

# Reaping India's promised demographic dividend – industry in driving seat



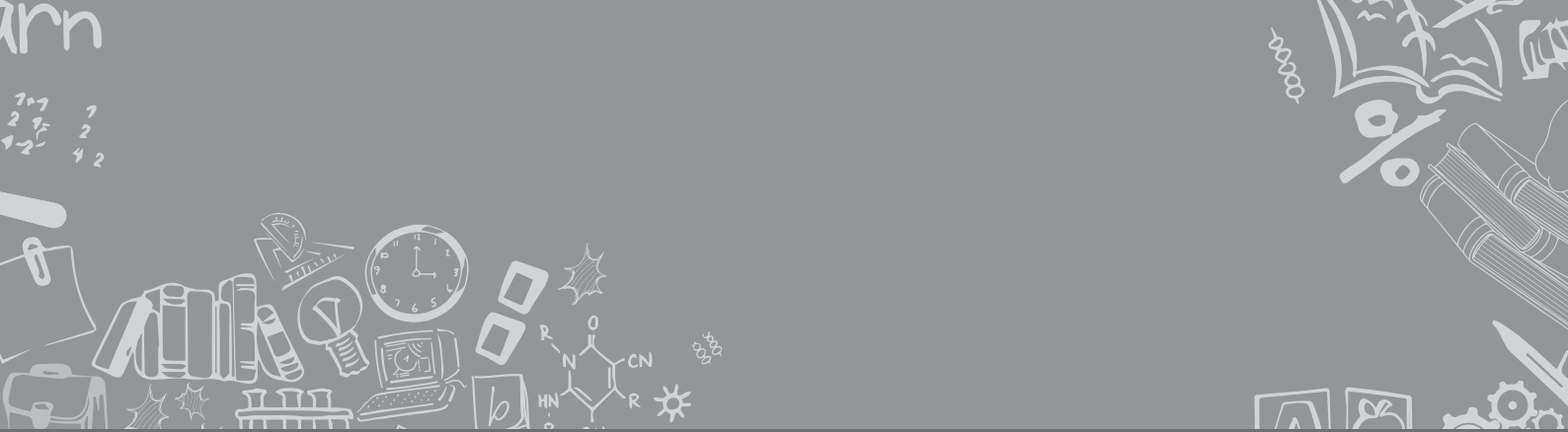

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# Fore



The development of skills for 500 million Indians in less than 10 years is not only a matter of national urgency; it is astounding in its scale. Thus far, the development of skills has been driven by the requirements of the market; while

much progress has been made with considerable help from the private sector, it clearly continued to be a supply driven system. The need to focus complete attention to the industry is now essential. This will make the system demand driven and close the skills mismatch.

The structural changes in the Indian VET system are clearly now visible. The Sector Skill Councils are becoming a reality. The industry needs to rally around them to strengthen this initiative which is essentially “By the Industry and For the Industry”.

This report discusses and analyses the reality of the demographic dividend and urges the industry to be the focal point of all skill development activity from working with the Government to engaging through CSR and through creating sustainable and scalable models to achieve the mammoth target of 500 Mn skilled people by 2022. Bringing industry in the forefront will not only improve productivity but improve access to decent employment and ensure India's competitiveness in the global market.

I am confident that the information provided in the report will prove extremely relevant to industry, academia, government and all the other stakeholders who are together developing the required skills for a modern, confident India.

Regards

**Dr. A. Didar Singh**  
Secretary General,  
FICCI

# word



Globalization and the Knowledge Economy pose numerous challenges as well as opportunities for developing countries like India. Indian labor force numbers around 500 million. Over 90% of them work in unincorporated,

unorganized enterprises gaining traditional knowledge on the job. Lack of formal vocational education for large segments of this population leads to poor working conditions, low income levels and workforce inertia hindering economic evolution.

Global flows of goods, services and know-how create pressures on economies to restructure, as some industries decline and new opportunities arise in others; these forces, in turn, create demand for re-skilling of those made redundant and for skills-upgradation and training in new skills for others employed in new industries. However with large segments of population working in the unorganized sector, formalizing mechanisms for re-skilling and skill-upgradation is challenging and onerous.

Ernst & Young had collaborated with FICCI to come up with a knowledge paper on Skill Development highlighting the vocational education and training (VET) scenario of India. Keeping the theme “learner first” in mind, the paper provided a comprehensive profile of today’s learner in terms of his/her demographic, social and educational status and voiced the opinion of the learner, regarding his/her understanding, expectations and need for skill development. This paper builds on the same to provide an Industry perspective on skill

development highlighting the need for organized sector job creation and of keeping the industry players at the centre of skill development initiatives to improve relevance and quality of training.

Governments across the states have been taking baby steps to address the humungous challenge of scaling up disparate skill development initiatives of different Departments. The paper also highlights severely deficient program management capabilities of the Government machinery at the ground level (district headquarters) that has led to excruciatingly slow progress. The paper seeks to outline concrete recommendations that can be taken up by respective State Skill Development/Employment Missions for perceptible improvement in program delivery in a time-bound manner.

We would like to extend our gratitude to FICCI for giving us this opportunity to present our findings and views at the Global Skills Summit 2013.

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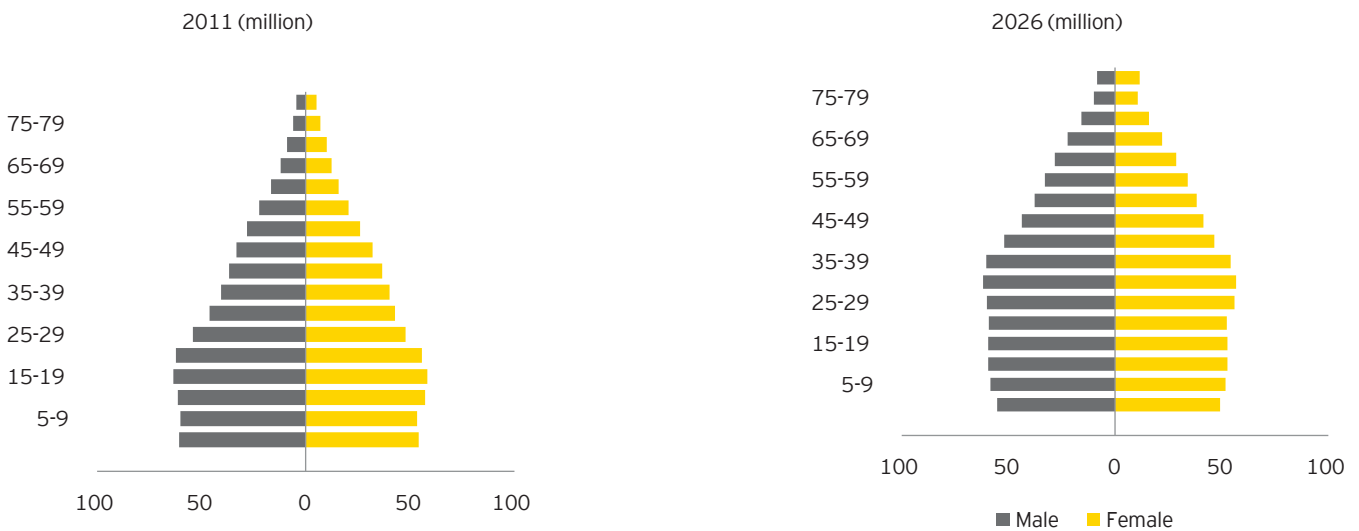


# 1 500-million skill development target: reality or mirage?

## 1.1 Population pyramid and demographic changes by 2025

Currently, India stands at a historical juncture, with the potential to reap rich economic benefits in the next few decades. The rapid growth in the country's population would be accompanied by an unprecedented demographic transition, with far-reaching consequences on economic growth.

**Figure: India's population pyramid: 2011 vs. 2026**



Source: Census of India projections

India is expected to become one of the most populous nations by 2025, with a headcount of around 1.4 billion<sup>1</sup>. The country's population pyramid is expected to "bulge" across the 15-64 age bracket over the next decade, increasing the working age population from approximately 761 million<sup>2</sup> to 869 million during 2011-2020<sup>3</sup>. Consequently, until 2020, India will be experiencing a period of "demographic bonus," where the growth rate of the working age population would exceed that of the total population<sup>4</sup>.

Around 64% of India's population is expected to be in the age bracket of 15-59 years by 2026, with only 13% of the total aged above 60 years.

India is poised to become the world's youngest country by 2020, with an average age of 29<sup>5</sup> years, and account for around 28% of the world's workforce. In comparison, during the same period, the average age is expected to be 37 years in China and the US and 45 years in Western Europe<sup>6</sup>.

While China's demographic dividend would start tapering off by 2015, India is expected to enjoy the benefit until 2040<sup>7</sup>. An increasing proportion of working population will provide a window of opportunity to improve labor productivity, increase domestic production, enhance revenue from services, increase savings and reduce the burden of old residents on the working population. Empowered with unique demographic advantages and guided efforts, India is poised to position itself among developed economies within the next 10-15 years.

1 "India to be most populous country by 2028: UN report," The Hindu website, <http://www.thehindu.com/todays-paper/tp-national/india-to-be-most-populous-country-by-2028-un-report/article4816016.ece>, accessed 12 August 2013

2 "Skilling India - The Billion People Challenge," CRISIL, November 2010, p.1

3 "India to have 28 pc of world's workforce soon," IBN Live website, <http://ibnlive.in.com/news/india-to-have-28-pc-of-worlds-workforce-soon/112213-3.html>, accessed 12 August 2013

4 "Population Projection and its Socio-Economic Implications in India: A State Level Projection Till 2020," International Institute for Population Sciences (IIPS), p.5

5 "State of the Urban Youth, India 2012," UN Habitat, April 2013, p.123

6 "Skill Development in India, A Transformation in the Making - Dilip Chenoy," IDFC, December 2012, p.1

7 "Employment and Skill Development - Twelfth Five Year Plan," Planning Commission, April 2013, p.140

## 1.2 Informal and formal sector skill gap assessments

The Government of India (GoI) has set a target to impart the necessary skills to 500 million people by 2022, in line with its forecast of a significant requirement of skilled manpower over the next decade. However, some experts have raised concerns over the magnitude of the target. In this regard, the Institute of Applied Manpower Research (IAMR) (a government think-tank) has computed new skill gap figures to arrive at a “realistic” overall target. According to IAMR’s analysis, the total number of people who need to be trained by 2022 ranges between 249 and 290 million across differing skill requirement scenarios<sup>8</sup>.

The Twelfth plan has embarked on a relatively modest target of skilling 80 million people until 2017<sup>9</sup>, which leaves around 400 million people to be trained in the Thirteenth period by 2022. In view of the above, the Government could consider re-examining mission targets and redesigning its policies/execution accordingly.

NSDC projects an incremental requirement of 347 million personnel (skilled as well as unskilled) in 21 high-growth sectors by 2022. Based on this estimate, IAMR has forecast that the total workforce (including agriculture and other sectors) will cross 1,000 million by 2022. However, census estimates are in disagreement.

Even by alternative estimates, the country faces a considerable skill development challenge. Around 12 million people are expected to join the workforce every year over the next decade<sup>10</sup>. In contrast, the country has a total training capacity of around 4.3 million<sup>11</sup>, thereby depriving around 64% entrants of the opportunity of formal skill development every year. Moreover, net enrolment in vocational courses in India is estimated at around 5.5 million per year, while that in China is 90 million and in the US 11.3 million. Clearly, the country faces a major challenge of imparting “employable skills” to its growing workforce over the next few decades.

**Skill gap forecast for 2012-22 for select states<sup>12</sup> (million)**

| State       | Skilled            |                    |                  | Semi-skilled       |                    |                   | Unskilled          |                    |                  |
|-------------|--------------------|--------------------|------------------|--------------------|--------------------|-------------------|--------------------|--------------------|------------------|
|             | Incremental demand | Incremental supply | Surplus/ Deficit | Incremental demand | Incremental supply | Surplus / Deficit | Incremental demand | Incremental supply | Surplus/ Deficit |
| Delhi       | 0.85               | 2.27               | 1.42             | 0.53               | 0.36               | -0.17             | 3.00               | 3.41               | 0.41             |
| Jharkhand   | 0.73               | 0.55               | -0.18            | 0.95               | 0.55               | -0.40             | 2.71               | 3.51               | 0.80             |
| Karnataka   | 2.15               | 1.44               | -0.71            | 3.60               | 3.22               | -0.38             | 2.28               | 3.46               | 1.18             |
| Maharashtra | 5.77               | 2.41               | -3.36            | 5.36               | 4.29               | -1.07             | 4.40               | 3.94               | -0.45            |
| Tamil Nadu  | 4.70               | 2.20               | -2.49            | 3.95               | 0.54               | -3.42             | 5.03               | 4.70               | -0.35            |

Multiple pointers indicate serious gaps between the output of skill development institutions and industry requirements. Out of around 0.4 million engineering students graduating every year in India, only 20% are readily employable<sup>13</sup>. By 2020, the country is expected to face a shortage of 13 million medium-skilled workers, posing a big impediment to labor-intensive sectors<sup>14</sup>.

Around 93% of the Indian workforce is employed in the unorganized or informal sector, which lacks any kind of formal skill development system<sup>15</sup>. Barely 2.5% of the unorganized workforce reportedly undergoes formal skill development, vis-à-vis 11%

8 “Training 500 mn people by 2022 unrealistic: Govt think-tank IAMR,” Economic Times website, [http://articles.economictimes.indiatimes.com/2013-06-07/news/39815423\\_1\\_skill-development-skill-gap-ck-prahalad](http://articles.economictimes.indiatimes.com/2013-06-07/news/39815423_1_skill-development-skill-gap-ck-prahalad), accessed 12 August 2013

9 “Workshop on Skill Development with Ten States,” Office of Advisor to the Prime Minister (NSDC), October 2012, p.4

10 “India’s Economy Leaves Job Growth in the Dust,” Bloomberg website, <http://www.bloomberg.com/news/2013-03-14/india-s-economy-leaves-job-growth-in-the-dust.html>, accessed 12 August 2013

11 “Twelfth Five Year Plan (2012-17) Economic Sectors,” Planning Commission, March 2013, p.69

12 “NSDC Skill Gap Analysis Reports - By State,” NSDC website, <http://nscindia.org/knowledge-bank/>, accessed 12 August 2013

13 “A mere 2% of Indian workers are formally skilled,” NSDC website, <http://www.nscindia.org/pdf/2per-indian-workers.pdf>, accessed 12 August 2013

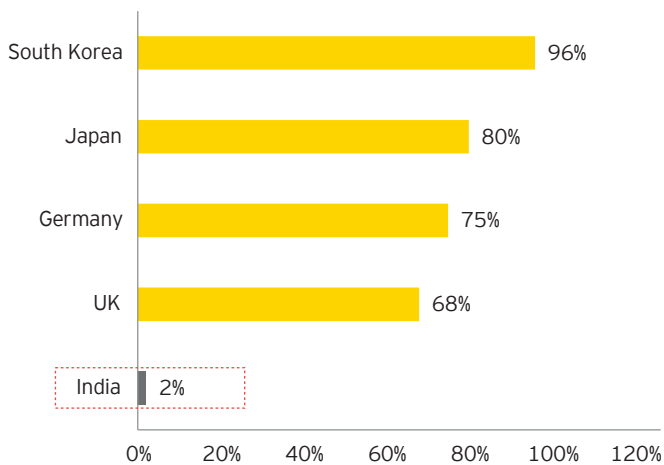
14 “Indians can dominate workforce of future, but may lack the skills,” Live Mint website, <http://www.livemint.com/Politics/v2iTiH85LIREkkco31aAhK/Indians-can-dominate-workforce-of-future-but-may-lack-the-s.html>, accessed 12 August 2013

15 “Skill Development Initiatives in India,” ISAS Special Report-National University of Singapore, July 2013, p.6



in the organized sector. Furthermore, only around 12.5% and 10.4% of the workforce in the unorganized and organized sectors, respectively, undergoes informal skill development. This indicates that around 85% of the workforce in the unorganized sector does not imbibe any form of skill development – formal or informal<sup>16</sup>.

**Figure: % of formally skilled workforce**



Source: IDFC (as published in 2011)

Poor skill levels among India's workforce are attributed to:

- ▶ Dearth of a formal vocational education framework, with wide variation in quality
- ▶ High school dropout rates
- ▶ Inadequate skills training capacity and negative perception toward skilling
- ▶ Lack of "industry-ready" skills, even in professional courses

People in urban areas have a 93% higher chance at vocational training than those in rural areas. Furthermore, a person with a high school degree has a 300% higher chance at getting trained than an illiterate person.

16 "eSkill Development," Adviser to the Prime Minister (NSDC), p.5

### 1.3 Future skill needs

India is expected to have the largest workforce in the world by 2025<sup>17</sup>, with around 2 billion English-speaking people by the end of 2020. Within the same period, India has the potential to have a surplus of around 47 million skilled workers through its skill development program, while countries across the world are expected to witness a shortage of around 56.5 million skilled workers<sup>18</sup>.

| Prominent skill shortage being faced globally <sup>19</sup> |                                       |                                    |                               |
|---|---------------------------------------|------------------------------------|-------------------------------|
| The UK  | Latin and South America               | Australia and New Zealand          | Europe and the US             |
| Logistics, manufacturing and construction                   | Engineering, life sciences and retail | Construction and natural resources | Engineering and manufacturing |

Evidently, apart from meeting its own demand, India has the potential to become the worldwide hub for sourcing skilled labor. Increasing globalization and digital presence is resulting in greater cross-border outsourcing. For instance, India's current share in the global outsourcing market is around 37%, amounting to US\$18 billion. Innovative BPO/KPO delivery models, coupled with a readily employable workforce, could help India significantly increase its global share.

Furthermore, industries across various sectors are expected to come to the forefront and steer the skill development agenda to fully utilize the economic benefits of the country's "demographic bonus."

17 "India supplies the workforce of the world," Financial Times website, <http://www.ft.com/cms/s/0/2e56d512-4732-11e1-b847-00144feabd0.html#axzz2ZvS4JNdG>, accessed 12 August 2013

18 "Skill Development and Training - Eleventh five year plan," Planning Commission, p.91

19 "The Hays Global Skills Index Report 2012 - Oxford Economics," Hays, p.3

"Industries Facing Skills Shortage," The National Skills Academy website, <https://www.nsal.org.uk/news/industries-facing-skills-shortage>, accessed 12 August 2013

"US manufacturers face skills shortages," Financial Times website, <http://www.ft.com/intl/cms/s/0/8c800066-24a0-11df-8be0-00144feab49a.html#axzz2atLbky3I>, accessed 12 August 2013

"Alarm over skills shortage in Europe," Financial Times website, <http://www.ft.com/intl/cms/s/0/51dc6cca-c145-11e2-b93b-00144feab7de.html#axzz2atLbky3I>, accessed 12 August 2013

India needs to impart vocational training to at least 300–350 million people by 2022 to cater to domestic requirement and also to serve as an effective manpower hub globally. This figure is significantly lower than the government target of 500 million. It is important to achieve the target without diluting training quality and ensure placement prospects. Therefore, a meticulous execution of the country's revised skill development agenda, taking global requirements into consideration, is the need of the hour.

### 1.4 Multiple agencies making efforts to meet future skill needs

Over the past couple of years, India has witnessed significant developments in the skill development landscape. Various types of organizations have been set up at national and state levels to scale up skill development efforts being undertaken across the country. A number of agencies – around 17 ministries, 2 national-level agencies (NSDA and NSDC), several sector skill councils (SSCs), 35 state skill development missions, and several trade and industry bodies – are putting their best foot forward to push the national skill development agenda.

#### Nodal ministries

About 17 ministries of the Indian Government are currently engaged in undertaking various skill development initiatives, with a combined target of imparting skills to 350 million people by 2022. Among these, the nodal ministries for skill development are the Ministry of Human Resource Development (MoHRD) and the Ministry of Labor and Employment (MoL&E), which play an important role in monitoring various segments of the Skill Development Mission. All aspects of higher education and college education, including vocational courses, come under the purview of the Ministry of HRD. Whereas, the current vocational training infrastructure, including government and private Industrial Training Institutes (ITIs) comes under the Ministry of Labor and Employment's Directorate General of Employment and Training (DGET). Apart from this, both the Ministries have introduced various schemes/programs in the field of infrastructure development and employment linkages to impart quality skill training.

### National Skill Development Agency and National Skill Development Council

Recently, the cabinet approved to launch the National Skill Development Agency (NSDA) that would subsume the functions of three key organizations – the Prime Minister's National Council on Skill Development (PMNCSD), the National Skill Development Coordination Board (NSDCB) and the Office of the Adviser to the PM on Skill Development. The agency will work to meet the increasing need for skilled population, in both the public and private sectors. The agency will be responsible for coordinating with all central government ministries involved in skill development initiatives. It will also develop and monitor an overarching framework for skill development, and anchor and operationalize the National Skills Qualifications Framework. The National Skill Development Council (NSDC) will continue to work with the private sector. So, with the setting up of NSDA, there will broadly be two major agencies, where the NSDA will monitor the NSDC's functioning.

| Key responsibilities of NSDA and NSDC |  |
|---------------------------------------|--|
| NSDA                                  | <ul style="list-style-type: none"> <li>▶ Drive the National Skill Development Mission and meet skilling target</li> <li>▶ Coordinate and harmonize the efforts of various stakeholders</li> <li>▶ Anchor and operationalize the national skills qualification framework</li> <li>▶ Monitor and evaluate skill development schemes</li> <li>▶ Raise extra-budgetary resources from various sources</li> </ul> |
| NSDC                                  | <ul style="list-style-type: none"> <li>▶ Develop ultra-low cost, high-quality, innovative business models</li> <li>▶ Foster private sector initiatives</li> <li>▶ Provide support services</li> </ul>  |

Source: NSDA and NSDC

### State Skill Development Missions

In line with the Coordinated Action on Skill Development, the majority of the state governments or union territories have formed their own State Skill Development Missions (SSDMs) for adopting a focused and synergized approach for skill development in their respective states. The formation of SSDMs will also solve the specific problems pertaining to multiple interfaces in applying for both central and state schemes on skill





# 2. Skill development: industry takes the lead

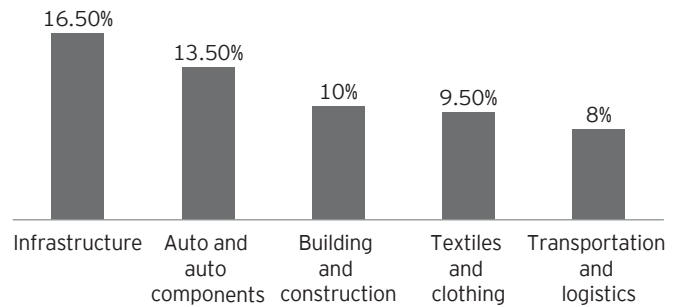
## 2.1 Skill development scenario in key sectors

A growing economy and increasing globalization are expected to cause a surge in workforce requirement in the next decade across various skill levels. The Government and partner agencies deployed for executing the skill development agenda have identified sectors with the potential to create high employment in the near future. Addressing gaps in the skill development framework in these sectors, coupled with the provision of effective employment, will be particularly useful to ensure consistent development of the economy.

| Prominent sectors expected to generate employment <sup>20</sup> |                              |                           |
|---|------------------------------|---------------------------|
| Infrastructure  | Auto and auto components     | Building and construction |
| Textiles and clothing   | Transportation and logistics | Food processing           |
| Handlooms and handicrafts                                       | Gems and jewelry             | Leather and footwear      |

The five sectors that are expected to create the majority of jobs are infrastructure, auto, building and construction, textiles and transportation.

**Figure: Estimated industry growth rate (CAGR 2013-21)**



Source: NSDC, IBEF, ET  
Projection for Transportation and logistics till 2018

The Government, industries and SSCs, along with several other stakeholders, have been implementing various skill development initiatives to cater to the requirements of these sectors. Nevertheless, multiple challenges in each sector need to be tackled uniquely in order to pre-empt the potential economic losses originating from a skill gap in the respective sectors.

| Infrastructure   |  |
|--|--|
| Skill development initiatives in the sector  | Challenges in skill domain   |
| <ul style="list-style-type: none"> <li>▶ Short-term courses based on modular employable skills have been launched by the DGET to impart skills across various levels in the building and construction sector.</li> <li>▶ Leading industrial houses have set up training institutes to impart basic skills in the sector. Employment guarantee is also high for participants of these courses.</li> </ul> | <ul style="list-style-type: none"> <li>▶ Training in various construction and building sub-sectors, which are critical to infrastructure, are not offered in the ITI curriculum.</li> <li>▶ Large industrial houses had to reportedly source skilled workforce from China, Indonesia and the Philippines amid issues of acute shortage and low productivity of labor in the respective regions.</li> </ul> |

<sup>20</sup> "Employment and Skill Development - Twelfth Five Year Plan," Planning Commission, April 2013, p.148 and NSDC sector-wise skill gap reports



### Auto and auto components

| Skill development initiatives in the sector  | Challenges in skill domain  |
|--|---|
| <ul style="list-style-type: none"> <li>▶ NSDC funds the Automotive Skills Development Council (ASDC) – SSC for the automotive sector. ASDC decides the standards and handles assessment and certifications for vocational training in the sector.</li> <li>▶ Pilot projects of the NVEQF have been launched in 40 schools across Haryana, wherein training in the automotive sector will be provided to students.</li> </ul> | <ul style="list-style-type: none"> <li>▶ The primary challenge pertaining to workforce employed in the sector is that of quality. The knowledge level of even the skilled workforce is significantly low, which results in weak productivity of India's automotive industry as compared to that of global peers such as Japan and the US.</li> <li>▶ Styling and designing capabilities are significantly weak in India. As a result, Original Equipment Manufacturers (OEMs) have to depend on design houses located overseas. However, with rising product development activities in India, the need for design capabilities is expected to increase dramatically.</li> </ul> |

### Building and construction

| Skill development initiatives in the sector   | Challenges in skill domain   |
|---|--|
| <ul style="list-style-type: none"> <li>▶ Housing &amp; Urban Development Corporation Ltd. (HUDCO) has established around 640 building centers. These setups train artisans on technologies that promote the use of cost-effective alternative building material and are environment friendly<sup>21</sup>.</li> <li>▶ Construction Industry Development Council (CIDC) has trained and certified more than 250,000 personnel, with almost 100% industry placement record. CIDC runs skill development programs across 19 states in India<sup>22</sup>.</li> </ul> | <ul style="list-style-type: none"> <li>▶ Only 3%-5% of the blue-collared workforce in the construction sector has received a formal training/certification<sup>23</sup>.</li> <li>▶ The sector faces around 30% labor shortage, even though it provides livelihood to around 6% of India's population. Addressing this skill gap in the sector could add around US\$20 billion to the economy<sup>24</sup>.</li> </ul> |

21 "Possible Futures for the National Council for Vocational Training (NCVT) Discussion Paper," ILO, December 2011, p.109

22 "Activities- Vocational Training," CIDC website, <http://www.cidc.in/new/activities8a.html>, accessed 12 August 2013

23 "Talent Projections & Skills Gap Analysis for the Infrastructure Sector (2022)," NSDC, p.8

24 "Address at the Seventh ICA/ World Bank Conference: Employment and Development, November 2012," National Skill Development Agency website, <http://www.skilldevelopment.gov.in/node/495>, accessed 12 August 2013



### Textiles and clothing

| Skill development initiatives in the sector  | Challenges in skill domain   |
|--|--|
| <ul style="list-style-type: none"> <li>▶ The Ministry of Textiles runs programs such as the Decentralized Training Program (DTP) and Integrated Handloom Development Scheme. (IHDS) for skill up gradation of weavers.</li> <li>▶ The Government has set up 30 Weavers Service Centers,<sup>25</sup> which provide short-term in-house training in weaving, designing/pattern making and processing.<sup>26</sup></li> </ul> | <ul style="list-style-type: none"> <li>▶ Apparel Training &amp; Design Centre (ATDC), ITIs and NIFT collectively produce around 50,000 trained personnel annually<sup>27</sup>, while the annual incremental requirement for skilled workforce until 2022 is around 1.2 million.<sup>28</sup></li> <li>▶ Skill gap is particularly acute at the machine-operator level, wherein personnel are primarily trained on the job. This leads to poaching and acts as a deterrent for funding in-house training.</li> </ul> |

### Transportation and logistics

| Skill development initiatives in the sector  | Challenges in skill domain  |
|--|---|
| <ul style="list-style-type: none"> <li>▶ DGET has introduced a course curriculum for the courier and logistics sector under the Skill Development Initiative Scheme (SDIS), which is part of the Modular Employable Skills (MES) program. The course offers a wide spectrum of training including loader, marketing executive, warehousing operator and dispatch operator.<sup>29</sup></li> </ul> | <ul style="list-style-type: none"> <li>▶ The sector is considered as an unattractive career option and fails to attract skilled manpower, especially in the case of integrated logistics providers.</li> <li>▶ The sector demands multiple skills at various levels such as driving skills, including safety procedures, technology skills, industry understanding and managerial skills. The current vocational training framework for the sector is not equipped to cater to the widening skill gap at a rapid pace.</li> </ul> |

25 "Weavers Service Centres," National Centre for Textile Design website, [http://www.designdiary.nic.in/wse\\_centre.asp](http://www.designdiary.nic.in/wse_centre.asp), accessed 12 August 2013

26 "Service Charter Of Weavers' Service Centre," Ministry of Textiles website, [http://handlooms.nic.in/cit\\_char\\_wsc.htm](http://handlooms.nic.in/cit_char_wsc.htm), accessed 12 August 2013

27 "Human Resource and Skill Requirements in the textile sector (2022)," NSDC, April 2010, p.52

28 Human Resource and Skill Requirements in the Unorganised Sector," NSDC, February 2010, p.9

29 "Course Curricula under Skill Development Initiative Scheme (SDIS) - Courier and Logistics Sector," DGET

## 2.2 Industry at the epicenter of the skill agenda program

Industries across the world have been increasingly taking up larger roles in the skill development agenda of their respective nations. Vocational training through channels, such as apprenticeship, on-the-job training, and financial and technical support to industrial training institutes, and the provision of decent employment opportunities continue to be the backbone of the skill development programs of countries such as New Zealand, Germany, South Korea and Australia.



The industry has now stepped up its role and is on its way to take charge of the country's skill development. The establishment of Industrial Training Institutions (ITI) and Polytechnics has traditionally been a government-driven initiative. However, round 2005 onward, the industry started taking interest in the upgrade of Government ITIs. Currently, the industry is directly participating in over 1500 ITIs, with mixed results. Several major industrial houses in India have taken initiatives to upgrade in-house training capabilities and improve the employability of the labor force. Several state-of-the-art programs have been implemented in the areas of e-learning and innovation to foster a culture of imparting

“industry-ready” skills. Noteworthy models followed by organizations in this regard include:

- ▶ Upgrade and establishment of new institutes in the PPP mode
- ▶ Imparting of customized training to the economically and socially underprivileged
- ▶ Collaboration with schools and training institutes to help provide means of livelihood for the poor
- ▶ Tailored skilling programs and guaranteed absorption for in-house training participants
- ▶ Scholarships and mentoring programs to promote entrepreneurial spirit among the youth
- ▶ Leveraging international best practices to set up training institutes, initially to meet their internal requirements and eventually to scale up and supply skilled manpower to the industry

Recently, with the implementation of the National Skills Policy 2009, SSCs have begun to appear on the skills landscape. These autonomous bodies are set up by the industry to cater to their own requirement. This is a striking example of the industry taking the lead role in shaping the skilling mission. Critical roles of SSCs include:

- ▶ Define occupational standards for all jobs in the respective sectors
- ▶ Set up a robust LMIS to forecast skills demand and take corrective action in time
- ▶ Proactively engage with state governments to link their training initiatives with the competencies defined by the industry through occupational standard; furthermore, their integration with the formal education system will ensure that the education system assures of employability

Despite the initiatives mentioned above, the industry needs to make intensive efforts to keep up with the skill development agenda. The industry should look at reaping significant tangible benefits from leveraging opportunities in the field of training.



## 2.3 Potential role of the industry in implementing the skill development program

The industry has the potential to play a significant role in various aspects of the country's skill development mission. It is imperative that the industry works closely with NSDC to achieve this mission. Various areas where the industry could help the NSDC in driving its skill agenda include:

### Setting up skill development institutes

India is estimated to have significant requirement of skilled people by 2022 across 20 high-growth sectors ranging from manufacturing to services to infrastructure. To meet this demand, the country requires massive capacity augmentation to the tune of eight times the current capacity. The industry can play a major role in achieving this target by partnering with the NSDC to set up large-scale skill development enterprises. The NSDC supports the creation of these enterprises through funding up to 75% of the operating and capital expenses, with the balance being supported by the industry.

Also, the industry could play a vital role in setting up Advanced Training Institutes (ATI) in the PPP mode in industrialized districts to ensure proximity to the place of employment. As an example, Singapore has adopted a model that involves a high level of private sector involvement, incentivized through significant financial support for the Centre for Excellence.

### Assisting in capacity expansion

The NSDC has lent support in the creation of many social enterprises, with many of them still being in the startup mode and requiring additional technical and financial assistance to scale up and become self-sustained in the foreseeable future. The industry could step in and forge partnerships across functions to attain the requisite scale and sustainability. Furthermore, given the limited capacity of ITI and other constraints, the industry could use its resources, such as on-the-job training, to enhance the skills of the growing workforce and scale up current programs.

### Setting quality standards

The industry's most crucial role could be in the setting of standards and defining National Occupational Standards (NOSs) through NSDC-approved SSCs. Around 22 such SSCs have been approved, and 19 of them have or are in the process of defining the NOS. Students who fulfill NOS requirements are expected

to find ready employment, since the industry has defined these standards. Well-structured collaboration among industry players within their sectors could play a significant role in developing standards and certification, as well as in supporting providers with content and apprenticeships. Furthermore, SSCs could set up a working group with various state governments to make sure that training is being undertaken through government schemes and that government programs are aligned to national occupational standards such that students are industry ready, post training.

### Assisting in special initiatives

The NSDC works closely with Central and State Governments to implement special initiatives that are critical for the development of skills ecosystem and employment generation. One such initiative is "Udaan", which is a special industry initiative targeted at helping the ambitious and progressive youth of Jammu and Kashmir. Udaan aims to provide skills and consequently make 40,000 youth from J&K employable over a five-year period in key high-growth sectors. Udaan targets graduates, post graduates, three-year engineering diploma holders and professional degree holders. More than 29,000 youth of Jammu and Kashmir are already engaged with the initiative. In addition, about 37 corporates have already started work on the field, with over 1,300 candidates participating in corporate training. Many industry leaders are lending their support to Udaan, while others are being encouraged to come forward.

### Supply of trainers

The industry could provide quality trainers and support the "train-the-trainer" programs. It could look at creating a database of all of the industry experts who are willing to train students or trainers for a short duration. This could be of great help to training providers and the state governments.

## 2.4 CSR: making skills a responsible activity

Several prominent industry houses have started contributing to the skilling movement, albeit in a small degree and primarily through CSR actions. While CSR activities that contribute to skills development are certainly helpful, they are not sufficient to cater to India's skill challenge. The industry should not relegate skill development as a mere CSR activity, but embrace it as a company strategy. Going forward, industry engagement with vocational training should be moved from being a CSR

activity to a core business one. Skill development initiatives provide a perfect vehicle for corporates to fulfill the new Companies' Bill mandate on CSR, but the question is whether such initiatives would suffice to achieve the target of skilling/upskilling 500 million people in India by 2022 set by the Gol.

To encourage India Inc.'s resources in affirmative action, the Ministry of Corporate Affairs has suggested that funds spent on training and skills enhancement may be considered as CSR<sup>30</sup>. The industry, on the other hand, must see itself as an equally responsible partner in creating an employable workforce. Potential focus areas for the industry include job internships and apprenticeships, adoption of training institutions, in-house training of recruits, active participation in formulation of curriculum and content, and recognition and up-skilling of its employees.

Two common practices that emerge from the existing skilling system of the corporate world are:

- ▶ Integration of skill development objectives with CSR objectives, for instance, by supporting community training initiatives
- ▶ Internal training provision for existing employees

Both these practices can contribute to skills improvement of the country, but the full impact will only be felt if employers identify skill development as a critical component to sustain the success of their bottom lines.

India Inc. has the capacity to contribute significantly to the vision of skilling growing workforce, but this would require corporations to view skill development from a wider perspective and not limit it to CSR programs. Realization and action on this maxim have already started. For instance, the skill development forum at FICCI has initiated the CEO4skills program, which aims to engage CEOs and shift decision making about skills from CSR, HR or other departments to the CEO level. This initiative would play a key role in developing a strategic direction in the skill building landscape, as well as help bridge the demand supply gap. This indicates a change in attitude toward seeing skills as fundamental for business success and not merely as a CSR contribution. Furthermore, skill development certainly needs to become a priority for the entire organization and not just for the HR or CSR department of an organization.

Organizations may offer/choose from a wide spectrum of CSR activities to facilitate skill development activities; these include:

- ▶ Create/Add to the skill development infrastructure
- ▶ Include room/facilities for skill development when building schools and other setups in the area of their operation
- ▶ Help existing ITIs acquire equipment needed for vocational training
- ▶ Create Skill Development Centres where none exist
- ▶ Finance training costs, especially for trades commanding a high fee
- ▶ Involve other private organizations (profit/non-profit) in activities implemented by the CSR cell
- ▶ Take the lead in boosting demand for skilled manpower, for instance, by stipulating a minimum percentage of skilled personnel in all industrial contracts
- ▶ Offer differential wages for the skilled and certified workforce to encourage acceptance about skill development programs and create a pull factor
- ▶ Encourage social benefits such as decent working conditions to attract talent pool
- ▶ Integrate skills development into the core business proposition

## 2.5 Apprenticeship regime under watchdog

Apprenticeship training is an important tool for skill development, as it facilitates "learning by earning" and "learning by doing." Apprenticeship training is a proven mechanism that has been practiced for a considerable period in Europe and the US. The fundamental reason for the success of an apprenticeship program is that it combines formal education and hands-on experience under formal guidance.

### Existing apprenticeship regime

In India, the Indian Railways introduced the systematic apprenticeship system, followed by the defense department. The current apprenticeship regime consists of several stakeholders, with MoHRD and MoL&E being at the helm. Apprenticeship programs in India are regulated by The Apprentice Act, 1961 and the Apprenticeship Rules 1992. The regulations make it mandatory for employers, both in the public and private sector, to hire trade apprentices according to the ratio of apprentices to workers in designated trades, as prescribed under the Rules.

30 National Skill Development Agency website, <http://www.skilldevelopment.gov.in/>, accessed 25 August 2013

Overall, apprenticeship training comprises the following schemes:

- ▶ **Trade Apprenticeship Training:** People can enter apprenticeship either after completion of their training and certification at ITIs/ITCs (Craftsman Training Scheme) or immediately after they complete a certain level of basic minimum education, which could be 8th, 10th or 12th standard education (Apprentice Training Scheme).
- ▶ **Graduate, Technician and Technician (Vocational) Apprenticeship Training:** The scheme covers Graduate Apprentices – people who have an engineering qualification; Technician Apprentices – people with a diploma in engineering or technology, and Technician (Vocational) Apprentices – people who have completed an AICTE-recognized vocational course.

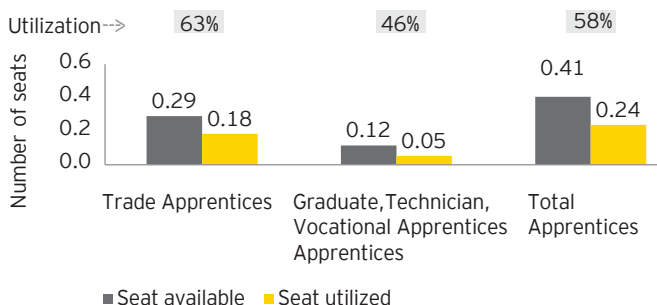
### Comparison of various streams of apprenticeship programs

| Parameter                  | Trade Apprentices   | Graduate, Technician, and Vocational Apprentices  |
|----------------------------|---|---|
| Ministry Responsible       | MoHRD   | MoL&E   |
| No of Trades Notified      | 188 Trades  | 114 Trades for Graduate/Technician and 102 Trades for Technician (Vocational) Apprentices |
| Implementation model       | DGET manages the scheme for the Central Government, whereas, State Apprenticeship Advisers manage it for state governments and the private sector | Central Government through four Regional Boards established for the purpose               |
| Stipend                    | Fully borne by employer   | 50% refunded by the Central Government  |
| Certification requirements | After completion of training, an apprentice has to take a certification exam  | No such requirement   |

Source: MoL&E

As on 31 December 2011, apprenticeship training facilities were available in 32,141 establishments – 875 establishments in Central Sector and 31,266 in the state/private sector. As compared to a total of 32,141 establishments with training facilities, only 26,998 establishments had actually engaged apprentices during the period. This implies that 16% of the establishments with training facilities had not participated in the apprenticeship training program. The intake capacity of apprentices was approximately 0.4 million, with actual on-roll apprentices of approximately 0.2 million.<sup>31</sup>

**Figure: Overall Apprentices in India, as on December 2011**



Source: DGET, MoL&E

31 "Trade Apprenticeship Training In India," MoL&E, December 2012, p.9

### Challenges

The current size of the India apprenticeship system is small, with approximately 0.2 million youth apprentices. This is a significantly low benchmark for a workforce that is growing by 12 million a year. Furthermore, the number is even lower than that of smaller countries, Japan and Germany, which have 3 million and 1 million apprentices, respectively<sup>32</sup>. Limited participation of the private sector has been one of the major reasons for the small size of the apprenticeship system. The private sector is averse to taking apprentices. Key issues that hinder the development of apprenticeship, including those in the private sector, are discussed below.

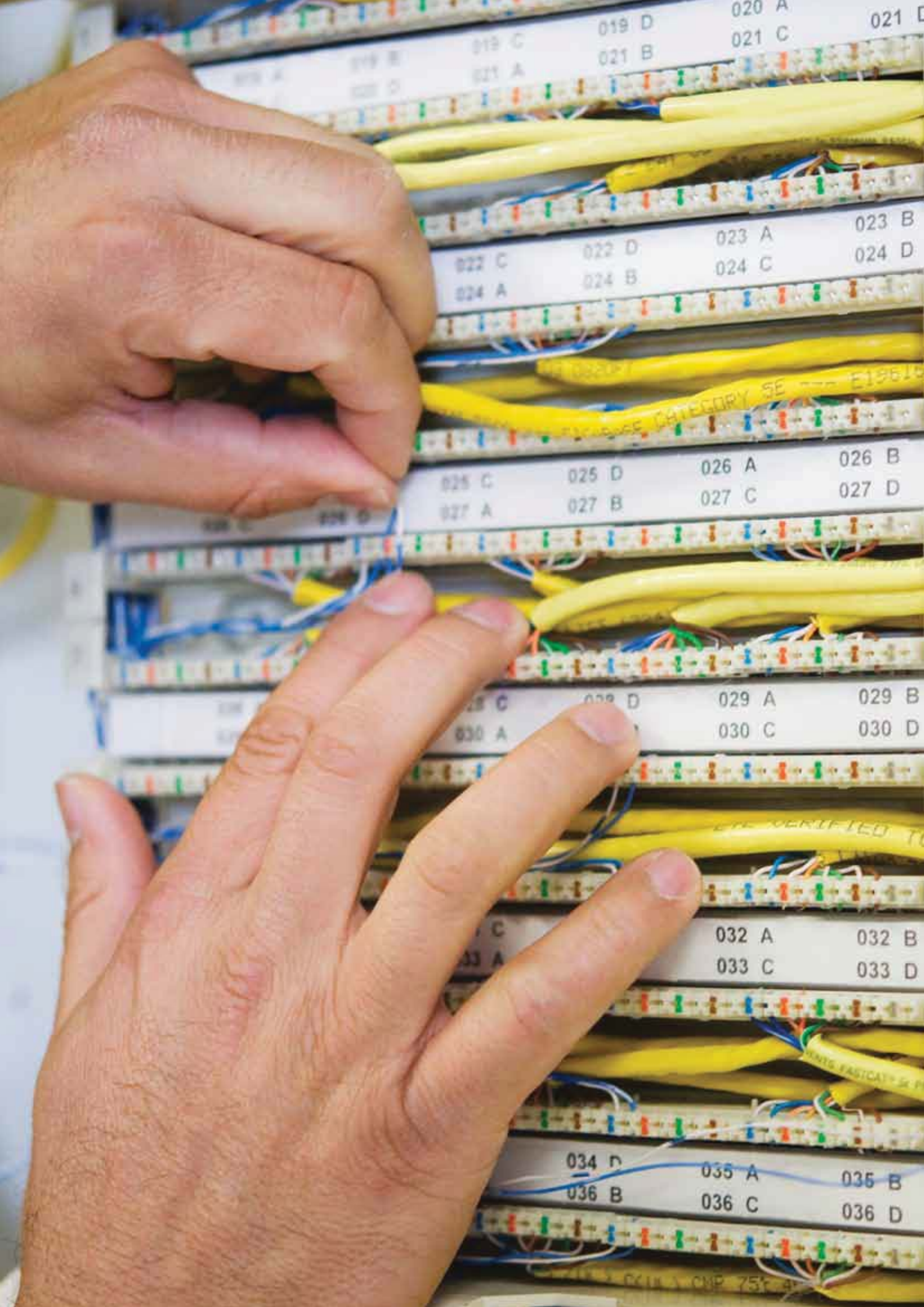
- ▶ **Fragmented implementation structure:** The current institutional framework for apprenticeship has distributed authority across various levels of the government, posing administrative challenge for the private sector. A private sector company that intends to hire trade apprentices is required to secure approval separately from each state apprentice advisor, and has to adhere to compliance formalities that differ across states.

32 "On-the-job training: Services firms to hire at least 2.5% of their workforce as apprentices," Economic Times website, [http://articles.economictimes.indiatimes.com/2013-06-03/news/39714636\\_1\\_indian-industry-india-inc-apprenticeships](http://articles.economictimes.indiatimes.com/2013-06-03/news/39714636_1_indian-industry-india-inc-apprenticeships), accessed 12 August 2013



- ▶ **Rigid law governing apprenticeship:** The law governing apprenticeship has strict provisions that strongly discourage private companies from implementing apprenticeship schemes. These provisions relate to the termination of apprentices, maintenance of records, and basic training infrastructure. The law also contains penal provisions such as imprisonment of up to six months for violation of certain regulations. However, the industry is willing to do more to train the youth, if the norms are eased.
- ▶ **Limited coverage:** The current trades list does not represent several skills that are required in the manufacturing and services sector. Furthermore, considerable time is taken to add a new trade to the list.
- ▶ **Outdated curriculum:** In most of the trades, the training curriculums are outdated and are not matched with industry requirements.
- ▶ **Lack of industry linkage:** The current regime has no system linking an apprentice and an employer. The Government makes it mandatory for the private sector to engage a certain number of apprentices. However, there is lack of any institutionalized framework, which would have gone a long way in easing the process.
- ▶ **Low level of awareness:** The current apprenticeship program has a low brand image among prospective candidates. Moreover, there is lack of awareness about the program among private sector employers. There is a need to spread more information on various aspects, such as the process of appointing apprentices and government support for the program, among private sector players.

The current apprenticeship system is in need of major reform. In response, the Government has initiated to act on existing issues to widen the program's ambit. Accordingly, it will review penal provisions, especially those relating to imprisonment. To expand the capacity and utilization of the current system, the industry needs to be made an active partner in a collaborative approach. The industry can collaborate with training providers to work out a healthy mix of classroom and OTJ learning curriculum. It could also consider instituting training programs for sectors such as manufacturing using Germany's dual apprenticeship model, as this would rationalize job expectations and impart practical skills.



# 3 Taking stock and correcting course: where are we?

## 3.1 2013: Target vs. achievement: a situational analysis

The National Skill Development Mission (NSDM) demands focused efforts on the part of the Government, as well as non-government agencies. Considering the vast scope and scale of operations, various ministries, departments and organizations have been entrusted with the responsibility of achieving the overall skill development target.

| S. No. | Ministry/ Department/ Organization     | Target for 2011-12 | Achieved by 31.03.2012 <sup>33</sup> | Target for 2012-13 | Cumulative achievement for 2012-13, till Jan 2013 <sup>34</sup> |
|--------|--|--------------------|--------------------------------------|--------------------|---|
| 1      | Labour & Employment                    | 1,991              | 1,952                                | 2,500              | 800   |
| 2      | Micro, Small & Medium Enterprises      | 478                | 429                                  | 600                | 333   |
| 3      | Agriculture                            | 875                | 777                                  | 1,000              | 1,184   |
| 4      | Rural Development                      | 250                | 318                                  | 800                | 422   |
| 5      | Department of Higher Education         | 120                | 220                                  | 310                | 143   |
| 6      | Women & Child Development              | 103                | 77                                   | 150                | 67  |
| 7      | Housing & Urban Poverty Alleviation    | 220                | 279                                  | 500                | 242   |
| 8      | Tourism                                | 33                 | 27                                   | 50                 | 35  |
| 9      | Social Justice & Empowerment           | 23                 | 23                                   | 40                 | 28  |
| 10     | Textiles                               | 161                | 34                                   | 250                | 40  |
| 11     | Heavy Industries                       | 14                 | 16                                   | 20                 | 18  |
| 12     | Department of IT                       | 223                | 235                                  | 440                | 263   |
| 13     | National Skill Development Corporation | 162                | 182                                  | 400                | 204   |
| 14     | Chemical & Fertilizers                 | -                  | -                                    | 30                 | 18  |
| 15     | Development of NER                     | -                  | -                                    | 3                  | 0   |
| 16     | Food Processing Industries             | -                  | -                                    | 10                 | 0   |
| 17     | Road Transport and Highways            | -                  | -                                    | 100                | 0   |
| 18     | Tribal Affairs                         | -                  | -                                    | 10                 | 0   |
| 19     | Commerce and Industry                  | -                  | -                                    | 30                 | 9   |
|        | <b>Total</b>                           | <b>4,653</b>       | <b>4,569</b>                         | <b>7,243</b>       | <b>3,806</b>  |

Source: MoL&E (All figures in thousands)

Current statistics indicate that the Government and its partner agencies are expected to run short of achieving their skilling targets for 2012-13 by a wide margin. Ministries such as Labor and Employment and Textiles had not achieved even half of their annual target (ending March) by January 2013. Furthermore, all of the stakeholders have cumulatively achieved a meager 53% of the overall 2012-13 target in the same period. Consequently, these stakeholders have to ramp up the speed and scale of their operations to lay a strong foundation and avoid piling up of skilling targets over the years.

To bridge this disconnect and expand the reach of vocational training, the Government has been taking steps in multiple areas. Apart from the three-tier structure at the national level, several states are following a decentralized approach, customizing their skill development operations according to their requirements and are simultaneously contributing to the national objective.

33 "National policy for skill development-un starred question no. 2575," MoL&E website, [http://labour.nic.in/upload/uploadfiles/files/Divisions/Parliament/2575\(1\).pdf](http://labour.nic.in/upload/uploadfiles/files/Divisions/Parliament/2575(1).pdf), accessed 12 August 2013

34 "Skill Development Progress (FY 2013-14)," National Skill Development Agency website, <http://www.skilldevelopment.gov.in/resources/ministry-wise-targets>, accessed 12 August 2013



In addition, the government is taking the following steps to ramp up training capacity:

- ▶ Offer highly subsidized skilling programs and collateral-free loans to address affordability issues for the economically disadvantaged
- ▶ Set up 1,500 additional ITIs and 50,000 skill development centers in the PPP mode
- ▶ Establish 15 Advance Training Institutes and 12 Regional Vocational Training Institutes through PPP to train a sufficient number of people
- ▶ Modernize 1,896 ITIs in a phased manner at a total cost of around INR53 billion (US\$0.9 billion)
- ▶ Improve remote delivery of vocational training with the help of India's rural broadband infrastructure network plan, which aims to connect 250,000 village clusters; the plan would provide last-mile connectivity and has the potential to deliver "video-intensive" skill development programs to a wide audience

Despite these efforts, there is still a long way to bring the skill development mission to completion. To achieve the ambitious skilling target, it is imperative that business and corporate houses work closely with the NSDC. The industry has the potential to drive the agenda and could play a key role in the skill development mission.

## 3.2 Facilitators of skill delivery framework

### Sector Skills Councils (SSCs)

The NSDC has developed/is in the process of developing SSCs, which are national partnership organizations that bring together industry stakeholders, including private sector, labor, academia and the Government, to meet the skill requirements of various sectors of the economy. Around 22 SSCs have been approved, of which 19 have/are in the process of defining NOS. These belong to the agriculture, automotive, banking and financial services, capital goods, construction, electronics, food processing, gems and jewelry, healthcare, IT, logistics, media and entertainment, private security, plumbing, retail, telecom, leather, rubber and life sciences sectors. Standards developed by SSCs are expected to address one of the major issues in the current skill delivery framework, namely, the poor quality of training and lack of alignment with industry needs. However, to maintain a high level of credibility and efficiency, SSCs need to tread their path carefully and focus on the following for effective functioning:

- ▶ Quality assurance processes
- ▶ Relationship with important industry stakeholders
- ▶ Institutional framework for effective coordination and support from government entities

### Training of trainers

Training of trainers is a key component of the skill development framework. The gross requirement of instructors in India is approximately 79,000. Furthermore, the annual incremental requirement of instructors is approximately 20,000, whereas, the current annual capacity of training trainers is only 2,000<sup>35</sup>. To address this gap, NCVT approved a proposal to upgrade Model Industrial Training Institutes (MITIs) for conducting instructors' training. The council has also issued a resolution to enhance the current system. As part of the system, the council will allow various types of organizations (sole proprietorships, private/public limited companies registered under the Companies Act, societies and trusts registered as per the Act) to set up ITIs/ITCs, as well as undertake trainers' training programs. However, the Government's initiative to upgrade MITIs would increase annual training capacity by a mere 1,200 trainers, considering there are 4 MITIs and each MITI can train 300 instructors annually<sup>22</sup>. The Government needs to close

35 "Twelfth Five Year Plan (2012-17) Economic Sectors," Planning Commission, March 2013, p.154







# 4 Absorbing the increasing skilled workforce: Where are the jobs?

## 4.1 Job creation scenario in India

Merely filling the number of people trained in different trades is not the key to reap the benefits of the country's demographic dividend – the trained personnel should be able to find a decent productive job. Skill development without provision of productive employment is no smaller problem than the absence of skills in the first place. Therefore, job creation should be considered as a parallel process, along with skill development initiatives.

During the last few years, job creation has been a major issue in the Indian economy. The root-level problem is the lack of an enabling environment, due to which the industry is not creating an adequate number of good jobs in the country. Job creation has not kept pace with GDP growth during the last decade. GDP growth increased from approximately 6% during 2000-2005 to 8.6% during 2005-2010; however, net jobs created remained almost flat at approximately 27 million. The annual average job creation during 2005-2010 was approximately 5 million, which is a sign for worry, considering that around 12 million people join the workforce every year. Furthermore, the problem is deepening with economic growth slowing down to 5%.<sup>36</sup>

The job creation scenario in the manufacturing sector is more serious because the sector has shed several jobs over the past few years and has not been able to adjust the exodus from agriculture, which happened due to the modernization of India's economy. In addition to this, most of the jobs created by the industry are low productivity and non-contractual jobs in the unorganized sector, offering low incomes, little protection, and no benefits. The jobs in the service sector have relatively high productivity; however, the employment growth in the sector has been slow in recent years. The overall challenge for the country is to create the conditions for faster growth of productive jobs, outside of agriculture, especially in organized manufacturing and services sectors.

“This year we will fall short of the target. But my worry would be more to ensure that people who go for vocational education and come out with training, get a job. That is our priority No. 1. It cannot be training for the sake of training. It has to be training with employment.”

- S. Ramadorai, Advisor to the Prime Minister for the National Council for Skill Development

### Missing jobs in various scenarios (2020)

| Parameter                               | Scenario 1 -Baseline | Scenario 2 - high labor force participation | Scenario 3 - low unemployment |
|---|----------------------|---|-------------------------------|
| Labor force (in millions)               | 561                  | 586   | 561                           |
| Labor force participation rate (%)      | 56                   | 58  | 56                            |
| Employment/labor force (in %)           | 96                   | 96  | 98                            |
| Employment in agriculture (in millions) | 217                  | 226   | 221                           |
| Employment in industry (in millions)    | 165                  | 165   | 165                           |
| Employment in services (in millions)    | 154                  | 154   | 154                           |
| Missing jobs (in millions)              | 2.8                  | 16.7  | 11.8                          |

Source: World Bank - World Development Indicators, UN Population Division

<sup>36</sup> “India needs 55 million jobs by 2015: Crisil,” The Times of India website, [http://articleWwW.timesofindia.indiatimes.com/2011-08-17/india-business/29895670\\_1\\_job-creation-new-job-gdp-growth](http://articleWwW.timesofindia.indiatimes.com/2011-08-17/india-business/29895670_1_job-creation-new-job-gdp-growth), accessed 23 August 2013

The Economic Survey of 2013, conducted by the Government of India, blames the current regulatory framework and “straitjacket” regulations for hindering the expansion of the private sector, especially that of micro, small and medium enterprises. In fact, the MSME group has a high concentration of small enterprises, with minimal existence of medium enterprises. According to the survey, the legal and policy regime forces enterprises to stay small instead of expanding into larger enterprises and employing more people.

According to the Economic Survey of 2013, 95% of the MSMEs do not expand considerably and remain in this segment, hampering the creation of sustainable jobs.

The Government is working on these problems and is considering legislative changes to increase formal employment in the country. Globally, the private sector generates 90% of all of the available jobs. It is imperative for India to develop its private sector at an accelerated pace for job creation at the scale required. Services, such as information technology, finance and banking, tourism, and trade and transport, are expected to play a significant role in employment generation during the Twelfth Plan period and beyond. There is a need to adopt sector-specific strategies that aim at sustained expansion of employment opportunities in these fields. Apart from this, more incentives are required at the industry front, along with a simplification of labor laws at the Center and the State level, to encourage private sector development. Further, state governments need to step up their role in job creation. They need to address red tape in their respective state

bureaucracies, as it hinders entrepreneurs and discourages startups. State governments should focus on developing a business climate that is conducive for new companies and/or small- and medium-scale manufacturing facilities to stimulate job creation.

## 4.2 Role of entrepreneurship and self-employment in job creation

Accelerating entrepreneurship and self-employment is crucial for large-scale employment generation in India. According to a Planning Commission report, India has the potential to build around 2,500 highly scalable businesses in the next 10 years. Taking into account the probability of entrepreneurial success, this implies that 10,000 startups will need to be spawned to get to 2,500 large-scale businesses<sup>37</sup>. These businesses could generate revenues of US\$200 billion, making contribution to GDP and to employment at the same scale, as projected for the IT and ITeS industry<sup>38</sup>.

Skill development initiatives focusing on specific needs and challenges faced by budding entrepreneurs is the key to promote self-employment among the Indian youth. There is a lack of dedicated training or skill development programs for entrepreneurs in the country. Developing an entrepreneurial ecosystem requires a collaborative effort involving numerous stakeholders such as government agencies, education and training institutes, private sector enterprises and financing institutions.

| Major drivers to promote entrepreneurship as a lucrative career path   |   |  |   |  |
|--|---|--|---|--|
| Catalytic government policies  | Enhance access to equity and debt   | Engage established businesses  | Develop entrepreneurial culture   | Promote collaborative forums   |
| <ul style="list-style-type: none"> <li>▶ Facilitate venture and angel investment</li> <li>▶ Scale up incubation programs</li> <li>▶ Reduce business processes</li> </ul> | <ul style="list-style-type: none"> <li>▶ Establish a “fund-of-funds” to seed other venture funds</li> <li>▶ Remove regulatory hurdles for fund raising</li> </ul> | <ul style="list-style-type: none"> <li>▶ The private sector could operate incubation centers in the PPP mode</li> <li>▶ Industry bodies and chambers to drive collaboration</li> </ul> | <ul style="list-style-type: none"> <li>▶ Upgrade courses and programs</li> <li>▶ Promote commercialization of innovation and disseminate success stories</li> </ul> | <ul style="list-style-type: none"> <li>▶ Develop online portals and mentorship networks such as MentorSquare</li> <li>▶ Set up a network of innovation labs</li> </ul> |

37 “Creating a Vibrant Entrepreneurial Ecosystem in India,” Planning commission, June 2012, p.13

38 “India needs to create 10 - 15 million jobs per year”- Planning Commission Report on Entrepreneurship,” Yourstory website, <http://yourstory.in/2012/08/india-needs-to-create-10-15-million-jobs-per-year-says-the-planning-commission-report-on-entrepreneurship/>, accessed 9 August 2013



# 5. Creating a scalable model: what are the pillars?

## 5.1 National Skills Qualifications Framework (NSQF): mainstreaming vocational education

The gap between an industry-ready workforce and the country's current skilling framework is widening at a rapid pace. Apart from a majority of degree and diploma holders, approximately 200 million students drop out of classes IX, X, XI and XII, and are in dire need of vocational skills to become employable<sup>39</sup>. Moreover, standardization of vocational education is a major lacuna in the current skilling curriculum. In light of the above, the NSDA would develop and operationalize the National Skills Qualifications Framework (NSQF) – a centralized model responsible for regularizing the skill development agenda on a pan-India basis. NSQF intends to be an all-encompassing framework, with a strong focus on vocationalization of school education.



The Skills Development Project, launched jointly by the Governments of India and European Union, aims to assist the development of NSQF in three key economic sectors in pilot states and collect information on industry requirements for skilled labor. The EUR6-million (around US\$8 million) project would help build occupational standards, training standards, training programs and curricula for three high-growth sectors

<sup>39</sup> "AICTE approval process handbook - Vocational education and community college courses (2013-14)," AICTE, p.25

(starting with the automotive sector) until 2016<sup>40</sup>.

Another key objective of the NSQF curriculum development initiative is to engage industry personnel in designing syllabuses and assessing the knowledge levels of learners.

Prominent activities envisaged under the guidance of NSQF in the Twelfth plan include<sup>41</sup>:

- ▶ Strengthening of 10,000 existing secondary schools with vocational stream
- ▶ Establishment of 100 new vocational schools through State Governments
- ▶ Assistance to 500 vocational schools to operate in PPP mode
- ▶ In-service training of seven days for 2,000 existing vocational education teachers and induction training of 30 days for 1,000 new vocational education teachers
- ▶ Development of 250 competency based modules for each vocational course
- ▶ Assistance to reputed NGOs to run short-term innovative vocational education programs

## 5.2 Placement-linked skill development

A major criticism of India's existing skill development system has been its inability to provide adequate jobs to trained people due to poor placement linkages. Majority of the current government schemes such as Swarnjayanti Gram Swarozgar Yojana (SGSY)<sup>42</sup>, Roshini<sup>43</sup> and Himayat<sup>44</sup> target 75% assured placement above minimum wages; however, a significant number of trainees are still not able to get jobs and are dropping out because of inadequate wages, poor working conditions, lack of jobs near home and even "low status" of available jobs<sup>45</sup>.

<sup>40</sup> "Press Release - European Union & India launch Skills Development Project," European External Action Service website, [http://eeas.europa.eu/delegations/india/documents/press\\_corner/eu-india\\_skills\\_development\\_project\\_ver\\_2.pdf](http://eeas.europa.eu/delegations/india/documents/press_corner/eu-india_skills_development_project_ver_2.pdf), accessed 22 August 2013

<sup>41</sup> "Employment and Skill Development - Twelfth Five Year Plan," Planning Commission, April 2013, p.150

<sup>42</sup> "Special Projects for Placement Linked Skill Development of Rural BPL Youth under Swarnjayanti Gram Swarozgar Yojana (SGSY)," NRLM, December 2009, p.1

<sup>43</sup> "Roshni will light the way for rural youth: Jairam," The Hindu website, <http://www.thehindu.com/news/national/roshni-will-light-the-way-for-rural-youth-jairam/article4792240.ece>, accessed 12 August 2013

<sup>44</sup> "Union Govt's Job placement project "Himayat" fails to take off in J&K," Early Time news website, <http://earlytimesnews.com/newsdet.aspx?q=103743>, accessed 12 August 2013

<sup>45</sup> "India 2022: High on skills but low on jobs?," Moneycontrol website, <http://www.moneycontrol.com/smentor/mentorade/human-resources/india-2022-highskillslowjobs-914774.html>, accessed 12 August 2013

**Case in point: Himayat**

“Himayat”, launched in September 2011, is a Central Government-sponsored training-cum-placement program for the unemployed youth of Jammu and Kashmir. The scheme aims to train 100,000 youth in 5 years and provide at least 75% of them with jobs.

- ▶ Only 1,904 youths applied for various courses during the first year of the scheme's launch.
- ▶ Merely 37% of the 1,662 participants have been placed within two years of the scheme's operations.

**Skill development programs and employment prospects – a disconnect?<sup>46</sup>**

Results based on the findings of National Sample Survey Organization (NSSO) - 2009-10 indicate a startling disconnect between formal skill development programs and the job market, as follows:

- ▶ More than 65% of the rural laborers working in construction sites and agricultural fields had received training in mechanical or electrical engineering, or computer skills.
- ▶ About 58% of the clerks surveyed had received diplomas in computer skills.
- ▶ Of the nearly 60% trained in textile-related skills, 44% have diploma in computers, and around 57% of those who had trained to become beauticians were no longer in the workforce.
- ▶ Overall, 8% of the trained people were unemployed, with another 33% no longer in the workforce.
- ▶ Around 33% of those trained in formal setups said that their training was “not helpful”.

There is a significant need to implement a placement-linked framework, coupled with a strict quality control mechanism, for all skill development programs in India. Establishing robust connections with private players and institutions, leveraging their existing means and infrastructure, mapping demand with industry requirements and linking training with relevant jobs is the recommended way forward.

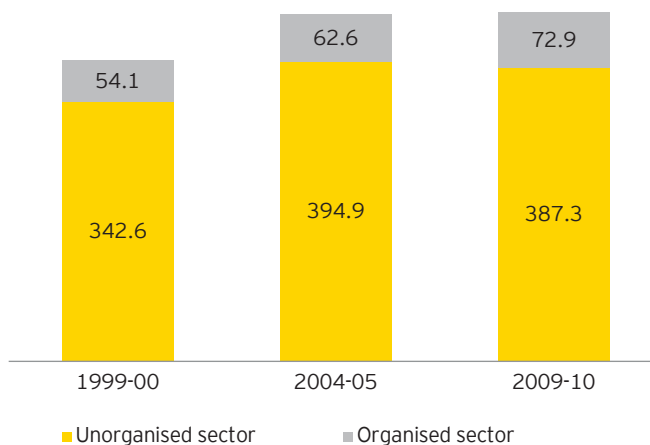
<sup>46</sup> “Only 2% of Indian's youth have vocational training,” The Times of India website, [http://articles.timesofindia.indiatimes.com/2013-05-13/india/39227170\\_1\\_training-men-and-women-employment](http://articles.timesofindia.indiatimes.com/2013-05-13/india/39227170_1_training-men-and-women-employment), accessed 12 August 2013

**5.3 Skill development in organized and unorganized sectors**

The Indian economy is characterized by the coexistence of a significant number of unorganized sector enterprises, along with a few large organized sector enterprises. The unorganized sector contributes around 60% of the GDP of the country. Predominance of unorganized employment has been one of the central features of the labor market scenario in India.

The unorganized sector is heterogeneous in nature and cuts across all economic activities in rural and urban areas. The sector is dominated by workers employed in micro enterprises, casual laborers, migrant laborers, farmers and artisans in rural areas. These groups constitute the bottom of the skill pyramid with relatively low skills, poor productivity and low income.

**Figure: Sector-wise employment in India (million)**



Source: Planning Commission

The labor force in the Indian economy is dominated by informal employment (93% of the total employment), while 84% of the 460 million-strong workforce is employed in the unorganized sector. However, over the last decade, growth of employment in the organized sector (35%) has outpaced that in the unorganized sector (13%), primarily due to the rapid expansion of the organized services sector in the country. Agriculture is the largest unorganized sector in India, accounting for 51% of informal sector workers. The manufacturing and services sectors contribute 20% and 29% to informal sector employment, respectively. Furthermore, the share of informal employment is projected to grow to 95% of the total workforce of India by 2022<sup>47</sup>. The level of organized and unorganized

<sup>47</sup> “eSkill Development,” Adviser to the Prime Minister (NSDC), p.112

employment varies among industries. For instance, while sectors such as IT and ITeS, automobile and auto components, chemicals and pharmaceuticals, electronics hardware are largely organized, the following sectors have a considerable proportion of unorganized employment:

- ▶ Building, construction and real estate services
- ▶ Textiles, apparel and garments
- ▶ Food processing
- ▶ Transportation, logistics, warehousing and packaging
- ▶ Leather and leather goods
- ▶ Gems and jewelry
- ▶ Furniture and furnishings
- ▶ Tourism and hospitality services, travel trade

Skill development for bridging the widening skill gap has become a priority in India. About 90% of the jobs in India are reportedly "skill based" and require vocational training. The current skill development initiatives of various government ministries and departments are focused on organized sector workers. Furthermore, initiatives for the organized sector have gained momentum over the last few years due to rapid advancement in the country's manufacturing and services sector. On the other hand, there is no robust skill development framework for the unorganized sector, due to which a majority of workers employed in the sector lack any kind of formal skill development training. Around 85% of the workforce in the unorganized sector does not imbibe any form of skill development, formal or informal<sup>48</sup>. The formal training system poses entry restrictions in terms of minimum education requirements, which makes it inaccessible, especially for workforce in rural non-farm sectors. Most of the skill formation in the unorganized sector takes place through informal channels such as family occupation, on-the-job training under master craftsman with no linkages to formal education training and certification. In the organized sector, most of the workforce does not opt for formal skill training, as wages remain disproportionate to the years of education and the kind of training received by workers<sup>49</sup>.

48 "eSkill Development," Adviser to the Prime Minister (NSDC), p.5

49 "Left Behind in India," International Herald Tribune website, [http://latitude.blogs.nytimes.com/2012/08/03/indias-skilled-workers-left-behind/?\\_r=2](http://latitude.blogs.nytimes.com/2012/08/03/indias-skilled-workers-left-behind/?_r=2), accessed 7 August 2013

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“Skill development in unorganized sector will increase employability.”

- Dilip Chenoy, CEO and MD, NSDC

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The Government has realized the importance of providing adequate skills training to the unorganized sector to achieve a holistic improvement in the overall skilling scenario. Availability of a highly skilled workforce in the unorganized sector is likely to increase the competitiveness, productivity, wages and employability of these workers. Moreover, such workers may migrate to the organized sector after gaining enhanced competency, thereby adding value to the organized workforce as well. Several ministries/departments such as Textiles, Woman and Child Development, Agriculture and MSME have initiated programs to address the training requirement of their respective sectors and groups. The Modular Employable Skill Program of the Ministry of Labor; STEP of Women and Child Development; Community Polytechnic Development Program of Human Resource Development are some of the programs that are benefitting this segment of the workforce. However, given the scale of the problem, much more needs to be done in terms of scaling up training capacities, recognition of prior learning and functional literacy for the unorganized sector.

## 5.4 Skill development for women

Women form an integral part of the Indian workforce; however, the proportion of women active in the labor force is declining. The share has decreased from 39% in 2000 to about 30% in 2010. Further, only 39.5% of India's prime-aged (between 25 and 54 years) women were economically active in 2010, compared to 82% in China and 72% in Brazil. The decreasing participation of women in the workforce contributes to approximately 50% of the decline in the country's overall labor participation rate, which fell from 62% in 2000 to only 57% in 2010. This implies that the under-representation of women in the workforce is a waste of the demographic dividend that India could reap from its young and quickly growing working age population.

Women in India are mainly concentrated in the informal sector and are engaged in poorly paid jobs with no security benefits and, in many cases, below minimum daily wage. The lack of employment opportunities and skills contribute significantly to the low participation of women in workforce and poor working conditions. Currently, a majority of the female workforce in India is unskilled, with a low portion of women receiving formal education. In 2010, around 65% of prime-aged women in rural regions and over 30% of women in urban areas lacked basic primary school education<sup>50</sup>.

To unlock the full economic potential of women's participation, India needs to bring about an employment revolution, along with a skill development or educational revolution. It is proven that female participation in the workforce increases along with educational levels. Initiatives of the NSDC, along with business and non-governmental organizations, would play an important role in ensuring that women acquire job-relevant skills, even in the absence of formal education. This would also help India meet its skilling target and reap benefits of having the largest workforce by 2025.

## 5.5 Building public perception about vocational education

In India, skill development through vocational training is yet to achieve acceptance as a viable alternative to formal education. Most of the prospective students in the country are not willing to substitute the two, due to several reasons. Firstly, students lack awareness about industry requirements and vocational courses available to meet such requirements. Secondly, they do not vouch for the credibility of vocational courses, as they do not have adequate evidence of people receiving jobs after completing vocational courses. Moreover, they are not aware on how vocational courses can improve their career prospects. Lastly and most importantly, the low prestige associated with vocational streams or blue collar jobs prevents youth from taking vocational education. Young people increasingly prefer to opt for white collar jobs. Limited integration between formal and vocational education systems, and low compensation levels among people with such skills, contribute toward the development of this perception.

Only 2% of the total Indian students in the 15-25 years age group undergo vocational training, compared to 80% in Europe and 60% in East Asian countries such as Malaysia and Indonesia.

It is evident that the success of skill initiatives is highly dependent on awareness generation programs targeted at the youth. These programs could play an important role by spreading information about existing skill development programs and their relevance among prospective students through websites, local newspapers and magazines. This would increase student mobilization and also lend credibility to skill institutes, thereby giving a boost to the overall vocational system in the country.

The Government of India, through DGE&T, conducts All India Skill Competition for Craftsmen every year to offer recognition to trainees and foster a healthy spirit of competition among the trainees of ITIs/ITCs. Apart from this, it sends participants for the WorldSkills Competition, which is held every two years and symbolizes the pinnacle of excellence in vocational training. Recently, P. Chidambaram presented medallions to three winners of the World Skill Competition (WSC) 2013 held in Germany. Such initiatives create confidence among trainees and offer them recognition in the society.

Recently, the government has accelerated the pace of its efforts to turn things around.

For instance, the government has launched an INR10-billion (~US\$165 million) National Skill Certification and Monetary Reward Scheme, which would give 1 million students INR10,000 (~US\$165) each as an incentive to pursue skills training<sup>51</sup>. The scheme, also known as Standard Training Assessment and Reward (STAR), would be implemented on a pan-India basis by the National Skill Development Corporation (NSDC). Apart from this, it is planning to launch a major advertising campaign to promote skills training and attract youth to vocational courses. National Skill Development Corporation (NSDC), co-promoted by the Ministry of Finance, India, will be managing the initiative. The multi-media campaign will aim at brand building and generating increased awareness about vocational courses among students. Initially, the Government will conduct the campaign in five states – Maharashtra, Uttar Pradesh, West Bengal, Orissa and Tamil Nadu – with an investment of INR420 million (~US\$6.8 million).

50 "India's missing women workforce," Livemint website, <http://www.livemint.com/Opinion/dd80FniJdurubBOoNJeohK/Indias-missing-women-workforce.html>, accessed 23 August 2013

51 "Highlights of the budget," Press Information Bureau (Government of India), February 2013, p.1



## 5.6 Adopting international best practices

Replication and benchmarking of global best practices has the potential to give India's vocational education framework a complete makeover, besides boosting the morale of prospective learners. Several international players have shown interest in the skill development domain at the government-to-government and institutional levels. India has been progressive in this regard, and it has collaborated with several international partners to leverage their experience and co-develop skill delivery operations and customize them for the Indian scenario.

| Prominent international alliances for skill development |  |
|---|--|
| Country   | Initiatives  |
| New Zealand   | <ul style="list-style-type: none"> <li>▶ National Institute of Open Schooling (NIOS), the largest open schooling system in the world, has signed a memorandum of understanding (MoU) with New Zealand's Open Polytechnic to promote the role of vocational schooling in India.</li> <li>▶ The Open Polytechnic has provided two scholarships to the NIOS staff to study its certificate courses in designing and e-learning. Furthermore, the institutes are planning to develop online courses and a "train-the-trainers" program<sup>52</sup>.</li> </ul>  |
| Germany   | <ul style="list-style-type: none"> <li>▶ The Indo-German Joint Working Group on Vocational Education is working with the Government of Karnataka to develop multi-skills development centers, replicating the German Dual system. These centers will have world-class infrastructure.</li> <li>▶ iMove, an initiative by the German Federal Ministry of Education and Research (BMBF) to impart vocational training, has signed an agreement with NSDC to support the development of SSCs and the training of trainers.</li> </ul>   |
| Australia   | <ul style="list-style-type: none"> <li>▶ The Bureau for Vocational Education and Training Collaboration (BVETC) was established by Australia and India in 2010 to facilitate skill development operations. The agency delivers courses in India through local partners and works toward improving linkages between the government, industry and various institutions.</li> <li>▶ The Victorian Government has contributed AU\$300,000 (approx. US\$272,000) to train 325 Indian vocational trainers<sup>53</sup>. A prominent vocational education provider from Australia offers diploma courses in automotive technology and aircraft maintenance engineering in Maharashtra.</li> </ul> |
| UK  | <ul style="list-style-type: none"> <li>▶ The UK has cooperated and extended its expertise in setting up SSCs. The UK India Skills Forum (UKISF) provides a platform for organizations across the technical and vocational education sectors in the UK and India for imparting skills.</li> <li>▶ UKISF works closely with UK Trade and Investment (UKTI), which helps in identifying business opportunities in the skills domain. Thrust areas of the forum include knowledge transfer, localization of services for India, and training and accreditation of trainers.</li> </ul>   |

However, a key concern is posed by the fact that a number of other practices are being followed globally, which may be remodeled for India to reinforce the skill development agenda. Various countries have set exemplary standards on several parameters for their respective skilling missions such as apprenticeship, placement linkages and the use of ICT. It will be highly beneficial for India to utilize these practices to connect the remaining dots in its vocational education framework.

52 "Open Polytechnic of New Zealand hosts Indian Delegates from one of the world's largest education organisations," Open Polytechnic website, <http://www.openpolytechnic.ac.nz/about-us/news/open-polytechnic-of-new-zealand-hosts-indian-delegates-from-one-of-the-world-s-largest-education-organisations/>, accessed 7 August 2013

53 "To upskill 500 million workers, India goes international," ICEF Monitor website, <http://monitor.icef.com/2013/02/to-upskill-workforce-india-goes-international/>, accessed 7 August 2013



**Prominent best practices around the world in vocational education**

| Country     | Parameter                                | Framework   |
|-------------|--|---|
| New Zealand | Industry adoption of training institutes | <ul style="list-style-type: none"> <li>▶ Majority of New Zealand's industrial skill development and on-the-job training is coordinated by Industry Training Organisations (ITOs). ITOs are jointly funded by industries and the government.</li> <li>▶ Around 35,000 businesses and organizations of various sizes work with ITOs and a large number of education and training providers such as polytechnics and private training establishments (PTEs) to promote the skill development agenda<sup>54</sup>.</li> </ul>   |
| Germany     | Apprenticeship system                    | <ul style="list-style-type: none"> <li>▶ Germany's Dual Vocational Training System (TVET) is one of the most robust skilling models across the world, and is now incorporated in the country's law. The dual system combines vocational training at a Government-supported vocational school with an apprenticeship position in a company, which typically lasts three years.</li> <li>▶ Organizations are responsible for skilling students on-the-job, as well as guiding them on various career options. The system facilitates smooth transition from school to work for trainees and assures availability of skilled manpower to the industry at low recruitment costs.</li> </ul> |
| South Korea | Placement linkages                       | <ul style="list-style-type: none"> <li>▶ The Government of South Korea has set up 28 Meister Schools targeted to train youth on high-skilled manufacturing jobs, among other fields. With a total capacity of around 12,000 students, these schools promote a perception of "high status" toward vocational jobs, with an almost guaranteed placement and competitive wages.</li> <li>▶ Backed strongly by the Government, the number of businesses supporting these schools has exceeded 1,300<sup>55</sup>. Market demand for graduates from vocational high schools has increased in the past few years from various sectors.</li> </ul>   |

54 "Who is involved in Industry Training?," Industry Training Federation website, <http://www.itf.org.nz/industry-training/who-is-involved-in-industry-training/>, accessed 21 August 2013

55 "Meister schools fight social prejudice," The Korean Times website, [http://www.koreatimes.co.kr/www/news/nation/2013/07/113\\_111552.html](http://www.koreatimes.co.kr/www/news/nation/2013/07/113_111552.html), accessed 7 August 2013



#### Prominent best practices around the world in vocational education

| Country        | Parameter                          | Framework   |
|----------------|------------------------------------|---|
| Australia      | Use of ICT                         | <ul style="list-style-type: none"> <li>▶ The Department of Education, Employment and Workplace Relations (DEEWR) operates Australia's Labour Market Information Portal, which provides information on a wide range of topics including higher education, skill development, international education, and employment and workplace relations. The portal also provides key labor market statistics and facilitates job search across the country.</li> <li>▶ Various industries have collaborated with the government for developing LMIP, which is used extensively by employers to extract information on various parameters such as labor force projections, industry trends and skill gap requirements.</li> </ul> |
| China          |                                    | <ul style="list-style-type: none"> <li>▶ Various e-learning tools such as web-based learning, computer based modules, virtual classes and digital collaborations are being implemented in China to deliver courses in vocational education. The Government of China has partnered with several private players to promote e-learning.</li> </ul>  |
| United Kingdom | Development and assessment of SSCs | <ul style="list-style-type: none"> <li>▶ SSCs are independent, employer-led, UK-wide organizations responsible for specific economic sectors. These are designed to build a skill system driven by employer demand for their sectors. The funding and relicensing of SSCs is a key responsibility of the UK Commission. The annual performance of SSCs is assessed through a performance scorecard to drive continuous improvement, and enhance output and achievements.</li> </ul>   |
| Canada         |                                    | <ul style="list-style-type: none"> <li>▶ The Alliance of Sector Councils is a network of Canada's sector councils dedicated to implement industry-driven labor market solutions in key sectors of the economy. Performance monitoring of sector councils is linked to the planning cycle. The performance of the Sector council is monitored against the five-year plan and strategic plan in the long and short terms, respectively.</li> </ul>  |



# 6 Conclusion: tying it all together

## 6.1 Summary of findings

With 12 million people entering the workforce on an annual basis, India's labor force is expected to grow to 600 million by 2022. Since workforce in agriculture is expected to remain stagnant at best if the economy is able to provide gainful employment to the youth entering the workforce, non-agricultural workforce shall constitute about 390 million of the total workforce.

At present, only 25-30 million of the workforce is formally skilled. Even if we achieve planned capacity expansion, the skilled workforce base is expected to go only up to 70-80 million by 2017, significantly more than the total employment in the formal sector. In the agricultural sector, livelihood-oriented skill upgrade initiatives would need to be taken up at mass scale to ensure productivity and farmer profitability improvement.

While there should be considerable onus on ramping up skill development capacity, the bigger concern is that all these efforts need to be matched with job creation. With over 70 million employments in the organized sector, the organized sector is hardly growing in terms of number of jobs available.

In the above context, a concerted policy action is required from all of the stakeholders, such that job creation and formalization precedes capacity expansion in skill development. The rest of the section highlights some recommendations that need to be taken up for a quick, visible impact on the skill development landscape in India.

## 6.2 Private sector development

Globally, the private sector generates 90% of all available jobs, and it is imperative for India to develop its private sector at an accelerated pace for job creation at the scale required. Private sector development initiatives need to be targeted at two levels:

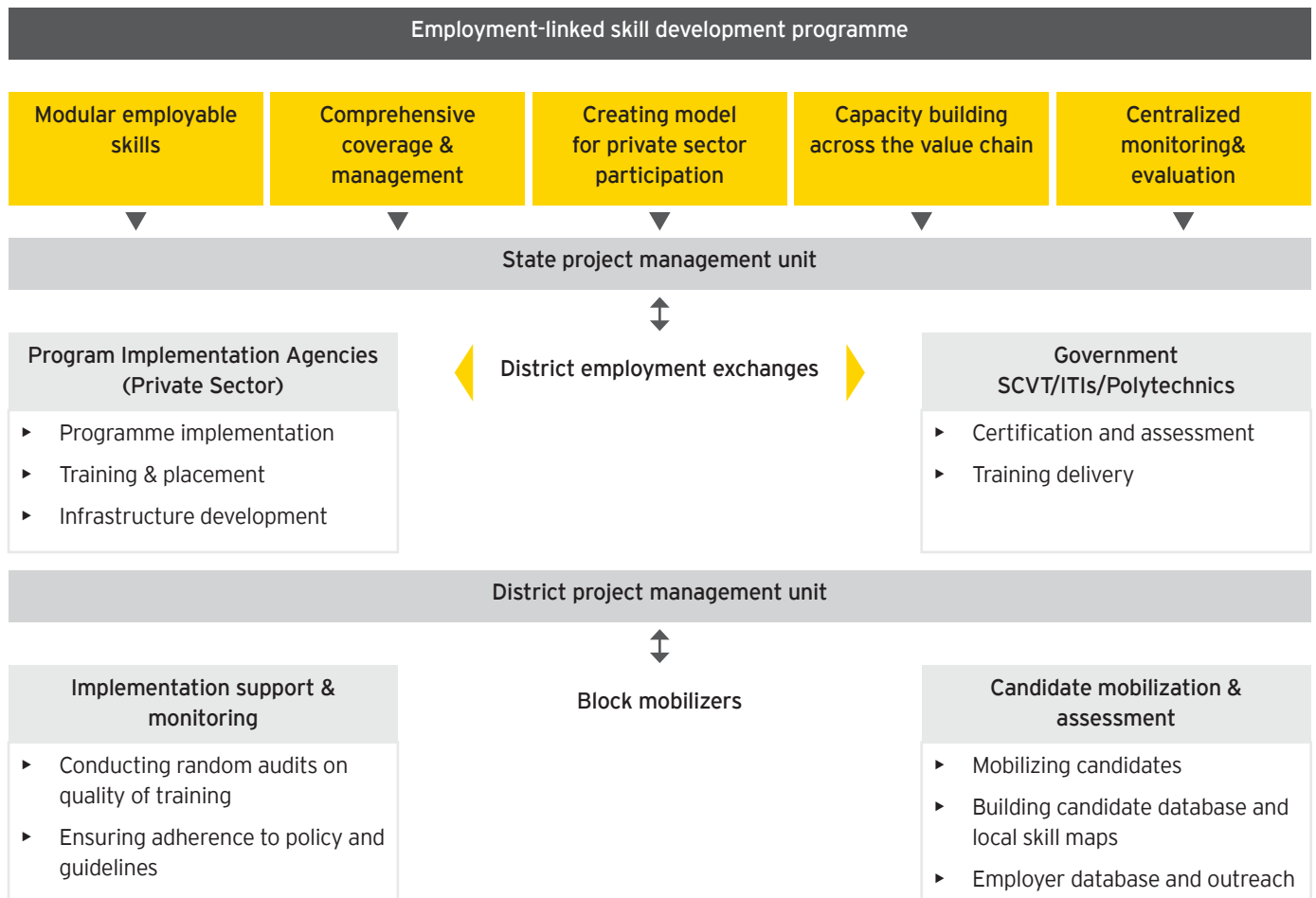
- ▶ Encouraging private participation in all aspects of economic and social activities and having a favorable regime for attracting investments
  - ▶ Streamlining of doing business process to reduce time and cost for business operation
  - ▶ National and regional investment and trade promotion strategy encompassing policy and regulatory reforms
  - ▶ Proactive investor outreach through multiple channels
  - ▶ Infrastructure development
- ▶ Incentivizing MSME sector growth and formalization by increasing access to capital and reducing the costs of formality
  - ▶ Availability of high-risk credit/seed capital
    - ▶ Specialized startup and micro-enterprise bank with transparent guidelines on lending where the mortgage-free credit limit is available for each skilled individual for a single-time withdrawal. Such limit may be capped on the basis of educational background, potential of the idea and business acumen of the promoter. Such risk capital may be underwritten by the Government's credit guarantee trust.
    - ▶ Professionally managed government sponsored theme-based innovation and VC funds
  - ▶ Labor Laws Reforms: Employment contracts need to be symmetric/flexible, and the amount of salary deduction at source for low-wage employees need to be reduced.

## 6.3 Integrated delivery platform/ decentralized program management

At the central level, over 17 ministries are in charge of formulating various schemes with clearly spelt out targeted beneficiaries for skill development. At the state level, State Skill Development Missions were formed to lead the convergence of various initiatives. However, in practice, this is not the case, except in a few places such as Andhra Pradesh. At the district level, the resource base of the State Skill Development Missions is deficient in undertaking large-scale program management, mobilization, perception building, and monitoring and evaluation interventions.

To accelerate implementation, State Missions need to undertake unified responsibility for state targets. They should also engage professional agencies to strengthen their district and block level presence to manage the program in a decentralized level, as well as ensure proper and timely utilization, adherence to budgeted spending and outcomes, monitoring and evaluation, and conceptualization of flexible locally relevant implementation strategies.

**Figure 1: decentralized program management (illustrative)**



## 6.4 Improving relevance and quality of training

Mechanism for linking skills demand and supply that are ubiquitous in developed economies are absent in India. The primary employer of educated new labor market entrants in many such economies has been the public sector, resulting in a skills development system with few links to the private sector. The traditional attraction of employment guarantee in the public sector, coupled with the disconnection between training provided by VET systems and skills required by businesses, helps explain this delink. With growing market economies in the region, the introduction of new technologies, and greater integration into the world economy, demand for labor in higher-productivity private sectors is increasing. On the other hand, many public VET systems are not proactive in responding to this new demand. Therefore, SSCs and the NSDC should be

empowered to play a key role in improving the relevance of training courses and curriculum.

Poor trainers, and outdated curriculum and equipment used to train trainees highlight another problem area. In the case of government-managed VET systems, in the absence of any incentives to upgrade their skills, teachers and trainers tend to teach what they know instead of what their students need to learn. Courses and curriculum are rarely updated. ITIs in India still have the same list of courses that they used to run about 20 years back, with a few cosmetic additions. The number of seats is virtually unchanged in most government-run ITIs. Such a state of affairs also affects the quality of input and, as a result, only a few good candidates opt for vocational education in India. TVET teachers are paid more poorly than primary school teachers, and TVET colleges are in a poor state of readiness, with tools and equipment well past their usefulness.

To improve these conditions, it is imperative to develop a pool of trainers and pay them salaries commensurate with their ability and level that is equivalent to the compensation of college lecturers. ITIs need to be upgraded in partnership with the private sector. Some steps in this direction have already been initiated. The Government needs to build momentum in this area.

#### 6.4.1 Encouraging industry participation

One of the best ways to improve the relevance of the VET systems is to encourage industry participation. Through the ITI upgrade project, the Government is trying to encourage industry participation in operating and managing ITIs. However, seats in ITIs are limited, and the procedure for bringing in changes is complex. However, employment-linked skill development programs in most states lack significant industry participation. Therefore, several concrete steps need to be taken up to increase industry participation in vocational education and training. These include:

- ▶ Offering preferential terms and conditions for industry/industry bodies with captive requirements willing to invest in skill development initiatives
- ▶ Relaxing skill development track record-related eligibility criteria for engaging industries as training partners
- ▶ Providing industry partners with flexibility to design their own courses and choose the delivery models that suits them most
- ▶ Incentivizing industry partners to induct well-qualified supervisors and line managers for training on specific modules by reimbursing the opportunity cost/replacement recruitment cost
- ▶ Providing capital subsidy to select industry partners with large-scale captive manpower requirements for setting up of training workshops/training infrastructure
- ▶ Providing institutional land at subsidized rates for such initiatives
- ▶ Developing innovative risk-sharing based PPP models

At the same time, industry captains need to step forward and share the skilling responsibility. In this regard, expectations from the industry include:

- ▶ Act as role models for the whole private sector to ensure greater involvement in the skill development initiative

- ▶ Provide infrastructure and equipment to facilitate vocational training
  - ▶ Implement self-managed and third-party training programs
  - ▶ Encourage apprenticeship and on-the-job training
  - ▶ Share industry expectations in terms of workforce development and curriculum development
  - ▶ Construct low-cost hostel facilities across the country in proximity to identified skill development centres to encourage more youth to migrate to cities/towns to take up skill development programs

#### 6.4.2 Establishing quality standards

Specifications and requirements in relation to vocational institutes have been clearly laid out by the Directorate General of Employment and Training (DGET) with respect to space requirements and trainers. However, the specifications are mostly silent on equipment requirements and other quality-related aspects such as trainers' knowledge and industry experience. Similarly, quality standards for placement-linked training programs have not been clearly defined. A mechanism needs to be devised to establish such quality standards while updating them on a periodic basis. Industries/Industry bodies need to be involved in such a mechanism.

#### 6.4.3 Developing a pool of trainers

The low number of trainers, as well as the poor quality of the existing pool, has played a large part in the deficient quality of vocational education. Teachers and trainers tend to teach what they know instead of what their students need to learn in the absence of any incentives to upgrade their skills. Once a person starts as a teacher/trainer, he/she does not upgrade his/her skill sets on a regular basis. Incentives for teacher and trainers need to be linked with their ability to stay relevant. In addition, cross-career mobility for teachers and trainers needs to be encouraged (industry exchange programs, etc.) to ensure that a dynamic pool of trainers with industry experience is created.

## 6.5 Integrating skills with education

In many countries with well-developed TVET systems, vocational education is initiated at the school level to enable students to make an informed decision about choice in vocational education and a particular stream. Such a system should also be initiated in India. Vocational education at the high school level should be made compulsory within the proposed qualification framework.

In a country where vocational education has a low social esteem, it is also imperative for vocationally skilled candidates to have a convenient access to formal education. This concern should be tackled in the qualification framework.

## 6.6 Inclusion of the informal sector

While the canvas of skill development as per planning documents include all the sectors, informally and traditionally acquired skills through actual work have been completely ignored for the purpose of calculating skill gaps or for supporting skill development initiatives. It is not without reason that the informal sector values actual skills more than any formally certified training. The formalization of the informal sector would take some time even if the steps recommended in 6.2 are implemented. In the meantime, it becomes important that the informal sector is incentivized to get staff formally certified through an independent assessment mechanism. In addition, the informal sector could also be included within the ambit of the apprenticeship scheme, wherein it could seek Government assistance for on-the-job training of formally skilled candidates.

Inclusion of skills for the informal sector under the purview of formal skill development by the Government/other agencies is critical not only to scale up various employment-linked skill development programs, but also for boosting growth in a widely disseminated manner. Informal sector growth is geographically more distributed. At the same time, such initiatives would open up avenues for the Government to formalize these entities in a more targeted manner at a later stage.

Vocationally trained women have a high chance to obtain employment in the informal sector due to locational and other working-hours related constraints faced at their end. Hence, such initiatives would also provide a boost for women.

Agricultural-related skills upgrade initiatives are yet to be systematically planned and structured in terms of course outline, curriculum, delivery models, etc. Since the sector

is mostly unorganized and comprises a large workforce (around 220 million), it is important to enunciate a focused strategy for sector-specific skill development and accelerated implementation at the state level.

## 6.7 Women inclusion

FICCI, in association with Ernst & Young, came up with a knowledge paper on skill development in India titled “Learner first”, which identified that over two-thirds of learners for such training are women. In such a scenario, low enrollments signify the apathetic attitude of the official machinery toward encouraging women.

To bridge this gap, government schemes and programs need to focus on increasing women participation through grants and soft loans. It is also important to have more women trainers.

## 6.8 Conclusion

A concerted effort by the Government toward building a flexible and deregulated policy regime and decentralized delivery approach can lead to significantly better outcomes within a short span. Other stakeholders could then build on this foundation. Otherwise, skill development efforts would deem futile in the absence of wider social acceptance of government-sponsored skill upgrade initiatives and lack of “worthy” jobs.





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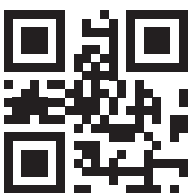
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