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Skill Development Initiatives in India

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Abstract

Structural changes in the Indian economy have precipitated changes in the patterns of demand for industrial labour. Recent trends in the composition of employment indicate that the Indian workforce is migrating from the agriculture sector to the industry-and-services sectors.

India has one of the youngest populations in the world, a trend that is expected to continue until 2040. However, India's labour productivity is much lower than that of other Asian economies. A structural shift towards higher-productivity sectors requires up-skilling of the labour force in order to ensure the country's inclusive economic growth. Skill development has emerged as a national priority and a number of skill-training initiatives have been undertaken over the last four years. In this context, the role of international players in the Indian skill domain is explored in this paper.

1. Introduction

Structural changes in the Indian economy have precipitated changes in the patterns of demand for industrial labour. In most developing nations, a large proportion of the workforce is engaged in agricultural activities. Figure 1.1 depicts the sectoral composition of employment across the world. India's employment patterns mirror those in other developing regions. 52% of the total workforce is engaged in the agriculture sector. However, agriculture only accounted for 14.5% of India's GDP in 2010-11.

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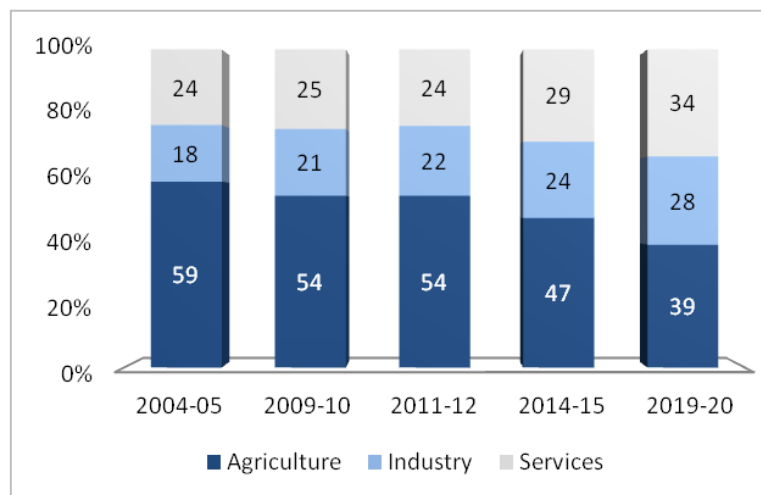
Figure 1.1: Sectoral Composition of Employment



Source: *Global Employment Trends (2012)*, International Labour Organisation

Recent trends in the composition of employment indicate that the Indian workforce is migrating from the agriculture sector to the industry-and-services sectors. This trend is expected to continue over the next decade.

Figure 1.2: Indian Workforce: Past, Present and Future



Source: *India – Vision 2020*, Planning Commission of India (2002)

This structural shift towards higher-productivity sectors requires up-skilling of the labour force. The labour productivity of India has seen steady growth since 2002. However, it continues to be significantly lower than that of other Asian economies such as China, Japan and Singapore.

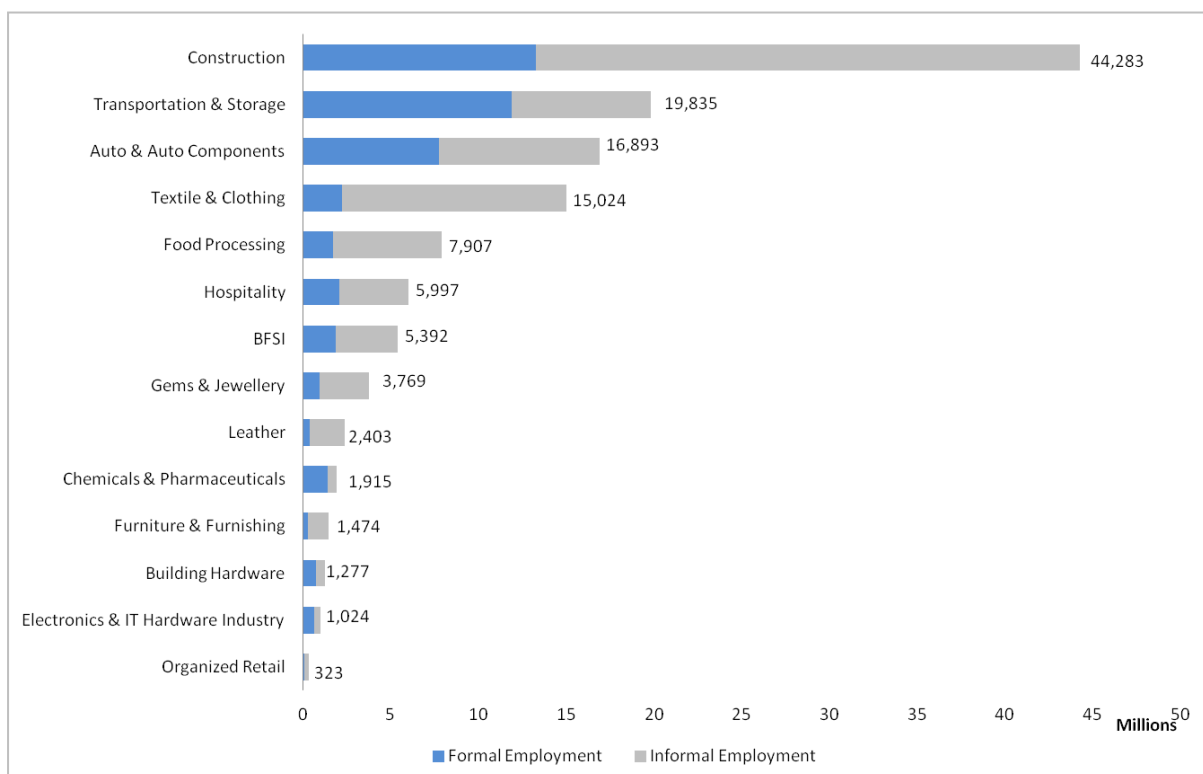
India has one of the youngest populations in the world. The proportion of the workforce in the working age group is well in excess of those dependent on them, a trend that is expected to continue until 2040. The benefits of a large labour force can be leveraged to accelerate economic growth through skill development, thereby creating a demographic dividend.

Skill development has, therefore, emerged as a national priority. Under the Coordinated Action Plan for Skill Development (2008), the Indian Government established a three-tier institutional structure consisting of the Prime Minister’s National Council on Skill Development, the National Skill Development Board and the National Skill Development Council, in order to bridge the existing skill gap. In this context, this paper explores the role of the National Skill Development Corporation in bridging the skill gap and the opportunities that have emerged for international players in this space.

2. Skill Gap in India

Figure 2.1 depicts the 14 subsectors of the economy that account for approximately 55% of total employment in the industry-and-services sectors.

Figure 2.1: Industry and Service Sector Employment in India - 2010

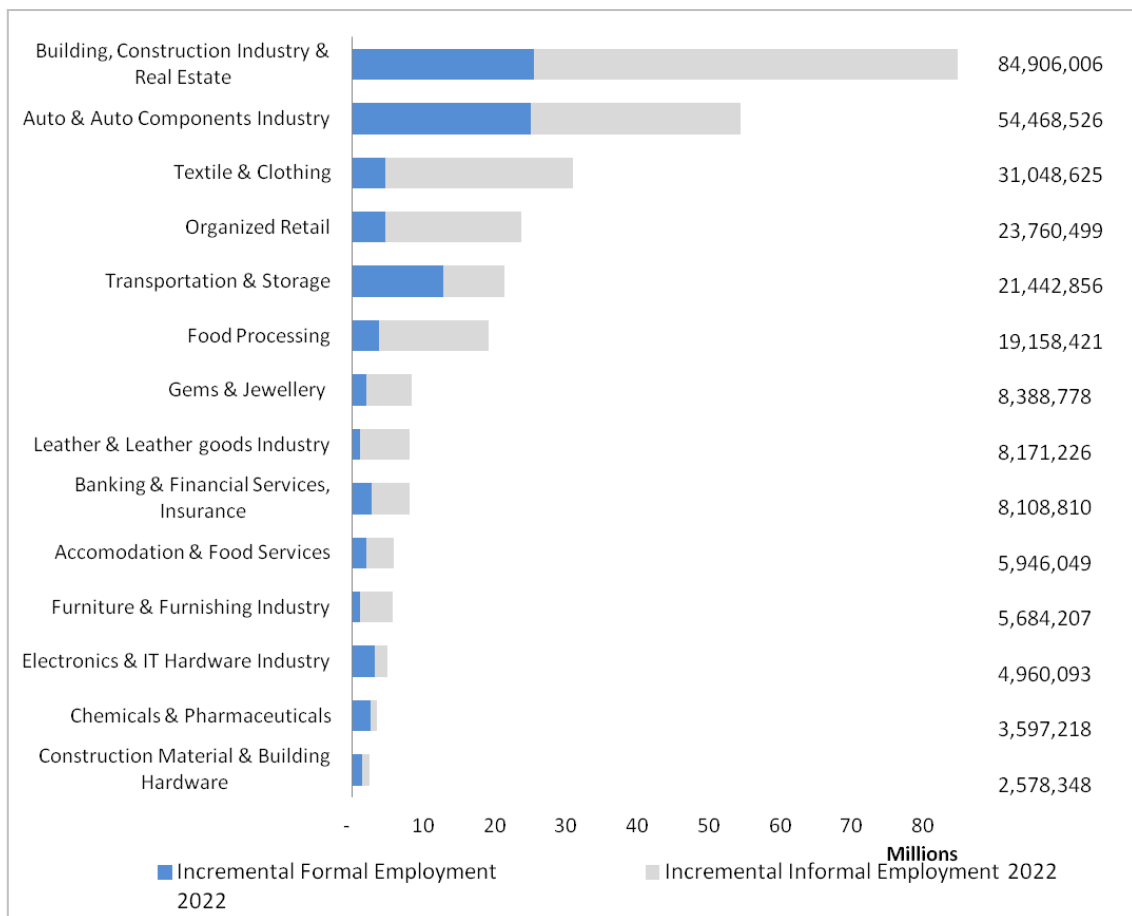


Source: National Sample Survey Organisation (2009-10); Sector Skill Reports, National Skill Development Corporation (2009)

The highest demand for the services sector is expected to be generated by subsectors such as construction, transportation, hospitality and the Banking and Financial Services Industry (BFSI). In the industry sector, the highest labour demand is expected to be generated by the automobile, textile and food processing subsectors.

The construction industry is the most labour-intensive sector. It also displays the highest level of informal employment, in the form of part-time or contract labour. Textiles and leather also exhibit a high level of informality in employment. Chemicals and pharmaceuticals, electronics and IT hardware have the highest degree of formality. The level of formalisation in a specific subsector displays a strong positive correlation with the level of skill required for performing tasks within that subsector. Sectors requiring a higher degree of skill have a higher proportion of formal employment, as opposed to sectors that employ a high proportion of unskilled or semi-skilled labour.

Figure 2.2: Incremental Labour Requirements - 2022



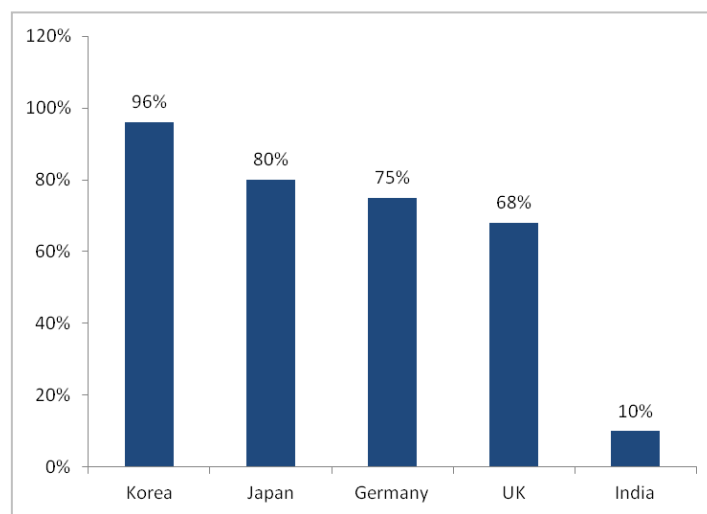
Source: National Sample Survey Organisation (2009-10); Sector Skill Reports, National Skill Development Corporation (2009)

By 2022, the demand for skilled labour is expected to increase significantly. The highest incremental labour demand is expected to be generated in the construction, automobile, textiles and transportation subsectors. Organised retail is also expected to grow rapidly. Together, these subsectors are expected to generate demand for over 282 million skilled workers by 2022. Primary research indicates that skill gaps exist in these sectors, suggesting that the total demand for skilled labour may be even higher than the incremental demand

projections. However, the industry-and-services sectors are deeply fragmented, with multiple sources of demand for skilled labour.

With the changing economic environment, the demand for better-quality products and services has given rise to huge demand for skilled labour. According to the Eleventh Five Year Plan, only 10% of the Indian workforce has formal skill training in the form of higher education, technical or vocational training. The percentage of the workforce that receives formal skill training is 68% in the United Kingdom, 75% in Germany, 80% in Japan and 96% in Korea. In 2008-09, India had an annual skilling capacity of 4.3 million, against 12.8 million youth joining the workforce annually.²

Figure 2.3: Percentage of Workforce receiving Skill Training in India



Source: Planning Commission, Government of India (2008)

The unavailability of appropriately skilled labour lengthens the job matching process, with candidates facing difficulties in finding jobs that match their skill-set and with employers struggling to find workers with suitable skills. According to the International Labour Organisation, the difficulty to fill up jobs in India is 48%, far higher than the global average of 34%. The problem is particularly acute for small and medium sized firms: since they require fewer employees, it is expensive for them to invest heavily in recruitment processes, and it is not feasible for them to set up captive skill-training institutes. In the short-run, this skill gap leads to loss of productivity. In the long-run, this demand-supply gap may not adversely affect economic growth. However, should the low availability of skilled labour persist, employers are likely to substitute labour with technology by automating processes. Hence, the lack of skill development will prevent inclusive growth for the economy in the long-run.

² Chenoy, D. (2011), "Skill Development Holds Key to Economic Development", *National Skill Development Corporation*, Retrieved from <http://nsdcindia.org/pdf/digital-learning.pdf>

According to the Government of India estimates, 93%³ of workforce is employed in the unorganised or informal sector, which is not supported by a structured skill development system. Workers in this sector are often skilled informally or on-the-job. The information channels and skilling processes in the unorganised sector are not understood. This creates difficulties in targeting this section of the population for skill development. Furthermore, the opportunity cost of skilling, in the form of loss of employment and wages for the duration of the skill training programme, also acts as a disincentive to skill acquisition.

The skill development environment in India is complex, and stakeholders face several challenges. The public sector has dominated the vocational training landscape in India. However, the private sector's participation and prominence in the skill development space has been growing over time, particularly in training for the services sector. In addition, a large number of non-profit organisations are engaged in providing skill training to enhance employability among the vulnerable sections of society.

Vocational training is a Concurrent subject under the Indian Constitution, and the responsibility is shared by the central and state governments. Public sector training infrastructure is coordinated at the centre by the Directorate General of Employment and Training (DGET) under the Ministry of Labour. In each state, the Department of Employment and Training coordinates and implements state-level training initiatives. Training infrastructure takes the form of Industrial Training Institutes (ITIs) and Industrial Training Centres (ITCs), which are privately operated. There are approximately 9,400 ITIs and ITCs in India with a combined capacity to train 1.3 million people.⁴ The course duration varies from a few weeks to three years. The courses also vary in complexity from basic skills to specialised courses.

ITIs/ITCs suffer from a number of limitations. Outdated curriculum and equipment often lead to the students being required to re-learn the skills at their work-sites. Primary research suggests that many employers treat ITI graduates at par with those who have completed Class 10 in terms of wages, which serves as a disincentive to invest time in acquiring skills. The evaluation framework adopted by ITIs does not provide a competency-based certification, making it difficult for employers to interpret the level of skill acquisition through such courses. Additionally, the dropout rate in these institutes is quite high, despite a number of incentives that are provided to the students who enrol in these institutes. One of the causes for the high dropout rate is weak basic education, which makes it difficult for students to grasp basic concepts at such institutes.

Until quite recently, vocational education and blue-collar jobs were associated with a low level of dignity. India's youth continues to display a strong preference for white-collar jobs, creating difficulties in student mobilisation for skill training programmes. Skill development is yet to gain acceptance as a viable alternative to formal education. Furthermore, the lack of

³ Report of the Committee on Unorganised Sector Statistics (2012, February), National Statistical Commission, Government of India. Retrieved from http://mospi.nic.in/mospi_new/upload/nsc_report_un_sec_14mar12.pdf?status=1&menu_id=199

⁴ eSkill Development (2012), Adviser to the Prime Minister, National Council on Skill Development, Retrieved from <http://www.skilldevelopment.gov.in/sites/default/files/resource/e%20Skill%20Development.pdf>

horizontal mobility between formal and vocational education acts as a deterrent to enrolling in vocational education. There are other socio-economic constraints to skilling, such as the reluctance to allow women to participate in skill training programmes, particularly in rural and backward regions; lack of awareness about skill development and industry requirements; and the unwillingness to migrate to other areas for work.

The existing training infrastructure (public and private) in the country is inadequate to meet the expected industrial demand for skilled labour. Additionally, the low relevance of the curriculum and the unavailability of quality-trainers limit the value addition from these courses. Qualitative gaps lead to people being employed in sectors that are unrelated to their educational attainment, indicating a mismatch between the skills required for performing jobs and the training imparted. Weak linkages between skill training institutes and industries, manifest in low placements, mean that there is no clear perception of improvement in employability through skill development.

The distribution of skilling capacity across the country is uneven, influenced by regional characteristics, market forces and the respective state government's emphasis on skill development. The eastern states have very low per capita provision of skill training capacity relative to the northern states such as Himachal Pradesh, Haryana and Punjab. The more industrialised states have a higher number of vocational training institutions. The existing capacity is marked by high variability in the quality of training imparted.

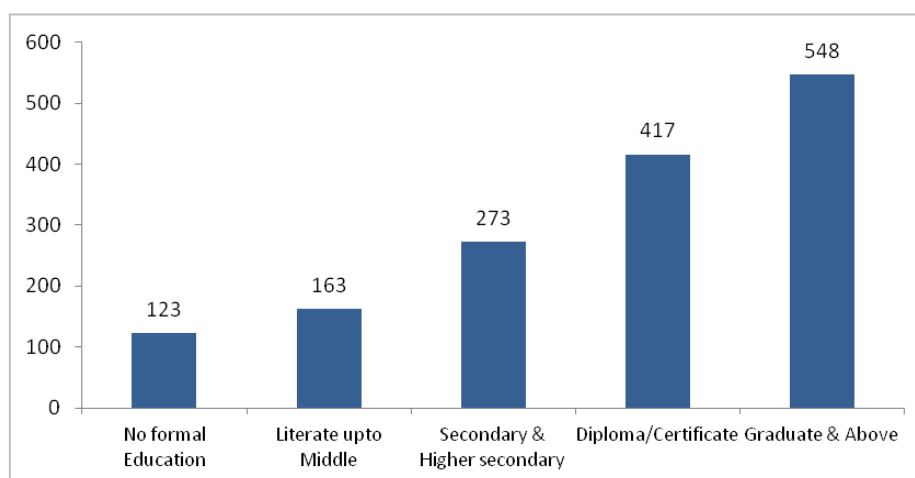
In order to integrate the formal and vocational education streams, the Ministry of Human Resource Development has established the National Vocational Education Qualification Framework (NVEQF), which is expected to cater to 5 million students for vocational degrees/diplomas each year. It is to be implemented in polytechnics, engineering colleges and other colleges in the university system from 2012-13. The NVEQF establishes seven certificate levels, with each level covering 1,000 hours of competency-based vocational training modules integrated with general learning. On completion of level 5, a vocational education diploma may be obtained; and on completion of level 7, a vocational education degree will be awarded. This is expected to make it possible for students to transition between vocational and formal education.

In 2005-06, the DGET initiated a scheme to upgrade 500 ITIs into Centres of Excellence. While this improved the quality of training-infrastructure to some extent, the low relevance of the curriculum continued to be a problem. In 2007-08, the DGET initiated a scheme to upgrade the 1,396 ITIs on the Public Private Partnership (PPP) mode to ensure greater relevance of curriculum and pedagogy to industrial needs through the involvement of an industry partner. However, in the absence of any clear incentive mechanisms for the private partner, these schemes have met with only a partial success.

The low level of skilling in India presents a huge unrealised workforce-potential. Unskilled workers remain unemployed, undertake menial jobs and live in poverty, or enter the labour market and undergo informal or on-the-job training. There is a significant wage-gap between skilled and unskilled workers in India. The wages earned by highly skilled workers are over 345% higher than those earned by unskilled workers. Skill development can help a worker

transition from the informal economy to the formal economy and expand the set of employment opportunities available to him through up-skilling.

Figure 2.4: Average Wage in Rupees per Day



Source: National Sample Survey 66th Round (2009-10)

3. Existing Skill Development Initiatives

The need for a well-defined skill development framework, with clear demarcation of responsibilities for achieving specific targets, has been recognised by the Government of India. In recent years, skill development has emerged as a national priority. The Eleventh Five Year Plan favoured the formation of Skill Development Missions at the state and national levels in order to coordinate and monitor skill development efforts in the respective regions. The Coordinated Action Plan for Skill Development was formulated in 2008, instituting a three-tier structure to bridge the existing skill gap.

1. Prime Minister's National Council on Skill Development

The PM's Council is at the apex of the three-tier structure. It is constituted by the Prime Minister and the Union Ministers of Human Resource Development, Finance, Heavy Industry and Public Enterprises, Rural Development, Housing and Urban Poverty Alleviation and Labour and Employment. It also includes the Deputy Chairman of the Planning Commission, the Chairperson of the National Manufacturing Competitiveness Council, the Chairperson of the National Skill Development Corporation and six skill development experts. The main functions of the Council are:

- a) Laying down broad policy objectives, financing and governance models and strategies relating to skill development.
- b) Reviewing progress of schemes to make decisions regarding continuity and mid-course corrections.
- c) Coordinating public and private sector initiatives.

The Council has set a target of skilling 500 million people by 2022, with an emphasis on inclusivity of training, fungible skills, conversion of knowledge and skills into degrees and diplomas through testing and certification, multiple modes of training-delivery, utilisation of existing infrastructure and state-level coordination of programmes.

2. National Skill Development Coordination Board (NSDCB)

NSDCB coordinates skill development initiatives across 17 Central Ministries and State Governments and the National Skill Development Corporation. It is constituted by Secretaries of the Central Ministries of Labour and Employment, Rural Development, Finance and Higher Education along with the Chief Secretaries of four states by rotation (for a period of two years), three skill development specialists, the Chairperson of the National Skill Development Corporation, the Deputy Chairman of the Planning Commission and the Secretary of the Planning Commission. The main functions of NSDCB are:

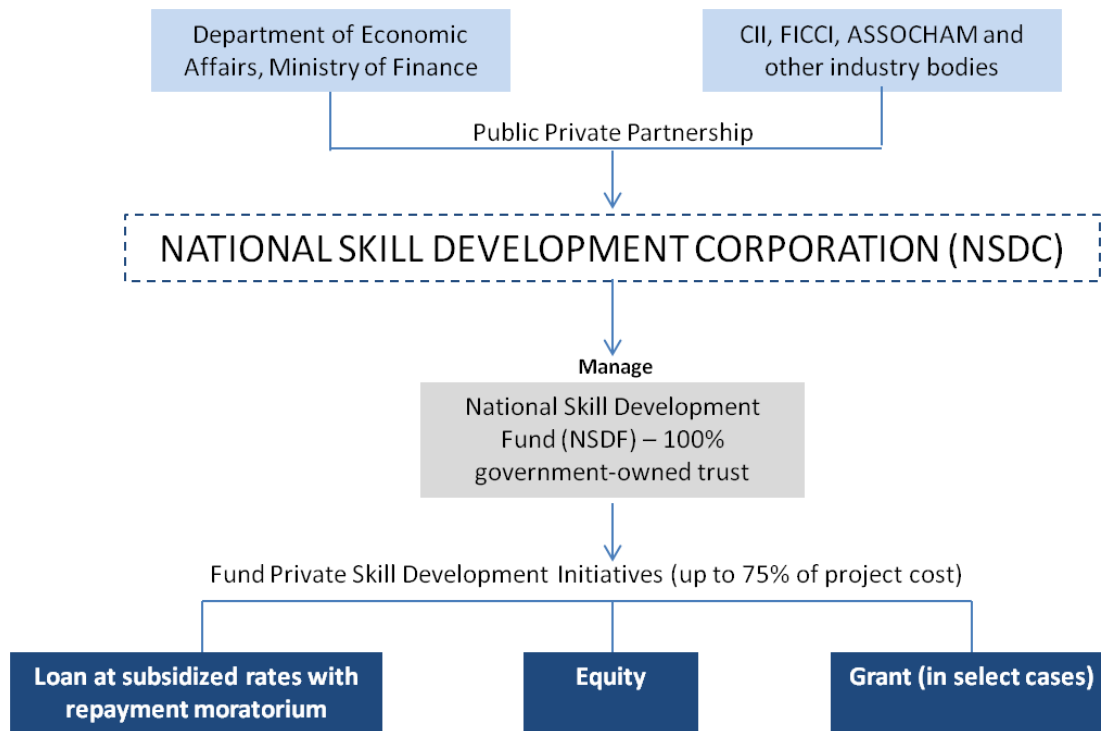
- a) Creating strategies to implement the decisions of the PM's National Council on Skill Development.
- b) Developing solutions to address regional imbalance in skill infrastructure
- c) Establishing national skill inventory and skill deficiency mapping on the national web portal
- d) Helping reposition employment exchanges as information points for skill development
- e) Coordinating the establishment of a credible accreditation system
- f) Monitoring and evaluating skill development schemes

3. National Skill Development Corporation (NSDC)

NSDC was set up as a non-profit company under Section 25 of the Companies Act with an equity base of Rs. 10 crore. It is a Public Private Partnership (PPP) with 49% of the equity contributed by the Department of Economics Affairs, Ministry of Finance of the Government of India and 51% contributed by the private sector through various industry associations such as Confederation of Indian Industry (CII), Federation of Indian Chambers of Commerce and Industry (FICCI) and Associated Chambers of Commerce and Industry of India (ASSOCHAM).

NSDC has a 15-member Board consisting of six government nominees (including the Chairman of NSDC) and nine private members (including the Chief Executive Officer). NSDC invests in skill development through the National Skill Development Fund (NSDF), a government-owned trust with a corpus of Rs. 9,951 million, with financial contributions from donors, private entities, government, statutory bodies and financial institutions, among others. The NSDF provides funds to NSDC to facilitate skill development and NSDC receives a management fee for managing the fund.

Figure 3.1: Structure of the National Skill Development Corporation



Source: Athena Research

NSDC seeks to catalyse investment by private players in the Indian skill development sector. Its target is to facilitate the training of one-third of the government’s total skilling target, i.e. 150 million people by 2022. It offers flexible funding-modes for private skill development initiatives in the form of loans, equity infusion and, in select cases, grants. The functions of NSDC are, therefore:

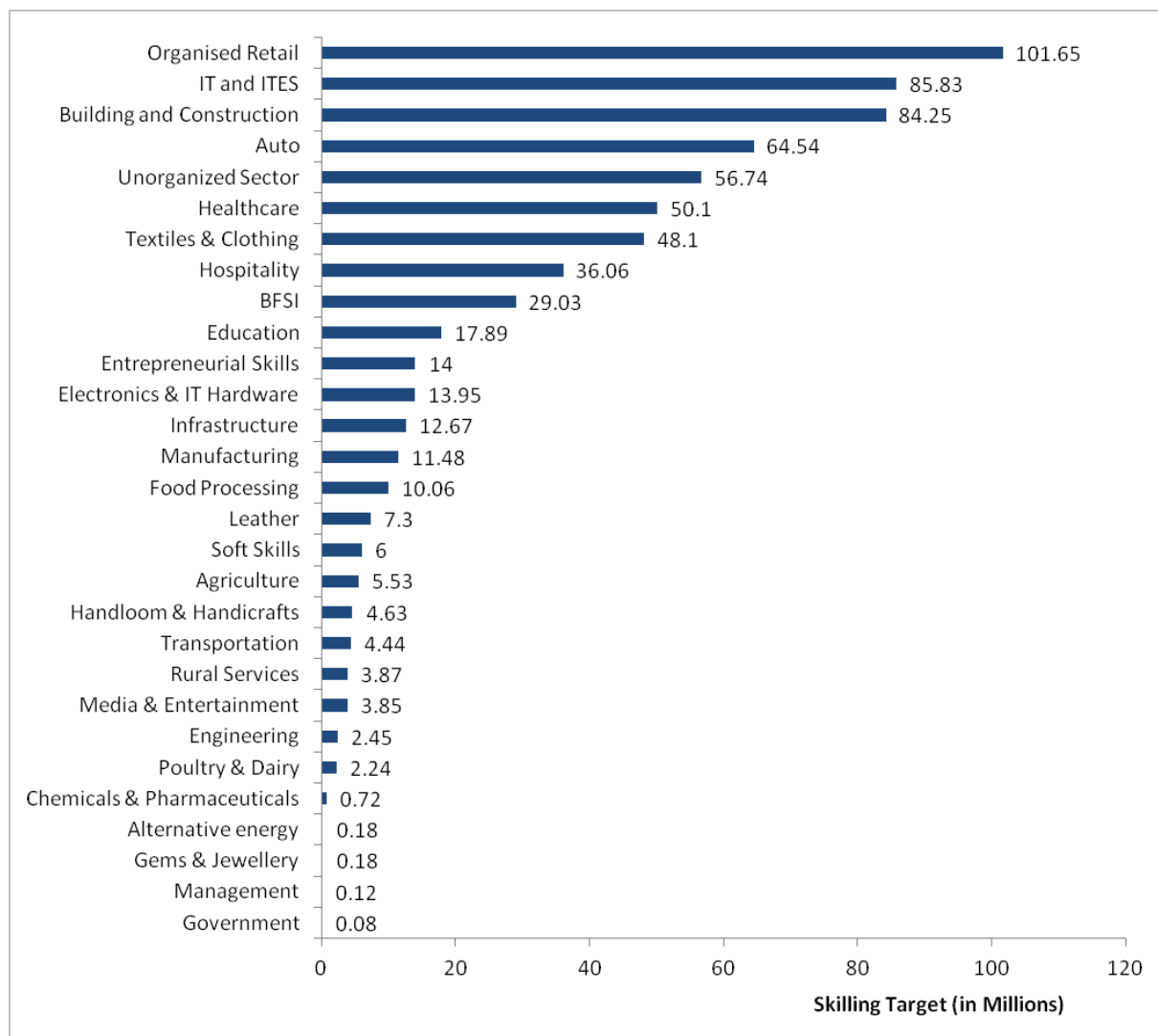
- a) **Coordinate** and stimulate private sector initiatives in skill development with enhanced flexibility and effectiveness.
- b) **Creating:** Proactively catalyse creation of large, quality vocational training institutions.
- c) **Funding:** Reduce risk by providing capital
- d) **Enabling:** Support systems required for skill development
 - Sector Skill Councils
 - Quality Assurance
 - Information System
 - Train-the-Trainers
 - Set Standards

NSDC receives technical assistance and funding from the Asian Development Bank. In addition to funding institutes, NSDC also funds students through soft loans. The main revenue sources for NSDC are the interest-income and dividends. NSDC uses flexible criteria for evaluating proposals, which are detailed below:

- Sustainability of the business model in the medium to long-term
- Partnerships with prospective employers, state governments and financial institutions
- Encouragement of innovation

- Use of existing infrastructure is encouraged. Funds obtained for NSDC cannot be utilised for land acquisition or the construction of buildings.
- A minimum of 100,000 people should be trained over a period of 10 years

Figure 3.2: Sector-wise Skilling Target



Source: National Skill Development Corporation

The NSDC funds initiatives across sectors and regions. It prioritises skilling in 21 priority sectors as identified by the Planning Commission of India.⁵ Figure 3.2 presents NSDC’s sector-wise skilling target. Since 2009, NSDC and its 62 training partners have trained 280,000 people across 23 sectors. By June 2012, NSDC had disbursed a cumulative amount of Rs. 2,235 million towards funding skill development initiatives.

⁵ According to the National Policy on Skill Development, the target groups for skilling in the unorganised or informal sector are “owners, workers and apprentices in micro enterprises; household workers; casual labour; peripatetic workers and migrant labour; out of school youth and adults in need of skills; and farmers and artisans in rural areas; among many others”.

Sector Skill Councils

NSDC's mandate includes setting up Sector Skill Councils (SSCs), which are industry-led organisations that coordinate skilling initiatives for each sector. SSCs ensure that the responsibility of skilling is with the industry, thereby addressing the fundamental imbalance in the skilling ecosystem, which has led to problems with the relevance of training imparted. The mandate of the SSCs is to complement existing infrastructure to meet the entire value chain's requirement of skilled manpower qualitatively and quantitatively on a sustained and evolving basis. The main functions of the SSCs are:

a) **Research**

- Identification of skill development needs and preparation of a catalogue of skill types
- Setting up Labour Market Information Systems
- Developing sector skill development plan and maintaining skill inventory
- Productivity analysis of human resources

b) **Delivery Mechanism**

- Developing skill competency standards and qualifications
- Developing and updating existing course models
- Planning and executing training of trainers
- Training existing employees
- Developing training-delivery mechanisms

c) **Quality Assurance**

- Standardisation of affiliation and accreditation process
- Certification tests for employees
- Certification tests for trainers
- Accreditation of sector-specific courses
- Promotion of academies of excellence

Thus far, 18 SSCs have been approved by NSDC's Board in sectors such as automobile, retail, IT and media. Four SSC proposals are under evaluation and eight more are in the pipeline. SSCs will create a decentralised, industry-driven environment for skill development, where NSDC acts as a nodal agency and facilitates initiatives in the sector, while SSCs ensure standardisation within each sector.

As a result of greater collaboration between the government and the private sector in the skill sector, several modes have been adopted for setting up skill training institutes. These range from complete government control in funding, management and delivery, as is the case with Industrial Training Institutes (ITIs), to private skill training institutes. In the PPP space, however, a number of business models have been adopted with varying levels of private and government involvement, as illustrated in Figure 3.3 below.

Figure 3.3: Business Models for Skill Development

	Funds	Management	Delivery	Examples
Govt.	G	G	G	ITIs, Skill Development Centers
PPP	G P			NSDC (Funding and monitoring only)
	G P	P	P	NSDC Partners: B-ABLE, Gram Tarang
	G	G P	G	ITI upgradation through PPP
Private	P	P	P	Private Skill Institutes

G Government
P Private

Source: Athena Research

The following figure provides examples of effective skill development initiatives in India. B-ABLE or Basix Academy for Lifelong Employability focuses on imparting training for creating a source of livelihood, with focus on the farm sector. Gram Tarang designs curricula driven by industrial demand, with a focus on the lower skill levels. VETA is one of the largest English-language training institutes in the country, imparting soft skills to students through courses of varying duration. MeritTrac offers testing- and evaluation-services to universities, colleges, institutes and industry. These players have used diverse modes of seed funding, fee determination, student-mobilisation strategies and revenue sources.

Figure 3.4: Models for Skill Development

	B-ABLE	Gram Tarang	VETA	MeritTrac
Seed Funding	NSDC	NSDC	Private Equity	Private Equity
Use of ICT Technology	Medium	Medium	High	High
Fee Determination	Self	Self	Self	Self
Mobilization Strategy	Self, Grass-root organizations	Marketing vans, NGOs	Formal advertisement	Formal advertisement
Capacity	1 MN (Total in 10 years)	21,000 (Total in 5 Years)	3.3 MN (Total in 31 Years)	20 MN (Total in 12 years)
Geographical Spread	PAN India	Orissa, Andhra Pradesh	PAN India	PAN India
Focus Areas	Construction, Tourism, Banking, Rural Farm, Hospitality, Food Processing	Construction, tailoring, plumbing, textiles, security guards, retail, computers	English and Personality Development	Examination and Assessment Solutions
Institute-Industry Linkage	Medium	High	High	High
Revenue Sources	Student fees, revenue share from franchisees, one-time membership fees paid by franchise owners	Industry sponsorships, government employment schemes and Education Loans through Micro Finance will help students finance their training cost	Student fees, revenue share from franchisees	Fees from clients including educational institutions, examination boards and universities

Source: Athena Research

Figure 3.4 describes the business models for two NSDC partners and two private skill training initiatives. These institutes vary in their focus sectors, size and expansion modes, highlighting the fact that multiple business models have been successful in this space. However, it is clear that the use of information and communication technology is essential for sustainability of the business. The Indian skill development market is characterised by low margins and high volumes, due to which price discovery is a challenge. For maintaining profitability in such a market, operating costs must be limited through the use of technology. This has been practised successfully by a number of players in the market by offering, for instance, remote classes, online testing and electronic course material.

Training providers have adopted a variety of approaches to overcome existing issues in skill development. ITIs have attempted to address the opportunity cost associated with training, in the form of loss of employment and wages, by providing a stipend for the duration of training, along with other incentives such as uniforms, laptops and bicycles for specific courses and areas. Under the Modular Employability Scheme, special courses offering multiple skills have been initiated at ITIs. Certification of informally-acquired skills has been made possible by allowing people to become certified by taking examinations at ITIs. However, the qualitative and quantitative shortfall in training continues to persist. NSDC has attempted to ensure the relevance of training imparted by its partners – by setting a target of at least 70% placement among students who complete the training programme. NSDC has also initiated media campaigns at the national level to improve the dignity of labour. The SSCs are attempting to standardise the training imparted by different players in each industry.

Typically, successful skill training initiatives in rural areas have strong community outreach and an orientation towards livelihood-skills training, which has helped mobilise students for the training programmes. To overcome the shortage of skilled labour, large firms have set up captive training centres to skill their employees. However, such a model is not feasible for smaller industries. Some private players have tried to mobilise students through direct interactions, such as presentations and seminars at schools. In the urban areas, a large number of private skill training providers focus on the service sector and try to mobilise students through improved placement statistics.

A critical factor that determines the success of a skill training institute is its industry linkages, which help build better placement records, creating the perception of higher employability. Since skill development is yet to gain acceptance as a viable alternative to formal education in the Indian market, demand creation can be achieved by positioning skill development as an avenue for better employment opportunities. In the absence of verifiability of this claim through good placements, student mobilisation is likely to be challenging.

International players have also shown interest in the Indian skill development space at the government-to-government level as well as the institution-to-institution level. International players often collaborate with local partners due to the complexity of the socio-economic environment.

- **Germany:** The Indo-German Joint Working Group on Vocational Education and Training saw consensus on creating a Public Private Partnership on the pattern of the

German Dual system. Efforts are on, with the Government of Karnataka, to develop multi-skills development centres of an international standard.

- **Australia:** The Bureau for Vocational Education and Training Collaboration (BVETC) was established by Australia and India in 2010. Courses are being delivered in India with local partners.
- **United Kingdom:** The UK India Skills Forum (UKISF) was established in April 2002 to provide a platform for organisations across the technical and vocational education sectors in UK and India. The UK has also worked with NSDC to develop the SSC concept for India.
- **Singapore:** A Memorandum of Understanding has been signed between Singapore's Institute of Technical Education and the state government of the National Capital Territory of Delhi's Department of Training and Technical Education on the establishment of a world-class Skills Centre in Delhi.

4. Business Case for Skill Development in India

Vocational training imparted through Industrial Training Institutes (ITIs) and Industrial Training Centres (ITCs) is regulated by the Directorate General of Employment and Training at the centre and the Departments of Training at the state-level. However, the private players in the Indian skill development space continue to remain largely unregulated. The regulatory mechanism is expected to become more structured in the medium to long-term.

There are very few entry barriers to the Indian skill sector. 100% Foreign Direct Investment (FDI) is permitted in this sector. Unlike in the case of education, skill development institutes are allowed to be set up as for-profit ventures. However, easy-entry and the lack of accreditation systems make it difficult for new players to establish themselves, since there is no signal for students to segregate strong players from weak ones. Therefore, there is need for new players to enhance their value proposition to position themselves competitively in the market.

A large proportion of the skill training infrastructure in the country is comprised of government institutes. This leads to market distortion due to under-utilisation of existing skill capacity and price discovery problems. In spite of this, private players and employers have begun to establish a strong presence through domain-based initiatives and differentiated products and services.

There is a growing market for skills in India, especially for service sectors such as IT, BFSI, telecommunications, hospitality, retail and construction. The demand for English training and soft skills will continue to remain high since many students are schooled in regional languages. The transition to formal employment in service sectors often requires the ability to speak in English.

Successful skill development initiatives have been implemented through the use of high-volume-low-margin models. Lean business models, combined with an enhanced value-proposition, are likely to help establish a competitive advantage.

Scope

There are opportunities in India for investment and collaboration by reputed international players in the form of development/co-development of institutes; content, curriculum and pedagogy support; training of trainers to improve the quality of training-delivery; setting up world-class training institutes; certification, accreditation and testing; and partnerships with existing institutes or skill development missions for offering programmes.

The main sectors that are likely to be attractive for foreign investments are construction, healthcare, finance, logistics and maritime, urban infrastructure, retail, hospitality, engineering and automotive goods. There is a tremendous potential for offering innovative vocational education courses, partnering with skill development missions for setting up Advanced Training Institutes and Faculty Training Institutes, certification of blue-collar workers for regional markets and soft-skills training.

Business models may take the following forms:

- **Government to Government:** Collaboration for developing training-quality standards and creating a suitable environment for skill development.
- **Government to Industry:** Public Private Partnerships with state-level Skill Development Missions, e.g. Gujarat, Tamil Nadu, Karnataka and Madhya Pradesh, for developing training institutes.
- **Industry to Industry:**
 - Joint Ventures
 - Knowledge Partnerships

Success Factors for the Indian Market

The main factors that are likely to determine the success of a skill development initiative in the Indian market are:

1. **Business Model:** The choice of an appropriate business model suited to regional market characteristics is essential for a clear understanding of the local market.
2. **Sector Focus:** There is likely to be a huge demand for up-skilling of unskilled and semi-skilled workers in the service sectors.
3. **Enablers:** Market enablers – such as high market-growth, low-entry barriers and the understanding of willingness to pay – must be leveraged effectively.

4. **Pricing:** Market penetration is more likely to be sustainable than market skimming as a pricing strategy.
5. **Value-Proposition:** An enhanced value-proposition is essential to counter excess supply from the government.
6. **Indigenous Marketing:** Collaboration with local partners, the understanding of local information channels, and the targeted student-mobilisation strategies are likely to be most effective.
7. **Government Association:** Public Private Partnerships, with active state skill development missions, may be explored to raise the quality of training to match international standards.
8. **Placement Assistance:** There is need for a clear link between skill development and employment in order to encourage the adoption of vocational training as an alternative to formal education.

5. Conclusion

By 2022, the number of people projected to be employed in the industry-and-service sectors is 539 million, a 150% increase from current statistics. Given that the recent employment patterns show a large number of people migrating from the agriculture sector to the industry-and-services sectors, there is considerable requirement for up-skilling of the workforce as well as for capacity-building within the agriculture sector.

With a rapidly expanding economy registering growth across various sectors and with the availability of cost-effective manpower from a young cohort, India's educational and workforce-development system is struggling to respond to the rapid growth in the demand for skilled labour – both qualitatively and quantitatively.

The Indian skill sector provides ample opportunity for international players to enter a growing market whilst ensuring service to the society.

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