## Role of DGT in Skill ecosystem

### DGT caters to different areas of skill ecosystem

1. **ITI Students**
2. **ITI Trainers**
3. **Apprentices**
4. **Upgrading skills of Technicians & Engineers**
5. **Industry**

### DGT perform role in different functions

<table>
<thead>
<tr>
<th>Affiliate, Assess &amp; Certify</th>
<th>Schemes &amp; Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Connect Apprenticeship, Short Term Courses &amp; Flexi MoU</td>
<td>Curriculum Content &amp; Teaching Aid</td>
</tr>
<tr>
<td>Technology Enabler (New Age Courses)</td>
<td>Regulatory and Secretariat to NCVT</td>
</tr>
<tr>
<td>Outreach through Institutes</td>
<td>International &amp; National Collaborations</td>
</tr>
</tbody>
</table>
Organisation Structure

Director General

DDG I
- Establishment, General Administration, Budget
- Central Funded Institutes (CFI)- 33 NSTI.
- Schemes – PPP, Model ITI, LWE, ESDI, Polytechnics
- RDSDE -22 nos & 15 Extension Centres

DDG II
- Affiliation, Assessment & Certification,
- Curriculum Development, CSTRAI
- Content Development- NIMI

DDG III

IT CELL
- Apprenticeship
- Coordination & Parliament Matters
- STRIVE
# DGT: Staff Strength

<table>
<thead>
<tr>
<th>Staff Strength</th>
<th>Sanctioned Strength</th>
<th>Filled</th>
<th>Vacant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group ‘A’ (ISDS)</td>
<td>271</td>
<td>163</td>
<td>108</td>
</tr>
<tr>
<td>Group ‘A’ (WT)</td>
<td>57</td>
<td>8</td>
<td>49</td>
</tr>
<tr>
<td>Group ‘B’ (Combined (Gen &amp; WT))</td>
<td>975</td>
<td>484</td>
<td>491</td>
</tr>
<tr>
<td>Group ‘C’ (Combined (Gen &amp; WT))</td>
<td>1145</td>
<td>571</td>
<td>574</td>
</tr>
<tr>
<td>Total</td>
<td>2448</td>
<td>1226</td>
<td>1222</td>
</tr>
</tbody>
</table>
ITIs

The “makers” of “Make In India”

- Number of ITIs (as on March 2020): 15,697 (Govt.: 3055 & Pvt.: 12,642)
- Seating Capacity: 34.30 lakhs (Enrolled 26.42 lakhs) (Govt. 32% & Pvt. 68%)
- Female Students: ~11%
- Number of Trades: 137 (73 Engg. + 59 Non-Engg. + 05 Divyang)
- Duration: 1 year to 2 years
- Entry Criteria: 10th Standard
- Age: 14 years & above

Launched in 1950
Total DGT employees: 1226
Administrative & Financial control of ITIs is with the State Governments/UT Administrations
Offers range of vocational/skill training courses
ITI increased from 10750 ITIs (2014) to 15,697 ITIs (2020)
Capacity Increased by 120% to 34.3 lakhs in the same period
## Top 10 Courses in ITIs

<table>
<thead>
<tr>
<th>Trades</th>
<th>ITI Count</th>
<th>Trainee Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrician</td>
<td>12,286</td>
<td>9,87,591</td>
</tr>
<tr>
<td>Fitter</td>
<td>9,683</td>
<td>5,31,731</td>
</tr>
<tr>
<td>Computer Operator and Programming Assistant</td>
<td>2,617</td>
<td>91,403</td>
</tr>
<tr>
<td>Welder</td>
<td>2,555</td>
<td>74,213</td>
</tr>
<tr>
<td>Electronics Mechanic</td>
<td>1,840</td>
<td>66,633</td>
</tr>
<tr>
<td>Mechanic Diesel</td>
<td>1,990</td>
<td>65,010</td>
</tr>
<tr>
<td>Mechanic (Motor Vehicle)</td>
<td>1,417</td>
<td>53,953</td>
</tr>
<tr>
<td>Wireman</td>
<td>1,357</td>
<td>48,409</td>
</tr>
<tr>
<td>Draughtsman (Civil)</td>
<td>1,278</td>
<td>35,463</td>
</tr>
<tr>
<td>Mechanic (Refrigeration and Air-Conditioning)</td>
<td>912</td>
<td>35,411</td>
</tr>
</tbody>
</table>
Interventions for ITIs

➢ Collaborating with Industry to improve labs in ITIs
➢ Incubating Production through earning while learning
➢ Dual System of Training and Flexi MoU
➢ Reforms in curriculum Development- Online content - Assessment
➢ Transparency and standardization in Affiliation
➢ Informed Choices to students - Grading
Interventions for ITIs (Cont..)

- Skill Strengthening for Industrial Value Enhancement (STRIVE)
- Upgradation of 1396 ITIs through PPP
- Upgradation of existing Govt. ITIs into Model ITIs
- Enhancing Skill Development Infrastructure in NE States and Sikkim
- Skill Development in LWE affected districts
Getting Industry to improve Labs in ITIs

Way Forward: Scaling up from 500 odd ITIs
Production Centres in ITI (Earning while Learning)

**SAMSUNG**

Govt. ITI Kalamssery, Kerala

**LAKMÉ**

Govt. ITI Guwahati

**Way Forward:** Scaling up from 100 odd ITIs and liaising with Industry/Entrepreneurship for incubation
Dual System of Training
Two Campus Training Model: ITI + Industry

1. Objective
   - Strengthen industry connect
   - Impart quality, industry relevant training
   - Encourage more participation from ITIs and Industry

2. Significant Changes to provide flexibility
   Change in **Duration** of Industrial Training

<table>
<thead>
<tr>
<th>Duration of Trade / course</th>
<th>Duration of industrial exposure/ training (as per previous guidelines)</th>
<th>Duration of industrial exposure/ training (as per revised guidelines)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 months</td>
<td>Not Defined</td>
<td>1-3 months</td>
</tr>
<tr>
<td>1 Year</td>
<td>5 months</td>
<td>3-6 months</td>
</tr>
<tr>
<td>2 Years</td>
<td>9 months</td>
<td>6-12 months</td>
</tr>
</tbody>
</table>

- block / multiple block / mixed mode training
- 500 ITIs 748 MoUs with industry partners
- Industry Partner conduct part/ full formative assessment

**Way Forward**: Scaling up from 500 to 5000 ITIs
Flexi-MoU - One Campus Training Model - Industry

Objectives:

- Strengthen industry connect – 8 Industries
- Impart customized industry relevant training
- Offer flexibility to create tailored skilling programmes

Way Forward: Scaling up from 8 Industries
Reforms in Curriculum Development

All 137 courses have been aligned to NSQF - 35 New trades and 11 Industry 4.0 courses

QR codes in each book (Augmented Reality (AR)’, ‘Virtual Reality (VR)’ and Videos)

Question bank on Bharat Skill Portal

Hinglish Manuscript for NIMI books
Reforms in Curriculum Development (Cont.)

Way Forward:

- Integrate formal education with skilling – Equivalency and Vertical Mobility
  - Establish Board of Vocational Education & Training
- Develop more Industry connect and more robust processes
- Introduce more Service sector trades
- Introduction of Employability Skills in the curriculum
- Skill Gap Study and introduce new courses
- Courses for reskilling/ Upskilling
- Evolving equivalence of short term to long term courses through Credit framework
- Exploring Entrepreneurship support to candidates and Incubation
BharatSkills.gov.in - Online Content for ITI Students/Trainers

ITI Trainees
- Tailored courses for ITI trainees.
- Study Materials (English, Hindi and other regional languages) Question Banks, E-books, Video, Blended Learning courses, Mock Test etc.

ITI Trainers
- Access ToT courses under Trainers Module

Others
- Add-on trade related courses, NSDC short-term courses.
- Soft skills
- Custom courses from partners such as Cisco, Quest Alliance, Adobe and IBM
BharatSkills.gov.in
Online Content for ITI Students (Cont..)

Way Forward:

➢ Further rationalization of courses and self assessments
➢ Content in regional language
➢ Feedback from students from students and industries
➢ Live support desk to students
➢ Virtual classrooms and tracking
➢ Analytics and tracking of students progress
Examinations Reforms

1. Self-center for Practical/Engineering Drawing Exam
2. Practical/Engineering Drawing Exam to be conducted by State
3. Supplementary exams to be conducted on demand for students
4. RPL Examinations to be done in NSTIs (where trade is available) and Government ITIs
5. Digitally Signed Certificates to be issued to all trainees
6. Introduced Electronic Skill Credential Standards

**Way Forward:**
- Standardization of entire examination calendars and procedures
- Ensuring results within 45 days of annual exams
- Use of National Academic Depository (NAD) for Trade certificates
- Convocation in ITIs
AFFILIATION - NEW ITI & Expansion

- Pivotal role of State Govt. in Affiliation
- Mandatory requirement for ownership of the building
- Enforcement of Building Completion Certificate and local Bye-laws
- Well defined norms for building with size and numbers
- Norms for Toilets, Parking area, Drinking water & playground
- Emphasis on Fire, safety & green building norms.
- Online System
Way forward:

- Standardize and improve quality of institutes
- Mechanism on lines of CBSE with affiliation Committee, regulations and Grievance Redressal
- Mapping of gap areas viz transition loss
- Establish in districts in Aspirational or zero absence districts
- Explore Mega ITI in each State with 25000 students per year, 30% seats for girls
- Model ITI in each district
- Expand penetration of service trades and high end trades
- Introduction of new age skill for Industry relevant training
- Cross leverage ITIs for short term skilling
Initiatives Taken To Improve Quality Of Training & Employability

GRADING OF ITI: NEED FOR GRADING

To provide a benchmark for comparison

In alignment to National Policy on Skill Development and Entrepreneurship, 2015

Opportunity for institutes to Improve

Improves Student choices

Performance based funding
Grading of ITIs

- Phase-1 of Grading was optional and covered 4811 ITIs
- Phase-2 of grading is mandatory and 10443 ITIs have already been self-graded

### Graded Autonomy of ITI

<table>
<thead>
<tr>
<th>Grade</th>
<th>Govt</th>
<th>Pvt.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Star (&lt;2.0)</td>
<td>1200</td>
<td>2348</td>
<td>3548</td>
</tr>
<tr>
<td>2 Star (&gt;=2.0 but &lt;2.5)</td>
<td>355</td>
<td>392</td>
<td>747</td>
</tr>
<tr>
<td>3 Star (&gt;=2.5 but &lt;3.0)</td>
<td>235</td>
<td>158</td>
<td>393</td>
</tr>
<tr>
<td>4 Star (&gt;=3.0 but &lt;4.0)</td>
<td>81</td>
<td>42</td>
<td>123</td>
</tr>
<tr>
<td>Total</td>
<td>1871</td>
<td>2940</td>
<td>4811</td>
</tr>
</tbody>
</table>

- ITIs with grade ≥ 2.5 will be self-centres for OMR based theory examination.
- Only ITIs with grade 2.5 or more will be allowed to apply for addition of new trades/units.
- Only Private ITIs with at least 2.5 grade and Government ITIs with at least 2.0 grade will be eligible to participate under STRIVE (World Bank Project).
- Principals and Instructors of ITIs with 2.5 or more grade will be eligible for training in NSTIs or abroad, wherever possible.
GRADING OF ITI: 27 PARAMETERS UNDER 5 GRADING CATEGORIES FOR PHASE-2 of ITI GRADING

- Phase-2 Grading of ITIs was launched in February 2019 for all the NCVT affiliated ITIs in the country.
- It is mandatory for all the NCVT ITIs in the country to get graded.
For ITI Trainers- NSTI and IToTs

Objective:
To train Instructors in the techniques of transferring hands-on skills & training methodology

Trades covered: Popular 27 Engineering and 7 non-engineering trades

Total seating capacity: 11556

CITS RPL has been introduced recently

Details on NSTI and IToTs across India

<table>
<thead>
<tr>
<th>Institutes for Training of Trainer</th>
<th>Count</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Institute- NSTIs</td>
<td>33</td>
<td>7776</td>
</tr>
<tr>
<td></td>
<td>(19 women)</td>
<td></td>
</tr>
<tr>
<td>Private Institutes for Training of Trainers (IToTs)</td>
<td>12</td>
<td>3060</td>
</tr>
<tr>
<td>State Government Institutes for Training of Trainers (IToTs)</td>
<td>06</td>
<td>720</td>
</tr>
</tbody>
</table>
National Skill Training Institutes & Institutes for Training of Trainers

- 33 NSTIs - 19 NSTI(W) / 18 IToTs – 6 State Govt. and 12 Pvt.
- NCVT mandate all Instructors to be certified - need about 90,000 instructors

Conducts:

- Crafts Instructor Training Scheme – 11,556 seats in 34 trades (27 Engg & 7 Non Engg.)
- Advanced Vocational Training Scheme – 12 disciplines - 40,000 capacity
- Craftsmen Training Courses in all NSTI(W)
- Craftsmen Training Courses (New Age) in 13 NSTI
- Training Of Trainers & Assessors – Short Term Training – collaborate with NSDC/ JSS
- Advanced (Vocational) Diploma at 16 NSTIs in association with IBM.
National Skill Training Institutes 
& Institutes for Training of Trainers (Cont..)

Way Forward:

- Refresher Training- Institutionalise annual 2 week course
- Expansion of training capacity- Scope for scheme & Feasibility of RPL for Instructors
- Time bound training of Trainers
- Strengthen Infrastructure
- Strengthen Industry Engagement for all trainers and assessors
- Enhance Quality and newer avenues for ToT with Universities and Industry clusters.
# Apprenticeship (After ITI or Freshers)

## Name of the Establishment

<table>
<thead>
<tr>
<th>Name of the Establishment</th>
<th>No. of apprentices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Railways</td>
<td>14673</td>
</tr>
<tr>
<td>Tata Motors</td>
<td>11835</td>
</tr>
<tr>
<td>Bharat Heavy Electricals Ltd.</td>
<td>11643</td>
</tr>
<tr>
<td>Aegis Customer Support</td>
<td>9776</td>
</tr>
<tr>
<td>Gujarat State Road Transport</td>
<td>8317</td>
</tr>
<tr>
<td>Maruti Suzuki India Limited</td>
<td>7760</td>
</tr>
<tr>
<td>Bharat Electronic Ltd.</td>
<td>4582</td>
</tr>
<tr>
<td>AP State Road Transport</td>
<td>4289</td>
</tr>
<tr>
<td>ONGC</td>
<td>3229</td>
</tr>
<tr>
<td>Ordinance Factory</td>
<td>3126</td>
</tr>
</tbody>
</table>

## # of Establishments

- 60000

## No. of Apprentices

- 1.7 lakhs
Way Forward: Apprenticeship

➢ Streamline the process
➢ Timely assessment and certification
➢ Expansion to cover more industry and more aspirants
➢ Identification of relevant Industry clusters and priority and designated courses
➢ Advocacy of Apprenticeship among industries so as to ensure that all institution come on-board
➢ Explore aggregator model to involve MSME
Outreach through NSTI/ Nodal ITI

- Review of infrastructure, machinery across various Government and private ITI across the district
- Facilitate training of trainers of ITIs across the district
- Conduct, facilitate and track the skill gap across the district
- Mentor new ITIs in the district by extending support in industry connect and representation in governing committees
- Building and nurturing industry relationship in close coordination with the officials of industry department and various industry clusters across the district
- Facilitating placement and job melas at the district leveraging their industry connect
Regional Directorate for Skill Development & Entrepreneurship (RDSDE)

- Implementation and Monitoring of all schemes of DGT
- Coordinating with trade-testing cell for examination of all schemes
- Coordination with Ministry for schemes like PMKVY, DDUGKY and NULM
- Handling of court cases of the schemes
- Coordination for establishing Skill Universities and NSTI Extension Center

Total RDSDE 22
Schemes for improving Quality of Long term Training Courses
World Bank funded STRIVE Project

: INR 2200 Crore- 2018-22

STRIVE- Skills Strengthening for Industrial Value Enhancement

Result Area 1: Improving performance of ITIs
(INR 1,000 Crore)
500 ITIs to be selected (including 100 Private ITIs) for providing grant of average INR 2 crore

Result Area 2: Increased capacities of State Governments
(INR 330 Crore)
Signing of STRIVE MoU with all states/Uts for state-specific reforms.

Result Area 3: Improved teaching and learning capabilities
(INR 435 Crore)
On boarding of CSTARI & NIMI for revamping of CTS and CITs trades

Result Area 4: Improved and broadened apprenticeship training
(INR 212 Crore)
MoU with Industry Clusters and States has to be signed with 100 Industry Clusters.
Upgradation of 1396 ITIs through PPP

<table>
<thead>
<tr>
<th>No. of ITIs</th>
<th>Loan amount</th>
<th>Expenditure with seed money</th>
<th>Expenditure</th>
<th>Seed Money</th>
<th>Interest earned</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1227</td>
<td>3067.50</td>
<td>2570.59 (83%)</td>
<td>1848.23</td>
<td>722.36</td>
<td>1200.87</td>
<td>225.01</td>
</tr>
</tbody>
</table>

Over 900 Institute Management Committees (IMCs) active in Govt ITIs

Industry Partner is the Chairman, and Principal, ITI is Secretary of IMC Society

Rs 2.50 crore loan provided to each IMC

Total revenue earned by IMCs is Rs 155 crore through training programmes and production centres

335 ITIs have earned revenue worth more than Rs 10 lakh each

Critical Decision: Should loan be converted to Grant?
Upgradation of Existing Government ITIs into Model ITIs

29 ITIs have been identified in 27 States

Fund allocation so far - INR 245.30 crores

Fund released - INR 117.46 crore

Model ITI, Durgapur, West Bengal

Model ITI, Karaundi, Varanasi
Scheme for Enhancing Skill Development Infrastructure in NE States & Sikkim (ESDI) & Skill Development in 47 Districts affected by Left Wing Extremism

• **For North- East:** Upgradation of existing ITIs by introducing three new trades per ITI in each of 22 ITIs with 100% GoI funding and establishment of 34 New ITIs in 8 States with 90% central and 10 State funding.

• **For LWE:** 47 ITIs with 1 ITI / district [13 new districts in addition to 34 districts covered earlier].

Govt. ITI, Gajabahal (Odisha)
Reorganising DGT
Key Issues

➢ Fill Existing vacancies through revival of posts
➢ Establishment of Board of Vocational Education and Training on lines of CBSE within DGT
➢ Establish Standing Committees- Curriculum, Affiliation, Examination and Certification
➢ Reorganize and recalculate HR requirements
➢ Re-establish linkage with CSTARI and NIMI
➢ Strengthening of RDSDEs
➢ Re-organize MIS bringing long term financial support for DGT portal
DGT Portals (Current)

Affiliations
nimionlineadmissions.in/iti

DGT
dgt.gov.in

NCVTMIS
ncvtmis.gov.in

Bharat Skills
bharatskills.gov.in

Apprenticeship
apprenticeship.gov.in

ITI Grading
gradingiti.bharatskills.org.in

Registry
registry.dgt.gov.in
DGT Portals 2.0 (Proposed)
Thank You