



Tracer Study of ITI Graduates (STRIVE)

Directorate of Technical Education (Training), Rajasthan

A Report by **Social Network India**

Tracer Study of ITI Graduates under STRIVE

**Directorate of Technical Education (Training)
W-6, Gaurav Path, Residency Road,
Jodhpur, Rajasthan – 342032**

**Tracer Study Report
December 2022**

Issue and Revision Record

Revision	Date	Originator	Approver	Description
1	12/December/2022	Mohd Arshad	Namita Chhetri	Draft Report
1	05/January/2023	Mohd Arshad	Namita Chhetri	Final Report
2	04/March/2023	Mohd Arshad	Namita Chhetri	Final Report

TABLE OF CONTENTS

Abbreviations	1
Acknowledgement	2
Executive Summary	3
1. Introduction	17
1.1 About Strive	17
1.2 National Skill Development Mission (NSDM)	19
1.3 Industrial Training Institutes (ITI)	19
1.4 Craftsmen Training Scheme (CTS)	20
1.5 Need of the Tracer study	20
1.6 Objectives of the Assignment	21
1.7 Scope of work/Essential duties	21
1.8 Tracer Study Limitations	22
2. Stages of Tracer Study	23
2.1 Approach in conducting Tracer Study	23
2.2 Survey Design	23
Target Population	23
Provision for a non-response buffer	23
Selection of Respondents	23
Selection of ITIs	24
Data Collection Methodology	24
Monitoring Plan for Quality Check	24
Data Analysis	24
District wise distribution of ITIs and target sample	25
3. Profile of Sample Graduates	31
3.1 Distributions of trainees by sector, trade & trade type	31
3.2 Sector wise profiling of respondents (male & female)	32
3.3 Training duration of respondents	33
3.4 District wise profiling of respondents	33
3.5 Location wise profiling of respondents	34
3.6 Socio-Economic profiling of respondents	35
3.7 Reasons for joining ITI	37
4. Apprenticeship & OJT/Internship/ Industrial Training	38
4.1 Apprenticeship after course completion	38

4.2	Apprenticeship received by ITI assistance _____	38
4.3	Duration & stipend of apprenticeship _____	39
4.4	Apprenticeship placement _____	39
4.5	Apprenticeship completion by sector _____	40
4.6	OJT / Internship/ Industrial training _____	40
5.	Labour Market Outcome _____	42
5.1	Status of Employment _____	42
i.	Employment by Gender and Social Group _____	43
ii.	Status of Minority category graduates _____	43
5.2	Distribution of employment by trade type, sector and trade _____	43
5.3	Distribution of Employed Trainees _____	47
i.	Nature of current employment _____	47
ii.	Sector of current employment _____	47
iii.	Size of current workplace _____	47
iv.	Monthly earnings of wage employed _____	48
v.	Duration of starting first job after passing out from ITI _____	48
vi.	Duration of searching first job after passing out from ITI _____	48
vii.	Source of Information about employment _____	49
viii.	Effective channel for procuring employment _____	49
ix.	Career progression of employed pass-outs _____	50
5.4	Distribution of Self-Employed Trainees _____	52
i.	Nature of business of self-employed _____	52
ii.	Monthly net income of self-employed _____	53
5.5	Distribution of Unemployed Trainees _____	53
i.	Category of unemployed ITI graduates _____	53
ii.	Reasons for unemployment for graduates looking for job _____	54
iii.	Category of unemployed ITI graduates not looking for job _____	54
5.6	Status of employment prior to joining ITI _____	54
6.	Satisfaction with the ITI training _____	55
6.1	Quality of training services in ITIs _____	55
6.2	Availability & quality of equipment in ITIs _____	56
6.3	Trade content in relation to industry requirements _____	57
6.4	Scope of employment for the trade in ITIs _____	57
6.5	Areas of improvement suggested by ITI graduates _____	57

6.6	Job placement activities conducted in ITIs	58
7.	Way Forward and Recommendations	59
7.1	Key strengths of the STRIVE ITIs	59
7.2	Recommendations and Way Forward	59
i.	Courses in ITIs	60
ii.	Development of practical knowledge and personality skills	60
iii.	Process during the placement support	60
iv.	Process for post-placement support	60
7.3	Coverage of Apprenticeship Training	61
7.4	Training, Counselling and Placement Cell	61
7.5	Labour Market Outcomes	61
7.6	Quality of Training Delivery	61
Annexure		62
	Additional Tables	62
	Case Studies of ITI Graduates	64
	Best Practices under Tracer Study	66

List of Tables

<i>Table 1</i>	<i>District & zone wise number of ITIs & sample covered</i>	25
<i>Table 2</i>	<i>District & zone wise distribution of sampled ITIs covered</i>	26
<i>Table 3</i>	<i>List of selected 29 trades for the Tracer Study</i>	30
<i>Table 4</i>	<i>Distributions of Trainees covered by sector, trade & trade type</i>	31
<i>Table 5</i>	<i>Distributions of sector wise trainees covered under Tracer Study</i>	32
<i>Table 6</i>	<i>Duration of training received within sample</i>	33
<i>Table 7</i>	<i>Distributions of district wise trainees covered under Tracer Study</i>	33
<i>Table 8</i>	<i>Distribution of respondent's age within sample</i>	35
<i>Table 9</i>	<i>Distribution of religion of respondent within sample</i>	35
<i>Table 10</i>	<i>Distribution of social category of respondent within sample</i>	36
<i>Table 11</i>	<i>Distribution of marital status of respondent within sample</i>	36
<i>Table 12</i>	<i>Average monthly household income from all sources (excluding trainee income)</i>	36
<i>Table 13</i>	<i>Distribution of respondent house within sample</i>	36
<i>Table 14</i>	<i>Distribution of ownership of house within sample</i>	37
<i>Table 15</i>	<i>Duration of apprenticeship training received within sample</i>	39
<i>Table 16</i>	<i>Monthly stipend received during apprenticeship training received within sample</i>	39
<i>Table 17</i>	<i>Respondent's placement in the same company where apprenticeship training received</i>	39

Table 18 Sector within apprenticeship training received within sample	40
Table 19 On-the-job training (OJT)/ Internship/ Industrial training received during the course	41
Table 20 Duration of industrial training received	41
Table 21 Employment status of respondent within sample	42
Table 22 Distribution of Employed Trainees by trade type, sector & trade	44
Table 23 Size of company where respondent is employed	47
Table 24 Range of monthly salary of employed graduates	48
Table 25 Duration of starting first job after passing out from ITI	48
Table 26 Duration of searching first job after passing out from ITI	49
Table 27 Channels used by ITI graduate for job search (multiple response)	49
Table 28 Comparison of employment scenario	50
Table 29 Comparison of monthly wage pattern of employed graduates	51
Table 30 Satisfaction of respondent with the current job	51
Table 31 Reason for dissatisfaction of respondent with the current job	52
Table 32 Nature of business of self-employed graduates	53
Table 33 Range of monthly net income of self-employed respondent	53
Table 34 Category of unemployed ITI graduates	53
Table 35 Reasons for unemployment for graduates looking for job	54
Table 36 Category of unemployed ITI graduates covered not looking for job	54
Table 37 Comparison of current monthly income with that prior to joining ITI	54
Table 38 Distribution of respondent on their response on quality of classroom learning	55
Table 39 Distribution of respondent on their response to teaching quality of lectures	55
Table 40 Distribution of respondent on their response to quality of teaching in lab	56
Table 41 Distribution of respondent on their response on training hours of theory and practical	56
Table 42 Distribution of respondent on their response on availability of technical equipment	56
Table 43 Distribution of respondent on their response on quality of equipment	56
Table 44 Trade/Course content is up to date with regards to practical/ industry requirements	57
Table 45 Distribution of respondent on their response on scope of employment for the trade	57
Table 46 Distribution areas of improvement suggested by ITI graduates	57
Table 47 Respondent trade distribution based on district location	62

Abbreviations

Abbreviations	Full Form
CTS	Craftsmen Training Scheme
CITS	Craft Instructors Training Scheme
COPA	Computer Operator and Programming Assistant
CSTARI	Central Staff Training And Research Institute
DGT	Directorate General of Training
DTE	Directorate of Technical Education
IAI	Industry Apprenticeship Initiative
IAs	Implementing Agencies
IBRD	International Bank for Reconstruction and Development
IC	Industry Clusters
ICTSM	Information & Communication Technology System Maintenance
INR	Indian Rupee
IT	Information Technology
ITeS	Information Technology Enabled Services
ITI	Industrial Training Institutes
KPIs	Key Performance Indicators
MBC	Most Backward Classes
MBOs	Member Business Organizations
MSDE	Ministry of Skill Development and Entrepreneurship
NSDA	National Skill Development Agency
NSDC	National Skill Development Corporation
NSDM	National Skill Development Mission
NSQF	National Skill Qualification Framework
NSTI	National Skill Training Institute
OBC	Other Backward Class
OJT	On-the-Job Training
PBFA	Performance-Based Funding Agreement
PforR	Program for Results
RAC	Refrigeration and Air Conditioning
RFP	Request for Proposal
SC	Scheduled Caste
SME	Small and Medium Enterprises
SNI	Social Network India
SPIU	State Project Implementation Unit
SPSS	Statistical Package for Social Sciences
ST	Scheduled Caste
STRIVE	Skills Strengthening for Industrial Value Enhancement
TVET	Technical and Vocational Education and Training
UT	Union Territory

Acknowledgement

At the outset, Social Network India would like to express special thanks and gratitude to the Director, Directorate of Technical Education (Training)—Jodhpur for entrusting us and giving us the opportunity to serve in one of the important assignments of DTE.

We are grateful to the Deputy Director (Training), who coordinated the tracer study smoothly and gave us valuable insights, a briefing about the project, suggestions for improving the outcome of the study, and support in obtaining the necessary data for the study.

We take this opportunity to convey our sincere thanks to the state government officers and zonal Deputy Directors whose support was significant in obtaining the data from sampled ITIs in their respective zones and districts.

We would like to thank all principals/superintendents and those in charge of sampled ITIs for extending cooperation and assistance to our field team in completing the data collection successfully. We also acknowledge the cooperation extended to us by the faculty of ITI during the course of our field work.

Ms. Namita Chhetri
Director, SNI

Executive Summary

About Strive

The Skills Strengthening for Industrial Value Enhancement (STRIVE) project is a World Bank-sponsored Government of India project with the objective of improving the relevance and efficiency of skills training provided through Industrial Training Institutes (ITIs) and apprenticeships. On December 19, 2017, the Government of India and the International Bank for Reconstruction and Development (IBRD) signed a financial agreement covering 500 ITIs (400 government ITIs and 100 private ITIs) and 100 industry clusters (ICs) with a budget outlay of INR 2200 crores (US \$318 million). It is an outcome-focused scheme, marking a shift in the government's implementation strategy in vocational education and training from inputs to results. It is aimed at institutional reforms and improving the quality and market relevance of skill development training programs in long-term vocational education training. It shall incentivize ITIs to improve overall performance, including apprenticeship, by involving SMEs, business associations, and industry clusters. The project aims to develop a robust mechanism for delivering quality skill development training by strengthening institutions such as the State Directorate of Training and Employment, CSTARI, NIMI, NSTIs, ITIs, etc.

Under the National Skill Development Mission (NSDM), the Government of India is committed to providing skilling opportunities for economically disadvantaged and underserved communities and developing a globally competitive workforce. STRIVE is a far-reaching initiative with the objective of improving the quality and market relevance of skills training provided through ITIs and apprenticeships. Implementation of the STRIVE project follows the Program for Results (PforR) modality. Funds will be disbursed to all Implementing Agencies (IAs) based on achievement or progress on the Key Performance Indicators (KPIs), as well as milestones for each KPI agreed upon between the Ministry of Skill Development and Entrepreneurship (MSDE) and implementing agencies (states/UTs, ITIs, & ICs).

As per the Performance-Based Funding Agreement (PBFA) signed by State Directorates with the DGT (Directorate General of Training), states and UTs are required to complete one tracer study to achieve KPI. States and UTs are required to complete one tracer study by the 2nd or 3rd year after signing the PBFA to receive 20% of the total funds allocated to their respective state or UT under STRIVE.

Industrial Training Institutes (ITI): Industrial Training Institutes are training institutes set up under the Directorate General of Training (DGT) of the Ministry of Skill Development and Entrepreneurship (MSDE), Government of India. The ITIs provide a variety of vocational and skill training courses in a wide range of economic sectors, with the goal of providing a skilled workforce to industry and encouraging youth self-employment. The training courses in ITIs have been designed to impart basic skills and knowledge in the trades so as to prepare trainees for employment as a semiskilled or skilled worker or for self-employment.

Industrial Training Institutes have played a vital role in the economic development of the country, especially in terms of supplying skilled manpower to industries. The industry requires properly trained skilled labor, which is regularly supplied by hands-on skill training provided by ITIs. Demand for skilled manpower in the country and state would be forthcoming from newly launched government schemes, namely "Make in India," "Digital India," "Smart Cities," and "Clean India Mission." ITIs are ready to take on the new task and will play an important role in meeting the skilled manpower demand generated through these new schemes.

Craftsmen Training Scheme (CTS): The Craftsmen Training Scheme (CTS) was introduced by the Government of India in 1950 to ensure a steady flow of skilled workers in different trades for the domestic industry, to raise quantitatively and qualitatively the industrial production by systematic training, to reduce unemployment among the educated youth by providing them employable skills, and to cultivate and nurture a technical and industrial attitude in the minds of the younger generation. The scheme, which is the most important in the field of vocational training, has been shaping craftsmen to meet the existing as well as future manpower needs through the vast network of ITIs spread over various states and union territories in the country.

Vocational training is a concurrent subject for both the central and state governments. The development of training schemes at the national level, the evolution of policy, the laying of training standards and norms, the conducting of examinations, certification, etc. are the responsibilities of the central government, whereas day-to-day administration, including admission to ITIs, rests with the respective state governments and UTs.

Currently, training courses under the Craftsmen Training Scheme are available through a network of 14930 ITIs (Government 3227 and Private 11702) across the country, with a total of 26.58 lakh trainees enrolled (in trades of 1 and 2 year durations) on the NCVT-MIS portal, with the goal of providing a skilled workforce to the industry in 150 NSQF-compliant trades.

Need of the Tracer study: A tracer study is a useful way of gathering information on the employment situation for trainees across a variety of data points, such as:

Percentage of employment
Type of employment
Time taken to get employment
Salary range
Position
Change in employment & salary
Economic Sector etc.

Objectives of the Assignment: The objectives of the tracer study of ITI graduates under the STRIVE project in Rajasthan were to measure the following:

- Career progression of the project and non-project ITI trainees in the labour market and delivering report(s) with quality data analysis and inferences.
- To evaluate the impact of STRIVE intervention(s) on the beneficiaries and the training's relevance to job markets and livelihood activities.
- To assess the employment status (wage or self-employed, higher studies, or apprenticeship) of the beneficiaries.
- To explain the causes of employment outcomes and provide feedback for improvements in various areas of training and placement at ITIs.
- Exploring changes in the professional career of trainees after graduating from ITI and the impact of STRIVE on these changes.
- A standard questionnaire will be the research instrument and will comprise graduates from TVET institutions (core questionnaire), field-specific questions, trade-specific questions, and institution-specific questions.
- To understand work better circumstances in any future planning, policy advice, and decision making.

Scope of work/Essential duties: Social Network India (SNI) collected and analysed quality data according to expectations and protocols and within a timeframe. As per the RFP, the SNI was expected to do the following:

- To measure the labour market performance of the project and non-project ITIs disaggregated by gender and social groups.
- Statistically significant sampling and designing survey instrument in consultation with the SPIU.
- Collecting information and reasons for the non-employment of trainees due to industry closures during the lockdown, reverse migration due to the pandemic, etc.
- Assess the impact of the ITI training programs in terms of relevance, effectiveness, efficiency, and sustainability.
- Obtain the views and opinions of employers on the impact, quality, and relevance of ITI training programs.
- Assess the graduates' or passouts' level of satisfaction with the type of ITI training they received.
- Clear methodology of tracer study instruments and indicator measurement, analytic approach, and robustness check approach.
- Reasonability testing of the data (with SPSS syntax) as a part of data quality controls.

Tracer Study Limitations

- The major challenge faced in the study's implementation was the collection of student details from the selected sampled ITIs and contacting the principals of the few ITIs to provide information.
- Several attempts, visits, and follow-up calls had to be made to obtain reasonable data from the principals, even after the support, cooperation, and intervention of officials of SPIU.
- Data obtained from ITIs had inconsistencies, including wrong contact numbers and addresses of graduates, which were reported to DTE officials, and it ended up revisiting the ITIs for collection of the correct student list. Despite being instructed to only share data for 2019 passout graduates, many ITIs provided student passout data for other years.
- Due to the aforementioned reasons, the primary survey for the study was delayed, necessitating the deployment of additional resources and time.

Approach in conducting Tracer Study

Stage 1: Planning and Designing	<ul style="list-style-type: none"> •Target Population •Survey Instrument & Data Collection Methodology
Stage 2: Questionnaire Finalization	<ul style="list-style-type: none"> •Finalizing the questionnaire with help of SPIU Team
Stage 3: Collection and Updation of Contact Details	<ul style="list-style-type: none"> •Maintain database of passed out trainees 'contact details
Stage 4: Organize data collection	<ul style="list-style-type: none"> •Collection of data from the selected respondents
Stage 5: Data Analysis & Reporting	<ul style="list-style-type: none"> •Analysis of data and Interpretation of results followed by report generation

Survey Design

Target Population

The trainees from ITIs who successfully completed the CTS programme in a selected trade and hold the National Trade Certificate were the target population for the tracer study. The study targeted the trainees who passed the annual examination held in 2019, including trainees appearing for the final examination in 2019 for 1 year and 2 year trades. This helped in capturing a more relevant scenario by ensuring most of the trainees seeking employment have taken a job.

Total ITIs and trainees in Rajasthan

State	Total ITIs	STRIVE Project ITIs	Govt Non-Project ITIs	Private ITIs	Total Passouts	Study Coverage
Rajasthan	1660	14	143	1503	90,000	10% of total passouts

For this tracer study, a 9000 sample size from 166 ITIs across Rajasthan was proposed. This covered a total of 9012 trainees across 33 districts from 167 ITIs under the study.

Provision for a non-response buffer

In order to meet the non-response buffer, the next graduate from the same trade and ITI were covered.

Selection of Respondents

Type I

• Trainees who graduated with 1 year of training/course

Type II

• Trainees who graduated with 2 years of training/course

Overall, the respondents were selected using a systematic random sampling approach, which selected members from the pool of trainees. The sampling interval was decided based on the number of trainees in each trade through the creation of a sampling frame by disaggregating the trainees/beneficiaries on the basis of gender, socio-economic demographics, as well as their trade.

The following requirements were made mandatory for the selected sample in a tracer study of ITI graduates in Rajasthan:

- Capture the diversity of trainees in terms of their age, SC/ST/OBC status, location (rural/urban), type of ITI (government and private), education level, and household economic status.
- Include passouts from both project and non-project ITIs among government and private ITIs.
- The ratio of government ITIs to private ITIs in the survey will be in proportion to the total number of government ITIs to private ITIs in the state.
- The sample size of a trade will be in proportion to the number of passouts from each selected trade, with at least 10 passouts in each trade.
- To survey the minimum number of ITIs and select at least three ITIs from each district (wherever the requisite number exists),
- To record responses from at least 30 passouts from each selected ITI.

Selection of ITIs

The tracer study involved capturing primary information from a representative sample of targeted respondents, who successfully passed or graduated in 2019. For selecting their sample, first of all, a purposive sample of ITIs with due geographical representation from each district with at least one private ITI was selected. Accordingly, due representation was given to the three types of ITIs in the state.

- a. Govt. ITIs covered under STRIVE project
- b. Govt. ITIs not covered under STRIVE project
- c. Pvt. ITIs not covered under the STRIVE project

Data Collection Methodology

The tracer study was undertaken by collecting relevant training and employment related data from the youth who completed the CTS program in any trade from project/non-project & private ITIs in 2019. For collecting such information, a standard questionnaire (attached as Annexure) with mainly structured, closed-ended questions was used.

Interviews were duly canvassed through face-to-face interactions using the Geotagged connect CAPI application. ITI graduates who were unavailable within 100 km of the ITI or who had relocated to other districts or states during the time of the data collection were canvassed through telephonic interactions. Around 60% of trainees were interviewed in person, while the remaining 40% were via telephone.

Monitoring Plan for Quality Check

Supervisors monitored the field team to ensure that the interview was properly captured, checked, and corrected before leaving the trainee. Each of them ensured that all necessary questions had been asked, a proper skipping pattern had been followed, and the responses had been clearly recorded.

Data Analysis

The quantitative data collected through CAPI devices was converted into SPSS formats, specifying the variable names and value labels for each field. The quantitative data so collected through structured interviews was cleaned to make it fit for generating reliable estimates so as to meet the purpose of this study. Further, the data was analysed through SPSS to generate the desired estimates, fact sheets, tables, and graphs to be used in the final analysis and presentation of the data.

Profile of Sample Graduates

Under this tracer study of ITI graduates, interactions were held with 66% of graduates from non-Project ITIs, 18% from Private ITIs, and 16 from Project ITIs. 49% of respondents covered have completed 1 year of training, while 51% have undergone 2 years of training in their respective ITIs. A greater proportion of respondents had completed two years of training at private ITIs.

The target population is represented by a majority of males in the study (85%). A higher proportion of female trainees were found in project ITIs (27%) in comparison to non-project ITIs (15%), while the lowest proportion of female trainees were found in private ITIs (3%). From the total of 14 STRIVE ITIs covered under the study, 71% were female trainees from the three women ITIs selected for the study. This has resulted in a higher proportion of female trainees covered under Project ITIs.

Apprenticeship & OJT/Internship/ Industrial Training

Of the total of 9012 respondents, the study could cover a total of 568 (6.3%) ITI graduates who have undergone Apprenticeship training after completing their respective courses. The analysis indicates that most of the apprenticeship training opportunity was accessed by the graduates of non-project ITIs (63%), followed by project ITIs (20%) and private ITIs (17%).

Non-project ITIs (55%), project ITIs (26%), and private ITIs (19%) have provided assistance to their respective passed-out trainees who have undergone apprenticeship training.

Only 6.6% of respondents covered by the tracer study have undergone on-the-job training (OJT), internships, or industrial training received during the course. A higher proportion of OJT or internship/industrial training was recorded for the graduates of Project ITI (13.9%). Lower enrollment in OJT was observed, citing various reasons, namely, lack of interest, budget, resources, and planning.

Labour Market Outcome

The key objective of the project is to enhance the skilled labour force in the market. In order to understand the achievement of this goal with more clarity, employability analysis has been done on the basis of the demographics of the collected sample size across the Project, Private and Non-Project ITIs. Under the tracer study, the proportion of wage employment is higher in project ITIs. According to the data analysis, approximately 66% of male graduates are both wage and self-employed, while 50% of female graduates are either wage or self-employed. Under minority, 68% of ITI graduates were either wage employed or self-employed.

Social group-wise analysis of the employed graduates indicates that a higher proportion of OBC (65%) and general graduates (64%), followed by MBC (63%), SC (61%), and ST (58%), got employment. Employment status for graduates from rural and urban locations was 64% and 63%, respectively.

Category		Wage Employed		Self-employed		Unemployed & looking for job		Total in Labour Force	Unemployed & not looking for job
		N	%	N	%	N	%		
Type of ITI	Govt Non-Project	1511	30	1629	32	1912	38	5052	860
	Govt Project	543	41	332	25	448	34	1323	123
	Private	478	36	384	29	453	34	1315	339
Gender	Female	286	24	305	26	603	51	1194	138
	Male	2246	35	2040	31	2210	34	6496	1184
Religion	Christian	-	-	1	100	-	-	1	-
	Hindu	2367	33	2158	30	2651	37	7176	1242
	Jain	7	37	6	32	6	32	19	1
	Muslim	146	32	166	37	138	31	450	68
	Sikh	12	27	14	32	18	41	44	11
Minority Community		165	32	187	36	162	32	514	80
Social Category	General	497	34	451	30	534	36	1482	276
	MBC	61	34	52	29	65	37	178	27
	OBC	1311	34	1186	31	1308	34	3805	687
	SC	429	32	386	29	536	40	1351	212
	ST	234	27	270	31	370	42	874	120
Location	Rural	1249	34	1108	30	1329	36	3686	739
	Urban	1283	32	1237	31	1484	37	4004	583
Total		2532	33	2345	30	2813	37	7690	1322

- Engineering trade graduates are more likely to be wage employed (34%), self-employed (31%), and at a better level than non-engineering trade graduates, who are 30% wage and 30% self-employed.
- Under the tracer study of ITI graduates in Rajasthan, 9012 graduates were covered, of whom 7690 are at present available in the labour market. Graduates from ITIs who are currently unemployed and looking for jobs in the market were higher in three sectors, namely, Apparel (52%), Beauty & Wellness (47%), and Office Administration & Facility Management (45%).

- Wage-employed graduates were more prevalent in Fabrication (40%), Production & Manufacturing (35%), Automobiles (34%), Electrical & Electronics (33%), and IT & ITES (32%). While the construction (34%) & automobile (26%) sectors had a higher proportion of self-employed graduates.
- Wage employment was higher in trades like Instrument Mechanic (58%), Surveyor (46%), Machinist (44%), and Turner (43%). Among self-employed graduates, embroidery graduates (67%) and draughtsman-civil graduates (43%), in particular, showed significant involvement.
- Graduates who are currently unemployed and looking for jobs in the market were higher in Steno-English (61%), Dress Making (61%), Fashion Design & Technology (53%), and ICTSM (50%) trades.
- 71% of wage earners are in regular or permanent employment, while 29% are part-time employees. Significantly higher proportions of private ITI graduates (76%) have permanent employment in comparison to non-project (71%) and project (67%) ITIs.
- A study's analysis indicates that 90% of the ITI graduates were employed in the private sector. Also, a slightly higher proportion of non-project ITI graduates were employed in the government sector.
- The project was implemented with a mandate of improving the labour market outcomes, including reduction of time taken (duration) in getting a first job after completion of their training. A slightly higher proportion of graduates from Project ITIs (14%) received a job after one year of passing out.
- Personal contacts with family, friends, and fellow students were suggested as an effective channel for obtaining employment by 33% of ITI graduates, followed by newspaper ads and advertisements (19%) and contacting the employers independently (14%). Only 7% of employed graduates suggested the ITI Training & Placement Cell as an effective source for procuring employment.

The results of employability in the current scenario are quite satisfactory, with half of the ITI graduates being employed (wages and self-employment combined). Wage employment (part-time and permanent) and self-employment have shown satisfactory growth among the ITI graduates when comparing their current status with their past employment histories. At least 12% of students who were engaged immediately after the completion of the course are currently unemployed. There is also an absolute decline in apprenticeships and unemployed graduates who are not looking for jobs in the market.

Monthly Income - Current Employment	Immediately after Course Completion	Currently	Gap Calculated
	(%)	(%)	(+/-)
Advance/Further studies	12.4	12.1	-0.3
Apprenticeship	8.3	0.0	-8.3
Wage Employed- part time	2.8	8.1	5.3
Wage Employed- permanent	8.3	20.0	11.7
Self-Employed	22.6	26.0	3.5
Unemployed & looking for job	26.4	31.2	4.8
Unemployed & not looking for job	19.3	2.6	-16.7

Most of the income is concentrated below INR 15,000; however, there is an increase in income in the current scenario, which could be seen as an impact of training. The pattern of income for INR 15,000 to 20,000 and above INR 20,000 has increased, as can be seen in this table.

Monthly Income-Current Employment	Immediately after Course Completion (%)	Currently (%)	Gap Calculated (+/-)
INR 0-6,000	11.1	5.0	-6.1
INR 6,000 to 10,000	31.9	26.0	-5.9
INR 10,000 to 15,000	32.5	40.0	7.5
INR 15,000 to 20,000	13.2	16.0	2.8
INR >20,000	11.4	13.0	1.6

- Under the tracer study, 59% of employed respondents covered were satisfied with their current job, followed by 32% of respondents who seemed to be okay with their current job. However, 9% of employed respondents were dissatisfied with their current job for various reasons. Dissatisfaction with the current job was reported lower for the graduates of Project ITIs.
- After receiving training from the ITI in a particular sector, 62% of graduates from non-project ITIs changed their sector as per the availability and opportunity of employment, followed by 19.4% of graduates from project ITIs and 18.6% of graduates from private ITIs who changed their sector. The majority of graduates have changed their sector of employment after accepting the first job offer they received and have also looked for better career opportunities in the new sector. Only 5% of all employed graduates had their sector changed due to a lockdown or pandemic.
- Analysis of the study indicates that lower salary and benefits (62%), and a job role not related to the field of study (32%), were the main reasons for dissatisfaction with the current job for the employed graduates. Only 6% of employed graduates reported that their dissatisfaction with current employment was due to proximity to their residence.
- Among respondents covered by the self-employment category, 34% established their business after graduation from ITI, and the remaining 66% of graduates engaged in their family business. When comparing ITIs, a slightly higher proportion of trainees who graduated from government project ITIs (39%) than those who graduated from private ITIs (38%), have established their own businesses.
- Among the unemployed graduates covered by the tracer study, 68% of them are looking for jobs in the market, while the remaining 32% are not currently looking for a job. Unemployed graduates who are looking for a job were observed more in project ITIs.
- Graduates were unemployed for a variety of reasons, the most common of which was not being able to find a desired job in the market. Unemployment due to lockdown or pandemic was found to be higher among Project ITI graduates. 82% of unemployed graduates not looking for job were involved in advanced or further studies, while the remaining 18% have not looked for a job yet.

Satisfaction with the ITI training

To gauge the satisfaction level of the graduates with the training courses, their responses were evaluated across a variety of parameters, like the quality of classroom learning, the teaching quality of lectures and labs, and the training hours of theory and practical.

- Of the total sample covered, 72% of graduates were satisfied with the quality of classroom learning at ITIs. More graduates from project ITIs (33%) did not find classroom learning satisfactory.
- 78% of graduates covered from the sampled 167 ITIs reported the teaching quality of lectures in ITIs as satisfactory. Improvement in teaching quality was indicated by 22% of graduates.
- 75% of graduates covered reported that the quality of teaching in labs in their respective ITIs was satisfactory, while the remaining 25% perceived an improvement in lab teaching. In government non-project, government project, and private ITIs, both trends were similar.
- An analysis of 75% of the graduates from 167 ITIs shows that the training hours of theory and practical classes were sufficient and satisfactory based on their trade module. While the remaining 25% of respondents believe that increasing the number of hours of theory and practical classes will help them learn more and receive better training.
- The availability and quality of equipment in ITIs are critical to providing technical development for trainees. The availability of good technical equipment in ITIs was reported by 54% of the graduates from private ITIs, 48% from non-project ITIs, and 47% from project ITIs.
- 70% of the respondents shared that the quality of equipment was satisfactory in their ITIs. While 30% of the respondents think that upgrading the equipment in the ITI may help them learn better.
- Under this tracer study, 77% of the respondents covered were satisfied with the trade content in relation to the industry requirements. The quality of training delivery in terms of practical and industry requirements was a major concern for 23% of graduates of non-project, project, and private ITIs, and its impact on labour market performance is quite visible.
- 76% of respondents from ITIs agreed to the scope of employment for their respective trades. While the remaining 24% of respondents did not find their trade within the scope of employment. To overcome this, it is suggested that the government should plan out proper guidelines for directing the public-sector undertakings to provide employment opportunities to ITI graduates.
- A higher number of ITI graduates (36%) have suggested the improvement of practical classes in ITIs, followed by 32% of graduates for the display of vacancies in ITIs and 20% for the availability of permanent jobs in their respective sectors. Only 6% have suggested improvements in teaching quality in ITIs, while another 3% demanded the arrangement of internship training from the ITIs.
- 18.5% of graduates from private ITIs and 18.1% of graduates from non-project ITIs shared that their ITI didn't have any job placement activities.

Comparative analysis across types of ITIs and their efficacy

- In project ITIs, the respondents are mostly from urban localities (83%), while in private ITIs, 79% of respondents are from rural localities. Taking into account the project requirement of covering an equal ratio of rural and urban graduates, in non-project ITIs, 49% of respondents were from rural areas, while 51% were from urban areas.
- A higher proportion of female trainees were found in project ITIs (27%) in comparison to non-project ITIs (15%), while the lowest proportion of female trainees were found in private ITIs (3%). The proportion of females enrolling in project ITIs in both engineering and non-engineering trades has been increasing.
- The apprenticeship training opportunity was accessed by the graduates of non-project ITIs (63%), followed by project ITIs (20%), and private ITIs (17%). Most of the apprenticeship training assistance was provided to the graduates by non-project ITIs (55%), followed by project ITIs (26%), and private ITIs (19%).
- 65.2% of respondents from project ITIs with apprenticeship training were placed in the same company, followed by 56% from non-project ITIs and 52.6% from private ITIs.
- Under employment status of respondents covered, 66% were employed from project ITIs, while 65% and 62% were employed from private and non-project ITIs, respectively.
- Higher proportions of private ITI graduates (76%) have permanent employment in comparison to non-project (71%) and project (67%) ITIs.
- After receiving training from the ITI in a particular sector, 62% of graduates from non-project ITIs changed their sector as per the availability and opportunity of employment, followed by 19.4% of graduates from project ITIs and 18.6% from private ITIs.
- A slightly higher proportion of trainees who graduated from government project ITIs (39%) than those who graduated from private ITIs (38%), and non-project ITIs (32%), have established their own businesses.
- The quality of training services, availability, and quality of equipment in private ITIs were slightly better than in project and non-project ITIs.
- Job placement activities conducted in project ITIs were quite satisfactory as compared with those conducted in non-project ITIs and private ITIs.

Way Forward and Recommendations

The conclusions are based on the objectives that were set for the tracer study, which was to understand the employability scenario of the trainees from ITIs who successfully completed the CTS program and hold the National Trade Certificate so that feedback for improvements in Technical and Vocational Education and Training (TVET) can be provided.

Key strengths of the STRIVE ITIs

- ❖ Increased enrollment of female graduates from STRIVE ITIs was recorded as compared to government non-project and private ITIs. The proportion of females enrolling in STRIVE ITIs in both engineering and non-engineering trades has been increasing.
- ❖ Under the wage employment category, graduates from STRIVE ITIs have more employment on the market. Also, the range of monthly salaries was higher for these graduates.
- ❖ The trainees who have been employed after receiving training from STRIVE ITIs reported a high degree of satisfaction with their current job and the training courses offered in the ITI program.
- ❖ A higher proportion of STRIVE ITIs have established their businesses, and their range of monthly net income has been higher than that of non-project and private ITIs.
- ❖ Graduates of STRIVE ITIs received longer-term apprenticeship training. In addition, a high percentage of apprentices were placed in the same company.
- ❖ On-the-job training (OJT), internships, and industrial training received during the course were higher in STRIVE ITIs as compared with non-project and private ITIs.
- ❖ Various job linkage activities, such as arranging company visits, posting vacancies on company websites, providing information or orientation on job search, and connecting trainees to HR agencies or companies were more common in project ITIs.

Recommendations and Way Forward

This section includes the recommendations arising from the interactions with the respondents covered by this tracer study. They may serve as potential indicators against which future training courses may be modified accordingly.

Courses in ITIs

- ❖ Only 15% female and 6.6% minority graduates were covered under this study based on the proportion of their enrollment in ITI trades. The enrolment of female trainees in the ITIs can be increased by introducing specific technical arenas for women-dominated sectors.
- ❖ In-demand labor-market skills, such as service provider jobs, can be emphasised by increasing enrollment capacity for such courses, making them more accessible to larger number of trainees.
- ❖ Registration capacity for in-demand trades for prospective male and female trainees can be increased and supported through more hands-on sessions to improve accessibility.
- ❖ Trainee satisfaction levels are relatively low compared to ITI training; in order to overcome this, the enhancement of ITI could make a difference in trainee perception and experience.

Development of practical knowledge and personality skills

- ❖ Apprenticeships and/or on-the-job training should be encouraged to enhance the practical skills of students and provide them with market visibility.
- ❖ Apprenticeships and internships can be arranged for students who cannot find jobs through ITI placement activities. This would help ensure their time is spent wisely and prevent a gap in their curriculum vitae by engaging in skill development.
- ❖ There is a need to mainstream TVET offerings into broader skills and employment trends. Annual District Skill Plans could be developed taking into account industry trends; it will be extremely advantageous for ITI courses to be aligned with annual skill plans.

Process during the placement support

- ❖ The placement cell of the ITIs can be made more proactive by organising career fairs, orientation meetings, and internship fairs so that the trainees have access to a wide variety of options.
- ❖ Memorandums of Understanding (MOUs) with corporate agencies or non-governmental organisations to place more trainees, either as apprentices or employees, after their training at ITIs, ensuring large recruitment.

Process for post-placement support

- ❖ For trainees who have graduated, refresher or capacity-building training or career guidance sessions could be scheduled on a regular basis to help them move forward in their careers.
- ❖ It is important to investigate the reasons for employed trainees' lower job satisfaction levels and encourage them to enhance overall working conditions by engaging in conversation with both employers and employees.

Coverage of Apprenticeship Training

The study indicates that very few graduates (6.3%) have undergone apprenticeship training as it is currently not available in the government sector. Hence, it is suggested that the government should plan out proper guidelines for directing the public-sector undertakings to appoint or provide employment and apprenticeship training opportunities to ITI graduates.

Measures must be taken to ensure the incorporation of apprenticeships in the training curriculum, which could also be extended to include hands-on workshops, interactive sessions with prominent stakeholders from their respective sectors, etc. ITI assistance in undertaking apprenticeship training could be developed for trainees to improve their participation level, and the range of the stipend should be increased so that they could meet their basic requirements.

Training, Counselling and Placement Cell

The TCPC cell is crucial in improving labour market performance; however, only 2% of the graduates were employed with the support of the TCPC of their ITIs. Hence, there is a huge gap in this service, and regular monitoring of TCPC should be done from zonal offices. The study recommends that effective TCPC cells within each ITI could be backed by the TCPC cells of nodal ITIs in their respective clusters.

Labour Market Outcomes

The current employment status indicates 63% wage or self-employment in CTS. Furthermore, a significant proportion of women passouts are unable to enter the labour force for a variety of personal reasons. The above data is not very good considering the social strata to which the ITI graduates belong. It was also seen that a few ITIs are doing well, and their performance on the labour market is also good.

Graduates from ITIs who are currently unemployed and looking for jobs in the market were higher in three sectors, namely, Apparel (52%), Beauty & Wellness (47%), and Office Administration & Facility Management (45%). Hence, it is suggested that the Ministry come up with a comprehensive plan and reinforce project guidelines through a consultative cluster approach.

Quality of Training Delivery

The quality of training delivery is a major concern, as indicated by the graduates, and its adverse impact is quite visible on labour market performance. To address issues related to training quality and delivery, it is suggested that ITI projects be implemented in a clustered approach with full support from the nodal ITI. A close monitoring system is also essential to ensure quality delivery. Other issues like low compensation, systematic planning of course delivery, and the adoption of recent training methods and equipment could also be adequately addressed through proper monitoring by the nodal ITIs.

1. Introduction

1.1 About Strive

The Skills Strengthening for Industrial Value Enhancement (STRIVE) project is a World Bank-sponsored Government of India project with the objective of improving the relevance and efficiency of skills training provided through Industrial Training Institutes (ITIs) and apprenticeships. On December 19, 2017, the Government of India and the International Bank for Reconstruction and Development (IBRD) signed a financial agreement covering 500 ITIs (400 government ITIs and 100 private ITIs) and 100 industry clusters (ICs) with a budget outlay of INR 2200 crores (US \$318 million). It is an outcome-focused scheme, marking a shift in the government's implementation strategy in vocational education and training from inputs to results. It is aimed at institutional reforms and improving the quality and market relevance of skill development training programs in long-term vocational education training. It shall incentivize ITIs to improve overall performance, including apprenticeship, by involving SMEs, business associations, and industry clusters. The project aims to develop a robust mechanism for delivering quality skill development training by strengthening institutions such as the State Directorate of Training and Employment, CSTARI, NIMI, NSTIs, ITIs, etc.

Under the National Skill Development Mission (NSDM), the Government of India is committed to providing skilling opportunities for economically disadvantaged and underserved communities and developing a globally competitive workforce. STRIVE is a far-reaching initiative with the objective of improving the quality and market relevance of skills training provided through ITIs and apprenticeships. Implementation of the STRIVE project follows the Program for Results (PforR) modality. Funds will be disbursed to all Implementing Agencies (IAs) based on achievement or progress on the Key Performance Indicators (KPIs), as well as milestones for each KPI agreed upon between the Ministry of Skill Development and Entrepreneurship (MSDE) and implementing agencies (states/UTs, ITIs, & ICs).

As per the Performance-Based Funding Agreement (PBFA) signed by State Directorates with the DGT (Directorate General of Training), states and UTs are required to complete one tracer study to achieve KPI. States and UTs are required to complete one tracer study by the 2nd or 3rd year after signing the PBFA to receive 20% of the total funds allocated to their respective state or UT under STRIVE.

STRIVE: four results areas

a) Improved performance of ITIs

The outcome area addresses key challenges faced by ITIs by assisting them in improving the quality of their skill development programs, increasing labour market relevance and operational efficiency, deepening industry relations, increasing industrial exposure, conducting joint needs assessments, and introducing new trades (CTS trades and other NSQF-compliant short-term courses) to meet local market needs.

b) Increased capacities of State Governments to support ITIs and apprenticeship training

Under this result area, state governments are incentivized to implement policy and regulatory reforms that are aimed at improving the overall ecosystem for ITIs and apprenticeship. Funding is released to states and UTs for the achievement of annual targets for three Key Performance Indicators (KPIs):

- i. Conducting tracer studies
- ii. Reducing the number of ITI trainer vacancies
- iii. Development of career progression policy for ITI trainers (based on guidelines to be issued by the MSDE)

c) Improved teaching and learning

This result area covers activities that complement the institutional reforms in vocational training under DGT. The key objectives include:

- i. Improved curriculum, teaching, and learning materials in blended mode
- ii. Capacity Building Program, introduction of Continuous Professional Development (CPD) - technology based teaching and learning material for the Craft Instructors Training Scheme (CITS) program

d) Improved and broadened apprenticeship training

This result area focuses on encouraging Small and Medium Enterprises (SMEs) to engage in Apprenticeship Training through the Industry Apprenticeship Initiative (IAI) grant. The IAI grant incentivizes Industry Clusters (ICs) and Industry Associations to promote apprenticeship within their Member Business Organizations (MBOs).

Major activities under STRIVE

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

1.2 National Skill Development Mission (NSDM)

The National Skill Development Mission (NSDM) was launched in 2015 on World Skills Day by the Honorable Prime Minister Narendra Modi. The NSDM aims to consolidate skill training and development efforts across sectors and states, as well as to assist sectors in expediting steps to achieve various skilling efforts at scale and at a rapid pace. NSDM's mission is to create an end-to-end framework that promotes sustainable livelihoods for citizens while aligning them with the demands of potential employers.

The MSDE has set up institutional mechanisms at three tiers to help this mission succeed; a Governing Council at the apex level for policy guidance, a Steering Committee, and a Mission Directorate. The Mission Directorate will be supported by three additional institutions that will help the Directorate facilitate smooth functioning by working horizontally:

- **National Skill Development Agency (NSDA)**

The NSDA focuses on policy research via the National Skills Research Division, quality assurance and implementation of quality standards across all skilling agencies, developing protocols for training and accreditations for private trainers, etc.

- **National Skill Development Corporation (NSDC)**

NSDC overlooks the training and capacity-building aspects of trainers, both public and private, who lead the engagement with industries and drive the sector skills councils.

- **Directorate General of Training (DGT)**

The DGT maintains the skill training structures of Advanced Training Institutes (ATIs), Regional Vocational Training Institutes (RVITs), and other such institutes, advises on training policies, trains instructors, provides technical support, runs women-centric training institutes, etc.

1.3 Industrial Training Institutes (ITI)

Industrial Training Institutes are training institutes set up under the Directorate General of Training (DGT) of the Ministry of Skill Development and Entrepreneurship (MSDE), Government of India. The ITIs provide a variety of vocational and skill training courses in a wide range of economic sectors, with the goal of providing a skilled workforce to industry and encouraging youth self-employment. The training courses in ITIs have been designed to impart basic skills and knowledge in the trades so as to prepare trainees for employment as a semiskilled or skilled worker or for self-employment.

Industrial Training Institutes have played a vital role in the economic development of the country, especially in terms of supplying skilled manpower to industries. The industry requires properly trained skilled labor, which is regularly supplied by hands-on skill training provided by ITIs. Demand for skilled

manpower in the country and state would be forthcoming from newly launched government schemes, namely "Make in India," "Digital India," "Smart Cities," and "Clean India Mission." ITIs are ready to take on the new task and will play an important role in meeting the skilled manpower demand generated through these new schemes.

1.4 Craftsmen Training Scheme (CTS)

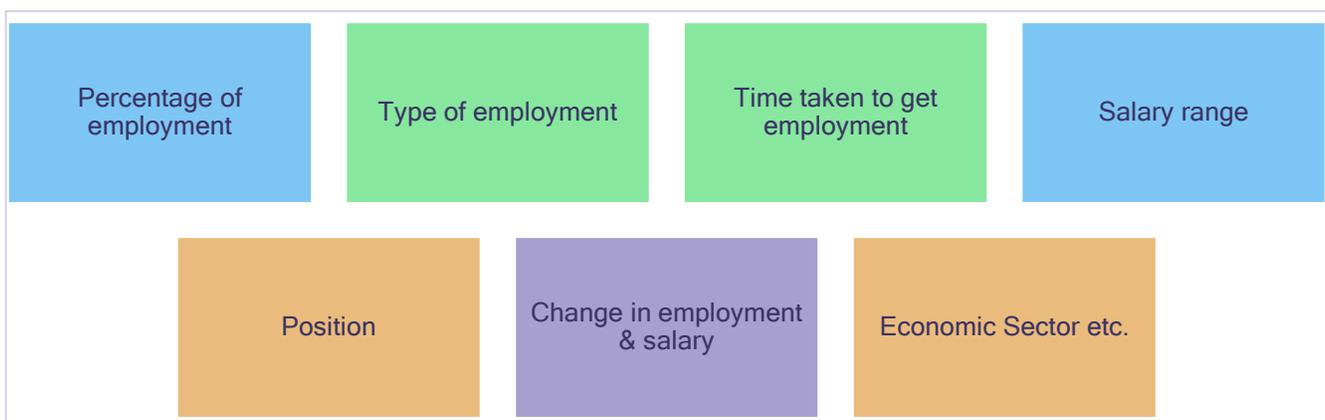
The Craftsmen Training Scheme (CTS) was introduced by the Government of India in 1950 to ensure a steady flow of skilled workers in different trades for the domestic industry, to raise quantitatively and qualitatively the industrial production by systematic training, to reduce unemployment among the educated youth by providing them employable skills, and to cultivate and nurture a technical and industrial attitude in the minds of the younger generation. The scheme, which is the most important in the field of vocational training, has been shaping craftsmen to meet the existing as well as future manpower needs through the vast network of ITIs spread over various states and union territories in the country.

Vocational training is a concurrent subject for both the central and state governments. The development of training schemes at the national level, the evolution of policy, the laying of training standards and norms, the conducting of examinations, certification, etc. are the responsibilities of the central government, whereas day-to-day administration, including admission to ITIs, rests with the respective state governments and UTs.

Currently, training courses under the Craftsmen Training Scheme are available through a network of 14930 ITIs (Government 3227 and Private 11702) across the country, with a total of 26.58 lakh trainees enrolled (in trades of 1 and 2 year durations) on the NCVT-MIS portal, with the goal of providing a skilled workforce to the industry in 150 NSQF-compliant trades.

1.5 Need of the Tracer study

A tracer study is a useful way of gathering information on the employment situation for trainees across a variety of data points, such as:



1.6 Objectives of the Assignment

The objectives of the tracer study of ITI graduates under the STRIVE project in Rajasthan were to measure the following:

- Career progression of the project and non-project ITI trainees in the labour market and delivering report(s) with quality data analysis and inferences.
- To evaluate the impact of STRIVE intervention(s) on the beneficiaries and the training's relevance to job markets and livelihood activities.
 - To assess the employment status (wage or self-employed, higher studies, or apprenticeship) of the beneficiaries.
- To explain the causes of employment outcomes and provide feedback for improvements in various areas of training and placement at ITIs.
 - Exploring changes in the professional career of trainees after graduating from ITI and the impact of STRIVE on these changes.
- A standard questionnaire will be the research instrument and will comprise graduates from TVET institutions (core questionnaire), field-specific questions, trade-specific questions, and institution-specific questions.
 - To understand work better circumstances in any future planning, policy advice, and decision making.

1.7 Scope of work/Essential duties

Social Network India (SNI) collected and analysed quality data according to expectations and protocols and within a timeframe. As per the RFP, the SNI was expected to do the following:

- To measure the labour market performance of the project and non-project ITIs disaggregated by gender and social groups.
- Statistically significant sampling and designing survey instrument in consultation with the SPIU.
 - Collecting information and reasons for the non-employment of trainees due to industry closures during the lockdown, reverse migration due to the pandemic, etc.
- Assess the impact of the ITI training programs in terms of relevance, effectiveness, efficiency, and sustainability.
 - Obtain the views and opinions of employers on the impact, quality, and relevance of ITI training programs.

- Assess the graduates' or passouts' level of satisfaction with the type of ITI training they received.
 - Clear methodology of tracer study instruments and indicator measurement, analytic approach, and robustness check approach.
- Reasonability testing of the data (with SPSS syntax) as a part of data quality controls.

1.8 Tracer Study Limitations

- The major challenge faced in the study's implementation was the collection of student details from the selected sampled ITIs and contacting the principals of the few ITIs to provide information.
- Several attempts, visits, and follow-up calls had to be made to obtain reasonable data from the principals, even after the support, cooperation, and intervention of officials of SPIU.
 - Data obtained from ITIs had inconsistencies, including wrong contact numbers and addresses of graduates, which were reported to DTE officials, and it ended up revisiting the ITIs for collection of the correct student list. Despite being instructed to only share data for 2019 passout graduates, many ITIs provided student passout data for other years.
- Due to the aforementioned reasons, the primary survey for the study was delayed, necessitating the deployment of additional resources and time.

2. Stages of Tracer Study

2.1 Approach in conducting Tracer Study

Stage 1: Planning and Designing	<ul style="list-style-type: none"> •Target Population •Survey Instrument & Data Collection Methodology
Stage 2: Questionnaire Finalization	<ul style="list-style-type: none"> •Finalizing the questionnaire with help of SPIU Team
Stage 3: Collection and Updation of Contact Details	<ul style="list-style-type: none"> •Maintain database of passed out trainees 'contact details
Stage 4: Organize data collection	<ul style="list-style-type: none"> •Collection of data from the selected respondents
Stage 5: Data Analysis & Reporting	<ul style="list-style-type: none"> •Analysis of data and Interpretation of results followed by report generation

2.2 Survey Design

Target Population

The trainees from ITIs who successfully completed the CTS programme in a selected trade and hold the National Trade Certificate were the target population for the tracer study. The study targeted the trainees who passed the annual examination held in 2019, including trainees appearing for the final examination in 2019 for 1 year and 2 year trades. This helped in capturing a more relevant scenario by ensuring most of the trainees seeking employment have taken a job.

Total ITIs and trainees in Rajasthan

State	Total ITIs	STRIVE Project ITIs	Govt Non-Project ITIs	Private ITIs	Total Passouts	Study Coverage
Rajasthan	1660	14	143	1503	90,000	10% of total passouts

For this tracer study, a 9000 sample size from 166 ITIs across Rajasthan was proposed. This covered a total of 9012 trainees across 33 districts from 167 ITIs under the study.

Provision for a non-response buffer

In order to meet the non-response buffer, the next graduate from the same trade and ITI were covered.

Selection of Respondents

Type I	<ul style="list-style-type: none"> •Trainees who graduated with 1 year of training/course
Type II	<ul style="list-style-type: none"> •Trainees who graduated with 2 years of training/course

Overall, the respondents were selected using a systematic random sampling approach, which selected members from the pool of trainees. The sampling interval was decided based on the number of trainees in each trade through the creation of a sampling frame by disaggregating the trainees/beneficiaries on the basis of gender, socio-economic demographics, as well as their trade.

Selection of ITIs

The tracer study involved capturing primary information from a representative sample of targeted respondents, who successfully passed or graduated in 2019. For selecting their sample, first of all, a purposive sample of ITIs with due geographical representation from each district with at least one private ITI was selected. Accordingly, due representation was given to the three types of ITIs in the state.

- d. Govt. ITIs covered under STRIVE project
- e. Govt. ITIs not covered under STRIVE project
- f. Pvt. ITIs not covered under the STRIVE project

A district-wise summary of the required robust sample of the total of 167 ITIs was selected from across 33 districts in Rajasthan, as per the list provided by the department, and is presented in Table 1. These ITIs were selected by the method of simple random sampling based on the discussion with SPIU.

Data Collection Methodology

The tracer study was undertaken by collecting relevant training and employment related data from the youth who completed the CTS program in any trade from project/non-project & private ITIs in 2019. For collecting such information, a standard questionnaire (attached as Annexure) with mainly structured, closed-ended questions was used.

Interviews were duly canvassed through face-to-face interactions using the Geotagged connect CAPI application. ITI graduates who were unavailable within 100 km of the ITI or who had relocated to other districts or states during the time of the data collection were canvassed through telephonic interactions. Around 60% of trainees were interviewed in person, while the remaining 40% were via telephone.

Monitoring Plan for Quality Check

Supervisors monitored the field team to ensure that the interview was properly captured, checked, and corrected before leaving the trainee. Each of them ensured that all necessary questions had been asked, a proper skipping pattern had been followed, and the responses had been clearly recorded.

Data Analysis

The quantitative data collected through CAPI devices was converted into SPSS formats, specifying the variable names and value labels for each field. The quantitative data so collected through structured interviews was cleaned to make it fit for generating reliable estimates so as to meet the purpose of this study. Further, the data was analysed through SPSS to generate the desired estimates, fact sheets, tables, and graphs to be used in the final analysis and presentation of the data.

District wise distribution of ITIs and target sample

Table 1 District & zone wise number of ITIs & sample covered

Zones	Districts	STRIVE Project ITIs	Govt Non-Project ITIs	Private ITIs	ITI per district	Total Sample covered
Ajmer	Ajmer	3	2	1	6	474
	Bhilwara	-	6	1	7	276
	Nagaur	-	4	1	5	197
	Tonk	-	2	1	3	110
Ajmer Zone Total		3	14	4	21	1057
Bharatpur	Bharatpur	-	3	4	7	376
	Dhaulpur	-	4	1	5	161
	Karauli	-	3	1	4	148
	Sawai Madhopur	-	2	1	3	182
Bharatpur Zone Total		-	12	7	19	867
Bikaner	Bikaner	-	5	1	6	250
	Churu	-	3	2	5	201
	Hanumangarh	-	2	1	3	262
	Sri Ganganagar	1	2	1	4	246
Bikaner Zone Total		1	12	5	18	959
Jaipur	Alwar	-	8	2	10	583
	Dausa	-	2	1	3	91
	Jaipur	2	9	3	14	884
	Jhunjhunu	-	4	1	5	398
	Sikar	-	3	1	4	254
Jaipur Zone Total		2	26	8	36	2210
Jodhpur	Barmer	-	4	1	5	278
	Jaisalmer	-	2	1	3	130
	Jalore	-	2	1	3	79
	Jodhpur	2	5	2	9	571
	Pali	2	2	1	5	284
	Sirohi	-	3	1	4	176
Jodhpur Zone Total		4	18	7	29	1518
Kota	Baran	-	4	1	5	180
	Bundi	-	3	-	3	212
	Jhalawar	1	4	1	6	177
	Kota	2	3	1	6	492
Kota Zone Total		3	14	3	20	1061
Udaipur	Banswara	-	2	1	3	207
	Chittorgarh	-	4	1	5	278
	Dungarpur	-	2	1	3	201
	Pratapgarh	-	2	1	3	109
	Rajsamand	-	3	1	4	202
	Udaipur	1	4	1	6	343
Udaipur Zone Total		1	17	6	24	1340
Overall Sample		14	113	40	167	9012

Table 2 District & zone wise distribution of sampled ITIs covered

S.No	Zone	District	ITI Name	Type of ITI	Total Sample covered
1.	Ajmer	Ajmer	Govt-ITI, Ajmer	Govt Non-Project	107
2.			Govt-ITI, Kekri (Ajmer)	Govt Non-Project	27
3.			Govt-ITI, Beawar (Ajmer)	Govt Project	144
4.			Govt-ITI, Kishangarh (Ajmer)	Govt Project	98
5.			Govt-ITI Women, Ajmer	Govt Project	45
6.			Igmenz Pvt. ITI, Madar, (Ajmer)	Private	53
7.		Bhilwara	Govt-ITI, Bhilwara	Govt Non-Project	89
8.			Govt-ITI Women, Bhilwara	Govt Non-Project	25
9.			Govt-ITI, Gangapur (Bhilwara)	Govt Non-Project	0*
10.			Govt-ITI, Gulabpura (Bhilwara)	Govt Non-Project	25
11.			Govt-ITI, Shahpura (Bhilwara)	Govt Non-Project	43
12.			Govt-ITI, Uncha (Bhilwara)	Govt Non-Project	25
13.			Vision Pvt. ITI, Uncha (Bhilwara)	Private	69
14.		Nagaur	Govt-ITI, Nagaur	Govt Non-Project	24
15.			Govt-ITI, Kuchaman City (Nagaur)	Govt Non-Project	54
16.			Govt-ITI, Nawan City (Nagaur)	Govt Non-Project	18
17.			Govt-ITI, Jaswantgarh (Nagaur)	Govt Non-Project	52
18.			Bhaskar Pvt. ITI, Merta (Nagaur)	Private	49
19.		Tonk	Govt-ITI, Tonk	Govt Non-Project	81
20.			Govt-ITI, Todaraisingh (Tonk)	Govt Non-Project	24
21.			Saint Joseph Pvt. ITI, Bichharas (Tonk)	Private	5
22.	Bharatpur	Bharatpur	Govt-ITI, Bharatpur	Govt Non-Project	98
23.			Govt-ITI, Bayana (Bharatpur)	Govt Non-Project	20
24.			Govt-ITI, Kaman (Bharatpur)	Govt Non-Project	111
25.			Carrier Develop Pvt. ITI, Brij I-Area (Bharatpur)	Private	3
26.			Kamlesh Pvt. ITI, Bahnera (Bharatpur)	Private	50
27.			Master Kirodi Lal Pvt. ITI, Nadbai (Bharatpur)	Private	80
28.			Shri Sai Pvt. ITI, Nadbai (Bharatpur)	Private	14
29.			Dhaulpur	Govt-ITI, Dhaulpur	Govt Non-Project
30.		Govt-ITI, Bari (Dhaulpur)		Govt Non-Project	52
31.		Govt-ITI, Rajakhera (Dhaulpur)		Govt Non-Project	12
32.		Govt-ITI, Saipau (Dhaulpur)		Govt Non-Project	40
33.		Gandhi Pvt. ITI, Railway Station (Dhaulpur)		Private	12
34.		Karauli	Govt-ITI, Karauli	Govt Non-Project	95
35.			Govt-ITI, Nadauti (Karauli)	Govt Non-Project	8
36.			Govt-ITI, Sapotra (Karauli)	Govt Non-Project	20
37.			Bharti Pvt. ITI, Banshi Ka Bag (Karauli)	Private	25
38.		Sawai Madhopur	Govt-ITI, Sawai Madhopur	Govt Non-Project	122
39.			Govt-ITI, Khandar (Sawai Madhopur)	Govt Non-Project	24
40.			Aadrash Pvt. ITI, Kherda (Sawai Madhopur)	Private	36

S.No	Zone	District	ITI Name	Type of ITI	Total Sample covered	
41.	Bikaner	Bikaner	Govt-ITI, Bikaner	Govt Non-Project	133	
42.			Govt-ITI Women, Bikaner	Govt Non-Project	7	
43.			Govt-ITI, Chhattargarh (Bikaner)	Govt Non-Project	72	
44.			Govt-ITI, Lunkaransar (Bikaner)	Govt Non-Project	0*	
45.			Govt-ITI, Nokha (Bikaner)	Govt Non-Project	23	
46.			Rajeev Gandhi Pvt. ITI, Barsingsar (Bikaner)	Private	15	
47.		Churu	Govt-ITI, Churu	Govt Non-Project	38	
48.			Govt-ITI, Ratangarh (Churu)	Govt Non-Project	96	
49.			Govt-ITI, Sujangarh (Churu)	Govt Non-Project	30	
50.			Smt. Moongi Devi Pvt. ITI, Khasoli (Churu)	Private	29	
51.			Phooshraj Todi Pvt. ITI, Rajaldesar (Churu)	Private	8	
52.		Hanumangarh	Govt-ITI, Hanumangarh	Govt Non-Project	123	
53.			Govt-ITI, Sangariya (Hanumangarh)	Govt Non-Project	19	
54.			Mata Kitab Kaur Pvt. ITI, Kohla (Hanumangarh)	Private	104	
55.		Sri Ganganagar	Govt-ITI, Sri Ganganagar	Govt Project	159	
56.			Govt-ITI, Karanpur (Sri Ganganagar)	Govt Non-Project	49	
57.			Govt-ITI, Suratgarh (Sri Ganganagar)	Govt Non-Project	52	
58.			Chawala Pvt. ITI, Kirti Colony (Sri Ganganagar)	Private	2	
59.	Jaipur	Alwar	Govt-ITI, Alwar	Govt Non-Project	141	
60.			Govt-ITI Women, Alwar	Govt Non-Project	102	
61.			Govt-ITI, Bansur (Alwar)	Govt Non-Project	49	
62.			Govt-ITI, Bhiwadi (Alwar)	Govt Non-Project	29	
63.			Govt ITI, Nimrana (Alwar)	Govt Non-Project	23	
64.			Govt-ITI, Rajgarh (Alwar)	Govt Non-Project	47	
65.			Govt-ITI, Reni (Alwar)	Govt Non-Project	17	
66.			Govt-ITI, Thanagazi (Alwar)	Govt Non-Project	54	
67.			Bhagwan Mahaveer Pvt. ITI, Kesarpur (Alwar)	Private	38	
68.			Shri Ganesh Pvt. ITI, Tapukara (Alwar)	Private	83	
69.			Dausa	Govt-ITI, Dausa	Govt Non-Project	43
70.				Govt-ITI, Sikrai (Dausa)	Govt Non-Project	23
71.		Jeeyash Pvt. ITI, Gudha Katla (Dausa)		Private	25	
72.		Jaipur	Govt-ITI, Jaipur	Govt Project	145	
73.			Govt-ITI Women, Jaipur	Govt Project	99	
74.	Govt-ITI, Amer (Jaipur)		Govt Non-Project	24		
75.	Govt-ITI, Chomu (Jaipur)		Govt Non-Project	94		
76.	Govt-ITI, Dudu (Jaipur)		Govt Non-Project	52		
77.	Govt-ITI, Kho Nagoriyan (Jaipur)		Govt Non-Project	19		
78.	Govt-ITI, Kotputli (Jaipur)		Govt Non-Project	64		
79.	Govt-ITI, Phagi (Jaipur)		Govt Non-Project	37		
80.	Govt-ITI, Sambhar Lake (Jaipur)		Govt Non-Project	42		
81.	Govt-ITI, Sanganer (Jaipur)		Govt Non-Project	26		

S.No	Zone	District	ITI Name	Type of ITI	Total Sample covered
82.			Govt-ITI, Shahpura (Jaipur)	Govt Non-Project	49
83.			Bhushan Pvt. ITI, Krishna Colony (Jaipur)	Private	145
84.			Akshat Pvt. ITI, Kishangarh Renwal (Jaipur)	Private	13
85.			Shri Bhawani Niketan Pvt. ITI, (Jaipur)	Private	75
86.		Jhunjhunu	Govt-ITI, Jhunjhunu	Govt Non-Project	60
87.			Govt-ITI, Binjusr (Jhunjhunu)	Govt Non-Project	15
88.			Govt-ITI, Chirawa (Jhunjhunu)	Govt Non-Project	79
89.			Govt-ITI, Khetri (Jhunjhunu)	Govt Non-Project	75
90.			Birla Pvt ITI, Pilani (Jhunjhunu)	Private	169
91.		Sikar	Govt-ITI, Sikar	Govt Non-Project	93
92.			Govt-ITI, Fatehpur (Sikar)	Govt Non-Project	23
93.			Govt-ITI, Khood (Sikar)	Govt Non-Project	105
94.			Hajrat Omer Bin Khattab Pvt. ITI, (Sikar)	Private	33
95.		Jodhpur	Barmer	Govt-ITI, Barmer	Govt Non-Project
96.	Govt-ITI, Balotra (Barmer)			Govt Non-Project	65
97.	Govt-ITI, Shiv (Barmer)			Govt Non-Project	21
98.	Govt-ITI, Siwana (Barmer)			Govt Non-Project	38
99.	Cambridge Pvt. ITI, Baldeo Nagar (Barmer)			Private	48
100.	Jaisalmer		Govt-ITI, Jaisalmer	Govt Non-Project	91
101.			Govt-ITI, Pokran (Jaisalmer)	Govt Non-Project	34
102.			Sankalp Pvt. ITI, Pokran (Jaisalmer)	Private	5
103.	Jalore		Govt-ITI, Jalore	Govt Non-Project	51
104.			Govt-ITI, Raniwara (Jalore)	Govt Non-Project	0*
105.			Shri Heeralal Yogi Pvt. ITI, Sayala (Jalore)	Private	28
106.	Jodhpur		Govt-ITI, Jodhpur	Govt Project	138
107.			Govt-ITI Women, Jodhpur	Govt Project	133
108.			Govt-ITI, Balesar (Jodhpur)	Govt Non-Project	55
109.		Govt-ITI, Bilara (Jodhpur)	Govt Non-Project	0*	
110.		Govt-ITI, Mandor (Jodhpur)	Govt Non-Project	25	
111.		Govt-ITI, Phalodi (Jodhpur)	Govt Non-Project	62	
112.		Govt-ITI, Pipar City (Jodhpur)	Govt Non-Project	55	
113.		Marwar Pvt. ITI, Banner Road (Jodhpur)	Private	22	
114.	Maulana Abul Kalam Azad Pvt. ITI, Jodhpur	Private	81		
115.	Pali	Govt-ITI, Pali	Govt Project	120	
116.		Govt-ITI, Jaitaran (Pali)	Govt Project	95	
117.		Govt-ITI, Phalna (Pali)	Govt Non-Project	5	
118.		Govt-ITI, Sojat City (Pali)	Govt Non-Project	2	
119.		HK Hi-Tech Pvt. ITI, Sumerpur (Pali)	Private	62	
120.	Sirohi	Govt-ITI, Sirohi	Govt Non-Project	27	
121.		Govt-ITI, Abu Road (Sirohi)	Govt Non-Project	98	
122.		Govt-ITI, Shivganj (Sirohi)	Govt Non-Project	41	

S.No	Zone	District	ITI Name	Type of ITI	Total Sample covered
123.			Shree Nath Pvt. ITI, Amthala (Sirohi)	Private	10
124.	Kota	Baran	Govt-ITI, Baran	Govt Non-Project	58
125.			Govt-ITI, Anta (Baran)	Govt Non-Project	74
126.			Govt-ITI, Atru (Baran)	Govt Non-Project	19
127.			Govt-ITI, Chhabra (Baran)	Govt Non-Project	4
128.			Shri Laxmi Pvt. ITI, Chhabra (Baran)	Private	25
129.			Bundi	Govt-ITI, Bundi	Govt Non-Project
130.		Govt-ITI, Keshoraipatan (Bundi)		Govt Non-Project	93
131.		Govt-ITI, Lakheri (Bundi)		Govt Non-Project	95
132.		Jhalawar	Govt-ITI, Jhalawar	Govt Project	83
133.			Govt-ITI, Aklera (Jhalawar)	Govt Non-Project	5
134.			Govt-ITI, Bhawani Mandi (Jhalawar)	Govt Non-Project	34
135.			Govt-ITI, Khanpur (Jhalawar)	Govt Non-Project	33
136.			Govt-ITI, Pidawa (Jhalawar)	Govt Non-Project	0*
137.			Pt. Ratnaker Pvt. ITI, Jhalrapatan (Jhalawar)	Private	22
138.		Kota	Govt-ITI, Kota	Govt Project	84
139.			Govt-ITI, Sangod (Kota)	Govt Project	166
140.			Govt-ITI, Chemical BTC, (Kota)	Govt Non-Project	50
141.			Govt-ITI Women, Kota	Govt Non-Project	64
142.			Govt-ITI, Sultanpur (Kota)	Govt Non-Project	96
143.			Mahatma Gandhi Pvt. ITI, Borkhera (Kota)	Private	32
144.	Udaipur	Banswara	Govt-ITI, Banswara	Govt Non-Project	65
145.			Govt-ITI, Bagidora (Banswara)	Govt Non-Project	73
146.			Jambukhand Pvt. ITI, Bagidora (Banswara)	Private	69
147.		Chittorgarh	Govt-ITI, Chittorgarh	Govt Non-Project	55
148.			Govt-ITI, Bari Sadri (Chittorgarh)	Govt Non-Project	53
149.			Govt-ITI, Bhadesar (Chittorgarh)	Govt Non-Project	50
150.			Govt-ITI, Kapasan (Chittorgarh)	Govt Non-Project	60
151.			J K Pvt. ITI, Nimbherda (Chittorgarh)	Private	60
152.		Dungarpur	Govt-ITI, Dungarpur	Govt Non-Project	170
153.			Govt-ITI, Sagwara (Dungarpur)	Govt Non-Project	19
154.			Kamakhya Pvt. ITI, Sagwara (Dungarpur)	Private	12
155.		Pratapgarh	Govt-ITI, Pratapgarh	Govt Non-Project	75
156.			Govt-ITI, Dhariyawad (Pratapgarh)	Govt Non-Project	14
157.			Gyan Sarovar Pvt. ITI, Chhotisadri (Pratapgarh)	Private	20
158.		Rajsamand	Govt-ITI, Rajsamand	Govt Non-Project	48
159.			Govt-ITI, Amet (Rajsamand)	Govt Non-Project	50
160.			Govt-ITI, Nathdwara (Rajsamand)	Govt Non-Project	50
161.			Nathdwara Pvt. ITI, Upli Odan (Rajsamand)	Private	54
162.		Udaipur	Govt-ITI, Udaipur	Govt Project	96
163.			Govt-ITI Women, Udaipur	Govt Non-Project	124

S.No	Zone	District	ITI Name	Type of ITI	Total Sample covered
164.			Govt-ITI, Production Centre, Udaipur	Govt Non-Project	0*
165.			Govt-ITI, Mavli (Udaipur)	Govt Non-Project	50
166.			Govt-ITI, Salumber (Udaipur)	Govt Non-Project	73
167.			J.R. Pvt. ITI, Jhadol (Udaipur)	Private	0*

Note (): These were the ITIs that had NIL passouts in CTS trade in 2019.*

The following requirements were made mandatory for the selected sample in a tracer study of ITI graduates in Rajasthan:

- Capture the diversity of trainees in terms of their age, SC/ST/OBC status, location (rural/urban), type of ITI (government and private), education level, and household economic status.
- Include passouts from both project and non-project ITIs among government and private ITIs.
- The ratio of government ITIs to private ITIs in the survey will be in proportion to the total number of government ITIs to private ITIs in the state.
- The sample size of a trade will be in proportion to the number of passouts from each selected trade, with at least 10 passouts in each trade.
- To survey the minimum number of ITIs and select at least three ITIs from each district (wherever the requisite number exists),
- To record responses from at least 30 passouts from each selected ITI.

A list of selected trades under this tracer study is given below:

Table 3 List of selected 29 trades for the Tracer Study

List of selected 29 trades for the survey		
Basic Cosmetology	Fitter	Sewing Technology
Carpenter	Instrument Mechanic	Sheet Metal Worker
Computer Operator and Programming Assistant	Information Communication System Technology Maintenance	Stenographer & Secretarial Assistant (English)
Draughtsman (Civil)		Stenographer & Secretarial Assistant (Hindi)
Textile Wet Processing Technician	Mechanic (Refrigeration and Air Conditioning)	Surface Ornamentation Techniques (Embroidery)
Dress Making	Mechanic (Motor Vehicle)	Surveyor
Electrician	Machinist	Turner
Electronics Mechanic	Mechanic (Tractor)	Welder
Fashion Design & Technology	Mechanic Diesel	Wireman
Solar Technician (Electrical)	Plumber	Information Technology (IT)

3. Profile of Sample Graduates

The current chapter provides an analysis of information based on the survey done with eligible ITI graduates covered by the study. Before looking at the findings from the target respondents, it is imperative to understand "the profile" of these respondents who have responded to the survey.

3.1 Distributions of trainees by sector, trade & trade type

Electrician (22.9%), Mechanic Diesel (16.6%), and Computer Operator and Programming Assistant (16.4%) trades have high sample representation; possibly they are highly popular among the ITI graduates. However, there are 16 out of the 25 trades covered in the study for which there is a low sample representation (less than 2%) and ITI graduates have a low resonance with those trades.

Table 4 Distributions of Trainees covered by sector, trade & trade type

Sector in received training	CTS Trade of ITI Graduate	Engineering Trade	Non-Engineering Trade	Total	
				N	%
Apparel	Dress Making		46	46	0.5
	Embroidery		3	3	0.03
	Fashion Design & Technology		67	67	0.7
	Sewing Technology		95	95	1.1
	Total		211	211	2.3
Automobiles	Mechanic (Motor Vehicle)	165		165	1.8
	Mechanic (Tractor)	116		116	1.3
	Mechanic Diesel	1500		1500	16.6
	Total	1781		1781	19.8
Beauty & Wellness	Basic Cosmetology		131	131	1.5
	Total		131	131	1.5
Construction	Carpenter	39		39	0.4
	Draughtsman (Civil)	44		44	0.5
	Plumber	162		162	1.8
	Surveyor	32		32	0.4
	Total	277		277	3.1
Electrical & Electronics	Electrician	2068		2068	22.9
	Electronics Mechanic	359		359	4.0
	Instrument Mechanic	21		21	0.2
	Mechanic (RAC)	241		241	2.7
	Wireman	229		229	2.5
	Total	2918		2918	32.4
Fabrication	Welder	663		663	7.4
	Total	663		663	7.4
IT & ITeS	COPA		1479	1479	16.4
	ICTSM	105		105	1.2
	Total	105	1479	1584	17.6

Sector in received training	CTS Trade of ITI Graduate	Engineering Trade	Non-Engineering Trade	Total	
				N	%
Office Administration & Facility Management	Steno (English)		51	51	0.6
	Steno (Hindi)		260	260	2.9
	Total		311	311	3.5
Production & Manufacturing	Fitter	1008		1008	11.2
	Machinist	39		39	0.4
	Turner	89		89	1.0
	Total	1136		1136	12.6
Grand Total		6880	2132	9012	

3.2 Sector wise profiling of respondents (male & female)

According to data from the distribution sector, 32.4% of ITI graduates trained in the Electrical & Electronics sector, which was followed by the most popular sectors such as Automobiles (19.8%), IT & ITeS (17.6%), and Production & Manufacturing (12.6%). Fabrication (7.4%), Office Administration & Facility Management (3.5%), Construction (3.1%), Apparel (2.3%), and Beauty & Wellness (1.5%) are among the least covered sectors (as can be seen from the following table).

42% of female graduates covered received ITI training from the non-engineering trades' category, while only 6% of them received training in engineering trades. A higher proportion of female graduates covered by the tracer study belongs to Beauty & Wellness and Apparel sectors. These graduates have passed under CTS in the year 2019 from the sampled 167 ITIs.

Table 5 Distributions of sector wise trainees covered under Tracer Study

S. No	Name of Sector	Trade type	Gender of Respondent				Total Trainees Covered	
			Female		Male		N	%
			N	%	N	%		
1.	Apparel	Non Engineering Trade	194	92	17	8	211	2.3
2.	Automobiles	Engineering Trade	52	3	1729	97	1781	19.8
3.	Beauty & Wellness	Non Engineering Trade	131	100			131	1.5
4.	Construction	Engineering Trade	17	6	260	94	277	3.1
5.	Electrical & Electronics	Engineering Trade	243	8	2675	92	2918	32.4
6.	Fabrication	Engineering Trade	11	2	652	98	663	7.4
7.	IT & ITeS	Engineering Trade	76	72	29	28	105	1.2
		Non Engineering Trade	423	29	1056	71	1479	16.4
8.	Office Administration & Facility Management	Non Engineering Trade	142	46	169	54	311	3.5
9.	Production & Manufacturing	Engineering Trade	43	4	1093	96	1136	12.6
Grand Total		Engineering Trade	442	6	6438	94	6880	76.3
		Non Engineering Trade	890	42	1242	58	2132	23.7
		Total	1332	15	7680	85	9012	

3.3 Training duration of respondents

Under this tracer study of ITI graduates, interactions were held with 66% of graduates from non-Project ITIs, 18% from Private ITIs, and 16 from Project ITIs. 49% of respondents covered have completed 1 year of training, while 51% have undergone 2 years of training in their respective ITIs. A greater proportion of respondents had completed two years of training at private ITIs.

Table 6 Duration of training received within sample

Type of ITI	Gender of respondent	Completed 1 year of training		Completed 2 years of training		Total
		N	%	N	%	
Govt Non-Project	Female	656	73	243	27	899
	Male	2762	55	2251	45	5013
	Total	3418	58	2494	42	5912
Govt Project	Female	290	75	96	25	386
	Male	551	52	509	48	1060
	Total	841	58	605	42	1446
Private	Female	14	30	33	70	47
	Male	339	21	1268	79	1607
	Total	353	21	1301	79	1654
Total	Female	960	72	372	28	1332
	Male	3652	48	4028	52	7680
	Total	4612	51	4400	49	9012

3.4 District wise profiling of respondents

The following table indicates the profile of respondents sampled from different types of ITIs, viz., Project, Non-Project and Private across 33 districts in Rajasthan. A higher proportion of trainees were covered in Jaipur (9.8%), Alwar (6.5%), Jodhpur (6.3%), and Kota (5.5%) districts. Only 1% of the trainees in the Jalore and Dausa districts were covered. The proportion of higher and lower trainees covered among these districts was based on the sampled ITIs from the respective districts and the number of trainees passed during the year 2019 under the Craftsmen Training Scheme (CTS).

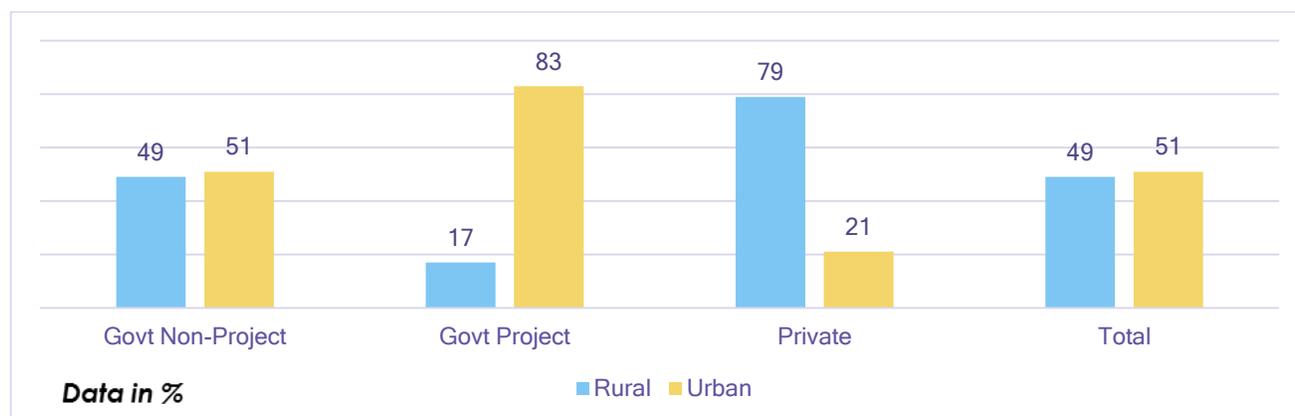
Table 7 Distributions of district wise trainees covered under Tracer Study

S. No	Name of Districts	Total Trainees Covered	Percent
1.	Ajmer	474	5.3
2.	Alwar	583	6.5
3.	Banswara	207	2.3
4.	Baran	180	2.0
5.	Barmer	278	3.1
6.	Bharatpur	376	4.2
7.	Bhilwara	276	3.1
8.	Bikaner	250	2.8
9.	Bundi	212	2.4

S. No	Name of Districts	Total Trainees Covered	Percent
10.	Chittorgarh	278	3.1
11.	Churu	201	2.2
12.	Dausa	91	1.0
13.	Dhaulpur	161	1.8
14.	Dungarpur	201	2.2
15.	Hanumangarh	246	2.7
16.	Jaipur	884	9.8
17.	Jaisalmer	130	1.4
18.	Jalore	79	0.9
19.	Jhalawar	177	2.0
20.	Jhunjhunu	398	4.4
21.	Jodhpur	571	6.3
22.	Karauli	148	1.6
23.	Kota	492	5.5
24.	Nagaur	197	2.2
25.	Pali	284	3.2
26.	Pratapgarh	109	1.2
27.	Rajsamand	202	2.2
28.	Sawai Madhopur	182	2.0
29.	Sikar	254	2.8
30.	Sirohi	176	2.0
31.	Sri Ganganagar	262	2.9
32.	Tonk	110	1.2
33.	Udaipur	343	3.8
Total		9012	100

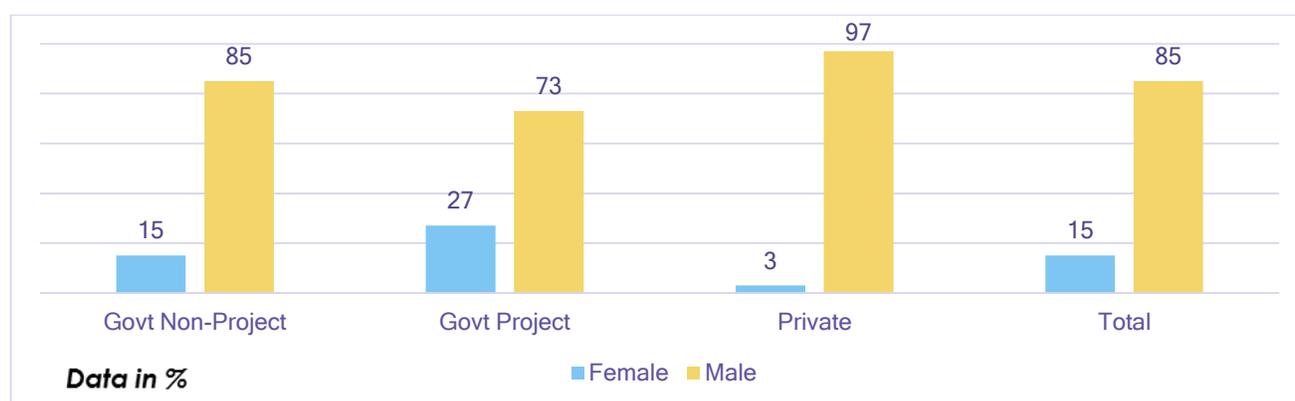
3.5 Location wise profiling of respondents

In project ITIs, the respondents are mostly from urban localities (83%), while in private ITIs, 79% of respondents are from rural localities. Taking into account the project requirement of covering an equal ratio of rural and urban graduates, 49% of respondents were from rural areas, while 51% were from urban areas covered by the study.



3.6 Socio-Economic profiling of respondents

The findings of this section deal with understanding the distribution of various profiling aspects like gender, religion, social category, and household background among the respondents (ITI graduates). The target population is represented by a majority of males in the study (85%). A higher proportion of female trainees were found in project ITIs (27%) in comparison to non-project ITIs (15%), while the lowest proportion of female trainees were found in private ITIs (3%). From the total of 14 STRIVE ITIs covered under the study, 71% were female trainees from the three women ITIs selected for the study. This has resulted in a higher proportion of female trainees covered under Project ITIs.



Under this tracer study, a higher (82.5%) proportion of respondents were found in the age group of 19-25 years, followed by the age group of 26-35 years (17.3%). Only 0.2% of graduates between the ages of 36 and 45 were surveyed.

Table 8 Distribution of respondent's age within sample

Type of ITI	19-25 years		26-35 years		36-45 years		Total
	N	%	N	%	N	%	
Govt Non-Project	4858	82	1033	17	21	0.4	5912
Govt Project	1153	80	293	20	-	-	1446
Private	1422	86	231	14	1	0.1	1654
Total	7433	82.5	1557	17.3	22	0.2	9012

The majority of respondents (93.4%) were Hindu, with Muslims accounting for 5.7%. In all, 6.5% of graduates belong to the minority category; private ITIs had a proportionately higher number of minority graduates (7.3%) than government ITIs.

Table 9 Distribution of religion of respondent within sample

Type of ITI	Christian		Hindu		Jain		Muslim		Sikh		Total
	N	%	N	%	N	%	N	%	N	%	
Govt Non-Project	-	-	5530	93.5	13	0.2	321	5.4	48	0.8	5912
Govt Project	-	-	1355	93.7	3	0.2	87	6.0	1	0.1	1446
Private	1	0.06	1533	92.7	4	0.2	110	6.7	6	0.4	1654
Total	1	0.01	8418	93.4	20	0.2	518	5.7	55	0.6	9012

In terms of the social category of the respondents, 17% are Scheduled Caste, 11% Scheduled Tribe, 50% Other Backward Class and 20% General. Only 2% respondents were from MBC category.

Table 10 Distribution of social category of respondent within sample

Type of ITI	General		MBC		OBC		SC		ST		Total
	N	%	N	%	N	%	N	%	N	%	
Govt Non-Project	1099	19	114	2	3040	51	971	16	688	12	5912
Govt Project	286	20	48	3	711	49	267	18	134	9	1446
Private	373	23	43	3	741	45	325	20	172	10	1654
Total	1758	20	205	2	4492	50	1563	17	994	11	9012

Under this tracer study, 37% of respondents covered were married, and 63% were unmarried. Only 0.1% of respondents covered by the study were either divorced or separated.

Table 11 Distribution of marital status of respondent within sample

Type of ITI	Divorce/Separated		Married		Unmarried		Total
	N	%	N	%	N	%	
Govt Non-Project	2	0.03	2189	37	3721	63	5912
Govt Project	3	0.2	558	39	885	61	1446
Private	1	0.1	582	35	1071	65	1654
Total	6	0.1	3329	37	5677	63	9012

About 35% of respondents have an average monthly household income of less than INR 15,000 from all sources. Only 4% of respondents had a monthly household income of more than INR 50,000.

Table 12 Average monthly household income from all sources (excluding trainee income)

Type of ITI	Less than INR 15000		INR 15001–30000		INR 30001–50000		INR 50001–70000		INR 70000 & above		Total
	N	%	N	%	N	%	N	%	N	%	
Govt Non-Project	2232	38	2507	42	967	16	154	3	52	1	5912
Govt Project	401	28	670	46	324	22	35	2	16	1	1446
Private	560	34	680	41	364	22	45	3	5	0.3	1654
Total	3193	35	3857	43	1655	18	234	3	73	1	9012

90% of respondents' homes were pucca, with the remaining 8% being semi-pucca. Only 2% of respondent households were kuccha in nature.

Table 13 Distribution of respondent house within sample

Type of ITI	Kuccha		Pucca		Semi-Pucca		Total
	N	%	N	%	N	%	
Govt Non-Project	117	2	5379	91	416	7	5912
Govt Project	22	2	1204	83	220	15	1446
Private	16	1	1553	94	85	5	1654
Total	155	2	8136	90	721	8	9012

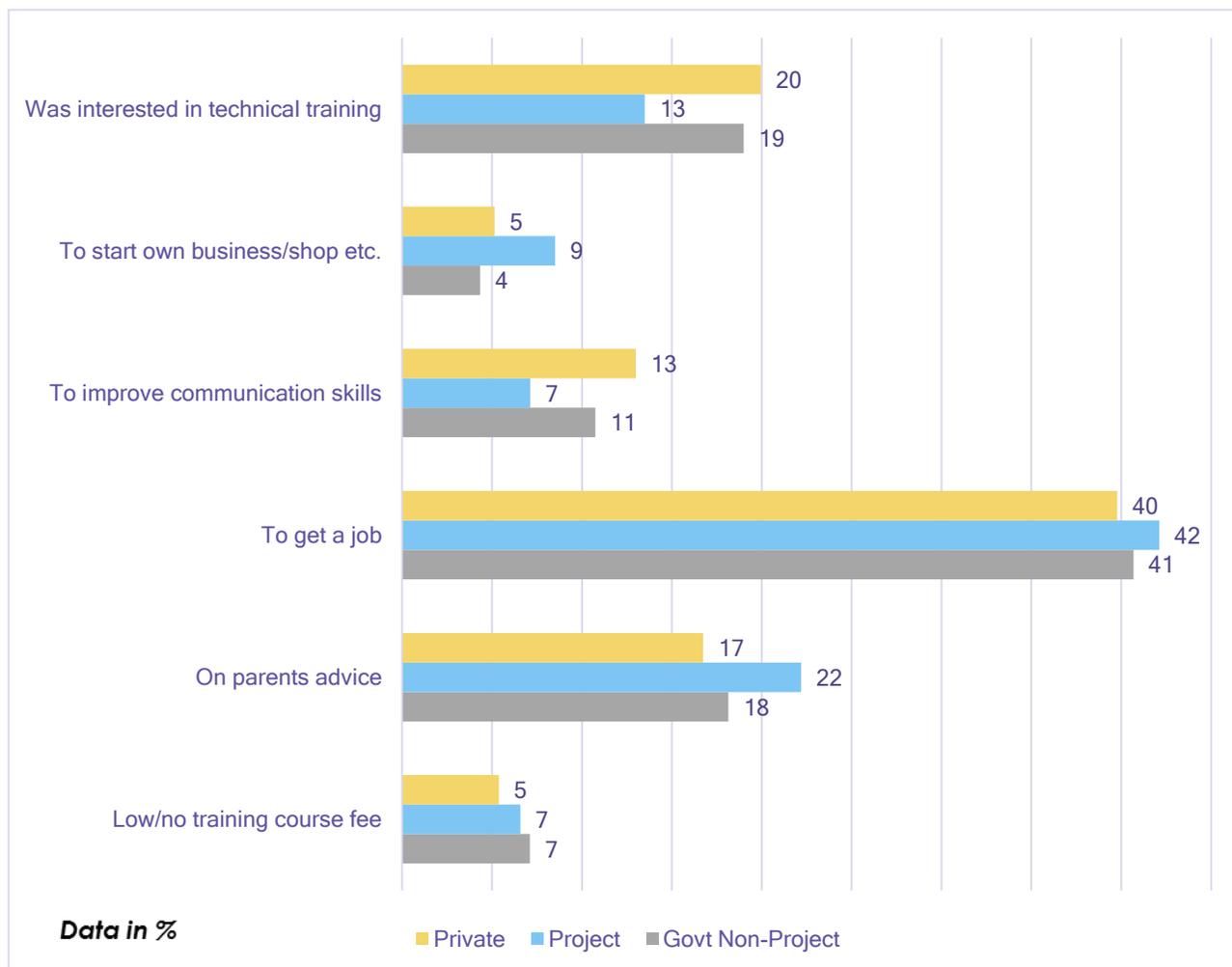
98.6% of the respondents have their own dwelling unit. Only 1.2% of them are living in rented units, and 0.2% in company quarters.

Table 14 Distribution of ownership of house within sample

Type of ITI	Company quarters		Own		Rented		Total
	N	%	N	%	N	%	
Govt Non-Project	15	0.3	5828	98.6	69	1.2	5912
Govt Project	2	0.1	1424	98.5	20	1.4	1446
Private	1	0.1	1637	99.0	16	1.0	1654
Total	18	0.2	8889	98.6	105	1.2	9012

3.7 Reasons for joining ITI

Respondents were asked their reason for joining ITI, and 41% said they joined ITI to get a job. Another 19% have joined ITI on their parents' advice, followed by their interest in technical training (18%) and to improve their communication skills (11%). Given the low or no training course fees in the sampled ITIs covered, approximately 7% have enrolled. Only 5% of the respondents covered have joined ITI training to start their own business, shop, etc.



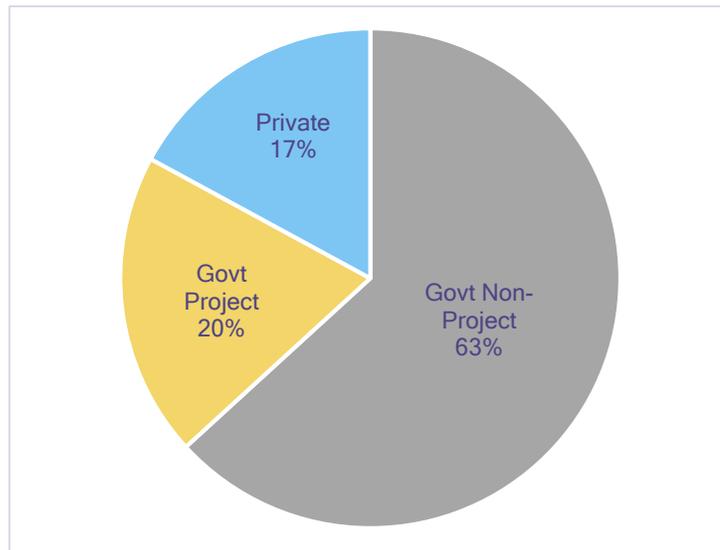
4. Apprenticeship & OJT/Internship/Industrial Training

After the training and certification at ITI, it is expected that the passout graduates undergo apprenticeship training relevant to their trade, which often renders prolific employment pertinent to his or her training at ITI.

4.1 Apprenticeship after course completion

Of the total of 9012 respondents, the study could cover a total of 568 (6.3%) ITI graduates who have undergone Apprenticeship training after completing their respective courses.

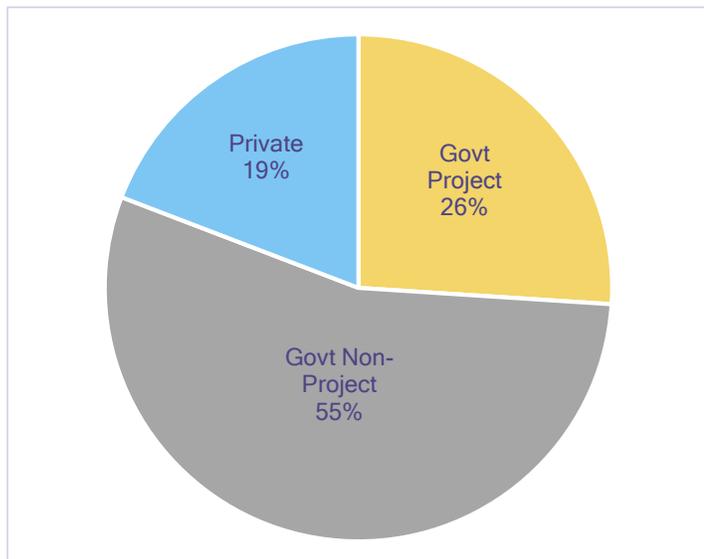
The figure indicates that most of the apprenticeship training opportunity was accessed by the graduates of non-project ITIs (63%), followed by project ITIs (20%) and private ITIs (17%).



4.2 Apprenticeship received by ITI assistance

Several ITIs have provided assistance to their respective passed-out trainees who have undergone apprenticeship training. These ITIs have arranged apprenticeship training for their graduates.

The figure indicates that most of the apprenticeship training assistance was provided to the graduates by non-project ITIs (55%), followed by project ITIs (26%), and private ITIs (19%).



4.3 Duration & stipend of apprenticeship

The extent of an apprenticeship fluctuates according to the trade and qualification. 58.5% of those who chose apprenticeship said they completed their training in 7-12 months. A training curriculum lasting less than 3 months (26.2%) was followed by a curriculum lasting 4-6 months (15.3%).

A longer duration of apprentice training after passing ITI was observed for the graduates of project ITIs, where 70% of graduates got placed in the same company after completing 10-12 months of training.

Table 15 Duration of apprenticeship training received within sample

Type of ITI	< 3 months		4-6 months		7-9 months		10-12 months		Total
	N	%	N	%	N	%	N	%	
Govt Non-Project	124	34.5	54	15.0	26	7.2	155	43.2	359
Govt Project	6	5.4	10	8.9	1	0.9	95	84.8	112
Private	19	19.6	23	23.7	11	11.3	44	45.4	97
Total	149	26.2	87	15.3	38	6.7	294	51.8	568

About 73% of respondents who have undergone apprenticeship training have received a stipend of less than INR 10,000, followed by 20.2% who received a stipend of INR 10,001-15,000. Only 6.7% of respondents from the sampled ITIs have received a stipend of INR 15,001-20,000.

Fashion Design & Technology, Steno (Hindi), and Mechanic trades received the lowest stipends during apprenticeship, while Electrician, COPA, and Fitter received the highest.

Table 16 Monthly stipend received during apprenticeship training received within sample

Type of ITI	Upto INR 5,000		INR 5,001-10,000		INR 10,001-15,000		INR 15,001-20,000		Total
	N	%	N	%	N	%	N	%	
Govt Non-Project	112	31.2	141	39.3	77	21.4	29	8.1	359
Govt Project	12	10.7	93	83.0	5	4.5	2	1.8	112
Private	15	15.5	42	43.3	33	34.0	7	7.2	97
Total	139	24.5	276	48.6	115	20.2	38	6.7	568

4.4 Apprenticeship placement

57.2% of respondents with apprenticeship training were placed in the same company, while the remaining 42.8% were placed in other companies. The response was higher among the graduates of project ITIs (65.2%).

Table 17 Respondent's placement in the same company where apprenticeship training received

Type of ITI	Placement in same company		Placement in other company		Total
	N	%	N	%	
Govt Non-Project	201	56.0	158	44.0	359
Govt Project	73	65.2	39	34.8	112
Private	51	52.6	46	47.4	97
Total	325	57.2	243	42.8	568

4.5 Apprenticeship completion by sector

A higher proportion of apprenticeship training was received in electrical & electronics (32%), followed by automobiles (30%), production & manufacturing (17%), and IT & ITeS (8%). Apparel, fabrication, construction, beauty and wellness apprenticeship training accounted for 13% of the total.

Table 18 Sector within apprenticeship training received within sample

Sector apprenticeship	Trade of ITI Trainees	Type of ITI attended			Total
		Govt Non-Project	Govt Project	Private	
Apparel	Fashion Design & Technology	-	1	-	1
	Sewing Technology	4	-	-	4
Automobiles	Mechanic (Motor Vehicle)	10	-	-	10
	Mechanic (Tractor)	11	-	-	11
	Mechanic Diesel	32	29	24	85
Beauty & Wellness	Basic Cosmetology	-	1	-	1
Construction	Carpenter	1	1	-	2
	Draughtsman (Civil)	4	-	-	4
	Plumber	3	-	-	3
Electrical & Electronics	Electrician	91	20	50	161
	Electronics Mechanic	23	9	-	32
	Instrument Mechanic	3	-	-	3
	Mechanic (RAC)	5	2	5	12
	Wireman	6	-	-	6
Fabrication	Welder	40	4	1	45
IT & ITeS	COPA	44	23	1	68
	ICTSM	-	1	-	1
Office Administration & Facility Management	Fashion Design & Technology	1	-	-	1
	Steno (English)	1	-	-	1
	Steno (Hindi)	5	-	-	5
Production & Manufacturing	Dress Making	1	-	-	1
	Fitter	68	16	16	100
	Machinist	3	3	-	6
	Turner	3	2	-	5
Total		359	112	97	568

4.6 OJT / Internship/ Industrial training

Only 6.6% of respondents covered by the tracer study have undergone on-the-job training (OJT), internships, or industrial training received during the course. A higher proportion of on-the-job training (OJT) or internship/industrial training was recorded for the graduates of Project ITI (13.9%).

Lower enrollment in OJT was observed, citing various reasons, namely, lack of interest, budget, resources, and planning.

Table 19 On-the-job training (OJT)/ Internship/ Industrial training received during the course

Type of ITI	Yes		No		Total
	N	%	N	%	
Govt Non-Project	336	5.7	5576	94.3	5912
Govt Project	201	13.9	1245	86.1	1446
Private	55	3.3	1599	96.7	1654
Total	592	6.6	8420	93.4	9012

61.8% of the respondents covered have undergone less than 3 months of on-the-job training (OJT) or internship/industrial training received during the course. 4-6 months of training were received by 27.9% of respondents, while the remaining 10.3% completed more than 6 months of training.

Table 20 Duration of industrial training received

Type of ITI	Less than 3 months		4-6 months		More than 6 month		Total
	N	%	N	%	N	%	
Govt Non-Project	209	62.2	80	23.8	47	14.0	336
Govt Project	122	60.7	77	38.3	2	1.0	201
Private	35	63.6	8	14.5	12	21.8	55
Total	366	61.8	165	27.9	61	10.3	592

5. Labour Market Outcome

This chapter provides details of the current employment status of the graduates, including employment rate, share of employment, time taken for the first job, relevance of ITI training, sector of employment, size of work place, monthly earnings, career progression, self-employment, and unemployment, etc.

The key objective of the project is to enhance the skilled labour force in the market. In order to understand the achievement of this goal with more clarity, employability analysis has been done on the basis of the demographics of the collected sample size across the Project, Private and Non-Project ITIs.

5.1 Status of Employment

Under the tracer study, the proportion of wage employment is higher in project ITIs. According to the table below, approximately 66% of male graduates are both wage and self-employed, while 50% of female graduates are either wage or self-employed. Under minority, 68% of ITI graduates were either wage employed or self-employed.

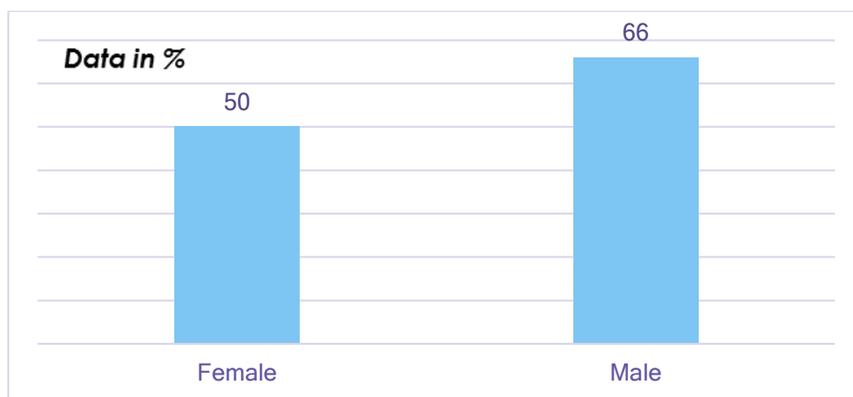
Social group-wise analysis of the employed graduates indicates that a higher proportion of OBC (65%) and general graduates (64%), followed by MBC (63%), SC (61%), and ST (58%), got employment. Employment status for graduates from rural and urban locations was 64% and 63%, respectively.

Table 21 Employment status of respondent within sample

Category		Wage Employed		Self-employed		Unemployed & looking for job		Total in Labour Force	Unemployed & not looking for job
		N	%	N	%	N	%		
Type of ITI	Govt Non-Project	1511	30	1629	32	1912	38	5052	860
	Govt Project	543	41	332	25	448	34	1323	123
	Private	478	36	384	29	453	35	1315	339
Gender	Female	286	24	305	26	603	51	1194	138
	Male	2246	35	2040	31	2210	34	6496	1184
Religion	Christian	-	-	1	100	-	-	1	-
	Hindu	2367	33	2158	30	2651	37	7176	1242
	Jain	7	37	6	32	6	32	19	1
	Muslim	146	32	166	37	138	31	450	68
	Sikh	12	27	14	32	18	41	44	11
Minority Community		165	32	187	36	162	32	514	80
Social Category	General	497	34	451	30	534	36	1482	276
	MBC	61	34	52	29	65	37	178	27
	OBC	1311	34	1186	31	1308	34	3805	687
	SC	429	32	386	29	536	40	1351	212
	ST	234	27	270	31	370	42	874	120
Location	Rural	1249	34	1108	30	1329	36	3686	739
	Urban	1283	32	1237	31	1484	37	4004	583
Total		2532	33	2345	30	2813	37	7690	1322

i. Employment by Gender and Social Group

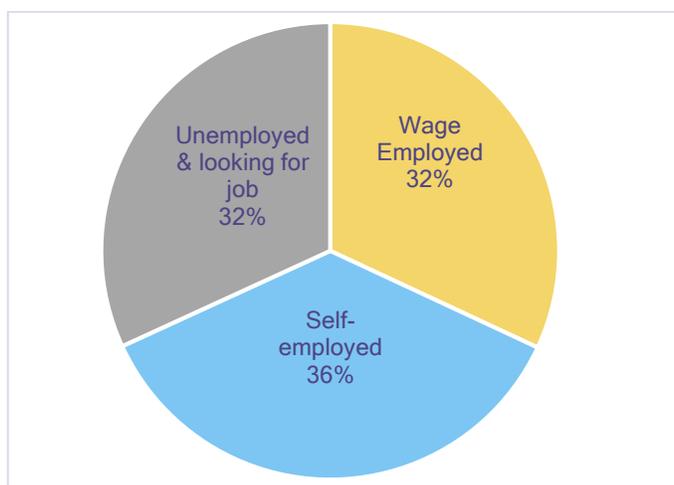
This figure indicates that about 66% of male graduates are either employed or self-employed, while in terms of female graduates, 50% are either employed or self-employed.



Social category analysis of the employed graduates from the sampled ITIs indicates that a higher proportion of OBC (65%) and general graduates (64%), followed by MBC (63%), SC (61%), and ST (58%), got employment.

ii. Status of Minority category graduates

This study also captured the employment status of ITI graduates from the minority category, of whom 68% were either wage or self-employed. This figure indicates that about 66% of male graduates are either employed or self-employed, while in terms of female graduates, 39% are either employed or self-employed.



5.2 Distribution of employment by trade type, sector and trade

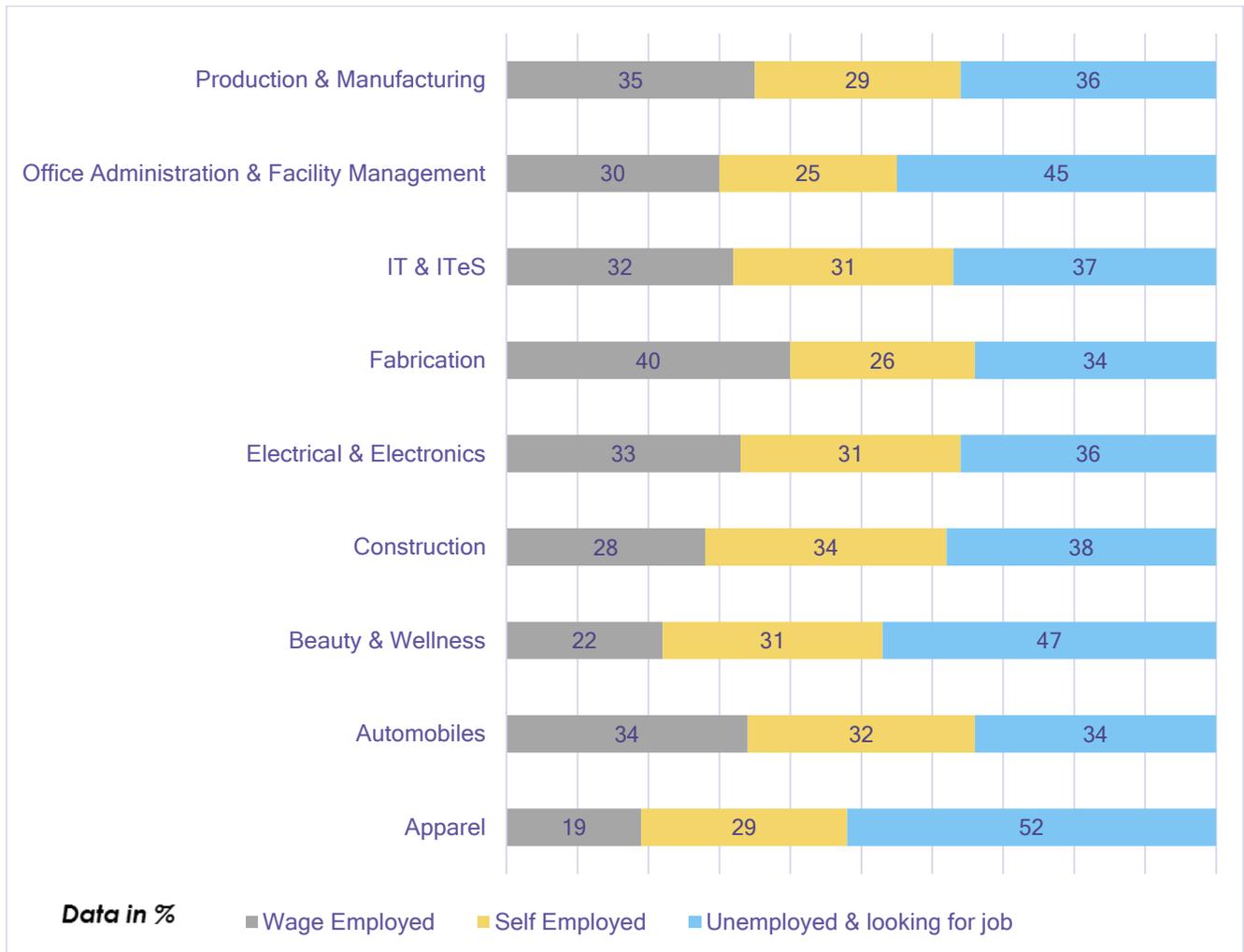
When comparing the employment status of engineering and non-engineering trade graduates, it is clear that engineering trade graduates are more likely to be wage employed (34%), self-employed (31%), and at a better level than non-engineering trade graduates, who are 30% wage and 30% self-employed.

Table 22 Distribution of Employed Trainees by trade type, sector & trade

Trade type	Sector of Training	CTS trade of ITI graduate	Employment status of ITI graduate						Total in Labour Force	Unempl oyed & not looking for job
			Wage Employed		Self-employed		Unemployed & looking for job			
			N	%	N	%	N	%		
Engineering Trade	Automobiles	Mechanic (Motor Vehicle)	54	39	34	25	49	36	137	28
		Mechanic (Tractor)	36	41	27	31	24	28	87	29
		Mechanic Diesel	439	33	428	32	455	34	1322	178
	Construction	Carpenter	12	34	10	29	13	37	35	4
		Draughtsman (Civil)	9	21	18	43	15	36	42	2
		Plumber	37	26	51	36	54	38	142	20
		Surveyor	11	46	4	17	9	38	24	8
	Electrical & Electronics	Electrician	544	31	547	31	648	37	1739	329
		Electronics Mechanic	122	40	87	29	94	31	303	56
		Instrument Mechanic	11	58	6	32	2	11	19	2
		Mechanic (RAC)	81	40	64	31	60	29	205	36
		Wireman	59	28	74	36	75	36	208	21
	Fabrication	Welder	221	40	142	26	190	34	553	110
	IT & ITeS	ICTSM	22	22	28	28	50	50	100	5
	Production & Manufacturing	Fitter	288	33	260	30	313	36	861	147
		Machinist	14	44	7	22	11	34	32	7
		Turner	29	43	15	22	23	34	67	22
Total			1989	34	1802	31	2085	35	5876	1004
Non Engineering Trade	Apparel	Dress Making	5	12	11	27	25	61	41	5
		Embroidery	1	33	2	67	0	0	3	0
		Fashion Design & Technology	18	29	11	18	33	53	62	5
		Sewing Technology	13	15	31	36	42	49	86	9
	Beauty & Wellness	Basic Cosmetology	27	22	38	31	57	47	122	9
	IT & ITeS	COPA	409	32	391	31	464	37	1264	215
	Office Administration & Facility Management	Steno (English)	8	26	4	13	19	61	31	20
		Steno (Hindi)	62	30	55	27	88	43	205	55
Total			543	30	543	30	728	40	1814	318
Grand Total			2532	33	2345	30	2813	37	7690	1322

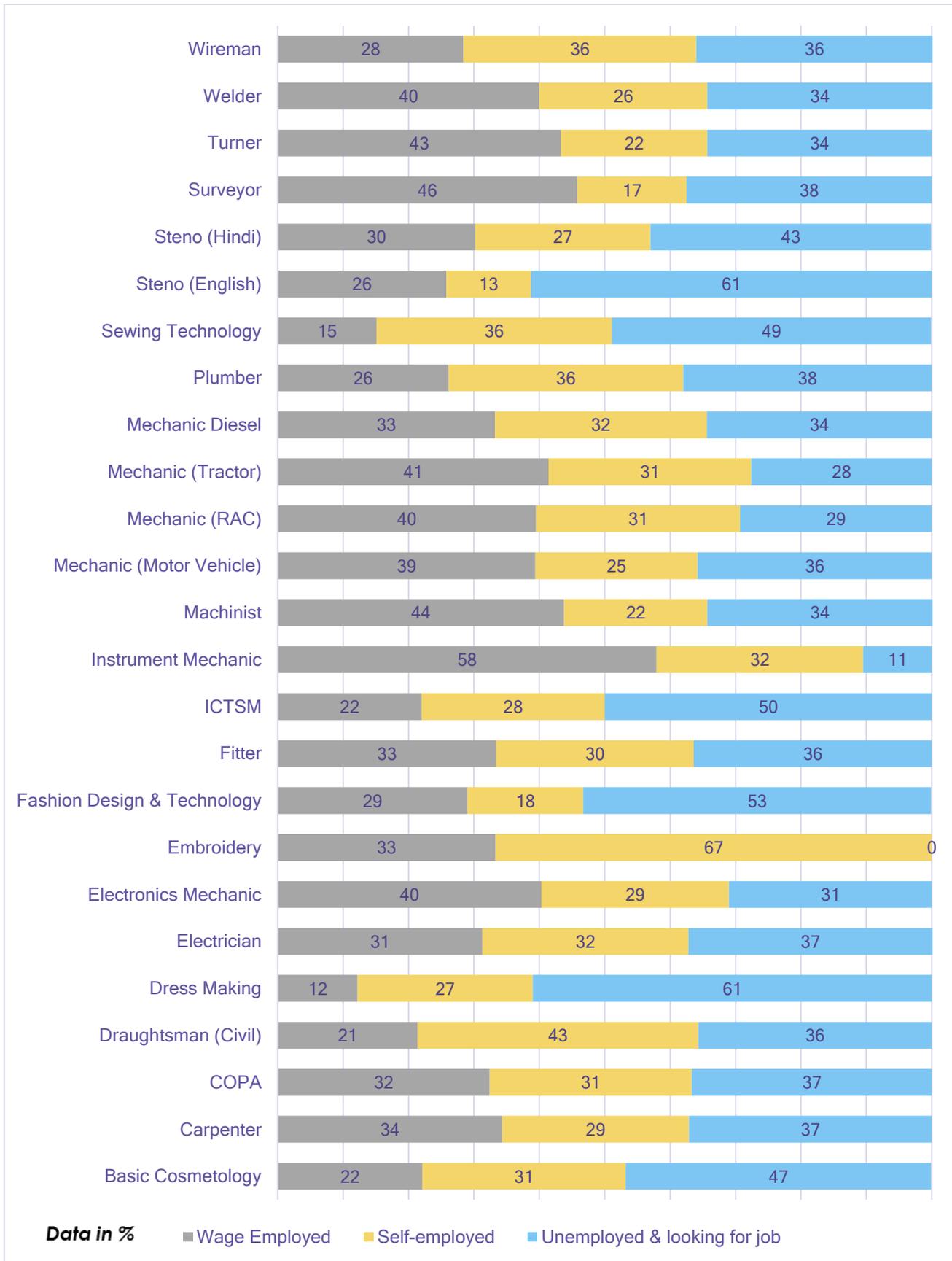
Under the tracer study of ITI graduates in Rajasthan, 9012 graduates were covered, of whom 7690 are at present available in the labour market. Graduates from ITIs who are currently unemployed and looking for jobs in the market were higher in three sectors, namely, Apparel (52%), Beauty & Wellness (47%), and Office Administration & Facility Management (45%).

Wage-employed graduates were more prevalent in Fabrication (40%), Production & Manufacturing (35%), Automobiles (34%), Electrical & Electronics (33%), and IT & ITES (32%). While the construction (34%) and automobile (26%) sectors had a higher proportion of self-employed graduates.



The distribution of employment for the ITI graduates who received training in specific trades is given in the figure below. Wage employment was higher in trades like Instrument Mechanic (58%), Surveyor (46%), Machinist (44%), and Turner (43%). Among self-employed graduates, embroidery graduates (67%) and draughtsman-civil graduates (43%), in particular, showed significant involvement.

Graduates who are currently unemployed and looking for jobs in the market sector were higher in Steno-English (61%), Dress Making (61%), Fashion Design & Technology (53%), and ICTSM (50%) trades.

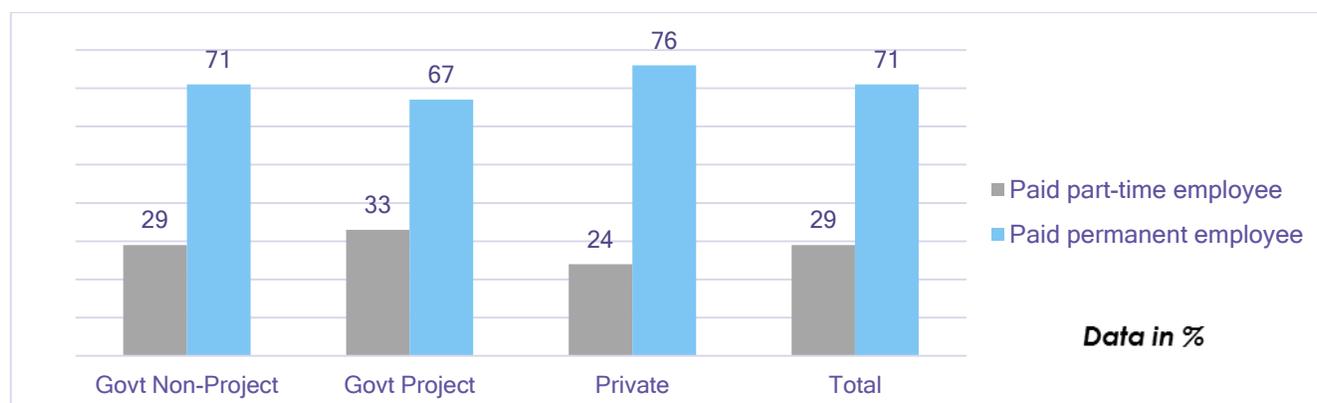


5.3 Distribution of Employed Trainees

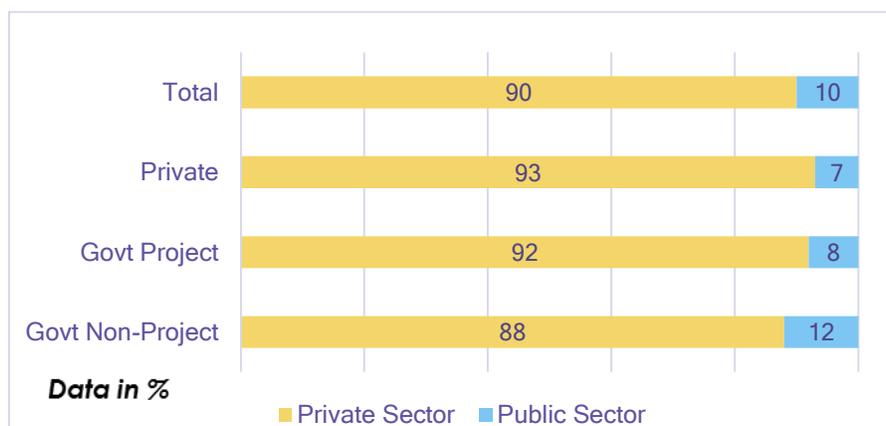
The distribution of employed graduates covered by the tracer study is given in this section.

i. Nature of current employment

According to the figure below, 71% of wage earners are in regular or permanent employment, while 29% are part-time employees. Significantly higher proportions of private ITI graduates (76%) have permanent employment in comparison to non-project (71%) and project (67%) ITIs.



ii. Sector of current employment



An analysis of this figure indicates that as many as 90% of the ITI graduates were employed in the private sector. Also, a slightly higher proportion of trainees who had graduated from non-project ITIs were employed in the government sector.

iii. Size of current workplace

A higher proportion (48%) of graduates were reported to be working in smaller enterprises with 50 employees, followed by 41% working in a company with 51-200 employees. Only 11% of graduates were working in companies with over 200 employees.

Table 23 Size of company where respondent is employed

Type of ITI	5-50 employees		51-200 employees		201- 500 employees		Total
	N	%	N	%	N	%	
Govt Non-Project	779	52	564	37	168	11	1511
Govt Project	234	43	265	49	44	8	543
Private	205	43	210	44	63	13	478
Total	1218	48	1039	41	275	11	2532

iv. Monthly earnings of wage employed

ITI graduates' monthly salary earning INR 10,000 to INR 20,000 was recorded for 56% of graduates, followed by 31% of graduates earning less than INR 10,000. Graduates' monthly salary above INR 20,000 was 13% of respondents', which was higher in project ITIs.

Table 24 Range of monthly salary of employed graduates

Type of ITI	Gender of ITI Graduate	Less than INR 6,000		INR 6,000 to 10,000		INR 10,000 to 15,000		INR 15,000 to 20,000		INR >20,000		Total
		N	%	N	%	N	%	N	%	N	%	
Govt Non-Project	Male	79	6	369	27	512	38	241	18	152	11	1353
	Female	11	7	64	41	58	37	19	12	6	4	158
	Total	90	6	433	29	570	38	260	17	158	10	1511
Govt Project	Male	9	2	66	16	201	48	64	15	82	19	422
	Female	9	7	33	27	58	48	10	8	11	9	121
	Total	18	3	99	18	259	48	74	14	93	17	543
Private	Male	17	4	113	24	190	40	78	17	73	15	471
	Female	-	-	4	57	1	14	1	14	1	14	7
	Total	17	4	117	24	191	40	79	17	74	15	478
Total	Male	105	5	548	24	903	40	383	17	307	14	2246
	Female	20	7	101	35	117	41	30	10	18	6	286
	Total	125	5	649	26	1020	40	413	16	325	13	2532

v. Duration of starting first job after passing out from ITI

An analysis of the information collected from graduates indicates that about 62% of the graduates received jobs within six months of passing out from their respective ITIs.

Table 25 Duration of starting first job after passing out from ITI

Type of ITI	Less than 1 month		1 to 3 months		3 to 6 months		6 to 9 months		9 to 12 months		More than 1 year		Total
	N	%	N	%	N	%	N	%	N	%	N	%	
Govt Non-Project	85	6	370	24	501	33	307	20	118	8	130	9	1511
Govt Project	13	2	148	27	155	29	70	13	80	15	77	14	543
Private	28	6	118	25	156	33	80	17	39	8	57	12	478
Total	126	5	636	25	812	32	457	18	237	9	264	10	2532

The project was implemented with a mandate of improving the labour market outcomes, including reduction of time taken (duration) in getting a first job after completion of their training. A slightly higher proportion of graduates from Project ITIs (14%) received a job after one year of passing out.

vi. Duration of searching first job after passing out from ITI

According to the table below, 64% of graduates looked for work within 6 months of finishing their ITI, 27% within 6-12 months, and 9% within more than a year. A higher proportion of graduates from project

ITIs (44%) searched for a job for more than nine months after passing out from their respective ITI. 33% of graduates from non-project ITIs and 34% of graduates from private ITIs searched for a job for less than three months' duration.

Table 26 Duration of searching first job after passing out from ITI

Type of ITI	Less than 1 month		1 to 3 months		3 to 6 months		6 to 9 months		9 to 12 months		More than 1 year		Total
	N	%	N	%	N	%	N	%	N	%	N	%	
Govt Non-Project	94	6	408	27	502	33	323	21	82	5	102	7	1511
Govt Project	19	3	146	27	161	30	87	16	59	11	71	13	543
Private	34	7	128	27	154	32	87	18	28	6	47	10	478
Total	147	6	682	27	817	32	497	20	169	7	220	9	2532

vii. Source of Information about employment

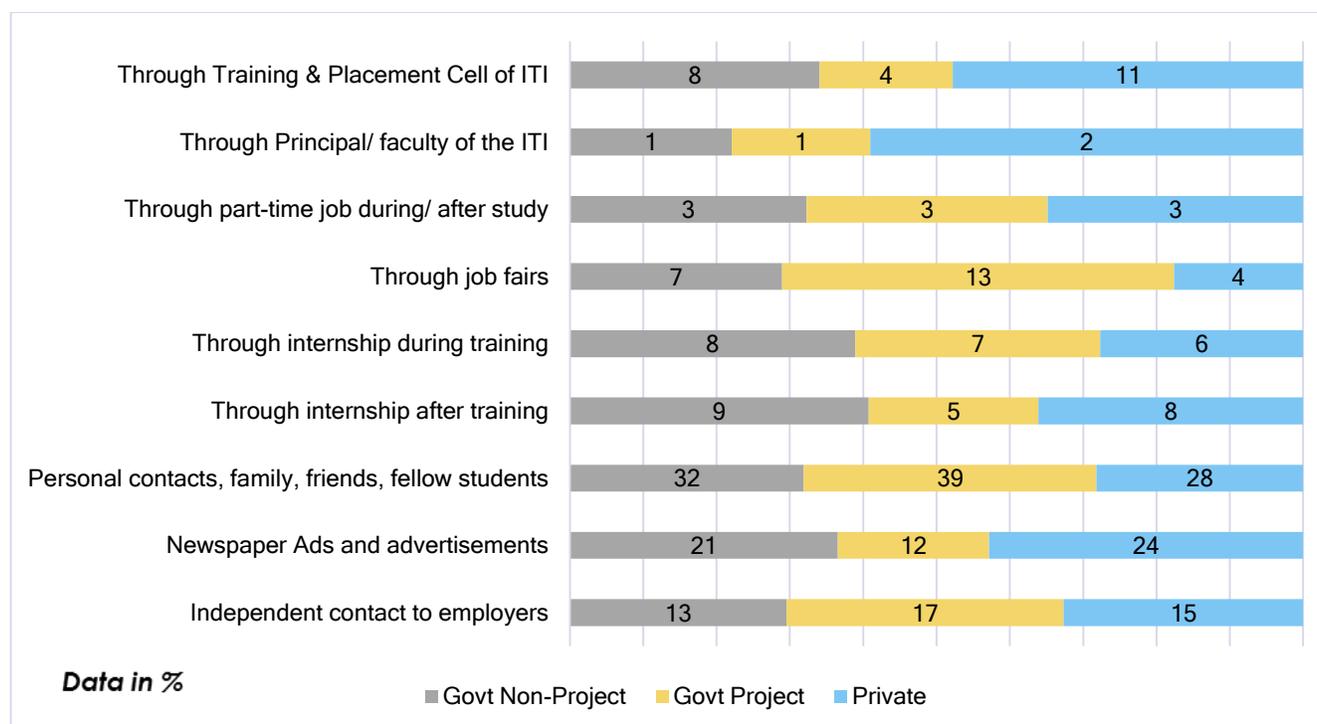
An analysis of the table below indicates that the major source of information (48%) about the employment was with the help of personal contacts, family, friends, and fellow students. Newspaper ads and advertisements used for getting information about employment were used by 28% of graduates from ITIs covered, followed by 12% of graduates who used internships during or after training as their source of information for their employment. Only 2% of ITI graduates received employment information from their ITI principal or faculty and the Training & Placement Cell of their respective ITI.

Table 27 Channels used by ITI graduate for job search (multiple response)

Type of ITI	Govt Non-Project		Govt Project		Private		Total	
	N	%	N	%	N	%	N	%
Personal contacts, family, friends & fellow students	695	46	320	59	201	42	1216	48
Independent contact to employers	60	4	22	4	29	6	111	4
Newspaper Ads and advertisements	423	28	136	25	153	32	712	28
Through internship during/after training	212	14	43	8	48	10	303	12
Through job fairs	30	2	5	1	5	1	40	2
Through part-time job during/after study	30	2	5	1	5	1	40	2
Through Principal/faculty of ITI	30	2	5	1	19	4	55	2
Through Training & Placement Cell of ITI	30	2	5	1	19	4	55	2
Total	1511	-	543	-	478	-	2532	-

viii. Effective channel for procuring employment

Personal contacts with family, friends, and fellow students were suggested as an effective channel for obtaining employment by 33% of ITI graduates, followed by newspaper ads and advertisements (19%) and contacting the employers independently (14%). Only 7% of employed graduates suggested the Training and Placement Cell of ITI as an effective source or channel for procuring employment.



ix. Career progression of employed pass-outs

In order to understand the career progression, the employed graduates were analysed further about their past employment history between the two scenarios: immediately after training completion in ITI and the current scenario.

a) Comparison of Employment Scenario

The results of employability in the current scenario are quite satisfactory, with half of the ITI graduates being employed (wages and self-employment combined). Wage employment (part-time and permanent) and self-employment have shown satisfactory growth among the ITI graduates when comparing their current status with their past employment histories. At least 12% of students who were engaged immediately after the completion of the course are currently unemployed. There is also an absolute decline in apprenticeships and unemployed graduates who are not looking for jobs in the market.

Table 28 Comparison of employment scenario

Monthly Income - Current Employment	Immediately after Course Completion	Currently	Gap Calculated
	(%)	(%)	(+/-)
Advance/Further studies	12.4	12.1	-0.3
Apprenticeship	8.3	0.0	-8.3
Wage Employed- part time	2.8	8.1	5.3
Wage Employed- permanent	8.3	20.0	11.7
Self-Employed	22.6	26.0	3.5
Unemployed & looking for job	26.4	31.2	4.8
Unemployed & not looking for job	19.3	2.6	-16.7

b) Income pattern in Employment

The following table indicates the income distribution for the two scenarios: immediately after training completion in ITI and the current scenario. Most of the income is concentrated below INR 15,000; however, there is an increase in income in the current scenario, which could be seen as an impact of training. The pattern of income for INR 15,000 to 220,000 and above INR 20,000 has increased, as can be seen in this table.

Table 29 Comparison of monthly wage pattern of employed graduates

Monthly Income-Current Employment	Immediately after Course Completion (%)	Currently (%)	Gap Calculated (+/-)
INR 0-6,000	11.1	5.0	-6.1
INR 6,000 to 10,000	31.9	26.0	-5.9
INR 10,000 to 15,000	32.5	40.0	7.5
INR 15,000 to 20,000	13.2	16.0	2.8
INR >20,000	11.4	13.0	1.6

c) Satisfaction with Current Job

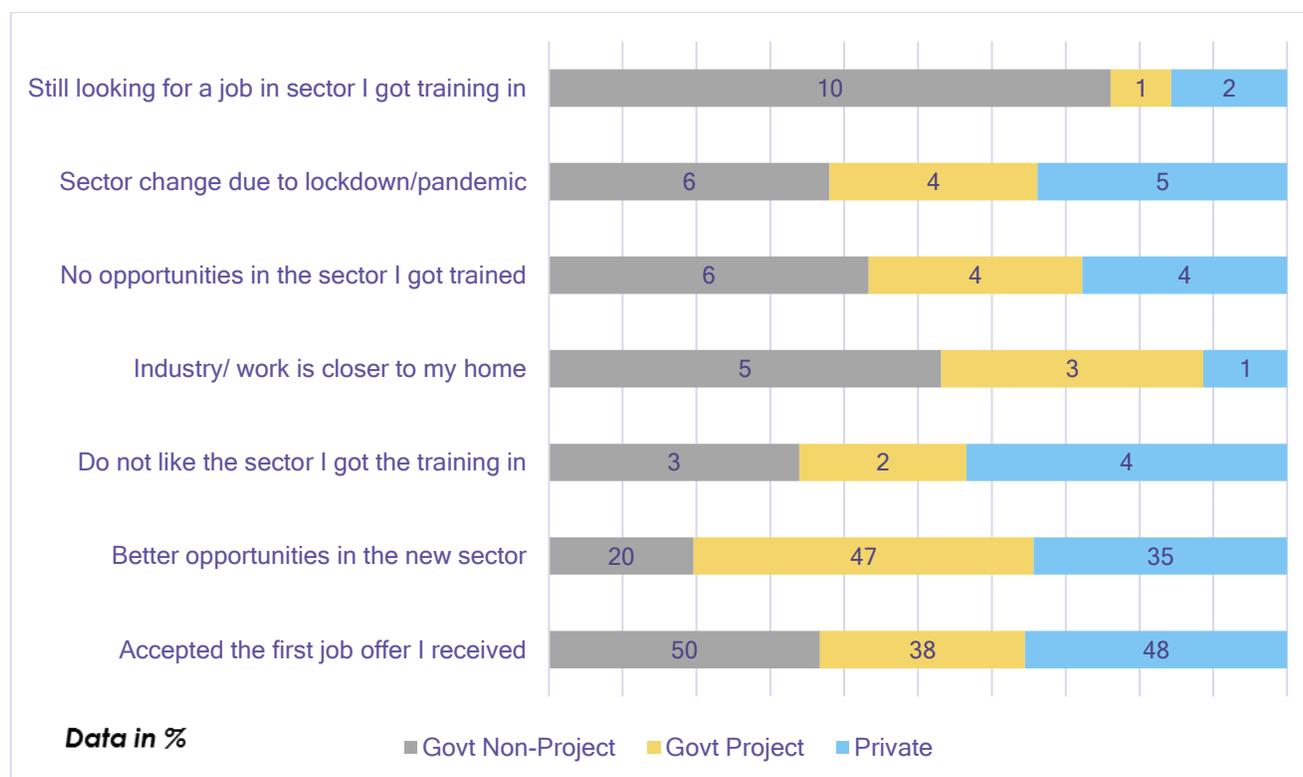
Under the tracer study, 59% of employed respondents covered were satisfied with their current job, followed by 32% of respondents who seemed to be okay with their current job. However, 9% of employed respondents were dissatisfied with their current job for various reasons. Dissatisfaction with the current job was reported lower for the graduates of Project ITIs.

Table 30 Satisfaction of respondent with the current job

Type of ITI	Very Satisfied		Satisfied		Okay		Dissatisfied		Very Dissatisfied		Total
	N	%	N	%	N	%	N	%	N	%	
Govt Non-Project	296	20	727	48	354	23	126	8	8	1	1511
Govt Project	45	8	150	28	319	59	27	5	2	0.4	543
Private	65	14	216	45	143	30	48	10	6	1	478
Total	406	16	1093	43	816	32	201	8	16	1	2532

d) Sector changed during employment

After receiving training from the ITI in a particular sector, 62% of graduates from non-project ITIs changed their sector as per the availability and opportunity of employment. 19.4% of graduates from project ITIs and 18.6% from private ITIs changed their sector based on the reasons listed in the table below. The majority of graduates have changed their sector of employment after accepting the first job offer they received and have also looked for better career opportunities in the new sector. Only 5% of all employed graduates had their sector changed due to a lockdown or pandemic.



Analysis of the table below indicates that lower salary and benefits (62%), and a job role not related to the field of study (32%), were the main reasons for dissatisfaction with the current job for the employed graduates. Only 6% of employed graduates reported that their dissatisfaction with current employment was due to proximity to their residence.

Table 31 Reason for dissatisfaction of respondent with the current job

Type of ITI	Low salary & benefits		Not related to my field of study		Proximity to residence		Total
	N	%	N	%	N	%	
Govt Non-Project	77	57	46	34	11	8	134
Govt Project	19	66	10	34	-	-	29
Private	39	72	13	24	2	4	54
Total	135	62	69	32	13	6	217

5.4 Distribution of Self-Employed Trainees

The distribution of self-employed graduates covered by the tracer study is given in this section.

i. Nature of business of self-employed

Among respondents covered by the self-employment category, 34% established their business after graduation from ITI, and the remaining 66% of graduates engaged in their family business. When comparing ITIs, a slightly higher proportion of trainees who graduated from government project ITIs (39%) than those who graduated from private ITIs (38%), have established their own businesses.

Table 32 Nature of business of self-employed graduates

Type of ITI	Business established by ITI graduate		Family business		Total
	N	%	N	%	
Govt Non-Project	520	32	1109	68	1629
Govt Project	131	39	201	61	332
Private	146	38	238	62	384
Total	797	34	1548	66	2345

ii. Monthly net income of self-employed

Under the self-employed category of ITI graduates, 38% have a monthly net income of INR 10,000-15,000, followed by 35% with INR 6,000-10,000 and 14% with INR 15,000-20,000. Earning less than INR 6,000 from self-employment was recorded for 7% of respondents. Only 6% of them earned more than INR 20,000 per month, a figure that was higher for Project ITI graduates.

Table 33 Range of monthly net income of self-employed respondent

Type of ITI	Less than INR 6,000		INR 6,000 to 10,000		INR 10,000 to 15,000		INR 15,000 to 20,000		INR >20,000		Total
	N	%	N	%	N	%	N	%	N	%	
Govt Non-Project	126	8	586	36	636	39	214	13	67	4	1629
Govt Project	15	5	110	33	134	40	36	11	37	11	332
Private	25	7	128	33	131	34	72	19	28	7	384
Total	166	7	824	35	901	38	322	14	132	6	2345

5.5 Distribution of Unemployed Trainees

The tracer study tried to understand the reason for not taking up jobs in all the respondent categories. An analysis of the information collected in this regard from the graduates of the sampled ITIs under the tracer study is given below:

i. Category of unemployed ITI graduates

Among the unemployed graduates covered by the tracer study, 68% of them are looking for jobs in the market, while the remaining 32% are not currently looking for a job. Unemployed graduates who are looking for a job were observed more in project ITIs.

Table 34 Category of unemployed ITI graduates

Type of ITI	Unemployed & looking for job		Unemployed & not looking for job		Total
	N	%	N	%	
Govt Non-Project	1912	69	860	31	2772
Govt Project	448	78	123	22	571
Private	453	57	339	43	792
Total	2813	68	1322	32	4135

ii. Reasons for unemployment for graduates looking for job

According to a tracer study of 2019 ITI graduates in Rajasthan, graduates were unemployed for a variety of reasons, the most common of which was not being able to find a desired job in the market. Unemployment due to lockdown or pandemic was found to be higher among Project ITI graduates. Various reasons cited by the unemployed graduates covered by the study are given in the figure below:

Table 35 Reasons for unemployment for graduates looking for job

Reasons for unemployment for graduates looking for job	Govt Non-Project		Govt Project		Private		Total	
	N	%	N	%	N	%	N	%
Could not answer properly in interviews	10	1	1	0.2	4	1	15	1
Family concerns	312	16	91	20	57	13	460	16
Health related issues	163	9	28	6	39	9	230	8
Lack of work/experience	201	11	50	11	51	11	302	11
No job opportunity in the region	234	12	45	10	62	14	341	12
Not found a desired job	526	28	107	24	141	31	774	28
Not found a job related to field of study	258	13	47	10	74	16	379	13
Unemployed due to lockdown/pandemic	46	2	47	10	7	2	100	4
Working at home/with family	162	8	32	7	18	4	212	8
Total	1912	-	448	-	453	-	2813	-

iii. Category of unemployed ITI graduates not looking for job

82% of unemployed graduates not looking for job were involved in advanced or further studies, while the remaining 18% have not looked for a job yet.

Table 36 Category of unemployed ITI graduates covered not looking for job

Type of ITI	Advanced or further studies		Did not look for a job yet		Total
	N	%	N	%	
Govt Non-Project	699	81	161	19	860
Govt Project	104	85	19	15	123
Private	287	85	52	15	339
Total	1090	82	232	18	1322

5.6 Status of employment prior to joining ITI

Of the total 9012 trainees covered, only 2.4% were employed and 7.6% were self-employed prior to joining the ITI. The pattern of income above INR 10,000 has increased, as can be seen in this table.

Table 37 Comparison of current monthly income with that prior to joining ITI

Monthly Income	Prior joining ITI (%)	Currently (%)	Gap Calculated (+/-)
INR 0-6,000	19.3	5	-14.3
INR 6,000 to 10,000	44.5	26	-18.5
INR 10,000 to 15,000	34.3	40	5.7
INR 15,000 to 20,000	1.7	16	14.3
INR >20,000	0.2	13	12.8

6. Satisfaction with the ITI training

Similarly to the training courses, the respondents' level of satisfaction with the ITIs was measured using a variety of parameters, like the quality of classroom learning and training experiences in the institute, the quality of the lectures imparted in the institute, the competence and commitment of the trainers, the relevance and usefulness of different types of teaching and learning materials available in the ITIs, and the availability and quality of technical equipment in the institute.

6.1 Quality of training services in ITIs

To gauge the satisfaction level of the graduates with the training courses, their responses were evaluated across a variety of parameters, like the quality of classroom learning, the teaching quality of lectures and labs, and the training hours of theory and practical. The tables below present graduates' perceptions of training quality and ask them to identify areas for improvement.

Of the total sample covered, 72% of graduates were satisfied with the quality of classroom learning at their respective ITIs. More graduates from project ITIs (33%) did not find classroom learning satisfactory.

Table 38 Distribution of respondent on their response on quality of classroom learning

Type of ITI	Average		Good		Satisfactory		Total
	N	%	N	%	N	%	
Govt Non-Project	1640	28	2107	36	2165	37	5912
Govt Project	474	33	454	31	518	36	1446
Private	399	24	698	42	557	34	1654
Total	2513	28	3259	36	3240	36	9012

78% of graduates covered from the sampled 167 ITIs reported the teaching quality of lectures in their respective ITIs as satisfactory. Improvement in teaching quality was indicated by 22% of graduates.

Table 39 Distribution of respondent on their response to teaching quality of lectures

Type of ITI	Average		Good		Satisfactory		Total
	N	%	N	%	N	%	
Govt Non-Project	1311	22	2212	37	2389	40	5912
Govt Project	314	22	512	35	620	43	1446
Private	332	20	668	40	654	40	1654
Total	1957	22	3392	38	3663	40	9012

75% of graduates covered reported that the quality of teaching in labs in their respective ITIs was satisfactory, while the remaining 25% perceived an improvement in lab teaching. In government non-project, government project, and private ITIs, both trends were similar.

Table 40 Distribution of respondent on their response to quality of teaching in lab

Type of ITI	Average		Good		Satisfactory		Total
	N	%	N	%	N	%	
Govt Non-Project	1518	26	2742	46	1652	28	5912
Govt Project	331	23	706	49	409	28	1446
Private	372	22	831	50	451	27	1654
Total	2221	25	4279	47	2512	28	9012

An analysis of 75% of the graduates from 167 ITIs shows that the training hours of theory and practical classes were sufficient and satisfactory based on their trade module. While the remaining 25% of respondents believe that increasing the number of hours of theory and practical classes will help them learn more and receive better training.

Table 41 Distribution of respondent on their response on training hours of theory and practical

Type of ITI	Average		Good		Satisfactory		Total
	N	%	N	%	N	%	
Govt Non-Project	1543	26	2417	41	1952	33	5912
Govt Project	349	24	647	45	450	31	1446
Private	345	21	735	44	574	35	1654
Total	2237	25	3799	42	2976	33	9012

6.2 Availability & quality of equipment in ITIs

The availability and quality of equipment in ITIs are critical to providing technical development for trainees. The availability of good technical equipment in ITIs was reported by 54% of the graduates from private ITIs, 48% from non-project ITIs, and 47% from project ITIs.

Table 42 Distribution of respondent on their response on availability of technical equipment

Type of ITI	Average		Good		Satisfactory		Total
	N	%	N	%	N	%	
Govt Non-Project	1441	24	2860	48	1611	27	5912
Govt Project	327	23	681	47	438	30	1446
Private	325	20	888	54	441	27	1654
Total	2093	23	4429	49	2490	28	9012

70% of the respondents shared that the quality of equipment was satisfactory in their ITIs. While 30% of the respondents think that upgrading the equipment in the ITI may help them learn better.

Table 43 Distribution of respondent on their response on quality of equipment

Type of ITI	Average		Good		Satisfactory		Total
	N	%	N	%	N	%	
Govt Non-Project	1789	30	2259	38	1864	32	5912
Govt Project	461	32	504	35	481	33	1446
Private	425	26	719	43	510	31	1654
Total	2675	30	3482	38	2855	32	9012

6.3 Trade content in relation to industry requirements

Under this tracer study, 77% of the respondents covered were satisfied with the trade content in relation to the industry requirements. The quality of training delivery in terms of practical and industry requirements was a major concern for 23% of graduates of non-project, project, and private ITIs, and its impact on labour market performance is quite visible.

Table 44 Trade/Course content is up to date with regards to practical/ industry requirements

Type of ITI	Average		Good		Satisfactory		Total
	N	%	N	%	N	%	
Govt Non-Project	1398	24	2216	37	2298	39	5912
Govt Project	349	24	545	38	552	38	1446
Private	315	19	716	43	623	38	1654
Total	2062	23	3477	38.5	3473	38.5	9012

6.4 Scope of employment for the trade in ITIs

76% of respondents from non-project, project, and private ITIs agreed to the scope of employment for their respective trades. While the remaining 24% of respondents did not find their trade within the scope of employment. To overcome this, it is suggested that the government should plan out proper guidelines for directing the public-sector undertakings to provide employment opportunities to ITI graduates.

Table 45 Distribution of respondent on their response on scope of employment for the trade

Type of ITI	Average		Good		Satisfactory		Total
	N	%	N	%	N	%	
Govt Non-Project	1494	25	2327	39	2091	35	5912
Govt Project	348	24	585	40	513	35	1446
Private	328	20	757	46	569	34	1654
Total	2170	24	3669	41	3173	35	9012

6.5 Areas of improvement suggested by ITI graduates

Various improvement measures suggested by ITI graduates covered are given in the table below:

Table 46 Distribution areas of improvement suggested by ITI graduates

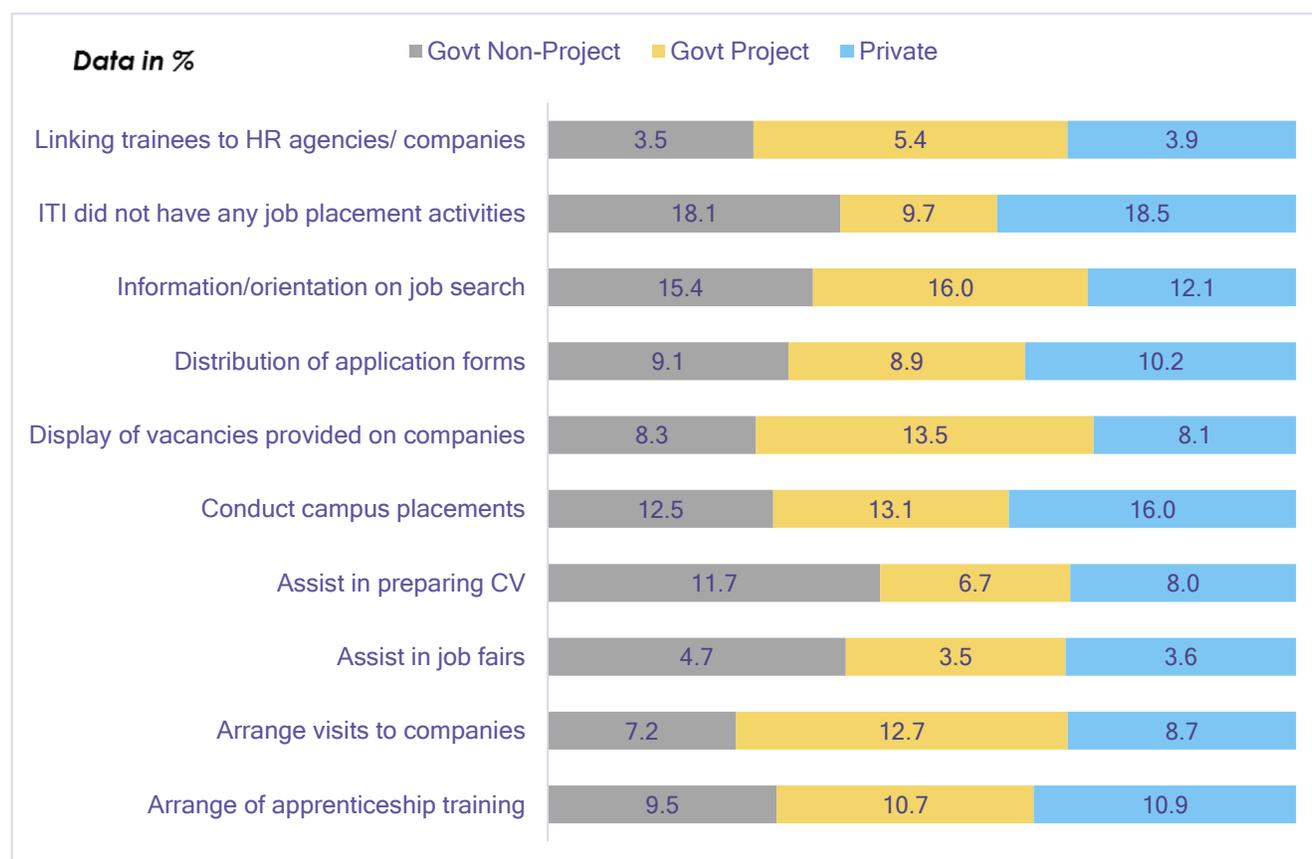
Graduates suggestions to improve the quality of the training program	Govt Non-Project		Govt Project		Private		Total
	N	%	N	%	N	%	
Arrangement of internship by ITI	63	3	16	5	13	3	92
Display of vacancies in ITI	653	32	45	13	178	38	876
Improvement in practical classes	722	36	139	40	154	33	1015
Increase in hours of training classes	23	1	17	5	9	2	49
Increase in number of teachers in ITI	45	2	11	3	1	0.2	57
Availability of permanent job in the sector	412	20	85	25	88	19	585
Teaching quality should be improved	112	6	33	10	27	6	172
Total	2030	-	346	-	470	-	2846

A higher number of ITI graduates (36%) have suggested the improvement of practical classes in ITIs, followed by 32% of graduates for the display of vacancies in ITIs and 20% for the availability of permanent jobs in their respective sectors. Only 6% have suggested improvements in teaching quality in ITIs, while another 3% have demanded the arrangement of internship training from the ITIs.

6.6 Job placement activities conducted in ITIs

One of the key interventions of the project was to play an important role in the quality training, availability of technical equipment, and labour market consequences as it prepared the trainees with various talents that are desirable for placement, such as developing personalities, organising interviews, preparing trainees to face competitive tests, facilitating the preparation of their CVs, etc. Also, it helps in finding professional prospects for the trainees.

The analysis of job placement activities conducted in sampled ITIs in Rajasthan was also analysed as a key parameter of the tracer study. 18.5% of graduates from private ITIs and 18.1% of graduates from non-project ITIs shared that their ITI didn't have any job placement activities. Various job linkage activities, such as arranging company visits, posting vacancies on company websites, providing information or orientation on job search, and connecting trainees to HR agencies or companies were more common in project ITIs. An analysis of various job placement activities conducted in ITIs as responded to by 2019 passout trainees is given below.



7. Way Forward and Recommendations

This chapter highlights the key strengths of the tracer study of the ITI graduates under the STRIVE project. The conclusions are based on the objectives that were set for the tracer study, which was to understand the employability scenario of the trainees from ITIs who successfully completed the CTS program and hold the National Trade Certificate so that feedback for improvements in Technical and Vocational Education and Training (TVET) can be provided.

7.1 Key strengths of the STRIVE ITIs

- ❖ Increased enrollment of female graduates from STRIVE ITIs was recorded as compared to government non-project and private ITIs. The proportion of females enrolling in STRIVE ITIs in both engineering and non-engineering trades has been increasing.
- ❖ Under the wage employment category, graduates from STRIVE ITIs have more employment on the market. Also, the range of monthly salaries was higher for these graduates.
- ❖ The trainees who have been employed after receiving training from STRIVE ITIs reported a high degree of satisfaction with their current job and the training courses offered in the ITI program.
- ❖ A higher proportion of STRIVE ITIs have established their businesses, and their range of monthly net income has been higher than that of non-project and private ITIs.
- ❖ Graduates of STRIVE ITIs received longer-term apprenticeship training. In addition, a high percentage of apprentices were placed in the same company.
- ❖ On-the-job training (OJT), internships, and industrial training received during the course were higher in STRIVE ITIs as compared with non-project and private ITIs.
- ❖ Various job linkage activities, such as arranging company visits, posting vacancies on company websites, providing information or orientation on job search, and connecting trainees to HR agencies or companies were more common in project ITIs.

7.2 Recommendations and Way Forward

This section includes the recommendations arising from the interactions with the respondents covered by this tracer study. They may serve as potential indicators against which future training courses may be modified accordingly.

i. Courses in ITIs

- ❖ Only 15% female and 6.6% minority graduates were covered under this study based on the proportion of their enrollment in ITI trades. The enrolment of female trainees in the ITIs can be increased by introducing specific technical arenas for women-dominated sectors.
- ❖ In-demand labor-market skills, such as service provider jobs, can be emphasised by increasing enrollment capacity for such courses, making them more accessible to larger number of trainees.
- ❖ Registration capacity for in-demand trades for prospective male and female trainees can be increased and supported through more hands-on sessions to improve accessibility.
- ❖ Trainee satisfaction levels are relatively low compared to ITI training; in order to overcome this, the enhancement of ITI could make a difference in trainee perception and experience.

ii. Development of practical knowledge and personality skills

- ❖ Apprenticeships and/or on-the-job training should be encouraged to enhance the practical skills of students and provide them with market visibility.
- ❖ Apprenticeships and internships can be arranged for students who cannot find jobs through ITI placement activities. This would help ensure their time is spent wisely and prevent a gap in their curriculum vitae by engaging in skill development.
- ❖ There is a need to mainstream TVET offerings into broader skills and employment trends. Annual District Skill Plans could be developed taking into account industry trends; it will be extremely advantageous for ITI courses to be aligned with annual skill plans.

iii. Process during the placement support

- ❖ The placement cell of the ITIs can be made more proactive by organising career fairs, orientation meetings, and internship fairs so that the trainees have access to a wide variety of options.
- ❖ Memorandums of Understanding (MOUs) with corporate agencies or non-governmental organisations to place more trainees, either as apprentices or employees, after their training at ITIs, ensuring large recruitment.

iv. Process for post-placement support

- ❖ For trainees who have graduated, refresher or capacity-building training or career guidance sessions could be scheduled on a regular basis to help them move forward in their careers.
- ❖ It is important to investigate the reasons for employed trainees' lower job satisfaction levels and encourage them to enhance overall working conditions by engaging in conversation with both employers and employees.

7.3 Coverage of Apprenticeship Training

The study indicates that very few graduates (6.3%) have undergone apprenticeship training as it is currently not available in the government sector. Hence, it is suggested that the government should plan out proper guidelines for directing the public-sector undertakings to appoint or provide employment and apprenticeship training opportunities to ITI graduates.

Measures must be taken to ensure the incorporation of apprenticeships in the training curriculum, which could also be extended to include hands-on workshops, interactive sessions with prominent stakeholders from their respective sectors, etc. ITI assistance in undertaking apprenticeship training could be developed for trainees to improve their participation level, and the range of the stipend should be increased so that they could meet their basic requirements.

7.4 Training, Counselling and Placement Cell

The TCPC cell is crucial in improving labour market performance; however, only 2% of the graduates were employed with the support of the TCPC of their ITIs. Hence, there is a huge gap in this service, and regular monitoring of TCPC should be done from zonal offices. The study recommends that effective TCPC cells within each ITI could be backed by the TCPC cells of nodal ITIs in their respective clusters.

7.5 Labour Market Outcomes

The current employment status indicates 63% wage or self-employment in CTS. Furthermore, a significant proportion of women passouts are unable to enter the labour force for a variety of personal reasons. The above data is not very good considering the social strata to which the ITI graduates belong. It was also seen that a few ITIs are doing well, and their performance on the labour market is also good.

Graduates from ITIs who are currently unemployed and looking for jobs in the market were higher in three sectors, namely, Apparel (52%), Beauty & Wellness (47%), and Office Administration & Facility Management (45%). Hence, it is suggested that the Ministry come up with a comprehensive plan and reinforce project guidelines through a consultative cluster approach.

7.6 Quality of Training Delivery

The quality of training delivery is a major concern, as indicated by the graduates, and its adverse impact is quite visible on labour market performance. To address issues related to training quality and delivery, it is suggested that ITI projects be implemented in a clustered approach with full support from the nodal ITI. A close monitoring system is also essential to ensure quality delivery. Other issues like low compensation, systematic planning of course delivery, and the adoption of recent training methods and equipment could also be adequately addressed through proper monitoring by the nodal ITIs.

Annexure

Additional Tables

Table 47 Respondent trade distribution based on district location

District in ITI located	CTS trade of ITI graduate																								Total	
	Basic Cosmetology	Carpenter	COPA	Draughtsman (Civil)	Dress Making	Electrician	Electronics Mechanic	Embroidery	Fashion Design & Technology	Fitter	ICTSM	Instrument Mechanic	Machinist	Mechanic (Motor Vehicle)	Mechanic (RAC)	Mechanic (Tractor)	Mechanic Diesel	Plumber	Sewing Technology	Steno (English)	Steno (Hindi)	Surveyor	Turner	Welder		Wireman
Ajmer	10	-	69	3	-	71	45	-	15	93	6	10	-	-	-	-	87	9	-	10	-	-	-	36	10	474
Alwar	27	6	51	-	13	95	51	-	20	101	-	-	8	35	-	-	9	6	-	17	17	-	15	103	9	583
Banswara	-	-	30	2	-	77	4	-	-	15	-	-	-	3	9	-	19	5	2	-	8	-	-	2	31	207
Baran	-	-	45	-	-	40	-	-	-	32	-	-	-	-	-	-	42	5	2	-	-	-	-	14	-	180
Barmer	-	-	25	-	-	117	15	-	-	63	-	-	-	-	-	-	42	-	6	-	-	-	-	-	10	278
Bharatpur	-	-	21	-	-	126	23	-	-	55	-	-	-	7	10	14	49	4	11	-	15	-	5	33	3	376
Bhilwara	-	-	5	-	-	40	41	-	-	27	-	-	-	-	-	10	76	13	6	-	-	-	11	22	25	276
Bikaner	17	-	63	20	-	85	-	-	-	33	-	-	-	5	-	-	15	-	-	-	8	-	-	4	-	250
Bundi	-	-	16	-	-	31	-	-	-	44	19	-	-	-	-	-	50	9	-	-	-	-	-	40	3	212
Chittorgarh	-	-	30	-	-	71	11	-	-	45	3	-	-	4	14	-	68	18	-	-	-	-	-	14	-	278
Churu	-	-	13	-	-	49	-	-	-	13	-	-	-	-	-	-	78	8	-	-	-	-	7	22	11	201
Dausa	-	-	19	-	-	44	-	-	-	-	-	-	-	-	-	-	28	-	-	-	-	-	-	-	-	91
Dhaulpur	-	-	-	-	-	53	37	-	-	22	-	-	-	-	-	-	15	-	-	-	-	14	-	18	2	161
Dungarpur	-	-	35	-	-	19	-	-	-	20	-	-	-	8	-	-	22	9	34	-	30	-	-	1	23	201
Hanumangarh	14	-	53	-	-	109	-	-	-	26	-	-	-	-	7	18	16	-	-	-	-	-	-	3	-	246

District in ITI located	CTS trade of ITI graduate																									
	Basic Cosmetology	Carpenter	COPA	Draughtsman (Civil)	Dress Making	Electrician	Electronics Mechanic	Embroidery	Fashion Design & Technology	Fitter	ICTSM	Instrument Mechanic	Machinist	Mechanic (Motor Vehicle)	Mechanic (RAC)	Mechanic (Tractor)	Mechanic Diesel	Plumber	Sewing Technology	Steno (English)	Steno (Hindi)	Surveyor	Turner	Welder	Wireman	Total
Jaipur	7	22	176	-	17	199	18	-	-	80	5	-	7	12	46	31	110	-	7	10	51	18	9	52	7	884
Jaisalmer	-	-	62	-	-	24	-	-	-	-	-	-	-	14	11	-	13	-	-	-	-	-	-	6	-	130
Jalore	-	-	10	-	-	28	-	-	-	12	-	-	-	-	-	-	29	-	-	-	-	-	-	-	-	79
Jhalawar	-	-	60	-	-	32	6	-	-	12	-	-	-	5	-	-	25	17	-	-	-	-	-	20	-	177
Jhunjhunu	-	-	61	-	-	91	21	-	-	59	-	-	-	-	41	-	62	5	-	9	11	-	10	28	-	398
Jodhpur	23	7	74	-	16	99	-	-	31	33	10	-	13	12	27	-	134	5	6	4	41	-	7	10	19	571
Karauli	-	-	37	-	-	58	23	-	-	6	-	-	-	-	-	-	-	-	4	-	-	-	-	20	-	148
Kota	13	-	113	-	-	99	-	3	-	50	6	6	2	12	-	14	49	5	9	1	20	-	5	72	13	492
Nagaur	-	-	26	2	-	54	9	-	-	17	-	5	-	16	12	-	49	-	-	-	7	-	-	-	-	197
Pali	-	-	83	-	-	55	7	-	-	15	-	-	-	-	18	-	66	-	-	-	-	-	9	11	20	284
Pratapgarh	-	-	-	-	-	53	-	-	-	7	-	-	-	12	-	-	32	-	-	-	-	-	-	-	5	109
Rajsamand	-	-	68	-	-	67	12	-	-	33	-	-	-	-	2	-	12	-	-	-	-	-	-	8	-	202
Sawai Madhopur	-	-	-	-	-	24	-	-	-	-	-	-	-	-	32	-	76	15	-	-	24	-	-	11	-	182
Sikar	-	-	32	12	-	40	20	-	-	29	-	-	-	14	1	-	15	15	-	-	-	-	11	52	13	254
Sirohi	-	-	36	-	-	20	9	-	-	18	-	-	-	-	-	-	54	-	-	-	11	-	-	8	20	176
Sri Ganganagar	11	-	47	4	-	34	7	-	-	20	-	-	-	-	11	23	54	14	3	-	17	-	-	17	-	262
Tonk	-	-	11	1	-	20	-	-	-	23	-	-	-	-	-	6	33	-	-	-	-	-	-	16	-	110
Udaipur	9	4	108	-	-	44	-	-	1	5	56	-	9	6	-	-	71	-	5	-	-	-	-	20	5	343
Total	131	39	1479	44	46	2068	359	3	67	1008	105	21	39	165	241	116	1500	162	95	51	260	32	89	663	229	9012

Case Studies of ITI Graduates

Case Study 1: Business established by ITI graduate from ST category

A welder trade graduate from Karauli district, Jai Prakash Meena, from a ST background, established his own business after graduating from ITI. Being from the BPL category with a lower monthly household income, he joined ITI to develop his technical skills and uplift himself and his family to gain a better monthly income. Currently, he's earning more than INR 20,000 monthly from his business established under the "fabrication" sector.

Case Study 2: Business established by ITI graduate from ST category

Anil Kumar, from Sikar district, belongs to an ST and BPL category family. His family has faced economic hardship due to lower household monthly income. After graduating from ITI in the electrician trade, he underwent apprenticeship training for 6 months and searched for a job for more than 6 months. At last, he decided to utilise his skills gained from ITI and apprenticeship training to establish his own business in the electrical and electronics sector. At present, through his shop, he's earning above INR 20,000.

Case Study 3: Business established by Minority ITI graduate

Firoz Shah, a COPA trade graduate from Kota, passed ITI in 2019. The main reason behind his enrollment in ITI was to develop his IT skills and undergo technical competency training in the current scenario. A minority graduate established his own business after searching for a job for almost six months. He started his own shop in town, which struggled for 3–4 months in the beginning. As of now, he's satisfied with his business and is earning more than INR 20,000 from his self-employment business.

Case Study 4: Permanent wage employed Minority graduates

Naved Akhtar from Bikaner and Mohammad Asif from Bharatpur graduated from their respective ITIs in fitter and electronics mechanic trades, respectively. Before enrolling in ITI, their family had a lower household income; due to this, they joined ITI for the low or no course fee. Both belonging to the BPL and minority categories have started jobs in the three months after graduating from ITI. Currently, they are earning a monthly salary of more than INR 20,000 and are able to fulfil their living needs.

Case Study 5: Permanent wage employed Minority graduate

A COPA graduate from Jhunjhunu district, Sharyar Khan, from the minority category, joined ITI to develop his technical and IT skills. He underwent apprenticeship training for 6 months in the IT industry and received a job offer during internship training. He started working in an IT & ITeS firm within a month of receiving a job offer and is now earning more than INR 20,000 per month.

Case Study 6: Permanent wage employed female graduate from SC category

Renu Kumari, an ITI graduate from Jhunjhunu district, completed the COPA trade at her ITI. She belongs to SC, has a lower monthly household income, and joined ITI to get enrolled in a permanent job. After graduating from ITI, she got a job in the IT & ITeS department of a good firm within 3 months of graduating from ITI. She shared receiving support from the principal and faculty of the ITI in getting this first job. Currently, she's working in a company with 5 employees and a monthly salary of INR 20,000.

Case Study 7: Dissatisfaction by permanent wage employed ITI graduate

From Baran district, ITI Fitter trade graduate Naveen Yadav joined ITI due to low course fees. After completing the ITI course, he tried for almost a year to get a permanent job. After a year, he got a job in the production and manufacturing sector through the Training & Placement Cell of ITI. Currently, he's not satisfied with his job and salary of INR 9,000, citing the reasons of a lower salary and fewer benefits.

Case Study 8: Dissatisfaction by permanent wage employed ITI graduate

Ashok Mehra from Jaipur district joined ITI training to gain technical training through the fitter trade. After waiting for more than a year, he got a job offer from a company in the production and manufacturing sector. At present, he's getting a monthly salary of INR 10,000 and is very dissatisfied with his job due to the low salary and benefits. He shared that there are very few opportunities in the sector he trained.

Case Study 9: Permanent wage employed graduate from ST category

Hukam Chand Meena was interested in technical training and joined ITI for Mechanic Diesel trade. Belonging to the ST category, his monthly income was under INR 12,000. He received apprenticeship training for a duration of 8 months with a monthly stipend of INR 8,000 and got placed in the same company where apprenticeship training was received. At present, he's working as a permanent wage employee with a monthly salary of INR 20,000 in the automobile sector. He's satisfied with the ITI training and his employment, since he received a job offer in less than 1 month after graduating from the ITI.

Case Study 10: Higher participation of part-time employees among Minority graduates

From the wage-employed minority category of ITI graduates, more (35.7%) are involved in part-time employment. There is a need to develop a strategy among minority ITIs to improve job planning for minority graduates through job orientation, support in job search, and the availability of permanent jobs in their sectors of training.

Best Practices under Tracer Study

Success Story 1: Increased enrollment of female graduates from STRIVE ITIs

Increased enrollment of female graduates from STRIVE ITIs was recorded as compared to government non-project and private ITIs. The proportion of females enrolling in STRIVE ITIs in both engineering and non-engineering trades has been increasing.

Success Story 2: Increased employment of graduates from STRIVE ITIs

Under the wage employment category, graduates from STRIVE ITIs have more employment on the market. Also, the range of monthly salaries was higher for these graduates. The trainees who have been employed after receiving training from STRIVE ITIs reported a high degree of satisfaction with their current job. A higher proportion of STRIVE ITIs have established their businesses, and their range of monthly net income has been higher than that of non-project and private ITIs. Dissatisfaction with the current job was reported lower for the graduates of Project ITIs.

Success Story 3: Quality of training services in ITIs

To gauge the satisfaction level of the graduates with the training courses, their responses were evaluated across a variety of parameters, like the quality of classroom learning, the teaching quality of lectures and labs, and the training hours of theory and practical. Over 70% of total graduates covered under this tracer study were satisfied with the quality of classroom learning, lectures, and lab teaching at their respective ITIs. Overall, 75% of graduates have reported the availability of technical equipment and satisfactory quality of equipment in the ITIs where they have received training.

Success Story 4: Various job linkage activities by STRIVE ITIs

Various job linkage activities, such as arranging company visits, posting vacancies on company websites, providing information or orientation on job search, and connecting trainees to HR agencies or companies were more common in project ITIs.

Success Story 5: Profiling of ITI graduates

Taking into account the project requirement of covering an equal ratio of rural and urban graduates, 49% of respondents were from rural areas, while 51% were from urban areas covered by the study. Under this tracer study, a higher (82.5%) proportion of respondents were found in the age group of 19–25 years, which is a critical age to learn and develop technical skills.