

SKILLING THE WORKFORCE: SKILL DEVELOPMENT INITIATIVES IN INDIA

**SKILL DEVELOPMENT INITIATIVES AND
MEASURES IN INDIA - A STUDY REPORT**

NOVEMBER 2013

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1. INDIA'S SKILLING MANDATE

A growing economy such as India requires a large pool of skilled workers. While India's population growth rate had declined over the last two decades, the labour force is projected to grow by close to 2 per cent; adding over 7 million per year for the next few years. Also, while the labour force is moving away from the traditional sector of agriculture, it still employs the highest percentage of the total labour force. As the workers migrate from the rural and predominantly agricultural sector to other urban sectors, India realises that it has the need for a well thought out and executed strategy to provide a new set of skills through vocational training in order to effectively absorb this additional workforce and sustain economic growth. However, it is necessary to also build a robust infrastructure of trainers and training institutes for the same.

The National Policy on Skill Development was approved by the Indian cabinet in February 2009 with the objective of creating a workforce that has improved skills, knowledge and internationally recognised qualifications that can result in gaining access to decent employment and enhancing India's competitiveness in the global labour market. The policy focuses on the following:

- Demand driven system guided by labour market signals in order to reduce skills mismatch
- Expansion of outreach using established as well as innovative approaches
- National Vocational Qualifications Framework, which will include opportunities for horizontal and vertical mobility between general and technical education, recognition and certification of competencies irrespective of mode of learning
- System to deliver competencies in line with nationally and internationally recognised standards
- Emerging occupations, pre-employment training and life-long learning
- Adequate participation of women, disabled persons and disadvantaged groups including economically backward classes and minorities, and enhancing their access to training; improving employability and increasing employment opportunities
- Stress on research, planning and monitoring
- Involvement of social partners with responsibility for managing and financing shared with all stakeholders and greater space for public-private partnerships (P-P-P)
- Promoting excellence and use of modern training technologies
- Skill up-gradation of trainers, quality assurance and improvement of status

The policy covers the following areas of skill development:

- Institution-based including ITIs, ITCs, vocational schools, technical schools, polytechnics and professional colleges
- Learning initiatives of different ministries and departments
- Formal and informal apprenticeships and other types of training by enterprises
- Training for self-employment or entrepreneurial development
- Adult learning and retraining of retired or retiring employees
- Informal training programmes, including those by civil society organisations
- E-learning, web-based learning and distance learning

2. GOVERNMENT'S COMMITMENT

Skill development is one of the priority agendas of the government for the 12th Five Year Plan. The government plans to set up sector skill councils (SSCs) to complement the existing vocational education system for the industry in meeting the entire value chain's requirements of appropriately trained manpower in quantity and quality across all levels on a sustained and evolving basis. SSCs are national partnership organisations that bring together all stakeholders – industry, labour and the academia. The SSC will operate as an autonomous body. It could be registered as a Sec 25 Co or Public Limited Co. Funding is initially done by the government. As it grows, the SSCs become self-funded, for-profit organisations.

The Planning Commission had made an allocation of Rs 22.1 billion (at 2006-07 prices) for the plan schemes of the Ministry of Labour & Employment during the 11th Five Year Plan (2007-12).

National Skill Development Council has been established with a central government commitment of Rs 10 billion and Rs 150 billion is envisaged to be generated from other governments, public sector entities, private sector players, bilateral and multilateral sources. The government has, however, further increased the allocation of funds in the Union Budget 2012-13 by Rs 10 billion, taking the total corpus to Rs 25 billion.

The government plans to launch an advertising campaign to popularise skills training and attract youngsters to vocational courses that will equip them for jobs in industries ranging from automobiles and auto components to retail and real estate. In the first year, the advertising campaign will run in the states of Maharashtra, Uttar Pradesh, West Bengal, Orissa and Tamil Nadu at an expected cost of Rs 420 million. In the 2013-14 annual budget, the government announced a Rs 10 billion corpus to give one million students Rs 10,000 each as an incentive to pursue skills training.

3. POTENTIAL SECTORS FOR SKILLING

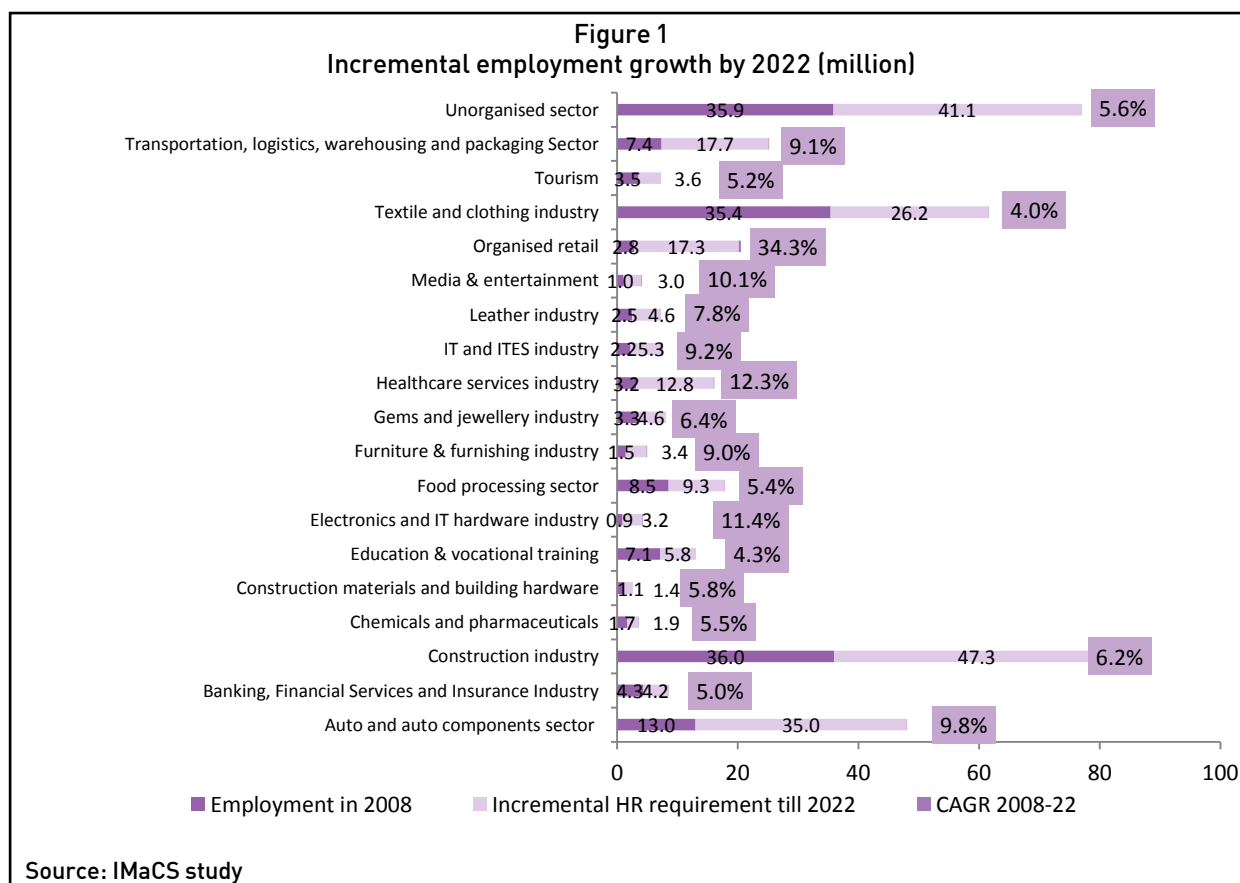
According to the Planning Commission, about 12.8 million people will join the labour market annually up to 2017. As the proportion of the working age group of 15-59 years increases, India has the advantage of a "demographic dividend". Harnessing the demographic dividend through appropriate skill development efforts would provide an opportunity to achieve inclusion and enhance productivity within the country and also effect a reduction in global skill shortages. More than 700 million Indians are estimated to enter the working age group by 2022, of which more than 500 million will require some form of vocational or skill training. Large scale skill development is thus an imminent imperative.

Table 1
Projected employment

Year	GDP growth rate	Projected employment (million)			
		Agriculture	Industry	Services	Total
	9%	229.2	105.0	153.5	487.7
2011-12	7%	225.4	102.0	149.0	476.4
	5%	221.5	99.1	144.6	465.2
	9%	240.2	126.2	189.5	555.9
2016-17	7%	232.0	116.8	174.8	523.5
	5%	224.0	108.1	161.2	493.3

Source: NSDC

The government has identified 20 high-growth sectors and services that have the ability to provide expanded employment in the coming years; of which 10 are in manufacturing and an equal number are in services. The most prominent sectors are manufacturing, textiles, construction, automotive and healthcare. It is necessary to develop proper skill training mechanisms, as the skill sets required in manufacturing and services sectors differ significantly from those required in the agriculture sector—the existing majority employer.



Construction industry, auto sector, textile, retail, transport, healthcare and the unorganised sector in general, are few of the highest employment generating sectors. Year-on-year growth in employment, however, is high in organised retail, healthcare, IT, electronics and media & entertainment.

Priority sectors identified in the 12th Five-Year-Plan

- Sectors that will create large employment: Textiles and garments, leather and footwear, gems and jewellery, food processing industries, handlooms and handicrafts.
- Sectors that will deepen technology capabilities in manufacturing: Machine tools, IT hardware and electronics.
- Sectors that will provide strategic security: Telecommunications equipment, aerospace, shipping, defence equipment.
- Manufacturing technology sectors for energy security: Solar energy, clean coal technologies, nuclear power generation.
- Capital equipment for India's infrastructure growth: Heavy electrical equipment, heavy transport, earth moving and mining equipment.
- Sectors where India has a competitive advantage: Automotive sectors, pharmaceutical and medical equipment.
- Micro, small and medium enterprises sector: The base for the manufacturing sector – employment and enterprise generation

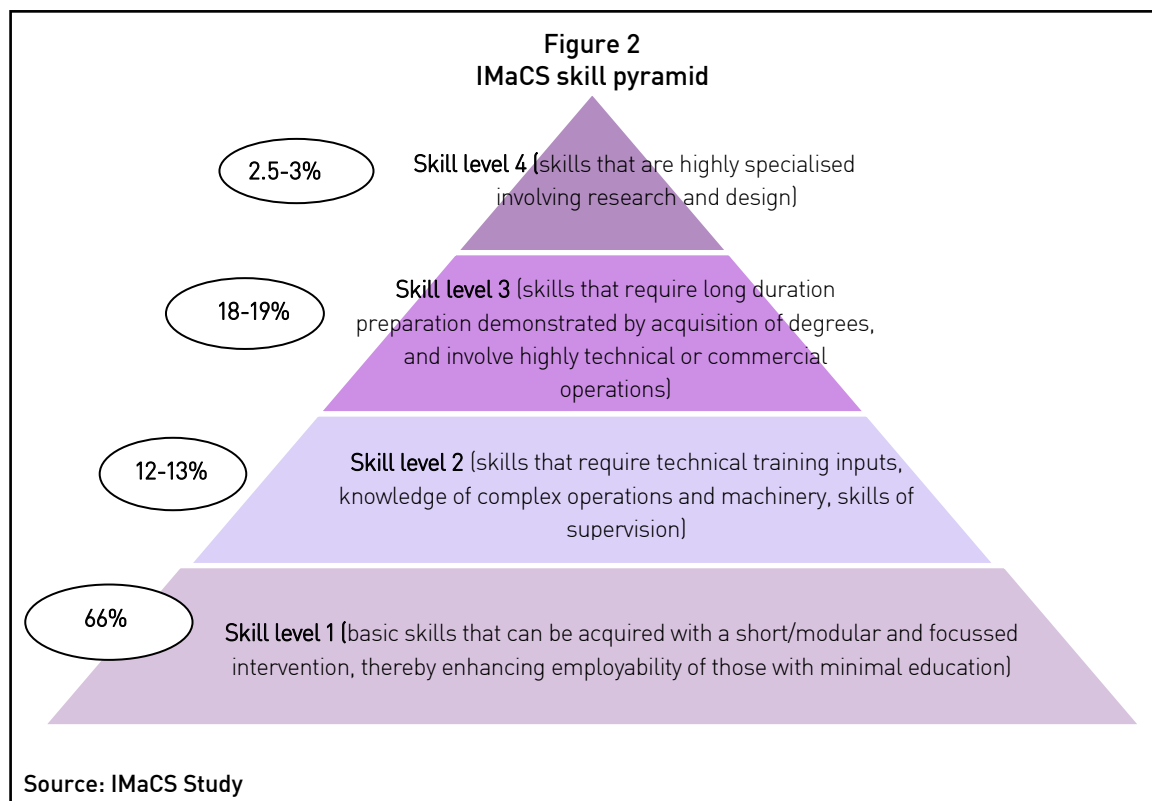
4. SKILL REQUIREMENTS IN THE SECTORS

Given that all the industries would require a varied profile of skill sets, the following section presents an overview of the skill requirements as derived from an IMaCS study of human resource requirements across different sectors.

Considering the diversity of skill requirements across various levels for construction, chemicals and pharmaceuticals, construction materials and building hardware, electronics and IT hardware industry, food processing sector, furniture & furnishing industry, gems and jewellery industry, leather industry, organised retail and textile and clothing industry; a skill pyramid for the industry as a whole has been created considering the weighted averages.

The skill pyramid, in summary, captures where the overall industry stands relatively in terms of skills (a function of activity, educational requirements and the amount of 'preparatory' time required to inculcate a specific skill).

As can be observed, the lower portion of the pyramid, 'Skill level 1', has the highest incremental requirement of human resources. It requires persons who are minimally educated, but can still handle simple and/or repetitive tasks (e.g., persons such as cutters, those engaged in polishing, etc). Such skills can also be attained in a lesser time duration as compared to engineering or ITI. Skill level 2 relates to areas where substantial skill building efforts would be needed (e.g., carpenters, electricians, welders, operators, plumbers).



In the 10 sectors listed below, as many as 370 million persons are required across various skill levels outlined above by 2022. Out of this, Skill level 1 accounts for over 66 per cent of the human resources with skilling requirements.

Table 2
Skill requirement across sectors

Segment	Skill level 1	Skill level 2	Skill level 3	Skill level 4	Total employment in 2022 in '000s
Construction industry	80-81%	14-15%	3-4%	1-2%	83,270
Chemicals and pharmaceuticals	20-25%	25-30%	44-45%	5-6%	3,548
Construction materials and building hardware	35-40%	40-45%	15-18%	2-5%	2,497
Electronics and IT hardware industry	19-21%	25-27%	49-50%	4-5%	4,129
Food processing sector	80-81%	9-10%	8-9%	1-2%	17,808
Furniture and furnishing industry	80%	12%	7%	1%	4,873
Gems and jewellery industry	74-75%	4-5%	18-20%	1-3%	7,943
Leather industry	88.5-89%	4-4.5%	6-6.5%	0.5-1%	7,139
Organised retail	50-53%	10-15%	30-33%	4-5%	17,625
Textile and clothing industry	85-86%	10-11%	3-3.5%	0.5-1%	61,600
Industry average	66.0%	12.6%	18.5%	2.9%	369,059

Source: IMaCS study

Sector-specific technical skills, machine operations and services are the main areas of skill gaps, i.e., where the industry demands skilling of personnel.

Table 3
Skills in demand in select sectors

Sector	Key skills in demand
Textiles and clothing	Power loom operators, apparel manufacturing, fashion design, QA, knitwear manufacturing, sewing machine operators
Building and construction industry	Crane operators, electricians, welders, masons, plumbers, carpenters, painters, etc.
Auto and auto components	Auto OEMs, auto component manufacturers, drivers, sales, servicing, repair, financial services sales, insurers/valuers
Organised retail	Shop floor executives, back-store operations, merchandising
Banking, financial services and insurance	Financial intermediaries (including direct selling agents), banking and insurance (including agents), NBFCs, mutual funds
Gems and jewellery	Jewellery fabrication, grading, faceting, polishing, cutting
IT and ITeS	IT – Software engineering, maintenance and application development, end-to-end solutions, infrastructure management, testing, etc. ITeS – BPO, KPO – Legal, medical, STM, analytics and research
Leather and leather goods	Tanning, cutting, clicking, stitching, lasting, finishing
Furniture and furnishings	Carpenters & operators engaged in stitching, sewing, stuffing
Electronics and IT hardware	Computers, telecom & consumer electronics; manufacturing, sales, servicing/after sales support of electronics goods; high-tech
Tourism and hospitality services	Front office staff, F&B services and kitchen and housekeeping staff, ticketing and sales, tour guides
Chemicals and pharmaceuticals	Industrial and chemical manufacturing attendants, process attendants, manufacturing assistants, lab attendants, equipment operators, sales personnel
Food processing sector	Operation of power machine, packaging, bakery, cold storage and transportation, ice-cream manufacturing, slaughtering, preservation techniques, disposal, drying/radiation, preparation of concentrates, manufacturing of edible oil
Healthcare	Doctors, nurses, technicians and paramedics
Media and entertainment	Directors, cinematographers, editors, script writers, artists, producers, sound designers/editors, animation – pre-production, animator, game developer, radio jockey
Transportation, logistics, warehousing and packaging	Truck drivers, loading supervisors, warehouse managers, pilots, aircraft maintenance, air traffic control, instructors, safety and security

Source: IMaCS study

5. INITIATIVES FOR SKILL DEVELOPMENT

About 20 ministries of the Union Government of India have created infrastructure for skill development in their respective areas. These ministries have either set up their own training centres in specific sectors (examples of such ministries include Ministry of Labour and Employment, Ministry of Agriculture, and Ministry of Health and Family Welfare) or provided subsidised training to specific target populations (examples of such ministries include Ministry of Rural Development, and Ministry of Women and Child Development).

Most state governments have also set up state skill development missions (SSDM) as nodal bodies to anchor the skill development agenda in the state. SSDMs are expected to play a significant role in escalating the pace of skilling. Their mandate pertains to identification of key sectors for skill development in the state, and enabling coordination between union ministries and state departments, as well as industry and private training organisations. Each state has adopted a structure of SSDM that best suits the local environment and its vision for skill development. While some states have formed the SSDM as a society or corporation under the Chief Secretary or Chief Minister, others have housed it under relevant departments such as labour, human resource development or planning. Many states are beginning to set year-wise targets for skill development, specifying the state budgetary allocation, and complementing government efforts by encouraging private investment.

According to the Planning Commission, there are 1,896 ITIs (under state governments), 1,244 polytechnics, 669 community polytechnics, 9,583 secondary schools with vocational education and training (VET) stream and 3,218 industrial training centres (ITCs) in the private sector. Besides, Ministries of Rural Development (RD), MSME, Health, Tourism and several others have their own training centres.

The Directorate General of Employment & Training (DGE&T) in the Ministry of Labour is the apex organisation for development and coordination at the national level for the programmes relating to vocational training.

The key training schemes that have been undertaken at the national level are:

- Craftsmen Training Scheme (CTS)
- Apprenticeship Training Scheme(ATS)
- Craft Instructors' Training Scheme(CITS)
- Advanced Vocational Training Scheme(AVTS)
- Supervisory/Foremen Training Scheme
- Staff Training and Research Programme
- Instructional Media Development Programme
- Women's Training Scheme
- Hi-Tech Training Scheme

Informal sector training

- Community Polytechnics training about 450,000 people a year within communities
- Jan Shikshan Sansthan offering 255 types of vocational courses to almost 1.5 million people, mostly women, and
- The National Institute of Open Schooling (NIOS) offering 85 courses through over 700 providers

recognised by the NIOS.

Ministry of Labour & Employment (MoLE) implements various vocational training schemes and imparts skill trainings. Two of the notable schemes are (i) Craftsmen Training Scheme (CTS) and (ii) Apprenticeship Training Scheme (ATS). These two schemes cover almost the entire array of vocational training activities under DGE&T.

Craftsman Training Scheme was initiated by DGE&T in 1950, which set up 50 industrial training institutes (ITIs) to impart skills in diverse vocational areas to meet manpower requirements for the technological and industrial growth of the country. Under this scheme, institutional training is provided through a network of 9,025 ITIs/ITCs (2,228 in government sector and 6,797 in the private sector) spread across various states and UTs with a total seating capacity of 1.3 million in more than 114 trades. The courses conducted by these institutes are open to youth in the age group of 14 to 40 years, who have passed either Class VIII or X depending on the trade and are of 6 months, 1 or 2 years duration; which varies from course to course.

In order to supplement the efforts taken under the CTS, The Apprentice Act, 1961 was enacted for governing apprenticeship trainings dealing with employers in public and private sector establishments. The major apprenticeship types are: Trade apprentices, graduate apprentices, technician apprentices and technician (vocational) apprentices. As per the latest information available, 254 groups of industries are covered under the Act. About 25,500 establishments engage apprentices and 235 trades in 37 groups have been designated. Educational qualifications vary from Class VIII pass to XII pass. The minimum age required is 14 years and the duration of training varies from 6 months to 4 years. As mentioned in the Annual Plan 2009-10 and 2010-11, a sub-committee was formed to examine the apprenticeship regime in the country to make appropriate changes in The Apprenticeship Act, 1961. MoLE is taking steps to move a proposal for the Union Cabinet for various amendments in the Apprenticeship Act, 1961.

Khadi and Village Industries Commission (KVIC) conducts and facilitates training in numerous kinds of courses. These courses range from a couple of weeks to 2 years in duration.

Ministry of Tribal Affairs' initiatives include working through non-governmental organisations or voluntary organisations in providing professional coaching institutions for ST students to appear in competitive examinations.

In April 1999, the Ministry of Rural Development (MoRD) launched the Swarnjayanti Gram Swarozgar Yojana (SGSY) to ensure inclusion of the rural poor in the growth of the nation. It aims to bring the assisted families above the poverty line by ensuring an appreciable sustained level of income over a period of time.

The Department of Information Technology, through its Human Resource Development Division, has started initiatives aimed at ensuring availability of trained human resources for the manufacturing and service sectors of the electronics and IT industries. The initiatives include identifying gaps emerging from the formal sector and planning programmes in the informal and formal sectors for meeting these gaps.

Table 4
Ministry-wise targets for skill development

Ministry/Department/Organisation	Target for 2013-14 (persons)
Ministry of Labour & Employment	2.5
Ministry of Labour & Employment	14,00,000
Ministry of Agriculture	12,00,000
National Skill Development Corporation	10,00,000
Ministry of Rural Development	8,00,000
Ministry of Micro, Small & Medium Enterprises	6,50,000
Department of Higher Education (MHRD)	5,44,000
Department of Electronics & Information Technology	5,10,000
Ministry of Housing & Urban Poverty Alleviation	4,00,000
Ministry of Women & Child Development	1,50,020
Ministry of Textiles	1,50,000
Ministry of Social Justice & Empowerment	1,21,400
Ministry of Tourism	67,300
Ministry of Tribal Affairs	60,000
Ministry of Home Affairs	58,000
Ministry of Road Transport and Highways	56,000
Ministry of Chemicals & Fertilisers	39,000
Ministry of Commerce and Industry	35,000
Department of Heavy Industry	30,000
Ministry of Minority Affairs	5,000
Ministry of Development of North Eastern Region	4,000
Ministry of Food Processing Industries	3,000
TOTAL	72,82,720

Source: Office of Adviser to the PM - National Council on Skill Development

Most state governments have also set up SSDMs as nodal bodies to anchor the skill development agenda in the state. State governments have been actively promoting vocational training by forging alliances with private partners and creating employment opportunities for the state population.

In the past few years, certain initiatives taken by a few states have been appreciated by various agencies and been replicated by other states. A few of such initiatives are mentioned in the table below.

Table 5
Key initiatives taken by certain states for skill development

State	Skill Development Initiative
Karnataka	<ul style="list-style-type: none"> Converted district employment exchanges into human resource development centres with services like career counselling, training for soft skills as well as placement Entered into Memorandums of Understanding (MoUs) with foreign universities/institutes for training of trainers with international certification
Gujarat	<ul style="list-style-type: none"> Skill voucher scheme to induce competition among training providers and provide choices to trainees Kaushalya Vardhan Kendra for dealing with women specific soft skills training useful to local requirements
Andhra Pradesh	<ul style="list-style-type: none"> Biometric attendance check for monitoring trainees Setting up of Mission/Sub-Missions with targeted beneficiaries
Madhya Pradesh	<ul style="list-style-type: none"> ITIs/ITCs rating based on the certain performance parameters Training housemaids to use kitchen appliances and cooking
Rajasthan	<ul style="list-style-type: none"> Providing training in remote areas using mobile vans Developed e-learning material in local language
Haryana	<ul style="list-style-type: none"> Use of 'video recording' for Assessment under SDI Scheme, to cross verify the genuineness of assessment before result declaration
Kerala	<ul style="list-style-type: none"> Focus on training specific to local requirements/resources like services sector, precision farming, nanotechnology, etc.
Orissa	<ul style="list-style-type: none"> Fixing minimum placement requirement for selecting training providers and giving bonus for higher placement above the minimum requirement

Source: Planning Commission; IMaCS Analysis

A few of these initiatives are discussed below.

Kaushalya Vardhan Kendra (KVK) Project of Gujarat:

The Commissionerate of Employment & Training, Government of Gujarat implements various skill-building programmes with the objective of employment, which would in-turn facilitate industrial development. One of the key schemes launched for skill development has been the Kaushalya Vardhan Kendra (KVK). It is an institution to impart desired skill training at the door steps of the rural population. The main thought behind KVK was that if the trainees did not go to the institutes, the institutes should go to the trainees.

The main purpose of the KVK scheme was to:

- Skill and empower rural youth, adolescent girls and housewives
- Rehabilitate school drop outs
- Train the manpower on hard as well as soft skills to meet industry requirements
- Promote entrepreneurship
- Increase employability through certification

KVK adopted the WISH approach in deciding its courses:

W – Women-oriented courses, such as beauty related courses

I – Industry-specific courses, such as mobile repairing course

S- Soft skill related courses, such as basic computer training

H- Hard core traditional courses, such as welding course

Besides these, it also has various life skill courses such as cloth bag making, bed making with rope, table making, and pesticide spraying.

Each course has a nominal fee of US\$ 1 and is free for SC/ST/women/PH and BPL trainees, which has been one of the key success factors of the scheme. At the same time, there is no upper age limit for candidates. All KVKs have direct-to-home (DTH) connections for regular lectures. The DTH has been arranged through Bhaskaracharya Institute for Space Applications and Geo informatics (BISAG).

Today, there are 335 KVKs in Gujarat. From August 2010 up to May 2013, KVKs have trained 852,597 youth of which 511,162 are women (59.95 per cent). The main achievement of this scheme is the increase in women's participation in skill-related courses.

Considering the success of the scheme, KVK project of Gujarat has been awarded 'the Prime Minister's Award for Excellence in Public Administration' for year 2011-12. Also, after an intense review of Gujarat's KVK model, the Planning Commission and Labour Ministry have decided that the KVK model is appropriate for designing PPP architecture for setting up 5,000 skill development centres across India.

Kerala Academy for Skills Excellence (KASE) by Kerala:

The Kerala Academy for Skills Excellence (KASE) has been set up as a non-profit company, fully owned by the Government of Kerala as an apex institution to initiate, implement, regulate and coordinate focused specialty skill development initiatives for different industry domains in the state such as construction, retail, finance, IT & ITeS, tourism, and hospitality. It proposes to form separate special purpose vehicles (SPVs) using the PPP model under an apex body.

Keeping in mind the market demand for construction workers in Kerala, especially, for working in the GCC countries, the first SPV formed under KASE was the Construction Academy in Chavara, with the objective of conducting courses for the skill development of construction workers across all categories – from carpenter, plumber, electrician to draftsmen with CAD expertise, supervisors and site managers. Using the hub and spoke model, this academy is expected to be rolled out in all the 14 districts of the state within next two years. It aims at skilling about 45,000-50,000 labour every year.

The other SPVs floated under KASE, include forming a Multi Skill Development Centre (in partnership with Smart city, Kochi) which aims to skill about 40,000 people per year; Kerala State Institute of Design (KSID), which aims to promote design education and enhance use of technology, management, creativity and design skills among the youth of the state; and employability centres with the aim to test and assess the skill level and aptitude of the youth and get them employment accordingly.

Industry initiatives (private sector)

In the private sector, initiatives for skill development have been undertaken by industry associations, industry players as well as international players.

Industry associations are also involved in skill development initiatives. For example, FICCI launched The FICCI Skills Development Forum (SDF) in 2008 to supplement government initiatives with industry interventions and international collaborations. CII has skill development projects running across the rural and urban areas of the country. It has successfully completed over 20 projects and currently has several projects running in the rural areas of Maharashtra, Andhra Pradesh, Rajasthan, Haryana, Tamil Nadu and Punjab. It has taken up 'skills gap' studies across states and sectors, and also taken up skill development beyond borders in countries like Afghanistan.

Company	Initiative taken
Canara Bank	<p>Training, production and marketing centre</p> <ul style="list-style-type: none"> ▪ First promoted Training, Production and Marketing Centre in 1991 at Jogaradoddi, Karnataka State. ▪ Imparts free residential long-term skill-EDP training in traditional crafts such as wood and stone carving, sheet metal embossing, and terracotta. ▪ Training provided to artisans under the supervision of master craftsmen, to pursue crafts as a profession. ▪ Trainees should be in the age group of 18-35 with minimum educational qualification of 8th std. ▪ Preference: To applicants from rural areas, Scheduled Castes/Scheduled Tribes and weaker sections of society. ▪ Inspired by its success, Canara bank opened centres in Karkala, North Karnataka in 1997 and Karaikudi, Tamil Nadu in 2005
Taj Hotels	<p>Started corporate sustainability initiative in India. Taj Hotels initiative undertakes the following action plan:</p> <ul style="list-style-type: none"> • Identification of villages • Provision of food • Organisation of health camps • Distribution of glasses, solar powered lamps and water pumps • Finance for repairing looms • Repayable advance for the design of Jacquard cards etc. <p>Outcome: The weavers earn about US\$ 36 per saree, against US\$ 16 earlier. They make more than 5 sarees a month (7 days per saree compared to 15 days earlier) and earn about US\$ 180 per month.</p>

Source: News reports: IMaCS Research

6. CONCLUSION

As the workers migrate from the rural and predominantly agricultural sector to other urban sectors, India realises that it has the need for a well thought out and executed strategy to provide a new set of skills through vocational training in order to effectively absorb this additional workforce and sustain

economic growth. However, it is necessary to also build a robust infrastructure of trainers and training institutes for the same.

Realising the need for skill development Government of India has taken several initiatives such as:

- Setting up institutional capacity: NSDC and Sector Skill Councils
- Increasing the vocational training institution network
- Launching various schemes for skill development
- Identifying potential employment demand industries

The government has identified 20 high-growth sectors and services that have the ability to provide expanded employment in the coming years. Of these, 10 each are in manufacturing and services. Depending on the type of industry, the skill requirements fall in different levels ranging from one to four. In the key sectors identified, Skill level-1 accounts for over 66 per cent of the human resources with skilling requirements. Hence, it is of crucial importance to impart basic entry level training to a large number of work-force in order to make them employable.

In addition, state governments and other stakeholders such as industry associations, international organisations, and industry players are also contributing via various types of financial aid, schemes and programmes in order to achieve the skill development objective.

7. ANNEXURE

Sl. No	Ministry/ Department	Schemes/Programmes/ Institutions having provision for vocational education and training programme	Target group	Duration of training (long-term / short-term)
1	Agriculture	Training in agricultural extension (21 training centres), training in use of agricultural implements & machinery, soil conservation training centre, LFQC&TI, NPPTI, cooperative education and training	Persons engaged in agricultural institutions and support services, members of cooperatives and farmers. Under KVK, 550/589 districts are covered	Short term courses
		Under the university stream, various under-graduate, post-graduate and PhD courses are offered (DARE)	Students with qualifications as usual under university stream of education	UG courses – 4 years, PG courses – 2 years and PhD as usual

		There is one central agricultural university, thirty-one state agricultural universities (SAUs) and four national institutes of Indian Council of Agricultural Research having the status of deemed university	Students with qualifications as usual	As usual
		ICAR also arranges need-based training programmes in any of state agricultural universities or ICAR institutes in new and emerging areas	Individual scientists or groups of scientists	One week to three months (or longer duration, as fixed)
		CIFNET – regular courses and special training courses	10 th standard students	6-18 months
		CIFNET – refresher courses	Lecturers/in-service	4 weeks
2	Food processing industries	Grants were provided to NGOs for setting up of 326 food processing & training centres (FPTCs) during 1992-93 to 2000-01	Persons living in rural areas with preference being given to women, SC, ST and other weaker sections of society	
		Institutions like Central Food Technology Research Institute, Paddy Processing Research Centre, PHTC, Council of Entrepreneurial Development Programme (EDP) are also running training courses	Mainly persons in food processing industry	Short term
		Person power development in rural areas (FBTC Scheme)	Open	Short term
		Entrepreneurship development programme	Open	Short term
		Programmes for development of human resources in food processing, testing, training, quality management etc.	Candidates aspiring to be managers, technician/ technologists and entrepreneurs	AICTE approved diploma/degree courses durations as usual (long-term)
3	Health & family welfare	Basic training of multi-purpose health worker (female & male) * 478 ANM/ MPW(F) training centres * 28 HFWTC & 30 basic MPWA(M) schools	Educated youth with minimum 10 th pass -	12 to 18 months

		Promotional training of female health assistant in 42 training centres. Training is also provided by Safdarjung Hospital, St. John Ambulance, NTCP, NPCB, NMHP, NACP, INC, CBHI, CLTRI, PWTRC, ECH etc.	Persons working in health & family welfare programme	Short term
4	Heavy industries & public enterprises	Counselling, retraining and redeployment of rationalised workers of CPSEs (Formerly NRF)	Workers who opt for voluntary retirement, rendered surplus or retrenched from CPSEs	Short term courses
5	Human Resource Development	Vocationalisation of secondary education (6800 schools covered)	Student having passed 10 th class	2 years
		Polytechnics (1244) + institutions for diploma in pharmacy (415), hotel management (63), architecture (25)	10 th pass	3 years diploma
		Community Polytechnic Scheme (675 CPs)	Poorer sections of society in both rural and urban areas	(3 to 6 months)
		Jan Shikshan Sansthan (157 vocational training centres run by NGOs offering more than 250 courses)	Disadvantaged groups of adults. Priority is given to adult neo-literates/ semi-literates, SC and ST, women/girls, oppressed, migrants, slum/ pavement dwellers and working children	Need-based (1- 4 weeks)
		Support for distance education & web-based learning (NPTEL)	Engineering and physical sciences under-graduates/post graduates in the country; all teachers/faculties in science and engineering universities in India	(Designing course material – time-bound project)
		National Institute of Open Schooling - distance vocational education programmes [practical training through accredited vocational institutes (AVIs)]	School leavers with 5 th , 7 th , 8 th and 10 th pass	6 months to 2 years
		Apprenticeship training for student of +2 vocational stream	Students passing out of +2 vocational stream	One year

		National Programme on Earthquake Engineering Education (NPEEE)	Recognised engineering colleges/ polytechnics and schools of architecture having related academic degree or diploma programme	Faculty development through short-term crash programmes and long-term programmes
6	Information technology	DOEACC – 'O'level	Students or working persons with 10+2 pass	Flexible duration for passing examination
		CEDTI	It conducts courses in the field of electronics, telecommunications, IT, process control & instrumentation	Short term courses
7	Labour & employment (DGET)	Craftsmen Training Scheme (CTS) (6834 ITI/ITCs)	School leavers with 8 th , 10 th and 12 th pass	Six months to three years
		Apprenticeship Training Scheme (ATS) (23,800 establishments)	School leavers with 8 th , 10 th and 12 th pass or national trade certificate holder	Six months to four years
		Modular Employable Skills (MES)	School drop outs and unorganised sector workers	Short term (60 hrs to 1000 hrs)
		Crafts Instructor Training Scheme (CITS) (6 Institutes)	Instructors of ITIs/ITCs	1 year
		Advanced vocational training scheme and hi-tech training scheme (65 centres)	Industrial workers/ technicians	Short term courses
		Supervisory training (2 institutes)	Supervisors from Industry	Long and short term
		Women training institutes(11 institutes)	Women (school leavers, instructors and others)	Long and short term
		Central staff training and research institute	Training executives and principals	Short term
8	Rural development	National Institute of Rural Development (NIRD) conducts about 150 programmes	Practising manager in rural development	Short term courses

		Swarnjayanti Gram Swarozgar Yojana (SGSY)	Focus is on the vulnerable groups among the rural poor. SC/ STs would account for a minimum of 50%, women for 20% and disabled for 3% of the total swarozgar during a year	Need-based short term
		RUDSETIS trains about 1.25 lakh per annum		Short term
		Skill development of BPL @50000 per annum		Short term
9	MSME [Small Industries Development Organisation (SIDO)]	Entrepreneurship Development Programme, Skill Development Programme (SDP), Management Development Programme	<ul style="list-style-type: none"> * Workers * Educated unemployed youth * Entrepreneurs 	Both short term and long term
10	Khadi & Village Industries Commission under Ministry of MSME	51 training centres run 35 types of programmes	Unemployed rural youth, in-job artisans/supervisors working in KVI institutes, prospective entrepreneurs, beneficiaries of different government schemes desirous of undertaking KVI activities	2 months to 12 months
11	Social justice & empowerment	National Institute of Mentally Handicapped, National Institute for the Orthopaedic Handicapped, Institute for Physically Handicapped, National Institute for the Hearing Handicapped, National Handicapped Finance and Development Corporation, National Scheme of Liberation and Rehabilitation of Scavengers and their Dependents, National Scheduled Castes and Scheduled Tribes Finance and Development Corporation, Rehabilitation Council of India	Disadvantaged and marginalized sections of the society viz., SC, minorities, BC, persons with disabilities, aged persons, street children and victims of drug abuse etc.	<ul style="list-style-type: none"> * Short term training upto six months duration * Orientation programmes upto one week duration

12	Textiles	Decentralised training programme, 24 weavers' service centres, cooperative training, 13 power loom centres, Indian Jute Industries Research Association, Central Wool Development Board, Central Silk Board, training centres for handicrafts, North-eastern Handicrafts and Handlooms Development Corporation	Skill up-gradation of workers in textile industry	* Mainly short term (15 days to 3 months) * Some courses under handicrafts are of 1 year duration
		Apparel Export Promotion Council (AEPC)	Workers in garment Industry	3 months to 1 year
13	Tourism	15 food craft institutes under state governments	10 th pass	6 months – 1 year
14	Tribal affairs	Vocational training centres (VTC) in tribal areas. (100% central assistance is given to state/UT/NGO for setting up VTCs)	Unemployed tribal youth (each person is given training in two trades)	6 months in VTC and 6 months with master craftsmen
15	Urban development & poverty alleviation	Urban self-employment programme under Swarnajayanti Shahari Rozgar Yojana (SJSRY)	Urban unemployed or underemployed poor below poverty line	Short term (2-6 months) subject to minimum 300 hours
16	HUDCO & others in construction sector under Ministry of Urban Development & Planning Commission	640 building centres (HUDCO)	Persons engaged in construction industry	Short term courses
		Company-run schools (NBCC HCC, L&T, ECC etc.) & associations etc.		Short term courses
		Construction Industry Development Council (CIDC) & others	Worker & supervisor having qualification of V th to XII th Standard	1 month to 6 months
17	Women & child development	Support to Training & Employment Programme for Women (STEP)	To provide updated skills and new knowledge to poor and asset-less women in traditional sectors	Short term courses
		Swawlamban (previously NORAD)	To train poor women mostly in non-traditional trades	

		Training in home scale preservation of fruits and vegetables, (by Community Food and Nutrition Extension Units (CFNEUs)	Housewives and adolescent girls with a view to promote preservation and consumption of fruits and vegetables, which provide much needed micronutrients, as well as to provide necessary skills, which could be useful for income generation purposes	Two weeks
		Central Social Welfare Board (programmes are organised by voluntary organisations)	To train women in marketable trades and also to upgrade their skills for getting remunerative employment opportunities	
		Women Empowerment Programme in collaboration with IGNOU (training programme on “Empowering women through SHG”)	To organise women into effective self-help groups	
		Kishori Shakti Yojana	To train and equip adolescent girls to improve home-based and vocational skills	
		Other programmes like UDISHA, Training of Anganwadi workers, NIPCCB, Rashtriya Mahila Kosh etc		Minimum 60 days

Source: National Skill Development Policy, IMaCS analysis

Table 8
Plan provisions and expenditure (US\$ million)

S. No	Name of the scheme	11 th Plan outlay (2007-12)	Annual plan 2007-08		Annual plan 2008-09		Annual plan 2009-10		Annual plan 2010-11
			Approved	Actual	Approved	Actual	Approved	Actual	Approved
1	DGE&T	184.0	229.1	241.4	209.2	240.9	252.0	248.7	90.9#
2	Occupational health & safety (DGMS & DGFASLI)	12.5	1.5	1.3	3.7	2.8	3.4	3.0	5.0
3	Industrial relations	9.2	1.3	1.2	1.9	1.6	1.4	1.7	2.6
4	Child labour	128.7	33.9	34.6	32.6	35.1	22.2	21.2	30.0
5	Women labour (merged with scheme No 11 from 2008-09)	0.5	0.1	0.1	-	-	-	-	-
6	Labour statistics	8.4	1.2	1.9	1.8	1.8	2.0	2.0	4.5
7	National Labour Institute (NLI)	4.9	1.0	1.1	1.0	1.1	1.1	0.9	1.0
8	Grants-in-aid scheme for research studies	0.3	0.0	0.0	0.2	0.1	0.1	0.1	0.2
9	Workers' education	9.8	1.8	2.1	1.8	2.1	2.0	2.0	2.1
10	Rehabilitation of bonded labour	2.9	0.3	0.2	0.2	0.3	0.2	0.2	0.2
11	Information technology	2.0	0.3	0.3	0.3	0.3	0.1	0.1	0.2
12	Social security for unorganised sector workers and health insurance for unorganised sector workers	127.7	0.3	0.2	45.3	22.6	77.8	58.8	77.8
13	Lump sum provision for NE	0.0	5.9	0.0	18.9	0.0	-20.0@	-	22.2@
	Total	491.1	277.8	284.5	316.9	308.5	362.4	338.6	214.5

Source : Planning Commission

#This does not include amount provided by the Ministry of Finance for up-gradation of 1,396 government ITIs and civil work components. @This amount has been included in different schemes.

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