

# Mid-term Progress Review of Centrally Sponsored Scheme “Upgradation of Existing Government Industrial Training Institutes into Model ITIs”

*Submitted to*  
**Ministry of Skill Development and Entrepreneurship**

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# **Mid-term Progress Review of Centrally Sponsored Scheme “Upgradation of Existing Government Industrial Training Institutes into Model ITIs”**

*Submitted to*  
**Ministry of Skill Development and Entrepreneurship**

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**National Council of Applied Economic Research  
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## Executive Summary

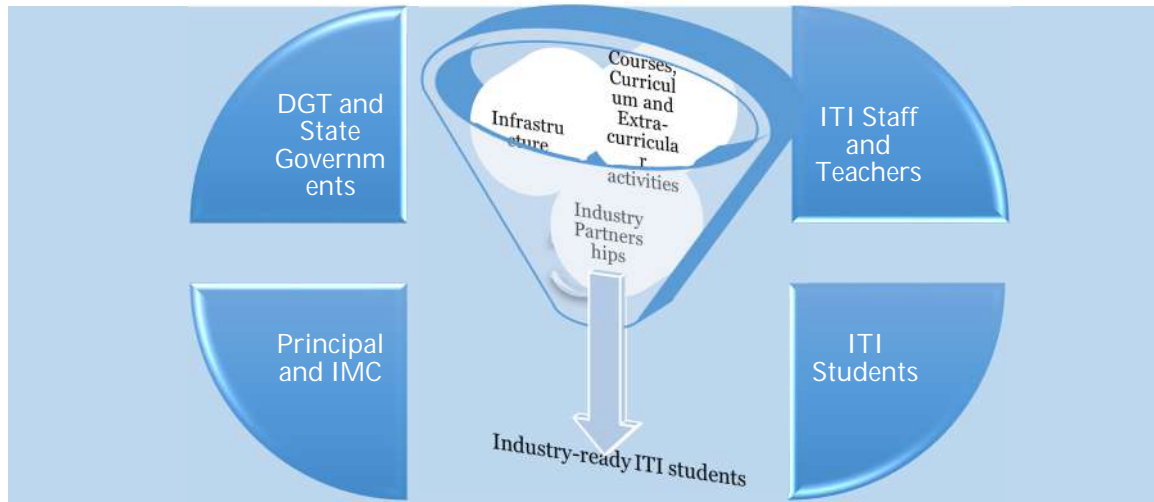
The broad objective of the scheme is to develop a benchmark for an industry oriented Industrial Training Institute (ITI) in a state. The objective of the report is to undertake a mid-term evaluation of the Model ITI scheme for the period 2014–15 to 2017–18. The framework of assessment includes three key parameters including policy readiness and progress. Policy readiness is assessed using the modalities of the scheme i.e. geographical proximity to industrial cluster, whether agreements are in place and funds have been released to the ITI, memorandum of agreement signed with other industry partners and training, counselling and placement cell have been put in place. The progress is assessed using three sub-components of financial, physical and academic progress. Financial progress assesses whether funds have flowed from the Centre to the ITIs. Physical progress assesses whether infrastructure development activities have been carried out in the ITIs as planned or stated in their implementation plans. Academic progress assesses whether course and curriculums have been upgraded, placements improvements as per ITI's own implementation plans and benchmarks set the Directorate General of Training (DGT).

The key results are that 95.2 per cent of the Model ITIs are located near an industrial cluster or area; 100 per cent of them have registered their Institute Management Committees (IMCs) as Societies, 66.7 per cent of have the tripartite Memorandum of Agreement (MoA) in place and 81 per cent have received funds either fully or partially. Majority (95.2 per cent) of the ITIs have formed industrial partnerships and have functioning Training Counselling and Placement Centres (TCPC).

At the current juncture of the scheme, 50 per cent of the total funds should have flowed to the Model ITIs. If one uses that as a benchmark, only nine ITIs out of 21 (42.9 per cent) have received that 50 per cent or more of total (Centre plus state) funds allocated. Only four ITIs have used more than 50 per cent of the funds received as on December, 2017. A larger share of the funds utilised so far had been devoted to civil works (57.9 per cent) and equipment purchase (31.3 per cent). An examination of the civil works reveal that majority of the ITIs have stayed within their estimated costs so far and have started work on areas marked in their Implementation Plans. Academic progress has been assessed for hiring of teachers, course curriculum and placements by comparing the data provided for the baseline years and latest available data in 2017. The analysis of trades show that the ITIs are currently undergoing change as new job-oriented trades are introduced with the help of new industry partners and old trades are retired. Further, the ITIs are hiring a higher share of trained contractual teachers. Seat utilisation and pass-out rates also showed improvement in majority of the ITIs. However, the final outcome of placements and improvement in average wage rates are not systematically provided by the ITIs making it challenging to monitor and evaluate the scheme on these key performance indicators.

The policy recommendations are structured around the four key stakeholders including DGT and State Government, Principal & Institute Management Committee, ITI staff and teachers and ITI students. All four of them have to work together on provision of physical infrastructure, courses, curriculum and extra-curricular activities and form industry partnerships. The industry partners need to work with the Principal, teachers and students such that all stakeholders can benefit in terms of teacher training, placements, knowledge of latest equipment etc. The DGT on its part needs to develop more scientific methods of monitoring and evaluation, hand-hold ITIs into improving their quality by offering training and development, and better match trades being offered in the ITIs with regional industrial demand for those workers. The State Governments need to work in tandem with the Central Government and ITIs to facilitate transfer of money to ITIs in a seamless manner. This also signals to industry partners about improvements in the "ease of doing business" in the respective states.

**Figure 1: Schematic Policy Recommendation for the Model ITI Scheme with Key Stakeholders and Ingredients needed to make industry-ready ITI Students**



**Source:** NCAER Conceptualisation.

## Chapter 1: Introduction

*The broad objective of the scheme is to develop a benchmark for an industry oriented ITI in a state. The objective of the report is to undertake a mid-term evaluation of the Model ITI scheme for the period 2014–15 to 2017–18. The framework of assessment includes three key parameters including policy readiness and progress. Policy readiness is assessed using the modalities of the scheme i.e. geographical proximity to industrial cluster, whether agreements are in place and funds have been released to the ITI, memorandum of agreement signed with other industry partners and training, counselling and placement cell have been put in place. The progress is assessed using three sub-components of financial, physical and academic. Financial progress assesses whether funds have flowed from the Centre to the ITIs. Physical progress assesses whether infrastructure development activities have been carried out in the ITIs as planned or stated in their implementation plans. Academic progress assesses whether course and curriculums have been upgraded, placements improvements as per ITI's own implementation plans and benchmarks set the DGT. Broadly the results indicate that the policy parameters are only now firming up. Financial progress is slow which then holds up progress on infrastructure and academic fronts. However, wherever funds have flowed in, the impact is substantial. This is based on the field visits to two ITIs. The main challenge in the scheme is to smoothen the flow of funds from the Centre to the ITI.*

### 1.1 Background

The Industrial Training Institutes (ITIs) have formed the backbone of vocational education and training (VET) in India since the 1950. It is through this primary channel that India's oldest VET program, the Craftsmen Training Scheme (CTS) has been getting implemented (Appendix A1.1). VET is a concurrent subject between the Central and State/UT Governments with the CTS scheme and ITIs being run by both with the former giving strategic direction and the latter looking after the day-to-day operations<sup>1</sup>. Fifty years later translated into more seats in ITIs but neither did aspirations (demand) for VET (produced via ITIs) pick up nor the quality of VET produced by the ITIs.

The ITIs had remained in a state of veritable neglect till the Eleventh Five Year Plan or EFYP (2007–2012), which brought renewed attention to it. The budget estimates of the Directorate General of Training (DGT)<sup>2</sup> went up by 85 per cent between 2007 and 2011 in nominal terms<sup>3</sup>. There were three major schemes during this period- upgradation of Government ITIs into Centres of Excellence, Vocational Training Improvement Project for 100 ITIs and Upgradation of 1,396 ITIs<sup>4</sup> through Public Private Partnerships (PPPs). At the end of those five years, VET acquired through ITIs still had not shown any visible improvement. Only three percent of the population with ages 15 and above had received or were receiving

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<sup>1</sup> Appendix A1.1 delineates the functions of the Central and state governments in detail.

<sup>2</sup> During this period, the DGT was under the Ministry of Labour and Employment and was known as Directorate General of Employment and Training.

<sup>3</sup> Rao, K.S., Sahoo, B.K., D. Ghosh. 2014. "The Indian Vocational Education and Training System: An Overview". In S. Mehrotra (ed.) (2014). India's Skill Challenge: Reforming Vocational Education and Training to Harness the Demographic Dividend. Oxford University Press, New Delhi, India.

<sup>4</sup> Ibid.

formal vocational education in 2011–12<sup>5,6</sup>. The Twelfth Five Year Plan or TFYP (2012–2017) continued to focus on revamping and scaling up VET in India.

The number of ITIs have showed a compound annual growth (CAGR) of 9.6 per cent, growing from 60 in 1956 to 13,350 in 2016 (Appendix A1.1). And 16.1 per cent of the ITIs are Government ones (Appendix A1.1). Seating capacity was 28.5 lakh in December 2016 but typically the seats are underutilised. Further, quality issues continued to plague the vocational education provided by the ITIs – shortage of teachers, inadequately trained teachers with poor pedagogical skills and varying levels of motivation, old workshop machinery, lack of industrial partnerships, low placements, little training in soft skills, high drop-out rates, low female participation, etc.<sup>7</sup>. Majority of ITI enrolments tended to be have completed secondary education<sup>8</sup>. Overall, the outcome was that skill gaps continued to persist at both intensive and extensive margins – (i) shortage of persons trained in the particular trade and (ii) the available persons do not possess the skills required by the industry<sup>9</sup>. In summary, the quality of vocational education in India continues to lag behind.

Learning from schemes implemented in the post-EFYP period, one of the new schemes devised in 2014 was to develop a Model ITI in each state. This was a new scheme and not part of the TFYP<sup>10</sup>. The goal of the scheme was to help establish best practices in each state – closer industry-ITI partnership, updated equipment, updated courses and curriculum, well-trained teachers with latest industrial knowledge, introduction of soft skills in curriculum, better placements etc. Overall, the goal was to improve employability of ITI trained students and reduce both types of skills mismatch.

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<sup>5</sup> There is no direct way to infer from the National Sample Survey Organisation (NSSO) data, from where these students have acquired vocational skills. Therefore separate numbers for ITIs are not available. The 2011-12 statistics are from

National Sample Survey Office (NSSO), Ministry of Statistics and Programme Implementation, Government of India. 2014. Employment and Unemployment Situation in India: NSS 68th Round, July 2011 to June 2012. NSS Report No. 554(68/10/1).

<sup>6</sup> In 2004-05, only 2.4 and 7.7 per cent of the population had formal and non-formal VET, respectively, in the age group 15–29 in year 2004 in India.

Agrawal, T. 2014. "Skill development in India: an examination". *Journal of Education and Work*. 27:6, 629-650, DOI: 10.1080/13639080.2013.787485.

<sup>7</sup> S. Mehrotra (ed.). 2014. India's Skill Challenge: Reforming Vocational Education and Training to Harness the Demographic Dividend. Oxford University Press, New Delhi, India.

Pilz, M. (ed.). 2016. India: Preparation for the World of Work: Education System and School to Work Transition. Springer, Wiesbaden.

Tara, N., Kumar, S. and M. Pilz. 2016. "Quality of VET in India: The case of Industrial Training Institutes". In: TVET@Asia, issue 7, 1-17. Online:

[http://www.tvet-online.asia/issue7/tara\\_et\\_al\\_tv7.pdf](http://www.tvet-online.asia/issue7/tara_et_al_tv7.pdf) (retrieved 2.8.2016).

Jambo, S. and M. Pilz. 2017. "Perceptions of teachers in industrial training institutes: an exploratory study of the attractiveness of vocational education in India". *International Journal of Training Research*. <https://doi.org/10.1080/14480220.2017.1403945>

<sup>8</sup> Mathur, A.K., Sharma, S.K. and P. Saha. 2014. "The Vocational Training System: A Learner's Perspective". In S. Mehrotra (ed.) (2014). India's Skill Challenge: Reforming Vocational Education and Training to Harness the Demographic Dividend. Oxford University Press, New Delhi, India.

<sup>9</sup> Rao, K.S. Joshi, S., Mathur, A.K. and B.K. Sahoo. 2014. "The Vocational Training System: An Employer's Perspective". In S. Mehrotra (ed.). India's Skill Challenge: Reforming Vocational Education and Training to Harness the Demographic Dividend. Oxford University Press, New Delhi, India.

<sup>10</sup> Ministry of Skill Development and Entrepreneurship. 2018. Memorandum for Standing Finance Committee for Centrally Sponsored Scheme, Upgradation of Existing Government Industrial Training Institutes (ITIs) into Model ITIs". Internal Document. January.

## 1.2 Upgradation of Existing Government Industrial Training Institutes (ITIs) into Model ITIs

### 1.2.1 Objectives

The stated objective of the scheme, “Upgradation of Existing Government Industrial Training Institutes (ITIs) into Model ITIs” (Model ITI) being implemented by the Ministry of Skill Development and Entrepreneurship was that an existing ITI in a state was to be upgraded as a Model ITI, which would eventually evolve as an institution showcasing best practices, high quality training delivery, and sustainable and effective industry relationship. The Institute Management Committee (IMC) was to be constituted by each ITI in society mode with its chairperson being from Industry. This committee would ensure the efficient functioning of upgraded ITIs. Till date, 26 Government ITIs had been identified in 25 states with major industries as the partners. The period of implementation of the scheme initially was to be from December 2014 to March 2017. A proposal has been presented in the Ministry for continuation of the scheme till the end of the 14th Finance Commission, that is, March 2020, with the target to upgrade 30 Government ITIs into Model ITIs on a pan-India basis. The concomitant cost incurred on this scheme would be shared between the Centre and the State on a 70: 30 basis.”<sup>11</sup>

The objectives of the scheme are the following<sup>12</sup>:

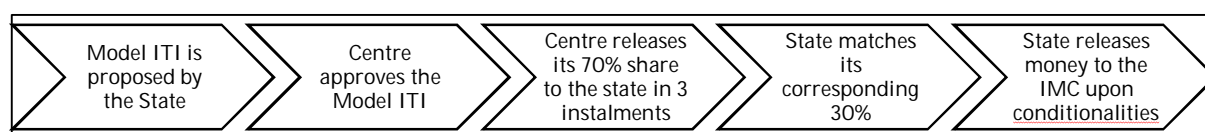
- Becoming a demand centre for local industries for its expertise and best performance in training.
- Better engagement with local industries
- Signing flexi MoU with industry to conduct training program to meet specific skill requirement of the Industry. For such approved courses, examination/assessment and certification will be done by NCVT Training of unorganised sector workers.
- Training of existing industrial workforce

### 1.2.2 Functioning of the Scheme

#### 1.2.2.1 Flow of Funds

The Model ITI scheme is funded by both the Centre and State. Figure 1.1 shows how the funds are ideally supposed to flow in the state and then to the IMC in a seamless manner. This is critical because in ideal circumstances, the money flows to the IMC via the state with the state matching the funds received from the Centre.

**Figure 1.1: Flow of Funds**



**Source:** NCAER Conceptualisation from Model-ITI Implementation Manual, MSDE officials and ITI Visits to ITI Pusa and ITI Saket.

The internal documents of the ITI Scheme from June 2018 shows the total funds released to the states in instalments during fiscal years 2014–15, 2015–16 and 2016–17 including equivalent state share (Table 1.1).

<sup>11</sup> Model-ITI Implementation Manual.

<sup>12</sup> Ministry of Skill Development and Entrepreneurship, Government of India. 2017. Annual Report 2016-17. Available at <http://www.skilldevelopment.gov.in/annual%20report.html>. pp. 69. Accessed on 29th August, 2017.

**Table 1.1: Total Central Funds Released to the States**

S. No.	Financial Year	No. of ITIs identified for upgradation	Central Funds Released to the State Government as on June 2018 (₹ lakh)	Central funds released including equivalent State Share (₹ lakh)
1.	2014–15	10	1,763.4	2,483.8
2.	2015–16	11	1,918.5	2,685.0
3.	2016–17	4	2,633.3	3,715.0
4.	2017–18	1	444.7	549.4
5.	Total	26	6,759.9	9,378

**Note:** ITI Jorhat in Assam was the 26<sup>th</sup> ITI which received its first instalment in 2017–18. However, this is left out of the analysis as it is too early for assessment.

**Source:** Ministry of Skill Development and Entrepreneurship. 2018. Memorandum for Standing Finance Committee for Centrally Sponsored Scheme, Upgradation of Existing Government Industrial Training Institutes (ITIs) into Model ITIs". Internal Document. January.

### 1.2.2.1 Functioning of the Scheme

**Figure 1.2: Schematic Presentation of Upgradation of Inputs**

Upgrading courses and curriculum	<ul style="list-style-type: none"> <li>• Offer training to new job entrants, existing workers, workers of the unorganised sector, upgrade curriculum, offer new trades, run short-term courses</li> </ul>
Industry Partnership	<ul style="list-style-type: none"> <li>• Flexi MoU/ Starting Dual Training course with Industry Partner for specific skill needs and providing employment to trainees</li> </ul>
Strengthening Placement Cell	<ul style="list-style-type: none"> <li>• Offering Career Service through TCPC</li> <li>• e-Learning</li> </ul>

**Source:** Directorate General of Training, Ministry of Skill Development and Entrepreneurship. Implementation Manual for Central Sponsored Scheme "Upgradation of Existing Government Industrial Training Institutes into Model ITIs". Internal Document.

The key objective is to develop a benchmark for an industry oriented ITI in a state. The MSDE has outlined inputs that are needed to upgrade an ITI into a model one. The details are contained in Appendix A1.2 and Figure 1.2 presents these inputs in a schematic framework.

## 1.3 Objectives of the Report

The objective of this exercise is to conduct a mid-term evaluation of the scheme and suggest possible corrections, which would improve the outcomes of the scheme. The period of analysis is from 2014–15 to 2017–18. Since ITI Jorhat in Assam received its first funding in 2017–18 only, it is too early to be included in the mid-term evaluation.

There are three key objectives in this report.

- The focus of the report is on the "readiness" component of the Model ITI rather than the outcomes i.e. what progress have the ITIs made so far based on their own timelines or at least from the time the ITIs have received the funds. The Implementation Plans (IPs) and Quarterly Progress Reports (QPRs) submitted by the ITIs are used to evaluate progress. Preparedness of ITIs is assessed in terms of policies that they have implemented based on the Model ITI guidelines.

- The second objective of the report is to understand the outcome or the impact, if any. Two case studies are used to analyse the impact. Since the scheme is still in early stages, it would be too early to assess impact fully.
- The third objective is to comment on the prospects of the scheme and how mid-term corrections, if any can help it achieve its purpose of upgrading ITIs.

## 1.4 Assessment Framework

As stated in the above section, the focus is on the 25 ITIs' progress towards becoming Model ITIs in their state. The 25 ITIs are ITI Gajuwaka in Andhra Pradesh, ITI Yupia in Arunachal Pradesh, ITI Marhowrah in Bihar, ITI Bhilai in Chhattisgarh, ITI Pusa in Delhi, ITI Panaji in Goa, ITI Dashrath in Gujarat, ITI Gurgaon in Haryana, ITI Nalagarh in Himachal Pradesh, ITI Ranchi in Jharkhand, ITI Bangalore in Karnataka, ITI Kalamassery in Kerala, ITI Bhopal in Madhya Pradesh, ITI Nashik in Maharashtra, ITI Barbil in Odisha, ITI Rupnagar in Punjab, ITI Udaipur in Rajasthan, ITI Namchi in Sikkim, ITI Coimbatore in Tamil Nadu, ITI Indranagar (W) in Tripura, ITI Mallepally in Telengana, ITI Saket and Varanasi in Uttar Pradesh, ITI Jagitpur in Uttarakhand and ITI Durgapur in West Bengal.

Since the focus of assessment at this current stage is on preparedness, progress and prospects (3Ps), the assessment framework is divided in two major components – policy and progress (presented in the schematic framework, figure 1.3). The policy component is assessed from four perspectives.

### 1. Policy

- Location: This examines whether the ITI is appropriately selected in terms of whether it is located near an industry cluster and it is producing skilled labour that the cluster needs. As emphasised in the selection criteria of ITIs in the state, it is important that the ITI is located near an industrial cluster (Box A1.1 in Appendix A1.2). The location of an ITI near an industrial cluster is important from the perspective of developing an industry-oriented ITI. This is important because an assessment of ITIs in 2014 revealed that they were not teaching the courses in the major industries located in the district<sup>13</sup>.
- Model ITI Readiness: This examines whether the ITIs have met their pre-conditions to be a Model ITI:
  - ❖ The IMC registered as a Society should be in place (Appendix A1.2)
  - ❖ Memorandum of Agreement (MoA): As mentioned in Appendix A1.2, a Tripartite MoA will be signed between the champion industry partner, State Governments and Central Government for each of the IMC Society. Essentially this has to be in place for the ITI to be a model one.
  - ❖ Release of funds to the ITI: This is clearly important that whether the funds released by the Centre have been given to the ITI in a seamless manner and in-time. Not receiving the funds on time hampers the progress of the ITI.
  - ❖ Training Programs: This examines whether the ITI has signed Memorandum of Understanding (MoU) with other industry partners for specific programs such as Dual System of Training, on-the-job and apprenticeship training.
  - ❖ Training Counselling and Placement Centre (TCPC): This examines whether the TCPC has been set up and whether there is a dedicated person to look after the TCPC.

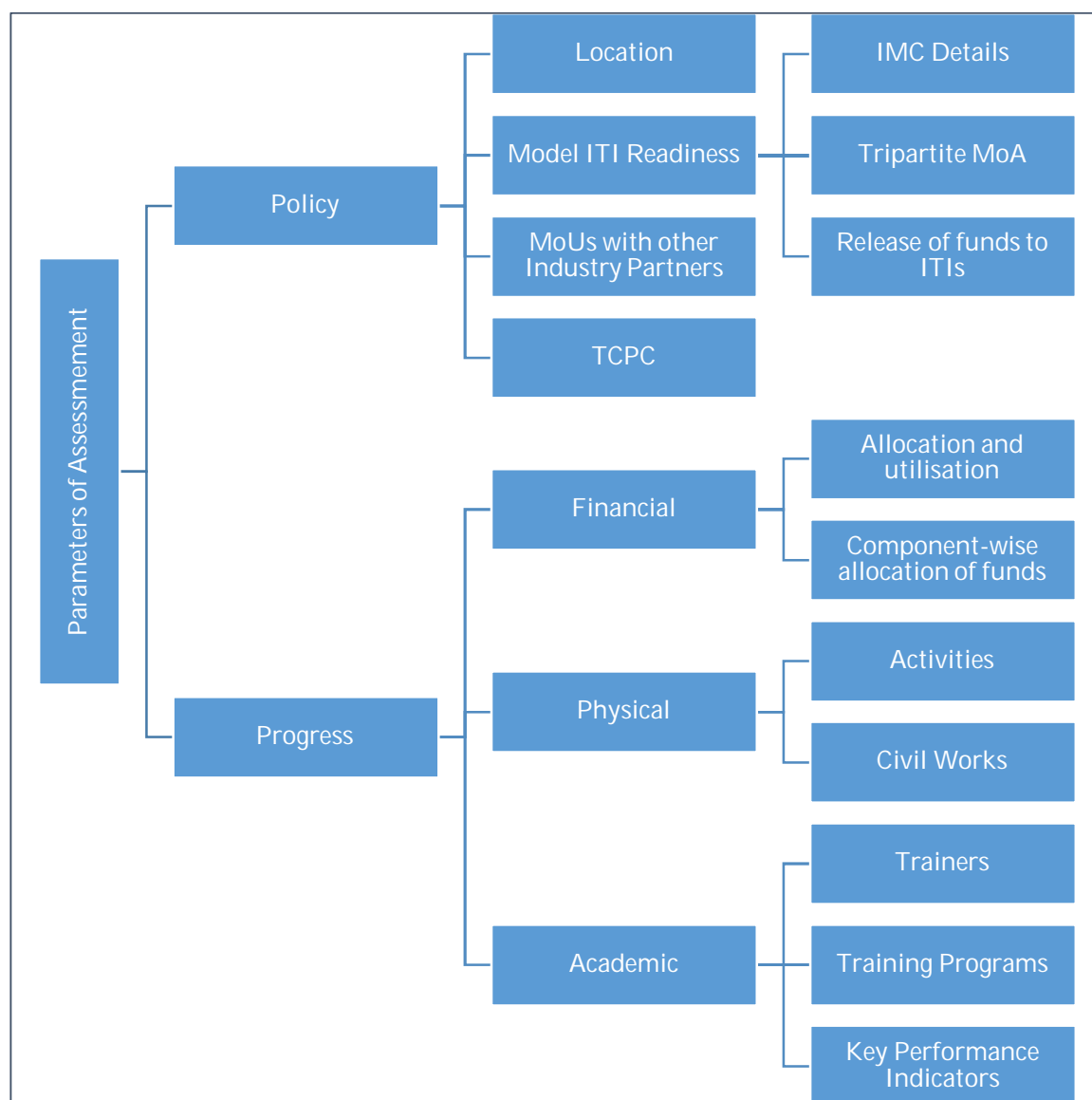
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<sup>13</sup>For example, the study showed that the Kanpur ITI was not teaching any courses related to the area's major industry, leather industry. Similarly the Panipat ITI (Haryana) was not teaching any courses related to the city's main industries, handloom/textile industries.

Rao, K.S. Joshi, S., Mathur, A.K. and B.K. Sahoo. 2014. "The Vocational Training System: An Employer's Perspective". In S. Mehrotra (ed.). India's Skill Challenge: Reforming Vocational Education and Training to Harness the Demographic Dividend. Oxford University Press, New Delhi, India.

2. *Progress*: This is essentially focused on whether the funds have been used effectively to make the ITI industry-ready. There are three elements to assessing progress:

**Figure 1.3: Schematic Framework of Assessment**



**Source:** Conceptualised by NCAER.

- A. **Financial:** Here it is examined whether the ITIs have received the money and utilised the money. Further it is examined whether they have spent the money in the areas as per the scheme details. This is done using Quarterly Progress Reports submitted by the ITIs. Further, the progress in the financial area should commensurately match the progress made in physical and academic areas.
- B. **Physical:** This examines the civil works planned and whether progress has been made on them. It typically involves re-building infrastructure of the ITI especially in re-producing actual shop-floor experience at the institution.
- C. **Academic:** This area focuses on the soft infrastructure. It is divided in three areas looking at teachers, curriculum and the overall progress made. This examines whether trainers have upgraded skills and/or the ITIs are hiring adjunct faculty to make-up for lack of trainers in a particular trade. Further, whether the ITI has introduced new



trades or programs, both long-term or short term as laid out in their IPs. There is no point in training students in trades for which there is no demand in the industry (e.g. stenographers are slowly becoming irrelevant). As shown in Table A1.1 in the Appendix A1.2, the key outcomes are identified in terms of Key Performance Indicators (KPIs) - overall seat utilisation, pass-out rate (overall average), placements (overall average, wage/self-employment, real monthly wages of placed candidates and average number of outside workers trained by additional short term courses. The progress of the KPIs are examined in detail.

Essentially, if policy is in place to give strategic direction and the finance are available to upgrade ITIs' both physical and human infrastructure in relevant ways, the ITIs would be relatively more industry ready. As per the internal documents of the schemes, only 41.6 per cent of the allocated fund has been released till June 2018 i.e. the first installment for majority of the 25 ITIs.

### **1.5 Structure of the Report**

This report consists of four more chapters. The second chapter examines the Policy Readiness of the ITI. The third chapter examines the progress that has been made so far in the areas of Academic, Physical and Financial. The fourth chapter qualitatively analyses the impact using the field visits to the ITI Pusa and ITI Saket. Last but not the least, the report draws policy implications from the analysis.



## Chapter 2: Policy Readiness

*The objective in this chapter is to examine the policy readiness of the ITI in giving strategic direction as given the Guidelines provided by the Central Ministry. There are four key aspects that are examined -location of the ITI in terms of nearness to an appropriate industry cluster/area; Model ITI Readiness in terms of IMC registered as Society, tripartite memorandum of agreement is in place between the champion industry partner, State/UT Governments and the Central Government and release of funds to ITIs; ITI-industry partnership is in place and; TCPC has been set up with dedicated personnel. The key results are that 95.2 per cent of the Model ITIs are located near an industrial cluster or area; 100 per cent of them have registered their IMCs as Societies, 66.7 per cent of have the tripartite MoA in place and 81 per cent have received funds either fully or partially. 95.2 per cent of the ITIs have formed industrial partnerships and have functioning TCPC Cells.*

### 2.1 Introduction

The overall goal of this scheme is to develop an example of an industry oriented Industry Training Institute (ITI). The objective in this chapter is to examine the policy readiness of the ITI in giving strategic direction as given the Guidelines provided by the Central Ministry (Appendix A1.2) and ultimately work towards the long-term objective. There are four key aspects that are examined here (Figure 1.3):

- Location of the ITI in terms of nearness to an appropriate industry cluster/area;
- Model ITI Readiness
  - Institute Management Committee registered as Society,
  - Tripartite memorandum of agreement is in place between the champion industry partner, State/UT Governments and the Central Government and
  - Release of funds to ITIs;
- ITI-industry partnership is in place and;
- Training counselling and placement centre (TCPC) has been set up with dedicated personnel.

This chapter is divided in six sections. The next four sections examine the four policy aspects of an ITI. The last section presents an overall assessment in terms of the ITI in terms of policy readiness of the ITI.

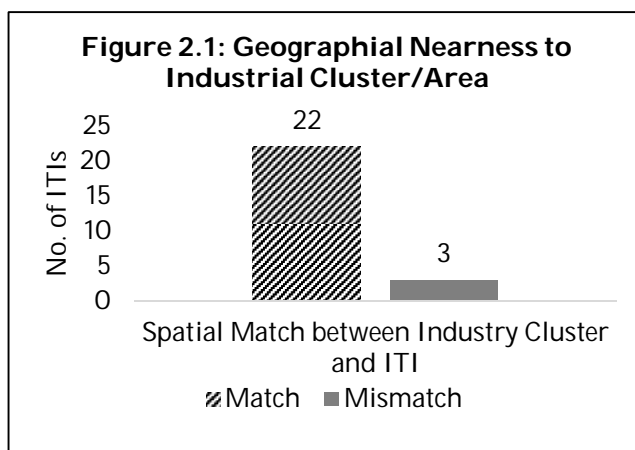
### 2.2 Location

One of the selection criteria for an ITI to be an industry oriented one is that it is located near an industrial cluster (Appendix A1.2). In the words of the Guidelines of the scheme, “the identified ITI should be situated in a prominent industrial cluster in the state. These Model ITIs will establish links with the industrial clusters in their vicinity to enable it to function as a solution provider to the cluster group”<sup>14</sup>.

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<sup>14</sup> Directorate General of Training, Ministry of Skill Development and Entrepreneurship. Implementation Manual for Central Sponsored Scheme “Upgradation of Existing Government Industrial Training Institutes into Model ITIs”. Internal Document.

Using various government lists of industrial clusters and then supplementing that with Google Maps, it is assessed whether the ITI is located near (100km radius) or within an industrial area or a cluster. There is a 88 per cent match i.e. 22 ITIs are located spatially close to an ITI (Figure 2.1). If one includes the two Northeastern ITIs because the mapping rule is relaxed for them, the matching percentage increases to 96 per cent. Appendix A2.1 shows the detailed results, explaining the methodology.



Exceptions are ITI Yupia in Arunachal Pradesh, ITI Panaji in Goa, and ITI Namchi in Sikkim (Table A2.1 in Appendix A2.1). There are no clear demarcated industrial area/clusters in the first two ITIs. While the ITI Namchi, Sikkim does not have to follow the exact guidelines laid down by MSDE, the state does house pharmaceutical industries. However, the Cipla Manufacturing Plants, its Champion Industry Partner and other pharma industries are in Kumarek, in Eastern Sikkim, two hours away. Few plants are an hour away from the ITI in Southern Sikkim.

**Note:** All ITIs are located in the vicinity of an industrial cluster except ITI Yupia in Arunachal Pradesh, ITI Panaji in Goa, and ITI Sikkim.  
**Sources:** NCAER Computation from literature review, Google Maps and Survey of Industries.

Overall, the performance of the scheme in this parameter is good i.e. majority of the ITIs are located geographically close to an industrial cluster or an industrial area. However, the question remains whether the ITIs are skilling people in those trades that are in demand in that district i.e. the supply and demand of vocationally trained labour should be in the same industry. For example, the ITI Saket is located in a Sports Goods Hub (Appendix A2.1) but the ITI does not offer any particular trade related to this industry. A separate detailed analysis is needed for that.

### 2.3 Model ITI Readiness

This examines whether the ITIs have met their pre-conditions to be a Model ITI. The three pre-conditions are presented in three sub-sections.

#### 2.3.1 Institute Management Committee Registered as a Society

The Institute Management Committee (IMC) registered as a Society should be in place (Appendix A1.2): 23 out of 25 ITIs have registered as a Society or 92 per cent of the 25 ITI have registered their IMC as Societies. Exceptions are the it is from Madhya Pradesh and Maharashtra. Their latest responses from the IPs in 2014 and 2015 respectively indicate that their Societies had not formed yet. The states of Maharashtra and Madhya Pradesh are not in sync with the Central model where the funds flow to the IMC. They would prefer funds flowing to the state.

100 per cent of the ITIs' IMCs are registered as societies.

Plus, the location of the ITI changed from Ludhiana to Rupnagar in Punjab in 2017–18. And The Directorate General of Training (DGT) is in the process of making an agreement with the State Government of Bihar. Therefore, four ITIs are not considered for evaluation in this study – ITI Bhopal (Madhya Pradesh), ITI Marhowrah (Bihar), ITI Nashik (Maharashtra) and ITI Rupnagar (Punjab). However, this report mentions about the current status of the four ITIs, if and when relevant information is available. Therefore leaving aside the four ITIs, 100 per cent of the ITIs' IMC are registered as Societies.

### 2.3.2 Tripartite Memorandum of Agreement

As mentioned in Appendix A1.2, a Tripartite MoA will be signed between the champion industry partner, State/UT Governments and Central Government for each of the IMC Society. Figure 2.2 shows status of Model ITI in respect of signing of MoA. As on 10<sup>th</sup> July 2018, the MoA was signed by 66.7 per cent (14 ITIs out of 21 ITIs) of the ITIs. However, even the four model ITIs from Bihar, Madhya Pradesh, Maharashtra and Punjab are also in the process of signing agreements or awaiting approvals from their respective state governments.

The fourteen ITIs where the MoAs have been signed are ITI Yupia in Arunachal Pradesh, ITI Bhilai in Chhattisgarh, ITI Pusa in Delhi, ITI Dashrath in Gujarat, ITI Ranchi in Jharkhand, ITI Kalamassary in Kerala, ITI Barbil in Odisha, ITI Namchi in Sikkim, ITI Saket and ITI Varanasi in Uttar Pradesh, ITI ITI Hosur Road in Karnataka, ITI Gurugram in Haryana, ITI Indranagar in Tripura and ITI Udaipur in Rajasthan.

Amongst the six ITIs where the MoAs are under process are ITI Gajuwaka in Andhra Pradesh, ITI Jagitpur in Uttarakhand, ITI Bhopal in Madhya Pradesh, ITI Nashik in Maharashtra, ITI Marhowrah in Bihar and ITI Durgapur in West Bengal. In the case of Andhra Pradesh, although the agreement had been signed, a missing document has held up its final processing. In ITI Jagitpur, Uttarakhand, the IMC partner is being changed. The MoA has not been signed in the case of ITI Bhopal in Madhya Pradesh because there was a state government proposal to form a mega model ITI with merger of three existing ITIs located in the same campus. In ITI Nashik in Maharashtra and ITI Marhowrah in Bihar MoA signing is “under process with State Government”.

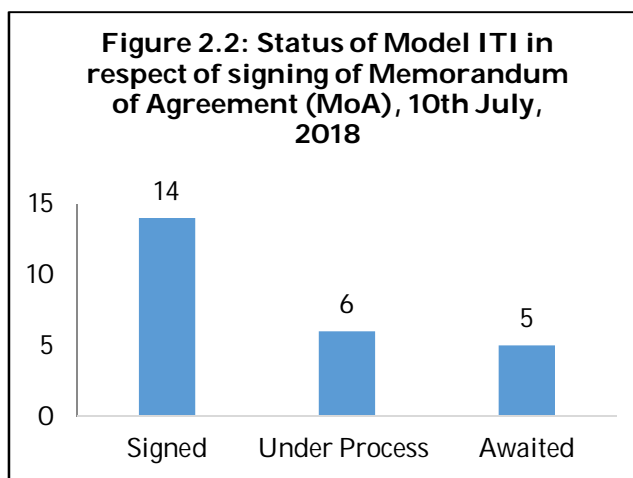
Five it is where the MoA were still awaited were ITI Panaji in Goa, ITI Nalagarh in Himachal Pradesh, ITI Rupnagar in Punjab, ITI Coimbatore in Tamil Nadu and ITI Mallepally in Telangana. In ITI Mallepally, Telangana, the state government was reviewing the MoA.

### 2.3.3 Release of Funds to the ITI

This assesses whether the funds released by the Centre have flowed to the ITI in a seamless manner and in-time manner. Not receiving the funds on time hampers the development of the ITI.

Figure 1.1 had illustrated that how funds were supposed to ideally flow in this scheme. Tables A2.2 and A2.3 show the status of flow of funds. Together they show the following:

- The Centre released the funds to the state in the same financial year that they were approved (Table A2.2). Records available (with the Central Government) up to June 2018 show that the Central Government has released 50 per cent of Central funds to 16 ITIs including ITI Barbil, Odisha where 90 per cent of Central funds against



**Source:** Directorate General of Training, Ministry of Skill Development and Entrepreneurship, Government of India. 2018. [Memorandum for Standing Finance Committee for CSS 'Upgradation of Existing Government ITI into Model ITI'](#). Internal Document

The Government of Jharkhand has decided to increase their contributions to the Model ITI by matching Central Funds, thereby taking the ratio to 50:50.

allocation have been released (Table A2.3). In seven ITIs, 25–33 per cent of Central funds have been released. In ITI Durgapur, 24 per cent of Central funds against allocation have been released and in ITI Jagitpur in Uttarakhand, 15 per cent of funds have been released. Part of 1st instalment was released in fiscal year (FY) 2014–15. Due to administrative reasons funds was not transferred to IMC of ITI Marhowrah, Bihar. Now, Bihar is committed to spend the expenditure under the scheme and in line with this a proposal for revalidation of funds released earlier has also been received by the DGT. Also, list of tools and equipment with estimated cost has been received stating to release the balance of the first instalment to the ITI.

- Sixteen ITIs (76.2 per cent) have responded in their Quarterly Progress Reports (QPRs received in May 2018) that the equivalent state share of 30 per cent had been contributed by states (Table A2.2) including Andhra Pradesh, Arunachal Pradesh, Chhattisgarh, Goa, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Odisha, Rajasthan, Sikkim, Tripura, Telengana, Uttar Pradesh and West Bengal. In the case of ITI Bangalore, the entire allocation of ₹ 1,000 lakh has been transferred to the IMC Society in two instalments (₹ 278.2 lakh and ₹ 721.8 lakh in March 2016 and December 2017 respectively). The State Government of Karnataka has given money to the ITI in advance of receipt of money from the Central Government. Out of that the ITI Kalamassery, Kerala responded that they have only received 50 per cent of the funds and Goa responded that funds have been allocated by the state. The ITI Pusa in Delhi responded that the contribution of state share of funds was still “under process”. The ITI Dashrath in Gujarat has responded that it had not received funds. The ITI Coimbatore has responded that the proposal has been sent to the State Government and order was awaited. Last but not the least, the ITI Jagitpur, Uttarakhand had not received state government funds as per its QPR. The Government of Jharkhand has decided to increase their contributions to the Model ITI by matching Central funds, thereby taking the ratio to 50:50. Table A2.3 shows the amount of Central and state funds released as per documents available from the Centre. Overall 41.5 per cent of funds were released against Central Allocation up to latest data in June 2018. However, this aggregate number hides significant variation between 90 per cent in ITI Barbil, Odisha to 15 per cent in ITI Jagitpur, Haridwar.
- Whether funds transferred from State to ITI/IMC Society account: As per the Quarterly Progress Reports, 17 ITIs or about 81 per cent of IMC Society have either received funds fully or partially including Andhra Pradesh, Chhattisgarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Odisha, Rajasthan, Sikkim, Tripura, Telengana, Uttar Pradesh (both ITIs), Uttarakhand and West Bengal. The ITI Yupia in Arunachal Pradesh has responded that the funds are parked with the Arunachal Pradesh Skill Development Society. This is a state society and not equivalent to an IMC Society. Although the state society did release funds to the ITI for civil works. In the case of ITI Bangalore, the entire allocation of ₹ 1,000 lakh has been transferred to the IMC Society in two instalments (₹ 278.2 lakh and ₹ 721.8 lakh in March 2016 and December 2017 respectively). The State Government of Karnataka has given money to the ITI in advance of receipt of money from the Central Government.

In the case of ITI Bangalore, the entire allocation of ₹ 1,000 lakh has been transferred to the IMC Society. The State Government of Karnataka has given money to the ITI in advance of receipt of money from the Central Government.

The flow of funds from the Centre to the IMC Society is a challenge. For example, the ITI Dashrath Gujarat, received approval to become a Model ITI in 2014–15 and the state government received its first tranche of funds in the same year but the IMC Society has only received the funds partially. In NCAER visit to ITI Pusa, the challenge revolving around the

flow of funds came up with no clear guidelines from the Centre. The ITI Yupia in Arunachal Pradesh has the funds parked in a state society instead of the ITI's own society.

### 2.3.4 Model ITI Readiness

In this section, out of the 21 ITIs, 100 per cent of them have registered their IMCs as Societies, 66.7 per cent of have the tripartite MoA in place (14 ITIs) and 81 per cent (17 ITIs) have received funds either fully or partially. There is room for improving the three-way partnership between the IMC Society, Central Government and State Governments thereby ensuring further smoothed functioning of this scheme.

Out of the 21 ITIs, 100 per cent of them have registered their IMCs as Societies, 66.7 per cent of have the tripartite MoA in place (14 ITIs) and 81 per cent (17 ITIs) have received funds either fully or partially.

### 2.4 Memorandum of Understanding (MoU) with Industry Partners

The idea is that ITIs sign with MoUs with other industry partners to promote employability of its students through programs like Dual System of Training, on-the-job and apprenticeship training. The objective is that students can get practical training at a real life environment thereby boosting their employability.

The IPs of the ITIs show that 12 of them had pre-existing industrial tie-ups including ITI Gajuwaka, ITI Pusa, ITI Dashrath, ITI Kalamassery, ITI Bhopal, ITI Nashik, ITI Barbil, ITI Rupnagar, ITI Namchi, ITI Coimbatore, ITI Mallepally and ITI Saket. Eleven ITIs did not have any tie-ups or MoUs including ITI Yupia, ITI Marhowrah, ITI Bhilai, ITI Gurgaon, ITI Ranchi, ITI Bangalore, ITI Udaipur, ITI Indranagar (W), ITI Varanasi, ITI Jagitpur in Haridwar and ITI Durgapur. Two of them had no formal MoUs in place but had tie-ups including ITI Panaji and ITI Nalagarh. The ITI Coimbatore had fairly elaborate existing industrial tie-ups including industrial visit to trainees, in-plant training to trainees, placement to trainees, organising seminar to trainees and monetary support from various industries.

From the Quarterly Progress Reports (QPRs), it is evident that all the ITIs have signed several MoUs with Industry Partners with the exception of Tripura. The ITI Yupia, Arunachal Pradesh and ITI Jagitpur, Haridwar has signed a MoU with its Industrial Partner only.

The ITI Pusa in Delhi and Coimbatore in Tamil Nadu are offering Dual Training courses. A MoU of ITI Coimbatore in Tamil Nadu is for industrial visits. The ITI Kalamassery in Kerala has signed a MoU with Samsung, who will offer a course titled, "Advanced Repair & Industrial Skills Enhancement". This is a training program in addition to regular syllabi. A MoU with Zydus Healthcare would help the ITI Namchi in Sikkim with job placement. The ITI Nalagarh in Himachal Pradesh and ITI Panaji in Goa have signed three MoUs with automobile and hotel industries and they will be providing in-plant or on-the-job training. On-the-job training will be offered by Maruti Suzuki in ITI Chhattisgarh. Maruti Suzuki is also running a Skill Enhancement Centre in ITI Saket, Meerut. The ITI in Delhi has signed a MoU with LG Electronics to help them set up laboratories in electronics and refrigeration and air condition trades, training trainers and on-the-job training for trainees and employment in authorized service centres. Further the ITI Delhi has signed a MoU with the Times of India, which would provide training in soft skills and English speaking ability.

Out of the 21 ITIs, 57.1 per cent of them had pre-scheme industrial tie-ups and this went up to 95.2 per cent by 2017-18.

Out of the 21 ITIs, 57.1 per cent of them had pre-scheme industrial tie-ups and this went up to 95.2 per cent by 2017-18. The process of setting up of

Model ITI has itself helped the ITIs to form industrial tie-ups.

However, only very few of them are offering specific employability enhancement courses. The hope is that as the scheme progresses further, the quality of the tie-ups will improve<sup>15</sup>. The ITI Pusa and ITI Saket, Meerut offer cases in contrast. The Maruti Suzuki, the Champion Industrial Partner of the former has developed a 360 degree view of enhancing employability with spillovers outside the automobile courses like concentration on soft skills. The Champion Industrial Partner of ITI Saket is giving active guidance but the hand-holding that is needed and a strategic direction to increase employability is missing.

## 2.5 Training Counselling and Placement Centre (TCPC)

One important guideline of the scheme was to strengthen the placement cell in the ITIs. The Placement cell should function as 'Career Centre envisioned under National Career Service (NCS)'. This includes registration of various stakeholders, organising events such as job fairs and providing career counselling to job-seekers (Ministry of Labour and Employment). The objective of TCPC is to foster close networking with the industry and assist job placement for the trainees. To have a functional TCPC, one needed the following:

- ITI may appoint a qualified person on contract for TCPC coordinator and equip it with better facilities for immediate response from employer/industry
- The TCPC will perform counselling and job placement and will be a one-point stop for employers/industries and trainees.

Out of 21 ITIs, 19 of them had placement cells functioning in the Model ITI as per their Implementation Plans (Table A2.4). Based on responses from the QPRs, the ITI Panaji does not have a functioning TCPC cell. Therefore, 20 out of 21 ITIs have functioning Placement Cells.

Out of the 21 ITIs, 20 of them have functioning TCPC Cells. However, only 12 of them have been set up as per the proposal in the Implementation Plan. Only seven ITIs have regular placement officers for the TCPC.

12 of the 21 respondent ITIs have set up placement cells according to the above stated guidelines and four are in the process of setting up (Table A2.4). The ITI Jagitpur and ITI Durgapur both have responded

in the negative. Clearly, this is an area, where the ITIs need further guidance.

Only seven ITIs have regular placement officers for the TCPC (Table A2.4). The ITI Panaji also has a Programming Assistant along with that. And 12 ITIs have Placement Cell officials for whom this is an additional charge. Four ITIs have advertised for full-time positions for Placement Cell officials including ITI Bhilai, ITI Bengaluru, ITI Dashrath and ITI Udaipur. Some like ITI Durgapur responded that the next IMC will discuss the modalities and ITI Nalagarh has responded that the matter has been forwarded to the State Government.

## 2.6 Conclusions: Overall Policy Readiness of ITIs

In conclusion, the overall performance on the policy readiness aspect of the ITIs to implement the scheme varies is above average. 95.2 per cent of the Model ITIs are located near an industrial cluster or area. Out of the 21 ITIs, 100 per cent of them have registered their IMCs as Societies, 66.7 per cent of have the tripartite MoA in place (14 ITIs) and 81 per cent (17 ITIs) have received funds either fully or partially. 95.2 per cent of the ITIs have formed industrial partnerships. While the initial focus is there on quantity but the quality of partnerships will need to be monitored closely. Out of the 21 ITIs, 20 of them have functioning TCPC Cells. However, only 12 of them have been set up as per the proposal in the IPs. Only seven ITIs have regular placement officers for the TCPC.

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<sup>15</sup> In Chapter 3, we see that the industry partners are offering training to teachers.



There are key areas where the ITIs need to re-work their strategy. The triangular partnership between the ITI, State and Central Government needs to be re-worked and the flow of funds process needs to be further smoothed. The placement cells of the ITIs are work-in-progress. More detailed guidance from the Central Government in this regard would help the ITIs with dedicated seminars and workshops in this area. The quality of the industrial partnerships need to be enhanced.



## Chapter 3: Progress of ITIs –Key Findings

*The objective in this chapter is to assess the progress of the ITIs in three domains – financial, physical and academic. At the current juncture of the scheme, 50 per cent of the total funds should have flowed to the Model ITIs. If one uses that as a benchmark, only nine ITIs out of 21 (42.9 per cent) have received 50 per cent or more of total (Centre plus state) funds allocated. Only four ITIs have used more than 50 per cent of the funds received as on December, 2017. A larger share of the funds utilised so far had been devoted to civil works (57.9 per cent) and equipment purchase (31.3 per cent). An examination of the civil works reveal that majority of the ITIs have stayed within their estimated costs so far and have started work on areas marked in their Implementation Plans. Academic progress has been assessed for hiring of teachers, course curriculum and placements by comparing the data provided for the baseline years and latest available data in 2017. The analysis of trades show that the ITIs are currently undergoing change as new job-oriented trades are introduced with the help of new industry partners and old trades are retired. Further, the ITIs are hiring a higher share of trained contractual teachers. Seat utilisation and pass-out rates also showed improvement in majority of the ITIs. However, the final outcome of placements and improvement in average wage rates are not systematically provided by the ITIs making it challenging to monitor and evaluate the scheme on these key performance indicators.*

### 3.1 Introduction

The objective in this chapter is to assess the progress the ITIs have made as a result of the scheme. The ITIs are assessed for progress in three domains including financial, physical and academic. Financial progress is assessed in terms of the utilisation of the funds allocated, both overall and components-wise. This is evaluated against the scheme modalities. Physical progress assessment involves assessment of activities and civil works implemented as stated in the ITIs' Implementation Plans (IPs). Academic progress assessment involves analysing progress made in teachers' quantity and quality, curriculum etc. Progress in all three domains is assessed in light of the fact that it has taken time for funds to flow from the Central Government to the ITI and in many cases the ITIs have yet to receive all their allocated funds from the State Government. The second key point to remember is that this is a mid-term evaluation. At the current juncture of the scheme, it is relatively more important to assess financial and physical progress.

### 3.2 Financial Progress

At the current juncture of the scheme, 50 per cent of the total funds should have flowed to the

At this point of the implementation of the scheme, 50 per cent of the funds should have flowed to all ITIs. However, one finds that only 42.9 per cent of ITIs have received 50 per cent or more of central plus state funds. Only four ITIs have used more than 50 per cent of the funds received as on December, 2017.

Model ITIs. If one uses that as a benchmark, only nine ITIs out of 21 (42.9 per cent) have received 50 per cent or more of total (Centre plus state) funds allocated (Table 3.1). Only four ITIs have used more than 50 per cent of the funds received as on December, 2017. The individual position of ITIs with regard to receipt

of funds from Centre, State, total and utilisation of funds is shown in Table 3.1 (and Table A3.1). The QPRs indicate that there is a 'gap between fund allocation under project as reported by few IMC/ITI and communicated to State Directorates as per sanction orders issued by Government of India'. Nevertheless, based on the QPRs, the key results are discussed below:

- Financial progress has been slow. While Central funds have been released to the State but the Quarterly Progress Reports (QPRs) show that many states had not released funds to the IMCs. Delhi and Gujarat have received partial funds despite the state not releasing its share.
- ITIs that have received their quota (both centre and states) are ITI Gurugram in Haryana, ITI Kalamassery in Kerala, ITI Udaipur in Rajasthan, ITI Barbil in Odisha, ITI Namchi in Sikkim, ITI Saket in Uttar Pradesh, ITI Indranagar in Tripura.
- ITI Hosur Road has received their entire allocation of ₹1,000 lakh in two instalments (₹278.2 lakh in March 2016 and ₹721.8 lakh in December 2012). Similarly, ITI Barbil in Odisha has utilised 90 per cent of funds released to them. Other ITIs like ITI Nalagarh (47 per cent), ITI Gajukawa (58 per cent), ITI Dashrath (39 per cent), ITI Saket (48.3 per cent), ITI Kalamassery (35 per cent) have used their funds. The ITI Jagitpur in Uttarakhand received barely three per cent of their allocated funds but have utilised it wholly.
- ITI Yupia in Arunachal Pradesh had received 25 per cent of Centre allocation but nothing from the State quota. Out of the received funds it had utilised 69.9 per cent, all of them on civil works.
- ITI Ranchi in Jharkhand had received 50 per cent of the total (Central plus state) funds. Out of the total released funds, 52 per cent has been utilised.

**Table 3.1 Funds Released and Utilised as on December 31, 2017**

S.No.	State	Name of ITI	Percentage of Centre Funds Released to the IMC as a share of Central Allocation	Percentage of State Funds Released to the IMC as a share of State Allocation	Percentage of Total Funds Released to the IMC as a share of Total Allocation	Percentage of Utilisation of funds received
1.	Andhra Pradesh	ITI Gajuwaka	50	25	43	58.8
2.	Arunachal Pradesh <sup>1</sup>	ITI Yupia <sup>1</sup>	25	0	22.5	69.9
3.	Chhattisgarh	ITI Bhilai	24.3	24.3	24.3	0.0
4.	Delhi	ITI Pusa	12.5	0	8.75	9.2
5.	Goa	ITI Panaji	0.0	0.0	0.0	0.0
6.	Gujarat	ITI Dashrath	14.4	0	10.1	39.7
7.	Haryana	ITI Gurgaon	50	50	50	6.8
8.	Himachal Pradesh	ITI Nalagarh	50	43	48	47.2
9.	Jharkhand	ITI Ranchi	50	50	50	52
10.	Karnataka <sup>2</sup>	ITI Bangalore <sup>2</sup>	30.6	262	100	9.93
11.	Kerala	ITI Kalamassery	50	50	50	35.5
12.	Odisha	ITI Barbil	–	–	82.8	90.8
13.	Rajasthan	ITI Udaipur	50	50	50	0.0
14.	Sikkim	ITI Namchi	50	75	53	38.2
15.	Tamil Nadu	ITI Coimbatore	Administrative and financial sanction awaited from the state government			

S.No.	State	Name of ITI	Percentage of Centre Funds Released to the IMC as a share of Central Allocation	Percentage of State Funds Released to the IMC as a share of State Allocation	Percentage of Total Funds Released to the IMC as a share of Total Allocation	Percentage of Utilisation of funds received
16.	Tripura	ITI Indranagar (W)	50	46.5	49.6	25.2
17.	Telangana	ITI Mallepally	33	23	30	0.0
18.	Uttar Pradesh	ITI Saket	50	50	50	48.4
19.	Uttar Pradesh	ITI Varanasi	25	25	25	30.3
20.	Uttarakhand	ITI Jagitpur, Haridwar			3	100
21.	West Bengal	ITI Durgapur	23.5	23.5	23.5	30.2

**Notes:** 1. The money has been transferred to Arunachal Pradesh State Skill Development Society, a state society and not to the IMC. 2. In the case of ITI Bangalore, the entire allocation of Rs 1,000 lakh has been transferred to the IMC Society in two instalments (Rs 278.2 and Rs 721.8 lakh in March 2016 and December 2017 respectively). The State Government of Karnataka has given money to the ITI in advance of receipt of money from the Central Government.

**Source:** Quarterly Progress Reports.

The next step is to evaluate the utilisation of money. As per the Only 16 ITIs have utilised the money either fully or partially (as on December 31, 2017).

**Table 3.2 Distribution of ITIs by Percentage of Utilisation under Various Categories, December 2017**

Categories	Utilisation of funds received by categories				Total
	0%	0-25%	25-50%	50-100%	
Civil expenses	5	1	2	8	16
Equipment expenses	8	2	1	5	16
Learning Resources expenses	13	3	0	0	16
Recurring expenses	12	3	0	1	16
Other expenses	12	2	1	1	16

**Source:** NCAER Computation from QPRs.

Key findings are (Table 3.2 and Appendix A3.1):

- A larger share of the ₹ 20.77 crore utilised so far had been devoted to civil works (57.9 per cent) and equipment purchase (31.3 per cent). ITIs like ITI Barbil, ITI Indranagar and ITI Jagitpur had spent their entire utilisation on civil works. Similarly, ITI Gajuwaka and ITI Pusa had spent their entire utilisation on equipment.
- Five of the ITIs which had made some utilisation of released funds had not used any of the funds on civil works.
- Six of the ITIs which had utilised some funds had not used any of the funds on equipment procurement.

- Most of the ITIs (11 out of 16) had not spent any of their utilisation on Learning Resources expenses.

The scheme guideline says that 25 per cent of the total funds should be spent on civil works, 50 per cent on equipment, seven per cent on furniture, five per cent on learning materials and ten per cent on recurring expenses. One finds that ITI Barbil has spent 75 per cent of their funds on civil works and ITI Ranchi has spent 35.2 per cent.

### 3.3 Physical Progress

As seen in the previous section, ITIs had just started utilising their released funds, and it would be too early to see reflections of the financial progress on physical progress. Appendix table A3.2 gives an account of various physical works (either started or completed) by various ITIs with stage code for each work. Stage code ranges from '0' to '7' with 0 showing work not yet started and 7 showing work complete. Looking at the financial and physical progress tables (Tables A3.1 and A3.2), link between financial progress and physical progress may be assessed and is described below. The QPRs were dated around May–July, 2018. Key results are:

- ITI Nalagarh had around 50 per cent of allocated funds released and it had utilised around 50 per cent of the released amount, mostly on equipment and civil work. The construction of library and examination hall were complete (as planned in their IP) and they were within the estimated budget. Toilets have also been renovated as planned.
- ITI Kalamessary had around 50 per cent of allocated funds released and it had utilised around 36 per cent of the released amount, mostly on equipment and civil work. Renovation of workshops of Carpenter, Electrician, Mechanic Motor Vehicle (MMV), Mechanic Refrigeration and Air Conditioning had been completed, within budget. Construction of new workshop for MMV trade was in the technical sanction stage. This was in line with their IP and planned budget of ₹ 120 lakh (₹ 100 lakh is the estimated cost as per the QPR).
- ITI Barbil had around 83 per cent of allocated funds released and it had utilised around 90 per cent of the released amount, mostly on civil work. They had initiated a relatively large construction plan. Specifically, as per their IP, ITI Barbil wanted to build a workshop and classroom & building for ₹ 300 lakh and ₹ 100 lakh respectively. Plus, they had planned for renovation work. In their QPR, the ITI had mentioned that it was building a three stories building which was at the stage of technical sanction for the estimated cost of ₹ 540 lakh. A follow-up query revealed that technical sanction has already been granted and work has started.
- ITI Namchi had around 50 per cent of allocated funds released and it had utilised around 40 per cent of the released amount, mostly on civil work. The ITI Namchi had planned to construct a new building for an estimated ₹ 124.61 lakh and their QPR indicated that the building was at final stages of completion.

Majority of the ITIs are implementing their planned civil works and trying to accomplish them within budgets. The construction of library and examination hall in ITI Nalagarh were complete and within the estimated budgets. ITI Kalamessary had around 50 per cent of allocated funds released and it had utilised around 36 per cent of the released amount, mostly on equipment and civil work. The ITI Namchi were constructing a new building with 40 per cent of the funds released to them. It is in the final stages of completion. The ITI Barbil has spent majority of their total allocated budget in constructing a new building.

- ITI Varanasi had all 25 per cent of allocated funds released and it had utilised around 30 per cent of the released amount. On physical progress side some works undertaken by them had been completed and some are in planning stages. As per their IP, the ITI had planned renovation of ₹ 100 lakh and construction of new workshop and classrooms for ₹ 250 lakh. As per their QPR, the ITI was in various stage of renovation of various work, for example, they had completed laying down paver blocks on campus. At the time of receipt of the QPR, the ITI was preparing tender document for heightening boundary wall, toilet block renovation and drinking water stations. The preparation of drawing/estimates for safety workshop had started at that point of time. All the above renovations were for the estimated cost of ₹ 28.2 lakh.
- In their IP, the ITI Hosur Road had planned to renovate six workshops (at the cost of ₹ 80 lakh) and 20 classrooms and build three workshops and 10 classrooms. The ITI had partially completed the renovation of a workshop into an industrial tie-up lab for ₹ 90.2 lakh. The ITI was in the preparation process of drawing/estimates for renovating six workshops.
- The construction of workshop and classroom with toilet for introduction of two new trades namely Welder and Computer Hardware and Network Maintenance has been allotted to the Execution Agency for implementation of those civil works in ITI Yupia. The stage of work is not mentioned in the QPR. This civil work was as per the Implementation Plan (IP). The estimated budget for this particular civil work is ₹ 79.29 lakh as per the QPR. This is marginally below the budget of ₹ 80.72 lakh mentioned in the IP.
- Out of the total released funds 52 per cent has been utilised. The majority of the utilisation of ITI Ranchi in Jharkhand has been on civil works (₹ 260 lakh) and the expected date of completion of that work is 19<sup>th</sup> October, 2018. The ITI was in the process of formulating tenders for procuring equipment. The ITI Ranchi had planned to renovate administration building and workshop and there was new construction planned. The QPR showed that the ITI has partially completed renovating the administration building and all the workshops.

The ITI Hosur has spent more than their estimated money in renovating one single workshop. In their IP, they had mentioned that they would renovate six workshops for the same budget! The ITI Coimbatore, despite not having received funds had initiated some construction works like enhancement of workshops and preparation of new building.

Some ITIs had though not received the allocated funds but had made physical progress on their own resources. For example, the ITI Coimbatore, despite not having received funds had initiated some construction works like enhancement of workshops and preparation of new building.

### 3.4 Academic progress

Academic progress is the final objective of any scheme related to education and other progresses like financial and physical should be reflected in it. In this section academic progress has been discussed under three heads, namely, progress on instructors which includes filling of vacant posts, improvement in share of trained instructors and the like, progress on trades which includes setting up of new employment oriented trades, closing of obsolete trades, upgradation of existing trades and the like, and progress on key performance indicators like overall utilisation of seats, pass out rates, placement rates, wages of those placed and number of outside workers trained through short term courses. Academic progress has to be assessed in the perspective that

financial flows have flowed to ITIs in a not so seamless manner and the concentration of ITIs have been towards development of civil works and equipment.

### 3.4.1 Progress on instructors

Filling of vacant seats and hiring of trained instructors is key to the success of any trade and this has been the subject matter of this section. Table 3.3 elucidates the changes in various parameters on instructors. Box 3.1 discusses how industry partnerships have facilitated instructor training in the ITIs.

Parameters	Pre- Model ITI status(as given in IPs)				Post- Model ITI status (as given in QPRs)				Total
	Less than 25%	25- 50%	50- 75%	More than 75%	Less than 25%	25- 50%	50- 75%	More than 75%	
Percentage of instructor posts filled against sanctioned	0	3	6	12	0	1	8	12	21
Percentage share of regular instructors out of the total filled posts	1	2	4	14	1	3	5	12	21
Percentage of trained instructors out of the total filled posts	5	4	3	9	6	3	3	9	21

**Note:** Figures against the given percentage brackets show the number of ITIs belonging to various brackets

**Source:** Implementation Plans and QPRs.

The instructors' posts filled against sanctioned are discussed in detail below:

- Out of the sanctioned instructors' posts, 18 ITIs had filled more than 50 per cent of the vacancies pre-Model ITI status. Out of those 18 ITIs, 12 ITIs had filled more than 75 per cent. Post-Model ITI status, the corresponding numbers are 20 and 12 respectively.
- Two ITIs showed significant improvement in filling posts against sanctioned after the scheme was implemented. Specifically, this statistic showed improvement for ITI Udaipur (46 per cent to 66 per cent) and ITI Ranchi (50 per cent to 57 per cent). Both moved from the 25 to 50 per cent bracket to the more than 50 per cent bracket.
- Other ITIs that made progress over baseline in the instructor posts filled were ITI Bangalore (86 per cent to 90 per cent), ITI Barbil (27 per cent to 47 per cent), ITI Saket (62 per cent to 78 per cent) and ITI Varanasi (61 per cent to 76 per cent) (Table A3.3).
- ITI Yupia, ITI Namchi and ITI Indranagar had maintained complete filling of sanctioned seats both before and after the model ITI status approval (Table A3.3).

The share of regular instructors in total filled posts are discussed below:

- In 18 ITIs more than 50 per cent of the instructors were regular employees before the scheme. This number went down to 17 after the ITIs received model ITI status. Number of ITIs where more than 75 per cent of the instructors were regular employees changed from 14 to 12 between the baseline and current year.
- ITI Nalagarh showed improvement in hiring regular instructors, from 14 per cent in 2015 to 71 per cent in 2018 (Table A3.3). The ITI has utilised 50 per cent of the funds received.



- ITI Panaji too showed an improvement in this regard with percentage of regular instructors against filled posts going up from 38 to 65 per cent (Table A3.3).
- Other ITIs that showed improvement were ITI Yupia (75 per cent to 90 per cent), ITI Pusa (56 per cent to 60 per cent) and ITI Durgapur (98 per cent to 100 per cent) (Table A3.3).
- Seven ITIs, namely, ITI Dasharath, ITI Ranchi, ITI Hosur, ITI Kalamassery, ITI Indranagar, ITI Saket and ITI Jagitpur had 100 per cent regular instructors both in the baseline and in the current year (at the submission of the QPR in 2018).

The percentage of trained instructors in various ITIs are discussed below:

- In twelve of the 21 ITIs more than 50 per cent of the instructors were trained, with nine ITIs having more than 75 per cent of instructors trained. There was change between the baseline and current year.
- ITI Ranchi showed improvement with percentage of trained instructors rising from 17 to 88 percent after the scheme even when it has not been able to utilise its funds (Table A3.3).
- Other ITIs that showed improvement in share of trained instructors were ITI Yupia, ITI Panaji, ITI Dashrath, ITI Gurgaon, ITI Hosur, ITI Kalamasery, ITI Varanasi, ITI Jagitpur and ITI Durgapur (Table A3.3).
- All hired instructors were trained in ITI Saket and ITI Nalagarh, both before and after the scheme was passed (Table A3.3).

### **Box 3.1 Training of Instructors through MOUs with Industry**

An important aspect of ITI-Industry association has been training of instructors by the Industry bodies which apart from infusing practical knowledge to course curriculum, also makes the instructors up-to-date regarding changing needs of time. Various ITIs had signed Memorandum of Understanding (MoU) with industry partners to facilitate the training of not only the students but also provide training to the instructors. Details of MoUs facilitating training of instructors is given in Table A3.4. ITI Bhilai, ITI Pusa, ITI Bangalore, ITI Kalamassery, ITI Varanasi and ITI Durgapur are six such ITIs.

In ITI Pusa, it was seen during the field visit that automobile trade, which was facilitated by the partnership of Maruti Suzuki India Limited (MSIL) and Refrigeration and Air Conditioning (RAC) trade which was facilitated by Daikin industry, they had trained instructors thus keeping the students updated with the current developments in their respective trades.

*Source:* Quarterly Progress Reports.

### **3.4.2 Progress on Trades**

Introduction of new job oriented trades adds to the acceptability of the ITIs and addition of new trades in demand and discontinuation of outdated trades adds dynamism to the vocational skilling system. This section deals with change in number of trades, units, number of trades to be upgrades, number of obsolete trades to be scrapped and number of new trades to be included.

Five out of 21 ITIs or 23.8 per cent of ITIs have showed increase in number of National Council for Vocational Training (NCVT) trades between 2013–14 and 2017–18 including ITI Yupia, ITI Panaji, ITI Bangalore, ITI Barbil and ITI Namchi (Appendix Table A3.5). Four out of 21 ITIs (19 per cent) have showed no change in the number of NCVT trades between 2013–14 and 2017–18. The rest have showed decrease in the number of NCVT trades (57.1 per cent). This shows the over the last four years, the ITIs are undergoing a process of consolidation in the number of trades being offered.

Appendix Table A3.6 gives an account of number of new trades to be added, obsolete trades to be removed and trades to be upgraded as per the ITIs' IPs. The details are discussed below:

- Trades like Stenography, Radio and Television Mechanic and Tractor Mechanic are becoming unattractive and hence most of the ITIs wanted to discontinue them.
- Trades like Electrician, Machinist, Fitter, Turner and Welder needed upgradation with the latest developments. In ITI Saket, Meerut, the tools on which the Fitter and Turner students were working were outdated and the teacher themselves considered upgradation to be a necessity.
- Trades related to service sector saw increase in demand as ITI Jagitpur and ITI Panaji wanted to introduce Hair and Skincare and Cosmetology trades respectively. ITI Udaipur and ITI Panaji intended to introduce trades with catering to the hospitality industry.

Appendix Table A3.5 further shows that the seating capacity has improved in eight out of 21 ITIs (38.1 per cent) between the baseline year and 2017–18 including ITI Yupia, ITI Bhilai, ITI Bangalore, ITI Kalamassery, ITI Udaipur, ITI Namchi, ITI Coimbatore and ITI Mallepally. Seating capacity has remained unchanged for two ITIs including ITI Gajukawa and ITI Pusa. Eleven ITIs have showed decrease in the number of seats (78.6 per cent).

**Table 3.5: Trades by Top 5 Sectors and Sectors by Top 7 Trades, 2013–14**

Top 5 Sectors			Top 7 Trades		
Sector	Number of trades the sector caters to	Major Trades Under Sector	Trade	Number of Sectors in which trade is used	Major Sectors of the Trade
Production and Manufacturing	23	Fitter, Turner, Machinist, Welder	Fitter	12	Production and Manufacturing
Automobile	11	Mechanic Motor Vehicle, Diesel Mechanic	Electrician	7	Electrical
Electrical	10	Electrician, Wireman	Welder	8	Production and Manufacturing
Construction	11	Draughtsman (Civil)	Turner	7	
Information Technology	11	Computer Operator and Programming Assistant	Machinist	8	
			Mechanic Motor Vehicle	2	Automobile
			Wireman	3	Electrical

**Source:** NCAER Computations from the Model Implementation Plans.

An analysis of top five sectors and top 5 trades that were offered by the Model ITI show the type of trades the top 5 sectors want and top 7 trades that are wanted across a range of sectors (Table 3.5). The ITIs were primarily catering to the manufacturing sector and Information Technology sector. Fitter, Electrician, Welder, Turner and Machinist are wanted across a range of sectors. There is a gap in the analysis as the sectors specified in the DGT do not match National

Industrial Classification (NIC) code. Till that is done, it will be challenging to pinpoint demand and ensure better matching between skilled workers being supplied and demanded. Plus, this sector and trade information needs to be sought on an annual basis to detect changes in demand of trades, if any. Further, this analysis should be repeated with the latest data in 2017–18 to understand whether there has been any change in the demand patterns of trades and sectors.

In sum, the number of trades and seats have gone down in majority of the Model ITIs from 2013–14 to 2017. In the next section, we see whether seat utilisation rates have improved.

### 3.4.3 Progress on Key Performance Indicators (KPIs)

The Key Performance Indicators (KPIs) are the main deliverables of the Model ITI scheme and the outcome of the scheme has to be measured in the five given KPIs as mentioned below in Table 3.6.

**Table 3.6: Key Performance Indicators**

S. No.	KPIs	Definition	Unit
1	Overall Seat Utilization	The proportion of trainees appearing in examination against intake capacity	Percentage
2	Pass-out Rate	The proportion of trainees passing out against examined (overall average)	Percentage
3	Placement	The proportion of trainees placed against passed (overall average, wage employment only)	Percentage
4	Earnings of the Employed	Mean of monthly wages of placed candidates	Rupee
5	Outside workers trained by additional short term courses	Number of outside workers trained by additional short term courses being run	Number

**Source:** Internal Documents.

The data were collected from implementation plans and quarterly progress reports submitted by the various ITIs on the following KPIs and the progress was compared with the baseline and targets given in the implementation plans.

#### 3.4.3.1 Overall seat utilisation

While Table 3.6 shows the summary results for overall utilisation of seats, the more detailed information is available in the Appendix Table A3.7. Fourteen out of 21 ITIs or 66.7 per cent of ITIs show improved utilisation rate of seats between the baseline year, 2013–14 and the latest year 2017–18. These are ITI Bhilai, ITI Pusa, ITI Panaji, ITI Gurgaon, ITI Nalagarh, ITI Ranchi, ITI Barbil, ITI Udaipur, ITI Namchi, ITI Indranagar (West), ITI Mallepally and ITI Jagitpur. Six ITIs showed worsening in seat utilisation rate including ITI Gajukawa, ITI Yupia, ITI Dashrath, ITI Bangalore, ITI Kalamassery and ITI Coimbatore. The ITI Durgapur in West Bengal showed hundred per cent utilisation rate both in the baseline year and latest year of assessment.

Fourteen out of 21 ITIs or 66.7 per cent of the ITIs show improved utilisation rate of seats between the baseline year, 2013–14 and the latest year 2017–18.

<b>Table 3.6: Overall Seat Utilisation, Pass out rate and Placement rate (Number of ITI)</b>				
<b>Change over baseline (2013–14 and 2017–18)</b>				
<b>Indicators</b>	<b>Remained Same</b>	<b>Decreased</b>	<b>Increased</b>	<b>Total</b>
Overall utilisation of seats	1	6	14	21
Pass out rate	1	6	14	21

**Source:** Implementation Plans and QPRs.

#### 3.4.3.2 Pass out rate (Table 3.6)

The pass out rate has improved for 14 out of the 21 ITIs (66.7 per cent) in 2017 compared to their baseline while one (ITI Durgapur) has remained the same rate at 91 per cent between the two years (Table A3.8). The ITIs that showed improvement in pass out rates were ITI Gajukawa, ITI Yupia, ITI Bhilai, ITI Pusa, ITI Panaji, ITI Gurgaon, ITI Nalagarh, ITI Ranchi, ITI Udaipur, ITI Namchi, ITI Indranagar (West), ITI Mallepally, ITI Saket and ITI Varanasi.

#### 3.4.3.3 Placement Rates

The ITIs which have showed improvement in placement rates between their respective baseline years and 2017 are ITI Pusa, ITI Dashrath, ITI Gurgaon, ITI Ranchi, ITI Udaipur, ITI Namchi and ITI Coimbatore. However, as Appendix Table A3.9 shows that the placement rates statistics have not been consistently submitted by the ITIs. This makes it challenging to comment about the progress made in this regard in the overall scheme. Box 3.2 discusses placements that have been facilitated by MoUs with Industry Partners.

#### **Box 3.2 Placements facilitated by MoUs signed with Industry Partners**

While many ITIs have banked upon industry partnerships for funds and infrastructure, almost all of them have Memorandum of Understanding (MoUs) signed with industry partners to facilitate training and placement of the students. Details of Training and Placement facilitated by the MoUs between the ITI and Industry partners are given in Table A3.10. These partners help in running of Training and Placement Cell and also help organize placement fairs. ITI Saket is one such case. Maruti Suzuki India Ltd. (MSIL) has signed MoUs with 6 out of the 25 ITIs under which it offers dual training to students and later absorbs them into its own workforce. These industry partnerships also help prepare students in soft skills and English speaking. ITI Pusa has partnership with the Times of India to facilitate this training. ITI Bhilai, Pusa, Panaji, Gurgaon, Nalagarh, Kalamassery, Coimbatore and Varanasi have programs of in-plant training which helps the students develop with the developments in their respective fields. In ITI Pusa, Daikin Air Condition Ltd. has set up RAC labs where air conditioners and washing machines are present to train the students on the latest developments.

**Source:** Quarterly Progress Reports.

The placement statistics highlight a monitoring gap. The DGT should ask for absolute numbers from the ITIs and then compute the rates for the KPI at their end to facilitate monitoring and comparison.

#### 3.4.3.4 Earnings of the employed

Appendix A3.11 shows that average nominal wages have gone up for most ITIs between their respective baseline years and 2017. Given the data gaps, it is challenging to comment about the

overall performance of the scheme in a more systematic manner. This highlights the need to improve collection of statistics from the ITIs for monitoring and evaluation purposes.

#### *3.4.3.5 Number of outside workers trained by additional short term courses*

The last of the KPI was the number of outside workers trained by additional short term courses. These workers are already on job and come to the ITI to hone their skills further. This is important not only for the workers but for the students as well, as on interaction with these industry people, they get to know about the work environment. These workers also share the job experiences and help the students prepare for the recruitment process. ITI Gajuwaka, ITI Ranchi and ITI Bangalore train more outside workers in short-term courses than their counterparts. In 2017, the number was 670, 600 and 300 respectively for these three ITIs. They were followed by ITI Udaipur with 150 outside workers trained in short term courses. The ITI, approved in 2014–15, showed tremendous improvement in this figure with 40 outside workers being trained in 2014 to 150 in 2017. ITI Indranagar (W) showed a downfall with 144 workers in 2014 to 20 workers in 2017. The details of progress ITIs with respect to the number of outside workers trained is given in Table A3.12.

### **3.5 Conclusions**

All three parameters of progress, financial, physical and academic have showed medium rate of change. States' ITI have started introducing new job-oriented courses and retiring old ones. The physical progress of the ITIs is mainly assessed by assessing the progress of civil works, which they are implementing as per their stated plans. The ITIs have mostly stayed within budgets. While the ITIs are experiencing a consolidation in the number of trades, overall utilisation of seats, pass out rate have showed significant improvement. Industry partnerships have not only helped the ITIs in placements but they have had an impact in introduction of job-oriented trades, training of instructors and other aspects as well.



## Chapter 4: Case Studies

*A visit to the ITIs to assess the impact of the Model ITI scheme brought forth the tremendous potential of the scheme and ability of the scheme to change the narrative about decrepit ITIs. Most importantly, the scheme has the ability to help ITIs to form and leverage industry partnerships in a productive manner creating a multiplier impact on infrastructure, students, teachers and overall institutions. The ITI Pusa has the locational advantage of being in Delhi and therefore able to leverage number and quality of industrial partnerships. While both ITI Pusa and Saket had good and motivated leaders as Principal, an active Champion Industry Partner holding hands at every step of the way made a significant difference to ITI Pusa versus ITI Saket. The ITI Pusa was better able to “match” trades with jobs partly because the National Capital Region is the automobile cluster. The ITI Saket does not offer trades in the region’s two major industries of Sports Goods and Scissors. The difference between the two ITIs was more perceptible amongst students and teachers. While the Delhi students were more motivated towards higher education systems, the Saket students aspired for government jobs, implicitly influenced by teachers. The Delhi students seemed to be more positive about their institution. In contrast, the motivation level in Saket students varied as per their trade. The teachers in Delhi seemed relatively more motivated than Saket teachers. Both students and teachers felt that they were not adequately using the infrastructure being created. Both ITIs continued to face challenges. While the UP Government has been supported with flow of funds to ITI Saket, the ITI Pusa has faced challenges. In contrast, the transferrable policy of the Uttar Pradesh hinders sustained change and continuity in their ITIs.*

### 4.1 Introduction

The objective of this chapter is to assess the impact of the Model ITI scheme qualitatively. The key parameters of assessment are policy background, role of state, involvement of Champion Industry, industrial partnerships, infrastructure, course and curriculum and ultimately students’ and teachers’ perceptions. The cases of ITI Delhi and Meerut provide a story of contrast. While both of have dynamic leaders, Delhi has the inherent locational advantage. It has utilised it fully in developing partnerships and developing the ITI. While both have invested in physical infrastructure in upgrading laboratory, equipment and classrooms, the Delhi ITI has also paid to human infrastructure. Probably the role of its Champion Partner, Maruti Suzuki India Ltd. (MSIL) stands out in that perspective. There is a dedicated person for development of soft skills. The presence of senior representatives of MSIL certainly give an air of dynamism and purpose. Last but not the least are the students. The aspirations of students differ between Delhi and Uttar Pradesh. While the students from Delhi aspired for Polytechnics/higher education or jobs after completing their vocational skilling program, students in Uttar Pradesh aspired for Government jobs. There was implicit encouragement from the teachers in Uttar Pradesh. While upgradation of infrastructure and equipment were commendable in both the ITIs and much needed, the quality of teachers and vocational pedagogy were areas that need focused attention for improvement of employability of students.

### 4.2 Comparative Analysis

The following table (Table 4.1) compares ITI Pusa and ITI Saket by various parameters including policy, role of state, leveraging geographical proximity of industrial clusters, involvement of the Champion industry, involvement with other industrial associations,

infrastructure development of the ITI, course and curriculum, students' ambitions and aspirations, teachers' ambitions and aspirations and placements.

**Table 4.1: Comparison of ITI Delhi and ITI Saket**

<b>Parameters</b>	<b>ITI Pusa, Delhi</b>	<b>ITI Saket, Meerut</b>
<b>Policy</b>	<p><b>Setting up of model ITI and other required formalities:</b> Set up in 1950, the ITI was granted model ITI status in 2016–17. As a prerequisite for transfer of grants under the scheme, IMC has been set up and registered as a Society.</p> <p><b>IMC Composition</b> IMC is chaired by MSIL representative which is also the Champion Industry. Other members in the IMC from Industry association are Tata Power, Asian Paints, Bentex Group and LG Electronics.</p> <p><b>Government presence in IMC</b> State government is represented by members from Directorate of Training and Technical Education (DTTE) and Employment Department.</p>	<p><b>Setting up of model ITI and other required formalities:</b> Set up in 1947, the ITI was granted model ITI status in 2014–15. IMC has been set up and it has also been registered as a Society.</p> <p><b>IMC Composition</b> IMC is chaired by Stag International (which deals in manufacture of Sports goods and apparel) representative which is also the Champion Industry. Other members in the IMC from Industry association are Sai International, General Motors, Continental India Ltd., Fryo Foods, LG Electronics and Daurala Sugar works.</p> <p><b>Government presence in IMC</b> State government is represented by members from Agriculture, Sports and Training, Industry and Employment department.</p>
<b>Role of State</b>	<p><b>Involvement of Government IMC members</b> Members of State government present in the IMC are quite active towards development of the ITI, which was clearly visible during the visit to the ITI. They were quite apprehensive about the complicated Fund flow mechanism leading to the ITI not receiving funds in time.</p> <p><b>Flow of funds</b> Due to complications and lack of clarity of flow of funds, the state share of 30 per cent was not yet transferred to the ITI.</p> <p><b>Positives/negatives</b> To facilitate better placement, the State government organises job fairs and recruitment drives in various ITIs from time to time.</p>	<p><b>Involvement of Government IMC members</b> This could not be ascertained because of lack of interaction with them during the visit</p> <p><b>Flow of funds</b> Flow of funds to the ITI has been smooth with it receiving both Centre and State component, which has been helpful in completing certain Civil works initiatives the ITI had taken.</p> <p><b>Positives/negatives</b> One of the key shortcomings has been the intra-state transfer of the institute's principal at regular intervals which leaves them with no time to internalize the plan and make a road map of the measures to be taken to implement the policy properly.</p>



Parameters	ITI Pusa, Delhi	ITI Saket, Meerut
<p><b>Leveraging nearness to Industrial clusters</b></p>	<p><b>Presence of Industrial clusters</b> The ITI caters to the needs of almost all the industrial areas of Delhi, Gurgaon, Noida and Manesar. Various industrial hubs are present around the ITI which are active in industrial sectors like Production and manufacturing, Automobiles, Electronics, Refrigeration and air conditioning (RAC), Electricals, Construction and IT sectors.</p> <p><b>ITI's preparedness to cater to the clusters</b> The ITI is running as many as 18 NCVT trades and 11 SCVT trades to cater to all requirements by industries.</p>	<p><b>Presence of Industrial clusters</b> Table A2.1 shows that Meerut contains two major clusters – sports goods and scissors.</p> <p><b>ITI's preparedness to cater to the clusters</b> The ITI is running as many as 18 NCVT trades to cater to sectors like Automobiles, RAC, Electricals and Manufacturing. When asked, the Principal of the ITI had responded that, there were no trades directly catering to sports goods. This is partly because sports goods is a highly informal and household based industry. On telephonic follow-ups, it was revealed that the ITI had dress making trades which train workers in making sports dresses and apparels. Further, the Principal in consultation with the Champion Industry Partner is exploring the possibility of opening a few short-term courses which would cater directly to the Sports Goods industry like Wood Jointer, Hand and Machine stitcher, Machine Operator and Packer etc.</p>
<p><b>Involvement of Champion Industry</b></p>	<p><b>About the Champion industry</b> MSIL, the Champion industry is actively involved in the development of the ITI.</p> <p><b>Involvement through MOUs</b> By the three MoUs signed, MSIL has been helping in overall upgradation of the ITI into Model ITI which included setting up of state of the art workshop, introduction of dual system of training in Fitter and Machinist Trades, training of instructors and training and employment in authorised service centre.</p> <p><b>Other involvements</b> Two members from MSIL were deputed in the ITI on permanent basis to enhance teaching quality and impart some practical knowledge to the students.</p>	<p><b>About the Champion industry</b> Stag International, the Champion industry deals in sports and apparel goods</p> <p><b>Involvement through MOUs</b> The industry has signed an MOU with the ITI in 2015 where areas like training, finance, revenue generation, and placement had been covered.</p> <p><b>Other involvements</b> Interactions with the Principal during the visit revealed that the Champion industry while providing overall guidance, was relatively less hands-on compared to the one in Delhi. The</p>

Parameters	ITI Pusa, Delhi	ITI Saket, Meerut
		Champion industry had helped set up a badminton court in the campus.
<b>Other Industry associations</b>	<b>Locational advantages</b> Given the locational advantage of the ITI, ITI Pusa is quite well placed in terms of industry association. The ITI is supported by industry giants like Maruti, Mico Bosch, Ford Tractors, Voltas, etc. Industry association of the ITI was quite well placed even before becoming model ITI.	<b>Locational advantages</b> Presence of agro based industries like cane industry has helped the ITI in having associations with them and earning placement for students Earlier, in 2015, the ITI had signed an MOU with Automobile industry Raj Sneh Automobile Private limited.
	<b>Association after becoming Model ITI</b> After becoming model ITI, they are seeking nominations from various industries for IMC as many as possible. After becoming model ITI, the ITI has signed MOUs with industries like MSIL, LG Electronics, Oriental Insurance, Daikin, Havells and UNDP with scopes ranging from setting up of and upgradation of labs, training of Instructors, imparting soft skills and helping in placements.	<b>Association after becoming Model ITI</b> Presently, the ITI has signed an MOU with MSIL to improve lab infrastructure, students training and placement.
<b>Infrastructure development of the ITI</b>	<b>Infrastructure developed through flow of funds under the scheme</b> Though flow of funds to the ITI under the scheme was problematic, and so development through model ITI project was limited. <b>Infrastructure developed through industry association</b> Through industry association, the ITI has improved the infrastructure to a significant level. MSIL has setup an Automobile Skill Enhancement Centre (ASEC) in the ITI. Similarly, Daikin has setup RAC lab and Havells has setup Electrical lab. In addition to these, the ITI has also installed a 100Kw solar power plant on the rooftop. <b>Quality of infrastructure</b> Face recognition attendance machines for trainees were set up. The machines on which students practised were up to date.	<b>Infrastructure developed through flow of funds under the scheme</b> Through funds received in the model ITI scheme and its utilisation, the ITI has bettered its infrastructure in areas like toilets, building repairs, roofs repair, flooring and installation of septic tank. <b>Infrastructure developed through industry association</b> Through industry association the ITI has set up an Automobile Skill Enhancement Centre (ASEC) help from MSIL. MSIL has also helped establish a Denting and painting automation plant for the Auto body Repair and Painting trade. <b>Quality of infrastructure</b> Biometric attendance of students were installed. However, the machines on which students practised in the Fitter and Turner workshops were outdated.

Parameters	ITI Pusa, Delhi	ITI Saket, Meerut
<b>Course and curriculum</b>	<p><b>Trades</b> To cater to the changing needs of time, the ITI has started new trades of Mechanic-auto body repair and Mechanic-auto body paint through MoU with MSIL. ITI has planned upgradation of 19 trades like Turner, Machinist, Fitter, Welder, and Electrician. They have also discontinued obsolete trades like Stenography.</p>	<p><b>Trades</b> To cater to the changing needs of time, the ITI has started new trades of Mechanic- Diesel, Computer Operating and Program Assistant (COPA) and Dress making. ITI has planned upgradation of six trades like Fitter, Electrician, Machinist, Welder, Mechanic Electronics and Fashion Technology. They have also discontinued obsolete trades like Mechanic- Agriculture Machinery.</p>
	<p><b>Quality of study materials and teaching medium</b> The books that students referred to were bilingual for ease of understanding and to adapt to English speaking environment. All the classrooms were “Smart” ones with presence of modern amenities.</p>	<p><b>Quality of study materials and teaching medium</b> Medium of teaching and study material/books are in Hindi, but the exams are conducted in English. A secretarial course in English is taught in Hindi. Engineering drawing courses are still taught on paper while the engineering colleges and industries have moved to digital methods of learning. Interaction with students revealed that though the ITI has setup some modern trades (like Animation and Multimedia), yet due to absence of well-trained faculties students were not able to reap the benefits. Another finding was that the smart classrooms was not fully operational.</p>
<b>Students’ ambitions and aspirations</b>	<p><b>Composition of students</b> Most of the students were from Delhi and adjoining area. Further most of the students were fresh from Scholl with very few coming with work experience.</p> <p><b>Motive behind enrolling in ITI</b> Interactions with them revealed that their primary motive of coming to ITI Pusa was its reputation and its employability along with the reputed faculty and available facilities. They also pointed out that their skill would get maximum value when it is validated by the certificate provided by the institute at the end of the course.</p> <p><b>Positives/Negatives</b> The major form of communication of the students outside the classroom was WhatsApp where they exchanged notes and class information indicating that they are up to date</p>	<p><b>Composition of students</b> Most of the students were locals living in areas nearby the institute. Further most of the students were fresh from school with very few coming with work experience. Further they looked for jobs in the vicinity and in that way preference for that trade is fixed.</p> <p><b>Motive behind enrolling in ITI</b> Primary motive for students behind coming to this ITI was getting well-paid secured jobs, particularly in the government sector.</p> <p><b>Positives/Negatives</b> Due to absence of a well-equipped library, the students are generally made to pay for their books and since many are not able to afford it, they lose out on obtaining the relevant textbooks for</p>

Parameters	ITI Pusa, Delhi	ITI Saket, Meerut
	<p>with the uses of current technology. The students pointed out that generally the textbooks they are provided with are useful, adequate and relevant while they do have to take additional notes from their teachers for some trades. The students seemed quite content with the quality of teaching and pointed out that the faculty is able to teach and convey the concepts clearly and also they get plenty of practical experience as they have regular practical classes scheduled daily after lunch.</p>	<p>themselves. Since medium of training and medium of examination were different it becomes a problem for the students.</p>
<p><b>Teachers' ambitions and aspirations</b></p>	<p><b>Composition</b> Permanent and contractual teachers were in 50:50 ratio.</p> <p><b>Exposure/Refresher trainings</b> During the visit it was realised that faculties were quite well educated and well informed about the changing needs of time. Teachers were of view that interactions with guest faculties from industry partners were quite useful in updating them with current developments.</p> <p><b>Perceptions about the Model ITI scheme</b> The teachers were positive about the changes brought about through the implementation of the Model ITI scheme. They pointed out that the old books have been replaced by newer ones and that the ICT facilities of the institute have improved.</p>	<p><b>Composition</b> During the visit it was seen that most of the teachers were permanent.</p> <p><b>Exposure/Refresher trainings</b> There was no such guest faculties coming from the industry bodies. Teachers also do not attend refresher trainings conducted outside the ITI. As a result, the existing teachers were not able to change their teaching methods which is necessary for the changing requirements of time. There is a certain insistence on teachers' part that the ITIs are about teaching theory rather than practice because it is important to get the basics right. Further, an interaction with the teachers clearly showed that the teachers in Uttar Pradesh had cleared an exam to teach in ITI without significant industry experience. Plus, the welding classes in ITI Saket suffered from lack of safety equipment and the teacher seemed to be casual about it. And it was clear that there were not enough laboratory equipment available. Teachers also complained about poor infrastructure facilities made available to them.</p> <p><b>Perceptions about the Model ITI scheme</b> There were mixed perceptions about the scheme as everybody was not able to leverage the new amenities fully.</p>
<p><b>Placements</b></p>	<p><b>Presence of TCPC</b> To facilitate better placement, the ITI has a functioning TCPC in place with</p>	<p><b>Presence of TCPC</b> Though there is a TCPC in place, yet the in-charge was not regular and also not well-qualified to head the cell. The</p>

Parameters	ITI Pusa, Delhi	ITI Saket, Meerut
	regular crafts instructor made in-charge of the cell.	Champion industry partner helps organise regular placement fairs which helps students from the ITI and also nearby ITIs in securing jobs.
	<p><b>Placement details</b> After becoming model ITI, placement rate has been above 80 per cent in all the years. The students were of view that along with the placement, they are getting handsome salaries. This differed across trades.</p>	<p><b>Placement details</b> Not available</p>

**Sources:** Based on NCAER visits to the ITIs, interviewing, students, teachers, Principal and assessing the infrastructure developments.



## Chapter 5: Policy Recommendations

*The objective in this chapter is to make policy recommendations to improve the performance of the Model ITI scheme. The policy recommendations are structured around the four key stakeholders including DGT and State Government, Principal & Institute Management Committee, ITI staff and teachers and ITI students. All four of them have to work together on provision of physical infrastructure, courses, curriculum and extra-curricular activities and form industry partnerships. The industry partners need to work with the Principal, teachers and students such that all stakeholders can benefit in terms of teacher training, placements, knowledge of latest equipment etc. The DGT on its part needs to develop more scientific methods of monitoring and evaluation, hand-hold ITIs into improving their quality by offering training and development, and better match trades being offered in the ITIs with regional industrial demand for those workers. The State Governments need to work in tandem with the Central Government and ITIs to facilitate transfer of money to ITIs in a seamless manner. This also signals to industry partners about improvements in the “ease of doing business” in the respective states.*

### 5.1 Key Results

The objective of this report was to conduct a mid-term evaluation of the Model ITI scheme. The key results are that 95.2 per cent of the Model ITIs are located near an industrial cluster or area; 100 per cent of them have registered their Institute Management Committees as Societies, 66.7 per cent of have the tripartite Memorandum of Agreement in place and 81 per cent have received funds either fully or partially. 95.2 per cent of the ITIs have formed industrial partnerships and have functioning TCPC Cells.

At the current juncture of the scheme, 50 per cent of the total funds should have flowed to the Model ITIs. If one uses that as a benchmark, only nine ITIs out of 21 (42.9 per cent) have received 50 per cent or more of total (Centre plus state) funds allocated. Only four ITIs have used more than 50 per cent of the funds received as on December, 2017.

A larger share of the funds utilised so far had been devoted to civil works (57.9 per cent) and equipment purchase (31.3 per cent). An examination of the civil works reveal that majority of the ITIs have stayed within their estimated costs so far and have started work on areas marked in their Implementation Plans.

Academic progress has been assessed on teachers, course curriculum and placements by comparing the latest year, 2017 with the data provided for the baseline years of the respective ITIs. The analysis of trades show that the ITIs are currently undergoing change as new job-oriented trades are introduced with the help of new industry partners and old trades are retired. Further, the ITIs are hiring a higher share of trained contractual teachers. Seat utilisation and pass-out rates have showed improvement in majority of the ITIs.

Visits to the two ITIs of Pusa in Delhi and Saket in Uttar Pradesh highlight the tremendous impact potential of this scheme. Both have upgraded workshops, bought latest equipment for training students. The scheme can help the ITI leverage industry partnerships. This has been one key success of the scheme. It could have a positive impact on teacher training, placements, on-the-job training, apprenticeships etc.

## 5.2 Key Challenges

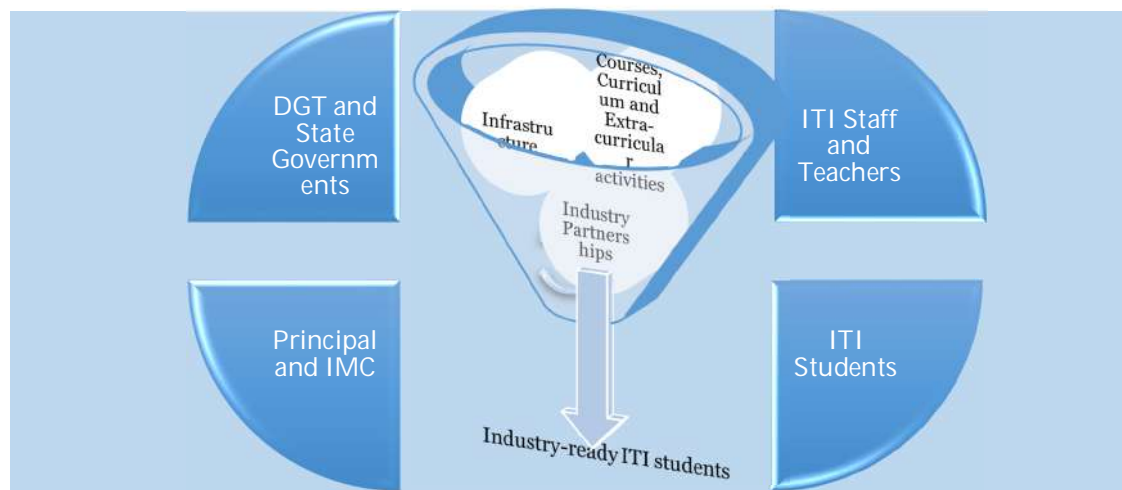
The analysis highlights couple of challenges in the scheme and they are:

- Three-way partnership between the Centre, State and ITI, which in turn affects the flow of money in a seamless manner from the Centre to the ITI.
- Teachers – While more teachers are hired but they are mostly contractual in nature.
- Courses and curriculum – the classes are in the process of consolidation
- Training Counselling and Placement Cell: While Placement Cells exist in the ITIs but not in the form that would be recommended by the Directorate General of Training (DGT).
- The quality of the responses to the Quarterly Progress Report signal that capacity of ITI staff also needs to be improved.
- Placement statistics and average monthly wages that students get are not tracked in a systematic manner by the ITIs.
- Lacunae in monitoring and evaluation by the Centre

## 5.3 Key Recommendations

**The scheme is highly recommended to continue as the impact potential on quality of Indian vocational education is high.** It has the ability to change the narrative on vocational skilling. Not only should the scheme is recommended to be extended for five years, the DGT should also be given the flexibility to spend the additional resources on upgrading more than one ITI in a state. A carrot and stick policy amongst the ITIs may spur them to compete with each other to receive money from the DGT.

**Figure 5.1: Schematic Policy Recommendation for the Model ITI Scheme with Key Stakeholders and Ingredients needed to make industry-ready ITI Students**



**Source:** NCAER Conceptualisation.

In order to improve the scheme and therefore the ITIs even further, it is recommended to have a strategic approach. There are four set of stakeholders in the scheme are Directorate General of Training (DGT) and State Government, ITI Staff and Teachers, ITI Students and Principal &



Institution Management Committee (IMC) (Figure 5.1). All four of them together have to work on building infrastructure, courses and curriculum and extra-curricular activities and forming & leveraging industry partnerships to make students industry-ready. The list of policy recommendations are listed below to further improve the functioning of the Model ITI scheme from the point of view of each stakeholder:

#### 1. DGT

- Objective of the Scheme needs change: The objective of the Model ITI scheme should be changed from forming “industry-oriented ITIs” to forming “industry-ready ITI students”.
- To improve funding flows, the DGT can use any of the proposed three approaches. However, the DGT must choose one approach and develop necessary guidelines for states that states have to adhere to those rules for able to use the money. The three proposed approaches are:
  - ❖ States may be given flexibility to decide whether expenditure from state treasury or through IMC subject to timeline of utilisation of funds be strictly followed.
  - ❖ States are given no choice but to accept the scheme as it is. If the state is not able to release the money to the ITI in a definite time frame, the money will come back to the Centre who can then use the money for other ITIs around the country.
  - ❖ A carrot and stick policy may be used where ITIs compete with each other for the pool of money, if they follow the scheme norms.
- Improve communication of objectives of the scheme to all stakeholders: This may be done by conducting workshops for all stakeholders separately including Principal, IMCs, Staff, teachers and placement counsellors. In these workshops by stakeholders, training may be provided like vocational pedagogy to teachers, management training to Principal etc., information about best practices to all stakeholders may be shared, may encourage cross-learning amongst the ITIs, may discuss common challenges and manage & leveraging industrial partners etc.
- Encourage Maruti Suzuki-type industry partners which provide holistic skilling and provide hands-on support.
- Development of Courses and Curriculum: Develop internationally-benchmarked curriculum with Indian eco-system for trades that are wanted across industries
- Monitoring and Evaluation of the Scheme needs to improve
  - ❖ The DGT also needs to develop statistics of trades and sectors. The sectors may be mapped with the National Industrial Classification Code to generate analysis about demand for trades in particular sectors. It also may help to generate information about trades that may be wanted in the future.
  - ❖ The DGT needs to improve ITI statistics. Especially the DGT needs to collect denominators and numerators of the Key Performance Indicators (KPIs) and compute them at one place to address errors.
  - ❖ The DGT needs to conduct surprise field visits to ITIs
  - ❖ Conduct online student and teachers’ surveys
  - ❖ Minutes of IMC meeting should be recorded and kept with the Ministry. Otherwise further funding may be affected.
- Others system changes, not specifically related to the scheme
  - ❖ Vocational pedagogy needs to be strengthened.
  - ❖ Student evaluations of teachers at the end of every semester should be made compulsory.
  - ❖ Centralised exam papers should be either made available in local languages or classes should be taught in a bilingual medium like in ITI Pusa. Students at ITI Saket would be rendered unemployable by their lack of knowledge of English.

- ❖ Faculty with minimum three to five years industry experience should be hired.

## 2. State Government

- The State Government needs to smoothen flow of funds from the DGT to the ITI. It can do so in the following ways:
  - ❖ By following DGT norms for transferring money from the DGT to the IMC.
  - ❖ Give money in advance to the ITI so as to facilitate their upgradation like the Government of Karnataka did for ITI Bangalore.
- The State Government can change the rules such that the Principal should have a minimum term of five years.
- The copy of sanction order of funds should be endorsed to the ITI Principal and IMC Chairperson to reduce informational gaps between ITI receiving funds and Governments saying that they have sent funds.
- Matching of availability of trades with regional demand: Systematically sync trades in ITIs with local industry requirements
- Change in hiring of faculty
  - ❖ Faculty with minimum three to five years industry experience should be hired.
  - ❖ Faculty needs to be upgraded on latest technologies every two years. This is especially important in the 21<sup>st</sup> century economy with short technological cycles.
  - ❖ Guest faculty is important especially when developing new trades.
  - ❖ Faculty should be encouraged to take sabbatical once in five years because of short technological cycles.

## 3. Principal

- The Principal of the ITI is the most important stakeholder, interacting with all others. Capacity development and managerial training needs to be given to the Principal. Further, the Principal needs to be given the flexibility to develop new industry partnerships and leverage them. This is a skill that needs to be taught and encouraged.
- Systematically sync trades in ITIs with local industry requirements
- Since ITIs are going through change in introduction of trades, it is important to ensure that before trades are introduced, pre-requisites like equipment and teachers need to be available
- There is a need to focus on soft skills and knowledge of the English language in some trades.
- Need to focus on extra-curricular activities.
  - ❖ The library facilities in ITI Saket were below average and so were the medical facilities. The library did not have even have basic magazines for various trades.
  - ❖ When there is an increased emphasis on learning to learn, having a one-room to be classified as a library does not encourage one to acquire skills.
  - ❖ Canteen facilities need to be improved. This where socio-emotional skills are developed.
  - ❖ Students in ITI Saket said that while infrastructure for drinking water was there (RO) but it was operational only when there were external visitors.
  - ❖ Ladies bathrooms were in remote corners of the college.
  - ❖ Students in ITI Saket complained that they could not use the cricket ground although they had an indoor sports area for badminton etc.

## 4. IMC

- The IMC needs to help the ITI give more hands-on guidance. Maruti Suzuki is a good example of that.

- It also needs to harness other industry partners and leverage them. Further the IMC needs to ensure that the quality of the industry ties are deep and transforming for the ITI in terms of teacher training, equipment, on-the-job training, apprenticeships and placements.
  - The IMC needs to meet regularly, keep minutes of the meeting and share that with the DGT and State Government.
  - The IMC needs to ensure that the trades offered in the ITI match with the regional industry needs.
5. ITI Staff and Faculty
- Capacity Development of ITI staff and faculty is important.
  - Faculty
    - ❖ The faculty need attitudinal shifts in education in ITIs and implicit encouragement towards government jobs.
    - ❖ Improvement in vocational pedagogy is critical – safety in welding equipment, teaching theoretical work and asserting that this is the way it is done, teaching on old equipment and insisting that it does not matter are all very old ways of teaching.
    - ❖ Digital skills and skills that promote active and independent learning need to be encouraged.
  - Staff
    - ❖ Capacity needs to be developed of financial department, Placement Cell, administration etc.
    - ❖ Placement Cell: It is quite clear that the ITIs have no idea what is required in the TCPC. While the DGT should hold workshops and seminars, bring in the best from major cities and transferring knowledge of what it means to be a Counsellor. One should hire a regular counsellor for this Cell who can provide students career counselling rather than just keep track of placements.
6. ITI Students
- Students need attitudinal shift and change in aspirations about government jobs.
  - Students need to seek career counselling
  - Student associations need to be strong.
  - Use the library to self-learn.

The Model ITI is a novel scheme. Learning from its predecessors, it has tried to incorporate lessons to improve ITIs. While the scheme has brought in many novel changes and offers a lot of potential, the scheme has got caught in a three way partnership which is acting as a barrier to implementation. Removing that barrier may help the scheme work relatively smoothly.



# Appendices



## Appendix A1

### Appendix A1.1: Craftsmen Training Scheme<sup>16</sup>

#### A1.1.1 Introduction

The Craftsmen Training Scheme (CTS) was introduced by the Government of India in year 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, to cultivate and nurture a technical and industrial attitude in the minds of younger generation. The Scheme has been shaping craftsmen to meet the existing as well as future manpower need, through the vast network of Industrial Training Institutes (ITIs) spread over various States/Union Territories (UTs) in the country.

The day-to-day administration of ITIs under the CTS was transferred to the State Governments/UT administrations with effect from the year 1956. From 1 April, 1969, the financial control of the ITIs in the State as well as in the UTs was transferred to the respective State Governments/UTs. The financial assistance was granted to them in the form of bulk grant in consultation with the erstwhile Planning Commission and the Ministry of Finance.

#### A1.1.2 Growth of ITIs

The Craftsmen Training Scheme (CTS) was initiated, in 1950 by establishing about 50 Industrial Training Institutes (ITIs) for imparting skills in various vocational trades to meet the skilled manpower requirement for industrial growth of the country. Several new private ITIs were established in 1980's in southern states mostly in Kerala, Karnataka and Andhra Pradesh, from where trained craftsmen found placement in the Gulf countries. In year 1980, there were 831 ITIs and the number of Training Institutes rose to 1887 in year 1987. It was during this period that private training institutes were distinguished from government training institutes by naming them as "Industrial Training Centres". However, recently amendment have been done and Industrial Training Institutes (ITIs) and Industrial Training Centers are uniformly known as Industrial Training Institutes (ITIs) while adding "Government" or "Private" word along with the name as the case be.

During last two decades the growth of Government and Private ITIs had been steep and during last five years these are growing with average growth rate of 15% every year. Presently (up to December 2016) there are 13,350 Government and Private Industrial Training Institutes (2,150 in Government and 11,200 in Private ITIs) having a seating capacity of 28.47 lakh (including supernumeraries)<sup>17</sup>.

Training courses under the CTS are being offered through a network of 13,350 Government and Private Industrial Training Institutes (ITIs) located all over the country with total seating capacity of 28.47 lakh with an objective to provide skilled work force to the industry in 126 trades. Candidates with 14 years and above can be enrolled under this scheme. There is no upper age limit. The training infrastructure in terms of Government & Private Industrial Training institutes saw a significant increase to reach a level of 13,350 in Twelfth Five Year Plan from about 5,114 in the beginning of the Eleventh Five Year Plan. The seating capacity also increased from 7.42 lakh in 2007 to 28.47 lakh as on 31.12.2016.

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<sup>16</sup> Directly reproduced from the Ministry of Skill Development and Entrepreneurship, Government of India. 2017. Annual Report 2016-17. Available at <http://www.skilldevelopment.gov.in/annual%20report.html>. pp. 56-61. Accessed on 29<sup>th</sup> August, 2017.

<sup>17</sup> This number is as on December 2016.

### **A1.1.3 Responsibility of Central & State Government for implementation of CTS**

- i. Central Government:
  - a. Framing overall policies, norms, and standards for Skill Development.
  - b. Formulation of new training schemes for Skill Development of youth.
  - c. Expansion of training infrastructure.
  - d. Development / revision of course curriculum
  - e. Affiliation of Industrial Training Institutes
  - f. Trade testing & certification
  - g. Conducting instructor training course for serving & potential instructors of ITIs.
  - h. Conducting courses for skill up gradation of instructor in specialized/new areas.
  - i. Organizing vocational training programmes for women.
  - j. Bilateral agreements and cooperation in the field of vocational training, to make training at-par within international standards.
- ii. State Government:
  - a. Day-to-day administration of Industrial Training Institutes.
  - b. Conducting training courses in ITIs.
  - c. Setting up new institutes, addition of trade units in the existing institute as per the requirement of local industries.
  - d. Actual conduct of trade test & distribution of certificates to successful trainees.
  - e. Implementation of Central Schemes for up gradation of ITIs.
  - f. Deputation of instructors for training at DGET institutes.

### **A1.1.4 Objectives of the Scheme:**

- To provide life long career through skill training
- To equip the work force with appropriate skills / multi skills as per requirement of various sector of economy.
- To make youth productive by providing employable skills, both for wage and promote entrepreneurship
- To produce craftsmen of high quality.
- To ensure steady flow of skilled workers in industrial /service sectors.
- To raise the quality and quantity of industrial production by systematic training of potential workers.

### **A1.1.5 Salient Features of the Scheme**

- Aspirants of age 14 years and above are eligible to seek admission in Government and Private ITIs. There is no upper limit.
- Admissions in Government and Private ITIs are done in month of August every year
- Tuition fee in the ITIs is decided by the respective State Government as deemed fit based on the recommendation of the concerned State Council for Vocational Training. However no fee is being charged from SC/ST candidates and persons with special abilities.
- Trainees are also provided with library, sports and medical facilities.
- Seats are reserved for SC/ST candidates in proportion to their population in respective State/UT.
- Guidelines for reserving 3% seats for persons with disability and 30% for women candidates have been issued to State Governments and these could be filled based on the general reservation policy of each State/UT and total reservation is limited to 50%. Seats are also reserved for the wards of Defense personnel. Seats for OBC candidates have also been reserved in proportion to the seats reserved for them in Government Services in the respective States.
- There is a provision of second and third shifts in Government and Private ITIs with segregated timing, for optimum utilization of infrastructural facilities, they are



encouraged to introduce second shift by appointing one additional trade instructor and additional trainee kit for trainees.

- A “Placement Cell” in every Government and Private ITIs is set up to facilitate the graduates in getting placement in different industries.
- It has been suggested to have Institute Management Committee (IMCs) formed for ITIs’ in consultation with apex Industry bodies to improve cooperation between Industry and Industrial Training Institutes (ITIs).

#### **A1.1.6 Structure of Training Programme**

- Training under the scheme is imparted in 129 (as on March 2018) trades.
- The period of training for various trades is one year and two years. The entry qualification varies from class 8th class pass to class 10<sup>th</sup> pass, depending on the trades.
- Structure of training Programme has been converted into semester system in place of long term, w.e.f. August, 2013.
- The courses have been designed to impart basic skills and knowledge in the trades so as to prepare trainee for employment as a semi-skilled worker or for self-employment.
- As 70% of the training period is allotted to practical training and the rest to subjects relating to Trade Theory, Workshop Calculation & Science, Engineering Drawing, therefore, emphasis is on skill building.
- For overall personality development of trainees, a course on “Employability Skill” is being taught to trainees. The subject covers topics introduced on Occupational safety and health, Quality tools, Communication Skills, Team work, Entrepreneurship, Environment Education, IT Literacy & Labour Welfare legislation

#### **A1.1.7 Measures to ensure Quality and Relevance of CTS**

- With the objective of maintaining quality of training in Government and Private ITIs, a number of measures have been prescribed by National Council of Vocational Training (NCVT) including guidelines for starting new institutes / trades and their affiliation to NCVT.<sup>18</sup>
- Strict norms prescribed for affiliation of ITIs with NCVT are adhered to, ensuring that the infrastructure facilities, qualified staff, etc.
- NCVT affiliation is granted to only those Government & Private ITIs which conforms to norms prescribed by NCVT-
- There is a well-defined procedure for evaluation of affiliated Government and Private ITIs & also there is a procedure for de-affiliation of Institutes / trades that are found not complying with the prescribed norms.
- To ensure transparency, it has been made mandatory for ITIs to host their website and link all necessary information relating to training programme being offered for affiliated NCVT trade units, placement of trainees, infrastructure facility etc.
- Syllabi of various trades are periodically revised to keep pace with the rapidly changing technology in industry.
- Obsolete trades are dropped and new trades are introduced under the scheme as per the need of the industry.

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<sup>18</sup> “The National Council for Vocational Training (NCVT) a tripartite body was set up through a resolution by Ministry of Labour in 1956, to advice on issues relating to “vocational training” including Craftsmen Training Scheme such as designing of curricula, maintaining quality standards, deciding norms for affiliation, granting affiliation to institutes, trade testing and certification.” Ministry of Skill Development and Entrepreneurship, Government of India. 2017. *Annual Report 2016-17*. Available at <http://www.skilldevelopment.gov.in/annual%20report.html>. pp. 24, Accessed on 29th August, 2017.

## **Appendix A1.2: Guidelines for the Scheme on Upgradation of Existing Government Industrial Training Institutes into Model ITIs - Centrally Sponsored Scheme<sup>19</sup>**

### **A1.2.1. Project Period and Cost**

- Remaining period of 12<sup>th</sup> TFYP i.e. FY 2016-17.
- The scheme is a Centrally Sponsored Scheme with the funding pattern between Centre and State as 70:30 (90:10 for North eastern states).
- The scheme has been approved for ` 300 crore.
- The scheme was approved in 2014 for an implementation period three years till March 2017 but seeking extension
- Coverage – 29 ITIs one will be assisted under the Scheme. Funds would be released on a first-come-first serve basis based on level of preparation and merit of selection of ITI by the State Government.

### **A1.2.2 Selection Criteria**

1. Existing Government ITI is to be identified for upgradation as a Model ITI. Key objective is to develop a benchmark for industry oriented ITI which would serve as a model for other ITIs and would also raise dignity of ITI education (Box A1.1)

**Box A1.1: List of Activities for submission of Proposal for Model ITI**

1. Select an existing Government ITI located in a major industry cluster with a champion industry partner.
2. The Model ITI should not have been funded under the Vocational Training Improvement Project (VTIP). An exemption maybe provided under exceptional circumstances on considering the justification provided by the State strictly on a case-to-case basis. Similarly, the Model ITIs identified in the North Eastern States should not have been funded under the scheme.
3. The ITI must have a functioning Institute Management Committee (IMC) registered as a Society. Other members in IMC from industry may also represent various trades in the ITI.
4. IMC Society will be required to take up reassessment of all existing trades and new requirements for their relevance with local market demand, for preparation of implementation plan (IP).
5. Tripartite Memorandum of Agreement (MoA) is to be signed between the champion industry partner, State/ UT Governments and Central Government for each of the IMC Society.
6. The State Government may recommend the IP to DGE&T along with commitment to give state share and to sign MOA.
7. Based upon the IP, central share of funds will be released to the States only after IMC is formed and action has been initiated for registration of society.
8. State will provide funds to the IMC Society including State Share. Released Central funds along with State share should be released by the State Government to the IMC only after its registration as a Society is complete.

2. The ITI will be provided funds for taking up several initiatives and reforms to achieve broad objective. The identified ITI should be situated in a prominent industrial cluster in the State. These Model ITIs will establish links with the industrial clusters in their vicinity to enable it to function as a solution provider to the cluster group. An

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<sup>19</sup> Directly reproduced from the:

Directorate General of Training, Ministry of Skill Development and Entrepreneurship. Implementation Manual for Central Sponsored Scheme "Upgradation of Existing Government Industrial Training Institutes into Model ITIs". Internal Document.

exemption may be given to the ITIs in the North-eastern states for identification of industrial cluster on an exceptional basis.

3. **Objective:** The following are the objectives:

- Offer training to new job entrants through
  - Existing trades (upgraded to match the standards laid down)
  - Starting of new trades
  - Conduct of short-term training programmes with customized skill training
- Existing workers
- Workers of unorganised sector.

Such ITIs may plan to upgrade existing trades, close trades which are obsolete (having no meaningful demand) and start new trades that cater to the Industry clusters. Further, they can run short-term courses under Modular Employable Skills (MES), as well. These objectives would be carried out through.

4. **Support of Dual Training Courses:** To assist industry with qualified and trained workforce, DGT has started a scheme on Dual System of Training. Dual Training will enable industries to partner with (Government and Private) ITIs for conducting training programmes under high employability potential courses to fulfil the needs of industries. The theory portion and basics about safety and tools, equipment along with foundation practical will be conducted in the ITI. For providing the industrial training relevant to practical/lab training portion of the curriculum in the industry would be roped in. At present there are a total of 129 trades running under the CTS. The dual system training is currently available for 17 most popular trades as on June, 2018. ITIs can sign MoUs with industry for on-the-job training for industrial exposure to trainees. ITIs may also support industry in imparting Apprenticeship training as 'Optional Trades' by acting as basic training provider utilising the ITI infrastructure in spare capacity.

5. **Strengthening Placement Cell:** The Placement Cell in the Model ITI should also function as Career Centre envisioned under National Career Service (NCS). Almost all the ITIs have established Training, Counselling and Placement Cell (TCPC). The objective of TCPC is to foster close networking with the industry and assist job placement for the trainees. To have a functional TCPC:

- ITI may appoint a qualified person on contract for TCPC coordinator and equip it with better facilities for immediate response from employer/industry.
- The TCPC will perform counselling and job placement and will be a one-point stop for employer/industry and trainees.

The additional manpower requirement (instructors for new trades and TCPC coordinator etc.) should be assessed and filled up in the Implementation Plan. Plan of the action for creation and filling up posts would be part of the Implementation Plan.

### **A1.2.3 Institute Management Committee (IMC)**

The Model ITI must have a functioning Institute Management Committee (IMC) registered as a Society under the Societies Registration Act, 1860. The IMC must have a pre-identified champion industry partner that is willing to run the operations of the IMC Society. The State Government would also delegate adequate functional powers to IMC in accordance with the Scheme of 'Upgradation of 1396 Government ITIs under PPP mode'

**Memorandum of Agreement (MoA):** A Tripartite Memorandum of Agreement (MoA) will be signed between the champion industry partner, State/ UT Governments and Central Government for each of the IMC Society. These will inter-alia include role, autonomy to IMC and deliverables i.e. Key Performance Indicators (KPIs), job offer by the industry, industry attachment to the trainees etc. The KPIs and overall Target Values will be as per following benchmarks:

**Table A1.1: Key Performance Indicators**

S.No.	Key Performance Indicator	Year 1	Year 2	Year 3
1	Overall Seat Utilization	70%	80%	90%
2	Pass-out Rate (overall average)	65%	70%	75%
3	Placements (overall average, wage/self-employment)	60%	70%	80%
4	Average monthly wages* of placed candidates	10% increase per year from baseline		
5	Average number of outside workers trained by additional short term courses being run	80% of the existing seats in ITI.	100% of the existing seats in ITI.	200% of the existing seats in ITI

**Note:** For wage employment, the benchmark would be not less than minimum wages for semi-skilled workers. There is also a reasonable permissible component of self-employment

#### **A1.2.4 Major Activities of IMC Society**

1. The IMC Society will be required to take up reassessment of all existing trades and new requirements for their relevance with local market demand, for preparation of implementation plan. Based upon the implementation plan as agreed by the State Government central share of funds will be released to the States.
2. As part of the project, IMC will internally, take up the following activities:
  - Realignment of offered CTS programs to industry needs by converting/opening relevant units based on the reassessment exercise;
  - Upgradation of all retained units by provisioning relevant infrastructure and training facilities;
  - Upgradation of overall facilities in the institute, including building, library, workshops, computer labs and IT facilities and other infrastructure for hygiene, safety and quality upkeep;
  - Filling up all vacant instructor positions by hiring contractual faculty, if required;
  - Setting up a full-fledged Training, Counselling, and Placements cell (TCPC) and appointing a full time training and placement officer to liaison with industries and generate and convert placement leads; TCPC of Model ITI will support other ITIs of the State, in its vicinity using Hub and Spoke model;
  - Strengthening the TCPC to work as a Career Guidance Centre as envisioned in the National Career Service and guide/help the graduates in employment/self-employment;
  - Champion Industry Partner to conduct training programmes in the most popular trade in ITI;
  - Creating suitable infrastructure for upgradation of skills of the existing workforce of the local industrial units;
  - Carrying out advocacy activities for institute promotion amongst candidates and potential employers by creating websites and holding job fairs;
  - Ensuring industrial attachment of ITI trainees for minimum 15 days.

#### **A1.2.5 Provision of funds**

The provision of funds may vary between ITIs depending on the intake capacity of the ITI. Hence, funds will be provided as per the norms including state share given below:

- For ITIs of existing/proposed seating capacity of 800 or more trainees, maximum allocation would be Rs.10 crore subject to actual requirement.
- For ITIs of existing/proposed seating capacity of 400 or more trainees, maximum allocation would be ` 5 crore subject to actual requirement.

- In North-Eastern (NE) states, the ITIs are smaller and accordingly the ratio will be 50 per cent i.e. for an ITI with 200 trainees, upto ` 5 crore may be allocated and two ITIs can be considered from the NE States.

#### **A1.2.6 Design and Modalities of Release of funds**

The state will provide the funds to the IMC Society including State Share. Funds from the Government of India will be released to the States only after IMC is formed at the Model ITI and action has been initiated for registration of society. Released Central funds along with State share should be released by the State Government to the IMC only after its registration as a Society is complete.

The funds are proposed to be provided for Civil Works (CW), Machinery and Equipment and other charges.

- Civil Work (CW): Normally 25 per cent of the project cost will be provided for CW which will include construction of new workshop block, renovation of existing workshops and class rooms.
- M&E: Normally 50 per cent of the total cost will be kept for procurement of equipment for the upgradation of existing trades and also for procurement of equipment for new trades.

Normally recurring exp. should be borne by the State Govt. However, expenditure to the tune of 25% of the project cost will be for following activities:

- Establishment/ strengthening of library;
- Establishment of functional TCPC including payment for placement officer;
- Office furniture/ office equipment;
- Publicity and advocacy efforts;
- Undertaking studies, job fairs, visits to other States, etc.

If a State Government intends to complete civil works out of state resources, it may procure more equipment out of project funds. The State Government may submit a plan for total funds required to upgrade the ITI into Model ITI while identifying separately components that are to be covered under the scheme. Accordingly, central releases will be restricted up to Rs 10 crore (including state share) and balance requirement may be met out of State resources.

#### **A1.2.7 Release of Central Funds**

The release of central funds will be in 3 instalments as per following norms:

- First instalment @ 50 per cent of central share will be released on the basis of implementation Plan prepared by the IMC.
- Second instalment @ 40 per cent will be released on utilization of 80 per cent of 1st instalment and furnishing of the Utilization Certificate by the IMC and State Government.
- Remaining 10 per cent to be given as an incentive fund contingent to performance of ITIs and achieving target Key Performance Indicators as identified in the MoA.

#### **A1.2.8 Monitoring**

States will monitor the implementation of scheme and furnish quarterly progress report as per prescribed format. State may, if required, appoint an implementation support agency.

### **A1.2.9 NCS & e-learning**

The placement Centre in the model ITI should also function as Career Centre envisioned under national Career service. The Model ITIs will also act as spoke for the Centre for distance learning under the scheme – e-learning and distance learning

### **A1.2.10 Financial & Procurement Procedure**

The Financial & Procurement Procedure are part of Implementation Plan and should be followed by the State / ITIs.

## Appendix A2

### Appendix A2.1: Industry Clusters and Areas

The objective in this exercise is to assess whether the ITIs are located geographically close to industrial clusters and/or areas within a radius of 100 km. There can be manifold benefits for this. It helps forge partnerships, on-the-job training, sourcing of guest lecturers who can provide knowledge of latest technologies, jobs for the ITI trained worker etc.

However, one specific strategy of the ITI also should be to match demand and supply of vocational skills in the geographical region. An industrial area may contain a range of industries whereas a cluster may contain industries producing the same or similar type of products. The Cluster Observatory has identified clusters across India by using the definition that "a cluster is a concentration of enterprises producing same or similar products or strategic services and is situated within a contiguous geographical area spanning over a few villages, a town or a city and its surrounding areas in a district and face common opportunities and threats"<sup>20</sup>. The characteristic of an industrial cluster is having at least 100 enterprises and/or a minimum turnover of Rs.100 million<sup>21</sup>. Units in these clusters are functioning from factory premises with hired workers. Such clusters have a mix of micro, small, medium, few large and at times all micro units."<sup>22</sup>

The strategy of the ITI is also then different. If there is no specific cluster, the ITI will produce more people with generic vocational trades like fitters, machinists etc., which are wanted across a range of industries. In contrast, in the presence of an industrial cluster, the ITI may also produce workers trained in those vocational trades that are wanted in those clusters.

The authors have used literature review, lists from the Development Commissioner, Ministry of Micro, Small and Medium Enterprises and the Cluster Observatory, to identify clusters in the vicinity of the ITI. In addition, it has used Google Maps analysis to assess whether there are industrial areas near the ITI within a 100–km radius and the type of industries they contain.

The extensive use of Google Maps in the analysis only highlights the problem that a country where clusters are not known or identifiable, producing workers to meet demand in itself would be challenging.

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<sup>20</sup> Cluster Observatory. <http://www.clusterobservatory.in/clustermap.php>.

<sup>21</sup> Ibid

<sup>22</sup> Ibid.





**Table A2.1: Geographical Match of Industry Cluster and/or Area and ITI**

S.No.	State	Name of ITI	Champion Industrial Partner	Industrial Cluster/Area	Products	References
1.	Andhra Pradesh	ITI Gajuwaka	Vishakapatnam Steel Plant	Steel Fabrication Cluster	Steel	<a href="http://www.dnb.co.in/Publications/SME_Cluster_Series_2016_Vishakapatnam/SME_Cluster_Series_2016_Visakhapatnam.pdf">http://www.dnb.co.in/Publications/SME_Cluster_Series_2016_Vishakapatnam/SME_Cluster_Series_2016_Visakhapatnam.pdf</a>
2.	Arunachal Pradesh	ITI Yupia	North Eastern Electric Power Corporation Limited (NEEPCO Ltd.)	No specific industrial cluster	The state has hydropower potential.	<a href="https://scroll.in/article/802708/why-private-companies-want-to-give-their-hydel-projects-in-arunachal-to-nhpc">https://scroll.in/article/802708/why-private-companies-want-to-give-their-hydel-projects-in-arunachal-to-nhpc</a> ; <a href="https://scroll.in/article/853655/the-centres-proposal-to-build-a-mega-dam-in-arunachal-pradesh-makes-even-hydropower-companies-wary">https://scroll.in/article/853655/the-centres-proposal-to-build-a-mega-dam-in-arunachal-pradesh-makes-even-hydropower-companies-wary</a> ; <a href="https://www.thehindubusinessline.com/news/national/arunachal-pradesh-has-the-potential-to-generate-50000-mw-hydro-electric-power/article8706166.ece">https://www.thehindubusinessline.com/news/national/arunachal-pradesh-has-the-potential-to-generate-50000-mw-hydro-electric-power/article8706166.ece</a>
3.	Bihar	ITI Marhowrah	North Bihar Power Grid Corporation of India Ltd	Leather Cluster	Railways locomotive plants, wheel factory nearby	<a href="http://dcmsme.gov.in/dips/DIPS-SARAN.pdf">http://dcmsme.gov.in/dips/DIPS-SARAN.pdf</a> and <a href="https://www.udयोगmitrabihar.in/docs/dp/saran.pdf">https://www.udयोगmitrabihar.in/docs/dp/saran.pdf</a> and <a href="#">Google Maps</a>
4.	Chhattisgarh	ITI Bhilai	Bhilai Steel Plant (Chhattisgarh)	Light Industrial Area	Engineering Companies	<a href="http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus">http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus</a>
5.	Delhi	ITI Pusa	Maruti Suzuki India Ltd.	NCR cluster	Auto Hubs	<a href="http://www.makeinindia.com/article/-/v/india-s-automobile-hubs">http://www.makeinindia.com/article/-/v/india-s-automobile-hubs</a>
6.	Goa	ITI Panaji	Hotel Manoshanti - Hospitality Sector	No specific industrial cluster	The share of hotels and restaurants in total state GVA was 2.2% in 2014. The Goa Tourism Satellite Accounts for 2009-10 indicates that the tourism GVA directly was 7.4% and 16.9% directly and indirectly. Share of tourism employment in total employment directly is 15.86% and directly & indirectly was 32.77%	<a href="http://tourism.gov.in/sites/default/files/Other/Goa_Final_(29-12-15).pdf">http://tourism.gov.in/sites/default/files/Other/Goa_Final_(29-12-15).pdf</a>
7.	Gujarat	ITI Dashrath	Gujarat State Fertilizers and Chemicals Ltd.	Karelibaug Industry Cluster, Industrial Area Padra	Surrounded by miscellaneous industries and	Google Maps

S.No.	State	Name of ITI	Champion Industrial Partner	Industrial Cluster/Area	Products	References
					clusters; Machinery and Equipment other than Transport	
8.	Haryana	ITI Gurgaon	Maruti Suzuki India Ltd.	NCR cluster	Auto Hubs; Transport Equipment and Parts	<a href="http://www.makeinindia.com/article/-/v/india-s-automobile-hubs">http://www.makeinindia.com/article/-/v/india-s-automobile-hubs</a> and <a href="http://clusterobservatory.in/Analysed%20Issues.pdf">http://clusterobservatory.in/Analysed%20Issues.pdf</a>
9.	Himachal Pradesh	ITI Nalagarh	Baddi Barotiwal Nalagarh Industry Association	Baddi-Barotiwal-Nalagarh Industrial Area	Miscellaneous industries including Pharma, Biotech, Beauty and major companies including Wipro, Pritam International Ltd. etc.	<a href="https://pt.slideshare.net/Exolus/india-2020-what-india-will-look-like-in-the-future/27-4_Production_Big_Pharma_Production">https://pt.slideshare.net/Exolus/india-2020-what-india-will-look-like-in-the-future/27-4_Production_Big_Pharma_Production</a> ; Model ITI Document; Google Maps
10.	Jharkhand	ITI Ranchi	Usha Martin Ltd, Tatisilway	Jharkhand Industrial Area	Miscellaneous plus major industries in the cluster like Exide Industries etc.	Google Maps
11.	Karnataka	ITI Bangalore	Bosch Ltd	Electronics City Industries Association (ELCIA) Cluster	Electronics manufacturing plus Miscellaneous industries outside the cluster	Google Maps
12.	Kerala	ITI Kalamassery	Nippon Motors Corporation Pvt. Ltd.	Kalamassery Industrial Estate	Miscellaneous	<a href="https://mediastudio.in/nippon/">https://mediastudio.in/nippon/</a> ; Google Maps; <a href="http://www.nippon-toyota.com/contact-co01b.html">http://www.nippon-toyota.com/contact-co01b.html</a> ; <a href="http://www.kdpia.com/member.php">http://www.kdpia.com/member.php</a>
13.	Madhya Pradesh	Govt. Gas ITI	Evonne Industries Pvt. Ltd.	Govindpura Industrial Area	Miscellaneous	Google Maps; ( <a href="http://www.gjabhopal.in/gia-sub-category.php?link_id=8&amp;par_id=8&amp;secfun=2a38a4a9316c49e5a833517c45d31070">http://www.gjabhopal.in/gia-sub-category.php?link_id=8&amp;par_id=8&amp;secfun=2a38a4a9316c49e5a833517c45d31070</a> )
14.	Maharashtra	ITI Nashik	Crompton Greaves	MIDC- Nashik Engineering Cluster	Nashik also is a cluster for Steel furniture	Google Maps; <a href="http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus">http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus</a>
15.	Odisha	ITI Barbil	Jindal Steel Limited	Matkambada Industrial Estate and Karokola Industrial Estate	Iron and Steel Industries	Google Maps
16.	Punjab	ITI Rupnagar	Cheema Boilers Ltd.	Within 100km range, Jindal Plywood Industries, Pinjor-Baddi-Nalagarh Road, Chanalon Industrial Area and close to Mohali	Miscellaneous	Google Maps

S.No.	State	Name of ITI	Champion Industrial Partner	Industrial Cluster/Area	Products	References
17.	Rajasthan	ITI Udaipur	Maruti Suzuki India Ltd.	Mewar Industrial Area	Miscellaneous including ancillary industries for the auto sector, minerals and metals, woven fabrics and bags etc.	Google Maps
18.	Sikkim	ITI Namchi	Zydus Healthcare Ltd.	Not Available	Sikkim is a hub of pharmaceutical production.	Google Maps
19.	Tamil Nadu	ITI Coimbatore	Laxmi Machine Works Limited	Coimbatore	Diesel Engines, Agricultural Implements, Machine Tools, Casting and Forging, Powerloom and Wet Grinding Machines	<a href="http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus">http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus</a>
20.	Tripura	ITI Indranagar (W)	Confederation of Indian Industry	5 industrial areas/parks in West Tripura	Agarbatti, Jute, handicrafts and Handloom clusters and production potential of natural gas	<a href="https://timesofindia.indiatimes.com/business/india-business/ongc-takes-step-to-increase-natural-gas-production-in-tripura/articleshow/59794160.cms">https://timesofindia.indiatimes.com/business/india-business/ongc-takes-step-to-increase-natural-gas-production-in-tripura/articleshow/59794160.cms</a> and <a href="http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus">http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus</a>
21.	Telangana	ITI Mallepally	Reactive Metals of India Pvt. Ltd.	SME Clusters, IT/ITeS Hub, Ameenpur Industrial Area and Rangareddy district has variety of mineral resources and deposits, Agri Seed Producers Cluster, Fiber Glass Industry Cluster, Plastic Cluster,	Ceiling Fan, Electronic Goods, Pharmaceuticals-Bulk Drugs, Hand Pumpsets and Foundry, Metal Products and Parts except Machinery & Equipment, Rubber, Plastic, Petroleum and Coal Products, Basic Chemicals and Chemical Products, Rubber, Plastic, Petroleum and Coal Products, Machinery and Equipment other than Transport	<a href="http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus">http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus</a> , <a href="http://it.telangana.gov.in/sectors/it-ites/">http://it.telangana.gov.in/sectors/it-ites/</a> ; <a href="http://www.industries.telangana.gov.in/Library/District/rangareddy.pdf">http://www.industries.telangana.gov.in/Library/District/rangareddy.pdf</a> ; <a href="http://clusterobservatory.in/Analysed%20Issues.pdf">http://clusterobservatory.in/Analysed%20Issues.pdf</a> and Google Maps
22.	Uttar Pradesh	ITI Saket	Stag International	Meerut	Sports Goods and Scissors	<a href="http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus">http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus</a>
23.		ITI Varanasi	Maruti Suzuki India Ltd	Textile and Jewellery clusters	Diesel Locomotive Works Factory is also located in Varanasi	<a href="http://www.clusterobservatory.in/clustermap/editview1.php?type=1&amp;sector=Type%20of%20Sector&amp;product=&amp;state=22&amp;district=Varanasi">http://www.clusterobservatory.in/clustermap/editview1.php?type=1&amp;sector=Type%20of%20Sector&amp;product=&amp;state=22&amp;district=Varanasi</a>

S.No.	State	Name of ITI	Champion Industrial Partner	Industrial Cluster/Area	Products	References
24.	Uttarakhand	ITI Jagitpur, Haridwar	Hero Motor Corp	Integrated Industrial Township; SIIDCUL Haridwar	Cosmetics & Allied, Plastic & Allied, Apparel & Allied, Agro Food & Allied, Pharma Products, Electrical, Electronic & Allied Institutional, Commercial & Allied, Survey Instruments	<a href="http://www.business-standard.com/article/companies/hero-honda-opens-plant-at-haridwar-108040901090_1.html">http://www.business-standard.com/article/companies/hero-honda-opens-plant-at-haridwar-108040901090_1.html</a> , <a href="http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus">http://www.dcmsme.gov.in/clusters/clus/smelist.htm#clus</a> and <a href="https://www.siidcul.com/industrial-estate/iie-haridwar">https://www.siidcul.com/industrial-estate/iie-haridwar</a>
25.	West Bengal	ITI Durgapur	Indian Iron & Steel Sector Council	Durgapur Industrial Area	Iron and Steel, power plants, chemical and engineering industries	Google Maps; <a href="http://www.durgapurcity.co.in/industries.html">http://www.durgapurcity.co.in/industries.html</a>

**Table A2.2: Flow of Funds**

S.No.	State	Name of ITI	Year of Approval of the ITI	Year When Funds were First Released to the State Government	Whether equivalent State Share [@30% ] contributed by the State	If Yes, whether funds transferred from State to ITI/IMC Society Account
			<i>As on January, 2018</i>		<i>ITI Responses, as on July, 2018</i>	
1.	Andhra Pradesh	ITI Gajuwaka	2015–16	2015–16	Yes	Yes
2.	Arunachal Pradesh	ITI Yupia	2016–17	2016–17	Yes	Funds parked into the account of Arunachal Pradesh Skill Development Society
3.	Chhattisgarh	ITI Bhilai	2015–16	2015–16	Yes	Yes
4.	Delhi	ITI Pusa	2016–17	2016–17	Under Process	Partially
5.	Goa	ITI Panaji	2015–16	2015–16	Allocated by the State	No
6.	Gujarat	ITI Dashrath	2014–15	2014–15	No	Partially
7.	Haryana	ITI Gurgaon	2016–17	2016–17	Yes	Yes
8.	Himachal Pradesh	ITI Nalagarh	2014–15	2014–15	Yes	Yes
9.	Jharkhand	ITI Ranchi	2015–16	2015–16	Yes	No
10.	Karnataka	ITI Bangalore	2014–15	2014–15	Yes	Yes
11.	Kerala	ITI Kalamassery	2015–16	2015–16	Yes (50%)	Yes
12.	Odisha	ITI Barbil	2014–15	2014–15	Yes	Yes
13.	Rajasthan	ITI Udaipur	2014–15	2014–15	Yes	Yes
14.	Sikkim	ITI Namchi	2015–16	2015–16	Yes	Yes
15.	Tamil Nadu	ITI Coimbatore	2015–16	2015–16	Proposal sent to State government and order awaited	No
16.	Tripura	ITI Indranagar (W)	2014–15	2014–15	Yes	Yes
17.	Telangana	ITI Mallepally	2014–15	2014–15	Yes	Yes
18.	Uttar Pradesh	ITI Saket	2014–15	2014–15	Yes	Yes
19.		ITI Varanasi	2016–17	2016–17	Yes	Yes

S.No.	State	Name of ITI	Year of Approval of the ITI	Year When Funds were First Released to the State Government	Whether equivalent State Share [@30% ] contributed by the State	If Yes, whether funds transferred from State to ITI/IMC Society Account
20.	Uttarakhand	ITI Jagitpur, Haridwar	2015-16	2015-16	No response	Yes
21.	West Bengal	ITI Durgapur	2015-16	2015-16	Yes	Yes

**Source:** Directorate General of Training, Ministry of Skill Development and Entrepreneurship, Government of India. 2018. Memorandum for Standing Finance Committee for CSS 'Upgradation of Existing Government ITI into Model ITI'. Internal Document and Quarterly Progress Reports of ITIs.

**Table A2.3: Releases to the State Government under the CSS 'Upgradation of Government ITIs into Model ITIs  
(` lakh), June 2018**

S.No.	State	Name of ITI	Approved allocation under the scheme	Central Allocation	Total Central funds released till date	State Share @ 30% (10% NE) to be provided by the state	Total funds released (central and state share) till date	Funds Release against Central allocation (%)
1.	Andhra Pradesh	ITI Gajuwaka	1,000	700	350	150	500	50.0
2.	Arunachal Pradesh	ITI Yupia	435	392	98	10.89	108.89	25.0
3.	Chhattisgarh	ITI Bhilai	1,000	700	350	150	500	50.0
4.	Delhi	ITI Pusa	843	590	295	126.43	421.43	50.0
5.	Goa	ITI Panaji	500	350	175	75	250	50.0
6.	Gujarat	ITI Dashrath	910	637	318.5	136.5	455	50.0
7.	Haryana	ITI Gurgaon	1,000	700	350	150	500	50.0
8.	Himachal Pradesh	ITI Nalagarh	913	639	319.5	136.93	456.43	50.0
9.	Jharkhand	ITI Ranchi	1,000	700	350	150	500	50.0
10.	Karnataka	ITI Bangalore	1,000	700	214	91.71	305.71	30.6
11.	Kerala	ITI Kalamassery	1,000	700	350	150	500	50.0
12.	Odisha	ITI Barbil	710	497	447.3	191.7	639	90.0
13.	Rajasthan	ITI Udaipur	500	350	175	75	250	50.0
14.	Sikkim	ITI Namchi	500	450	225	25	250	50.0
15.	Tamil Nadu	ITI Coimbatore	1,000	700	175	75	250	25.0
16.	Tripura	ITI Indranagar (W)	800	720	360	40	400	50.0
17.	Telangana	ITI Mallepally	1,000	700	228	97.71	325.71	32.6
18.	Uttar Pradesh	ITI Saket	1,000	700	350	150	500	50.0
19.		ITI Varanasi	900	630	157.5	67.5	225	25.0
20.	Uttarakhand	ITI Jagitpur, Haridwar	750	525	79	33.86	112.86	15.0

S.No.	State	Name of ITI	Approved allocation under the scheme	Central Allocation	Total Central funds released till date	State Share @ 30% (10% NE) to be provided by the state	Total funds released (central and state share) till date	Funds Release against Central allocation (%)
21.	West Bengal	ITI Durgapur	1,000	700	165	70.71	235.71	23.6
	Total		21,660	15,509.3	6,564.13	2,596.37	9,160.5	42.3

**Source:** DGT, MSDE, Internal Document.



**Table A2.4: Details of responses to questions related to Training and Placement Cell (TCPC)**

S. No.	Name of the ITI	Did ITI have a Placement Cell before becoming a Model ITI?	Whether dedicated TCPC cell is functioning or present status regarding same	Whether TCPC cell has been set up as per proposal in Implementation Plan?	Whether placement officer is regular (R) or contractual (C) or the officer of ITI in additional charges (AC)?	If TCPC doesn't have regular placement officer, then furnish present status for hiring regular placement officer
1	ITI Gajuwaka	Yes	Yes	Yes	R	Not Applicable
2	ITI Yupia	No	Yes	Yes	AC	No plans mentioned
3.	ITI Bhilai	Yes	Yes	To be set up	AC	For hiring of Placement officer the advertisement in newspaper is being issued.
4.	ITI Pusa	Yes	Yes	Yes	R	A regular Crafts Instructor has been given independent charge of TCPC
5.	ITI Panaji	Yes	No	To be set up	R	Not Applicable
6.	ITI Dashrath	Yes	Yes	To be set up	AC	Advertisement is given
7.	ITI Gurgaon	Yes	Yes	Yes	R	Not Applicable
8.	ITI Nalagarh	Yes	Yes	Yes	AC	Matter has been sent to Govt.
9.	ITI Ranchi	Yes	Yes	To be set up	AC	Activities in progress
10.	ITI Bangalore	Yes	Yes	Yes	AC	Action has been initiated to hire a placement officer through Keonics Bangalore. Training Officer looking after placement activity regularly
11.	ITI Kalamassery	Yes	Yes	Working in full swing	AC	No plans mentioned
12.	ITI Barbil	Yes	Yes	Yes	AC	Officer of ITI in additional charge
13.	ITI Udaipur	No	Yes	No	AC	Will be recruited soon
14.	ITI Namchi	Yes	Yes	Yes	AC	Yes
15.	ITI Coimbatore	Yes	Yes	No response	AC	No plans mentioned
16.	ITI Indranagar	Yes	Yes	Yes	R	Not Applicable
17.	ITI Mallepally	Yes	Yes	Yes	R	Not Applicable
18.	ITI Saket	Yes	Yes	Yes	AC	No plans mentioned
19.	ITI Varanasi	Yes	Yes	Yes	R	Not Applicable
20.	ITI Jagitpur, Haridwar	Yes	Yes	No response	No response	No response
21.	ITI Durgapur	Yes	Yes	No	AC	Modalities will be decided in next IMC meeting

**Source:** Implementation Plans and Quarterly Progress Reports submitted by the ITIs.

## Appendix A3

**Table A3.1 Financial Progress<sup>1</sup>**

S. No	Name of ITI	(in ` lakh)			Break-up of Utilisation (in ` lakh)					Break-up of Utilisation (as percentage of total utilised funds)				
		Total Allocated	Total Released to IMC Society	Total Utilised	Civil Works	Equip ment	Learning Resources	Rec urring	Oth ers	Civil Works	Equip ment	Learning Resources	Recu rring	Others
1.	ITI Gajuwaka	1,000.0	425.0	250.0	0.0	250.0	0.0	0.0	0.0	0.00	100.00	0.00	0.00	0.00
2.	ITI Yupia <sup>2</sup>	435.0	98	68.5	68.5	–	–	–	–	100	–	–	–	–
3.	ITI Bhilai	242.0	242.0	0.0	0.0	0.0	0.8	0.0	0.0	–	–	–	–	–
4.	ITI Pusa	295.0	73.8	6.8	0.0	6.8	0.0	0.0	0.0	0.00	100.00	0.00	0.00	0.00
5.	ITI Panaji	205.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	–	–	–	–	–
6.	ITI Dashrath	318.5	91.7	36.4	6.2	2.5	–	–	27.7	17.1	6.79	0.00	0.00	76.16
7.	ITI Gurgaon	1,000.0	500.0	33.8	0.0	32.3	1.2	0.0	0.0	0.0	95.77	3.64	–	–
8.	ITI Nalagarh	958.5	456.4	215.2	70.0	123.0	2.0	12.0	8.0	32.5	57.15	0.93	5.58	3.72
9.	ITI Ranchi	1,000.0	500	260	260	0.0	0.0	0.0	0.0	100	–	–	–	–
10.	ITI Bangalore	1,000.0	1000.0	99.3	90.2	0.0	0.0	9.1	0.0	90.8	0.00	0.00	9.20	0.00
11.	ITI Kalamassery	1,000.0	500.0	177.7	48.4	128.8	–	0.6	–	27.2	72.47	0.00	0.33	0.00
12.	ITI Barbil	710.0	588.1	534.1	534.4	0.0	0.0	0.0	0.0	100.1	–	–	–	–
13.	ITI Udaipur	500.0	250.0	0.0	0.0	0.0	0.0	0.0	0.0	–	–	–	–	–
14.	ITI Namchi	500.0	262.5	100.3	84.5	–	–	–	–	84.2	–	–	–	–
15.	ITI Coimbatore	1,000.0	0.0	–	–	–	–	–	–	–	–	–	–	–
16.	ITI Indranagar (W)	397.2	397.2	100.0	100.0	–	–	–	–	100.0	–	–	–	–
17.	ITI Mallepally	1,000.0	296.4	0.0	0.0	0.0	–	–	–	–	–	–	–	–
18.	ITI Saket	500.0	500.0	363.6	250.0	80.6	0.0	0.0	33.0	68.8	22.16	0.00	0.00	9.08
19.	ITI Varanasi	900.0	225.0	68.1	0.0	26.4	13.6	0.0	28.2	0.0	38.67	19.95	–	41.38
20.	ITI Jagitpur, Haridwar	750.0	20.0	20.0	20.0	–	–	–	–	100.0	0.00	0.00	0.00	0.00
21.	ITI Durgapur	235.7	235.7	71.4	0.0	0.0	0.0	0.7	0.0	0.00	0.00	0.00	100.0	0.00

**Notes:** The QPRs indicate that there is a 'gap between fund allocation under project as reported by few IMC/ITI and communicated to State Directorates as per sanction orders issued by Government of India'. 2. The money has been transferred to Arunachal Pradesh State Skill Development Society, a state society and not to the IMC.

**Source:** Quarterly Progress Reports.

**Table A3.2: Physical Progress**

S.No.	Name of ITI	Major work 1	Major work 2	Minor work 1	Minor work 2	Minor work 3
1.	ITI Yupia,	Construction of Workshop and Classroom with toilet for introduction of two new trades namely Welder and Computer Hardware and Network Maintenance				
2.	ITI Bhilai			Renovation and refurbishment of classroom (Stage 4)		
3.	ITI Pusa	Renovation of workshop on ground floor with lintel type roof and class rooms on 1st Floor (Stage 1)	Renovation of existing COPA Lab and its theory room (Stage 1)	Establishment of new IT Lab for 85 Computers (Stage 1)	Renovation of existing computer AutoCAD Lab for Draftsman (Stage 1)	Few equipment for the trades lie electrician, RAC, Electronics, auto body paint, Auto Body Repair have been provided by the industries. (Stage 1)
4.	ITI Dashrath	3 workshop & 1 audio visual room (Stage 4)		Maintenance, Electrification, colour, Flouing, New Electrification, Land Scaling, Internal Road (Stage 4)		
5.	ITI Ranchi	Renovation of old administrative building and all workshops (Stage 6)	Landscaping, car and motorcycle stand, guard room, main gate, Boundary wall (Stage 6)			
6.	ITI Gurgaon			construction of road (Stage 7)	Renovation of toilets (Stage 5)	Renovation of lab and Water Hut (Stage 3)
7.	ITI Nalagarh	Construction of light weight structure of multi-purpose hall and library (Stage 7)		Toilet and Washroom (Stage 7)		
8.	ITI Ranchi	Construction of new workshops, classrooms/labs, etc.) (Stage 6)	Landscaping, car, motorcycle, stand, guardroom, etc. (Stage 1)			
9.	ITI Kalamassery	Construction of New Workshop for MMV trade (Stage 3)		Renovation of MMV,CR, MRAC (Stage 7)		
10.	ITI Barbil	construction of 3 storey new building (Stage 3)				
11.	ITI Namchi	Construction of new building (Stage 6)				
12.	ITI Coimbatore	Construction of new building (Ground floor+1Workshop for new trades) (Stage 2)		Enhancement of transformer, renovation of existing workshop (Stage 2)		

S.No.	Name of ITI	Major work 1	Major work 2	Minor work 1	Minor work 2	Minor work 3
13.	ITI Indranagar (W)	New Double Storied Building (Stage 6)				
14.	ITI Mallepally	New building for new Trades (Stage 0)		Repairs to the existing (4) workshops (Stage 2)		
15.	ITI Saket			Gents and ladies toilets, administrative building repair, railings , workshop GI sheet roof repair, coat stone flooring , construction of boundary wall, septic tank (Stage 7)		
16.	ITI Varanasi	Paver Block Campus (Stage 7)	Heightened Boundary Wall (Stage 4)			
17.	ITI Jagitpur, Haridwar	Construction of workshop and classroom (Stage 3)				
18.	ITI Durgapur	Construction of a composite Building with Work Shops, Classrooms and TCPC (Stage 1)				

**Note:** Stages of work\* has been given in bracket; Stages: 0=not yet started, 1=preparation of drawing/estimates, 2=Administrative approval sought, 3=Technical sanction, 4=preparation of tender document, 5=tender floated, 6=works partially complete, 7=works complete

**Source:** Quarterly Progress Reports.

**Table A3.3: Instructor Statistics**

S.No.	Name of ITI	Pre- Model ITI			Post-Model ITI			Pre- Model ITI	Post-Model ITI
		Filled against Sanctioned %	Share of Regular Instructors %	Trained as percentage of total Filled Posts	Filled against Sanctioned %	Share of Regular Instructors %	Trained as percentage of total Filled Posts	Share of Guest Faculty in Sanctioned Seats %	Share of Guest Faculty in Sanctioned Seats %
1.	ITI Gajuwaka	66	74	74	54	54	68	9	1
2.	ITI Yupia	100	75	75	100	90	90	0	0
3.	ITI Bhilai	89	78	28	95	70	17	1	3
4.	ITI Pusa	87	56	4	93	60	4	0	6
5.	ITI Panaji	100	38	19	91	65	40	0	9
6.	ITI Dashrath	54	100	9	72	100	12	13	21
7.	ITI Gurgaon	67	93	0	53	82	100	0	0
8.	ITI Nalagarh	90	14	100	100	71	100	0	0
9.	ITI Ranchi	50	100	17	57	100	88	42	0
10.	ITI Bangalore	86	100	92	93	100	100	10	0
11.	ITI Kalamassery	79	100	77	79	100	95	21	7
12.	ITI Barbil	27	57	100	47	47	47	77	78
13.	ITI Udaipur	46	85	27	66	45	10	0	0
14.	ITI Namchi	100	30	80	100	0	0	50	0
15.	ITI Coimbatore	81	100	100	70	97	72	0	0
16.	ITI Indranagar (W)	100	100	60	100	100	0	0	0
17.	ITI Mallepally	64	71	56	51	47	42	0	0
18.	ITI Saket	62	100	100	78	100	100	0	2
19.	ITI Varanasi	61	94	43	76	93	93	0	0
20.	ITI Jagitpur, Haridwar	100	100	48	96	100	63	0	0
21.	ITI Durgapur	78	98	93	73	100	100	0	0

**Source:** Implementation Plans and QPRs

**Table A3.4: Details of Training of Instructors Facilitated through Memorandum of Understanding (MoU) Signed with Industry Partners**

S.No.	Name of State	Name of ITI	Name of Industry Partner	Industrial sector	Scope/subject/Areas covered as per MoU	Year of signing of MoUs	Validity of MoU
1.	Chhattisgarh	ITI Bhilai	Maruti Suzuki Ltd.	Automobile	Training to staff and trainees; Providing tools equipment and cut models/ working models of different vehicle system i.e. engine gear box etc.; On-job Training	2016	2021
			Mahindra and Mahindra	Automobile	Training to staff and trainees; Providing tools equipment and cut models/ working models of different vehicle system i.e. engine gear box etc.; On-job Training	2018	2023
2.	Delhi	ITI Pusa	LG Electronic India Limited	Electronics and Refrigeration & Air Conditioning	Setting up of Labs and Electronics and Refrigeration and Air Condition trades, Training of Trainers, OJIT for Trainees and employment in authorized service Centers	2017	2022
			Daikin Air Conditioning	Refrigeration and Air Conditioning	Setup COE of Air Conditioning, Training of Trainer & OJT	2017	2020
3.	Karnataka	ITI Bangalore	M/s Schneider Electric Company, Gilles Vermot Desroches, Delegate General for the Schneider Electric Foundation	Electrical	Advanced Electrical Appliance applications, Training of ITI JTOS, Training the Co. Employees	2013	2016
4.	Kerala	ITI Kalamassery	Volkswagen Group Sales Private Ltd.	Automobile Sector	Provides add-on courses-to learn & understand modern/latest automobile technologies-VG-TAP	2016	Renewed every 1 year
			Samsung India Electronics Private Limited	Electronics Sector	Samsung ARISE – Advanced Repair & Industrial Skills Enhancement.-training program in addition to regular syllabi. Training Centre-E/Mech., I/Mech., MRAC	2015	Renewed every 3 years
5.	Uttar Pradesh	ITI Varanasi	Maruti Suzuki India Limited, Gurgaon, Haryana	Automobile	Student Development, Staff Development, Infrastructure development, Industries connect and ITI marketing	2016	2019
6.	West Bengal	ITI Durgapur	Maruti Suzuki India Limited	Automobile	Improving Training facilities	2017	2020

Source: Quarterly Progress Reports submitted by the Model ITIs to NCAER

**Table A3.5: Trades, Units and Seating Capacity**

S.No	Name of the ITI	Baseline Year (2013–14)			Reporting Academic Year (2017–18)			Change between Baseline Year and 2017		
		No. of NCVT Trades	Units	Seating Capacity	No. of NCVT Trades	Units	Seating Capacity	No. of NCVT Trades	Units	Seating Capacity
1.	ITI Gajuwaka	13	41	876	13	41	876	↔	↔	↔
2.	ITI Yupia	7	10	160	6	9	189	↑	↓	↑
3.	ITI Bhilai	21	54	900	21	48	938	↔	↓	↑
4.	ITI Pusa	18	54	1,179	18	54	1,179	↔	↔	↔
5.	ITI Panaji	7	21	322	8	13	283	↑	↓	↓
6.	ITI Dashrath	24	55	896	11	37	773	↓	↓	↓
7.	ITI Gurgaon	21	46	986	18	39	493	↓	↓	↓
8.	ITI Nalagarh	9	27	931	8	25	535	↓	↓	↓
9.	ITI Ranchi	17	46	966	14	42	882	↓	↓	↓
10.	ITI Bangalore	23	76	1,530	24	78	1,700	↑	↑	↑
11.	ITI Kalamassery	19	49	959	18	50	980	↓	↑	↑
12.	ITI Barbil	12	40	1,038	13	44	954	↑	↑	↓
13.	ITI Udaipur	21	44	620	17	38	728	↓	↓	↑
14.	ITI Namchi	5	5	105	7	7	172	↑	↑	↑
15.	ITI Coimbatore	20	66	1,036	19	64	1,264	↓	↓	↑
16.	ITI Indranagar (W)	10	14	380	6	7	140	↓	↓	↓
17.	ITI Mallepally	20	30	502	19	30	630	↓	↔	↑
18.	ITI Saket	21	59	11,60	18	65	1,008	↓	↑	↓
19.	ITI Varanasi	20	69	1,229	20	55	1,158	↔	↓	↓
20.	ITI Jagitpur, Haridwar	10	21	362	9	17	276	↓	↓	↓
21.	ITI Durgapur	19	66	1,283	16	64	1,261	↓	↓	↓

**Notes:** The baseline year is 2013-14 for all ITIs except ITI Kalamassery and ITI Durgapur, where it is 2016-17. The baseline year for ITI Bhilai is 2014-15. The year of assessment is 2017-18 for ITIs except ITI Jagitpur, where the year is 2016.

**Sources:** NCAER Computation using figures from SFC Document and Quarterly Progress Reports.

**Table A3.6: Trades to be Added, Removed and Upgraded**

	New Trades to be added		Obsolete trades to be discontinued		Existing trades to be upgraded	
Name of the ITI	No.	Trades	No.	Trades	No.	Trades
ITI Gajuwaka	3	A.O. Chemical, Maintenance Mechanic, Mechanic Computer Hardware	0		4	Electrical, Fitter, Welder, Sheet Metal Worker
ITI Yupia	2	Computer Hardware and Networking Maintenance, Welder Fabrication and Fitting	0		-	
ITI Bhilai	4	Plumber, Lift and Escalator Mechanic, IT, Front Office Assistant	4	Radio and Television, Machinist Grinder, Driver-cum-Mechanic, Secretarial Practice	20	Turner, Machinist, Fitter, RAC, Electrician
ITI Pusa	2	Mechanic-Auto body repair, Mechanic-Auto body Painting	5	Mechanic(Tractor), Data Entry Operator, Dent Beating and Spray Painting	19	Turner, Machinist, Fitter, Welder, Electrician
ITI Panaji	6	Assistant Tourist Guide, Basic Cosmetology, Draughtsmen Civil, RAC	0		7	Electrician, Plumber, Welder, Fitter, Mechanic-Motor Vehicle
ITI Dashrath	2	Attendant Operator, Maintenance Mechanic	2	Armature Motor Rewinding, Domestic Applies Repairer	2	Instrument Mechanic, Maintenance Mechanic
ITI Gurgaon	5	Mechanic Diesel Engine, Sheet metal Worker, Fashion Design	6	Draughtsman-Civil, Stenography-English and Hindi, Wireman, Mechanic(Tractor)	17	Mechanic-Motor Vehicle, Welder, Fitter, Machinist, Turner
ITI Nalagarh	5	Machinist, Electrician, Fitter, Turner, Food Production	1	Carpenter	1	Welder(Gas and Electric)
ITI Ranchi	4	Mechatronics Mechanic, Physiotherapy Technician, Mason, Painter	4	MRTV, MCH, MCE, MIE	8	Electrician, Fitter, Turner, Machinist, Welder
ITI Bangalore	2	Industrial Painter, Plumber	2	Secretarial Practice, Stenography	18	Electrician, Fitter, Turner, Machinist, Welder
ITI Kalamassery	3	Mechanic-Diesel, Mechanic-Auto Electrical and Electronics, MMV	2	Foundary man, Automobile Technology Cluster	20	Electrician, Fitter, Turner, Machinist, Welder
ITI Barbil	8	RAC, Painter General, Foundary man, Surveyor	1	Stenography (English)	14	Electrician, Fitter, Turner, Machinist, Welder
ITI Udaipur	2	Catering and Hospitality Assistant, Food and Beverages Services Assistant	0		16	Electrician, Fitter, Turner, Machinist, Wireman
ITI Namchi	7	Welder, turner, Machinist, Draughtsman	0		7	Electrician, Dress Making, Fashion Technology
ITI Coimbatore	1	Tool and Die Maker	0		16	Electrician, Fitter, Turner, Machinist, Welder
ITI Indranagar (W)	3	Surveyor, Computer aided embroidery, Basic Cosmetology	0		6	Stenography, Dressmaking, Draughtsman, Electronics Mechanic
ITI Mallepally	6	Plumber, Front office assistant, Hospital Management, Denting and Painting	3	Letter Press Machine Minder, Hand Compositor, Electroplater	10	Electrician, Fitter, Carpenter, Welder
ITI Saket	3	Mechanic-Diesel, Dress Making, COPA	1	Mechanic-Agriculture Machinery	6	Fitter, Electrician, Machinist, Welder
ITI Varanasi	13	Machinist-Grinder, ICT&SM, COPA, Plumber	0		10	Electrician, Fitter, Turner, Machinist, Welder
ITI Jagitpur, Haridwar	10	Hair and Skincare, Motor Mechanic, RAC, Laboratory Assistant	1	Radio and TV	9	Electrician, Fitter, Turner, Stenography, Welder
ITI Durgapur	8	Welder Pipe, Civil Engineer Assistant	2	Plastic Processing Operator, Machinist Grinder	12	Electrician, Fitter, Turner, Machinist, Welder

**Sources:** SFC Document and Implementation Plans submitted by the various Model ITIs.



**Table A3.7: Overall Utilisation of Seats (percentage)**

S. No.	Name of ITI	Baseline Year	Baseline (2013-14)	Achievement (2017)	Change between Baseline Year and 2017
1	ITI Gajuwaka	2013-14	90	73	↓
2	ITI Yupia	2013-14	90	65	↓
3	ITI Bhilai	2014-15	54	99	↑
4	ITI Pusa	2013-14	65	76	↑
5	ITI Panaji	2013-14	93	100	↑
6	ITI Dashrath	2013-14	100	87	↓
7	ITI Gurgaon	2013-14	91	98	↑
8	ITI Nalagarh	2013-14	90	95	↑
9	ITI Ranchi	2013-14	70	90	↑
10	ITI Bangalore	2013-14	100	82	↓
11	ITI Kalamassery	2016-17	97	70	↓
12	ITI Barbil	2013-14	60	67	↑
13	ITI Udaipur	2013-14	75	85	↑
14	ITI Namchi	2013-14	80	100	↑
15	ITI Coimbatore	2013-14	99	53	↓
16	ITI Indranagar (W)	2013-14	58	85	↑
17	ITI Mallepally	2013-14	85	87	↑
18	ITI Saket	2013-14	70	90	↑
19	ITI Varanasi	2013-14	60	90	↑
20	ITI Jagitpur, Haridwar#	2013-14	89	100	↑
21	ITI Durgapur	2016-17	100	100	↔

**Note:** # The year of assessment is 2016.

**Sources:** NCAER Computation using Implementation Plans and Quarterly Progress Reports submitted by the Model ITIs.

**Table A3.8: Pass-out Rate (percentage)**

S.No.	Name of ITI	Baseline Year	Baseline	Achievement (2017)	Change between Baseline Year and 2017
1	ITI Gajuwaka	2013–14	80	96	↑
2	ITI Yupia	2013–14	85	88	↑
3	ITI Bhilai	2014–15	54	71	↑
4	ITI Pusa	2013–14	65	82	↑
5	ITI Panaji	2013–14	70	96	↑
6	ITI Dashrath	2013–14	93	81	↓
7	ITI Gurgaon	2013–14	81	92	↑
8	ITI Nalagarh	2013–14	80	95	↑
9	ITI Ranchi	2013–14	90	98	↑
10	ITI Bangalore	2013–14	100	62	↓
11	ITI Kalamassery	2016–17	81	62	↓
12	ITI Barbil	2013–14	90	86	↓
13	ITI Udaipur	2013–14	50	70	↑
14	ITI Namchi	2013–14	95	100	↑
15	ITI Coimbatore	2013–14	69	45	↓
16	ITI Indranagar (W)	2013–14	80	85.3	↑
17	ITI Mallepally	2013–14	80	93	↑
18	ITI Saket	2013–14	70	82	↑
19	ITI Varanasi	2013–14	60	90	↑
20	ITI Jagitpur, Haridwar*	2013–14	87	64	↓
21	ITI Durgapur	2016–17	91	91	↔

**Sources:** NCAER Computation using Implementation Plans and Quarterly Progress Reports submitted by the Model ITIs.

**Table A3.9: Placement Rate (percentage)**

S.No.	Name of the ITI	Baseline Year	Baseline		Achievement (2017)	
			Absolute Numbers	Percentage	Absolute Numbers	Percentage
1	ITI Gajuwaka	2013–14	300	–	550	–
2	ITI Yupia	2013–14	–	75	–	–
3	ITI Bhilai	2014–15	–	30	–	–
4	ITI Pusa	2013–14	–	60	–	78
5	ITI Panaji	2013–14	–	95	–	94
6	ITI Dashrath	2013–14	–	65	–	85
7	ITI Gurgaon	2013–14	–	80	–	91
8	ITI Nalagarh	2013–14	–	80	–	80
9	ITI Ranchi	2013–14	–	45	–	80
10	ITI Bangalore	2013–14	–	95	–	100
11	ITI Kalamassery	2016–17	355		250	–
12	ITI Barbil	2013–14	–	60	–	55
13	ITI Udaipur	2013–14	–	45	–	65
14	ITI Namchi	2013–14	–	70	–	100
15	ITI Coimbatore	2013–14	–	75	–	85
16	ITI Indranagar (W)	2013–14	–	58	–	–
17	ITI Mallepally	2013–14	176	71	255	–
18	ITI Saket	2013–14	-	35	-	–
19	ITI Varanasi	2013–14	60	75	–	70
20	ITI Jagitpur, Haridwar	2013–14	–	35	–	–
21	ITI Durgapur	2016–17	–	50	–	50

**Source:** NCAER Computation using Implementation Plans and Quarterly Progress Reports submitted by the Model ITIs.

**Table A3.10: Details of Placement of Students Facilitated through Memorandum of Understanding (MoU) Signed with Industry Partners**

Name of ITI	Name of the Industry Partner	Sector	Description	Year of Signing	Validity
ITI Gajuwaka	M/s DDM Engineers	Mechanical	CNC, Production and Manufacturing Sector	2015	2017
	M/s Hyundai Motor India Ltd.	Mechanical	Automobile Sector	2017	2021
ITI Yupia	NEEPCO Ltd., Dolmukh	Hydro Electric Power	–	2016	
ITI Bhilai	Maruti Suzuki Ltd.	Automobile	Training to staff and trainees; Providing tools equipments and cut models/ working models of different vehicle system i.e. engine gear box etc.; On-job Training	2016	2021
	Mahindra and Mahindra	Automobile	Training to staff and trainees; Providing tools equipments and cut models/ working models of different vehicle system i.e. engine gear box etc.; On-job Training	2018	2023
ITI Pusa	Maruti Suzuki India Limited, Gurugram	Automobile	Upgrading ITI into Model ITI	2016	Up to the duration of the scheme
	Maruti Suzuki India Limited, Gurugram	Automobile	Dual System of Training in Fitter and Machinist trades	2017	2021
	LG Electronic India Limited.	Electronics and Refrigeration & Air Conditioning	Setting up of Labs and Electronics and Refrigeration and Air Condition trades, Training of Trainers, OJIT for Trainees and employment in authorized service Centers	2017	2022
	Oriental Insurance Co Ltd, New Delhi	Insurance	Upgradation of two Labs for Electronic Trade	2016	2019
	Daikin Air Conditioning	Refrigeration and Air Conditioning	Setup COE of Air Conditioning, Training of Trainer & OJT	2017	2020
	Times Of India	Media	Soft Skills, English Speaking	No MoU signed but working with all ITIs of Delhi	
ITI Panaji	U.N.D.P. Lodhi Road, New Delhi	International Organization	Creating opportunities for employment and entrepreneurship for women	2016	Letter of Intent signed
	Hotel Manoshanti	Hospitality Sector	In-plant Training	2017	3 years
	M/s Carasid	Hospitality Sector	In-plant Training	2017	3 years
ITI Dashrath	Hyundai Motor India Ltd	Automobile	In-plant training	2016	
	Gujarat State Fertilizers & Chemicals Ltd.	chemicals and fertilizers	Nominated a representative as a member of THE IMC to act as chairperson	2016	
ITI Gurgaon	MSIL Gurgaon	Automobile	Motor Mechanic Vehicle	2017	Next 3 years
	Samsung	Domestic and Industrial Sector	Refrigeration and Air-Conditioning, Electronics, Mechanical	2017	Next 3 years
ITI Nalagarh	TVS Motor Company	Automobile	In-Plant Training	2017	1 year
	Fort Rsort Pvt. Ltd.	Tourism	In-Plant Training	2017	1 year
	M/S Bansal Motor Garage	Automobile	In-Plant Training	2017	1 year
	M/S Chandel Electrical Engg Works	Electrical Engineering	In-Plant Training	2017	1 year

Source: Implementation Plans and Quarterly Progress Reports submitted by the Model ITIs

**Table A3.10 contd.: Details of placement of students facilitated through Memorandum of Understanding (MoU) signed with industry partners**

Name of ITI	Name of the Industry Partner	Sector	Description	Year of Signing	Validity
ITI Ranchi	Usha Martin Limited	Wire rope manufacturing (mechanical)	–	2017	Own
ITI Bangalore	M/s Schneider Electric Company, Gilles Vermot Desroches, Delegate General for the Schneider Electric Foundation	Electrical	1)Advanced Electrical Appliance applications 2) Training of ITI JTOs 3) Training the Co. Employees	2013	2016
	MIs Samsung India Electronics Pvt Ltd	Electronics	RACHA, HHP, AV	2017	2020
	M/s Siemens India Ltd	IM, EM, EN	Pneumatics, PLC, Electrical Gadgets	2015	2018
ITI Kalamassery	Maruti Suzuki India Limited.	Automobile	To provide multi-skilled workforce of world standard	2010	
	Volkswagen Group Sales Private Ltd.	Automobile Sector	Provides add-on courses-to learn & understand modern/latest automobile technologies-VG-TAP	2016	Old MOU 17.06.2011-16.06.2015. Existing MOU renewed every 1 year
	Samsung India Electronics Private Limited	Electronics Sector	Samsung ARISE – Advanced Repair & Industrial Skills Enhancement. -training program in addition to regular syllabi. Training Centre-E/Mech., I/Mech., MRAC	2015	Renewed every 3 years
ITI Barbil	Mahindra & Mahindra	Automobile	Heavy Vehicle training	2014	NA
ITI Udaipur	Technoy Motors, Udaipur	Automobile	MMV, Mechanical Diesel	2017	2021
	Secure Meters, Udaipur	Electronic	Electronics, Electrical	2017	2021
ITI Namchi	Zydus Healthcare	Pharmaceuticals	Job Placement	2016	2019
ITI Coimbatore	Lakshmi Machine Works Limited	Production and Manufacturing	Industrial Visits	2017	2020
	M/s Auasub engineering	Production and manufacturing	Dual training , Industrial Training	2017	2020
ITI Indranagar (W)	NG	–	–		
ITI Mallepally	Maruti Suzuki India Limited	Automobile	Denting and Painting	2018	2019
ITI Saket	Stag International Partapur, Meerut	Sports goods and Apparel	Training finance , Revenue Generation, TCPC cell for placement	2015	2020
ITI Varanasi	Maruti Suzuki India Limited, Gurgaon, Haryana	Automobile	Student Development, Staff Development, Infrastructure development, Industries connect and ITI marketing	2016	2019
ITI Jagitpur, Haridwar	Hero Motocorp. Ltd.	Automobile	–	–	–
ITI Durgapur	Maruti Suzuki India Limited	Automobile	Improving Training facilities	2017	2020

**Sources:** Implementation Plans and Quarterly Progress Reports submitted by the Model ITIs.

**Table A3.11: Mean Monthly Wages of the Employed**

S. No.	Name of ITI	Baseline Year	Baseline (₹)	2017 (₹)
1.	ITI Gajuwaka	2013–14	8,700	8,500
2.	ITI Yupia	2013–14	–	–
3.	ITI Bhilai	2014–15	–	–
4.	ITI Pusa	2013–14	7,500	10,350
5.	ITI Panaji	2013–14	–	–
6.	ITI Dashrath	2013–14	–	–
7.	ITI Gurgaon	2013–14	–	–
8.	ITI Nalagarh	2013–14	–	–
9.	ITI Ranchi	2013–14	10,000	14,641*
10.	ITI Bangalore	2013–14	10,000	14,000
11.	ITI Kalamassery	2016–17	8,000	9,500
12.	ITI Barbil	2013–14	6,000	8,500
13.	ITI Udaipur	2013–14	–	9,000
14.	ITI Namchi	2013–14	15,000	17,000#
15.	ITI Coimbatore	2013–14	7,000	8,000
16.	ITI Indranagar (W)	2013–14	–	–
17.	ITI Mallepally	2013–14	8,000	8,000
18.	ITI Saket	2013–14	5,000	10,000
19.	ITI Varanasi	2013–14	–	–
20.	ITI Jagitpur, Haridwar	2013–14	–	–
21.	ITI Durgapur	2016–17	–	–

**Notes:** \* This indicates estimated value as the ITI Ranchi responded that minimum 10 per cent year increase per year from baseline. # This value is for 2016.

**Sources:** Implementation Plans and Quarterly Progress Reports submitted by the Model ITIs.

**Table A3.12 Number of Outside Workers Trained at the ITI by Additional Short-term Courses**

S. No.	Name of ITI	2014	2015	2016	2017
1	ITI Gajuwaka	–	–	610	670
2	ITI Panaji	–	25	–	4
3	ITI Nalagarh	70	80	90	95
4	ITI Ranchi	0	0	400	600
5	ITI Bangalore	50	100	200	300
6	ITI Barbil	60	50	40	50
7	ITI Udaipur	40	70	100	150
8	ITI Namchi	20	35	42	40
9	ITI Indranagar (W)	144	0	82	20
10	ITI Varanasi	30	30	30	30

*Source: Quarterly Progress Reports submitted by the Model ITI.*



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