



HRD INITIATIVES FOR SKILL DEVELOPMENT; A LITERATURE REVIEW ON INDIAN SERVICE SECTOR JOBS VS SKILLS

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Introduction

India has the world's youngest work force with a median age way below that of China and OECD countries. Half the population of India was younger than 25 in 2010. It will change to half the population being under 28 in 2030, making India a very young country for the next 20 years. The current focus of skill development has shifted to the learner and his/her needs and expectations from vocational education and training (VET). To empower the working population, it is essential to start from the source, i.e., the learner. The "voice" of the learner is the focal point of the mission, without which an effective conclusion to and attainment of the final goal would be incomplete. India has the advantage of the "demographic dividend" (younger population compared to the ageing population of developed countries), which can be cultivated to build a skilled workforce in the near future. For these reasons and several others, the aim of the paper is to understand and comprehend the issues surrounding vocational education and training by putting the Learner first. Finally, a need for intensive efforts in achieving the skilling target of 500 million workers by 2022 exists which is a very big challenge coupled with other challenges which are dealt in this study. However, the good news is that a sense of realism and realization has evolved among both the government and private sector, which will lead the country toward further economic prosperity through their pooled endeavors. (Dr.Rajiv Kumar, Director General FICCI, Knowledge paper on skill development of India). **Source: World**

Bank

Elementary, secondary and higher education is governed by the Ministry of Human Resource Development. University and Higher Education caters to all college education (Arts, Science, Commerce, etc.), while engineering education, polytechnics, etc. fall under Technical Education. University Grants Commission (UGC) is the nodal body governing funds, grants and setting standards for teaching, examination and research in Universities, and the All India Council for Technical Education (AICTE) is the regulatory body for Technical Education in India.

Table 1: Seat Utilization under apprentices Training Scheme

Year	Seats located	Seats utilized
2004-05	253,541	170,848
2005-06	234,388	167,554
2006-07	255,990	186,122
2007-08	258,163	185,224
2008-09	261,236	187,339
2009-10	274,741	197,994
2010-11	294,171	204,213
2011-12	321,937	218,032
2012-13	337,087	203,970
2013-14	359,356	211,632

Source; World bank report

As of 31st March 2015, across 28 sectors, standards for 1319 job roles pegged at NSQF levels 1 to 8 have been defined by the Sector Skill Councils (SSCs). Fourteen SSCs have covered development of 80% of entry level workforce QPs. The NSQF provides for a five year implementation schedule and at the end of the fifth year (2018), it shall be mandatory for all training/educational programmes/courses to be NSQF-compliant, and all training and educational institutions shall define eligibility criteria for admission to various courses in terms of NSQF levels. The system of multi-entry and multi-exit will enable students to acquire some skills after finishing compulsory general schooling, then enter the labour market and gain some work experience and return to the vocational education and training system to continue their vocational education/training. It would be particularly beneficial for relatively poor students, since it would enable them to continue in either the vocational education stream of the secondary system or the ITI system, rather than dropping out from the educational or vocational training space altogether. The Key Bodies involved for skill development are Ministry of Skill Development & Entrepreneurship MHRD Ministry of Rural Development (MoRD) Other Central Ministries which can be classified into enablers, implementing bodies, beneficiaries. The Enablers does the job of enacting the policies as stated,



like•State Skill Development Mission (SSDM) ,NSDC , NSDA ,SSCs ,NCVT ,SCVT ,Labour Laws ,Minimum Wages Act ,Financial Institutions ,Apprenticeships Act The Implementing Bodies are,ITIs ,Training Providers ,Captive Training by Employers ,Schools ,Universities Assessment Companies. The Beneficiaries are, Marginalized societies Unemployed youth, Low income Group, School & College Students .

MHRD; The Ministry of Human Resource and Development (MHRD) governs the polytechnic institutions offering diploma level courses under various disciplines such as engineering and technology, pharmacy, architecture, applied arts and crafts and hotel management. MHRD is also involved in the scheme of Apprenticeship Training. Apart from this, MHRD has also introduced vocational education from class IX onwards, and provides financial assistance for engaging with industry/SSCs for assessment, certification and training.

Objectives of study

- To review the challenges faced by India in Skill development initiatives
- To relate through facts and figures the challenges posed against available resources versus skill development initiatives
- To evaluate the strengths and weaknesses of the current policy framework against the required development
- To suggest practicable and possible suggestions for implementation of planned activities.
- To predict on the possible outcomes.

Methodology

- I. Meta Analysis on the secondary data and facts and figures released by government sources and related literature
- II. Reviewing Literature on the growth and development initiatives by MHRD

Key words used; National Skill Development , Institution-based skill development, vocational schools,professional colleges, sectoral skill development ,ministries/ departments

The problem of challenges discussed; Planned policies and Available resources and its utility

Challenge 1; Central Ministries; There are 21 Ministries under the central government who are also working for the purpose of skill development. There are two approaches that these Ministries have: one approach is setting up training centres of their own for specific sectors like (adopted by Ministry of Labour & Employment, Ministry of Agriculture, Ministry of Health & Family Welfare, etc.). The second approach is in the form of Public Private Partnership (as adopted by Ministry of Rural Development, Ministry of Women and Child Development, etc.) which only delays many implementation.

Challenge 2; Literacy levels in India are extremely low

As per the twelfth plan document 55 percent of workforce has education only up to primary level. School dropout rate is also high, with 19.8% dropping out after class V, additional 16.5% dropping out after class VIII and further 11.1% dropping out after class X.

Table 2: School dropout rate in India

Class	Dropout rate
I-V	19.8
I-VIII	36.3
I-X	47.4

Challenge 3; formally skilled workforce is less than 3 percent of total workforce; unfortunately, the current size of India's formally skilled workforce is very small. As per the latest survey by the Labour Bureau for 2013-14, only 6.8 percent of persons aged 15 years and above have received or were receiving vocational training, of which only 2.8 percent was through formal channels while 4 percent was through the informal system. In contrast, skilled workforce in other countries is much higher – Korea (96%), Germany (75%), Japan (80%) and United Kingdom (68%). Poor literacy levels impede skilling through normal channels; Amongst the formally skilled labour force, 74% have higher secondary or higher education levels, and amongst the labour force with informal skills, 78% of the workforce has completed only middle or lower education. Such skewed nature of skilling can be attributed to two factors – a) the education level entry requirements in the current skill set-up makes it difficult for workers with minimal education to access formal skills training; and b) lack of education also impedes the ability to absorb higher level of skills. Inadequate training capacities ; The number of people who enter the work force age group every year is estimated to be 26 million. With average labour participation rate of 90% for male and 30% for female, at least 16.16 million will enter the workforce and would need to acquire skills. However, current annual skilling



capacity, including training for the farm sector, in India is estimated at only 7 million. The table below highlights the dismal state of training capacities at the ITIs, which are a key source of skill training in India. Enrolments in vocational training are way below the enrolments in formal education. As against the enrolment of 23.76 million students in higher education, the skill training capacities in ITIs is mere 1.69 million. Training partners of NSDC have collectively trained 3.4 million youths in 2015-16.

Table 3: No. of ITIs with total Seating Capacity (as of 8 Sep 2014)

Region	No. of Govt. ITIs	Seating capacity (Govt.)	Number of private ITIs	Seating capacity (private)	Total ITIs	Total seating capacity at ITIs
North India	813	130818	3757	458837	4570	589655
South India	437	100828	3056	347926	3493	448754
East India	209	58250	1569	250301	1778	308551
West India	825	208474	1298	137402	2123	345876
GRAND TOTAL	2284	498370	9680	1194466	11964	1692836

Source: Labour Bureau, Ministry of Labour and Employment

Table 4: Enrollment in Higher Education in India

Level	Enrollment in University Departments/Colleges	Enrollment in affiliated colleges	Total	% share
Graduate	2,125,559	18,104,033	20,229,592	85.12
Post Graduate	774,557	2,160,432	2,934,989	12.35
Research	156,845	43,885	200,730	0.85
Diploma/ Certificate	156,909	242,740	399,649	1.68
Grand Total	3,213,870	20,551,090	23,764,960	100

Source: University Grants Commission, Annual Report 2013-14

Challenge 4; Poor literacy levels impede skilling through normal channels ; Amongst the formally skilled labour force, 74% have higher secondary or higher education levels, and amongst the labour force with informal skills, 78% of the workforce has completed only middle or lower education. Such skewed nature of skilling can be attributed to two factors – a) the education level entry requirements in the current skill set-up makes it difficult for workers with minimal education to access formal skills training; and b) lack of education also impedes the ability to absorb higher level of skills.

Challenge 5; Inadequate training capacities ; The number of people who enter the work force age group every year is estimated to be 26 million. With average labour participation rate of 90% for male and 30% for female, at least 16.16 million will enter the workforce and would need to acquire skills. However, current annual skilling capacity, including training for the farm sector, in India is estimated at only 7 million. The table below highlights the dismal state of training capacities at the ITIs, which are a key source of skill training in India. Enrolments in vocational training are way below the enrolments in formal education. As against the enrolment of 23.76 million students in higher education, the skill training capacities in ITIs is mere 1.69 million. Training partners of NSDC have collectively trained 3.4 million youths in 2015-16.

Services Included in the Service Sector in the National Industrial Classification 2008 are; Wholesale and retail trade; repair of motor vehicles and motorcycles, Transportation and storage, Accommodation and food service activities, Information and communication, Financial and insurance activities, Real estate activities Professional, scientific, and technical activities, Administrative and support services, Public administration and defense; compulsory social security, Education, Human health and social work activities, Arts, entertainment, and recreation, Other service activities, Activities of households as employers; undifferentiated goods and services, producing activities of households for own use, Activities of extraterritorial organizations and bodies, Jurisdictions in the Service Sector in the Union List; Telecommunications, postal, broadcasting, financial services (including insurance and banking), national highways, mining services, in the state list, State List Healthcare and related services, real estate services, retail, services incidental to agriculture, hunting, and forestry In the



Concurrent List, Professional services, education, printing and publishing, electricity. Over the time, the share of services in GDP has increased while that of agriculture has declined. In the last decade, the share of services surpassed the combined share of agriculture and industry making it the most important contributor to the country's output. In fiscal year (FY) 2009, services accounted for 57.3% of India's GDP² which was less than that of countries such as the United Kingdom (UK) at 78.4% and the United States (US) at 78.2%, but higher than that of the People's Republic of China (PRC) at 41.8%.³ India lags far behind in imparting. In the 1950s and 1960s, transport, storage, and communication and trade, hotels, and restaurant services grew faster than the overall sector while in the 1970s and 1980s, financing and business services started growing and in the 1980s surpassed transport, storage, and communication and trade, hotels, and restaurants. From 2000 to 2010, transport, storage, and communication were the fastest growing followed by financing and business services.

Challenge 6; Employment has been a lot of debate about the capacity of the service sector to generate employment. It has been argued that employment growth has not kept pace with income growth in the sector (Bosworth and Maertens 2010) or with the rise in its share of GDP (Kochhar et al.2006). Furthermore, the change in the production structure from agriculture to services has not been reflected by a proportionate change in the occupational structure (Bhattacharya and Mitra 1990). As a result, service-led growth has been jobless growth (Banga 2005). Table 3 shows that in FY1993, close to 63% of the population was engaged in agriculture while 22% worked in services (in both the formal and informal sectors). Over time, the percentage of people employed in agriculture has declined and employment in services has increased, although agriculture continues to have the highest share. Within services, there has been a change in the pattern of employment. The share of wholesale and retail trade has increased while the share of public administration and defense has declined.

Challenge 7; Labor Productivity It is difficult to do a productivity analysis in India since data on total employment are not calculated on a yearly basis and a great deal of employment in services is informal. Existing studies have, however, concluded that labor productivity has been the highest in the service sector, particularly in the decades after 1980. Using output data from National Accounts Statistics and employment data from other secondary sources, Bosworth and Maertens (2010) found that total factor productivity (TFP) was highest in service sector Eichengreen and Gupta (2010) used the National Accounts Statistics and cross-country data from the European Union (EU) KLEMS8 and showed that the skill content in both the manufacturing and service sectors is increasing over time. The authors divided the service sector into three groups (Table 5) and pointed out that productivity growth was the highest in Group 3. Within this group, the fastest growing types are business services, communications, and banking, and growth in exports has contributed to the growth of most services. Group 1 has low elasticity of demand and Group 2 has a cost-disease problem⁹ leading to low productivity.**Challenge 8; Categories of Services Based on their Productivity Growth;** An ongoing productivity research study funded by the Reserve Bank of India shows that from 1980 to 2008, TFP growth in India was highest in the service sector at 1.58% per annum followed by agriculture at 1.06% and manufacturing at 0.3%. Economy-wide estimates recorded an annual labor productivity growth rate of around 4.5% from 1980 to 2008 while the growth rates in labor productivity for services, agriculture, and manufacturing were 3.52%, 1.94%, and 5.45%, respectively. The study further found that labor productivity rates for services increased from 2.69% per annum from 1980 to 1999 to 6% from 2000 to 2008 due to growth in post and telecommunications, hotels and restaurants, and trade. Healthcare and social work, other services, and education registered lower rates which is a cause for concern. It is expected that the high productivity is largely driven by telecommunications since the postal service in India is still a government monopoly that suffers from over-employment. The service sector has been the highest and that communication services are one of the major propellers of growth in sector productivity in India.

Challenge 9; Future Growth; India's economic growth slowed to 6.9% in 2012; nevertheless, it is projected to grow at 7.3% in 2013 which is higher than the 6% average projected growth rate for emerging and developing economies. The share of the middle class in the total population will increase to 41% in 2025, and they will account for 59% of the country's total consumption. With the increase in incomes, there has also been an increase in the literacy rate which is expected to improve further. Moreover India has one of the youngest populations in the world with 54% below 25 years of age. All this is leading to a change in consumption patterns with an increase in demand for discretionary services like education, private healthcare providers, personal care, and hotels and restaurants. The Indian market is large and unsaturated, and most services have been opened up for foreign investment. India wants to be a knowledge-based hub, and the government is promoting exports of services. Only 10% of the total workforce in the country receives some kind of skill training (2% with formal training and 8% with informal training). Further, 80% of the entrants into the workforce do not have the opportunity for skill training.

Challenge 10; Investments: In the post-liberalization period, the service sector has attracted significant foreign investment due to the availability of skilled labor at lower wages and the large and unsaturated domestic market. According to the A.T.



Kearney Global Services Location Index, in 2011 India was the leading outsourcing destination among 50 countries followed by the PRC. India's rank is high due to human resources (2nd), but it ranked poorly in terms of business environment (43rd). According to the A.T. Kearney FDI Confidence Index, in 2012 India was the second most attractive destination for FDI after the PRC; however, the Inward FDI Performance Index of the United Nations Conference on Trade and Development (UNCTAD)¹⁹ which compares the relative performance of 141 countries in attracting FDI found that India has performed poorly compared with other developing countries.

Challenge 11; The Service Sector in India in the future; The bulk of FDI in India is routed through Mauritius. Other important investing countries include Japan, Singapore, the UK, and the US. At present, FDI is allowed in most but not all services in the sector (Table 7). In the post liberalization period, the overall sector has been the largest recipient of FDI with a share of over 50% between 2000 and 2011. Financial services, telecommunication services, and computer software and hardware were large recipients. In FY2010, India's FDI outflow in the service sector was \$10.3 billion out of the total outflow of \$14.6 billion.²³ In FY2011, 62.1% of India's outward investments were in services followed by the manufacturing sector at 31.4%. Within the sector, financial, insurance, real estate, and business services accounted for 29% of total outward investments followed by transport, communication, and storage (15.3%) and wholesale and retail trade and restaurants.

Challenge 12; Confusing Service Sector Policy; There is no government policy on how the sector can lead to inclusive growth. This is partly because the focus is on agriculture and manufacturing, and the service sector has largely been left to grow on its own. There is no nodal ministry for services like retailing while for others like transport and energy there are multiple ministries with conflicting interests. The quasi-federal governance structure has led to multiple regulatory bodies, numerous regulations, and multiple clearance requirements. For example, there are around 13 regulatory bodies for higher education, and each of them functions in isolation. This can be done with the help of technology such as computerizing check posts at state borders and with regulations such as implementing single goods and service taxes. In the case of industries like energy, various government departments should work together to design a policy that will facilitate equitable access at affordable prices. The policy should lay down a short-term strategy (5 years coinciding with the 5-year plans) and a long-term strategy (10–15 years) for development.

Challenge 13; Governing regulatory reforms; Some regulations do not take into account technological developments while others are outdated or do not follow international best practices. In areas like transportation, there is a lack of comprehensive regulations enabling integrated door-to-door service which increases waste in the supply chain. In addition, existing regulations do not take into account the characteristics of new services such as the Service Sector in India direct selling and express delivery. Lack of prescribed standards and common accreditation also adversely affect services like construction and education. While deregulation and removing regulatory barriers are often necessary for service sector growth (Hoekman and Mattoo 011, Jain and Ninan 2010),

In India it may not necessarily be true. For example, the **privatization of Indian airports** led to an arbitrary increase in tariffs prior to the appointment of the Airport Economic Regulatory Authority. Since many services have erstwhile been public monopolies, the vested interests of the government and of public sector units adversely affect performance as they get preferential prices in commodities like energy. Moreover, government procurement is not always transparent, e.g., private companies working for the railways have to procure materials from vendors selected by the railways. In many services, especially infrastructure, it is often difficult for the private sector to enter and operate due to a lack of third party access and of transparent procedures for sharing scarce resources among other problems.

Challenge 14; Service sector employment and education; Employment opportunities and quality education are both necessary for inclusive growth. There is a skill shortage in ICT and organized retail. According to the Electronic and Computer Software Export Promotion Council, approximately 5,000 people are needed every year to meet the demand of the ICT industry, but the total available from educational and training institutes is only a third of this number. This is leading to a rise in salaries (average salary increase was 11% in 2012), high attrition rates, and a high cost of operations. Studies (Mukherjee and Goyal 2012) have shown that although employees prefer to work in the formal sector for better salaries and job security, skill requirements are different, and it is not easy for employees to shift from the informal to the formal sector. In many cases companies have to invest substantially in training employees. Critics have argued that the government's education policy and funding have focused on higher education and have neglected primary education (Kochhar et al. 2006). There are reserved seats for the so-called backward classes in higher education but not in primary education; this is not based



on income. Also, labor productivity is lower in social services like healthcare and education which affects inclusive growth. To create quality employment in the service sector, it is important to encourage growth in the formal sector

Challenge 15; Taxes and subsidies; India has a high corporate tax rate of 30%–40% compared to around 17% in Singapore and up to 25% in the PRC. For commodities like petroleum, there are multiple taxes and levies that vary across states. Sometimes, taxes have adverse impacts on the use of the most efficient technologies. For instance, although multi-axle vehicles are more efficient than single-axle vehicles, the motor vehicle tax is levied based on gross vehicle weight rather than on potential axle loads. This results in under-taxation of two-axle trucks. In the Union Budget for FY2012, the government proposed imposing a retrospective tax which was sharply criticized by foreign investors.

Challenge 16; Access and availability of infrastructure. Indian government investment in infrastructure is low and has not been able to meet demand. For instance, most ICT companies have to invest in power units due to the erratic power supply. This increases their costs. Companies in construction, ICT, hospital services, and retail, among others, find it difficult to acquire property due to the lack of urban planning, restrictive zoning regulations, outdated laws related to land conversion, and the lack of clear ownership and titles to land. This causes delays in project implementation. In addition, due to poor infrastructure planning, the full benefits of existing investments cannot be reaped. The government needs to act as a facilitator so that private developers have access to basic facilities like land. There is a need for proper urban and infrastructure planning. The focus should not only be on creating new infrastructure but also on efficiently using existing infrastructure.

Advantages of Large Youth Population; Within the next several years, India's population is expected to exceed that of China. Unlike China, however, India's population structure is still relatively young overall, and the population keeps growing rapidly, with 28 million youth being added every year! Of India's total population of 1.21 billion according to the 2011 Census (Government of India (GOI) 2011b), more than 672 million people are of working age (15 to 59). Of these, 253 million are youth aged 15 to 24, accounting for 21 % of the total population in 2011. With a continued decline in the dependency ratio estimated over the next 30 years, India is expected to enjoy a large "demographic dividend" for the coming decades. With 12.8 million young people newly entering the labor market every year (GOI 2011a), the government recognizes that the country faces a serious skills shortage, as the majority of these new labor market entrants are likely to remain unskilled. It has also as Calculated from the data on total population from the provisional 2011 Census Data and the 2001 Census Data available from the Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India. In fact, the government ambitiously envisages that India could become a supplier of skilled workers "exportable" to other countries, given four factors: the vast size of the youth population, their limited domestic employment opportunities, the shortage of skilled workers in developed countries, and the growing global practice of outsourcing. At the same time, India's demographic profile poses serious pressure on government and society to invest in education and training. Indeed, in 2005, roughly 413 million people were in the school-going age group 6 to 24 years accounting for 35% of the total population. Since then, this figure has surely increased. Thus, expanding education and training for them and ensuring its quality will seriously challenge the government, which will have to build more schools, train and hire more teachers, and provide them with more textbooks, educational materials, and equipment. Despite India's projected demographic dividend and its abundant labor supply, it suffers from a serious shortage of skilled workers, because of their limited access to education and skills training and a large skills mismatch in the labor market.

Distribution of Rural and Urban Workers in India; 1980s and more seriously in the 1990s, employment growth stagnated in the 1990s and 2000s, making those two decades a period of "jobless growth." Thus, even the growing Indian economy has failed to generate sufficient jobs to accommodate its new young entrants into the labor market. Unlike the experience of East Asian countries, growth in the Indian economy has largely been led by its service sector, whose relative importance has been growing. While the agriculture sector's contribution to GDP has gradually declined and that of the industrial sector has grown slightly, the share of the service sector has grown quite rapidly. In 2010, it accounted for 55% of India's GDP. Looking at the amount of employment in each sector, however, agriculture is still the largest, accounting for 54%, while the industry and service sectors accounted for 18% and 25%, respectively, in 2008 (World Bank 2012b: Figure 2.6). In rural areas, non-farm employment also increased to 35% of the rural workforce in 2009/10, up from 30% in 2004/05 (World Bank 2012b, p. 95). Looking at the employment structures in non-agricultural sectors, we see that apart from manufacturing (26% of non-agricultural employment), some subsectors of the service sector such as wholesale and retail, and personal service have been growing. They now account for 48.6% and 35.6%, respectively, of non-agricultural employment (GOI 2008a). In manufacturing, almost all firms belong to the informal sector. Formal sector firms account for only 0.7% of total manufacturing firms. The majorities of informal sector firms are small, and located in rural areas (see Table 3). Size also



accounts for large differentials in wages and productivity. Small firms have 12% of the productivity on average and pay 19% of the wages of large firms (World Bank 2012b, p. 105). This high prevalence of informality suggests that the majority of India's manufacturing workers, including youth, work in low-productivity, low-wage jobs, with little access to opportunities for formal skills development.

Skills Development Opportunities outside the Formal Education System Outside of the formal education system is a well-established vocational training system, the Craftsman Training Scheme (CTS), established in 1951. The public Industrial Training Institutes (ITI) and private Industrial Training Centers (ITCs), under the Directorate General of Employment and Training (DGE&T) of the Ministry of Labor and Employment, provide pre-employment vocational training as key post lower secondary institutions to train the technical workforce. Under CTS, nation-wide, 8,306 ITIs/ITCs (2140 public ITIs and 6166 private ITCs) in 114 trades in 44 engineering and 24 non-engineering courses offer six months to three years of vocational training for those who have completed 8 to 10 years of schooling. Each state government is responsible for overseeing its ITIs. In total, over 740,000 trainees are enrolled in training courses at ITIs and ITCs. At ITIs, tuition was free until 2006. Trainees also received fixed monthly stipends based on government norms. Despite this orientation, the demand for vocational training has generally been low even among the socially disadvantaged. Both parents and youths prefer general education, partly because it is considered to better prepare students for examinations for the government jobs. Moreover, because of India's traditional hierarchical social structure based on the centuries-old caste system, society has not generally highly appreciated or valued craft and trade skills. Students prefer white-collar jobs in their search for upward mobility. Vocational training has largely been seen as a second-choice option for economically disadvantaged and/or academically less capable. In addition to the Directorate General of Employment and Training, more than 17 ministries/departments of the Indian government, along with their related agencies, provide and/or sponsor formal/non-formal TVET programs for specific groups, covering about 2.5 million people annually (GOI 2011). However, these TVET programs vary in many ways, including duration, target groups, entry qualifications, testing and certification, and curriculum. The result is overlap and duplication, and little unified recognition of qualifications and equivalence. In recent years, however, private training firms such as NIIT have been offering a wide range of IT-related training courses, providing young people with practical and general skills that are in high demand in the labor market. **Only 17% of manufacturing firms in India provide any training for employees (Asian Development Bank 2008: Figure A5.5).**

First, it set up the Prime Minister's National Skills Development Council (NSDC) to coordinate various schemes provided by various ministries. The Office of the Advisor to Prime Minister for Skills Development serves as an apex coordinating body and as a secretariat for the NSDC. Second, the National Skills Development Board (NSDB) was set up under the Planning Commission to coordinate 17 relevant ministries. Third, the National Skill Development Corporation (NSDC) was created, operating as a public-private partnership (PPP) involving industry associations and industry representatives to upgrade training institutions and deliver vocational training. Fourth, Sector Skills Councils have been set up for about two dozen sub-sectors involving various interested industrial associations to identify skills gaps and enhance skills training in each sub-sector. These organizations are responsible for developing policies, setting priorities and strategies, and overseeing and coordinating the various stakeholder initiatives and efforts. These Councils also try to involve employers more in establishing skills standards and assessing training performance. The creation of the NSDC in charge of skills development directly under the Prime Minister's Office helped show that the government was seriously committed to promoting skills development and raising awareness about skills development among policymakers, industry leaders, training institutions, and the general public.

The development of NVEQF has led to a closer partnership and collaboration of government with industry to 6 For example, courses in plumbing are popular among people wishing to work in the Middle East and Australia. They develop courses, curriculum, assessment, certification, and placement. Also, to improve the quality of training, the government introduced the concepts of competency-based training and training modules. These have changed the basis for certifying vocational training from duration to competence. Now individuals can have their skills recognized regardless of their educational and employment paths. India is experiencing an acute sense of urgency, given its serious shortage of skilled labor in the face of the potential "demographic dividend," the need to sustain rapid economic growth, and an interest in making its young skilled workforce "exportable" to global labor markets. Some advanced countries, especially Australia and Western European countries, are keenly interested in India's potential skilled labor, and have started offering attractive incentives and generous support to India's TVET and higher education sectors. Such external support and pressure has helped the Indian government make institutional reforms. Moreover, the private sector, particularly key industrial associations such as the Confederation of Indian Industries (CII), and the Federation of Indian Chambers of Commerce and Industry (FICCI), have played key roles in increasing public awareness about skills development—organizing workshops and seminars and lobbying the government to



promote institutional reforms. These associations are now represented and actively participate in various committees of tertiary and training institutions as well as national boards. Industry has also felt an urgent need to promote skills development given their frequent problems in finding workers with adequate skills. Thus, they have also demanded a well-designed skills development system with greater involvement on the part of the private sector. Under the current 12th Five-year Plan (2012—2017), the government emphasizes skills development even more ambitiously as a priority agenda item. Projecting that by 2022, India's working-age population will reach 700 million, of whom, 500 million will need to be skilled, the government set a national target of skilling 500 million people by then, allocating increased budgets for skills development. Thus, it ambitiously plans to increase the capacity of training institutions to 15 million (currently 2.5 million), by setting up more ITIs, encouraging the private sector to engage in vocational training, and expanding tertiary education (GOI, 2009).

Innovative Reforms at Training Institutes; Reflecting the changing policy environment for skills development, training institutions have recently introduced several new initiatives. Supported by the World Bank, the government selected 500 ITIs as Centers of Excellence (COE) to offer “advanced module” training, and upgrade their facilities, equipment, and machinery to the same standard used in industry. Under the COE scheme, each ITI must establish an institute management committee (IMC) of 8 to 10 members. The IMC chair is selected from the private sector, often from a leading local private firm, and has power to approve major decisions about the ITI's management. Operating as a public-private partnership, the IMC is expected to forge partnerships between ITIs and the private sector to: share labor market information, especially on the types of skills in demand; develop curriculum; and seek donations of equipment and tools from the private sector to upgrade ITI facilities and equipment. Also, the creation of IMCs has increased industry participation in decision making around the ITIs, to greater autonomy for ITIs, more channels to send trainees for internships, and improved facilities through more donations from industry. These closer linkages with employers and increased autonomy may help ITIs meet industry demands. In fact, COE courses achieved close to 100% job placements of their trainees at many ITIs.

Recognizing the importance of involving industry, some ITIs recently created partnerships with leading firms such as Toyota, Tata Motors, and Suzuki to offer training courses to cater to the firm. For example, four ITIs in Karnataka offer a Motor Mechanic Tool and Maintenance (MMTM) course jointly with Toyota located in Bangalore. The curriculum follows NCVT norms, but Toyota decides on the topics to cover in the syllabus so it can teach firm-specific skills. Toyota takes all the students in their second year as apprentices and places them at its dealers. The courses enjoy 100% placement rates as all the trainees who pass all the requirements are placed as regular employees at Toyota dealerships on the completion of training. This tailor-made arrangement in close collaboration with particular firms has helped make training more relevant, better able to respond to industry needs, and has significantly improved placement rates. Many of them are keen to work with leading firms to create such firm-specific courses and to increase opportunities for both apprenticeships and instructors' training with these firms.

Suggestive measures to counter the challenges

Today, India faces complex and enormous challenges in fostering skills development for youth. A fraction of economically well-off middle classes get good education, and, training and well-paid jobs in the organized sector. Meanwhile, the great majority of youth from economically and socially disadvantaged groups get very limited education and little access to vocational training. They work in the unorganized sector. The majority of Indian youth enter the labor market without adequate vocational skills, leading to unstable, informal, low-wage employment, such as casual labor and various forms of self-employment. In India, the bulk of employment is in rural areas and in the unorganized sector, and almost all manufacturing firms are in the informal sector. Given the highly-stratified and segmented nature of the labor market, Indian youths must acquire education, training, and skills if they are to find decent jobs and experience any social mobility. Thus, with rapid economic growth, demand for education is likely to grow further at all levels in coming years. However, access to education, training, and employment opportunities is still largely determined by youth's socioeconomic backgrounds, gender, and geographic locations.

Training institutes now have more autonomy and private-sector involvement, and have improved their governance and curriculum. **These changes are too recent to examine the effects on training outcomes.** But it will be interesting to see how these reforms improve access to and demand for vocational training among youths as well as the outcomes of training. Based on the discussion above, some suggestions for policy may be offered here. First, for India to promote industrial development and achieve sustainable growth, it must increase its investment in education and training for youth. In particular, to move further into a knowledge-based economy and move up the value chain, it is indispensable for India to improve the quality of education at every level. Second, the focus of India's skills development system does not correspond to either the



level of skills demanded by industry or the overall levels of education of most young people. Thus, the government must ensure that most young people at least finish lower secondary school (i.e., 10th grade). Third, to open training opportunities for youths who have not completed secondary education, it would be helpful to create more courses at ITIs with lower levels of educational requirements. Fourth, training for the informal sector needs to be strengthened. Generally, it is difficult to reorient formal training institutions toward the informal sector (Johansson & Adams 2004). Given the vast size of the informal sector, however, it is critically important to institutionalize some training for work in the informal sector. Rather than the current somewhat ad-hoc delivery of training such as the MES, more institutionalized and structured settings may help offer more effective and streamlined training for the informal sector.

The skill development initiative requires A nodal agency can be identified for each service and given the responsibility to see that the strategies are implemented. To standardize policies across states, the central government can come up with model regulations that the state governments can implement. It is important to note that there are disparities in performance across states and that poor states seem to do badly in service infrastructure and in delivering public services like healthcare and education. For inclusive growth, policies have to focus on state-specific requirements. Today, private organizations can operate only as not-for-profit institutions in education. The government may consider allowing for-profit education while putting in place a regulatory framework to ensure that participants meet a required standard. This will facilitate private investment. Focusing on vocational training and developing appropriate curricula will increase the employability of students in the service sector. The quality of education can be improved through proper accreditation at international standards. Cross-subsidization and inappropriate subsidies have led to misallocations of resources. In railways the average passenger tariff in India is 55% lower than in the PRC while the average freight tariff is 66% higher. Similarly, while the commercial sector has to pay a higher power tariff, the agriculture sector, irrespective of land size, is highly subsidized. A number of tax reforms including the pending single goods and service tax and the Direct Tax Code Bill of 2010 should be implemented, and cross-subsidies should be minimized. For inclusive growth, subsidies should be targeted to the poor and needy.

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