Skill Development in India A Skill Gap Analysis



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oday 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 rises a need for imparting and promoting skill sets of young population to tap



opportunities and overcome present day challenges. Emphasis on laying, stressing on education and training in India in enhancing demands for skill initiatives.

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



India in recent years has transformed as a knowledge-based economy due to profusion of competent elastic 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.

The Skills and knowledge are key drivers of macro-economic growth and socio-economic stability along with balancing economy as whole. Economic prosperity of country mainly depends on number of persons in employment and potential to contribute effectively and efficiently towards progress of country. Inclusive growth can be achieved only through skilled human resource.

NEEDS FOR SKILL DEVELOPMENT

India is a youth populated country and requirement of jobs has also increased. With support of skill development initiative

unemployment hurdle can be solved. If the 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 disputed and disturbances. Skilled workforce is crucial for success of recently launched missions by countrylike Make in India, Digital India, Swachh Bharath Abhiyan,

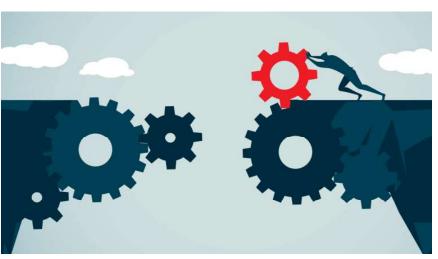
Smart Cities Sankalp schemes etc. Neighboring country China has been gradually vacating its factories due to rising Chinese wages and an appreciating value of country's currency and also with internal demographic challenge that China is facing. In this situation India has an opportunity to become a factory and a hub for various industries globally. If this vision is to be converted into reality in 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.

SKILLGAP

A skill gap between skills required by workforce and current capabilities is very high. 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. Industry includes diverse manufacturing sub-sectors. Service sector includes software IT construction retail hospitality communications health care education banking insurance and or economic activities. Post pandemic situation there is another sector which made considerable demand is Cyber Security.

In India percentage of population employed in agriculture sector is declined to 40% in 2020. Movement of workforce to industry and service sectors is a tendency that is anticipated to persist in India since tech 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.

Supply of Skills

According to research by Boston Consulting Group it is estimated that 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. 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.

Skilled Manpower Requirement in India

India requires 347 billion skilled workforces. (Sources: NSDC report 2022). 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.

DEMAND-SUPPLY GAP



NSDC has projected an incremental requirement of 347 million skilled personnel in 21 high- growth sectors in India by 2022 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.

In India most of formal skills-related training is given through government or private Industrial Training Institutes (ITIs). They are training institutes which provide training in technical fields and are constituted under Directorate General of Employment & Training (DGET). State-wise Number of Government/Private Industrial Training Institutes (ITIs) with Seating Capacity in India and it can be clearly seen that they 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.

Shortage of cyber security professionals in India

There are between 20,000 and 25,000 unfilled positions in cyber security profiles in India currently, and this number is expected to expand as telcos push 5G roll out, and companies continue their digital transformation journeys, staffing. Telcos will also have to fight not only technology companies, but also enterprises for

cybersecurity professionals going forward. (Between) 70-75% of tech companies in India, including IT companies, are looking to hire more cyber security professionals as their existing teams are understaffed or do not have adequate skills to handle the evolving dynamics of internet privacy.

which is just 36% of entrants and thus depriving This is in addition to security professionals every year around 64% newcomers of needed by telcos to ensure secure network opportunity of skill development training. operations in both, their enterprise and mobility Evidently India will face a great challenge of arm. For telcos, the demand for security experts

spans multiple niche profiles given the diversity training in nation. Innovative Policy on Skill of security functions that rise due to 5G roll out Development and Entrepreneurship contains and its enterprise use cases.

Several initiatives which if implemented

Profiles like security analyst, incident report analyst, cloud and IoT security experts are going to see an increase in demand as telcos roll out 5G as they push enterprise use cases.

The Data Security Council of India has forecast that the cybersecurity ecosystem will expand up to a point where nearly one million professionals will be required by 2025. Additionally, the demand for cloud security skills is estimated to grow by 115% between 2020 and 2025, representing almost 20,000 job openings.

An extensive exercise in reskilling and/or best practices that can be utilized in India's skill

upskilling the existing workforce, believe staffing experts, is one of the ways that telcos can future proof their workforce in this regard.

"Bridging this gap will take diligent upskilling and reskilling endeavors from employers as well

as government bodies. To prepare for the 5G technology, several telecom companies have initiated in-house training programs to upskill their workers,"

Bharti Airtel, for example, has been preparing for 5G roll out by upskilling its professionals and offering them certification courses such as CCNA (Cisco Certified Network Associate) and CCNP (Cisco Certified Network Professional). The courses are offered based on skill and eligibility level free of cost.

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 ecosystem. Integration of skill development with formal education system mobilization of students for skill development by r e m o v i n g misapprehensions and perceptions about vocational trades

investing in creation of new training capacities for 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 muchneeded steps to meet skill related challenges today, re 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.

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