



Review Of Literature In Context Of The Evaluating Effectiveness Of Skill Development Programmes In India

***Jalbir Singh**, “Ph.D Scholar”, “J.C. Bose University of Science and Technology, YMCA, India”, jalbirjakhars@gmail.com, 0000-0002-9624-301X

Renu Aggarwal, “Assistant Professor”, “J.C. Bose University of Science and Technology, YMCA, India”,

Pankaj Kumar Gupta, “Professor”, “Centre for Management Studies, Jamia Millia Islamia,, India”,

ABSTRACT - The availability of skilled manpower is an important issue in developing and developed countries. The developing countries especially the emerging economies have a momentous role to play in the form of suppliers of skilled human capital to satisfy the domestic as well as international demand. In countries like India, the conventionally publicized notion of unemployment is no longer valid and is now seen as employability from other countries. Therefore, the Indian government has taken several steps to increase the quantum of skilled manpower which inter-alia includes skill development programs. However, the effectiveness of such programs is a cause of concern. We therefore analyze five selected nationwide skill development programs on defined parameters and the state of Haryana is chosen as a sample state. We find that the structure and method of penetration of these programs need to change to achieve the desired goals. We also highlight that the skill development programs need to be customized across states for effective implementation.

Keywords: Skill Development Programs, Skilled Manpower, Achievement Ratios, Sponsored Schemes JEL Code: J24, H52, J08

I. INTRODUCTION

Sustainability and maintaining the pace of economic development is one of the biggest challenges in developing countries. To achieve this national agenda, a huge chunk of resources is required. We find that there is growing demand for skilled manpower in various segments of the economy, including the manufacturing segment and service segment. However, the decision of a development model is the most perplexing task for any country. The World Bank report of 1993 was fail towards the recognition of strategic interventions diversity accepted by the governments of eight Asian countries viz. Hong Kong, Thailand, Indonesia, Singapore, S. Korea, Japan, Malaysia and Taiwan even they got the right economic development in terms of achievement of high and sustained growth in human resource development, economic stability at macro level and productivity of total factors.(Asthon et al. 2002). In countries like India, equilibrium between economic growth and social welfare along with matching association of political vision of ruling parties makes is difficult to realize and is a daunting task for policy makers.

The proclamation of Dollah et.al (2020) that graduate students should be equipped with entrepreneurship skill before entered to the job market and India is also not different from this. Despite the steady and impressive GDP growth rate after the nineties, India is in tough position of not providing employment opportunities in required numbers (Agrawal 2014). Being the fourth largest economy in the world, India offers an ocean of opportunities on account of various economic, social and demographic indicators. Sixty-two percent youth of India belongs to the age of 15-59 years (GOI, 2015) and this is the group of working age peoples. This young Indian workforce is the biggest source of the future economic powerhouse and it is equally challenging to be at par with level of global demand in terms of skills availability of this workforce. It is a fact that skill education is more rewarding. Field like management and engineering are relatively more promising compared to the conventional streams like science, commerce and arts (Saha et al.2011).

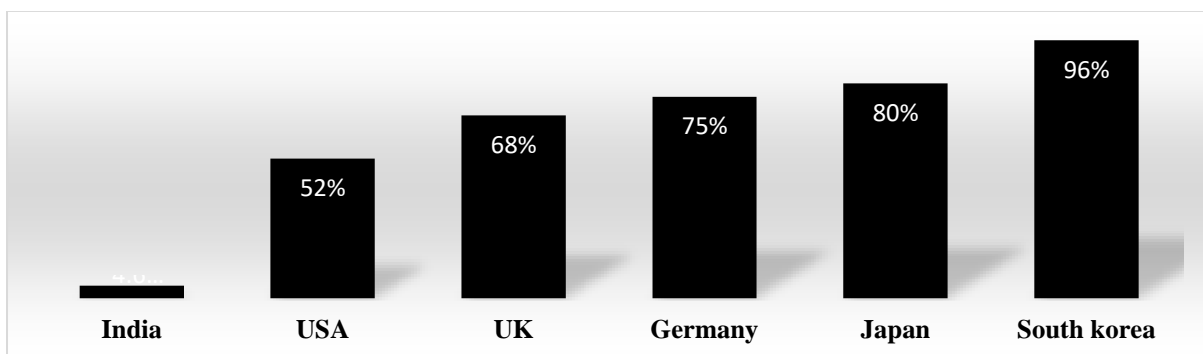
The average age of India by end of 2020 is estimated to be 29 years which is the lowest than many developed countries like USA (40), Europe (46), Japan (47) etc. In the next 20 years, the industrial labor force is expected to decline by 4 percent globally, and in India, increase of 32 percent is estimated. (GOI, 2015). This demographic strength creates an extensive need for skilled Indian workforce that can contribute significantly to the process of economic development. According to Saha et al. (2011), a strategic impact of higher returns in skill education with technical expertise can be seen as an improvement in India's productivity. The demographic dividend provides a host of opportunities to India in next twenty years to cater to the skill shortage of industrialized countries that are facing it due to aging population (Rothboeck et al., 2018). Sherino et al. (2021) states that demographic dividends can accelerate the pace of economic growth for the vast expanse of the developing world if appropriately leveraged. People need to build up skilled with IT and Employability skills to ensure that development initiatives are driving the optimum results to economic growth. Proper designing of the Skill development system provides opportunities in the informal sector and play a vital role in poverty reduction (McGrath, 2002). Teamwork and optimistic and are highly demanding skills before most of the employer as they are interconnected with interpersonal, personal and IT Skills (Ismail, 2020). We argue that in order to accelerate the tempo of economic development, the government and policy makers should lay emphasis on the well structure scheme of skill development in the country. Our effort in this paper is to analyze the performance of some selected nationwide skill development programs and suggest measure to make them efficient.

II. SKILL AVAILABILITY IN INDIA AND OTHER NATIONS

The notion of economic development by maximizing the human capabilities is central to the national agenda of developed and developing nations striving towards 'high skills economy'. The linkages between innovation, skill formation, economic intelligence and growth are visible in the vision statement of countries. For example - USA presidents call themselves as 'education presidents'. In 1996, Tony Blair of Great Britain put the education as central focus in its manifesto. In 1980 Hawke wanted to craft Australia a 'clever economy' (Lauder, 1999). Likewise, the Indian Prime Minister Narendra Modi wants to transform its economy into the form of 'Skill India'. To confront with rapidly wavering technology, economic surroundings, and concept of market uniformity as well as to face the impact of globalization, labor force of any country must be well equipped

with the well-being upgraded skills. Globally, countries have been considering substantial improvement in skill formation system, skill building, economic development, and training. Green (1999) argues that few East-Asian countries, prominently Singapore and Taiwan are doing efficiently in skill formation system but, Japan and South Korea are still sluggish. Agarwal (2014) argues that the conventional system of skill development should be re-think in such a way that it should not lead to compromise with existing challenges of quality, skill-mismatch, training in the un-organized sector and promotion of female participation. However, in a developing country like India, this is quite challenging because of highly lowest percentage (4.69) of workforce that has undertaken formal skills training in comparison of developed countries like UK, Germany, USA, Japan and South Korea, it is relatively high with the percentage of 68, 75, 52, 80 and 96 respectively (GOI, 2015) as shown in Figure 1.

Figure 1: Country wide Formal Skills Training undertaken

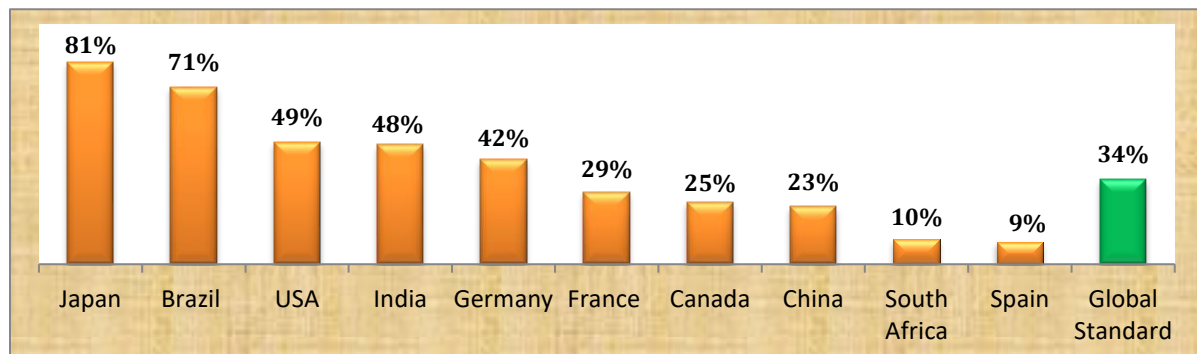


Source: National policy on Skill development and Entrepreneurship, 2015 (GOI)

In a global context, there is significant difference in the skill formation system ranging from the structure of school system, industrial structures, forms of work organization and internal labor markets. Countries with strong internal labor market tend to focus more on vocational training which is based on enterprises with focus on schooling education, while do so through government-funded external occupational training which have smaller labor markets (Green, 1999). Every country continues its decision making process to maintain the skill equilibrium, so that the main issues concern, which are different for each country may be resolve out. A comparative analysis between Singapore, South Korea and UK conducted by (Lauder, 1999) shows that Singapore has the challenge of supply side, Korea has the high supply of graduates and misallocation of educated labor with a shortage of intermediate skilled workers, while both demand and supply factors causes the low equilibrium in Britain. In Japan and South Korea, widespread enterprise training is essential in large corporations with compulsory school system and in Singapore, there is a provision for public vocational and occupational training with selective schooling. RPL has become the most important part of Education policy of South Africa (Jansen et al., 2007). Switzerland has also designed the VET programmes similar to Germany in which employer would benefitted economically, if employ the VET apprentices. (Dionisius et al., 2009; Maurer, 2019). Schemes like National Apprenticeship Promotion Scheme (NAPS) can be taken under similar initiatives in India. The rationale for skill development in developing countries like India is cited by various researches of global agencies. A study conducted

by British Council on India shows the five states of India viz. Maharashtra, Tamil Nadu, Uttar Pradesh, Uttaranchal, and Andhra Pradesh will account for more than 50% of the incremental human resource requirement from 2022(British Council, 2016). EY (2012) argues that accelerated growth rate in India has also increased the skilled workforce demand and there is a difficulty before employers in filling their required jobs, thus indicating the employability issue. In 2012, the difficulty level in India to fill up jobs (48%) was higher than the global standard (34%) as shown in Figure 2.

Figure 2: Level of Difficulty in filling Jobs before employers



Source: Earnest and Young's "Knowledge paper on Skill Development in India" (September 2012)

The EY analysis also articulates that there was huge number of persons are there as school dropouts in India, during 2009-10 which was The report of EY also shows that school dropout rate in 2009-10 was 16.7 million from Class I to Class X of which 53% was before completing class V. The indication is that this group needs to provide skills training, so as to help them stand in the group of better workforce. Basic skills and educational level might be of different importance to employment for different age-groups and indifferent welfare states. (Lundetraet et al., 2010).The influence of basic skills on youth unemployment is found across four countries i.e Canada, Italy, Norway and the USA.

Though in 2010, China became the second largest economy of the world (World bank, 2013) but only 4% of adult labor of china has been deliberated as 'highly skilled' and half among the 140 million labors of urban enterprises was 'skilled' (NCCE, 2015). The economic returns in college education declines with the expansion of higher education in China due to non-caring of employment and labor market requirements which affects the graduate employment and this situation leads towards the various reforms like curriculum reform, student learning reform with determination of market requirement in terms of number of graduates as per job opportunities and employment available (Mok and Qian, 2018).The dark sheds of the skill set availability in China is generally problem in most of the developing countries, which emphasizes towards skilldevelopment. It applies to all those same needs developing economies, with similar characteristics or having same human resource problems, including India.

In an Indian context, push for a policy backed initiative is a must of India since skill large segments of educated workforce either have slight or no skills vital for job, keeping them mainly in the category of unemployed (Shukla et al., 2019). There is an urgent need to making this young Indian workforce capable and skillful equivalent to

global skill set demands. The variations do not affect only one or limited area but also it is presented as global. India should focus on increasing its skilling efforts that it not only meets the demand of employers but also accelerate economic development.

The Indian formal education system did not focus more on skill level achievements rather it concentrates on literacy rate in terms of grades or percentages. The employability of the Indian workforce has adversely affected due to deficient attention on skill development in the existing system of education. The situation is not encouraging even in the case of educated youth as given their low rate of employability. The very low rate of formal skill training in India also emphasizes the need for skill development.

III. SKILL DEVELOPMENT INITIATIVES IN INDIA

Skill Development as policy measure has been launched in India in 2008, when government of India recognized skill development in its priority list through specific Skill Development Initiative Schemes. Prime Minister's National Council on Skill Development (PMNCSD) was constituted on 1st July 2008 and National Skill Development Coordination Board (NSDCB) under the Planning Commission was setup to implement the decisions of PMNCSD. The vision statement of NSDI says 'National Skill Development Initiative will empower all individuals through improved skills, knowledge, nationally and internationally recognized qualifications to gain access to decent employment and ensure India's competitiveness in the global market.' NSDC is setup as a non-profit company in PPP mode in July 2008 with private holding of about 51%. NSDC endeavors to constitute SSCs, the autonomous industry led-bodies that are responsible to conduct skill gap studies, creation of NOS and QP, structuring of competencies, organizing training programs with assessment and certification based on curriculum developed by them.

Under the policy, a target has been set to make 500 million persons skillful by 2022 with clear-cut projections for different Ministries/Departments/Organizations keeping the current annual capacity, sector wise potential and future challenges as well as capacity building plans. The NSDC and Ministry of Labor are supposed to train approximately 50% of the target and rest by other ministries/organizations. The strategic focus of the policy is to cater the large size of the group with the required skills through flexible and need based courses of short term duration with no barrier of entry and exit, to maintain dynamism and make them capable from open to feedback. MES schemes/program have been designed and implemented for vocationalisation of education. The coverage of MES was included of present workforce, early school leavers, any other leftover groups not covered under formal skill framework earlier. The scope of the policy also encompasses the coverage of formal and informal apprenticeships, training of entrepreneurship development with a focus on self-employment. The schemes have a third party certification of skills for those who have received skills through any way of informal learning but are not certified by a proper institutional mechanism. It does not take into account the maximum age of trainee that provides it the special feature of the program. In December 2013 National Skills Qualifications Framework (NSQF) has been implemented which organizes all qualifications according to a series of levels of knowledge, skills and aptitude.

In order to providing strategic acceleration to SDIs, the major turning point in Indian Skill Development sector was noted in the month of November of 2014 with the

notification of establishment of Ministry of Skill Development and Entrepreneurship. The national apprenticeship act was also modified in December 2014 and now employer can engage ten percent of its total workforce as apprentices.

In July 2015, the 'Skill India' was launched with the agenda to drive skill ecosystem in the mission mode so as to setting up of 'NSDM'. Under the 'Skill India' initiative the new policy, 'National Policy for Skill Development and Entrepreneurship 2015 (NPSDE) was introduced by replacing old one i.e. NPSD 2009. At state level the SSDM was setups along the lines of NSDM. The vision statement of the new policy evident its goal- "To create an ecosystem of empowerment by Skilling on a large Scale at Speed with high Standards and to promote a culture of innovation based entrepreneurship which can generate wealth and employment so as to ensure Sustainable livelihoods for all citizens in the country."

After introduction of the new policy, many of the effective programs come into force towards Skill India campaign. The Pradhan Mantri Kaushal Vikas Yojana is a flagship programme introduced in July 2015. Recognition of Prior Learning (RPL) is another key instrument of the policy under which persons with prior learning skills are accessed and certified. RPL aims to find out the gap between prior learning skill and NSQF skills and will provide skill gap training to match the competencies of unregulated workforce to the NSQF. Social Status, Income opportunities, occupational safety with openness to further learning had been affected positively by RPL and it is recognized as a useful approach, especially in economies where reforms seek to overcome in addressing the challenges of formal training and qualifications (Rothboeck et al., 2018).

NSDC also catalyzed the private sector involvement through the setting up of The PMKK after the new policy, to run industry-driven courses. NAPS launched in August 2016 with a target of 50 lakhs apprentice over a period of 2016-20. In summary we find three optional approaches to skill development schemes in India - (a) Centrally Sponsored Centrally Managed schemes (CSCM), (b) Centrally Sponsored State Managed schemes (CSSM) and (c) State Sponsored State Managed schemes (SSSM).

NPSDE(2015) estimates that 109.73 million additional skilled manpower will be required by the end of 2020 across 24 key sectors of the economy. More than half of the requirement is in non-farm sector. Thus a thorough skill mapping is required. Skilling, re-skilling and up-skilling is the main focused area of all most all of the strategic and policy decisions taken in recent time for the skill development sector. According to a study conducted by Boston Consulting Group (BCG) in which it has been estimated that entire world will have a shortage of 47 million working people by 2022 but India will have a surplus of 56 million. Realizing such opportunity, almost all central ministries in India have been given the target to ensure their participation in the 'Skill India' through a strategic action plan. Many governance reforms have also been initiated in the process of transformation to meet the objective of skilling at scale with speed, standard and sustainability as per policy documented. The NPSDE(2015) has a paradigm shift in skilling and Entrepreneurship skill development than that of policy of 2009, which in turn helpful to 'Start-up India'. Entrepreneurship Skill Development has also been given special importance in the course curriculum of the trainees. The rationale to allocate the important job of creation of NOS and QP to the industry-driven SSCs is also concerned with the development of entrepreneurship skill in the Indian workforce.

IV. STUDIES ON SKILL DEVELOPMENT

In various studies of skill development conducted nationally and internationally, the level of skilled workforce, composition of specializations, employment criteria and performance of recently generated graduates etc. are analyzed by researchers. In a study conducted by Smith et al. (2000) in which performance of the university was measured in terms of the criteria set by UK government for employment of graduates', it is observed that "probability of unemployment or inactivity after the six month of the graduation is influenced strongly by the individual's class of degree, by degree subject studied, by prior qualifications and by social class background". If skilling framework is designed like a patented technology, then it is also able to make tremendous differences. Due to the various institutional and other settings, it is not easy to apply the successful skill development model of Singapore for other nations which leads by its concerted national integrated effort (Kuruvilla et al., 2001). In skill development programmes, the involvement of public and private sectors is essential. The endeavors for development of skills assumed multiple forms or trajectories involving the institutions that are educational as well as vocational and also within the frame work of the enterprises. Skill development initiatives are aligned with the national agenda like economic development, technology transfer, empowerment etc. which involve multiple institutions aligning their joint efforts.

Ashton et al. (2002), argued that economic growth could proceed without employers experiencing severe skill shortages. The research has identified a set of government strategies and associated institutional structures in the field of education and training in the economies of Singapore, Taiwan and S. Korea. Mason et al. (2006) describes that graduate's ability has positively affected in the way that they find job placement within six months of their graduation with secured employment if the framework and delivery of the course is contributed by employer with keeping the input of well-planned work experience. The authors do not find any significant effect on labor outcome as a result of efforts made by university departments. The complex requirement of the concept of employability, updating workforce permanently with understanding the need for knowledge acquisition, processing and transfer of knowledge is being emphasized. The skill development could be benefited by the contribution of educational experiences and strong processes as well as the production and framing code of conduct of competencies and qualifications which could be able to transfer the social economic privileges (Morley, 2007). Alexander et al. (2009) recommends that there is an utmost need for South -Africa to review the approaches for e-skills shortage that are not only cheapest and reliable but also involves the input of collaboration for credible researchers. Onsomuet al.(2010) have used a panel data of eighty-four countries. These nations are paying their attention on transferring the skills from overseas enterprises through improving the contribution in the secondary and technical education courses oriented training in their tertiary educational programmes. The incremental industry-academia collaboration has been emphasised towards enhancement of skill development. Awogbenle et al. (2010) examined the barricades that create hinders before youth in hunting of non-available job opportunities and suggests that economies that are affected by unemployment are required the orientation of self-employment and entrepreneurship among youth through vocational and entrepreneurship development programmes. The three critical areas of development as suggested by the authors are firstly enterprise education, secondly

experiential programmes, thirdly enterprises development. Aya (2012) have shown that there is increase in enrollment due to increase in institutional capacity in India but little attention has been paid to equipped its youth as per the skill sets requirements of the industrial world. The country is still not only facing the lower level of educational achievement, high level of dropouts but there is also training problems in terms of inadequate access to mostly youth and reason being that informal sector is the only one to getting them work. Balwanz (2012) have identifies the various factors which tends to be the reason of unemployment, slow economic growth rate, lack of employability skills in youth while studying the skill reforms applied by Kenya and suggested to focus on skill development programmes and basic vocational education which is generally covered by polytechnic institutions. Weligamage (2014) have identified the employer skills needs in different countries and find that in order to increase competitive advantage, students should enhance their employability skills in addition to subject-specific knowledge and for that the universities should identify skill sets and design their study programme that fills the needs of future labor market. A study on Africa conducted by Catherine et al. (2014), it is observed that programs like TVET may be useful for the economic development, but the true advantages may be case specific. The focus on rural, uneducated and unemployed youth in remote areas is a must for India to progress (Pandey, 2016). India is far behind China and Singapore in imparting skills (Sharma et al., 2016) and must utilize the demographic dividend available. Anbutambi (2017) has suggested the way towards framework of study with its pedagogy designing and proposed that there is need to involvement of the industry, academia and other all stakeholders. The courses should be developed area specific keeping in the view, the available resources there, the required skilled sets, demand and supply factors, so that effective utilization of resources up-to its maximum extent is to be ensured. Similarly, Pandey et al. (2017) reviews that most of the Indian educated youth facing serious unemployment problem due to unavailability of skills and technical knowledge of current scenario and skill development programmes is a powerful weapon to make youth creative and technically sound. A recent study by Debpriya (2019) has suggested that government needs to focus on more systematic approach towards making job oriented programmes more enable.

We, therefore, also find from the literature that there is dire need for skill development schemes in the India. However, the skill India initiatives have not yielded the desired results. This motivates us to examine the current flag schemes of the government, identify the weaknesses and suggest a suitable framework for the management of schemes.

V. METHODS

In this paper, we analyze the five selected skill development programs (schemes) that are sponsored or launched either by Central Government or the Government of the state of Haryana in India. The operational area of schemes is in the state of Haryana or is being managed by the Haryana Government. The sample schemes selected for purpose of the study are –

SAMPLE SCHEMES

- (a) PMKVY: Pradhan Mantri Kaushal Vikas Yojana 2.0

- (b) DDU-GKY: Deen Dayal Upadhyaya Grameen Kaushalya Yojana
- (c) SURYA: Skilling, Up-Skilling, Re-Skilling of Youth & Assessment
- (d) SAKSHAM: Saksham Yuva Yojana
- (e) ATS: Apprenticeship Training Scheme

These samples schemes have been selected on the basis of their coverage. Countries have their own design or may have other names of their components and the most popular is Vocational Education and Training (VET) or TVET with an inclusion of word 'Technical' in previous one. Various countries have achieved the milestone like Switzerland has the rates of company based VET at upper secondary level (Maurer, 2019).

PMKVY 2.0 is categorized as Centrally Sponsored Centrally Managed (CSCM) and Centrally Sponsored and State Managed (CSSM). As per 'PMKVY 2.0 guidelines 2016-2020 of GOI', the scheme includes its three different components namely Short Term Training (STT), Recognition of Prior Learning (RPL) and Special Projects (SP). A budget of Rs. 1200 Million has been allocated to PMKVY 2.0 for the additionally implemented period of 2016 to 2020 (four year) with a target of providing skills training to 10 million peoples. The physical target was shared in the proportion of 75% and 25% by CSCM and CSSM hence allocation was 7.95 Million and 2.05 Million respectively. Earlier the first version i.e. PMKVY 1.0 was started in July 2015 with the initial outlay of was Rs 150 Million with a target to benefiting 2.4 Million youth and a total of 1.98 million (1.8 Fresh Trainings, 0.18 RPL) people completed trainings (GOI, PMKVY 2.0 State Engagement Guidelines).

DDU-GKY scheme is announced by Ministry of Rural Development in 2014 to function as policy-making agency. The scheme is being implemented through National Rural Livelihood Mission (NRLM) or State Rural Livelihood Missions (SRLMs) as the case may be at national or state level respectively. The programme is meant for the youth between the 15 to 35 years of age belongs to poor families' lives in rural areas of India.

SURYA scheme is an initiative of Haryana Skill Development Mission (HSDM) constituted with a vision to provide industries compliant skills training to the youth of Haryana through coverage to five main concepts i.e. **S**-Skilling, **U**-Up-skilling, **R**- Re-skilling, **Y**- Youth, **A**- Assessment. This scheme emphasized that educated persons are to be made skilled, persons who got their skill through informal learning be made more up-skilled, and industrially employed persons to be re-skilled. It's also focuses on skill development of youth which are dropouts, illiterate, non-formal sector laborers, differently abled or belongs to weaker & vulnerable section of the society.

SAKSHAM Yuva scheme, exclusively meant for the domicile holder of the Haryana, has been approved by Haryana Government in 2016, to provide monthly unemployment allowances to educated youth and honorarium to the eligible post graduate applicants for their honorary assignments in Government Departments, State Public Sector Undertakings and in private companies or enterprises.

ATS is being monitored and implemented through State Apprenticeship Advisor (SAA) under Department of Skill Development and Industrial Training (SDIT) of state government to Haryana. In India, apprenticeship programme has been implemented under the Apprentice Act 1961. In the state of Haryana this is done under the five types

of categories i.e. Trade Apprentices, Graduate Apprentices, Technician Apprentices, Technician (Vocational) Apprentices, and Optional Trade Apprentices.

Parameters for Analysis of the sample schemes

Enrollment to target (number of persons to be trained) ratio is determined. The achievement ratio of all parameters is determined by taking the enrollment as the base. These defined parameters are number of candidates enrolled, trained, assessed, certified and placed. Placement to number of certificated candidates is also determined. The major thrust areas of our analysis cover the context, objectives and targets achieved by respective schemes.

VI. ANALYSIS

Based on the selected parameters cited above, we present the analysis of sample schemes in the following paragraphs.

PMKVY 2.0

Given the emergent need for skill development and to fulfill the youth aspirations with maintaining the quality of skills with appropriate number of quantity, PMKVY has largest coverage in almost all regions of the country. The nationwide target is providing training to 7.95 million peoples in CSCM component of PMKVY of which 3.55 million STT, 4 million for RPL and 0.395 million for SP has been fixed for the period 2016-2020. In the state of Haryana, State CSCM target is 0.169 Million for the same period. The CSSM component of Haryana has been implemented through HSDM and the annual target of 2017-18 to 2019-20 has been set to train 49833 candidates. At India level (CSCM), the PMKVY 2.0 is in its last year and since its inception to the January 2021, official dashboard showing that the cumulative providing 142.85% enrollment of the target and 94.41 % training, 81.84% assessment, 73.56% certification of the total enrollment has been achieved. Only 52.06% (inclusion of STT & SP, except RPL) job placement in proportion to certified candidates has been done. In case of Haryana State (CSCM), the main achievement of this component of the scheme is that the enrollment of candidates is more than three times of its target i.e. 328.23%, inclusive of STT, RPL and SP. The target of 94.66% training, 84.97% assessment, 76.97% certification has been achieved for this enrollment. The placement is 57.32% in proportion to certified candidates (excluding RPL). At the level of Haryana State (CSSM), the target of 72.30% enrollment of the target and 85.84% Training, 72.13% assessment and 60.92% candidates' certification has been achieved against the enrollment for the year 2017-18 to 2019-20 as set by the HSDM, the Nodal Agency of the Skill Development in the state. The placement is 29.62% in proportion to certified candidates. The placement is even quite low in Haryana (CSSM) but also in CSCM case of both India and Haryana which is far behind the common norms of 70% placement. The placement performance puts a question mark over its flagship status of the scheme. The main challenges are now being faced by the scheme are numerous like people are not getting job in which they got trained, difference in job location and training location, lower payouts, mostly coverage of short term courses and focus to enrollment of dropouts without their pre-assessment before training. The availability of large number of Qualification Packs (QPs) without matching the employer requirement is also establishing it on the line of traditional

Programme, as they were developed in short span of time. The low industry interface of the franchise is also reason of the lower placement.

DDU-GKY

The cumulative national target till March 2022 of this scheme is to skill 2.88 million people out of which 2.23 has been sanctioned by the states from the year 2014-15 to 2020-21. At India Level the enrollment achievement is 58.32% and training to 84.19%, assessment of 61.71%, certification of 48.66% and placement of 48.88% of the enrollment has been registered so far in the given period. At Haryana State level, through HSRLM, 87.78% training commenced out of total 40250 targeted candidates and 87.74% trained, 71.36% assessment, 29.88% certification and 47.45% have been successful in providing placement under this scheme for the said period. The placement to certification ratio is higher than the certification and the reason due to its different placement variations like on the job training (OJT) in which candidates get job before the certificate.

The deprived performance of the scheme is also not untouched by the challenges. The schemes didn't differentiate the targeted rural Below Poverty Line (BPL) youth on the basis of their qualification. There is equal level of remuneration either for a primary school passed youth or the graduate one which leads to the non-availability of employers. Mobilisers are not getting fulfillment of their aspirations and are not able to deliver the actual content.

SURYA

It is the scheme through which target has been set to skill 0.065 million people from 2017-18 to 2019-20 by HSDM. The scheme got 55.03% enrollment and 72.20% trained, 64.50% assessment and 53.68% certification of the total enrollment up to the end of December 2020. The placement of 29.62% of the certified candidates has been done. The scheme is getting lower attraction reason being the up-skilling of already employed workforce. They either gained an experience that not seeing any up-liftment of skills or they have been expecting little scope after the engagement.

SAKSHAM YUVA

A target has been set to cover 47000 people in this scheme from 2018-19 to 2019-20, against it only 11.81% enrollment and Training of 79.33%, assessment of 49.06% certification of 43.55% of the enrollment has been achieved during given period. The placement of only 5.63% has been achieved in 2018-19 while the data of 2019-20 is not shown by HSDM. The pathetic situation of the scheme is clearly showing the non-attraction of youth towards it. The main hinder is to get employment of short span of time with a sacrifice of three-year education particularly for senior secondary pass out student, for example. The another one is that the rate of permanent employment is very low after passing three year in the temporary assignment. Limit of 3 Million rupees' family income also the big reason for not making its reach to most of the youth of the Haryana state. Though, the scheme is being appraised by the private sector, as it is having the advantage of having skilled youth at lower wage rates.

ATS

The Target of the engagement of apprentice is based on the employee strength in the department and State Public Sector Undertakings (SPSUs) of State government. The maximum permissible number of apprentice can be 10 percent of the total employee strength. The total number of apprentice engagement has been achieved 36.28% and 59.06% in the State Government Departments and SPSUs respectively. The reason behind the lower engagement of apprentices are optional engagement, lower rates of honorarium to even graduates and size limit of engaging at least 30 to 40 apprentices by an establishment. If it became mandatory, then performance can increase.

Table -1(a): Performances Status of Selected Skill Development Schemes
(Figures in Million)

Sr . No	Name of Scheme Parameter	PMKVY			DDU-GKY		SURYA	SAKSHA M
		CSCM- India, 2016- 2020	CSCM- Haryan a, 2016- 2020	CSSM- Haryana (HSDM only), Cumulat ive till Dec. 2020	India (2014- 15 to Feb 2020- 21)	Haryan a (2014- 15 to Feb 2020- 21)	CSSM-Haryana (HSDM only), Cummulative till Dec. 2020	
1	Skilling Target	7.95	0.17	0.05	2.23	0.040	0.065	0.05
2	Enrolled Candidates	11.36	0.56	0.04	1.30	0.035	0.036	0.01
3	Enrolled to Target (2÷1)	142.85 %	328.23 %	72.30%	58.32%	87.78%	55.03 %	11.81%
4	Trained Candidates	10.72	0.53	0.031	1.09	0.031	0.026	0.004
5	Trained to Enrolled (4÷2)	94.41 %	94.66%	85.84%	84.19%	87.74%	72.20 %	79.33%
6	Assessed Candidates	9.29	0.47	0.026	0.80	0.025	0.023	0.003
7	Assessed to Enrolled (6÷2)	81.84 %	84.97%	72.13%	61.71%	71.36%	64.50 %	49.06%
8	Certified Candidates	8.35	0.43	0.022	0.63	0.011	0.019	0.002
8 (a)	Certified Candidates PMKVY 2.0, except RPL	3.66	0.25	-	-	-	-	-
9	Certified to Enrolled (8÷2)	73.56 %	76.79%	60.92%	48.66%	29.88%	53.68 %	43.55%
10	Placed Candidates	1.90	0.14	0.007	0.64	0.017	0.006	0.0001
11	Placed to Enrolled (10÷2)	16.77 %	25.83%	18.05%	48.88%	47.45%	17.07 %	2.45%

1 2	Placed to Certified (10÷8 or 10÷8.a,as the case may be)	22.79 %	33.65 %	29.62%	100.46 %	158.80 %	31.80 %	5.63%
1 3	Source:	http://pmkvyofficial.org/	Monthly Progress Report of HSDM, March-Dec 2020	http://kaushalpragati.nic.in	http://www.hsrlmonline.com/	Monthly Progress Report of HSDM, March-Dec 2020		

Note:

1. The placement % of CSCM component of PMKVY 2.0 has been obtained as 10 ÷ 8 (a)
2. Number of placed candidates of PMKVY-CSCM is exclusive of RPL certified candidates i.e. inclusive of STT + SP only.
3. The overall Target of DDU-GKY till March 2022 is to provide training to 2882677 Candidates out of which 2227644 is sanctioned by states till date.
4. The placement of more than hundred percentage in DDU-GKY is due to its different interventions like OJT (on the job Training).

Table -1(b): Performances Status of Selected Skill Development Schemes
(Figures in Million)

ATS: Apprenticeship Training Schemes - Haryana

Apprentice Appointments in Organisation	Employees Strength	Maximum Permissible Apprentice (10%)	Apprentice Engaged (in No.s)	Shortage in Engagement of Apprentice	% of Total Engagement
State Govt. Departments	0.29	0.029	0.010	0.018	36%
SPSUs	0.08	0.008	0.005	0.003	59%
Total	0.37	0.04	0.02	0.02	41.44%

Source: <http://itiharyana.gov.in>

Table-2: Evaluation of effectiveness of skill development programmes

Sr. No.	Name of Scheme	Objective/s	Achievement Criteria	Effectiveness / Achievement/ Result	
1	PMKVY 2.0	To enable a large number of Indian Youth to take up industry relevant skill training.	Placement Ratio (Placed to Certified)	CSCM-India	52.06%
				CSCM-Haryana	57.32%
				CSSM-Haryana	29.62%
2	DDU-GKY	Adding diversity to the income of rural poor	Placement Ratio (Placed to	India	48.88%
				Haryana	47.45%

		families and cater to the career aspirations.	Enrolled)		
3	SURYA	To create the empowered manpower through Skilling, Up-skilling, & Re-skilling of Youth.	Placement Ratio (Placed to Certified)	31.80%	
4	SAKSHAM	To provide unemployment allowance to the educated youth of Haryana for their honorary assignments.	Placement Ratio (Placed to Certified)	5.63%	
5	ATS	Training to the youth for efficient utilization of resources, available at workplace.	Total Apprentice Engaged to Maximum permissible Apprentices	State Govt. Departments	36.28%
				SPSUs	59.06%
				In Total	41.44%

Source: Analysis of this paper

VII. DISCUSSION

The ultimate theme of any policy level skill development is to energize the pace of industrialization and enhance the well-being of people and society. 'Skill Development' endeavors in India are expected to eventually make India the 'Skill Capital of the World' (GOI, Skill India Mission, 2015). Among the twin policy interventions of industrial development i.e. import-substituting and export-oriented industrialization, the second one has yielded better results as also evidenced by various newly industrialized countries like Hong Kong, Korea, Singapore and Taiwan (Mayer and Altman, 2005). As an impact of labour surplus, most developing countries have undergone a phase of low-wages and low productivity manufacturing development (Syrquin and Chenery, 1989). It can be inferred from the analysis of the schemes that CSCM component of PMKVY 2.0 has significantly higher achievement percentage on the parameters of enrolment in the state of Haryana as compared to all India. On all other parameters, the scheme has failed. It is a matter of concern for HSDM and requires immediate remedies. The performance of Haryana state is also better in DDU-GKY as compared to overall India and it is due to HSRLM's efforts. Although the placement percentage is slightly lower but it is not much significant difference.

Out of the two other HSDM schemes, SURYA's performance cannot be said to be good on various parameters especially on enrollment. SAKSHAM YUVA's position is pathetic. The present state of SURYA and SAKSHAM schemes cannot be said to be a coincidence since its up-liftment is related to the availability and use of basic skills as well as educational level of the aspirants. The basic skills influence the youth unemployment as evidenced from various cross country studies like Canada, Italy, Norway and USA and can be assumed to be applicable to other countries (Lundetrae et al., 2010).

The engagement of apprentices in the Haryana State Government's Departments is very low. SPSUs also have a lot of space available for engagement. This needs to be taken care of by SAA Haryana. The slow speed of skill initiatives is a phenomenon in

developing countries. However, the problem varies from country to country. Various nation-wide studies support this fact. In Switzerland, peoples still prefer to pursue VET programmes through regular mode; even they have a very fruitful option that they can access upper secondary level VET qualification through RPL for more than ten years provided that they have five years of work experience (Maurer, 2019). In order to break the deepening unemployment crises in South Africa, the low and intermediate skill development will equally contribute even there is more emphasis on the shortage of high skill labor (Mayer and Altman, 2005).

VIII. REMARKS

In India, the government has taken various steps to increase the quantum of skilled manpower which inter-alia includes various skill development programs. The effectiveness of such programs is a cause of concern. The structure and method of penetration of these programs need to change to achieve the desired goals. Skill development programs need to be customized across states for effective implementation to achieve the desired results.

Disclosure Statement

Authors report no conflict of interest in any manner.

REFERENCES

- 1) Green, Andy (1999). East Asian Skill Formation Systems and the Challenge of Globalisation. *Journal of Education and Work*, 12:3, 253-279, DOI: 10.1080/1363908990120303.
- 2) Hugh, Lauder (1999). Competitiveness and the Problem of Low Skill Equilibria: a comparative analysis. *Journal of Education and Work*, 12:3, 281-294, DOI: 10.1080/1363908990120304
- 3) Smith, Jeremy & Mc Knight, Abigail & Naylor, Robin (2000). Graduate Employability: Policy and Performance in Education in the UK. *The Economic Journal*, 110(464), 382-411.
- 4) Kuruvilla, Sarosh & Erickson, Christopher L., & Hwang, Alvin. (2001). An Assessment of the Singapore Skills Development System: Does it constitute a Viable Model for Other Developing Countries? *World Development*. 30. 1461-1476. 10.1016/S0305-750X(02)00046-3.
- 5) McGrath, S. (2002). Skills for Development: A New Approach to International Cooperation in Skills Development?. *Journal of Vocational Education and Training* 54 (3): 413-430.
- 6) D. Ashton & F. Green & J. Sung & D. James (2002). The Evolution of Education and Training Strategies in Singapore, Taiwan and S. Korea: A development model of skill formation. *Journal of Education and Work*, 15:1, 5-30.
- 7) Marina J. Mayer & Miriam Altman (2005). South Africa's economic development trajectory: implications for skills development. *Journal of Education and Work*, 18:1, 33-56, DOI: 10.1080/1363908052000332302.
- 8) Mason, Geoff & Williams, Gareth & Cranmer, Sue (2006). Employability skill initiative in higher education: what effect do they have on graduate labour market outcomes? *Education Economics*, 17(1), 1-30, DOI: 10.1080/09645290802028315.

- 9) Morley, Louise (2007). The X Factor: Employability, Elitism and Equity in Graduate Recruitment. *Twenty-First Century Society: Journal of the Academy of Social Sciences* 2(2), 191-207, DOI: 10.1080/17450140701325782.
- 10) Jansen, J. & C. Herman & T. Matentjie & R. Morake & V. Pillay & C. Sehoole & E. Weber (2007). Tracing and Explaining Change in Higher Education: The South African Case. In *Review of Higher Education in South Africa: Selected Themes*, edited by Council on Higher Education, 157–188. Pretoria: Council on Higher Education.
- 11) Alexander, P. M. & Lotriet, H. H. & Matthee, M. C. (2009). Methodological challenges in e-skills shortage research in South Africa. *ACM International Conference Proceeding Series*, 16-21.
- 12) Dionisius, R., S. & Muehlemann, H. Pfeifer & G. Walden & F. Wenzelmann & S. C. Wolter (2009). Costs and Benefits of Apprenticeship Training. A Comparison of Germany and Switzerland. *Applied Economics Quarterly* 55 (1): 7–37. doi:10.3790/aeq.55.1.7.
- 13) Onsomu, E. N. & Ngware, M. W. & Manda, D. K. (2010). The impact of skills development on competitiveness: Empirical evidence from a cross-country analysis. *Educational Policy Analysis Archives*, 18 (7). DOI: 10.14507/epaa.v18n7.2010.
- 14) Kjersti Lundetræ & Egil Gabrielsen & Reidar Mykletun (2010). Do basic skills predict youth unemployment (16- to 24-year-olds) also when controlled for accomplished upper-secondary school? A cross-country comparison, *Journal of Education and Work*, 23:3, 233-254, DOI: 10.1080/13639081003745439.
- 15) Awogbenle A. Cyril & Lwuamadi K. Chijioke (2010). Youth unemployment: Entrepreneurship development programme as an intervention mechanism. *African Journal of Business Management* 4(6), 831-835.
- 16) Saha Bibhas & Sensarma Rudra (2011). Academic specialisation and returns to education: evidence from India. *Journal of Education and Work*, Vol. 24, No. 5, November 2011, 501–520, ISSN 1363-9080.
- 17) Okada Aya (2012). Skills Development for Youth in India: Challenges and Opportunities. CICE Hiroshima University, *Journal of International Cooperation in Education*, 15(2), 169 -193.
- 18) Balwanz David (2012). Youth Skills Development, Informal Employment and the Enabling Environment in Kenya: Trends and Tensions. CICE Hiroshima University, *Journal of International Cooperation in Education*, 15(2), 69-91.
- 19) Agrawal Tushar (2014). Skill development in India: an examination. *Journal of Education and Work*, 27:6, 629-650, DOI: 10.1080/13639080.2013.787485.
- 20) Weligamage Susima S. (2014). Graduates' Employability Skills: Evidence from Literature Review. Sub Theme A - Enhancing Employability through Quality Assurance - ASAIHL 2009 available at <https://www.researchgate.net/publication/266014502>.
- 21) Catherine Kathure & Jacob Mbijiwe (2014). Vocational Skills Development for Youths in the Informal Sector of the Economy in Africa. *IOSR Journal of Business and Management (IOSR-JBM)*, 15(6), 2278-487.
- 22) Pandey Seema (2016). Improvising Skill Development & Employability Potential through Higher Education, Research & Innovations in India. *International Journal of Innovative Research in Science Engineering and Technology*, 5(1), 2319-8753.

- 23) Sharma Lavina & Nagendra Asha (2016). Skill Development in India: Challenges and Opportunities. *Indian Journal of Science and Technology*, DOI: 10.17485/ijst/2016/v9i48/107324.
- 24) Anbuthambi B & Chandrasekaran N (2017). Impact of Skill India on Rural Youth – A Perspective. *ICTACT Journal on Management Studies*, 3(1), 457-460.
- 25) Pandey Ankul & Nema DK (2017). Impact of skill India training programme among the youth. *International Journal of Multidisciplinary Research and Development*, 4(7), 294-299.
- 26) Rothboeck Sandra & Paul Comyn & Partha S. Banerjee (2018). Role of recognition of prior learning for emerging economies: learning from a four sector pilot project in India. *Journal of Education and Work*, DOI: 10.1080/13639080.2018.1473560.
- 27) Ka Ho Mok & Jiwei Qian (2018). Massification of higher education and youth transition: skills mismatch, informal sector jobs and implications for China. *Journal of Education and Work*, DOI: 10.1080/13639080.2018.1479838.
- 28) Debpriya De (2019). Issues and challenges in implementing the Skill India movement: Training partner perspective. *Worldwide Hospitality and Tourism Themes*, 11(1) 54-67.
- 29) Markus Maurer (2019). The challenges of expanding recognition of prior learning (RPL) in a collectively organised skill formation system: the case of Switzerland. *Journal of Education and Work*, 32:8, 665-677, DOI: 10.1080/13639080.2019.1694141.
- 30) Ismail Zuriadahbinti & Ahmad Anis Suriati & Ahmi Aidi (2020). Perceived Employability Skills of Accounting Graduates: The Insights from Employers. *Ilkogretim Online - Elementary Education Online*, 2020; 19 (4): pp. 36-41.
- 31) Dollah Noor Faizzah Binti & Manaf Halimah Abdul & Misnan Siti Noor Shamilah & Wallang Muslimin & Ananthan Sharmaine Sakthi (2020). Knowledge Transfer and Entrepreneurial Skills Development Among Students in Higher Education Institutions. *Ilkogretim Online - Elementary Education Online*, 2020; 19 (3): pp. 54-67.
- 32) Sherino Mini & Bhatta NMK (2021). Pursuing Growth in Developing countries through Community Capacity Building – An innovative approach towards Skills development. *Ilkogretim Online - Elementary Education Online*, Year; Vol 20 (Issue 5): pp. 516-526
- 33) Syrquin, M. & Chenery H.B. (1989). Patterns of development, 1950 to 1983. *World Bank Discussion Papers 41* (Washington, DC, World Bank).
- 34) EY (2012). Knowledge paper on Skill Development in India. available at https://imyriaads.files.wordpress.com/2013/02/ficci_skill_report_2012.pdf.
- 35) Government of India (GOI), (2015). Ministry of Skill Development and Entrepreneurship (MSDE), NSDC, Scheme document of PMKVY. http://pmkvyofficial.org/App_Documents/News/PMKVY_Scheme_Document_v1.1.pdf
- 36) NSDM (2015). National Skill Development Mission, A Framework for Implementation available at <https://www.msde.gov.in/assets/images/Mission%20booklet.pdf>.
- 37) NPSDE (2015), National Policy for Skill Development and Entrepreneurship available at <https://www.msde.gov.in/National-Policy-2015.html>.

- 38)GOI, Programme Guidelines (2016). DDU-GKY, Ministry of Rural Development.
http://ddugky.gov.in/sites/default/files/SOP/DDUGKY_CNN_aligned_Guidelines_July_2016.pdf.
- 39)British Council, (2016). Overview of India's Evolving Skill Development Landscape' available at https://www.britishcouncil.org/sites/default/files/18.10.16_overview_of_skill_landscape.pdf.
- 40)PIB (2017). Achievements Report of Skill Development Sector , Department of Industrial Policy and Promotion available at <https://pib.gov.in/newsite/PrintRelease.aspx?relid=156108>
- 41)Annual Reports (2015-16, 2016-17 & 2017-18), M/o SDE, Government of India.
- 42)GOI (2016-2020). Ministry of Skill Development and Entrepreneurship (NSDC), Guidelines for State Engagement under PMKVY 2.0, <https://www.msde.gov.in/assets/images/pmkvy/State%20engagement%20guidelines%20-%20PMKVY.pdf>
- 43)India Skills Report (2017 & 2018) available at http://www.in.undp.org/content/dam/india/docs/poverty/india-skills-report-2018_undp.pdf.