Infrastructure Development Department (IDD) GOVERNMENT OF KARNATAKA

Institutional Strengthening & Sector Inventory for PPP Mainstreaming in Education

> Pre-Feasibility Report Institutional Structuring of Vocational Training in Karnataka



ICRA Management Consulting Services Limited



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Chapter 1: Introduction

1.1 Background

The Infrastructure Development Department (IDD) of Government of Karnataka has initiated the process of exploring Public – Private – Partnership (PPP) opportunities in Karnataka in several sectors including education. To achieve its objective, it had invited proposals from empanelled consultants for "Institutional Strengthening and Sector Specific Inventory for PPP Mainstreaming". Through a competitive bidding process, ICRA Management Consulting Services (IMaCS) was awarded the project for education. IMaCS has conducted five pre-feasibility studies for exploring PPP opportunities in education in Karnataka.

In this report, we are focusing on Vocational Training. We have conducted the study through a combination of primary and secondary research. We held detailed discussions with key stakeholders in vocational training including the government, potential investors, vocational training providers, and youths. The secondary research comprise of analysis of the global trend in vocational training initiatives, global PPP models in vocational training and PPP models in India.

1.2 Project idea

Karnataka contributes to around 6% of India's GDP. Skill and knowledge being the fundamentals of social and economic development, Government of Karnataka has taken various skill development initiatives. Karnataka has a total population of 6.11 crore in the year 2011 out of which around 20% to 22% are in the age group of 5 to 15 and around 60% in working age population. Karnataka with a dropout rate of 49% happening at various stages between standard one to ten, has potential opportunity for vocational training to bring back the students who have got out of the formal education system and also to up skill the existing workforce to meet the industry requirement. Other key issues highlighting the need for large-scale vocational training initiatives are:

- The huge number of people added to the workforce each year and their low preparedness to avail the emerging employment opportunities make the issue of vocational education self evident.
- The rest either are fresh hands they come into the workforce untrained, or are trained by the employer on the job.
- Migration of agricultural labour to manufacturing and service industry

Despite of availability of policy thrust and a number of initiatives government faces challenges in the areas such as reducing the demand and supply mismatch, diversifying the skill development initiatives to



meet the changing requirement of knowledge economy, ensuring quality and relevance of training, building the required competencies, promoting active involvement of private players through PPP models, etc.

In order to take the emphasis laid on encouraging private sector investments in vocational training and on PPP based innovative models to the next level; there is a need for institutional framework to play an advisory role and to facilitate the PPP initiatives in vocational training. Given this context, it is proposed to create/explore an institutional mechanism to play as a catalyst in vocational training.

1.3. Approach and Methodology

Approach



Module 1: Assessment of vocational training segment

The objective of this module is to assess the key trends that are driving the vocational education sector, both in India and globally. This included a comprehensive analysis of the vocational education sector to observe the trends exhibited recently. The national scenario will be analyzed in terms of challenges faced and opportunities available following which Karnataka vocational training sector is analyzed.

The outcome of this module is to map all the trends that pinpoint to the successful establishment of PPP models in vocational training and what is the need of Karnataka in vocational training space.

Module 2: Assessment of existing PPP models

Under this module, the existing PPP models in vocational training sector are mapped out. Countries considered for comparison are:

- Australia
- Germany
- United Kingdom



Singapore, etc

The outcome of this module will help us in understanding the successful PPP models in vocational training that can be used in Karnataka.

Module 3: Structuring of new PPP model

This module aims to structure the PPP model for Karnataka to meet the demand supply gap.

Methodology

Primary research was in the form of interaction with stakeholders. The stakeholders met were the youth, potential investors and the government. The primary survey was conducted to understand some of the key factors pertaining to the education like:

- Vocational training scenario in Karnataka
- Challenges faced in vocational training
- Understanding possible areas of private sector intervention in vocational training space
- Stakeholders expectation in vocational training
- The market opportunities

Secondary research was undertaken to understand various vocational training initiatives in the world.



Chapter 2: Sector Profile

2.1 Sector overview

India's Gross Domestic Product (GDP) has grown at a rate of in 8.4% in the last 2 years. GDP growth rate is expected to decrease to 6.9% in 2011-12, primarily due to deceleration in industrial growth. Some of the other reason contributing to slow growth rate are intensification of debt crises in Euro zone, political instability in Middle East, rise crude oil price and earthquake in Japan.

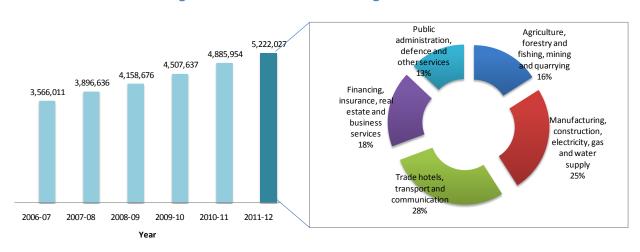


Figure 1: Gross Domestic Product growth in India

Source: Economic Survey 2012 and Budget 2012-13

However, in order to achieve the twin targets of economic growth, twelfth five year plan aims for build "faster, sustainable and more inclusive growth". This requires significant progress in several areas, including infrastructure development, agricultural growth coupled with productivity improvements, financial sector growth, a healthy business environment, ably supported by a skilled workforce.

The agriculture sector accounts for about 16% of the economy. The secondary and tertiary sectors account for about 25% and 59% respectively. For the economy to grow at 8% to 9%, it is required that the secondary and tertiary sectors grow at 10% to 11%, assuming agriculture grows at 4%. In such a scenario, it is obvious that a large portion of the workforce would migrate from the primary sector (agriculture) to the secondary and tertiary sectors. However, the skill sets that are required in the manufacturing and service sectors are quite different from those in the agriculture sector. This implies that there is/will be a large skill gap when such a migration occurs, as evidenced by a shrinking employment in the agriculture sector. This scenario necessitates skill development in the workforce.



Out of the current workforce of about 450 million¹, only about 8% to 9% are engaged in the organised/formal sector. As per the Census 2001, work participation rate² in India is around 39%. About 30% of the total population is main workers³, while marginal workers⁴ comprise of 9% of the population. Majority of the main workers are male (77%) while majority of the marginal workers are female (61%).

	Males	Females	Illiterate	Literate but below	Matric but below	Graduate and
				matric	graduate	above
Agriculture, Hunting, Forestry and Fishing	55%	45%	48%	38%	10%	5%
Mining and Quarrying	84%	16%	44%	34%	15%	8%
Manufacturing and Repairs	52%	48%	43%	40%	12%	5%
Electricity, Gas and Water Supply	96%	4%	7%	33%	41%	19%
Construction	89%	11%	36%	44%	14%	5%
Wholesale and Retail Trade	92%	8%	17%	41%	30%	13%
Hotels and Restaurants	90%	10%	20%	50%	22%	8%
Transport, Storage and Communications	97%	3%	19%	43%	28%	10%
Financial Intermediation, Real Estate, Renting	87%	13%	6%	18%	30%	46%
and Business Activities	6776	1370	0%	1070	30%	40%
Public Administration, Defence, etc	73%	27%	16%	24%	31%	30%

Table 1: NIC classification wise distribution of workers

Source: Census, 2001 and IMaCS Analysis

It is expected that the employment in the economy will be about 500 million by 2022. Out of this, the employment in the manufacturing and services sector would be in excess of 250 million persons. The high growth sectors identified by Planning Commission in XI Five Year Plan that are expected to generate employment opportunities are:

- 1. Automobile and Auto Components
- 2. Banking, Financial Services, and Insurance
- 3. Building and Construction Industry
- 4. Chemicals and Pharmaceuticals
- 5. Construction Materials and Building Hardware
- 6. Education and Skill Development Services
- 7. Electronics Hardware
- 8. Food Processing/Cold Storage/Refrigeration
- 9. Furniture and Furnishings
- 10. Gems and Jewellery
- 11. Healthcare Services

¹ National Commission for Enterprises in the Unorganised Sector – 2009

² Total workers (i.e., main + marginal workers) as a percentage of total population

³ Main workers are those who had worked for a major part of the reference period (i.e., six months or more).

⁴ Marginal workers are those who had not worked for a major part of the reference period (i.e., less than six months).



- 12. ITES/BPO
- 13. IT Services and Products
- 14. Leather and Leather Goods
- 15. Media and Entertainment
- 16. Organised Retail
- 17. Real Estate Services
- 18. Textiles, Apparels, and Garments
- 19. Tourism, Hospitality, and Travel Trade
- 20. Transportation, Logistics, Warehousing, Packaging, etc.

Distribution of human resource requirement across the above listed sectors is illustratively exhibited in the below Figure

Figure 2: Illustrative human resource requirements across select sectors till 2022 (in million)





Whereas, in India only 5% of the labour force in the age group of 20-24 years has obtained formal vocational training as compared to 50% to 60%⁵ in other countries. While the dropout rate is 53%⁶ at different stages among the students undergoing schooling, capacity available on a yearly basis for training under various Ministries and Departments of Government of India is around 3.1 million only. Collectively various government schemes are able to cover only 20% of the annual additions to labour

⁵ Planning Commission

⁶ Statistics of School Education, 2009-10-P



force. It has been observed by Government that large portion of school dropouts do not have accesses to vocational training. Thus to create a workforce with improved skills and to ensure India's competitiveness in Global Labour Market lots of initiatives have been taken by Government

2.2 Vocational training in India

To generate skilled human resource and to support the economic growth, National Policy for Skill Development has been formulated by the Ministry of Labour and Employment, and has been approved by Cabinet in the year 2009. The policy aims to create 500 million skilled workforces by 2020 and 15 million people every year, to meet the requirement of both organised and unorganised sector.

National Skill Development Policy

The key features of the policy are as follows:

- Demand driven system guided by labour market signals thereby reducing skills mismatch
- Expansion of outreach using established as well as innovative approaches
- National Vocational Qualifications Framework which will, interalia 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 recognized standards
- Focus on new emerging occupations
- Focus on pre-employment training and lifelong learning
- Equity consideration adequate participation of women, disabled persons and disadvantaged groups including economically backward and minorities – enhancing their access to training; improving employability and increasing employment opportunities
- Stress on research, planning and monitoring
- Involvement of social partners responsibility for management and financing of the system would be shared with all stakeholders and provide greater space for Public Private Partnership
- Promoting excellence
- Use of modern training technologies including distance learning, e-learning, web based learning, etc
- Skill upgradation of trainers, their quality assurance, and improvement of status

A three tier structure consisting of The Prime Minister's National Council on Skill Development, National Skill Development Coordination Board and National Skill Development Corporation is constituted to set vision, formulate core strategies and to coordinate skill development activities happening at Public and Private sector level.



The Prime Minister's National Council on Skill Development

- Apex of the three tier structure
- Vision setting and to lay down core strategies

National Skill Development Coordination Board

- To formulate strategies to implement the decisions of the Prime Minister's National Council on Skill Development and to develop operational guidelines and instructions for meeting skill development needs of the country
- To make appropriate solutions and strategies to address various concerns such as Regional imbalances, Socio-economic, rural-urban, gender divides:
 - Dearth of quality teachers and to ensure investments are fully utilized
 - Integration of existing regulatory institutions
 - Incentivising / making it obligatory for private sector to develop skills, more than captive requirements
 - Apprentice training / on-the-job training for addressing unemployment problems
 - Ensure that each sectoral and temporal Action Plans should build-in long term measures with a self-corrective mechanism.
- Encourage the state governments to put their activities in such structures that may be modeled along similar lines or in any other way as deemed suitable by the State Governments
- Assessment of skill deficits sector wise and region wise and plan action so as to bridge the gaps, and move towards the establishment of a "National Skill Inventory" and another "National Database for Skill Deficiency Mapping" on a national web portal
- Coordinate and facilitate the repositioning of Employment Exchanges as carrier counseling centers
- Coordinate the establishment of a "Credible accreditation system" and a "guidance framework" for all accrediting agencies, set up by various Ministries and/or by private players
- Monitor, evaluate and analyze the outcomes of the various schemes and programmes and apprise the Apex Committee of the same.

National Skill Development Corporation

- Mandated to skill 30% of targeted 500 million by 2022
- To develop partnerships with multiple stakeholders and build on current efforts



- Funding and incentivising private sector initiatives towards skilling and building a sustainable business models
- Setting up standards and accreditation systems in partnership with industry associations.
- Identify critical skill groups, develop models for skill development and attract potential private players and provide support to these efforts.

Current vocational skill training structure in India is given below:

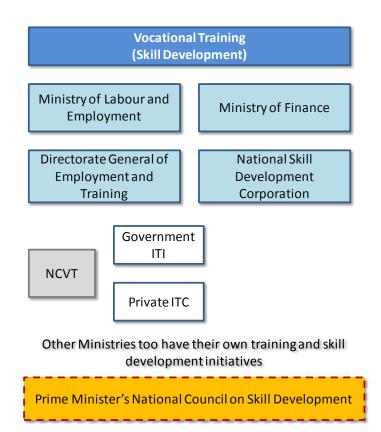


Figure 3: Vocational skill training structure in India

Trade-focused Vocational Training in India is being offered by the Directorate General of Employment and Training (DGET) under the Ministry of Labour and Employment. The DGET is the apex organisation for development and coordination at national level for programmes relating to vocational training. Employment service is operated through a countrywide network of Employment Exchanges. Industrial Training Institutes (ITIs) are under the administrative and financial control of State Governments or Union Territory Administrations. DGET also operates Vocational Training Schemes in some of the specialised areas through field institutes under its direct control. Development of these programmes at national level, particularly in the area concerning common policies, common standards and procedures,



training of instructors and trade testing are the responsibility of the DGET. However, day-to-day administration of employment Exchanges and Industrial Training Institutes rests with the State Governments/Union Territories Administrations. The National Council on Vocation Training (NCVT) also plays a key role in the formation of training curriculum, policies, standards, as well as in certification by means of 'trade test'.

The National Skill Development Corporation as mentioned above has been set up under Public Private Partnership (PPP) mode as a Section 25 Company under the Ministry of Finance to provide viability gap funding and coordinate private sector initiatives and training providers for skill development.

Current skill development capacity in India is enumerated below:

Table 2: ITI, ITCs and Polytechnics in India

Category	Sub-category	No. of institutions	Seating capacity
ITIs and ITCs	Government ITI	2,244	471,458
	Private ITC	7,171	858,110
	Total	9,415	1,329,568
Polytechnics		1914	6,90,410 ⁷

Different training programs are conducted by various Ministries at the central level as listed below:

⁷ Select Educational Statistics 2006-07

Table 3: Central Government training programs

SI.	Ministry/	Schemes/ Programmes/ Institutions having provision for	Target group	Duration of training
No	Department	Vocational Education and Training programme		(long-term/short-term)
1	Ministry of Agriculture: (i) Department of Agriculture Research and Education	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	Person engaged in agricultural institutions and support services, members of cooperatives and Farmers. Under KVK, 550/589 districts are covered	Short term courses
	(ii) Department of Animal Husbandry, Dairy and Fisheries	Under the University stream, various (12) under- graduate, post-graduate and Ph.D. courses are offered (DARE)	Students with Qualifications as usual under University stream of education	U.G. courses – 4 years (except for veterinary courses i.e. of 5 years), P.G. courses – 2 years and Ph.D. 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 to be University	Students with Qualifications as usual	As usual
		ICAR also arranges need based training programmes in any of State Agricultural University 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 (2) and special training courses (14)	10 th Standard students	6-18 months
		CIFNET – Refresher courses (4)	Lecturers/in-service	4 weeks



SI. No	Ministry/ Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Target group	Duration of training (long-term/short-term)
		CIFNET – Other Organizations viz college including engineering and foreign nationals (14)		3 days to 14 weeks
2	Ministry of 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, and 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 (FPTC 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 course duration as usual (Long term)
3	Ministry of Health and Family Welfare	 Basic Training of multipurpose health worker (Female & Male) 478 ANM/ MPW(F) Training Centres 28 HFWTC & 30 Basic MPWA(M) Schools 	Educated youth with minimum 10th pass	12 to 18 months
		Promotional training of Female Health Assistant in 42 training	Persons working in	Short term



SI. No	Ministry/ Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Target group	Duration of training (long-term/short-term)
		centres. Training is also provided by Safdarjung Hospital, St. John Ambulance, NTCP, NPCB, NMHP, NACP, INC, CBHI, CLTRI, PWTRC, ECH etc.	Health & family Welfare programme	
4	Ministry of heavy Industries and Public Enterprises	Counseling, Retraining and Redeployment of Rationalized Workers of CPSEs (Formerly NRF)	Workers who opt for voluntary retirement, rendered surplus or retrenched from CPSEs	Short term courses
5	Ministry of Human Resource Development	Vocationalisation of Secondary Education (6800 schools covered)	Student having passed 10th class	2 years
		Polytechnics (1244) + Institutions for diploma in pharmacy (415), hotel management (63), architecture (25)	10th pass	3 years diploma
		Community Polytechnic Scheme (675 CPs)	Poorer section 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 neoliterates/ semi-literates, SC and ST, women/girls, oppressed, migrants, slum/ pavement	Need Based (1- 4 weeks)
		Support For Distance Education & Web Based Learning (NPTEL)	dwellers and working children Engineering and physical sciences under-graduates/ post graduates in the country; all teachers/faculties in science and	(Designing course material – time bound project)



SI.	Ministry/	Schemes/ Programmes/ Institutions having provision for	Target group	Duration of training
No	Department	Vocational Education and Training programme		(long-term/short-term)
			engineering Universities in India	
		National Institute of Open Schooling – Distance Vocational Education Programmes [Practical training through Accredited Vocational Institutes (AVIs)]	School leavers with 5th, 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	One year
		National Programme on Earthquake Engineering Education (NPEEE)	Vocational stream	Faculty development through short-term crash programmes and long-term programmes
6	Department of 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	Ministry of Labour (DGET)	Craftsmen Training Scheme (CTS) (5114 ITIs)	School leavers with 8th, 10th and 12th pass	One to Three years
		Apprenticeship Training Scheme (ATS) (20,800 establishments)	School leavers with 8th, 10th and 12th pass or National Trade Certificate (from NCVT) Holder	6 months to 4 years
		Crafts Instructor Training Scheme (CITS) (6 Institutes)	Instructors of ITIs	1 year



SI.	Ministry/	Schemes/ Programmes/ Institutions having provision for	Target group	Duration of training
No	Department	Vocational Education and Training programme		(long-term/short-term)
		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
		Model Training Institutes and Model Industrial Training Institutes	School leavers with 8th, 10th and 12 th pass	One to Three years
8	Ministry of Rural Development	National Institute of Rural Development (NIRD) Conducts about 150 programmes	Practicing Manager in rural Development	Short term Courses
		Swarnjayanti Gram Swarozgar Yojana (SGSY)	Focus is on the vulnerable groups among the rural poor. SC/ STs should account for a minimum of 50%, women for 20% and disabled for 3% of the total swarozgaris during a year.	Need based short Term
9	Ministry of MSME Small Industries Development Organisation (SIDO)	Entrepreneurship Development Programme, Skill Development Programme (SDP), Management Development Programme It has 72 institutes/ bodies. SSSI – 30 Br. SSSI- 28	 Workers Educated unemployed youth Entrepreneurs 	Both short term and long term



SI. No	Ministry/ Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Target group	Duration of training (long-term/short-term)
		 RTC – 4 Tool Rooms – 8 PPDC – 2 		
10	Khadi & Village Industries Corporation	51 Training Centres run 35 types of programmes	Unemployed rural youths, In-job Artisans/Supervisors working in KVI institutions, Prospective Entrepreneurs, Beneficiaries of different Govt. Schemes desirous of undertaking KVI activities.	2 months to 12 Months
11	M/o Social Justice and Empowerment	 National Institute of Mentally Handicapped, National Institute for the Orthopedically 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, B.C., Persons with disabilities, Aged Persons, Street children and victims of Drug Abuse etc.	 Short term training up to six months duration Orientation Programmes up to one week duration
12	Ministry of Textile	Decentralized 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



SI.	Ministry/	Schemes/ Programmes/ Institutions having provision for	Target group	Duration of training
No	Department	Vocational Education and Training programme		(long-term/short-term)
13	Department of Tourism	15 Food Craft Institutes under State Governments	10 th Pass	6 months to 1 year
14	Ministry of Tribal Affairs	Vocational Training Centres (VTC) in Tribal Areas. (100% central assistance is given to State/ UT / NGO for setting up VTs.	Unemployed Tribal youth (Each person is given training in two trades)	6 months in VTC and 6 months with master Craftsmen
15	Ministry of Urban Development and Poverty Alleviation	Urban Self Employment Programme under Swarna Jayanti 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	640 Building Centres (HUDCO)	Persons engaged in construction industry	Short term courses
		Company run schools (NBCC HCC, L&T, ECC etc.) & association etc.		Short term courses
		Construction Industry Development Council (CIDC) & others	Worker and Supervisor having qualification of Vth to XIIth Standard	1 month to 6 months
17	Department of Women and Child Development	Support to Training and Employment Programme for Women (STEP)	To provide updated skills and new knowledge to poor and asset less women traditional sectors	Short term courses
		Swalamban (previously NORAD)	To train poor women mostly in non-traditional trades House wives and Adolescent	
		Training in Home scale preservation of fruits and vegetables, (by Community Food and Nutrition Extension Units (CFNEUs)	girls with a view to promote preservation and consumption of fruits and vegetables which	Two weeks



SI. No	Ministry/ Department	Schemes/ Programmes/ Institutions having provision for Vocational Education and Training programme	Target group	Duration of training (long-term/short-term)
			provide much needed micronutrients, as well as to provide necessary skills which could be useful for income generation purposes.	
		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: Planning Commission



In addition to the ITIs, ITCs and training programs conducted by various Ministries, National Skill Development Corporation has funded around 51 training providers, who in turn has set up around 499 vocational training centers pan India targeting the 21 growth sectors identified by the Planning Commission.

Despite of various capacities created through ITIs, ITCs, Ministry programs and NSDC, there are State level programs/schemes and numerous private training providers operating on their own individual capabilities.

Target to have 500 million skilled people in India by the year 2022 is going to be a challenge. Though various government initiatives have been taken towards the target, implementation of those initiatives will go a long way in skill development and training. At the same time it is also to be noted that need for skilling in India opens up the opportunity gate for building business models around all the aspects of the skill development value chain.

2.3 Karnataka Overview

Industrially, Karnataka is one of the most advanced states in India. Known as the Silicon Valley of India, Bangalore is the IT hub. Two of the biggest firms internationally – Wipro and Infosys – are headquartered in the state. In fact, the Nandi Hills area near Devanahalli has upcoming the BAIL IT region which is one of the highest valued infrastructure projects which will give a renewed thrust to the sector. The state has also become the biotechnology capital for India. Biocon is headquartered in Bangalore and 158 of the 320 biotechnology companies in the country are present in the state. The economy of Karnataka is expected to gain fillip with several upcoming sectors. Auto and auto component, horticulture and processing, tourism and hospitality and textile are expected to provide employment to people across the state. As of 2011 - 2012, Karnataka had GSDP of Rs. 465,552 crore. There has been a nine per cent growth from the GSDP of Rs. 166,747 crore in 2004-05.

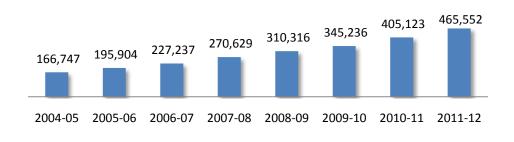


Figure 4: Gross State Domestic Product of Karnataka, in Rs. Thousand crore



Source: Central Statistics Organization

As of 2011-12, the per capita income of the state is Rs. 69, 493, which is significantly higher than the All India value of Rs. 60,972. Per capita income has grown at a CAGR of 6% from the 2004-05 value of Rs. 26,882.

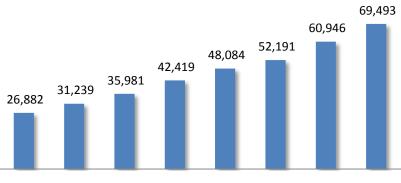
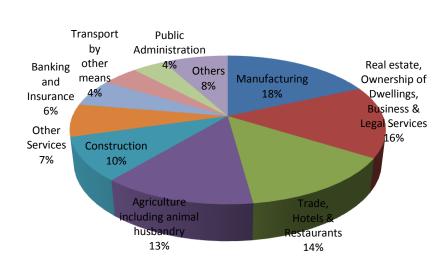


Figure 5: Per capita income of Karnataka, in Rs thousands

2004-05 2005-06 2006-07 2007-08 2008-09 2009-10 2010-11 2011-12

The state economy is pre-dominantly service based, with service sector's share in GDDP at 53% in 2008-09. This is followed by secondary sector at 29% and primary sector at 18%. The detailed break-up of the three sectors is given below.





Source: Central Statistics Organization



Source: Economic Survey of Karnataka 2009-10

Karnataka Vision 2020 has listed out the below transformations to be achieved by 2020:

Transformations proposed for vision 2020

- 1. Increase rural incomes through greater viability of agriculture and allied activities.
- 2. Focus on job-oriented growth through concomitant skill development of the workforce.
- 3. Develop the State as a vibrant knowledge society.
- 4. Improve access and availability of quality healthcare for all.
- 5. Achieve a sustainable and orderly process of industrialisation and urbanisation.
- 6. Enhance opportunities and empower women across economic, social and political spheres
- 7. Bridge the gap between socially backward and vulnerable groups and rest of the people
- 8. Improve energy availability and develop infrastructure to boost productive potential of economy
- 9. Preserve and promote Karnataka's rich heritage
- 10. Ensure sustainability of the State's environment and natural resources
- 11. Build and sustain Bangalore's leadership in science, technology and knowledge based industries
- 12. Improve governance through wider participation and deep democratic decentralisation

Table 4: Target for 2020

Indicator	Current level	Goal 2020
Students in 16-18 age-group receiving skill training through ITI/ Polytechnics,	8-10%	45%
VET and Modular Employable Skills		
Students in 14-16 age-group receiving skill training during secondary education	-	15%
Access to skill training institutes	-	100%
Literacy Rate	67%	100%
No. of skill training institutes in state	~1,500	2,700

Source: Global Investors Meet – 2012

In order to achieve the above planned transformations pertaining to skilling and to achieve the objective of increasing the current training capacity from 1 million to 3 million in 12th five year, various initiatives have been taken up by Government of Karnataka. Following section elaborates on vocational training scenario in Karnataka.



2.4 Vocational Training in Karnataka Overview

All the vocational training initiatives in the State are taken by the following departments

- Department of Technical Education
- Department of Employment and Training
- Department of Vocational Education
- Karnataka Vocational Training and Skill Development Corporation

Department of Technical Education (DTE)

DTE was established in 1959 to manage polytechnics and technical degree colleges. Primary functions of the department are as follows:

- To administer, supervise, control and plan programs for the development of Technical Educational Institutions in the state both at Degree and Diploma levels.
- To formulate Engineering studies and courses, recognition of new courses to examine and recommend for starting of New Institutions in the State both at the Degree levels and Diploma level.
- To conduct inspections and periodical reviews of existing Technical Educational Institutions to maintain the standard of Education.
- To conduct the diploma public examinations and to award the Diploma certificates to successful candidates.
- To sanction academic approval for Govt. and Aided Institutions.
- To provide suitable norms and procedures for selection of students for admission of students to Polytechnics.
- To release grants and other facilities to aided institutions.
- To select and depute teaching faculty for higher education.

Colleges coming under the DTE are given below:

Organisation	Engineering college	Polytechnics	Junior Technical Schools	Fine Colleges	Arts
Government	10+1*	81	6	-	
Government Aided	9+2*	43	-	76	
Private Management	146+1*	167	6	-	

Table 5: Colleges coming under Directorate of Technical Education

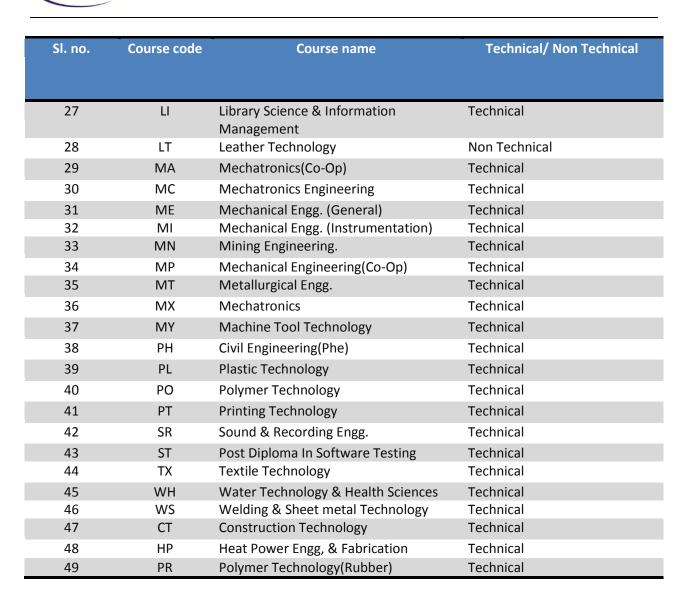


Organisation	Engineering college	Polytechnics	Junior Technical Schools	Fine Colleges	Arts
University Colleges (UC)	2+1*	-	-	-	
Minority Colleges (MC)	15	-	-	-	
Total	187	291	12	76	
*Evening Engineering College	9				

Source: Department of Technical Education

Table 6: Courses Offered by Directorate of Technical Education

Sl. no. Course code		Course name	Technical/ Non Technical
1	AG	Agriculture Engineering	Technical
2	AE	Aeronautical Engineering	Technical
3	AR	Architecture	Technical
4	AT	Automobile Engineering	Technical
5	BA	Business Administration	Non Technical
6	ВТ	Bio-Technology	Technical
7	CD	Civil (Draughtsmanship)	Technical
8	CE	Civil Engineering(General)	Technical
9	СН	Chemical Engineering	Technical
10	СК	Commercial Practice (Kannada)	Non Technical
11	CN	Cinematography	Technical
12	СР	Commercial Practice (English)	Non Technical
13	CR	Ceramic Technology	Technical
14	CS	Computer Science & Engg	Technical
15	DS	Post Diploma In Industrial Safety	Technical
16	EC	Electronics & Communication Engg	Technical
17	EE	Electrical & Electronics Engg	Technical
18	EN	Civil (Environmental)	Technical
19	EP	Electronics & Communication Engg(Co- Op)	Technical
20	FT	Apparel Design & Fabrication	Non Technical
21	HT	Heat Power Technology	Technical
22	IA	Interior Design	Technical
23	IC	Electronics Instrumentation & Control	Technical
24	ID	Interior Decoration	Technical
25	IS	Information Science & Technology	Technical
26	JD	Jewellery Design	Technical



Source: Department of Technical Education

List of services offered by DTE are exams, admission to diploma, admissions to engineering, scholarship, Curriculum Development Cell (CDC), Inspection, Technical Education Quality Improvement Programme (TEQIP) and State Technical Education Resources and Information Centre (STERIC).

Sectors covered by DTE through their initiatives include Automobile Engineering, Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Mechatronics and Mechanical Engineering, Commercial Practice and Apparel Design and Fabrication.

Department of Employment and Training

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The Department of Employment and Training implements National Employment Service Scheme and vocational training schemes for unemployed youths as per the norms prescribed by DGET. This department has two wings namely, Employment wing and Training wing.

Employment wing: Major functions carried out by this wing are registration and placement, vocational guidance, collection of employment market information and study cycle. There are around 48 employment wing offices, with a total live register number of 7,85,608.

Training wing: Training wing implements three types of schemes namely, Craftsmen Training Scheme (CTS), Apprenticeship Training Scheme (ATS) and Special Training Scheme (SPL – TRG).

Karnataka state has a total of 1,112 Industrial Training Institutes (ITIs) / Industrial Training Centres (ITCs) as of March 2012. Of these, 138 were Government ITIs, 198 were private aided ITIs and remaining 1,112 were private unaided ITIs. All the ITIs together have a seating capacity of 156,465.

Directorate of Vocational Education

Directorate of Vocational Education functions under Ministry of Primary and Secondary Education, Government of Karnataka and offers 29 trades through 500+ colleges providing 891 course units. The main objective of Directorate of Vocational Education is:

- Enhancing individual employability.
- To reduce mismatch between the demand and supply of skilled manpower.
- To provide an alternative for those pursuing higher education without particular interest or purpose.
- To attract the rural students towards self-employment.

Karnataka Vocational Training and Skill Development Corporation (KVTSDC)

KVTSDC is established in 2009 as an SPV to implement the recommendations of National Skill Commission. National Skill Commission is established to address the gap due to lack of skills among unemployed youth and to facilitate under the State Policy on Skill Development.

KVTSDC is a private company within the meaning of section 3(1)(iii) of companies act, 1956 with an authorized share capital of Rs.500 lakh divided into 5 lakh equity shares of Rs.100 each. The minimum paid up share capital of KVTSDC is Rs.100 lakh. The promoters of the corporation are:

The Principal Secretary to Government, Labour Department, Bangalore: 50%



• The Commissioner, Department of Employment and Training, Bangalore: 50%

The Commissioner Employment and Training is the Managing Director of the Corporation. It is Objectives of KVTSDC:

- 1. To design, develop and implement various skill training programs based on emerging trades
- 2. To impart training in multi skills considering the demand of industries
- 3. To assist implement and strengthen State Council for Vocational Training
- 4. To implement Modular Employable Skilled short term training programs as per DGE
- 5. To implement various employment generating training programs sponsored by Government Public sector, Enterprises, Corporations, Boards, Local Bodies, and Associates, etc
- 6. To run distance learning training programs in association with Edu-Sat
- 7. To assist implement and strengthen State Project Implementation Unit to implement, carryout, administer, manage the schemes entrusted by GOI
- 8. To cater the needs of the manpower required for study cycle to train the job seekers through competitive exams through Employment Exchanges
- 9. To promote, assist, organize, facilitate, co-ordinate, regulate and provide employment of Indian skilled personnel and others for overseas employment
- 10. To act as HR consultants and global placement services through web portal
- 11. To design, plan, organise, conduct and impart short term training programs for candidates seeking overseas employment
- 12. To plan, construct establish, promote, assist, organize, manage, ordinate maintain protector or emigration office in Karnataka Sate for Clearance of Emigration and other clearance
- 13. To assist coordinate with the protector of Emigrants in Karnataka State for Emigration and other clearance and
- 14. Adoption and implantation of the recommendation of the State Skill Mission/Committee

	Persons
Job seekers in various melas	146,487
Workers trained and employed	138,425
Employment created	65,553
MES skill trainees	72,872
Employment created through job fairs	37,217

Table 7: Achievements of skill development centers in 2009-10

Source: Global Investors Meet – 2012



2.5 International skill development initiatives

This section elaborates on the skill development initiatives in the following countries:

- Australia
- Singapore
- European countries

2.5.1 Australia

Nature of the Australian economy has changed from reliance on primary resources and manufacturing to more dependence on service and knowledge based industries. Thus there was a need for the Australian labour force to be increasingly mobile.

Many private sectors initiatives exist, but the government realised a need to make training and skills development programme centralized and organised so as to make them more accessible and equitable for people and to discourage only pockets of development. The Australian Qualifications Framework (AQF) was introduced on 1 January, 1995. It is a unified system of twelve national qualifications in schools, VET, and the higher education sector.

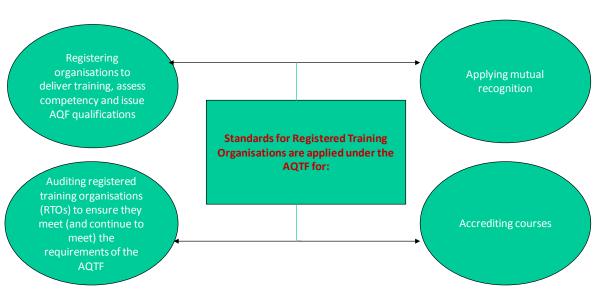


Figure 7: AQTF framework



Under this regime, the content of training or competency standard is determined by the industry, and qualifications are issued when skills are attained, not according to predetermined time periods. Some features of the AQF system that makes it successful are:

Recognition of Prior Learning: The AQF system of Recognition of Prior Learning (RPL) means that an individual would receive credit for the knowledge and skills they already possess, regardless of how or where they were attained.

AQF Seamless Pathways: The AQF aims to seamlessly unify the system of twelve national qualifications in schools, VET and the higher education sector, and also integrating the recognition of prior learning into the system. A recent study shows that many university students after completing their degrees undertake VET qualifications.

Vocational certificate pathways include the certificates I - IV which recognize achievement of specified national industry competencies at four levels in wide range of trades, industries and enterprises. Like the vocational certificate pathways, the diploma to degree pathways facilitates a number of partnerships between VET providers and universities, which function to enhance the pathways from an industry qualification to a higher education qualification i.e. a diploma or a university degree.

Credit Transfer: The AQF has developed a few articulation arrangements and dual award qualifications in the same fields between Diploma and Bachelor qualifications to which there may be award of credit. This would act as an incentive for the student to further his/her education. For example: 50% credit for a combined Advanced Diploma and a three year Bachelor Degree; 37.5% credit for an Advanced Diploma plus a four year Bachelor Degree; 25% credit for a Diploma when linked to a four year Bachelor Degree.

National Level Initiatives

Several national level initiatives have been taken by the government of Australia to augment the private enterprise led initiatives.

School to Work Programme: This centralised programme serves to facilitate easy transition from school to further education, training and employment through providing funds for vocational education in schools. Strategic projects under the Enterprise Education (EE) initiative include identifying best practice models for piloting projects like part-time New Apprenticeships (customised to suit different ages) in schools; developing VET delivery to suit rural and remote areas, development of varied partnership models for VET in schools. A study of this initiative, found that the EE initiative made useful advances in achieving its key objectives.



Industry Postings: This programme has been initiated by the Office for the Commissioner for Public Employment to give the public sector access to key areas of expertise in the private sector and increase understanding of Government amongst the private sector. Industry Postings are open to all levels of public sector staff. Industry Postings are bi-directional, i.e. private sector employees may be posted in the public sector and vice versa. Either organisation may initiate this. The parameters governing Industry Postings may vary from one business to another and are negotiated on a case by case basis. Industry Postings are useful for public sector organisations as they can expect to gain any or all of the following benefits through participation:

- A better understanding of how a particular industry group operates e.g. the Banking Industry
- Insight into a particular business
- Forging relationships and contacts with individuals and businesses
- Increased awareness of the business systems of the other sector including knowledge of the operational, technological, financial, social and environmental climate

Return to Work Programme: To assist job seekers returning to the workforce, this initiative was designed to help in finding job opportunities. The programme was available to job seekers not benefiting from other similar assistance, regardless of income support status. Job seekers on income support are required to be registered with the government as unemployed. The objectives of this purely voluntary service programme were to increase the skills and improve the self-esteem, motivation, confidence and career planning of job seekers who wished to re-enter the labour force after an absence of two or more years.

New Apprenticeships Access Programme (NAAP): This initiative is aimed at modernizing traditional apprenticeships and traineeships, making them more attractive propositions for both employers and trainees. New Apprenticeships can be commenced while an individual is still at school on a part time basis. For employers, the government provides incentives to take on an apprentice for example; each employer has greater autonomy over the content of training and the method and timing of its delivery.

The Commonwealth Government's New Apprenticeships Access Programme (NAAP) provides disadvantaged job seekers with pre-vocational training and other forms of assistance.

Persons are eligible for NAAP if they are registered for employment assistance and/or in receipt of income support and/or fit any of the following categories:

• From 15 years of age (14 years with an exemption from school) and assessed as eligible for, but not yet receiving, Intensive Assistance (IA); or



- Early school leavers under 25 years of age who have not completed either Year 10, 11, 12 of school; or
- Indigenous Australians; or
- Persons born in a high unemployment country

Pre-vocational training is delivered by registered training organisations to persons who enlist with NAAP. This training is recognised by employers nationally. If a student has a disability that would prevent them from starting a New Apprenticeship the Disabled Apprenticeship Wage Support (DAWS) Programme may be able to provide assistance. Under DAWS, an employer may be eligible to receive an incentive to accommodate the student's physical employment needs by providing modifications to the workplace.

2.5.2 Singapore

The National Skills Recognition System (NSRS) is Singapore's national framework for establishing work performance standards, identifying job competencies and certifying skills acquisition. It is implemented by the Standards, Productivity and Innovation Board (SPRING Singapore), with the support of the Ministry of Manpower and the Ministry of Trade and Industry. The NSRS was officially launched in September 2000. SPRING Singapore helped the industry train skills standards consultants and assessors, and developed On Job Training (OJT) blueprints for the skills standards established. To assess the workers, Assessment Centres were set up. Workers can be certified at centralised assessment centres, workplace or a combination of both.

Supporting the NSRS implementation framework are promotional activities and financial incentives for the industries. NSRS is promoted at four levels - national, industry, company and workforce - in collaboration with employer groups, industry associations, economic agencies and unions. A budget of around SG\$24 million has been set aside by the government for developing the infrastructure for NSRS.

Assessment of national qualifications in Singapore is conducted by the Approved Assessment Centres (AAC). Fees differ by skills that are evaluated and normally range from SG\$50 to SG\$150. In Singapore, NSRS was introduced in September 2000 and its implementation commenced in 2001.

National Level Initiatives

Institute of Technical Education

The Government of Singapore through the Institute of Technical Education (ITE) system has integrated its skill development program with the education system of Singapore. The Mission of ITE is "To create



opportunities for school leavers and adult learners to acquire skills, knowledge and values for lifelong learning in the global economy".

The ITE System has three colleges – The ITE East, ITE West and ITE Central. The complete vocational training for Singapore is done in these colleges. They cater to about 25% of the student population. ITE system is accredited in the worldwide and finds wide acceptance in most developed countries. The government of Singapore realizes the importance of skilling the bottom 30% of the population and invests nearly 1.5% of its GDP in this area. It also understands the importance

One of the most important models that ITE uses is the win – win partnerships of Joint certification with the Industry Leaders. ITE has signed about 61 Memorandum of Understanding (MoUs) with leading player from a wide range of Industries. These Link ups, includes a total of 13 sponsorships for Training equipment and faculty. This leads to Joint certification and student internships. Some of the important ones are:-

- Sun Microsystems.
- Microsoft.
- METI Center for Healthcare Simulation Training.
- ABB Automation Technology solutions.
- Omron Application Solution Center.
- IBM
- Retail Industry leaders
- Leading Beauty Therapy leaders.
- Building security control and air-conditioning systems.
- Smart Homes.

In addition, the ITE has a specialized ITE Education Services arm. This arm was created in response to numerous requests from companies both local and overseas to ITE for providing training and consultancy services. Based on the requirement ITE incorporated a holding company, ITE Holding Pte Itd on 13 Jan 2003 and a subsidiary under the holding company ITE Education Services Pte Ltd (ITEES) on 20 Jan 2003. This is the business arm of ITE. It is a good business model where there are a number of leading private Industry leaders on the board and they provide management guidance and approve policies of ITEES.

The Mission of ITEES is – To extend the brand name of ITE by capitalizing on its knowledge and expertise in vocational Technical Education and Training.

Certified On-the-Job Training Centre (COJTC) Scheme

A number of companies of various types and belonging to various sectors in Singapore have benefited from Institute of Technical Education's (ITE) Certified On-the-Job Training Centre (COJTC) Scheme. The Scheme, through the structuring of companies' On-the-Job Training (OJT) and promoting of skill upgrading among employees benefits them. This Scheme, implemented in April 1994, helped companies maximise the potential of their employees and motivate them to firm up skill levels by recognising OJT certificates for entry into relevant Skills Certificate courses. ITE's COJTC scheme has evolved to better accommodate the training needs of companies.

Critical Infocomm Technology Resource Programme (CITREP)

Critical Infocomm Technology Resource Programme (CITREP) is a training incentive programme by IDA (Infocomm Development Authority of Singapore), started to accelerate the development of specialised infocomm skills needed by the infocomm industry and its user organisations. Funding support under CITREP is open to Singapore-registered organisations that sponsor their employees for training in the endorsed courses, and to self-sponsored individuals. CITREP supports up to 70% of the course and examination fees for endorsed training courses.

Microsoft (Singapore) works with different departments of the Singapore Government to create technological solutions develop IT policy and address issues of mutual concern. This includes investing in the Singaporean economy, education system and IT industry, plus a commitment to local research and development. Courses are provided by Microsoft Certified Trainers at Microsoft Certified Technical Education Centres (Microsoft CTECs).

People for Jobs Traineeship Programme (PJTP)

PJTP offers employers wage support incentive in return for providing traineeship/mentorship arrangements to help newly recruited workers making a career transition with no relevant experience in a particular sector to fit into new jobs and work environment in it. PJTP encourages employers provide suitable job opportunities for such local workers aged 40 years and above. For each unemployed older worker that the participating company hires, the employer receives a wage support of 50% of gross salary or SG\$2,000 per month whichever is lower, for a period of up to 6 months. In addition, for a worker of age 50 years & above, the wage support is extended by another 3 months, at 25% of gross salary or \$1,000, whichever is lower.

The companies that participate in these initiatives claim wage support for qualified workers employed through the referrals of the Singapore Workforce Development Agency (WDA) or its associates



(Community Development Councils, Self-Help Groups, the National Trade Union Congress, etc) or through their own direct recruitment.

Skills Redevelopment Programme (SRP)

This is a national funding incentive programme that helps employers enroll their employees for certifiable training. It is required that:

- The courses be SRP-approved.
- The company must be registered or incorporated in Singapore.
- The trainee must either be a Singapore Citizen or Permanent Resident of Singapore.
- The trainee must achieve at least 75% attendance and sit for all prescribed examinations.

Skills Training and Employability Enhancement for Retrenched and unemployed workers (STEER) Programme

This programme is an extension of the Skills Redevelopment Programme (SRP) for retrenched and unemployed workers that takes SRP one step further by linking full-time SRP training to job placement. The current list of STEER programmes which serve to place and train candidates includes AeRO (aerospace), BusCaptaIN (public bus services), CaRE (call centre), DomestiCaRE (domestic cleaning), HEART (healthcare), PreciSE (precision engineering), PriME (prime movers), PTAP (hotel), SHA-NTUC (hospitality), TESS (social services), TextiLE (textile), WafER (wafer fabrication).

The trainee must however fulfill certain basic requirements. He must be:

- A Singapore citizen or Permanent Resident of Singapore
- Unemployed
- In possession of at least 75% attendance and must sit for all prescribed examinations
- Benefiting from Course Fees Support
- Trainees 40 years and above.

2.5.3 European countries

Country	Level	Institution	Responsibilities		
Austria	Central	Federal Ministry of Education	Receives funding from state budget	School provision, teaching staff, pupil support and accommodation grant.	

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Country	Level	Institution	Respons	sibilities
		Federal Ministry of Agriculture	Receives funding from state budget	Fund the schools of agriculture and forestry.
	Regional	Länder	Receive half of the cost of employing the teaching staff from Federal Government	Apprenticeship funding (school provision, teachers' pay).
	Providers	Training companies	Support from Employment Service and Federal Government	Company-based training.
Czech Republic	Central	Ministry of Education, Youth and Sports	Financial resources from state budget	Programmes initiated by Ministry of Education, Youth and Sports.
	Regional	Regional authorities	Financial resources from the budgets of regional and local administration	Wages, teaching and learning tools, teacher training
	Providers	Schools	Receive funding from regional and municipal budget	operating and capital costs
			Financial resources from state budget	Experimental testing and development programmes
Finland	Central	Ministry of Education	Receives funding from state budget	Distributes funding to education providers according to central government criteria; maintains a few special VET institutions.
		Ministry of Labour	Receives education budged from the state budget	Distributes funding to the Regional Employment and Economic Development Centres
	Regional	Provincial state offices	Receive funding from ministry of education	Decide on the allocation of appropriations related to the programme to improve the educational level of the adult population during the years 2003 to 2007

Country	Level	Institution	Respons	sibilities
		Regional Employment and Economic Development Centres	Receive funding from ministry of labour	Fund labour market training directly, also allocates money to the Local Labour Offices to acquire training locally.
	Providers	Municipalities, joint municipalities, private institutions	Receive funding from ministry of education and local government	Self-management of budged operational budged including for staff
		Local labour offices	Receive funding from Regional Employment and Economic Development Centres	Fund labour market training
Germany	Central	Federal Ministry for Education and Research	Receives funding from state budget	Funds inter-company training centres; gives grants to IVET, advanced training and adult education; funds VET research and pilot projects
		Ministry of Economics	Receives funding from state budget	Funds inter-company training centres, additional training places and continuing training for SMEs
	Regional	Laender ministries	State and regional finances	Fund IVET and CVET in schools, i.e. salaries of teachers; decide on financial support for enterprise-based training.
	Providers	Vocational schools	Receive funding from local governments	Fund school facilities, equipment, media as well as non- teaching personnel.
		Companies	Collective Sectoral Funds	Fund in-company training and continuing training voluntarily.
Greece	Central	Ministry of Education	Receive funding from general state budget	Fund education and training
Ireland	Central	Departments of Education and Science, and of Enterprise, Trade	Receive budget from Minister for Finance	Providing funds to intermediary organisations.



Country	Level	Institution	Respons	sibilities
	and Employment			
	Providers	Community/compre hensive schools	Receive funds from the Department of Education and Science	Payment of the first portion of each teacher's salary.
		Vocational schools	Receive funds from vocational education committees	Funding based on a standard pupil-teacher ratio.
Italy	Central	Ministry of Education, Universities and Research	Receive funding from state budget	Bears the costs of salaries and refresher training of the teaching and management staff of vocational schools and the costs of adult education schemes.
	Regional	Regions, Provinces	Receive funding from State, Region's Common Fund and European Social Fund	Finance all the operating and maintenance costs of schools.
Luxembo urg	Central	Ministry of Education and Vocational Training	Receives funding from state budget	Fund vocational training.
	Providers	Enterprises	Subsidies and awards from Employment Fund (state budget)	Apprenticeship allowances of young people in training.
Netherla nds	Central	Ministry of Education, Culture and Science	Receives funding from state budget	Distributes funding for VET; fees and studying grants.
	Providers	Regional training centres	Receive funding from central government	Finance IVET courses, adult education courses and integration measures.
Spain	Central	Ministry of Education and Culture	Receives funding from state budget	Costs of personnel, purchases of goods and services, subsidies to private educational bodies, scholarships and research
United Kingdom	Central	Department for Education and Skills	Receives VET budget from the Treasury	Distributes funding to the funding bodies

Country Level Institution **Responsibilities** Regional Corresponding Receives budget from Allocates funding to VET Departments of corresponding central providers (schools, education training government or devolved colleges or lifelong learning and others) according to governments central government or devolved governments' criteria. **Providers** Schools, colleges Receives budget from Self-management of and others operational budget regional government including for staff. Norway Receives budget from Distribution of budget to Central Ministry of Education and Re-Ministry of Finance County authorities (block search grant). State Education Receives budget from Distribution of grant and Loan Fund **Ministry of Finance** loans to individual applicants. Regional **County Authority** Receives budget from Distribution of funding to Ministry of Education and the County Education Research and Regional tax Department. **County Education** Receives budget from Distribution of budget to Department **County Authority** upper secondary schools and recognised training enterprises. Providers Schools and colleges Receives budget from Self-management of Ministry of Education and operational budget Research and County including for staff. **Education Department** Training/apprentice Receives budget from Self-management of ship enterprises **County Education** operational budget including for staff Department

Source: IMaCS Analysis

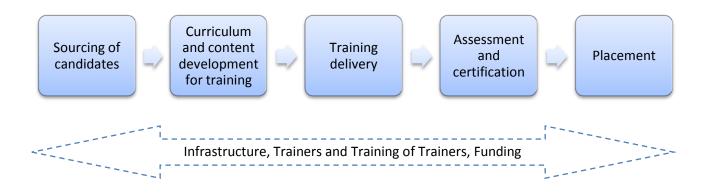
2.6 Challenges in vocational training in India

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As skill development takes off in a large scale, implementing agencies (government, institutes – both government and private, vocational training providers, businesses engaged in skill development, and other such implementers) would be faced with challenges that come up at every segment of the key activities in implementing skill development initiatives. There are several challenges that each skill development centre or groups of such centres are likely to face.

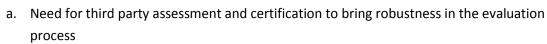






Various challenges would pertain to the following dimensions:

- 1. Sourcing of candidates:
 - a. Location identification for training based on demand-supply analysis
 - b. Creating awareness about the courses offered
 - c. Ability of the candidate to pay
- 2. Curriculum and content development for training:
 - a. Courses to be offered at center level
 - b. Curriculum and content to build the required level of competency standards of various functional roles targeted
 - c. Standardization of content to avoid poor quality training
 - d. Structuring of course curriculum for the candidates in rural areas
- 3. Training delivery
 - a. Operating models in-house, franchisee, college or corporate partnership, or hybrid models. Market has formulated much more complicated models such as backward integration of training need assessment to normal training models and forward integration of training models to placement agencies, temping.
 - b. Training delivery models Instructor Led Training (ILT), VSAT, e-learning, practical, blended models.
 - c. Suitability of operating and training delivery model will vary widely depending upon the target segment and industry targeted.
 - d. Ensuring quality will be a challenge when one moves up from in-house to franchisee model and similarly from ILT to VSAT/e-learning
- 4. Assessment and certification



- b. Availability of qualified assessors
- c. Need for industry accepted evaluation /certification framework
- 5. Placement

/MaCS

- a. Enabling placement linkages for training providers
- b. Getting students placed in the industry by making them employable is the key metric that reflects the achievement of the whole vocational training framework.
- 6. Infrastructure
 - a. Estimating the infrastructure requirement and availability
 - b. Leveraging on the existing
- 7. Trainers and train the trainers:
 - a. Standardization of qualification of trainers and selection process
 - b. Trainer availability
 - c. Level of technical skills, soft skills and entrepreneurial development skills of trainers, plays a critical role especially in the sectors with self employment potential
 - d. Standardization of evaluation and assessment of trainers
 - e. Reducing trainer attrition rate
 - f. Structuring need based training of trainer programs
- 8. Funding vocational training models:
 - a. Building sustainable and viable business models
 - b. Deciding the form of funding i.e, equity, preference share, debt or grant
 - c. Identifying the source of fund i.e, promoter's investment, venture capitalist, banks, etc

It is required that implementing agencies be aware of these challenges and prospect innovative ways to confront them. Furthermore, these challenges present themselves as potential business opportunities in skill development for various stakeholders.

Chapter 3: Market Assessment

Considering the magnitude of the challenge in terms of skilling about 15 million persons every year and ensuring that the workforce of 500 million is adequately skilled by 2022, it is required that the way forward comprises of adequate initiatives to achieve these humungous targets in the right 'scale' and 'speed'.

Vocational training is the shared responsibility of central and state government. As discussed in the earlier sections, vocational training at central level is managed by Directorate General of Employment and Training, Ministry of Labour and Employment, is the nodal agency for formulating norms, standards, etc. While at the State level, vocational training is provided through ITI and ITCs under Craftsman Training Scheme under DGET. On completion of training under Craftsman Training Scheme, candidates take up exams with National Council of Vocational Training (NCVT) for certification to reach the level semi skilled workers. Interested candidates also take up Apprenticeship training under Apprenticeship Act, 1961 in industrial establishments to become skilled worker.

Karnataka ranking 9th in population and contributing to around 6% of India's GDP⁸ has an established need for promoting skill development activities in the State. Karnataka Vision 2020 has listed out the below transformations to be achieved by 2020:

Transformations proposed for vision 2020

- 13. Increase rural incomes through greater viability of agriculture and allied activities.
- 14. Focus on job-oriented growth through concomitant skill development of the workforce.
- 15. Develop the State as a vibrant knowledge society.
- 16. Improve access and availability of quality healthcare for all.
- 17. Achieve a sustainable and orderly process of industrialisation and urbanisation.
- 18. Enhance opportunities and empower women across economic, social and political spheres
- 19. Bridge the gap between socially backward and vulnerable groups and rest of the people
- 20. Improve energy availability and develop infrastructure to boost productive potential of economy
- 21. Preserve and promote Karnataka's rich heritage
- 22. Ensure sustainability of the State's environment and natural resources
- 23. Build and sustain Bangalore's leadership in science, technology and knowledge based industries
- 24. Improve governance through wider participation and deep democratic decentralisation

⁸ Based on GDP constant (2004-05) prices for 2010-11



In order to achieve the above planned transformations pertaining to skilling and to achieve the objective of increasing the current training capacity from 1 million to 3 million in 12th five year, various initiatives have been taken up by Government of Karnataka. Various skill development initiatives are taken up in the following departments:

Department of Technical Education

- Established in 1959 to manage polytechnics and technical degree colleges
- 49 full time courses are conducted
- Sectors covered include Automobile Engineering, Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Mechatronics and Mechanical Engineering, Commercial Practice and Apparel Design and Fabrication.

Department of Employment and Training

- Implements National Employment Service Scheme and vocational training schemes for the benefit of unemployed and youth
- Provides Employment and self employment training courses as per the norms prescribed by DGE&T, Ministry of Labour, Government of India
- It has two wings:
 - *Employment wing:* Executes activities through employment exchanges registration and placement, vocational guidance, collection of employment market information (covers around 22099 public and private sector establishments), and study circle (free pre-examination training provided to around 13,299 candidates)
 - Training wing: Implements 3 types of training schemes Craftsmen Training Scheme, Apprenticeship Training Scheme and Special Training Schemes

Directorate of Vocational Education

- It functions under the Ministry of Primary and Secondary Education, Government of Karnataka.
- Main objective:
 - Enhancing individual employability.
 - \circ To reduce mismatch between the demand and supply of skilled manpower.
 - To provide an alternative for those pursuing higher education without particular interest or purpose.
 - To attract the rural students towards self-employment.
- Provides vocational training to 60,000 students through 29 courses at 553 institutions providing 891 course units



- Type of institutions covered: Pre-university Colleges, First Grade Colleges and Polytechnics
- Sectors covered through training programs are Agriculture, Commerce and Business, Technical and Job-linked Courses, and Home Science
- It has conducted 5 mega placement fairs in 2010-11 and secured employment for over 1000 students

Karnataka Vocational Training and Skill Development Corporation (KVTSDC)

KVTSDC is established in 2009 as an SPV to implement the recommendations of National Skill Commission. National Skill Commission is established to address the gap due to lack of skills among unemployed youth and to facilitate under the State Policy on Skill Development.

KVTSDC is a private company within the meaning of section 3(1)(iii) of companies act, 1956 with an authorized share capital of Rs.500 lakh divided into 5 lakh equity shares of Rs.100 each. The minimum paid up share capital of KVTSDC is Rs.100 lakh. The promoters of the corporation are:

- The Principal Secretary to Government, Labour Department, Bangalore: 50%
- The Commissioner, Department of Employment and Training, Bangalore: 50%

The Commissioner Employment and Training is the Managing Director of the Corporation. It is Objectives of KVTSDC:

- 15. To design, develop and implement various skill training programs based on emerging trades
- 16. To impart training in multi skills considering the demand of industries
- 17. To assist implement and strengthen State Council for Vocational Training
- 18. To implement Modular Employable Skilled short term training programs as per DGE
- 19. To implement various employment generating training programs sponsored by Government Public sector, Enterprises, Corporations, Boards, Local Bodies, and Associates, etc
- 20. To run distance learning training programs in association with Edu-Sat
- 21. To assist implement and strengthen State Project Implementation Unit to implement, carryout, administer, manage the schemes entrusted by GOI
- 22. To cater the needs of the manpower required for study cycle to train the job seekers through competitive exams through Employment Exchanges
- 23. To promote, assist, organize, facilitate, co-ordinate, regulate and provide employment of Indian skilled personnel and others for overseas employment
- 24. To act as HR consultants and global placement services through web portal
- 25. To design, plan, organise, conduct and impart short term training programs for candidates seeking overseas employment



- 26. To plan, construct establish, promote, assist, organize, manage, ordinate maintain protector or emigration office in Karnataka Sate for Clearance of Emigration and other clearance
- 27. To assist coordinate with the protector of Emigrants in Karnataka State for Emigration and other clearance and
- 28. Adoption and implantation of the recommendation of the State Skill Mission/Committee

	Persons
Job seekers in various melas	146,487
Workers trained and employed	138,425
Employment created	65,553
MES skill trainees	72,872
Employment created through job fairs	37,217

Table 8: Achievements of skill development centers in 2009-10

Source: Global Investors Meet – 2012

Table 9: Target for 2020

Indicator	Current level	Goal 2020
Students in 16-18 age-group receiving skill training through ITI/ Polytechnics,	8-10%	45%
VET and Modular Employable Skills		
Students in 14-16 age-group receiving skill training during secondary education	-	15%
Access to skill training institutes	-	100%
Literacy Rate	67%	100%
No. of skill training institutes in state	~1,500	2,700

Source: Global Investors Meet – 2012

To achieve the Vision 2020 objective, the Karnataka New Industrial Policy 2009-14 also emphasizes private sector investments towards promotion, upgradation and development of industry-relevant skills, with special emphasis on women skill development and with regular industry and institutional interactions to identify specific skills and develop them. In addition, government of Karnataka also plans to explore innovative models such as public private partnership, decentralized learning and computerized vocation training.



Government of Karnataka has undertaken various policy initiatives to address the following challenges:

- Reducing the demand and supply mismatch
- Diversifying the skill development initiatives to meet the changing requirement of knowledge economy
- Ensuring quality and relevance of training
- Building the required competencies rather than the qualifications
- Involvement of quality private institutes in vocational training
- Promoting active involvement of private players through PPP models
- Mobilizing funds from different channels towards skill development initiatives

In addition, one of the major challenges for vocational training in Karnataka is not only in providing skilled resource to industries but also to ensure whether it meets the industry requirement.

In order to take current initiatives to next level, a separate institutional framework under the PPP model is recommended with the following objectives:

- To encourage private sector investments in vocational training
- To facilitate PPP models in vocational training

Chapter 5: Project – Vocational Training

5.1 Project description

The proposed new entity will be a section 25 company under the Indian Companies Act 1956 and will be one of its kind to facilitate Government of Karnataka to promote PPP models in vocational training segment. With representation from all the key stakeholders (Public and Private sector), the new entity will act as a catalyst to bring in the involvement of private sector and other stakeholders to vocational training space to bridge the quality expectation gap among industry players.

The new entity will act as a State level apex body by playing an advisory role to overcome the current bottlenecks faced in terms of identification of training partners, ensuring quality through accreditation and for venturing into new models. The entity will also serve as an evaluating body for all the vocational training proposals received by government and as a channel for rooting the corporate funds allocated through corporate social responsibility initiatives for vocational training.

5.2 Project vision

To serve as an advisory body to government or any other player involved in vocational training, ensuring quality and effectiveness of training and increasing the access to vocational education.

5.3 Project objective

- 1. To act as a strategic advisory body to Government or KVTSDC or Private Players in area of vocational training.
- 2. To provide technical assistance in vocational training space through research and curriculum development through forming need based committees and sub committees.
- 3. To accredit all the existing centers delivering vocational training under various State Government schemes
- 4. To assist all the activities carried out by National Skill Development Corporation and its partners in Karnataka
- 5. To act as a channel to root all the scholarship funding provided under vocational training, both by State Government and Corporate and apprentice stipend.

5.4 Project components

Major activities proposed to be carried out by the new entity are as follows:

- Think tank for Government: The new entity will provide policy level advisory services to State Government and its Departments in vocational training spectrum (e.g. launch of new schemes, formulating innovative training models, etc).
- Research activity: The proposed new entity will be an autonomous body to carry out sector specific research activities at State level to facilitate State Government or any other player in vocational training space. Areas of research may pertain to sector/district wise demand and supply gap study, evaluating success of Government schemes, identification of growth bottle necks at location level, periodic research reports on new initiatives, etc
- Quality assurance: Quality training is a critical factor for the success of vocational training schemes. Accreditation of training centers on regular intervals will help the Government to have better control on training initiatives and to yield the desired outcome. Further the proposed entity will also facilitate curriculum development in vocational training by forming need based committees and subcommittees and by bringing in industry engagement.
- > **PPP Facilitator:** While KVTSDC is focusing on skill building initiatives, while the new entity can offer proposal evaluation services for all PPP model based vocational skilling in Karnataka.
- Assisting NSDC: NSDC at national level acts as a catalyst in skill development by funding enterprises/organisations providing skill training. NSDC also promotes Sector Skill Councils to address the challenges in vocational training space. The new entity can assist NSDC and its partners – training partner/Sector Skill Councils for all their activities in Karnataka.
- Fund mobilization: The proposed new entity can also serve as a channel to root the scholarship schemes for vocational training. They can also attract scholarship from corporate under CSR initiatives for skill training and apprentice stipend.

5.5 Best case studies

UMaCS

National Skill Development Corporation, India

National Skill Development Corporation is one of its kind PPP model in India, which is established as a part of National Skill Development Mission to meet the requirement of skilled workforce in India. It aims to create large, quality, and for profit organisations to promote skill development in India. Its efforts are directed towards bringing in Private players into skill training space in the 21 growth driving sectors indentified by Planning Commission. It also engages in funding for skill training ventures directly, and develops competencies, accredits, builds Labour Management Information System, Certifies candidates directly or through partnerships.



Objective

NSDC's objective is to contribute to at least 30% to overall target for skill training of 500 million by 2022 mainly by encouraging and funding private sector initiatives.

Mission statement

- Upgrade skills to international standards through significant industry involvement and develop necessary frameworks for standards, curriculum and quality assurance
- Enhance, support and coordinate private sector initiatives for skill development through appropriate Public-Private Partnership (PPP) models; strive for significant operational and financial involvement from the private sector
- Focus on underprivileged sections of society and backward regions of the country thereby enabling a move out of poverty; similarly, focus significantly on the unorganized or informal sector workforce.
- Play the role of a "market-maker" by bringing financing, particularly in sectors where market mechanisms are ineffective or missing
- Prioritize initiatives that can have a multiplier or catalytic effect as opposed to one-off impact

Organisation structure

NSDC is a not for profit entity established under section 25 of Companies Act by Ministry of Finance. It has equity of Rs.10 crore, out of which 49% is contributed by Government and 51% by Private sector. The board of NSDC comprise of 13 members (4 Government Nominees, 1 Chairman from Private sector and 8 Private sector nominees). NSDC has tiered decision making structure comprising of Board, Sub Committees and Executive Council and also National Skill Development Fund (100% government owned trust) which works with NSDC to achieve NSDC's objective.

Achievements of NSDC

NSDC has so far funded around 51 training providers, who in turn have set up around 499 vocational training centers pan India.

Table 10: State wise y	voarly training canacity	created by National Skill	Development Corporation
Table 10. State wise	yearry training capacity	Cleated by National Skill	Development Corporation

State	Training capacity created	
Andhra Pradesh	22,325	
Assam	1,484	

Bihar	1,239
Chhattisgarh	1,644
Delhi	10,977
Gujarat	2,505
Haryana	2,880
Himachal Pradesh	1,030
Jharkhand	1,802
Karnataka	5,441
Maharashtra	10,720
Manipur	200
Meghalaya	2,940
Madhya Pradesh	4,646
Nagaland	791
Odisha	9,382
Punjab	4,664
Rajasthan	8,870
Sikkim	850
Tamil Nadu	8,513
Tripura	1,120
Uttar Pradesh	14,986
Uttarakhand	3,209
West Bengal	10,240
Total	132,458

Source: NSDC

NSDC also promotes and funds setting up sector skill councils, which has the following objectives:

- Identification of skill development needs including preparing a catalogue of types of skills, range and depth of skills to facilitate individuals to choose from them.
- > Development of a sector skill development plan and maintain skill inventory.
- > Determining skills/competency standards and qualifications.
- > Standardization of affiliation and accreditation process.
- > Participation in Affiliation, accreditation, examination and certification.
- Plan and execute Training of Trainers.
- Promotion of academies of excellence.



Establishment of a well structured sector specific Labour Market Information System (LMIS) to assist planning and delivery of training.

SSCs are formed by bringing together all the stakeholders of the industry like industry players, academics, etc. SSCs will operate a separate section 25 company or a society. Initial funding on formation of SSCs will be done by NSDC and going forward they are expected to be self sustainable. List of sector skill councils approved by NSDC:

Table 11: Sector skill council promoted by NSDC

Industry sector	Name of SSC	Governing Council	Lead Organisations	Mandate	Status
Automobile	Automotive Skill Development Council (ASDC)	 Members of SIAM, ACMA (3 each) Members of FADA(2) One member from DGET One Representative from NSDC, NCVT CEO from ASDC 	SIAM, FADA, ACMA	 Establishment of ASDC Recruitment of the core ASDC team for carrying out pilot phase activities Signing of MoUs with the industry to ensure commitment and support Design and develop high standard course content for selected modules Provide certification to desirous candidates on the selected modules Review the performance of the pilot phase and draw up the DPR 	Incorporated
Security	Security Knowledge and Skills Development Council (SKSDC)	 7 of top 10 Security Companies by revenue Chairman of CAPSI and two Security Associations Two small security Companies Two members from customer organisations Representation from NSDC One Member from Army/Paramilitary Force 	CAPSI	 Identify the skill gaps & trade at each level & and develop course curricula, training programmes and training manuals accordingly Setting of National Standards, Benchmarks and Testing for each level and trades in Private Security Plan and execute Training of Trainers (Also to be certified). Identification, selection and accreditation of Training Providers in Private Security across the country and promoting them as Centre of Excellence 	Incorporated



			 Creating a nationwide data base of trained manpower in Private Security, level and trade wise.
Retail Retailers Association Skill Council of India (RASCI)	 1 representative from Retailers Association of India 1 representative from Globus Stores Pvt. Ltd. 1 representative from Infiniti Retail Ltd. 1 representative from Shoppers Stop Ltd. 1 representative from Pantaloon Retail India Ltd. 1 representative from Trent Ltd. 1 representative from Reliance Retail Ltd. 1 representative from Reliance Retail Ltd. 1 representative from Shoppers Pvt. Ltd. 1 representative from Connaught Plaza Restaurants Pvt. Ltd. 1 representative from NSDC 1 member as Chairman 	Retailers Association of India	 Development of a culture which promotes and enhances the skills development of its workforce Ensure availability of entire value chains requirement of appropriately trained manpower in quantity and quality across all levels on a sustained and evolving basis Vertical and Horizontal portability for VET skills as a comparable education across industries/education systems/geographies by building a robust quality assurance Create a transparency for all industry members for availability of appropriately trained skilled manpower Knowledge/Information repository as an open system. Process/Technology information as an open system.



Media &	Media &Entertainment	 5 members will be nominees of FICCI,. 	FICCI	 To create a sustainable and Approved by technologically advanced platform NSDC Board
Entertainment	Skill Council	 Members from the consortium members by consensus 2 members with outstanding contribution to the sector will be coopted Chairman will be elected from among the nominees of FICCI 		 for collection, storage and exchange of industry data, workforce data, welfare data and career related data across the whole industry segment called the LMIS To focus on building an organization that can develop the standards, evaluation criterion and accreditation systems for providing multiple and varied technical skills in the media sector including employability skills, to both men and women, as well as challenged persons with regular and direct inputs from industry. To build high quality trainer & learner communities while providing effective real-time connects between the job providers and job seekers To actively engage with the Government and Industry for support to realize existing synergies
IT/ITES	IT/ITES SSC	NASSCOM ChairmanNASSCOM Vice	NASSCOM	 Developing a global employer brand Incorporated and talent model to attract non-



Chairman,

- NASSCOM President,
- Secretary, DIT
- Ministry of IT (or Representative)
- 2 State Government Representatives
- CEO NSDC
- 3 Industry Representatives
- 2 Eminent Academician
- Executive Director IT-ITES SSC

Indian workforce

- Identifying and addressing specific leadership capability gaps in the new model
- Evolving business model requires different skills (e.g. relationshipbased selling vs. delivery, etc)
- Designing and effectively implementing technical and general management career tracks
- Preparing for the succession planning challenge as founderowners begin to retire
- Creating ownership for individual careers while scaling-up exponentially (e.g. x-vertical mentors)
- In BPO, there are additional talent pipeline challenges that require action: i) Re-calibrating rewards and career progression models with slowing industry growth
 ii) Articulating compelling employer brands as competition from other industries intensifies iii) Responding to high attrition rates and supplyside challenges through smarter hiring practices iv)Refining selection



				methods and conducting pre-hiring due diligence to ensure better fit v) Tapping alternate talent pools (e.g. Tier II cities, retirees, flexi-time working mothers, etc) vi) Identifying and addressing specific leadership capability gaps in the new model
Healthcare	Healthcare SSC	 1 member each from CII, NSDC, 1 member, Chairman, CII National Committee on Healthcare, 2 members from Teaching Academies / Institutions (like AIIMS, AFMC etc.) 2 members from leading public health institutions (like PHFI, NIHFW, AYUSH etc) 2 members from private hospitals 1 member from Public hospital 2 members from any of the Top* 5 Healthcare Equipment companies 1 member from any of the Top* 5 Pharmacy 	CII, Medanta, Max Healthcare, AYUSH,	 Standardization of job roles / skill Approved by types through development of NSDC Board under Identification of critical job roles incorporation where major skill gaps exist Develop and / or collate appropriate courses and curriculum as per the NOS developed Capacity building of the healthcare education and training system Plan and execute Training of Trainers Maximum participation of private training institutes Build affiliation and accreditation process for institutes Certification and examination of trainees Enable maximum employment of HSSC certified personnel Establish well structured, sector specific LMIS



		Company		 Establish capital intensive state-of- the-art training infrastructure like Simulation Labs
Foundry	Foundry SSC	To be decided	Indian Institute of Foundry Men	 To provide Skilled manpower to meet the requirement of the various foundries Set standards of Quality in the skills required "Trade" wise Align the educational institutions to match the Quality standards set by SSC Foundry Educate employers on best practices of workforce development and management Improve the image of the Foundry industry to make it an attractive place for workers To choose as Vocational option and stick to it.
BFSI	BFSI SSC	 One member each from CII, USE, BSE and NSE Top 10 (by turnover in the year 2010-11) Private Sector banks out of which two members would join 	CII, BSE, NSE	 Clearly define roles for each segment of the sector: NSDC Board Identify competencies required for each role defined as stated above incorporation Map learning objectives to the competencies and define learning modules



the SSC on rotation basis.

- Top 10 (by turnover in the year 2010-11) Public
 Sector banks out of which two members would join the SSC on rotation basis
- Top 5 (by turnover in the year 2010-11) Mutual
 Fund companies out of which two members
 would join the SSC on rotation basis
- Top 5 (by turnover in the year 2010-11) Public Insurance companies out of which one member would join the SSC on rotation basis.
- Top 10 (by turnover in the year 2010-11) NBFCs out of which two members would join the SSC on rotation basis
- 1 member from The Association of
- Mutual Funds in India (AMFI)
- 1 member from Indian

 Train the trainers, provide certification and accreditation for training service providers



		 Bank's Association (IBA) 1 member from Insurance Brokers Association of India (IBAI) 1 member from NSDC. 			
Electronics and Hardware	Electronics SSC	 2 members from Consumer Electronics and Appliance Manufacturers Association (CEAMA) 2 members from Electronics Component Industries Association of India (ELCINA) 2 members from Indian Printed Circuit Association (IPCA) 2 members from India Semiconductor Association (ISA) 2 members from Manufacture's Association of Information Technology (MAIT) Representation from NSDC 1 member Academician 	ISA, ELCINA, CEAMA, IPCA, MAIT	 Getting consent and participation of other hardware industry bodies Creating the business proposal and submitting it to NSDC for approval Addressing industry sectors of focus Defining scope of work of ESSC Process of formation of ESSC Elaborating stage wise progress, technology needs, pilot projects, partners, etc Constitution of its Board 	Approved by NSDC Board under incorporation



		 1 member from Relevant Ministry 			
Leather	Leather SSC	 1 members from any top* ten Finished Leather Segment - large 1 member from any top* ten Footwear Segment - large 1 members from top* ten Leather Goods and Garments Segment large, 1 members from any Medium Finished Leather Segment, 1 member from any Medium Footwear Segment, 1 member from any Small Footwear Segment, 1 members from any Medium Leather Goods and Garments Segment, 1 member from any Small Leather Goods and Garments Segment, 1 member from any Small Leather Goods and Garments Segment, 1 member from any Small Leather Goods and Garments Segment, 1 Industry leader (statesman) nominated by 	Council for Leather Exports	 Identification of Skill Development needs including preparing a catalogue of types of skills, range and depth of skills to facilitate individuals to choose from them Development of a sector skill development plan and maintain skill inventory Determining skills/competency standards and qualifications Standardisation of affiliation and accreditation process Participation in Affiliation, accreditation, examination and certification Plan and execute Training of Trainers Promotion of academies of excellence Establishment of a well-structured sector specific LMIS to assist planning and delivery of training 	Approved by NSDC Board under incorporation



		 Governing Council, 1 India Policy and Government relations expert nominated by Governing Council, 1 Marketing Expert nominated by Governing Council, 1 Export expert nominated by Governing Council, 1 member from NSDC, 1 member from Council of Leather Exports 			
Gems and Jewellery	Gems and Jewellery SSC	 2 members from any exporters of Gems and Jewellery (on a rotation basis from different geographical areas for 2 years) nominated by GJEPC , 1 member from any diamond polishing industry from Gujarat nominated by GJEPC, 1 member from any diamond polishing 	The Gems and Jewellery Export Promotion Council (GJEPC)	 Identification of skill development needs including preparing a catalogue of types of skills, range and depth of skills to facilitate individuals to choose from them. Development of a sector skill development plan and maintain skill inventory Determining skills/competency standards and qualifications, standardization of affiliation and accreditation process Participation in affiliation, 	Approved by NSDC Board under incorporation



industry from India excluding Gujarat nominated by GJEPC,

- 1 member from any Studded Jewellery manufacturer from Domestic Tariff Area nominated by GJEPC,
- 2 members from any retailer of Gems and Jewellery nominated by GJF (The Gem and Jewellery Federation),
- 2 members from any manufacturer of gold jewellery (on a rotation basis from different geographical areas for 2 years) nominated by GJF,
- 1 member nominated by SEEPZ (Santacruz Electronics Export Promotion Zone) Gem and Jewellery Manufacturers" Association ,
- 1 member from any colored Gem stone cluster

accreditation, examination and certification.

- Plan and execute Training of Trainers,
- Promotion of academies of excellence,
- Establishment of a well-structured sector specific (LMIS) to assist planning and delivery of training.



		 nominated by JJA (Jaipur Jewellers Association) , 1 academician nominated by GJPEC, 1 Government Nominee , 1 member nominated by NSDC 		
Rubber	Rubber Skill Council	 3 members from tyre segment, 3 members from non tyre segment, 1 from large size company, 2 from Medium/small company, 1 member from Indian Rubber Manufacturer Research Association 1 from Indian Cycle & Rickshaw Tyre Manufacturer Association, 1 member from Indian Rubber Manufacturer Research Association, 1 member from Indian Rubber Manufacturer Association, 1 member from Indian Rubber Manufacturer Association, 1 member from Indian Rubber Manufacturer Research Association 1 member from Indian Rubber Manufacturer Research Association 	All India Rubber Industries Association & Association of Tyre Manufacturers of India	 Identification of skill development needs including preparing a catalogue of types of skills, range and depth of skills to facilitate individuals to choose from them, Development of a sector skill development plan and maintain skill inventory, Determining skills/competency standards and qualifications Standardization of affiliation and accreditation process Participation in Affiliation, accreditation, examination and certification Plan and execute Training of Trainers Promotion of academies of excellence, Establishment of a well-structured sector specific



- 1 member from Rubber Board,
- Representation from NSDC

Labour Market Information System (LMIS) to assist planning and delivery of training.

Source: NSDC

In addition to the above SSCs, following SSCs are under evaluation:

- Foundry SSC
- Handloom and Handicraft SSC
- Construction SSC
- Agriculture SSC
- Food Processing SSC
- Textile SSC
- Plumbing SSC
- Logistics SSC
- Domestic Workers SSC
- Telecom SSC



5.6 Project design

The proposed new entity may be formed as a section 25 company with authorized share capital of Rs.5 crore and may have a paid up capital of Rs.1 crore (Government – 49% and Private sector – 51%). All the stakeholders of vocational training in Karnataka need to be a part of the new entity. Some of the key stakeholders include:

- ✓ Government of Karnataka
 - a. Karnataka Vocational Training and Skill Development Corporation
 - b. Knowledge Commission
 - c. Department of Employment and Training
 - d. Department of Industries and Commerce
 - e. Department of Rural Development and Panchayat Raj
- ✓ National Skill Development Corporation
- ✓ Industry associations

Organizational structure of the proposed new entity will be as follows:

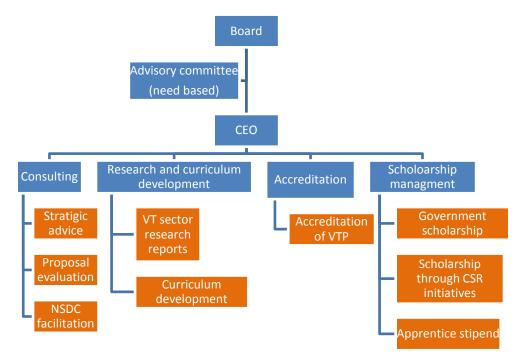
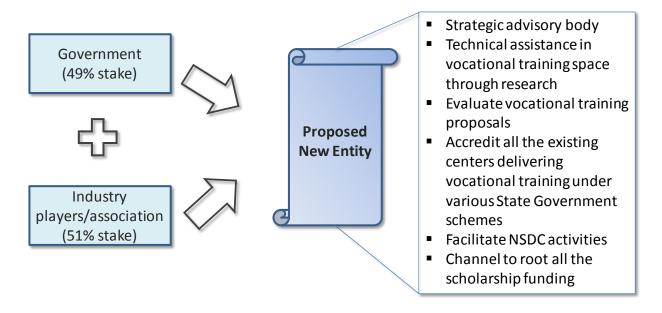


Figure 9: Organisation structure for new entity



Type of agreement

This is an institutional structure under PPP model. Government and Industry players/association should form a section 25 company that acts as single window to achieve the objectives listed above.



Role of public sector

- > To provide equity investment
- > Consulting with the proposed new entity for strategic decision in vocational training space
- > Rooting all the vocational training proposals through the proposed new entity
- Using the new entity as accreditation agency for all government schemes under vocational training space
- > Policy and regulatory changes to facilitate setting up of the proposed new entity

Role of private sector

- > To provide equity investment
- > Rooting all the CSR activities in vocational training through the proposed new entity
- > Consulting the proposed new entity for strategic decisions in vocational training in Karnataka
- Recruiting skilled people required for operationalizing new entity
- > Taking the accreditation from the proposed new entity for their centers

Following figure shows the benefit of the PPP model to both Private and Public Sector:

Public	Private
✓ Better management and administration	 ✓ Influence on public resource and policies
 ✓ Access to expertise and talent 	✓ Skilled workforce✓ Visibility and reputation
 ✓ Increased operating effectiveness 	 ✓ Delivery of Corporate Social responsibility
	 ✓ Leverage on government resource

Revenue model

Participants in the project will have to be the equity shareholder of the proposed new entity. Income will be generated through the following means:

- 1. Proposal evaluation charges
- 2. Consulting charges
- 3. Revenue from accreditation
- 4. Publishing research reports
- 5. Scholarship service charges

Snapshot of numbers driving the revenue model of the proposed entity are given below:

Table 12: Outcome to be achieved by the proposed new entity

	2013 -14	2014 -15	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20	2020 -21	2021 -22	2022 -23
No. of proposals evaluated*	180	157	186	213	274	356	216	238	177	203
No. of strategy consulting to be done	10	15	20	20	25	25	25	30	30	30
No. of institutes accredited	133	116	138	291	319	402	318	379	395	181
No. of publications	5	10	15	20	20	20	25	25	25	25



					2017 -18					2022 -23
Scholarship to be administered (Rs. Lakh)	260	273	287	301	511	536	563	591	621	652

*No. of proposals evaluated is assumed after considering proposal rejection rate as 35%



Chapter 6: Project Financials

6.1 Revenue Assumption

Proposal evaluation revenue	Rs.1,00,000/proposal
Consulting revenue	Rs.3,00,000/ Assignment
Accreditation revenue	Rs.50,000/institute; once in 3 years
Publication revenue	Rs.2,000/copy
Scholarship service charge	Recovery of manpower cost to break even

Table 13: Year wise distribution of revenue

Rs. Lakh	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Proposal evaluation revenue	180	172	225	284	401	574	383	463	379	479
Consulting revenue	30	50	73	80	110	121	133	175	193	212
Accreditation revenue	67	64	83	194	234	324	282	369	423	213
Publication revenue	10	22	54	80	117	129	221	244	322	354
Scholarship service charge	26	27	29	30	51	54	56	59	62	65
Total revenue	312	335	465	667	913	1,201	1,075	1,310	1,379	1,324

Source: IMaCS Analysis

6.2 Operating Cost Assumptions

Salary	Please refer below table for the roll out plan of employees
Rentals	4000 sq.ft at a rate of Rs.100/sq.ft/month



Travel expenses	10% of salary			
Committee Meetings Expenses	 Committee members: 5 members 			
	 No. of times meeting held in a year: 4 times 			
	 Cost/person/meeting: Rs.20,000 			
	 Subcommittee members: 5 members 			
	 No. of time meeting held in a year: 6 times 			
	 Cost/person/meeting: Rs.15,000 			
	 Cost are escalated at 5% year on year 			
Legal expenses	Assumed as Rs.10 lakh in year 1 and Rs.5 lakh there after every year			
Research reports	50% of research publication revenue			
Outsourced consulting expenses	 Year 1 to 3: 50% of proposal evaluation is outsourced 			
	 From year 4 onwards: 60% of proposals evaluated is outsourced 			
	 70% of proposal evaluation revenue is shared with the outsourced agency 			
Admin expenses	10% of salary cost			
Marketing expenses	3% of revenue			
Accreditation expenses	70% of accreditation revenue is shared with outsourced agency			
Misc. expenses	5% of total revenue			

Table 14: Year wise distribution of operating cost

Rs. Lakh	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Salary	141	156	190	199	258	294	308	324	340	357
Rentals	48	50	53	56	58	61	64	68	71	74
Travel expenses	14	16	19	20	26	29	31	32	34	36
Committee Meetings Expenses	9	9	9	10	10	11	11	12	13	13
Legal expenses	10	5	5	5	5	5	5	5	5	5
Research reports	5	11	27	40	59	64	111	122	161	177
Outsourced consulting expenses	63	60	79	119	169	241	161	194	159	201
Admin expenses	14	16	19	20	26	29	31	32	34	36

Rs. Lakh	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Marketing expenses	9	10	14	20	27	36	32	39	41	40
Accreditation expenses	47	45	58	136	163	227	197	258	296	149
Misc. expenses	16	17	23	33	46	60	54	66	69	66
Total expenses	375	395	497	657	846	1,058	1,005	1,152	1,223	1,154

Source: IMaCS Analysis

Table 15: Year wise distribution of capex

Rs. Lakh	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Computer	7.6	0.4	1.6	7.6	2.8	2.8	7.6	2.8	2.8	7.6
Furniture and fixtures	1.0	0.1	0.2	-	0.4	0.2	-	-	-	-
Other assets	10.0	-	-	-	10.0	-	-	-	-	10.0
Total	18.6	0.5	1.8	7.6	13.2	3.0	7.6	2.8	2.8	17.6

Source: IMaCS Analysis

Table 16: Funding requirement for the proposed model

Rs. Lakh	2013-14	2014-15	2015-16	2016-17	Total
Total funding requirement	144.07	63.69	50.74	24.49	282.99
Government (49%)	70.59	31.21	24.86	12.00	138.66
Industry players (51%)	73.47	32.48	25.88	12.49	144.32

Source: IMaCS Analysis

IRR for the project is at 14%



Chapter 7: Statutory and Legal Framework

Some of the key regulatory aspects that have to be clarified before setting up the new entity are:

- 1. Creation of the proposed new entity as a PPP, under PPP institutional framework
- 2. Single point clearance for the projects
- 3. Overlap with any other entity under skill development policy initiatives
- 4. Policies related to CSR fund utilization
- 5. Tax benefits to the member organizations
- 6. Overlap with current accreditation policies

Chapter 8: Operating Framework

8.1 Risks and Mitigation

The project involves a few risks both for the Government and also for the private player. The risks associated with the formation and implementation phases have been classified as High, Medium and Low.

Risk	Description	Risk Mitigation Mechanism	Risk level
Formation risk	Buy in from the key stakeholders of the vocational training area	Selling through highlighting benefits available for each of the stakeholders and by elaborating on the impact created in vocational training especially in terms of quality	Medium
	Requirement of policy level changes	Emphasizing on the integrated mechanism created to address the challenges in vocational training area highlighted in Karnataka Skill Policy and buy in from various Government departments involved in vocational training	Low
Market risk	Realisation of various estimated revenues or incurring cost over and above the budgeted expenses	Diversity in the areas of consulting, technical assistance and targeted customer will help	Medium
Operations risk	Coverage of sectors and training providers	Clear targets must be defined for the proposed new entity	Low
	Acceptance from corporate for routing of CSR initiatives in terms	Effective marketing initiative	Medium



Risk	Description	Risk Mitigation Mechanism	Risk level
	of scholarship for vocational training through the proposed new entity Attracting private players to get into PPP model in vocational training	Managed by KVTSDC and policy level initiatives taken by Government of Karnataka to promote PPP in vocational education	High



Chapter 9: Way Ahead

The way ahead in for a successful establishment of new entity to facilitate PPP model is dependent upon pointed and timely actions. The following can be adapted to make this mega venture successful.

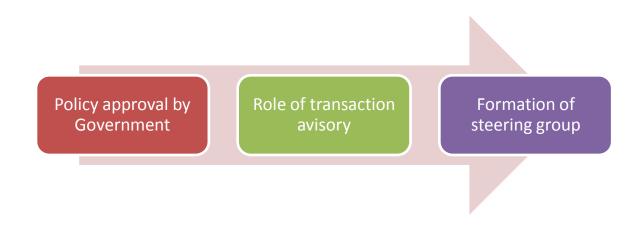


Table 17: Next step

Step for setting up proposed new entity	Outcome
Policy level actions in Government	Policy level actions must be taken up by Government to establish the proposed new entity
Role of transaction advisor	The transaction advisor must be taken on board to validate the assumptions, the design and financial outlay planned
Steering Group formation	A high profile venture like this needs formation of Steering Group – which comprises of the representatives from the government, from the highest echelons. This steering committee should work in tandem with the transaction advisor in every stage for timely approvals and clearances to propel the venture

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