interviewed, 70 per cent of the principals reported an increase in overall enrollment at the ITIs since the initiation of the STRIVE project.
- Every ITI adheres to the four key parameters, as detailed under the STRIVE project:
  a. *Increase in female enrollment*
  b. *Increase in OJT opportunities*
  c. *Increase in pass out rate*
  d. *Overall increase in enrollment*

Almost all the principals cited multiple interventions being undertaken to spread awareness and for greater mobilisation of trainees through:

- Social media platforms, like Facebook and Instagram page of the ITI.
- Conducting awareness sessions in schools for students of classes 8-12 on the different types of courses offered at the ITIs, its relevance in enhancing employability, fee structure, duration and stipend offered.
- Distribution of pamphlets, posters, hoardings at public places or advertisements in local newspapers, detailing out the type of course, duration, employability, fees, stipend, etc.

- Exhibitions at ITIs for attracting school students, and also circulating success stories of ex-ITI graduates and inviting them to schools to share their stories during *rozgar melas*.
- Miking and intimation through block development officers, ward parishads, village panchayats about upcoming vacancies/session of the ITI.

"We have advertised through door-to- door campaign and by visiting surrounding communities. Using print media and social media platforms such as WhatsApp groups to engage with candidates, as well as Facebook and Instagram for advertising. These steps were taken to motivate candidates to join the programme by preparing "Digital Kaushalya Rath for adjacent villages".

Trends in female enrollment and retention at ITIs – Around 90 per cent of principals affirmed a positive change in pass out rates and a reduction in dropout rates post STRIVE project implementation. Additionally, measures like infrastructure upgradation, introduction of new trades, awareness campaigns, travelling allowance during OJTs enabled the retainment of female candidates in the ITIs throughout the duration of the course and ensured that they completed the course. Female candidates were enrolled in a diverse range of courses, from both engineering and non-engineering trades.

Barriers in enrollment and retention of females candidates at the ITI:

- The distance and location of the ITI becomes a hindrance for easy accessibility, raising concerns over safety, availability of transportation facility and cost.
- Family opposition, household chores, socio-cultural norms, early marriage were also reported as significant barriers in enrollment and continuation of the females at the ITI.

Strategies to boost female enrollment and retention at ITIs: The principals reported to have undertaken several measures to boost female enrollment at the ITI -

- Forming specific committees such as counselling committees, conducting meetings and seminars at colleges, schools, village panchayat *bhawans*, with the families/guardians.
- Providing stipends through government schemes and admissions based on reservation norms. Introduction of trades more preferred by females like COPA, sewing technology, fashion technology, beauty and wellness, etc.
- Most institutes (64) provided counselling to disadvantaged and physically challenged students, with some designing courses specifically to help them improve their skills.

"Female enrollment has increased over the years, and it is encouraging to see more females enrolling in courses like Mechanical, Welder, Machinist, Molder which were earlier thought to be courses for males."

An ITI principal

Improvement in pass out rates/reduction in dropout rate of female candidates: Majority of the principals (about 90 per cent) affirmed a positive change in pass out rates and a reduction in drop-out rates of female candidates post STRIVE project implementation.

- *It was reported that pass out rates had increased in 2023 which was difficult to attain in the previous years as due to COVID, many students had dropped out and course could not be completed.*

12.3.3 Training

Introduction of new trades: Nearly three-fifth of the principals (about 60 per cent) mentioned introduction of new trades as a strategy to improve enrollment and alignment with market needs. Some of the top trades introduced across the ITIs have been - Solar Technician, Mechanic Electric Vehicle, Solar PV Installer, CNC Setter Pump Operator, AC Wing Operator, Domestic Data Entry Operator, Additive Manufacturing, CCTV Installation, Data Entry Operator and Drone Technology.

Capacity building of trainers: Enhancing the capacity of the trainers/faculty at the ITIs is a vital component in the ITIs.

"Solar Technician is the new course that has been introduced, which not only aligns with the market needs but also with the interest of the students."

- ITI in Maharashtra

"New trades have been introduced by the ITI – Mechanic Electric Vehicle and these trades are available in only this ITI across in my state."

- ITI in Jharkhand

The trainers also need trainings to keep themselves up-to-date with the upgradation and development in curriculum, content and technology.

- Close to 90 per cent of the principals confirmed that in-service training workshops have been organised for trainers/faculty members.
- The faculty members are sent for the training in batches every six months, and few also reported having technology-based training for trainers involving multiple curriculum and course materials organised at the state level or at the industry level.
- 90 per cent confirmed that there are different types of training resources for trainers like lesson plans, trainer manual, training aids and question banks.

"The refresher training is organised by the government in the regional centers, as it is a part of PPP model. Every year the teachers must undergo training, capacity building. It is done through STRIVE funding. All the required training material is given during the training."

- ITI in West Bengal

Industry linkage: Closer collaboration between ITIs and industries was highlighted as an essential component to ensure that the training programmes provided by ITIs align with the current and future requirements of the industry. Almost all the principals acknowledged the need for industry engagement as such collaboration can help bridge the gap between classroom learning and real-world industry practices, ultimately enhancing the employability of ITI graduates. Majority of the ITIs have tie-ups with the industries and MoUs signed for CSR funding, OJT and apprenticeship.

Insights on OJT: 95 per cent principals indicated an increase in the number of OJT after the implementation of the STRIVE project. It was also reported by them that multiple efforts have been made and measures have been undertaken to improve the enrollment, quality and to overcome the challenges in the OJTs such as:

- The deployment of apprentice advisers and placement coordinators to interact with industries indicated a positive approach to building strong connections.
- The role of the IMC in establishing strong industry connections helped ITIs get higher number of students placed for OJTs.
- The integration of practical knowledge and industrial experience provided by industries with the assistance of teachers under the STRIVE initiative bridged the gap between learning and practical knowledge.
- MoUs with industries for promotion of OJTs was another important measure adopted by majority of the principals (65 per cent).

One of the ITI principals from Jharkhand reported that they had created a database of potential employers, conducting thorough research of the company profile, including their turnover and organisational capabilities to assess whether they could offer OJT and for how many candidates.

Majority of the principals also stated that as part of earlier curriculum, 1-2 days of industry visits was conducted at least once in a year for the students at the ITIs. However, no separate industry visits were organised in the last two years.

12.3.4 Placement

Enhancing employability skills: 90 per cent of the principals confirmed the presence of dedicated subjects or modules for Employability Skills (ES) within the curriculum, and indicated that collaborations with external organisations, NGOs, and foundations to deliver these programmes would be helpful. Role of IMCs in organising these sessions was highlighted by some of the principals.

- The course curriculum included not only technical chapters but also rules and regulations, safety standards, professional relations, working hours, personality development, time management, communication skills, quality control, ISO, etc.
- One of the principals from Maharashtra mentioned that soft skills were being taught to students under ES subject. Labour law, EVS were among other subjects being covered under the ES subject.
- Few of the principals from Gujarat reported that MSDE has signed an MoU with Quest Alliance to impart training and enhance the employability skills of both ITI staff, teachers and students.
- More than half of the principals (54.3 per cent) reported to have organised guest lectures by industry experts to impart knowledge of latest industrial technology and apprenticeship awareness training for the ITI students.

Employment: Considerably higher proportion of principals (around 90 per cent) indicated that ITIs maintained information and databases of their pass outs.

- As reported by the principals, wage employment and apprenticeship was preferred by the pass outs from engineering trades and self employment by non-engineering trades pass outs.

- The findings corroborate well with the insights drawn from the interactions with ITI pass outs.
- Close to 10 per cent principals, especially from Bihar, Jharkhand, Uttar Pradesh and West Bengal, stated that a small proportion of pass outs were also inclined towards preparing for government jobs, opting for further studies, or additional skill training post completion of ITI training.

- Most of the ITI pass outs secured employment or apprenticeship opportunity in their own trades, as reported by about 65 per cent of the principals.

> *"An automobile major generally provides stipend of INR 11,316/- per month to the pass outs engaged in apprenticeship and they need to undergo a two year diploma course "Learn and Earn"- on mechatronics. Post completion, a diploma certificate is issued by the company.*
>
> *Additionally, they are also given attendance bonus, transportation facility and food at subsidized rate in the canteen."*
>
> *- ITI in Jharkhand*

Improving employment outcomes for ITI pass outs requires a multi-faceted approach that involves collaborations with industry partners, career counselling and guidance, entrepreneurship training, and job placement assistance.

- The principals were further probed upon their role in providing placement assistance to the candidates. Almost all the principals gave an affirmative response towards organising *rozgar melas*, placement drives and collaborating with industries for recruitment.
- Events like job melas, placement drives and guest lectures by industry experts were organised at ITIs to generate awareness and facilitate employment opportunities
- Furthermore, ITIs also extend their support to pass outs after their apprenticeships for securing employment.

12.3.5 Infrastructure

Approximately 80 per cent of the principals mentioned that the current trades have been upgraded with the latest machinery and have been enhanced in terms of technology for various trades, including interior design, decoration, hospital housekeeping, welder and COPA after the STRIVE programme. Specific trades such as mechanical diesel, mechanical motor vehicle, electronics, fitter and welder were also upgraded.

It was also stated by some principals that the upgradations have been carried out through STRIVE funds.

> *"Lab upgradation was pending due to lack of funds. When the STRIVE project was initiated, we got funding for infrastructure upgradation. We upgraded our labs through STRIVE funds."*
>
> *- ITI in Rajasthan*

An analysis of the quality of infrastructure availability at ITIs from the perspective of ITI principals highlighted the following:

- More than half of the principals were satisfied with the current infrastructure at ITI including the smart laboratory upgradation, smart classroom and sufficiency of machinery which were procured under the STRIVE project such as welding simulator/motors-panels/interactive panels.
- Most of the principals confirmed the presence of a dedicated internet connection, specifically mentioning a stable broadband internet facility and a stable broadband connection.

12.3.6 Challenges and suggestions

Challenges stated by principals in getting students placed for OJTs: Although there has been vast improvement in the opportunities provided to the candidates for OJT through multiple measures, ITI principals still face challenges in providing OJT opportunity to all the students.

- Employers' reluctance- Convincing employers to onboard students for a period of 15-30 days - Employers have an apprehension that students, being freshers, might damage the machineries used in the factory. Hence, the jobs offered during OJTs are usually of a basic nature and not related to the trades in which the candidate is undergoing training. This results in student's demotivation and OJT discontinuation.
- High travel expense- The industrial areas are usually away from the residential areas. Students from economically weaker backgrounds find it difficult to pay for their travel and food expenses during OJTs and tend to drop out. Like females are supported under STRIVE project through travelling allowance, provision should also be made for male candidates to reduce attrition during OJTs.
- Limited industries near the ITIs - Unavailability of industrial/employers in the nearby district from the ITIs was cited as the major challenge faced by the principals.
- Drop-out rates were also influenced by economic factors, family obligations and infrastructural shortcomings, mainly across ITIs from rural districts in West Bengal, Bihar, Rajasthan, etc.

Suggestions:

- Strategies to address the multi-faceted challenges include mobilisation of funds under STRIVE project, provision of travel support for pass outs, and targeted awareness campaigns to mitigate family opposition, especially for female enrollment.
- Closer collaboration between ITIs and industries was highlighted as an essential component to ensure that the training programmes provided by ITIs align with the current and future requirements of the industry, enhancing the employability of ITI pass outs.

Suggestions

Chapter 13: Suggestions

This chapter summaries the findings of the study based on the primary data analysis and stakeholder interactions. The broad suggestions and recommendations could be helpful for enhancing the effectiveness of ITIs in delivering quality training. It is expected that this study would contribute to providing inputs to policy making for skill development at ITIs towards creating a more inclusive, skilled and employment-ready workforce for future.

Table 114: Findings and suggestions

Theme	Findings	Suggestions
Enrollment	• Low female enrollment in ITIs (females constituted only 20 per cent of the total number of pass outs from ITIs under STRIVE in 2022)	1. State may consider incentives for ITIs achieving higher female enrollment. 2. ITIs may involve NGOs working for women empowerment for increasing female enrollment. 3. Provisioning for "mobilisation fund" as one of the components under STRIVE fund. 4. Adoption of measures to enhance female enrollment in the ITIs through introduction of new courses, facilitation to female candidates to ensure course completion, setting-up a target of minimum female enrollment number for each ITI through greater collaboration with community and other key stakeholders. 5. Enhancing trade diversity by encouraging females to explore non-engineering trades to create an inclusive environment. 6. Prioritising of courses that support female employment and increasing the seats in such courses as per the local demand.
	• Low enrollment of SC/ST and *Divyangjan* candidates	7. State may consider adding the below activities as part of the grading criteria for ITIs: a. Number of parent visits/events organized by the ITI campus as a part of awareness campaigns before enrollment. b. Number of ITI students' interactions with successful female pass outs who are in wage or self-employment to share their success stories. 8. State may consider incentivising ITIs for increased enrollment of *Divyangjan* students.

Theme	Findings	Suggestions
		9. ITIs may tie-up with NGOs working with *Divyangjan* in their localities for increasing the enrollment.
Training	• 46 per cent of employers rated the English communication skills of ITI pass outs as low while 31 per cent rated them as average. • 17 per cent of employers rated the behaviour skills of ITI pass outs as low while 30 per cent rated them as average	10. State may advise the states to enhance the time allotted to train the ITI students on communication skills and other behavioural skills for enhancing their employability.
	• Understaffing at all levels in the ITIs	11. States may look into the aspect of recruitment of faculty to fill the vacant positions.
	• 28 per cent of the ITI pass outs stated that quality of training needs to be improved and better faculty/instructors need to be made available	12. State may create higher focus on imparting refresher training and capacity building session for the ITI faculty members on advanced industry technologies and inviting visiting faculties / professionals from industries. 13. ITIs may enhance the number of sessions by visiting faculty/professionals from industries for sharing their knowledge and experience with students. 14. Ministry may institutionalise awards for the best trainers/faculty members at national level and at state level. 15. State may consider developing an online platform to register all ITI trainers/ faculty members and enhance their competencies through a combination of online modules and sessions with industry practitioners. Trainers may also be required to undertake competency evaluation tests every year. 16. The grading methodology of ITIs could be required to incorporate feedback from the students regarding the quality of teaching at the respective ITIs. 17. ITIs may focus on project-based learning for students by giving them industrial project for development, with support from industry. This will improve training quality and students' engagement.
	• 46 per cent of employers interacted rated the relevance of training given at ITIs as average and another 16 per cent rated it as poor • 35 per cent of employers rated the quality of technical skills possessed by ITI pass outs as	18. State may adopt and focus on industry partnerships to implement dual system of training- combining classroom and practical training. 19. State may consider fixing the duration of OJT and may consider making it mandatory.

Theme	Findings	Suggestions
	average and 13 per cent of the employers rate it low	20. NIMI/State may promote use of online modules for ITI students to complement their faculty-led in-person learning. 21. Inclusion of advanced courses in emerging areas like IoT, automation.
Curriculum	• Employers seek ready-to-be-deployed pass outs	22. State may review the ITI curriculum in consultation with industry. 23. Implementing a regular monitoring system to track the relevance of the curriculum to market needs, employment outcomes, salary trend, major employers and alumni feedback to enhance the quality of the training and upgradation of course.
Assessment and Certification	• Some industries do not see any difference between an ITI pass outs and others and prefer to recruit the latter as they are available at lower salary	24. State may consider including industry representatives in the assessment process for award of ITI certificates. 25. Joint or additional certificate from industry association may also be provided to students to build industry confidence in the ITI certificates.
ITI Infrastructure	• Employers stated that the equipment used at the ITIs need upgradation since these machines were not being used by the industries anymore	26. State may advise the ITIs to review the existing equipment/machinery at the laboratories and upgrade them to align with industry requirements 27. ITIs may consider partnering with industry for industrial training or with common training centers of nearby ICs for students to gain experience of working on such machines.
	• Low Participation in OJT (46 per cent of the ITI pass outs did not undertake OJT) • Among those who undertook OJT, 46 per cent of the ITI pass outs undertook OJT for 1 to 2 weeks, 35 per cent for 2 to 4 weeks and only 19 per cent for more than four weeks	28. Ministry may issue advisory to the ITIs to leverage their IC relationship for enhancing OJTs to the ITIs pass outs. a. State may consider adding KPIs to every IC promoted under STRIVE on number of OJTs provided to ITI students. b. State skill departments assessing the prevailing infrastructure at ITIs and allocating adequate funding provisions for upkeep and maintenance.
OJT	• Travelling allowance for OJT component under STRIVE is provided only to female students	29. State may consider providing travel allowance to all students not receiving any scholarships for taking up OJT.
Apprenticeship	• Only eight per cent of the ITI pass outs undertook apprenticeship.	30. Inviting industry experts to deliver lectures at ITIs and to counsel the students on the long-term benefits of Apprenticeship 31. State may consider adding KPIs to ICs promoted under STRIVE on number of apprenticeships provided to ITI students.

Theme	Findings	Suggestions
		32. Ensuring timely disbursal of stipend to the ITI pass outs and enhancing the stipend rate. 33. Strengthening support for apprentices, fostering closer collaboration between ITIs and employers, and improving the transition from apprenticeships to regular employment.
Placement Assistance	• Only 39 per cent of the pass outs got employed through placement cell/*rozgar mela* by the training center/ through principal/faculty of ITIs	34.ITIs may encourage TCPCs to play a larger role in disseminating information about job opportunities/*rozgar mela*s through various channels including social media.
	• Some employers stated that ITI students lacked proper documentation required for job interviews (resume, certificates)	35. TCPC at ITIs may assist the students in building their CVs and ensuring that they have other necessary documents required for job interviews. 36. TCPC to maintain database of placed pass outs with important details like name of the organisation, location, employment level and salary earned for at least 2 years. 37. Regular counselling of ITI students to inform the benefits of employment continuity and career progression.
Overall Skilling	• There is a need for integrating TVET offerings with the overall local trends in skilling and employment	38. It is important to align the courses and trades with the overall district skill development plans. 39. Inclusion of industry representatives in the practical examinations in the ITIs. 40. Strengthening the monitoring system for ITIs to cover key performance areas and recognising and rewarding ITIs and faculty members for exceptional performance.

Annexures

List of Annexures

Please refer to the Annexure document separately for the above.