



# PATHWAYS TO WORK

Mapping Education, Skills  
and Employability to  
Labour Market Demand

Knowledge partner  
**JustJobs**  
NETWORK

In partnership with  
 **QUEST  
ALLIANCE**

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## LIST OF ABBREVIATIONS

ASIMA	Ambala Scientific Industries Manufacturers' Association
CSSM	Centrally Sponsored State Managed
DDUGKY	Deen Dayal Upadhyay Grameen Kaushal Yojna
DGT	Directorate General of Training
DST	Dual System of Training
FDI	Foreign Direct Investment
FGD	Focus Group Discussion
FMCG	Fast Moving Consumer Goods
FRSN	Future Right Skills Network
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GSDP	Gross State Domestic Product
ITIs	Industrial Training Institutes
JJN	JustJobs Network
MSDE	Ministry of Skill Development and Entrepreneurship
MHRD	Ministry of Human Resource Development
MSME	Micro, Small, and Medium Enterprises
NEET	Not in Education, Employment, or Training
NEP	National Education Policy
NOS	National Occupational Standards
NSDC	National Skill Development Corporation
NSQF	National Skills Qualification Framework
PMKVY	Pradhan Mantri Kaushal Vikas Yojana
PLFS	Periodic Labour Force Survey
QP	Qualification Pack
RPL	Recognition of Prior Learning
SSC	Sector Skills Councils
SSDM	State Skill Development Mission
TPA	Third Party Aggregators

# EXECUTIVE SUMMARY

In the 1970s, a time when a closed economy presented few opportunities for economic mobility, movies like Deewaar and Trishul featuring mega-star Amitabh Bachchan became hits because they gave expression to the collective angst of the country's youth. Having made tremendous strides since then, India's economy today is large, open, and more diverse than it has ever been. Yet the country still struggles to deliver on the aspirations of its young people. In the absence of gainful employment that can deliver on youth aspirations, what seems like a demographic dividend could quickly become a liability. The pandemic is worsening this already grim picture by disrupting the economy, destroying jobs, and accelerating technological change before the government and society have the opportunity to catch up.

This report provides an overview of India's existing skills training ecosystem, delineating the challenges and the urgent need for deep reform. There are several challenges. The skill development ecosystem is large and unwieldy with responsibilities distributed across several Central ministries and State authorities; public, private, and non-profit training providers; and a heterogeneous pool of training recipients.

Many students lack the foundational education and literacy needed for skills acquisition. Social, gender, and economic class-based biases are pervasive in training and in the labour market. There is a lack of recognition and certification for skills acquired informally. And the skills training system is not aligned with market demand.

This report hones in on the first misalignment between the training provided and the needs of business. Of the large and diverse ecosystem of training in India, this report focuses on the Industrial Training Institutes (ITIs) and what they can do to rectify the disconnect between what is taught and what firms need.

The latter is referred to as the labour market "mismatch." But what is the mismatch and why does it exist? The term "mismatch" refers to, first, the misalignment between the training provided by skills training institutions and the needs of business. A lack of firm engagement with the system is a fundamental factor driving the disconnect between what is taught and what is required by businesses. Second, there is a divergence between youth and employer expectations of job roles, salaries, workplace behavior. Third, the networks that employers use to find a candidate are different from those that youth rely on to find a job. Finally, geographic mismatches between availability of jobs and the supply of labour in a given area further exacerbate the labour market mismatch.

This report hones in on the first misalignment between the training provided and the needs of business. Of the large and diverse ecosystem of training in India, this report focuses on the Industrial Training Institutes (ITIs) and what they can do to rectify the disconnect between what is taught and what firms need. To rectify this mismatch, there is a need to assess labour market demand, strengthen ITI placement and employment services, and systematize engagement with firms. Nonetheless, given that several factors drive the mismatch between the supply of labour and the demand for it, rectifying any one factor will help, but will not singularly fix all this is deficient in the skills ecosystem. This will take fundamental, large-scale reform.

Building on the JustJobs Network's (JJN) fieldwork across the country over the last decade, this report relies on primary research from Gujarat conducted in partnership with the Quest Alliance. It is supported by the Future Right Skills Network. The case study of Gujarat focuses on three districts: Ahmedabad, Rajkot and Narmada. Semi-structured interviews with government officials, experts, and industry, as well as focus group discussions with youth in the State contributed to understanding how the misalignment between industry expectations and youth aspirations has resulted in large section of skilled and semi-skilled youth being unemployed or underemployed. These findings from Gujarat supplement the learnings from JJN's previous work.

The pandemic is deepening the trends that were already plaguing our labour market prior to COVID-19. But it also presents a political moment and policy window to make fundamental shifts that will create a better, more inclusive, and equitable world for work, especially for India's large and growing population. For this, we must be willing to acknowledge the problems that ail our current system of training, and be brave enough to fundamentally rebuild it. Along these lines, this report makes the following recommendations:

## RECOMMENDATIONS FOR SYSTEMIC CHANGE

- There is a need to coordinate and streamline skills training activities across ministries, regulatory bodies, and at the State-level.
- Skills must build upon requisite levels of education. The National Education Policy 2020 (NEP), lays out a path to break down the education and skills training silos and bridge these to form a continuum from education, skills, to labour market entry. A concrete action plan, with goals and timelines, is scheduled to be drawn up so that by 2025 at least 50 percent of learners will be introduced to vocational education across both school and higher education systems. Focus areas for vocational training will be identified on the basis of expertise gaps identified in demands by the market, and rooted in local opportunity mapping. This and other goals of the NEP must be made a priority and operationalized in accordance to the timelines offered in the document, and where possible, even sooner.
- Institute campaigns to change mindsets and bring about behavioural change to root out social biases on the basis of caste, religion, disability, gender, socio-economic class or other social groupings. This would include:
  - Sensitization programs to train government officials at the Centre, State and local levels.
  - Long-term campaigns and community based programming in collaboration with States and decentralized, local authorities, to address societal biases.



- Improve Recognition of Prior Learning (RPL) and certification structures, especially for informally trained youth. These will signal to the employer that a young person has experience and will help smooth the transition into a job.
- Provide incentives for the private sector to preferably run their own training programs.
  - Bigger businesses should help provide training for workers in smaller businesses, especially in their value chains or other ancillary businesses.
  - Explore cluster-based approaches to training to enable sharing of resources, capitalizing on economies of scale, and reducing the overall cost of training for individual businesses.
- Set up channels through which the public skills training system can systematically engage with the private sector. These channels include:
  - Reform Sector Skill Councils, especially their points of contact at the State-level.
  - Promote apprenticeships. Apprenticeships are preferable to the Dual System of Training (DST) because they include a stipend for the trainee and they provide a connect to a potential job subsequent to the training whereas DST does not.

Promoting apprenticeships includes streamlining the apprenticeship system across Ministry of Human Resource Development (MHRD), Ministry of Skill Development and Entrepreneurship, and the National Skill Development Corporation as well as at the State-levels; reducing non-labour compliances; working with Third Party Aggregators (TPAs) to improve enrolment in the program and make it easier for companies to enrol. At the same time, ensuring that apprentices are not a cheap substitute for full-time workers; apprentices must enjoy the same rights and protections as regular workers.

## RECOMMENDATIONS TO REFORM THE INDUSTRIAL TRAINING INSTITUTES

- State governments and local authorities should regularly conduct demand mapping to keep track of sectoral trends and shifts in the composition of economic activity based on macroeconomic changes and economic shocks. This analysis should form the basis of a regular and systematic review of ITI curricula and practices.
- Develop a robust employment services or placements office.
  - This employment services office would consist of placement officers as well as career counsellors, but also student representatives and alumni.
  - Trainers, placement officers, and counsellors should be appropriately trained with regular investments in upgrading their knowledge and skills.
  - This employment office must keep a regularly updated repository of alumni and effectively engage them in getting information on potential opportunities; challenges on the job; information on conditions of work and suggestions to better align training to the demands of their respective jobs and employers.
  - The employment office should also maintain a regularly updated repository of businesses. It should maintain connections with Sector Skills Councils. Both of these will enable effective engagement with industry to enhance placements.
  - The employment office should have a robust data collection infrastructure to not only record placements but also measure retention.
- ITIs should provide basic occupational counselling services so that students entering a training program have a sense of what they are getting trained for and potential job opportunities in the field. Trainees should have access to this information before they sign up for a training course. This awareness will help trainees make informed choices rather than ad hoc ones.
- ITIs should also hold informational sessions at the secondary school level to help disseminate information in schools. This is particularly important for girls that frequently have access to less information about training and ITIs than their male counterparts.
- Develop a central ITI system for placements. ITIs across the country should have a common broadcast group for potential opportunities.
- Systematize the way an ITI goes about placements.
- ITIs should serve as Third Party Aggregators to enable apprenticeships. DST should not come at the expense of apprenticeships.
- To facilitate ITI placement services, as well as to provide a learning environment that is current, ITIs must have well-functioning technology infrastructure, including databases to maintain information on alumni, companies, and students. This would also include a strategy on how to engage with private and public job search portals.
- All ITIs should go through an assessment to ensure that they are suitable for women trainees.
  - This includes ensuring that there are safe training conditions, separate bathrooms, equal treatment of women.
  - ITIs for women should not subscribe to gender normative trades, rather they should skill girls in a range of trades, irrespective of gender, that are demand-led.
  - Fee waivers, and other such incentives, help boost female participation in ITIs and must be encouraged.
- ITIs should play an active role in encouraging and facilitating students to obtain academic accreditation.
- ITI infrastructure could also lend itself to being a site for Recognition of Prior Learning services and certification.

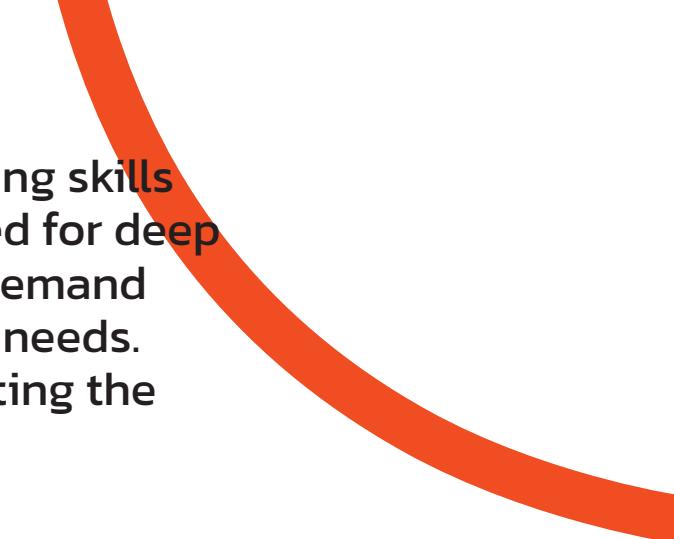
**Industrial Training Institute should play an active role in encouraging and facilitating students to obtain academic accreditation.**

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# INTRODUCTION 1

## THE YOUTH EMPLOYMENT IMPERATIVE





This report aims to provide an overview of India's existing skills training ecosystem, delineating the challenges and need for deep reform. It highlights the need to assess labour market demand so that skills training can be better aligned to business needs. In doing so, the study reflects how the pandemic is shifting the employment landscape and the challenges this poses.

In the 1970s, a time when a closed economy presented few opportunities for economic mobility, movies like Deewaar and Trishul featuring mega-star Amitabh Bachchan became hits because they gave expression to the pervasive angst of the country's youth. Having made tremendous strides since then, India's economy today is large, open, and more diverse than it has ever been. Yet the country still struggles to deliver on the aspirations of its young people.

India boasts the world's largest youth population; those between the ages of 15 and 29<sup>1</sup> represent a quarter of the country's population.<sup>2</sup> This demographic profile offers a window of opportunity, in which those of working age constitute a rising share of the total population and exceed the dependent population of children and the elderly. But availing this opportunity depends on India's ability to harness the productive potential of its youth and help them build successful economic trajectories.<sup>3</sup> In the absence of gainful employment that can deliver on youth aspirations, what seems like a demographic dividend could quickly become a liability.

Even before the COVID-19 pandemic, India's economy was not creating enough formal jobs to absorb the nearly eight million labour market entrants each year.<sup>4</sup> Forces such as technology were restructuring the labour market in ways that we could not understand, much less

prepare for. **Pre-pandemic youth unemployment, at 17.3 percent**, was three times the adult rate.<sup>5</sup> **Female youth unemployment at 17.7 percent** (urban and rural) was slightly higher than the average, driven by higher urban female youth unemployment.<sup>6</sup> Youth were also disproportionately likely to be in contractual and informal work, often characterized by low productivity and low wages, with women and girls faring even worse.<sup>7</sup> **Among youth, unemployment was highest for those ages 15–19 (25.5 percent), followed by youth ages 20–24 (23.7 percent), and lastly, youth ages 25–29 (10.7 percent).**<sup>8</sup>

Now the pandemic is worsening this already grim picture by disrupting the economy, destroying jobs, and accelerating technological change before government and society have the opportunity to catch up. Job creation is the need of the hour, but equally important is how we prepare youth to be agile in the face of a constantly changing world of work, and how we equip them with education and skills in demand by the labour market for the jobs that do exist or are emerging.

Against this backdrop, this report aims to provide an overview of India's existing skills training ecosystem, delineating the challenges and need for deep reform. It highlights the need to assess labour market demand so that skills training can be better aligned to business needs. In doing so, the study reflects how the pandemic

is shifting the employment landscape and the challenges this poses.

This report draws upon examples from the JustJobs Network's fieldwork across the country over the last decade.<sup>9</sup> It supplements the overall picture of the nation's training system with primary research in Gujarat. The researchers chose Ahmedabad, Rajkot, and Narmada districts because they represent different industrial sectors and regions in the State; they host a large youth population and are home to a large number of ITIs. Researchers conducted detailed semi-structured interviews with government officials, ITI officials, experts, industry, employers, and focus group discussions with youth to understand how the misalignment between industry expectations and youth aspirations has resulted in large section of skilled and semi-skilled youth being unemployed or underemployed. However, this has also led to excess supply of jobs that are not filled. These variations in the demand-supply gap at the district level in these regions reinforce the need for geography-specific measures to resolve skilling issues.

This research was made possible by donors in the Future Right Skills Network (FRSN). It was spearheaded by the JustJobs Network as the knowledge partner and Quest Alliance as the implementation partner.

# THE SKILLS TRAINING ECOSYSTEM

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The shortage of good jobs to occupy the country's large and rising youth population poses a challenge for policymakers who face the pressure of productively engaging the youth. For well over a decade now, this pressure has fueled investments in a growing ecosystem of public and private training providers, regulators, and various State and Central government schemes.

## 2.1 MAJOR PLAYERS AND SCHEMES

The National Skill Development Corporation (NSDC) was set up as a Public–Private–Partnership in 2008 to establish channels for firms to provide input into government training programs. Established in 2014, the Ministry of Skill Development and Entrepreneurship (MSDE) directs the Skill India Mission (2015).<sup>10</sup> MSDE was intended to be a hub for coordinating across the skills, vocational, technical education, and apprenticeship schemes run by different ministries. As part of the National Policy on Skill Development and Entrepreneurship (2015) that launched the Skill India Mission, the policy also set up a structure for subsidized Sector Skills Councils (SSCs) to further connect skills training to the demands of industry.

When it comes to skills development, government programs seek to provide skills training, but also employment services, career counseling, and entrepreneurship programs.<sup>11</sup> The latter, however, have received much less attention. All four functions are aimed at helping reduce unemployment and—equally important—underemployment, by helping youth leverage opportunities to engage in productive and fairly remunerated work.<sup>12</sup>



**Table 1** Approaches to enhancing youth employability<sup>13</sup>

Approach/Service	Description
Skills development	<ul style="list-style-type: none"><li>• These programs help youth build job-specific skills, technical, or transferable skills.</li><li>• Transferable skills (also called life skills or soft skills) include capacities such as communication, problem-solving, and the ability to adapt to situations that arise on the job.<sup>14</sup></li><li>• Along with basic cognitive skills, digital skills and literacy are also important to employers.<sup>15</sup></li><li>• Skills training can be delivered through skills training courses or on-the-job learning opportunities such as internships and apprenticeships.</li></ul>
Employment services	<ul style="list-style-type: none"><li>• These services help youth find jobs or connect to employers, such as through improved job search efforts, job placement, or employer-matching.</li></ul>
Career counseling	<ul style="list-style-type: none"><li>• These services include one-on-one consultations, mentoring, and coaching.</li><li>• Career counseling helps to assess a young person's interests and abilities and identify tools that can improve their career prospects.<sup>16</sup></li><li>• Career counselors may also help youth to enroll in skills development programs.</li></ul>
Entrepreneurship promotion	<ul style="list-style-type: none"><li>• These programs help participants start or expand a microenterprise or small business by providing technical support or facilitating access to financing.</li></ul>

There are two major short-term Central government sponsored schemes for skill development in India – Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and Deen Dayal Upadhyay Grameen Kaushal Yojna (DDUGKY). In addition to these schemes, there are various State sponsored programs.

PMKVY, implemented by NSDC, is a skill certification scheme for short-term training (150 to 300 hours) under the purview of the MSDE. The Recognition of Prior Learning (RPL) is an instrument that is part of PMKVY to assess and certify prior learning experience. NSDC works with State governments and State Skill Development Missions (SSDMs) to execute the Centrally Sponsored State Managed (CSSM) portion of skill development.

In addition, the Ministry of Rural Development sponsors the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDUGKY), which is implemented by the State government rural development departments. Training under DDUGKY ranges from short-term (576 hours or three months) to long-term (2304 hours or one year).

## 2.2 INDUSTRIAL TRAINING INSTITUTES (ITIs)

Beyond these two schemes, there are nearly 16,000 Industrial Training Institutes (ITIs) in India with a capacity of almost three million trainees.<sup>17</sup> These ITIs administer

technical skills training that ranges one to three years in duration – what is considered long-term training. In 2017, 1.2 million individuals completed training across government and private sector ITIs.<sup>18</sup>

MSDE's Directorate General of Training (DGT) is responsible for the regulation of ITIs, that is setting common standards, guidelines, rules, policies, and procedures. DGT is also spearheading the promotion of the Dual System of Training in ITIs to engage firms in providing trainees exposure to actual work in their field of training. At the same time, the government's apprenticeship program is implemented through both MSDE and MHRD, but very few ITIs have any systematic promotion of apprenticeships. The financial and administrative control of ITIs rests with State Governments or Union Territory Administrations.

ITIs charge a fee that is lower than courses in traditional academic institutions.<sup>19</sup> The target population for ITIs is youth who can afford to pay for a training course and/or invest the time to complete an ITI course, with some scholarships available to low-income and disadvantaged students.<sup>20</sup>

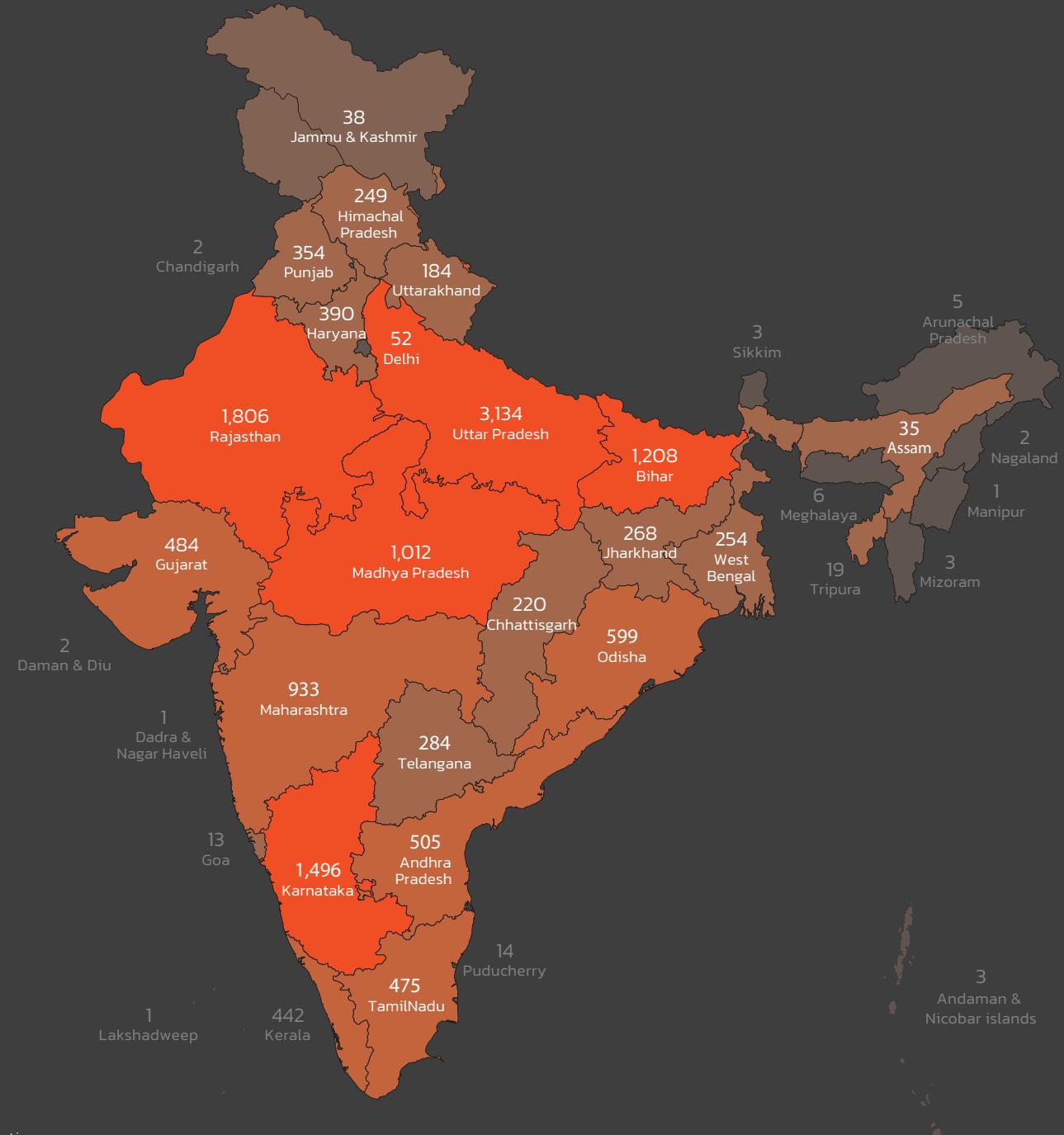
ITIs are supposed to provide both vocational skills and secondary or higher secondary education qualification, also termed academic equivalence. Under academic equivalence,<sup>21</sup> youth who have 8th-standard qualifications and complete two years at an ITI can take the National Institute of Open Schooling exams to earn the equivalence of 10<sup>th</sup> standard qualifications. Youth with existing 10<sup>th</sup> standard qualifications who complete two years at an ITI can take exams for 12<sup>th</sup> standard qualifications.<sup>22</sup> This integration intends to help ITI graduates to gain vocational skills and secondary or higher secondary certification simultaneously.<sup>23</sup> Though in practice, few ITIs pay any attention to academic equivalence.

### Box 1 Skills Standards and Qualification Frameworks

Dimension	Description
<b>Skills Standards</b>	<p><b>What are the skills standards?</b> The National Skills Qualification Framework (NSQF) <b>standardizes skill levels from 1-10</b>. Youth are certified under NSQF—to signal to employers their level of employable knowledge and skills. The NSQF levels are based on occupational standards by sector and job roles. The standards are also known as Qualification Packs, which are made up of National Occupation Standards. Under the Recognition of Prior Learning (RPL) process, the aim is to certify youth with informally acquired skills in line with NSQF.</p>
<b>How do standards reflect the private sector?</b>	<p>Sector Skills Council (SSCs), which are guided by the private sector, create the standards that inform the NSQF. <b>40 SSCs exist across services</b>, production and agriculture. For example, there are SSCs for retail, IT, and healthcare, to name a few.</p>

# Map of Industrial Training Institutes (ITIs), by State, 2019

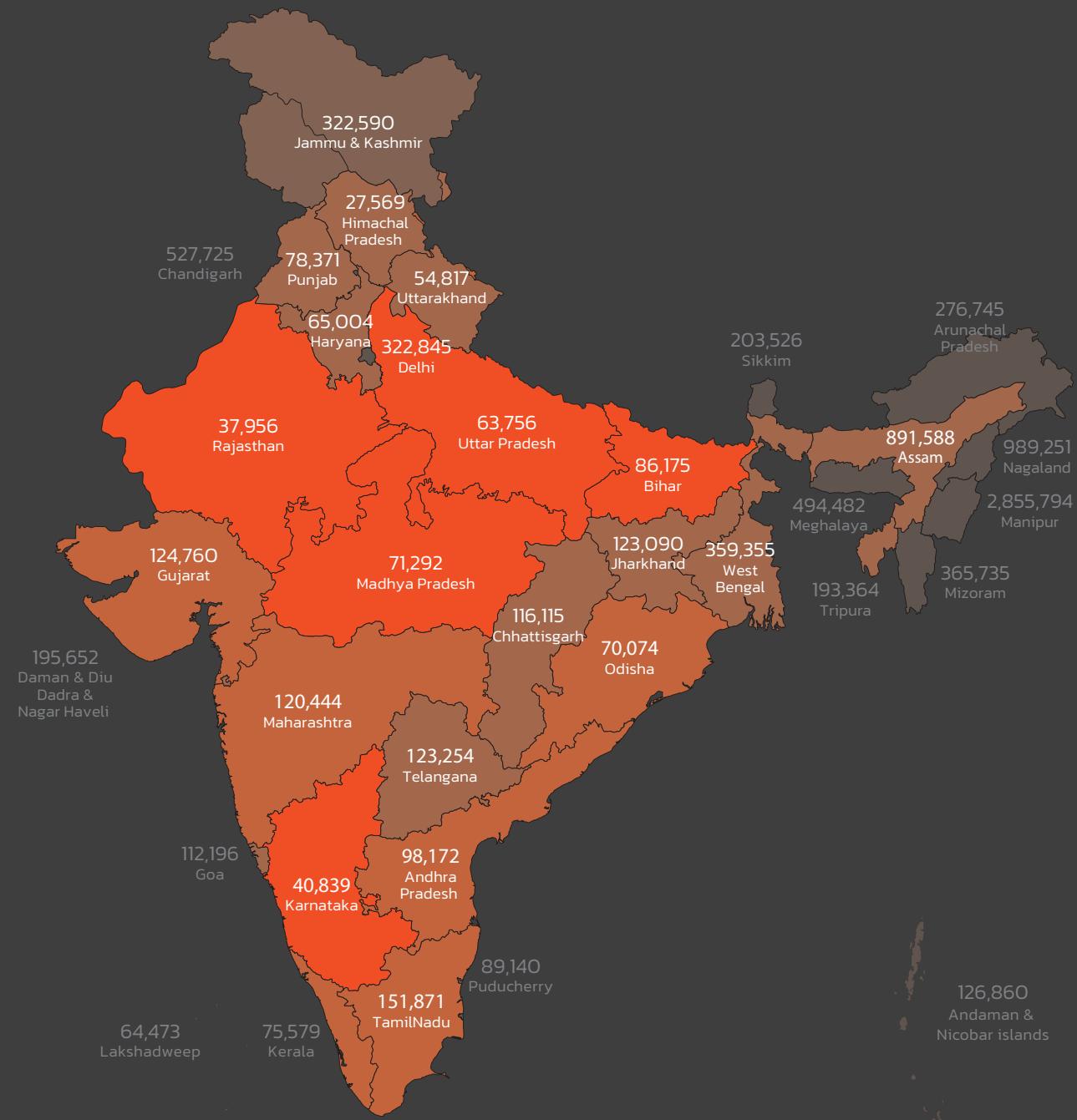
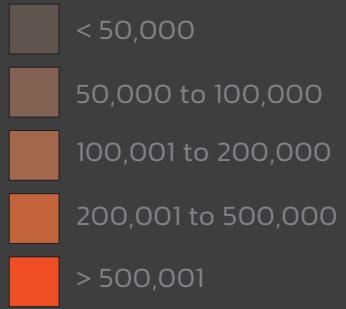
## Legend



Source: Dewan, S., & Khan, L. (2019). Breaking the Cycle of Vulnerability Education, Skills and Employability for Indian Youth.

# Map of Population per ITI by State, 2019

## Legend



**Source:** Population Data extracted from Census 2011 and ITI Data from Dewan, S., & Khan, L. (2019).  
Breaking the Cycle of Vulnerability Education, Skills and Employability for Indian Youth.

# **CHALLENGES IN SKILLS TRAINING AND THE NEED FOR SYSTEMIC REFORM**

3



### 3.1 DIFFUSION OF RESPONSIBILITY ACROSS CENTRAL MINISTRIES AND STATE AUTHORITIES

The skill development ecosystem is large and unwieldy with responsibilities distributed across several Central ministries, State authorities, and private players. Several ministries run their own skills training schemes. MSDE, among its other responsibilities, is supposed to coordinate these activities across government, but in reality, the independent mandates of different ministries make this difficult to implement.

At the same time, NSDC is responsible for short-term training, and is the main point of contact with Sector Skills Councils. Long-term training through ITIs is, however, regulated by the DGT. Financial and administrative responsibilities lie with State governments or Union Territory Administrations. But the Sector Skills Councils have varied, and sometimes spotty, presence at the State-level.

States are expected to implement certain Central schemes in addition to having their own skills training schemes. State-level capacity to institute and run skill development schemes varies significantly. States also work with a range of private training providers.

This network of ministries, Central and State-level departments, NSDC, SSCs, a range of schemes, regulators, and training providers generates a confusing landscape that is difficult for industry and youth to navigate. It creates confusion and a diffusion of responsibility that is counterproductive to creating an effective and efficient skills training ecosystem.



### 3.2 MANY STUDENTS LACK FOUNDATIONAL EDUCATION NEEDED FOR SKILLS ACQUISITION

There is a limit to how far young people can go without requisite levels of education. In JustJobs Network's fieldwork in Odisha, training providers and firms reported insufficient education of trainees as a constraint, suggesting that a lack of requisite education can constrain skills uptake.<sup>24</sup> In a 2014 survey of manufacturing firms, 9.4 percent of all firms cited an inadequately educated workforce as a major constraint to their doing business.<sup>25</sup> Just under half—about 47.4 percent—of the educated or formally trained workforce in India was considered to be employable as of 2019.<sup>26</sup>

What are some of the challenges with the education system? About 32 million Indian children between the ages of six and 13 have never attended school.<sup>27</sup> Even though there have been great strides in improving gross enrollment ratios, especially for girls, millions of children lag in attendance.<sup>28</sup> Progress on learning outcomes has also lagged.<sup>29</sup> The National Education Policy 2020 acknowledges India's severe learning crisis where children are enrolled in primary school but are failing to attain even basic skills such as foundational literacy and numeracy.<sup>30</sup>

Over 30 percent of Indian youth ages 15–29—that is, over 100 million young people—are not in education, employment, or training (NEET).<sup>31</sup> Some NEET youth have not completed school and many fail to undertake the transition from school-to-work or drop out before entering the labour market. When youth that have been NEET do enter the labour market, they are more susceptible to being employed in precarious work—that is, informal, casual, or contractual employment.<sup>32</sup>

Not only is education in dire need of reform, but building a smooth continuum from education to skills acquisition to ease the entry into the labour market is essential. These three rites of passage are connected and cannot be treated as discrete from one another. A single-minded focus on skills development, without accompanying improvements in both quality and quantity of education, will not deliver better employment outcomes for youth or improve the quality of labour supply.

### 3.3 BIASES ARE PERVERSIVE IN EDUCATION, TRAINING AND EMPLOYMENT

India's strength is its diversity; its weaknesses lie in the biases that have come to pervade its heterogeneous society. Opportunities to access education, skills training, and employment vary significantly on the basis of gender, caste, migratory status, and other social groupings. These are often also closely correlated with socio-economic status. Moreover, entrenched attitudes, such as a preference for an academic track education and cognitive jobs, over vocational training and manual jobs further fuel social chasms.

Structural mismatches are easier to address than entrenched biases that pervade India's labour markets. The latter take consistent, long-term interventions and regulation to change mindsets and behavior. Most visible metrics and results-driven political or funding cycles tend not to afford the time and resources to invest in these types of interventions.

#### Box 2 A Labour Market Infused with Biases

Structural mismatches are easier to address than entrenched biases that pervade India's labour markets. The latter take consistent, long-term interventions and regulation to change mindsets and behavior. Most visible metrics and results-driven political or funding cycles tend not to afford the time and resources to invest in these types of interventions.

##### What are these biases?

"Head over hand bias" – A commonly evoked phrase, this captures a preference for cognitive skills over trades that require physical labour and working with one's hands.

Biases based on social or economic class – The pervasiveness of gender biases embedded in patriarchal norms is well known. In India, social groupings on the basis of caste or religion also play a role in determining access to education, skill, and occupations. One interviewee noted, "these youth should take what they get, beggars can't be choosers."\* The interviews with some employers suggested that they believe that young people are unwilling to work hard or that they are lazy. Such biases de-sensitize employers to the preferences and aspirations of youth further fueling labour market friction.

**The notion that a young person's lack of enthusiasm may be a result of a mismatched in expectation rather than laziness was not widely acknowledged.**

\*Respondents are kept anonymous to protect their privacy

### 3.4 A LACK OF RECOGNITION AND CERTIFICATION FOR SKILLS ACQUIRED INFORMALLY

Though there is a complex web of government schemes and non-profit, for-profit, and public institutions that provide skills training, data indicate that the percentage of youth that acquire formal training is only 2.8 percent.<sup>33</sup> However, this number jumps to 9.2 percent, according to the same Periodic Labour Force Survey 2018–19 (PLFS), when non-formal training is included. The PLFS makes a distinction between non-formal and informally acquired training.<sup>34</sup>

The actual proportion of informally trained workers is likely higher, since India has a long tradition of informal training and apprenticeship that isn't captured by data because it is invisible and unassessed. Effective implementation of the Recognition of Prior Learning scheme and certification of young people would likely lead to a far higher share of the youth workforce possessing skills that the private sector can recognize and reward. A certification would provide important signalling value to the employer and/or consumer that would help eliminate some barriers to breaking in to the world of work.



#### Box 3 A Large Share of Our Workforce Has Skills: Conversations from Gujarat

Informal training among youth in the tribal belt of Gujarat was a recurring theme in interviews with government stakeholders. Young people often enrol in short courses and start working locally. But when they leave the job without any certification or even evidence of their experience, they are unable to prove their experience and capabilities and end up starting from the bottom of the ladder again.

Conversations about potential approaches at the cluster level would help circumvent this challenge. This approach should be as part of the RPL and certification programs.

**To record and certify this form of training is challenging in a country as large as India.**

### 3.5 SKILLS TRAINING SYSTEM IS NOT ALIGNED TO MARKET DEMAND

At the same time that there is a dearth of jobs for labour market entrants, employers often complain that they are unable to find and retain the right workers. Nearly three in five<sup>35</sup> employers reported having difficulties in filling jobs in India, **20 percentage points higher** than the global average, and more than double the share in China.<sup>33</sup> Underlying this is a lack of alignment between the training system and labour market demand.

These mismatches between businesses (labour demand) and those looking for work (labour supply) exacerbate the country's employment challenge. This report homes in on the first type of mismatch: the divergence between skills training and business requirements. A deeper discussion of mismatches two to four is beyond the scope of this report, though no less important.

Specifically, the mismatches are a result of:



Youth and employers rely on different networks when searching for a candidate and job respectively



Differences in what education and training institutions impart and what businesses need



A divergence between youth expectations of salary, role, and respect on the job, versus the expectations of the employer

# **UNDERSTANDING THE LABOUR MARKET MISMATCH**

## 4 THE DIVERGENCE BETWEEN SKILLS TRAINING AND BUSINESS REQUIREMENTS



**Industrial Training Institutes are key to administering long-term vocational training across the country. Yet their capacity to administer skills training and to provide employment/placement services, career counseling, and entrepreneurship promotion, is limited. ITI structures to provide the latter three services are underdeveloped further exacerbating the disconnect between skills training and demand.**

## INDUSTRY ENGAGEMENT WITH THE SYSTEM OF SKILLS TRAINING HAS BEEN LAGGING

In JustJobs Network's fieldwork in Odisha and Tamil Nadu, skills training providers reported few linkages with industry.<sup>37</sup> Some of the employers that JJN interviewed in Gujarat also said that they had little to no interaction with ITIs. JJN fieldwork in Haryana revealed that the lack of linkages between industry and training or educational institutes widened the gap between labour demand and supply.



Once a key competitive sector, Ambala's Scientific Instruments industry is waning. The reason, the president of Ambala Scientific Industries Manufacturers' Association (ASIMA) notes: "There is no linkage with the training providers or educational institutes. There are no such courses or training being provided specifically for the scientific instruments industry in the region—not even a single module focused on the scientific instruments industry is being taught in a semester, in any program, in any institution."<sup>38</sup>

Though the plan in building a skills training ecosystem has always been to mobilize business participation and resources through NSDC and the Sector Skills Councils, this approach has seen limited success so far. Sector Skills Councils do not have enough presence at the State-level where the financial and operational administration of ITIs occurs.

As a result, either the content of skills training does not match what employers want, or these systems are churning out more individuals with a certain vocation than the labour market can absorb.<sup>39</sup> Ultimately, ITIs with limited industry engagement lead to a one-sided system of training that does not necessarily translate into employment for youth.

### Box 4 Reforming Sector Skills Councils

Critics of India's 38 Sector Skills Councils point to the need to clearly delineate the functions of the SSC including their specific role in assessments, certification and utilization of Qualification Packs (QP) and associated National Occupational Standards (NOS). Based on the clear and specific functions ascribed to SSCs, there should be guidelines that clearly state what regulatory bodies the SSCs answer to. They should be required to routinely self-report their structure composition and performance. This should include reporting on accounts in a timely and transparent manner. SSCs should be responsible for revenue generation model that disassociates revenue from assessment, certification and QP-NOS utilization. The SSCs should reinforce (though not implement) compliance with existing labour and wage regulations.

**There is a need to build a better connect between SSCs and State and local bodies.**

*Source: Report of the Committee for Rationalization and Optimization of Functioning of Sector Skills Councils (2016)*

## SKILLS TRAINING INSTITUTIONS ARE SLOW TO ADAPT TO A CHANGING MARKET



The inability of ITIs to keep pace with changing market conditions and adapt their curriculum accordingly is fueling even greater misalignment between labour demand and supply. Advancing technology, evolving business needs, and changing sectoral labour demand patterns call for constant revisions in the content and methods of training. This is true even for medium-skilled and low-skilled occupations. ITIs have to ensure that their training programs produce adaptable graduates who are employable not just today, but also in the future.

Employers in Gujarat told JJN that because of the pandemic, they have started placing greater value on adaptability as a key skill for young people. This rapid pace of change requires skills training institutions to continuously adapt with the evolving job market. Stakeholders that JJN interviewed in Gujarat felt that the ITIs were slow to adapt to the changing job environment and that their course content is often outdated and does not cater to the current needs of employers.

## EXISTING ATTEMPTS TO MAP DEMAND HAVE BEEN AT THE MACRO-LEVEL WHEREAS LOCAL GEOGRAPHIES AND PLACE-BASED DYNAMICS PLAY AN IMPORTANT ROLE IN EMPLOYMENT

Most assessments of labour demand take a macro approach, examining broad sectoral trends. Designing skills training programs based on such a study of broad trends, and mostly large and/or formal enterprises, does not correspond to the reality of India's heterogeneous labour markets with businesses of different sizes, registered and unregistered, engaging in a range of activities that are not always related to large industries.

Labour supply is heterogeneous as well. For instance, in more patriarchal States, women may face more barriers to employment than in other States. Certain States host migrants while others send them. A broad analysis of industry trends does not tell us how to create local jobs to support livelihoods in a given geography. This is why years of interventions to generate more and better livelihoods have enjoyed limited success in improving the aggregate picture on employment. Sweeping schemes, top-down measures, and mass targets do not appreciate the place-based specificities of the way that labour markets operate.

While examining broad sectoral changes do provide some insight into the needs of downstream, smaller businesses in big value chains, such as the auto sector, food processing or apparel, there are many other kinds of micro, small and medium-sized enterprises (MSMEs) that are not accounted for in these macro approaches. MSMEs account for a large share of employment in the



country. Many operate in smaller market areas and a majority are unregistered. These do not factor into macro-level analyses. In 2013–14, MSMEs employed over 100 million people in India across 46 million units.<sup>40</sup> These enterprises together accounted for 38 percent of manufacturing output and 40 percent of total exports.<sup>41</sup> This is also the case in Gujarat. For example, in 2012, 55 percent of organized employment in Ahmedabad, 74 percent in Narmada, and 60 percent in Rajkot was in the MSME sector.<sup>42</sup>

The role of geography in determining employment opportunities and challenges is particularly relevant for women. Women are frequently restricted from accessing employment opportunities that are further away. Often, marriage-induced migration hinders access to jobs for women if they move to a location whose labour market demands skills other than the ones they have acquired. This can demotivate them from establishing careers prior to marriage, and it can be a disadvantage in accessing opportunities afresh in a new geography. In a JJN study in Haryana, 55 out of the 103 married women (53 percent) said that they had to migrate after marriage.<sup>43</sup> For jobs in Gujarat, men are sometimes preferred to women, who find it difficult to work long hours or handle heavy machinery.<sup>44</sup>



# DEMAND MAPPING 5

## A CASE STUDY OF GUJARAT

**This study draws on JustJobs Network's fieldwork across the country over the last decade. Using Gujarat as a case study, with a focus on three districts of Ahmedabad, Rajkot and Narmada, allows to better understand the supply and demand dynamics of the labour market and specifically the role of ITIs. In Gujarat, the research team conducted primary research consisting of detailed semi-structured interviews with government officials, experts, ITI officials, and industry; as well as focus group discussions with youth in the State.**

**Table 2** Number of Interview Respondents

Respondent	#
Youth Focus Groups Discussions (FGDs)	6 (over 50 youth)
Employment Officers	2
District Development Officer	1
Local Industry Associations	1
Industrial Training Institute Principals	5
Industrial Training Institute Placement Officers	5
Civil Society/Experts	3
Firms/Companies	6

## 5.1 THE ECONOMIC CONTEXT

Gujarat is frequently touted as being industry friendly, a trade and commerce hub, well-known for its ease of doing business.<sup>45</sup> The State's high levels of economic growth and business friendly atmosphere have fuelled a lower youth unemployment rate of 8.4 percent in 2018–19, far below the national average of 17.3 percent. Yet, it does not perform as well on quality of employment indicators.<sup>46</sup> Macro-level analyses of Gujarat's industries obscure several important local factors that play a role in underemployment in the State.

Gujarat's average annual growth has consistently been higher than the annual growth rate for India as a whole. From 2013–17, the State achieved a higher Gross State Domestic Product (GSDP) of 9.9 percent, relative to all India GDP growth of 6.9 percent as a whole.<sup>47</sup> The GSDP of Gujarat for 2021–22 (at current prices) is projected to have an annual increase of 7 percent over the actual GSDP of 2019–20.<sup>48</sup> Ranked first in India in terms of industrial output (2017–18), the State constitutes 17 percent of the country's total output while contributing

over 20 percent to its total exports.<sup>49</sup> Over the years, it has seen high levels of domestic and international investment relative to other States. With an inflow of \$30.23 billion, Gujarat recorded the highest Foreign Direct Investment (FDI) in the country in 2020–21 despite the global impact of COVID-19. The state has accounted for 53 percent of the total FDI investment received by the country.<sup>50</sup> Production of oil and gas, pharmaceuticals and biotechnology, textiles and apparel, gems and jewelry, soda ash, salt, plastics, petrochemicals and chemicals, and agro and food processing are key sectors.<sup>51</sup>

The diversity of Gujarat's economy and the labour intensity of many of its sectors means that the quantity of employment is less of a challenge relative to several other Indian States.<sup>52</sup> As of August 2021, the unemployment rate in Gujarat stands at 1.6 percent, far lower than the national unemployment rate of 8.3 percent.<sup>53</sup> But the quality of work and the geographic distribution of employment are rife with challenges. Gujarat ranked 18<sup>th</sup> out of 21 states in the JustJobs Index, above only Odisha, Uttar Pradesh, and Bihar.<sup>54</sup> A low labour force participation rate is driving the score low. This can be attributed to various factors such as people opting out of the labour market because of low quality of jobs, or labour market mismatches that result in youth getting discouraged when they are unable to find jobs they desire.

The State has a high share of own-account workers and contributing family members, with 39.8 percent being own account workers and 14 percent working as helpers in household enterprises.<sup>55</sup> These own-account workers and contributing family workers are less likely to have formal work arrangements making them more likely to lack decent working conditions, adequate social security and earnings.<sup>56</sup> The high percentage of workers in the agricultural sector and the higher share of informal workers in wholesale and retail trade services also contributes to the vulnerability of the labour force. Gujarat also has a high ratio of informal wages to formal wages.<sup>57</sup> The State fares poorly in the provision of benefits for workers, evident in the low share of workers with a union association (excluding the self-employed) and the State's expenditure on pensions as a percentage of gross state domestic product.

Nearly half the total labour supply in Gujarat is situated in six districts: Ahmedabad, Surat, Vadodara, Rajkot, Banas Kantha, and Bhavnagar and Junagadh.<sup>58</sup> Tribal regions such as Dangs, Narmada, Dohad, Navsar and Valsad are also responsible for outgoing seasonal work-related migration propelled by the lack of sustainable local employment options in these regions. Tribal regions, in addition to larger districts, must be considered while designing training programs, and education and employment policies. Variations in the demand-supply gap at the district level reflect the need for geography-specific measures to resolve skilling issues.

## 5.2 PROFILING GUJARAT'S YOUTH

Gujarat's population is forecasted to be 69.8 million in 2021. Youth constitute 26 percent, or 18.4 million, of the total population.<sup>59</sup> Given that more than a quarter of the State's population are young people, building a smooth continuum for education, skills training, and employment must be a priority.

### Education

In 2019–20, Gujarat's Gross Enrolment Ratio (GER) in higher education stood at 21.3 percent, lower than that the national average, which stood at 27.1 percent in 2019–20. While women had a higher GER than men at the national level — 26.9 percent for males and 27.3 percent for females, in Gujarat the trend was the opposite. Gujarat registered GER of 22.9 percent for males and 19.6 percent for females.<sup>60</sup>



Nearly 20 percent of students dropped out of school before reaching secondary grades.<sup>61</sup> There are various reasons for students opting to permanently drop out of the schooling system, many rooted in social and cultural factors that impact male and female youth differently. The main reason for young men dropping out is the need to supplement household income. Of the young men interviewed, 53 percent expressed this as the guiding reason. On the other hand domestic responsibilities influenced the drop-out rate for young women, with 44.3 percent of female youth saying that they were not attending school because of household chores.<sup>62</sup>

### Skills

Only a small percentage of youth in Gujarat, 2.1 percent, enroll in technical or vocational training.<sup>63</sup> In our extensive field research with ITIs across various regions of Gujarat, we found that ITIs offer a wide variety of courses but students gravitate toward courses in Mechanical and Electrical training owing to a higher likelihood of placement.

Youth report dissatisfaction with skills training courses available at various institutes across the State. A common grievance revolved around lack of practical and experiential learning in the vocational training courses, which had an impact on the job readiness of students undergoing these courses. Several structural and organizational challenges across ITIs were also highlighted during the research. Many ITIs still use outdated technology; a lack of networks – online or offline – that can help students find employment; and an inability to keep up with the evolving skills needs of the industry. This failure to evolve and adapt with the changing labour market is also reflected in the courses that are run for many years without any modification.

## Employment Outcomes

As a result of these skill training challenges, employment outcomes for the youth are mixed. Gujarat has a lower youth unemployment rate of 8.4 percent but it also has relatively low youth labour force participation.<sup>64</sup> The latter indicates that many young people in Gujarat don't enter the labour market or they get discouraged and drop out.

The labour force participation rate also varies considerably between male and female youth – it is 65.9 percent for male youth compared to 17.2 percent for female youth. Male youth, at 40.9 percent, are also more likely to be regular wage/salaried employees compared to female youth, at 33.8 percent. Moreover, just under 63 percent of female youth in Gujarat are not in education, employment or training (NEET) compared to the national NEET rate of 57 percent for female youth.<sup>65</sup>

JustJobs Network's fieldwork in Gujarat also revealed low retention of young people in industry jobs. Focus groups with youth suggest that this high attrition can be attributed to low job satisfaction for reasons including skilled workers being made to do manual work, mismatch of expectations and lack of proper working conditions, fair wages and opportunities for growth.

### Box 5 A Deeper Dive: ITIs, Attendance and Placements in Gujarat

#### ITIs in Gujarat

**There are a total of 484 ITIs in Gujarat.** Examples of vocational courses at the ITIs include fitter, turner, machinist, wireman, electrician, attendant, and operator for chemical plants. Most of the instruction is conducted in Gujarati.

The pandemic has been a mixed bag when it comes to ITIs. On the one hand, **ITIs that normally had intakes of 1,700 to 2,000 students** are now seeing far fewer because of the pandemic. On the other hand, one interview suggested a rise in online registrations, especially among young women.

#### Attendance

A few ITIs arrange for transportation and housing for students travelling from far, but most do not and many students cited a lack of transport as a constraint to attendance.

Most students in ITIs that JJN interviewed had passed 10th grade, though a small number of those interviewed had only completed up to 8th or 9th grade education. These students were largely accepted into training for trades such as sewing, wiring, or two-wheeler

# Students travel up to 70–80 kms to attend ITIs

repair, occupations which require fewer educational qualifications. On the opposite end of the spectrum, the researchers also came across a small number of students who had passed 12th grade who were attending the ITI as a substitute for college.

ITIs charge lower fees, or waive the fees altogether, for students from disadvantaged social groups: Scheduled Castes, Scheduled Tribes or Other Backward Classes. Therefore, there is a greater propensity for youth from low-income and farmer families to attend ITIs, particularly from tribal areas, than those that are from households and areas that are socio-economically better off.

Sometimes girls can obtain fee waivers, which is among the reasons why female enrollment in Gujarat's ITIs is 58 percent. Yet women still face barriers to entry: safety and transport issues, household responsibilities, and marriage.

## Box 6 Job Placements in Gujarat's ITIs

Based on qualitative interviews, JJN found that ITIs deploy the following strategies for job placement:



### Job fairs

The pandemic is prompting training institutes to use technology for more of their operations. For instance, virtual job fairs are replacing physical ones, though the virtual fairs are reported to be less effective than physical ones.



### Newspaper advertisements or vacancies

These are identified through community or alumni networks. Sometimes ITI staff rely on these methods to identify potential opportunities



### Direct outreach from companies

In some cases, companies contact ITIs regarding their needs. The ITI informs the students using social media channels or text messages. When needed the ITI will hold pre-placement talks and conduct written tests on behalf of the company.



### Ad hoc, based on the connections of ITI trainers/staff

Some ITIs reported having two employees to provide support with placements and apprenticeships. However, the process appeared to be ad hoc, sometimes relying on the trainers' own connections, rather than databases or standardized processes across ITIs.



### Campus placements

Some ITIs reported having 50–60 companies that come to the ITI to hire trainees. Since the placements are open for other ITI students too, occasionally students come from other States to get placed.



### Online portals

None of the ITI personnel interviewees mentioned the use of online labour portals to connect students to jobs. Both students and ITI staff are aware of online portals, but usage is limited.

With all of these different placement methods, the most common way for the ITIs to communicate with their students is through social media platforms like Facebook and WhatsApp, or text messages. Sometimes, a given ITI will send information about potential opportunities via email to all the ITIs. The ITIs also maintain a common Facebook page.

## 5.3 UNDERSTANDING YOUTH PREFERENCES

Focus group discussions reinforce that youth in Gujarat desire more on-the-job training. Students in ITIs expressed a preference for internships or apprenticeships to learn how to adapt to a professional environment and to identify their strengths and weaknesses before entering full-time employment.

It is important to note that given the nation's large youth population and those with low levels of education and learning, at present there are not enough opportunities for on-the-job training, apprenticeships and internships in the formal sector of the kind that many youth aspire to. More needs to be done to address the specific needs of vulnerable youth to ensure that they also have access to these opportunities. Moreover, mechanisms like Recognition of Prior Learning and associated certification will help ease the way for millions of informally trained youth into employment.<sup>66</sup>

Interviews with companies suggested that there is a lack of awareness of apprenticeship programs. Many companies do not have a robust apprenticeship model incorporated into their hiring policies. Moreover, the compliances which accompany apprenticeships are also daunting for small businesses. None of the ITIs had much experience with apprenticeship programs and none expressed any plans to institute them in any systematic way either.

Focus groups discussions underscored the fact that youth rank good pay, career advancement, and job security as key criteria in a job. In our conversation with a non-profit based out of Rajkot, a decent and livable salary was highlighted as an important factor, with INR 12,000–15,000 being the bare minimum aspiration of even those who had not completed Grade 10. An employment officer explained that students expressed a strong preference for weekly payments, or in some cases, even daily wages.

Students demonstrate lower preferences for service sector jobs. This is in-part because such jobs often entail fieldwork. Most aspire for jobs in well-known companies, for instance automobile companies like Suzuki over jobs that would require physical labour. The IT industry remains a top choice for young people, with computer trades preferred even when there are other sectors that offer good opportunities in other trades. This is indicative of a misalignment between youth aspirations and employer demand, leaving a large section of skilled and semi-skilled youth unemployed or underemployed.

The FGDs indicated that youth generally prefer to work locally due to various reasons. Conversations with youth in it is suggested a preference for jobs closer to the ITIs they graduate from so that they don't have to travel long distances. Infrequent or irregular transport, and long commute times, dissuade many youth from taking up employment further away. Single children households were found to be unwilling to send their children too far away from home. This disinterest in travelling for work was amplified further after the COVID-19 induced lockdowns that impacted mobility and transportation.

In Gujarat, as in several other States where JJN has undertaken research, women face even more socio-cultural barriers to mobility with parents often refusing to allow women to move to big cities like Ahmedabad for work. Domestic responsibilities and family obligations also result in married students not preferring to jobs that entail longer working hours.

As corroborated by JJN's other fieldwork, youth in Gujarat generally prefer to work for firms that provide both transport and residential facilities. It is usually big companies that can provide such facilities. Youth with traditional graduate or postgraduate degrees are more amenable to migrating to bigger cities like Ahmedabad, Vadodara and even out of the State to metropolitan cities like Bengaluru.

**It is important to note that given the nation's large youth population and those with low levels of education and learning, at present there are not enough opportunities for on-the-job training, apprenticeships and internships in the formal sector of the kind that many youth aspire to.**

### Box 7 Salary Bands and Dynamics

- Interviews suggest that youth ask for slightly higher salaries with an ITI diploma, though employers are reluctant to pay a premium for skills.
- General bands, based on interviews in Gujarat, are as follows:
  - Skilled (technical and managerial positions) – INR 20 – 40,000
  - Semi-skilled – INR 10 – 15,000
  - Low-skilled – Less than INR 10,000
- Multinationals tend to pay more than local companies.

**Box 8 The Youth Perspective on Placement: Conversations from Gujarat**

Based on youth focus groups in Gujarat, youth uniformly raised concerns that an ITI training certificate may not lead to jobs. Youth stories about placement aligned with the narratives presented by the ITI personnel interviewed for this report, but youth also noted that when they were given information about potential opportunities, the information was vague. They were not given enough information about the potential opportunity before the actual interview. This meant that sometimes youth were sent to interview for jobs that weren't in their field of training.

In one example, a young person completed a course to be a "fitter" expecting to work in the automobile industry, but when s/he went for the job interview, s/he was redirected to do a different job.

**Sometimes youth will take up the work out of necessity, or perhaps curiosity, but often this dynamic leads to high turnover and low retention in jobs.**

**Box 9 Through the Lens of the Youth**

In our focus groups discussions with the youth in Gujarat, they expressed preference of various skills training and courses.

**Courses:**

While the feedback was positive for ITI course material, as it covers required topics and reading material, many expressed demand for advanced courses. Selection for the course was an independent decision for a majority with many opting to join technical courses like IT and computer training for better job prospects. Since the pandemic, adapting to e-learning was challenging for some. However, virtual methods of learning were preferred by female youths, as it allowed them to overcome socio-cultural barriers to mobility.

**Skills:**

Communication and networking skill were emphasized with positive feedback for personality development courses that help the youth with job interviews. Many expressed willingness to acquire skills even after completing the training program.

**On-the-job Training & Apprenticeships:**

ITI students missed out on internships, on-the-job training and apprenticeship opportunities due to COVID-19 and were concerned about their practical exposure. Though they could acquire theoretical knowledge through online classes, they missed out on practical and on-ground experience.

**Students said that they were not aware of any available apprenticeship opportunities.**

## 5.4 UNDERSTANDING MARKET DEMAND AND EMPLOYER PREFERENCES

COVID-19 and the subsequent lockdowns have had an adverse impact on economies the world over and Gujarat has been no exception. Several industries have taken a hard hit, with industries like retail which are dependent on exports being some of the most affected. According to an industry leader from Rajkot, who is engaged in the retail industry in garment production, they have been running on 20 – 40 percent business and he does not foresee any scope of expansion in the near future. After the first wave hit in March 2020, industries were on their way to recovery but the second wave dealt a severe blow to their recovery efforts. He suggested that recent graduates should exercise caution in joining the retail industry any time soon owing to the volatility of the sector.

But other industries have seen growth, with the Fast Moving Consumer Goods (FMCG), healthcare, insurance, and IT sectors have experienced a boost during the pandemic. Interviews suggested that while healthcare and online enterprises are doing well, many industries do not have the requisite skilled workforce to support their expansion.

Infrastructure, pharmaceutical and medical industries in Gujarat have started running various training programs. IT hubs are emerging in the State. But interestingly, the interviews with employers suggest that while industries are looking for more workers to support the expansion of their activities, they have also become more careful about who they hire.

Employers prefer to train workers on the job as opposed to hire workers trained elsewhere. The pervasive view is that skills training does not necessarily improve employability. Firms also express a strong preference



for hiring workers with prior work experience, which in turn is making it difficult for young people who graduate from ITIs and other training institutions to get placements, especially in the absence of apprenticeships. An industry expert pointed that adapting courses and the curriculum to keep pace with automation would make students from employable. There is an acute shortage of trained teachers and trainers at ITIs. Employers that JJN interviewed in Gujarat noted the importance of not only the right skill sets but also that youth should have reasonable expectations from these jobs.

Employers acknowledged reservations in hiring women. They prefer men for jobs that require working late. Employers also believe that there are issues with women operating heavy machinery and equipment. The interviews with employers reflected that women are still thrust into gender normative occupations and are actively excluded from other types of work that are seen as more male-oriented.

Employers noted that worker retention is a problem. They shared that youth frequently leave a job when offered even slightly more pay elsewhere. This lack of retention disincentivizes employer investment in workers. Moreover,

while ITIs are held to certain placement targets, they don't measure retention.

Several major skills development programs exist, but our findings suggest that youth face significant barriers in turning skills into employment, and especially into productive and well-remunerated employment. These challenges range from training on outdated job requirements; to mismatches between youth and employer expectations of income and responsibilities, as well as in channels for hiring.

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# What employers are looking for in the youth



## Basic education

Even for occupations that rely on manual work, employers as well as ITI personnel cited basic literacy and numeracy as important. Training providers and firms reported a lack of basic education as a constraint to skills acquisition.<sup>67</sup>



## Language and communication

Language and communication requirements vary based on the job, but consumer facing businesses often have local language requirements that preclude migrant workers from taking up these positions. English language skills are increasingly reported as important. An interview of a Rajkot ITI suggested that students were asked to read the English newspapers as an entrance assessment.



## Technical know-how

Many employers want a technical know-how in addition to academic skills.<sup>68</sup>



## Digital literacy

From basic digital literacy such as the ability to effectively use a smart phone, to reading maps online and using MS Office applications, employers are increasingly looking for varying degrees of digital literacy.



## Adaptability

Employers value both job-based knowledge and transferable skills that will help employees adapt to different job roles and responsibilities in a changing labour market; this includes, but is not limited to digital skills.<sup>69</sup> When asked "what skills are important for employees to do well on their job?" problem solving, time management skills and ability to do well under different conditions were among the top three needed skills.<sup>70</sup>



## Soft skills

Employers identified confidence, hygiene and dress sense, as well as personal disposition as important characteristics for hiring.



# ADDRESSING THE MISMATCH

## RECOMMENDATIONS FOR REFORM

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The pandemic is deepening the trends that were already plaguing our labour market prior to COVID-19. But it also presents a political moment and policy window to make fundamental shifts that will create a better, more inclusive, and equitable world for work, especially for our large and growing population. As evident from the case study of the skills training ecosystem in Gujarat, for this we must be willing to acknowledge the problems that ail our current system of training, and be brave enough to fundamentally rebuild it. Along these lines, this report makes the following recommendations:

## RECOMMENDATIONS FOR SYSTEMIC CHANGE

- There is a need to **coordinate and streamline skills training activities across ministries, regulatory bodies, and at the State-level**. Traceability, accountability, and oversight are compromised in a complicated system with multiple players and schemes.
- Skills must build upon **requisite levels of education**. Our labor market is rife with false dichotomies such as the thinking versus doing or the white versus blue collar delineation; and more insidiously -- the education-skills divide. Such dispositions also map to India's intractable caste system and other such social categorizations that create a hierarchical and segmented world of education, training, and subsequently work.

The National Education Policy 2020, lays out a path to break down the education and skills training silos and bridge these to form a continuum from education, skills, to labour market entry. The NEP calls for a concrete action plan, with goals and timelines, to be drawn so that by 2025 at least 50 percent of learners should be introduced to vocational education across both school and higher education systems. Focus areas

for vocational training will be identified on the basis of expertise gaps identified in demands by the market, and rooted in local opportunity mapping. This and other goals of the NEP must be made a priority and operationalized in accordance to the timelines offered in the document, and where possible, even sooner.

- Institute campaigns to **change mindsets and effect behavioural change** against social biases on the basis of caste, religion, disability, gender, socio-economic class or other social groupings. This would include:
  - Sensitization programs to train government officials at the Centre, State and local levels.
  - Long-term campaigns and community based programming in collaboration with States and decentralized, local authorities, to address societal biases.
- Improve **Recognition of Prior Learning (RPL) and certification structures**, especially for informally trained youth. These will signal to the employer that a young person has experience and will help smooth the transition into a job.
- Provide **incentives for the private sector** to preferably run their own training programs.

- Bigger businesses should help provide training for workers in smaller businesses, especially in their value chains or other ancillary businesses.
- Explore cluster-based approaches to training to enable sharing of resources, capitalizing on economies of scale, and reducing the overall cost of training for individual businesses.

- Set up channels through which the public skills training system can systematically **engage with the private sector**. These channels include:

- Reform Sector Skill Councils, especially their points of contact at the State- level.
- Promote apprenticeships over the Dual System of Training (DST). Apprenticeships serve the purpose of both youth and industry in a way that DST does not. The former have the opportunity to 'earn while they learn', and 'learn by doing'. They build their capacities while gaining valuable work experience. For firms, apprenticeships provide an opportunity to impart training that is aligned and specific to their needs. DST does not include a stipend, nor does it facilitate interaction with an employer in the way that an apprenticeship does.

Apprenticeship promotion includes streamlining the apprenticeship system across Ministry of Human Resource Development, Ministry of Skill Development and Entrepreneurship, and the National Skill Development Corporation as well as at the State-levels; reducing non-labour compliances; working with Third Party Aggregators to improve enrolment in the program and make it easier for companies to enrol. At the same time, ensuring that apprentices are not a cheap substitute for full-time workers; apprentices must enjoy the same rights and protections as regular workers.

## RECOMMENDATIONS TO REFORM THE INDUSTRIAL TRAINING INSTITUTES

- State governments and local authorities should regularly conduct **demand mapping to keep track of sectoral trends and shifts** in the composition of economic activity based on macroeconomic changes and economic shocks. This analysis should form the basis of a regular and systematic review of ITI curricula and practices.
- Develop a **robust employment services or placements office**. This is central to strengthening the link between ITIs and market demand and ensuring that training actually aligns with what employers want and that it leads to employment.



- This employment services office would consist of placement officers as well as career counsellors, but also student representatives and alumni.
- Trainers, placement officers, and counsellors should be appropriately trained with regular investments in upgrading their knowledge and skills. They must also be able to impart soft skills in addition to technical training and they must be trained such that they help break down biases based on gender, social grouping, or economic class, rather than perpetuate them.
- This employment office must keep a regularly updated repository of alumni and effectively engage them in getting information on potential opportunities; challenges on the job; information on conditions of work and suggestions to better align training to the demands of their respective jobs and employers.
- The employment office should also maintain a regularly updated repository of businesses. It should maintain connections with Sector Skills Councils. Both of these will enable effective engagement with industry to enhance placements. This also underscores the need for SSCs to have a strong presence at the State-level. Activities to effectively engage firms and SSCs can include guest lectures; site visits for students; "career days" or job/apprenticeship fairs.
- The employment office should have a robust data collection infrastructure to not only record placements but also measure retention. This also calls for defining what placement means. For instance, some interviews reported that being short-listed was sometimes recorded as being placed.
- ITIs should provide basic occupational counselling services so that students entering a training program have a sense of what they are getting trained for and potential job opportunities in the field. Trainees should have access to this information before they sign up for a training course. This awareness will help trainees make informed choices rather than ad hoc ones.
- ITIs should also hold informational sessions at the secondary school level to help disseminate information in schools. This is particularly important for girls that frequently have access to less information about training and ITIs than their male counterparts.
- Develop a central ITI system for placements. ITIs across the country should have a common broadcast group for potential opportunities.
- Systematize the way an ITI goes about placements. Placements should not be an ad-hoc exercise based on the will or networks of the ITI personnel. Rather there should be a systematic method for identifying opportunities and disseminating this information to students, and other ITIs.
- ITIs should serve as Third Party Aggregators to enable apprenticeships. DST should not come at the expense of apprenticeships.

- To facilitate ITI placement services, as well as to provide a learning environment that is current, ITIs must have **well-functioning technology infrastructure**, including databases to maintain information on alumni, companies, and students. This would also include a strategy on how to engage with private and public job search portals.
- All ITIs should go through an assessment to ensure that they are **suitable for women trainees**.
  - This includes ensuring that there are safe training conditions, separate bathrooms, equal treatment of women.
  - ITIs for women should not subscribe to gender normative trades, rather they should skill girls in a range of trades, irrespective of gender, that are demand-led.
  - Fee waivers, and other such incentives, help boost female participation in ITIs and must be encouraged.
- ITIs should play an active role in encouraging and facilitating students to **obtain academic accreditation**. That is, youth who have 8<sup>th</sup> standard qualifications and complete two years at an ITI should be supported in taking the National Institute of Open Schooling exams to earn the equivalence of tenth-standard qualifications. Youth with existing 10<sup>th</sup> standard qualifications who complete two years at an ITI can take exams for 12<sup>th</sup> standard qualifications. This integration intends to help ITI graduates to gain vocational skills and secondary or higher secondary certification simultaneously. Some ITIs profess that they play this function, but few actually do.
- ITI infrastructure could also lend itself to being a site for Recognition of Prior Learning services and certification.

With approximately 364 million young people between the ages of 15 to 29, and the absence of enough formal jobs to absorb those entering the labour market, policymakers face pressure to productively engage this large and growing youth population. This has driven the expansion of the skills ecosystem. In countries where governments drive training, rather than industry, the systems tend to be supply driven rather than demand driven.<sup>71</sup> This report hones in on what must happen to reform India's skills training system and what Industrial Training Institutes can do to better engage firms, calibrate training to market demand, and deliver on youth aspirations toward a more sustainable and inclusive trajectory for the country.

## ENDNOTES

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<sup>34</sup>The PLFS distinguishes between formal, non-formal, and informal training. Formal training is imparted through institutions/ organisations and is structured based on a set curricula, teaching/learning requirements and assessments. It is recognised by national certifying bodies leading to a diploma, certificate, and qualification is considered formal. Non- formal Training can be acquired in addition to, or as an alternative to, formal learning. It is somewhat structured, but has greater flexibility than formal training. It is imparted through community-based settings, the workplace, or civil society and other organisations. Non-formal training does not have the level

of curriculum, syllabus, or accreditation and certification associated with formal learning but it is more structured as compared to informal learning. Informal training, on the other hand, is that which is not-structured, does not lead to a certification or recognized qualification. It occurs in daily life, imparted through family, or in the workplace or communities. It is unstructured in terms of learning objectives, learning time, or support.

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