

Skill Development in India: A Brief Analysis of Skill Gap

Dr. Rajshekhar Basavapattan

Assistant Professor, Department of Management Studies,
Visvesvaraya Technological University, BelagaviPG Center Kalaburagi -585105

ABSTRACT

Today India has witnessed a quantum jump in development process. Rise of modern age industries mindset of youths purchasing power etc has laid a new foundation for economic development. changes in economic scenario re rises a need for imparting and promoting skill sets of young population to tap opportunities and overcome challenges posed to m. re is considerable emphasis on laying and stressing on education and training in India but re is dearth in raising and enhancing needs and demands for skill initiatives. Present paper focuses on addressing skill gap in India and also studies various skill development initiatives undertaken by government. Paper is constructed by applying demand and supply approach to address skill gap and also appraising existing skill development initiatives undertaken by government at various levels and states in India.

Keywords: Demand and supply of skill skilled manpower scenario in India; skill development initiatives undertaken by government skill gap analysis.

INTRODUCTION

Skilling India is an enduring agenda that is essential in today's fast-moving economic atmosphere. This paper presents skill development ecosystem in India and its efforts to effectively utilize demographic dividend as a competitive advantage for India.

various objectives adopted under National Skill Development Initiative will empower all individuals through improving skill sets required to overcome challengesgain knowledge and its effective implementationadopt schemes and programs that are nationally and internationally recognized in form of qualifications to gain access to employment and enhance entrepreneurial skills that will ensure country to compete globally. Government of India has recognized need and wants for Skill Development initially in 11th Five Year Plan providing a framework and prospectus for skill development initiative and its significance. Initiative was quick started in first National skill Development Policy which was framed in 2009 and subsequently a National Skill Development Mission was frame and launched. government in its 12th Five Year Plan observed that Skill development programmes in past have been run mainly by government without connecting with market demand and also overcome challenges posed to aspirants joining programs. This provided an opportunity for designing and enabling a competitive

framework that would attract private investment in vocational training through Public-Private Partnership and also with international collaborations. Under Ministry of Youth Affairs and Sports in July 2014 a new department named NSDC was framed and established and was subsequently upgraded to full-fledged ministry in November 2014 and was launched in year 2015 by honorable Prime Minister Narendra Modi. Ministry was assigned with numerous roles and responsibilities involving coordinating and evolving skill development schemes and programs mapping of existing skills and certification industry-institute linkages in form of collaborations.

India in recent years has transformed as a knowledge-based economy due to profusion of competent and trained human resources. With rise in situations of globalization and its influence on economy country has immense opportunities to establish its distinctive position in world due to its young independent aggressive and competent work force. In country having a demographic transition of youths providing a suitable opportunity by training and educating progress of economy can be demonstrated globally. It has been opined by experts that Skills and knowledge are key drivers of macro-economic growth and socio-economic stability along with balancing economy as whole. Definition of skill development can be stated as proficiency that is acquired or developed through training education or by experience. This will reinforce ability of individuals to adapt to changing market demands and help benefit from innovation and entrepreneurial activities and excel in their respective career. Economic prosperity of country mainly depends on number of persons in employment and their potential to contribute effectively and efficiently towards progress of country. Inclusive growth can be achieved only through skilled human resource; therefore skill development can be connected to a broader growth perspective increasing employment and development demanding government interventions for overall development of country.

NEEDS FOR SKILL DEVELOPMENT

India is a youth populated country therefore requirement of jobs has also increased. With support of skill development initiative unemployment hurdle can be solved. Provided potential of youth is not harnessed they will fall prey to drug addiction and or anti-social activities which we as a nation cannot afford and will result in havoc through internal disputes and disturbances. Workforce who is skilled is crucial for success of recently launched missions by country like Make in India Digital India Swach Bharath Abhiyan Smart Cities Sankalp schemes etc. Neighboring country China has been gradually vacating its factories due to rising Chinese wages and an appreciating value of country's currency and also with internal demographic challenge that China is facing. Here in this situation India has an opportunity to become a factory and a hub for various industries globally. If this vision is to be converted into reality country requires an internationally acclaimed workforce matching international standards of quality and productivity through integration of skills and training along with education and training for skills up gradation and development.

LITERATURE REVIEW

Reviews of literatures are provided below

Kaur and Singh et al 2018 conducted a study titled “A Study on Skill Development of Paint and Coating Industry” was conducted which was intended to identify reasons for shortage of skills in paint industry and to determine how to deal with skill slit amongst painters. Primary data sources were used for study. A self administered questionnaire was used to collect data from 130 painters working in Kurukshetra district. Result of study was provided in findings of study which indicated that lack of formal training and inadequate provisions for training of painters are main reasons behind shortage of skills in industry as well as district. Findings indicated that there was shortage of skilled workforce. Quality of work can be very well assessed through skills of work and its potential. Vice versa poor quality of works could be results of lack of skilled painters in district. As it is evident that unskilled painters will produce poor quality of work and result may be devastating in future. Process of imparting training will have a positive and significant effect on performance of painters. Findings revealed that painters lack formal training and they do not have formal certificate or diploma through formal training related to their field or to their work too. Youths entering this occupation do not acquire formal training for their work in which painters lack sufficient knowledge and skills that is required or desired. They used to get informal training from their family and friends resulting in their performance which is not acceptable. Present skill level and knowledge are inadequate to use new equipment's and techniques in painting work that they are doing. Painters face numerous problems in their work like nonpayment of wages or they face difficulty in getting work absence of safety measures that risk their life etc.

Khan and Ansari et al 2018 conducted a research study on title “Role of Education and Skill Development to Promote Employment in India” was conducted. Prime objectives of study were to analyze and highlight status of contemporary education with respect to skill development and to provide some suggestions based on observations and analysis of research. This involved secondary data that was collected through various sources like books media reports published reports surveys prominent sites. Descriptive research methodology was adopted for study. Study concluded that to sum up skill development for India is critical from both socio-economic and demographic perspective. It is an essential tool for reducing poverty and enhancing competitiveness and employability and to promote self-entrepreneurship motivation in youths. This transformation in approach can make our economy achieve its targeted consequences. study states that around 12 million youth enter workforce every year with poor education and negligible work skills and if they are unemployed due to lack of skills than massive social unrest could arise in country. Here is an opportunity to stop spending on that imperfect approach and comprehensively embrace globally-proven training based model that has been effective in other economies in world.

OBJECTIVES OF STUDY

- To analyze initiatives undertaken by Government to promote skill development in India
- To understand present scenario of skill development in India.

- To study skill gap in India in various sectors.

INITIATIVE OF NATIONAL SKILL DEVELOPMENT IN INDIA

Presently capability of skill development in India is around 3.1 million persons per annum where India has capacity to 15 million annually. Here country has targeted of creating 500 million skilled workers by 2022. Before there is a need for increasing capacity and capability of skill development programs and come out with innovative schemes to attract and develop youths. Initiative of skill development will harness inclusivity and reduce divisions among demographic factors in country as a whole. These initiatives will support supply of trained workers who are adjustable dynamically to changing demands of employment and knowledgeable situations. This strategy will promote excellence and will meet requirements of knowledge based economy and skill based economy. Skill development initiative does not discriminate between private or public delivery and places importance on outcomes and competition among training providers and its accountability towards development process. This skill development initiatives support employment generation supporting economic growth and social development of country. As already stated Skill development policy will be an integral part of comprehensive economic labour and social policies and programmes. A structure for better coordination among various Ministries States industry and or stakeholders will be conventional.

Table 1: State-wise Number of Government/Private ITIs with Seating Capacity in India (As on 14.07.2014)

States/UTs	No. of Govt. ITIs	Seating Capacity (Govt.)	No. of Pvt. ITIs	Seating Capacity (Pvt.)	Total No. of ITIs	Total Seating Capacity
Andaman and Nicobar	1	273	0	0	1	273
Andhra Pradesh	148	28590	594	119796	742	148386
Arunachal Pradesh	5	512	1	96	6	608
Assam	30	5776	4	288	34	6064
Bihar	34	11433	657	92329	691	103762
Chandigarh	2	968	0	0	2	968
Chhattisgarh	92	11248	62	7072	154	18320
Dadra and Nagar Haveli	1	228	0	0	1	228
Daman and Diu	2	388	0	0	2	388
Delhi	16	11132	62	5052	78	16184
Goa	10	3264	5	412	15	3676
Gujarat	157	57804	394	24360	551	82164
Haryana	90	23752	108	11880	198	35632
Himachal Pradesh	75	11924	131	12140	206	24064
Jammu and Kashmir	37	4087	1	110	38	4197

Skill Development in India: A Brief Analysis of Skill Gap

Jharkhand	20	4672	166	36664	186	41336
Karnataka	179	30914	1291	102798	1470	133712
Kerala	40	16476	488	53914	528	70390
Lakshadweep	1	96	0	0	1	96
Madhya Pradesh	173	26158	268	31970	441	58128
Maharashtra	390	108744	419	50468	809	159212
Manipur	7	540	0	0	7	540
Meghalaya	5	622	2	320	7	942
Mizoram	1	294	0	0	1	294
Nagaland	8	944	0	0	8	944
Odisha	29	13952	590	100036	619	113988
Puducherry	8	1432	9	508	17	1940
Punjab	98	21364	251	32864	349	54228
Rajasthan	115	15728	990	124175	1105	139903
Sikkim	4	580	0	0	4	580
Tamil Nadu	61	23288	656	67982	717	91270
Tripura	12	1792	1	96	13	1888
Uttar Pradesh	315	32460	1462	172610	1777	205070
Uttarakhand	59	7147	52	5110	111	12257
West Bengal	52	13836	60	6984	112	20820
India	2277	492418	8724	1060034	11001	1552452

Source: Ministry of Human Resource Development Government of India.

PRIME MINISTER'S NATIONAL COUNCIL ON SKILL DEVELOPMENT

Peak coordinating institution Prime Minister's National Council on Skill Development was set up for policy direction and assessment. This commission is chaired by Prime Minister with ministers for Human Resource Development Finance Rural Development Heavy Industries Labour & Employment and Housing & Urban Poverty Alleviation as constituents. Committee has a vision of generating 500 million skilled people by 2022 through skill systems which must be dynamic and highly comprehensive. Commission is responsible to lay down policy objective governance models financing and strategies related to skill expansion. It will be involved in appraisal development of plan and directs mid-course improvement administrators inclusion and termination of any section or entire programme or scheme and coordinates initiatives of public/private cooperations.

NATIONAL SKILL DEVELOPMENT COORDINATION BOARD (NSDCB)

National Skill Development Coordination Board chaired by Deputy Chairman (Planning Commission) would assist Prime Minister's National Council and coordinate action for skill growth. Accountability of board is to specify strategies for implementing decisions of Council on skill development and formulate suitable operational guidelines to meet objectives of skill

expansion. It is predictable to develop strategies and solutions to tackle various issues related to regional imbalances socioeconomic apprehension shortage of quality teachers gender divides and develop a framework of institutionalize such measures. Board evaluates regional skill gaps and formulate action plans to bridge such hurdles. It also facilitates and coordinates to reposition employment exchanges as outreach points for accumulating and providing information on skill development and employment and promote m to function as career counseling centre. board is also responsible to check assess and evaluate outcomes of various skill development programmes and intimate Prime Minister's National Council on skill development about same.

NATIONAL SKILL DEVELOPMENT CORPORATION (NSDC)

Third tier of institutional set-up on skill development is National Skill Development Corporation which is a non-profit company with a suitable governance structure under Companies Act. It operates as a public-private partnership (PPP) including industry alliances and corporate representatives to develop training institutions and improve delivery of vocational training. As decreed by National Policy on Skill Development NSDC is expected to formulate periodic and annual reports of its strategies and actions and place m in public domain. NSDC is also supposed to meet requirements of labour market along with needs of unorganized sector. Central Government had formed a National Skill Development Fund with an initial investment of Rs 995.10 crore for aiding activities of NSDC and it is also intended to gar capital from central & state government public and private sectors. NSDC has a vision to train about 150 million people by 2022 under National Skill Development Policy.

NATIONAL POLICY ON SKILL DEVELOPMENT

As Government of India has set a target of skilling 500 million people by 2022 so in order to realize this Ministry of Labour & Employment has formulated a National Policy on Skill Development. Policy outlined roles that different stakeholders i.e. central and state government industries trade unions and society would need to play for establishment of a skill culture in India. Policy specified that government should complement initiatives of skill development in private sector and emphasized need of short-term and industry-relevant courses. Moreover it advocated that infrastructure should be developed for apprenticeship and on- job trainings and existing employment exchanges be reformed into career guidance centres to channelize applicants to training apprenticeships and jobs. Policy also called for establishment of an effective evaluation and reliable certification system and publicizing information on outcome of training institutions to ensure transparency.

NODAL MINISTRIES

At present 17 ministries of Indian Government are undertaking skill development initiatives with a collective target of developing 530 million skilled people by 2022 (Table 4). Among se Ministry of Human Resource Development (MoHRD) and Ministry of Labour and Employment (MoL&E) are nodal ministries for skill development which play a significant role

Skill Development in India: A Brief Analysis of Skill Gap

in overseeing various divisions of Skill Development Mission. All aspects of higher education including vocational courses come under responsibilities of Ministry of HRD whereas vocational training infrastructure including government and private Industrial Training Institutes (ITIs) comes under Ministry of Labour and Employment's Directorate General of Employment and Training(DGET).

Trained Persons under Skill Development Initiative in India-2022

Ministries/Departments/Organizations	Target/Projected No. of Trained Persons (in millions)
National Skill Development Corporation	150
Labour and Employment	100
Tourism	5
Textiles	10
Transport	30
Tribal Affairs	-
Rural Development (RUDSETI) and IL and FS	20
Women and Child Welfare	10
Agriculture	20
HRD Higher Education HRD Vocational Education	50
Dept of Heavy Industry	10
Urban Development	15
Department of Information Technology	10
Food Processing Industries	5
Construction Industry Development Council (Under Planning Commission)	20
Health and Family Welfare	10
Micro Small Medium Enterprise	15
Social Justice and Empowerment	5
Overseas Indian Affairs	5
Finance-Insurance/Banking	10
Consumer Affairs	10
Chemicals and Fertilizers	5
Ors (Power Petroleum etc.)	15
Total	530

Source: National Skill Development Policy Ministry of Labour Government of India

SKILL GAP

A skill gap is a considerable gap between skills required by workforce and its current capabilities. In India enormous skills gap exists between what industries demand based on rapid

economic growth and skills that young people acquire through education and training. This demand-supply gap not only affects economic growth but also prevents inclusive growth of economy as a whole. Hence it is responsibility of government to be aware of such skill gaps and take new initiatives for bridging those gaps in order to ensure inclusive growth.

Demand for Skills

India has classified and tracked its economy into three sectors – agriculture sector industry sector and service sector. Agriculture sector includes crops sericulture horticulture milk and animal husbandry fishing aquaculture forestry etc. Industry includes diverse manufacturing sub-sectors. Service sector includes software IT construction retail hospitality communications health care education banking insurance and or economic activities.

In India percentage of population employed in agriculture sector is likely to decline to 40% by 2020. Movement of workforce to industry and service sectors is a tendency that is anticipated to persist in India since these sectors have maximum potential for job creation. NSDC projects that by 2022 demand for skilled workforce will be greatest in automobile construction textile and transportation industries. Table 2 shows estimates for major sector/industry-wise skilled manpower requirements in 2022. It can be seen that skilled manpower requirement is not only restricted to traditional sectors like auto & BFSI but also to or rising sectors like organized retail.

Supply of Skills

India is a country with population of over 1.2 billion people and it is expected to become one of most populous countries by 2025 with a population of around 1.4 billion. According to a research by Boston Consulting Group it is estimated that by 2020 India will have a surplus of active population (in working age 15-59 years) - about 60% of total population. By 2026 around 64% of population of India is expected to be in category of active population (age bracket of 15–59 years) with merely 13% aged above 60 years. This phenomenon for an economy when majority of its population is active is referred as stage of reaping demographic dividend. India is poised to become youngest country of world by 2020 and average would be 29 years which would be around 28% of world's workforce. During this phase India will have a remarkable percentage of total population available for working and contributing towards Gross Domestic Product. While in same period average age of population in China and US is expected to be 37 years and in Western Europe it would be 45 years. Thus such demographic potential offers India an unprecedented edge over or western economies and India is expected to enjoy benefit until 2040. Such increasing percentage of active population will provide India an opportunity to improve labour productivity boost production and within next 10–15 years position itself among developed countries of world.

Table 2: Incremental Skilled Manpower Requirement in India - 2022

S. No.	Sectors/Industries	Skilled Manpower Requirement (in millions)
1	Building and Construction Industry	33

Skill Development in India: A Brief Analysis of Skill Gap

2	Real Estate Services	14
3	Gem and Jewellery	4.6
4	Lear and Lear Goods	4.6
5	Organized Retails	17.3
6	Textile and Clothing	26.2
7	Electronic and IT Hardware	3.3
8	Auto and Auto Components	35
9	IT and ITES	5.3
10	Banking Finance Services and Insurance	4.2
11	Furniture and Furnishing	3.4
12	Infrastructure Structure	103
13	Tourism and Hospitality Services	3.6
14	Construction Material and Building Hardware	1.4
15	Chemicals and Pharmaceuticals	1.9
16	Food Processing	9.3
17	Healthcare	12.7
18	Transportation and Logistics	17.7
19	Media and Entertainment	3
20	Education and Skill Development Services	5.8
21	Select Informal Employment Sectors (Domestic Help Beauticians Facility Management Security Guards)	37.6
	Total Incremental Requirement	347

Source: National Skill Development Corporation

With over 650 universities and around 35539 allied colleges enrolling more than 20 million students per year Indian has huge educational infrastructure to provide higher education and training to youth as shown in Table 3.

Table 3: Higher Education Institutions (Universities and Colleges) in India

Type of Institution	Number
Central Universities	45
State Universities	321

Deemed Universities (Private or Public)	129
Private Universities	187
Institution of National Importance (Public)	67
Affiliated Colleges (Public or Private)	35539

Source: UGC

In India most of formal skills-related training is given through government or private Industrial Training Institutes (ITIs). Se are training institutes which provide training in technical fields and are constituted under Directorate General of Employment & Training (DGET). Table 3 shows State-wise Number of Government/Private Industrial Training Institutes (ITIs) with Seating Capacity in India and it can be clearly seen that y have capacity to train 1552452 students per year.

As it is seen Indian education & training system has a huge potential for skill development. At present enrolment capacity of higher education system of India is around 20 million but limiting this to technical and vocational qualification mainly comprising of ITI/ITC Engineering Polytechnics country has a total training capacity of around 4.3 million.

DEMAND-SUPPLYGAP

NSDC has projected an incremental requirement of 347 million skilled personnel in 21 high- growth sectors in India by 2022 (Table 1) but country is faced with a significant skill development challenge as over next decade every year approximately 12 million people are expected to join workforce. In contrast country has a total training capacity of around 4.3 million which is just 36% of entrants and thus depriving every year around 64% newcomers of opportunity of skill development training. Evidently India will face a great challenge of bridging this gap and developing skills of its increasing workforce over next few decades.

CONCLUSION

Indian Government has laid a special focus on expanding and improving skill education and training in nation. Innovative Policy on Skill Development and Entrepreneurship contains several initiatives which if implemented earnestly will go a long way in minimizing demand-supply gap and challenges related to skill mismatch with industry requirements. With increased thrust on manufacturing under 'Make in India' programme need for revisiting and improving India's skill development mechanism becomes all more critical. It has been globally recognized that an efficient vocational education and training plays a critical role in industrial development and manufacturing success as in case of economies like Germany and China. Study of skill development models of three countries done in this report highlights some best practices that can be utilized in India's skill development eco-system. Integration of skill development with formal education system mobilization of students for skill development by removing misapprehensions and perceptions about vocational trades investing in creation of new training capacities for

Skill Development in India: A Brief Analysis of Skill Gap

students as well as teachers utilization of idle public infrastructure to provide skill training in remote corners of country encouraging industry to actively participate in training through provision of apprenticeship as well as through direct involvement in curriculum design and teachers training adopting innovative skill development delivery mechanisms are much-needed steps to meet skill related challenges today. There is a scope of international collaboration and assistance in India's skill development initiatives at almost all levels including for creating awareness and capacities setting standards improving quality as well as providing placement opportunities.

REFERENCES

1. Agrawal P. & Bhatt R. (2011). Globalization India and world New Delhi: Concept Pub.
2. Chenoy D. (2012): Skill Development in India A Transformation in Making. India infrastructure report 2012 IDFC 199-207.
3. Dhar A. (2013 June 15). India to be most populous country by 2028: UN report. Hindu <http://www.hindu.com/todays-paper/tp-national/india-to-be-most-populous-country-by-2028-un-report/article4816016.ece>
4. Duggal S. (2014 June 11). Empowering India. Pioneer <http://www.dailypioneer.com/avenues/empowering-india.html>
5. GOI (2009). National Skill Development Policy Government of India <http://www.skilldevelopment.gov.in/resources/national-skill-dev-policy>
6. MaClean R. (2013). Skills development for inclusive and sustainable growth in developing Asia-Pacific Dordrecht: Springer.
7. Planning Commission (2013a). Twelfth Five Year Plan (2012-17) Employment and Skill Development Planning Commission Government of India140
8. Planning Commission (2013b). Twelfth Five Year Plan (2012-17) Economic Sectors Planning Commission Government of India69.
9. Rao M. S. (2010). Soft skills enhancing employability: Connecting campus with corporate New Delhi: International Publishing House.