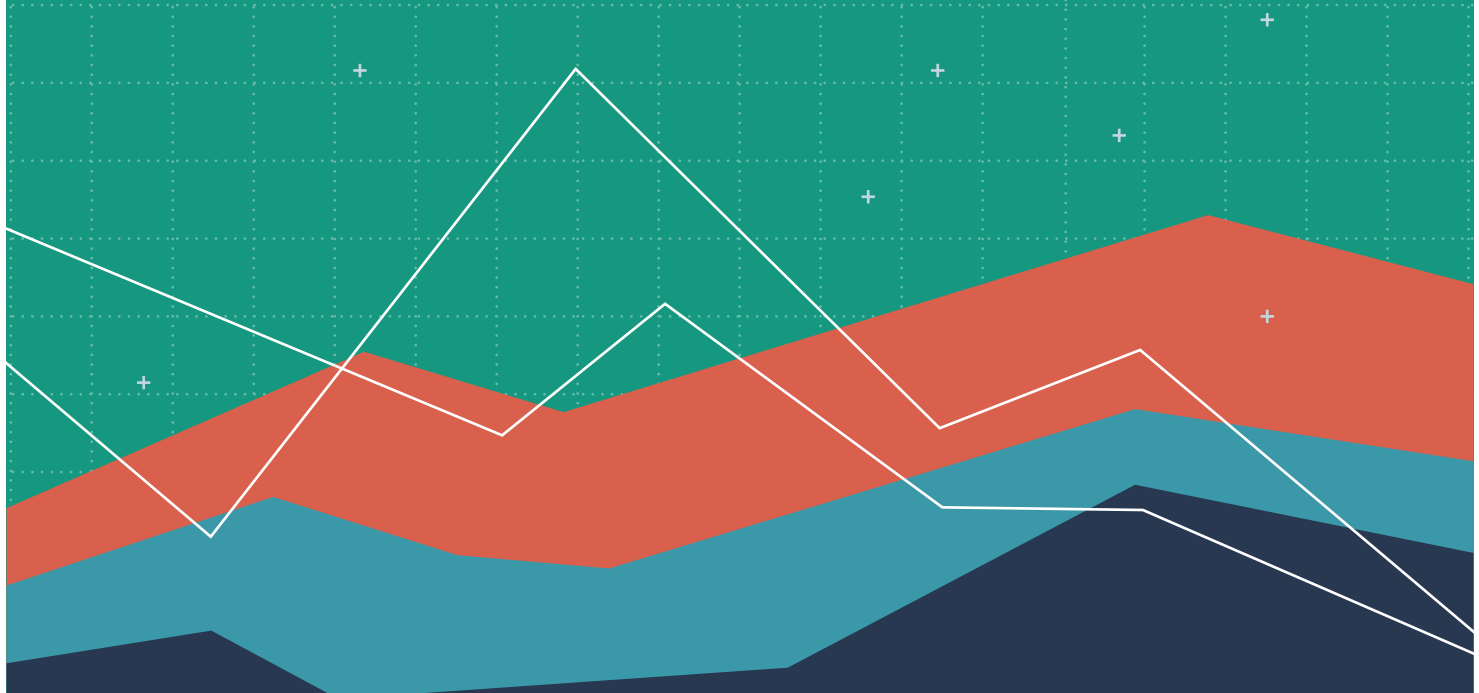


STATE OF WORKING INDIA | 2018
BACKGROUND PAPER - 08

FOURTH INDUSTRIAL REVOLUTION: REALISING INDIA'S DEMOGRAPHIC DIVIDEND

A. Srija





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Fourth Industrial Revolution : Realising India's Demographic Dividend

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Abstract

This paper attempts to explore the avenues for future jobs given the impact of technology with internet of things, robots, cloud computing, nanotechnology, automation of manufacturing and so on, and the measures in place to address these challenges. The paper explores the labour market from the supply side and the demographic advantage that India has along with the constraints involved in converting the advantage into a dividend. The demographic spread of the labour force is geographically different - in the South we have an ageing workforce with longer life expectancy while in the North and Central India the new entrants to the labour market are the youth. The demographic advantage is concentrated in the North. This is then addressed against the backdrop of the impact of the Fourth Industrial Revolution on jobs. The skill gaps that exist therefore needs to be addressed differently. While the policy focus is on skilling/up-skilling and re-skilling, the emphasis of each of these components differs according to the geographical spread of the demographic advantage. There should be continuous upgrading of the training curriculum to incorporate the technological advancements. More youth should be motivated to opt for vocational courses that enhance their skill set and employability to enable India convert its demographic advantage into dividend.



1. Introduction

India is going to have a relatively large share of working age population in the coming decades, which is referred to as the demographic advantage. The working age population (15-59 years) which was 52.8 percent of total population in 1971 increased to 60.3 percent in 2011 and is projected to increase to 65.9 percent by 2022¹. But to convert this advantage into a demographic dividend, it is essential that the new entrants as well as the existing labour force are gainfully employed. This in turn necessitates that enough job opportunities, either as self or wage employment, are generated in the economy. The challenge therefore is two-fold: whether we have the job avenues, and whether our labour force is qualified enough to leverage them.

In India the proportion of population in the labour force, that is, the labour force participation rate, is low as compared to other developing countries. This is mainly due to the low level of female participation in the labour force and an increasing proportion of youth preferring to remain in education. The labour force participation rate (LFPR) for the 15 and above age group was 52.4 percent in 2015-16, of which the LFPR for males was 75.5 percent and 27.4 percent for females². The unemployment rate during this period was 3.7 percent, of which the unemployment rate among females at 5.8 percent was higher than that of males at 3.0 percent. Even among those reported as employed the proportion of underemployment is relatively high. For instance, at the all-India level, only 60.6 percent of the persons aged 15 years and above who were available for work for all the 12 months of the reference period were able to get work throughout the year³.

The status of employment of the workforce shows that 47.2 percent were self-employed, 33.1 percent were casual employed, 16.2 percent wage/salary employed, and 3.5 percent were contract workers in 2015-16. The sector-wise distribution of employment shows that in 2015-16 while almost 47.3 percent were employed in the primary sector, 21.9 percent were employed in the secondary sector and 31 percent in the tertiary sector⁴. In other words, the workforce profile of India is such that we still have a predominant segment engaged in the agriculture sector and who are mostly self-employed. While there has been a transition from agriculture to a service sector led growth, the mobility of the labour force from agriculture to the manufacturing or service sectors has not been that rapid. This is mainly due to the skill gap that exists in the labour force. For instance, 58.3 percent of graduates and 62.4 percent of post-graduates reported non-availability of jobs matching their education or skills as the reason for their unemployment (Table 1). This section of the labour force may either go for self-employment or move out of the labour force after a period of waiting.

1. Report of the Sub-Group of Chief Ministers on Skill Development, September 2015

2. Fifth Annual Employment-Unemployment Survey 2015-16 (UPSS Estimates).

3. *ibid*

4. *ibid*

Table 1 : Unemployed Persons aged 15 years & above with Graduate/Post Graduate Level Qualification by reasons of unemployment, All India (in %)

Reasons	Graduate	Post Graduate
Non-availability of jobs matching with education/ skill/ experience	58.3	62.4
Non-availability of adequate remuneration	22.8	21.5
Family/personal problems	5.3	3.8
Others	13.5	12.4

Source : Authors' Calculations

In the coming decades, majority of the new entrants to the labour force would be from the northern and central parts of India while the southern and western parts of the country - excluding Maharashtra which has a large inflow of migrants - would face an ageing workforce with longer life expectancy. Current trends show that new entrants to the labour force, especially the unskilled and low skilled, migrate towards metropolitan cities, the southern and western parts of the country, or towards West Asia. The low skilled new entrants are engaged as construction workers, plantation labour, in the service sector as delivery boys of the various e-commerce portals, salesmen and women of retail stores, domestic workers, security staff, baby care, housekeeping, desktop operators, teachers/trainers of short term courses, truck/auto/petty auto/bus drivers, beauticians and so on. The skill set of this labour force is low because a large majority of them have not been able to attain even basic education. Almost 75 percent of the rural population and 49 percent of the urban population aged 15 years and above had educational qualifications below secondary level in 2014 (Table 2).

Table 2 : Percentage Distribution of Population (15 years and above) by Education Level in 2014 over 2011-12

Education level	2011-12		2014	
	Rural	Urban	Rural	Urban
Illiterate	36.3	16.1	34.8	15.8
Primary	23.0	16.7	22.5	17.4
Upper Primary	16.8	16.1	17.2	15.9
Secondary & Higher Secondary	19.3	30.7	20.2	30.2
Diploma/ Certificate Course	0.8	2.2	1.1	2.7
Graduate & above	3.8	18.1	4.3	18.1

Source: NSS Report No.575: Education in India, 2014

The low level of education reflects in the labour market too. Table 3 shows the distribution of the proportion of population aged 15 years and above in and out of the labour force based on their education classification. As the educational qualification increases the proportion of unemployed also increases. The proportion of population outside the labour force also remains high with more than half of population outside the labour force for those with secondary (55.3%) and higher secondary qualification (57.7%).

Table 3 : Distribution of Persons Aged 15 years and above by Main Activity and Educational Classification According to UPS Approach

Educational Qualification (1)	Employed (2)	Unemployed (3)	Labour Force (4) = (2)+(3)	Not in Labour Force (5)
Illiterate	46.3	0.9	47.2	52.7
Primary	54.7	1.3	56.0	44.0
Middle	51.8	1.6	53.4	46.6
Secondary	42.8	1.9	44.7	55.3
Higher Secondary	39.2	3.1	42.3	57.7
Certificate Course	46.4	5.9	52.3	47.7
Diploma/ Certificate	51.5	6.4	57.9	42.2
Graduate	51.6	10.0	61.6	38.4
Post-graduate and above	59.2	9.8	69.0	31.0

Source: Report on Education, Skill Development and Labour force Vol.III,2015-16, Labour Bureau

In a labour surplus economy like India on the one hand we are faced with an economy driven by the service sector which is receptive to the adaptation of digital technology to manufacturing and service process delivery. And on the other is a large pool of young labour force looking forward to job opportunities in this rapidly changing service sector. The government has initiated skill development programmes both at the Centre and State to provide for the smooth transition of the workforce from the farm to the non-farm sector. But apart from skilling/re-skilling, the challenge that India faces in capitalising upon its demographic advantage lies in the changes being brought to existing job descriptions as well as emergence of new job roles and skills in today's digital age - an age commonly referred to as the Fourth Industrial Revolution.

2. What is the Fourth Industrial Revolution?

Unlike the earlier Industrial Revolutions, the Fourth Industrial Revolution has an impact in both developed and developing economies simultaneously. It is the application of digital technology into machines through robots, artificial intelligence, big data, internet of things (IoT), cloud computing, advanced manufacturing and 3D printing, nanotechnology and more. Its impact is being felt through the large-scale layoffs of IT professionals, as well as automation in manufacturing and adoption of labour displacing technologies in the housekeeping sector, where low skilled or unskilled labour could easily find job opportunities earlier. In the manufacturing sector, new start-ups are technologically intensive digitally with less scope for job creation.

The Digital India programme focuses on bringing high-speed broadband connectivity to rural and remote areas through Bharatnet. As of 11th March 2018 optical fibre cables have been laid for 2.67 lakh kilometres, across 1.13 lakh gram panchayats (out of a total of 2 lakh plus gram panchayats). The mobile phone internet users in India have increased from 18.55 percent in 2015 to 23.93 percent in 2017 and are expected to reach 34.85 percent of the population by 2022⁵. The number of smartphone users in India was around 300 million in 2017 and is expected to increase to 442 million in 2022⁶. This increased access to internet through smartphones has seen an increase in m-commerce⁷ in recent years. Apart from the consumer goods market, innovative ways of accessing services and conducting commerce have emerged such as Big Data and analytics, IoT, artificial intelligence, blockchain and machine learning.

For instance, Byju's Learning App, a start-up that began operations in July 2015 has become a unicorn within 3 years of its launch. It also became a case study in May 2017 at the Harvard Business School to illustrate how an app, through a combined use of content, technology and media, has impacted learning among students across the globe.

FarmerZone is a cloud-based platform being devised by the Department of Biotechnology to provide a smart solution to farmers catering to all their needs such as how to deal with climate change, weather predictions, soil, water and seed requirements, to providing market information. This would enrich the reach of traditional agricultural extension services on a pan-India basis. FarmerZone would be a collective, open-source, data platform for smart agriculture that would feed biological research and data into the cloud and develop sentinel sites to help link with farmers. It would connect farmers, scientists, researchers, agriculture extension officers, companies working on big data and e-commerce to provide technology based localised agri-solutions⁸.

For the spread of health-related information like immunisation, communicable diseases prevention, 'swachta' campaigns are being created using various mobile apps such as Swasthaadhaar, mswasthya, online pharmacy corner-1mg and so on. Tele-medicine consultation has been made practical in rural and hilly areas which would reduce crowding at the tertiary care centres and also address the issue of shortage of doctors and specialists, especially in rural areas and small towns. The operation of these portals requires more paramedics such as lab/ X-ray technicians, pharmacists, nurses and so on with digital literacy in rural areas.

Another application of digital technology is for all public utilities such as Aadhaar, voter's ID card, PAN card to be delivered at citizens' doorsteps. The concept of smart cities includes smart transportation, e-governance and e-commerce, all of which enable smart living. Electric mobility is bound to increase in the coming decades with the shift towards battery charged two and four wheelers. The original automobile manufactures may see a shift towards producing electric or hybrid vehicles as the government is moving towards zero emissions by 2030. These transitions might see a change in the skill sets required of the labour force engaged in the sector. Electric mobility would require electric charging stations, manufacture of battery manufacturing plants to support the electric vehicles. All these are new areas of growth, requiring new skill sets of a higher

5. <https://www.statista.com/statistics/309019/india-mobile-phone-internet-user-penetration/>

6. *ibid*

7. m-commerce is the buying and selling of goods and services through wireless hand-held devices such as smartphones.

8. DBT's Smart Agriculture Conclave sets the stage for FarmerZone-The future of agriculture.

order and if the requisite skill sets fall short the industry could go in for more automation. India has a huge repository of Big Data collected via Aadhaar, passport, the Public Distribution System (PDS), voter card and so on, and using data mining, analytics and other apps this data can be used for providing smart solutions for effective governance. To execute these smart solutions, we need IT trained technicians for making electronic equipment, for their servicing, as well as for delivering the services both at the front and back end. These changes would also reduce the physical mobility of citizens for consumer goods and services and increase the activities involved in completing the logistics of timely delivery which would include warehouses, tying up with local retail stores, enhancing and strengthening telecommunication network, increased number of delivery boys, more use of two-wheelers and vans for delivery, and so on. On the entrepreneurial front also an increasing number of tech-based start-ups in the area of education, e-commerce/m-commerce, financial services, ITES and so on are emerging, making India the third largest start-up ecosystem in the world.

The impact of this flood of technology on the labour market is that there will be a growing market for a skilled workforce. Routine jobs will be taken over by machines or robots. This may not be a trend unique to developed countries alone but may also seep into developing countries. The cost advantage involved, say in engaging ten workers vis-a-vis an automated machine and an operator, could make this a global phenomenon. The labour force needs to upgrade their skill sets to be absorbed. For equitable distribution of the benefits of technology on the labour market, it is essential that the new entrants in the labour force are computer literate with a basic level of vocational training so that they can be absorbed in the labour market that is on the lookout for skilled workforce with specific skill sets. In short, the advent of the Fourth Industrial Revolution will impact the way we live. There could be a progressive change in society which is often referred to as Futuristic Society 5.0, the fifth stage of human evolution from hunters- agriculture-industry-information technology and finally smart living.

The 73rd round of the Enterprise Survey conducted by the National Sample Survey (NSS) for unincorporated non-agricultural enterprises covering manufacturing and services excluding construction, public administration and household workers for the period 2015-16, shows that out of a total of 6.34 crore enterprises, 51 percent was in rural areas and 49 percent in urban areas. Out of the total of 6.34 crore enterprises nearly 84 percent were own account enterprises (OAEs) operated without hiring any worker while the remaining 16 percent accounted for establishments hiring at least one paid worker. This Enterprise Survey is representative of the Micro, Small and Medium Enterprises (MSME) unorganised sector, which accounts for more than 50 percent of the self-employed workforce. With the introduction of Goods and Services Tax (GST), the enterprises in the Establishment category and the profitable OAEs would perforce get themselves registered with GST to continue in business or else they will lose their buyers who will have to pay GST under 'reverse charge' for unregistered purchases. Operating as a registered enterprise means compliance to economic regulations and labour legislations. This transition may make some of these enterprises' survival difficult and they could opt for automation as cheap bank credit becomes available to registered enterprises. The casual employment that thrives in these enterprises may see a fall.

These policy-induced changes in the enterprise sector also impose the urgent need to upskill and re-skill our labour force in the latest digital technologies for them to get adapted to the changes taking place in the business environment.

3. Issues Involved

The implications of the Fourth Industrial Revolution require that we upscale the educational attainments of our labour force, and skilling, re-skilling and up-skilling should be a continuous exercise. A higher weightage in skilling should be given to vocational training at secondary level in schools and for upskilling and re-skilling in mid-career. The weightage given for skilling, re-skilling and up-skilling should be distributed between the states after taking into account the geographical spread of the demographic advantage. States with a higher proportion of labour force in the 30-59 age group should focus more on reskilling and upskilling. For being gainfully employed, educational attainment of at least above secondary level is desirable in a technologically advancing economy. The challenges in attaining this are:

(i) Accessibility of educational institutions closer home - In rural areas, 94.1 percent of households have primary schools at a distance less than 1 kilometre. However, only 66.5 percent and 36.7 percent of the households had access to an upper primary and secondary school at a distance less than 1 kilometre⁹. In urban areas while 92.5 percent households had access to primary schools within 1 kilometre, the availability of upper primary schools (83 percent) and secondary schools (73 percent) was better than in rural areas¹⁰.

(ii) Discontinuance or drop-out of education - Among the 16-24 age group the percentage drop out in rural areas was 39.2 percent while it was 55.4 percent in urban areas. Among 5-15 age group - where there is government funding for education up to the age of 14 years under the Sarva Shiksha Abhiyan programme - there is a higher percentage of drop outs with 60.3 percent in the rural areas and 43.3 percent in the urban areas. The reasons attributed for this are - 23.8 percent males and 15.6 percent females reported that they are not interested in education, while 23.6 percent males and 15.2 percent females reported financial constraints. A higher proportion of males (31 percent) cited engagement in economic activities as the reason for the drop out.

(iii) High rate of unemployment among youth, which in turn is dependent on the choice of education stream - Among the 15-29 age group, 85 percent of the students have opted for the general stream, while the students opting for technical/professional stream were 12.6 percent and the students opting vocational stream were just 2.4 percent in 2014¹¹. Thus, we are faced with a dual problem: the proportion of students opting for education levels beyond higher secondary is still less than 10 percent, and the small proportion who do pursue higher education opt for the general stream where the chances of employability is relatively less in comparison with their aspirations.

9. NSS KI (71/25.2): Key Indicators of Social Consumption in India: Education, Statement 3.2

10. *ibid*

11. NSS KI (71/25.2): Key Indicators of Social Consumption in India: Education; Statement 3.9

4. Measures Underway

In India the automation potential is estimated at 52 percent¹² and the labour associated with technically automatable activities is 235 million FTE¹³. According to a study done by Frey and Osborne's using World Bank data, 69 percent of jobs in India are susceptible to automation as compared to 77 percent in China. Considering that the demographic advantage would taper out in two decades India needs to address the issues of accessibility of basic schooling, focus on vocational education/training at the secondary level and the existing labour force needs to be up-skilled and re-skilled.

Various policy measures have been initiated to tackle these challenges. For instance, to address the skill requirements, a flagship scheme, the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) which provides short-term skill training to the school/college dropouts/ unemployed and Recognition of Prior Learning (RPL) Certification to the existing workforce is being implemented. About 4.5 lakh candidates have received certification under RPL till February 2018. PMKVY-2.0, launched in October 2016, aims to impart a demand-driven curriculum and standards through industry-led bodies called the Sector Skill Councils. These curriculums are aligned with the latest National Occupational Standard (NOS)/Qualification Packs (QPs). Industries are also encouraged to participate as training providers to operate the high employment potential courses through appropriate accreditation and affiliation frameworks. PMKVY is spread across more than 250 job roles related to 35 Sector Skill Councils which mostly cover the upcoming sectors in the industry. Placement tracking under PMKVY is reported within 90 days of certification of trained candidates. Under PMKVY 2.0, as on 28.02.2018, out of 13.97 lakh trained candidates under short-term training component of PMKVY, 9.63 lakh candidates were certified, and 3.49 lakh of the certified candidates were given placement¹⁴. This placement percentage is only 25 percent of the total trained as compared to 70 percent placement stipulated in the guidelines for making the final 20 percent payment to the Training Centre under PMKVY. The placement under PMKVY includes wage employment (76%), self-employment and entrepreneurship (24%). Among the trainees who got wage employment almost 80 percent were placed in sectors like electronics and hardware, apparel, beauty and wellness, agriculture, retail, logistics, telecom, security, textiles and handlooms¹⁵. The World Bank observed, that despite the huge investment for skilling, trained youth only found jobs in the minimum wage bracket¹⁶.

Under the PMKVY, digital literacy training is an integral part of all job roles and training is imparted as a 40 hours top-up module training on using digital facilities including cashless payment facilities, courses on digital skills ranging from Android development to mobile software repair. Digitisation of skill development training also includes introduction of a SMART portal as a one-stop solution for all centre accreditation and affiliation process, SDMS for monitoring of fund disbursement, Assessment Apps for assessment of candidates, Skill Up App for mobilisation of candidates, Digi-Locker for integration of candidates and their digital certificates, Labour Market Information System (LMIS) for digital repository of employment actions, details of the skilled candidates and socio-economy data and so on. Other interventions made towards digitalisation in PMKVY include free online skilling course content, Direct Benefit Transfer, Aadhaar linkage of trainers and trainees,

12. McKinsey Global Institute: 'A future that works: Automation, employment, and productivity', January 2017

13. FTE –Full Time Equivalents

14. http://164.100.47.193/Isscommittee/Labour/16_Labour_36.pdf

15. <http://www.skilldevelopment.gov.in/assets/images/latest%20news/PMKVY%20Placement%20release.pdf>

16. India Country Engagement Dialogue 2017-18 (Consultations in Delhi), 20 September 2017.

Biometric attendance of candidate etc. The scheme also encourages standalone Training Centres (TCs) through various digital platforms to voluntarily disclose the features and achievements of their training programmes such as TC infrastructure, number of trainees trained, passed, certified, placed, and their placement details, on social media (Facebook and Twitter) on a periodic basis as a part of the Performance Standards Metrics. Varieties of digital channels are used by training partners for mobilisation of candidates for organising Kaushal Mela and Rozgar Mela under PMKVY¹⁷. These initiatives should expand the outreach of PMKVY to deserving candidates even in far-flung areas.

State-of-the-art Skill Centres called Pradhan Mantri Kaushal Kendras (PMKKs) will be set up in every district. So far 527 PMKKs have been allocated throughout the country. 14 India International Skills Centres are operational where advanced training is offered along with courses in foreign languages to help those youth seeking job opportunities outside the country. The Directorate General of Training (DGT) is imparting training in 128 Trades (74 Engineering, 49 Non-engineering and 5 for Divyangs) under the Craftsmen Training Scheme (CTS) in ITIs across the country. To make training in ITIs job-oriented, a two-year Advanced Technical Diploma in collaboration with IBM for ITI pass-outs in the field of 'IT, Networking and Cloud Computing' has been introduced. 'Dual System of Training' (DST) in ITIs has been initiated which enables industries to partner with the government and private ITIs for conducting training programmes in high employability courses that meet industry needs. The Skill Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP) and Skills Strengthening for Industrial Value Enhancement (STRIVE) schemes are aimed at institutional reform and quality improvement in skill development and vocational education and training. While SANKALP aims at implementing the mandate of the National Skill Development Mission by strengthening institutions, improving quality and access, and catalysing private sector investments in short-term skills, STRIVE aims to improve market relevance and efficiency of skills provided through Industrial Training Institutes (ITIs) and apprenticeship.

The Pradhan Mantri Yuva Udyami Vikas Abhiyan (PM YUVA) was launched in November 2016 to promote entrepreneurship. The scheme aims to create an enabling ecosystem for entrepreneurship development through entrepreneurship education and training across the country in select Institutes of Higher Learning (Universities, Colleges and Premier Institutes), schools, Industrial Training Centres (ITIs) and Entrepreneurship Development Centres (EDCs). Under the PM YUVA scheme, interested students will be given entrepreneurship education and training, including social entrepreneurship. Students will also get easy access to a robust network of peers, mentors, incubators, funds and business services through an online platform. So far, 239 Institutes of Higher Learning have been empanelled to impart entrepreneurship education throughout the country and entrepreneurship courses have started in 226 Institutes of Higher Learning¹⁸. An end to end customised entrepreneurship orientation module has been integrated under the Life Skill Course module in the PMKVY Courses so that every candidate undergoing PMKVY skill training receives an orientation in entrepreneurship. In ITI courses, the module on entrepreneurship is already integrated as a section under employability skills. Further, the Startup Village Entrepreneurship Programme (SVEP) under Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM) aims to help the rural poor, including artisans and weavers, to set up enterprises at the village level in non-agricultural sectors. Currently, SVEP is being implemented in 19 States. Under DDU-GKY, candidates are skilled for wage employment, and under RSETI candidates are skilled for both self and wage employment. A total of 5.55 lakh candidates have

17. Lok Sabha Unstarred Question on Digital Skill Development Centres 19th March 2018

18. Lok Sabha Unstarred Question on Skill Development Action Plan, 12th March 2018

been trained under DDU-GKY and 16 lakh candidates have been trained in RSETIs from 2014-15 till January 2018¹⁹.

The National Institute of Open Schooling (NIOS) also runs 103 vocational courses up to higher secondary level. All India Council for Technical Education (AICTE) has recently introduced Degree/Diploma programmes leading to Degree or Diploma in Vocational Education under National Skill Qualification Framework (NSQF) in 13 specialisations for AICTE approved institutions. Under this scheme, the education component is taught by the institute and the skill component is covered by industry partners or a Skill Knowledge Provider (SKP) approved by AICTE, NSDC or any government agency. The University Grants Commission (UGC), is implementing three schemes, namely Community Colleges, B.Voc Degree Programme and Deen Dayal Upadhyay Kaushal Kendras in Universities and Colleges for imparting skill development based vocational courses. These courses offer Certificate/Diploma/Advance Diploma/B.Voc/M.Voc and research level programmes. The skill components of courses are imparted in collaboration with industry partners based on relevant National Occupational Standards.

An Innovation Fund for Secondary Education has been created to encourage local innovation for ensuring universal access, gender parity and quality improvement, including ICT-enabled learning transformation with a special focus on educationally backward districts in the country. The Rashtriya Madhyamik Shiksha Abhiyan (RMSA) aims to augment access to and improve the quality of secondary education. Under the scheme the States can prioritise the components of RMSA that they would like to spend on. While most states focus on strengthening school infrastructure, teachers' training, monitoring, evaluation and so on, some states focus on ICT, while others focus on setting up girls' hostels and so on. During 2017-18 only Himachal Pradesh and Punjab allocated their RMSA funds for vocational education at the secondary level (at 50 percent and 43 percent respectively)²⁰.

Under the SWAYAM²¹ programme, the government is using the ICT platform to deliver classroom lectures, study material and interactive sessions with teachers covering Class 9 to post graduation free of cost. At present 593 online courses are listed on SWAYAM. For expansion of SWAYAM through DTH, 32 DTH educational TV Channels have been operationalised.

19. Lok Sabha Unstarred Question on Skill Development Programmes, 15th March 2018

20. Centre for Policy Research, Budget Briefs Vol.10/Issue 2, RMSA

21. Study Webs of Active Learning for Young Aspiring Minds (SWAYAM)

5. Conclusion

Although there are many efforts, they do not fill the skilling gap. There are issues of non-realisation of scheme targets, under-utilisation of allocated funds, project proposals not matching up to scheme guidelines resulting in delays in implementation and so on. The states need to speed up their efforts and focus exclusively on making school education more job-oriented by instilling more vocational streams, ICT and practical training. The youth should see real job potential from the streams that they are pursuing to curb drop outs at the secondary level. To pursue skill development courses beyond the introductory levels of NSQF, a minimum educational qualification at least up to secondary level is necessary. In states that have a high proportion of educationally backward districts, a hand holding through PPP/ industry association participation can be envisaged to improve the basic education standards beyond secondary level. Stipend driven courses, night classes, on the job classes for up-skilling/ re-skilling of the existing workforce can be envisaged so that they are able to upgrade their skills without loss of income. States should match their skill programmes with the age-profile of their labour force and accordingly give due weightage for skilling, upskilling and reskilling in their budget. In the context of the rapid technological evolution taking place in all spheres of life we need to focus on industry integrated and job market-oriented curriculum for India to be able to convert its demographic advantage into a demographic dividend.

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