Impact of Higher Education and Skill Development on Employment Generation and Socio-Economic Development: Strategies for developing an integrated framework for transforming education though skilling and technology interventions

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#### JEL Codes:

### **Abstract**

Skill Development is an important focus for India in the current economic scenario. As the advanced world moves to a demographic crisis, with the average age of population across countries increasing, India will prove to be provider for the global work force. This work force needs to be trained in the professional skills required to meet the standard minimum criterion. This paper studies the major problems affecting the vocational training institutes in some areas of India and provides insights into how to tackle these issues by hands-on policies.

### Introduction

With the 11th Five Year Plan offering a framework to address the crisis, the government has acknowledged the need for Skill Development. The first National Skill Development Policy was developed in 2009, and a National Skill Development Mission was established in 2010. According to the 12th Five Year Plan, skill development initiatives in the past have been mostly handled by the government, with minimal relation to market need. In 2014, the Ministry of Youth Affairs and Sports established a department of Skill Development and Entrepreneurship, which was then elevated to the status of ministry in November 2014. It has asked for a framework to encourage private investment in vocational training through PPP (Public-Private Partnership). The ministry's function entails industry-institute linkage, expanding skill development frameworks, mapping current skills and certification, and so on.

Today, India's demographic dividend benefits from an increase in the working-age population (15-59 years) relative to the dependant population (0-14 and above 60 years). According to statistics, by 2035, the young population will have peaked, giving a surplus of human capital to power the economy's expansion. To close the talent gap across various industries, India would need to recruit 109.73 million individuals by 2022. There is a 33% difference between the cumulative manpower requirement forecasts of the state-wise skill gap reports as well as state-specific reports of the same deduced from the sector-wise reports based on the obtained skill-gaps in the state-wise reports and data inferred from the sector-wise reports of NSDC. If the skill development programmes in India are successful, If effectively implemented, India might have a 47 million labour surplus. Furthermore, due to the global ageing impact, India may become the dominant source of personnel in meeting the massive workforce gap by the 2020s. The Ministry of Skill Development and Entrepreneurship is in charge of skill development efforts and bridging the gap between demand and supply. At the moment, around 91,91,675 individuals have been trained, and 35,77,444 people have been placed after receiving training from approximately 4,526 training centres and 290 training partners.

Although many industries understand and recognise the need of skill development initiatives, there are a few areas where awareness must be raised. The Ministry of Skill Development and Entrepreneurship, the National Skill Development Council, and sector skill councils have

been formed, but there is still work to be done on identifying employability traits and designing or modifying courses to meet the sector's need. The age demographic available to the Indian economy has a greater effect toward learning, and if competent, may help to making the economy stronger rather than being a burden.

### Literature Review

(Paul, 2014) emphasis that many industries understand and recognise the need of skill development initiatives, there are a few areas where awareness must be raised. The study points out that the Ministry of Skill Development and Entrepreneurship, the National Skill Development Council, and sector skill councils have been formed, but there is still work to be done on identifying employability traits and designing or modifying courses to meet the sector's need. Another aspect that the paper talks about is that the age demographic available to the Indian economy has a greater effect toward learning, and if competent, may help to making the economy stronger rather than being a burden. According to (Paul, 2014) most compelling rationale of technology-assisted learning systems is their cost-effectiveness. Innovative learning techniques are front-loaded, which means that there is a significant initial investment in technological tools, but once that hurdle is overcome, there is little to no effort required in actual deployment. The study finds remote learning programme costs one-third the price of a campus programme. And talks about methods to integrate such methods in today's vocational training programmes.

(ARORA & Chhadwani, 2018) acknowledge that knowledge and skills are the functioning power of every country's economic progress and social development. It was noted that countries with superior levels of talent adapt more successfully to the world of work's provocation and golden chances. (ARORA & Chhadwani, 2018) brings into focus the fact that as India progresses toward becoming a 'knowledge economy,' it becomes increasingly important that the country emphasises skill improvement, and these skills must be relevant to the evolving economic climate, which will aid in transforming the economy toward advancement. The purpose of the paper was to investigate the influence of skill India on altering the Indian economy, with an emphasis on the requirement of the skill India campaign and the role of skill India programmes undertaken by the government in providing impetus to the economy. The work of the authors was based on a conceptual investigation and secondary data sources. According to the report prepared by (ARORA & Chhadwani, 2018), the government has established a policy framework, but the sector should also participate in

public-private partnerships to develop skills. The demand to enhance the market can be met if the existing educational process, which focuses on academic capabilities, transforms and focuses on developing marketable talents in students.

(Nilsson, 2010) talks about how vocational education and training (VET) has had a comeback in recent years for two key reasons. For starters, it is seen as an effective technique of fostering economic growth. Second, it is regarded as a potentially effective instrument for promoting social inclusion. These supposed impacts are thoroughly reviewed by the paper based on the developing literature on the topic. (Nilsson, 2010) shoes evidence for VET's productivity-boosting impacts at the corporate level is fairly strong, but the data for its influence on growth of economy is far from definitive. The impacts on social integration are questionable since VET system reform has not been significant, and bringing about the required institutional transformation has been challenging. The study analyses policy consequences and gives some research recommendations for the future. VET is seen as an especially effective technique of supporting economic growth. (Nilsson, 2010) talks about the fact that VET is of special relevance since there are grounds to assume that it is preferable to general education in terms of socialisation as well as facilitating labour-market entry. The study shows that several of the difficulties in demonstrating solid evidential basis for the impacts of VET originate from the fact that, while intuitively simple and clear, the notion is almost impossible to define unambiguously and that the notion has several dimensions and may be structured in various ways.

(Pandey & Nema, 2017) recognises that the youth is among the most significant players in the country, contributing to economic success. As a result, governments recognise the value of youth in society, and different steps are being done to guarantee that the population of tomorrow has future-ready skills. The article examines how the majority of Indian young are suffering substantial unemployment issues, despite the fact that the majority of youth are educated, with a present lack of expertise and tools knowledge. According to (Pandey & Nema, 2017) the present status of schooling, skills development, and work for Indian young, India's skills development system is encountering issues in training the youth. The majority of today's kids are unaware of current technology, which aids in the growth and advancement of the country. The paper notes that skill development programme is a powerful tool for developing creative talents and technical training among the country's young people. And it

encourages youngsters to build the capacity of self-development and entrepreneurship by giving training in a variety of activities, as well as financial assistance. (Pandey & Nema, 2017) identifies the barriers that young people encounter in achieving the skill India development agenda.

(Mayer & Altman, 2005) speaks of revenue creation activities as options for providing youth with productive work. The study finds that during the capability building programme, the majority of the participants were jobless. However, after undergoing skill training, all of them obtained job or were able to develop a chance for self-employment. It shows how to enable the continued development of high-value traded commodities and services, the first level necessitates a high skill trajectory. The article is indicative of the fact that to alleviate unemployment, the second level necessitates the growth of low-productivity, non-traded goods and services, which must be supported by the supply of low and intermediate skills. (Mayer & Altman, 2005) points out that it is not just that skill development that should assist efforts to reduce unemployment, but that skill development at the low and intermediate levels is an essential component of a larger policy framework to promote the expansion of labour-intensive sectors.

## **Data and Analysis**

The used for this article was taken from the latest State-wise Skill Gap Reports published by National Skill Development Corporation. Only 8 states and 2 Union Territories were considered for this study. The Skill Gap Reports were published inclusive of two periods from 2012-2017 and 2017-2022. The areas considered that were the study were selected randomly and are distributed across India. The states that were studied are Haryana, Himachal Pradesh, Kerala, Andhra Pradesh, Jharkhand, Maharashtra, Madhya Pradesh and Rajasthan. The Union Territories of Goa and Jammu and Kashmir were also chosen for this study.

The study maps the number of vocational institutions present in each of the areas to the number of institutes facing each of the four major problems faced by vocational institutes in India. These were calculated manually by understanding the reasons of unemployment along with the youth inspiration of the individual districts of these States/Union Territories.

Table 1:

State/Union Territory	Total No. of Vocational Training Institutes	Existing infrastructure issues and lack of civil amenities	Demand for additional training and courses	Lack of awareness and Usage of technology for employment	Lack of career Counselling
Jammu and Kashmir	51	39	39	24	36
Himachal Pradesh	204	48	104	14	63
Kerala	64	64	47	44	30
Goa	70	25	70	70	45
Andhra Pradesh	380	135	290	194	252
Jharkhand	147	69	126	39	93
Maharashtra	717	507	374	376	290
Madhya Pradesh	272	198	167	183	188
Rajasthan	234	180	197	92	111
Haryana	225	147	156	126	145
Total	2364	1412	1570	1162	1253

 $(Author's\ own\ calculations)$ 

Table 1 shows the total number of vocational institutes in a particular State/Union Territory and the total number of institutes in the State/Union Territory facing a certain issue. The issues that were identified in the article were the ones that the authors found out to be the most common and prevalent issues all across these regions.

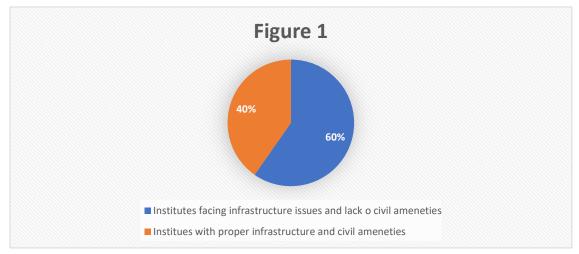


Figure 1 depicts the percentage of VETs facing infrastructure issues and lack of civil amenities. The issues of lack of infrastructure and civil amenities are found to be very common in vocational institutes. Issues ranging from lack of a proper institutional campus with working toilets to lack of hostels or mess were reported by the students of these institutions. Such an atmosphere causes low enrolment rates and is a huge reason why students discontinue their education. This is an important issue to notice and act upon as the responsibility of training an able work-force includes providing them with a basic environmental standard that is conducive to learning and growing.

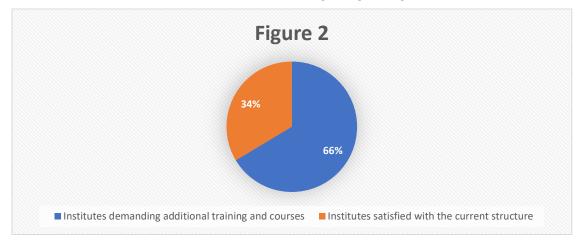


Figure 2 depicts the percentage of VETs that are in need of additional training and courses. One of the major issues that the students in VETs face is the lack of relevant courses within their district or state that matches with their interests and even the most common requirement for the industries within the State/Union Territories. This leads to the seats left open or students' graduating in something that would not lead them to employment. Ineffective course structuring within the leads lead to undefective vocational training and minimal



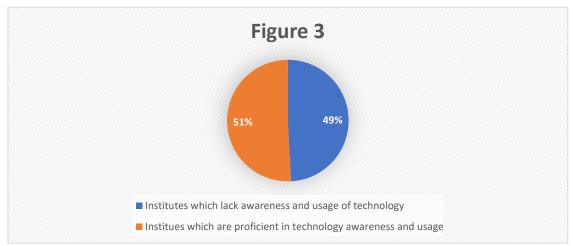


Figure 3 depicts the percentage of VETs that are lacking in technology awareness and usage. Lack of awareness and usage of technology leads to missing out on the opportunities in the real world that is fast moving with respect to technological advances. It is an important tool that the modern work force is expected to have. The situation in most of the VETs are such that less than 50% of all students enrolled even know of basic services such as ATMs and so on with even a lesser percentage knowing other skills such a basic computing.

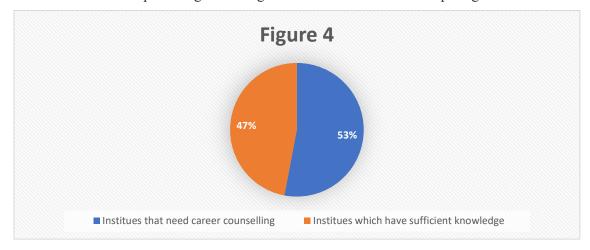


Figure 4 depicts the percentage of VETs that are facing issues due to insufficient career counselling. Career counselling is an important factor when in comes to any student graduating from any institutes. It is important to guide student based on the current market opportunities for the skills they learnt. Unequal information and misinformation render a vocationally strained skilful work force underutilised and unemployed. Lack of Career counselling was found to be a major reason why graduates remained unemployed after finishing their training with VETs.

There are many methods forward for tackling the issues put for by this paper. The base of any or most of the methods would be increased funding for the purpose of bettering the Skill Development programmes in India. There are many methods to do so with the most important one being PPP. It is an important avenue to explore as Private companies can include spending on Skill Development in their CSR activities, and they can guide VETs on what the market needs in terms of skill right now. This would allow integrating market needs for employability skills in the Skill Development Programmes. The government agencies should focus on allocation of funds to improve existing infrastructure of the vocational institutes all over the nation. This includes revamping the old building, spending on training teaching staff, regular maintenance activities as well as building hostels and messes for students near the institutes. As the population is rising, there as increasing need to equip the youth will skills needed for employment hence new VETs need to be set up to meet the demand for skill training. There need to be a committee set up by the State/Central Government with the help of bodies like the NSDC to regularly revise the curriculums of VETs as it is important to have relevant skills rather than any skill to get employed in the modern work force. Regular surveys of student interests and sectoral opportunities within state need to be carried out so as to ensure that the VETs provide graduates with the relevant skills demanded by the markets to ensure employment. Soft skills for students in Skill Development programmes is something that is majorly overlooked, while most of the career prospects that the graduates expect soft skills from this leads to an otherwise skilled person loosing out on job opportunities, As soft skill development is an important factor that is most commonly overlooked in VETs, a course on soft skills needs to be compulsorily set up in all VETs in India. There needs to be increased spending on training the youth in technology as it is an important skill needed to keep up with the modern world. There needs to be increased investment in IT facilities included in the institution like free Wi-Fi and Computer Labs so that the poverty ridden faction that joins the VETs have equal opportunities to keep up with their competition. Training needs to imparted to the students enrolled in Skill Development Programmes on how to use technology and internet as tools to increase their employability. It is not just important to provide the youth with any skill but with relevant skills and help them find avenues to apply it. One of the major reasons for unemployment even after completing vocational training is that many times a graduate does not know what job

opportunities are available for his/her particular skill. It is important to set up placement units and career counselling cells in VETs as the final goal is to ensure employability. Placement units can be set-up in VETs for the purpose of matching a job with a person that has the required skills for it, the same can be a body that imparts career counselling for students as they can be aware of where to apply for jobs after the training provided in VETs. This is a major step to tackle the issue of unemployment after vocational training. Even though there are efforts being made to improve the vocational training programmes, many of the institutes are still lacking in major areas. This paper highlights the needs of the youth for a better skill development programme all across India.

### **Conclusion**

Import of Skill Development has become clearer to the Governments and efforts are being made to improve the Skill Development programmes in the nation. The recent 5-year plans have focus on Skill Development and this is a step in the right direction. The government needs to play a more active part in acquiring the PPPS and funding for the VETs. The study emphasis on the issues that need to be tackled with urgency so that demographic boon in India does not become a demographic trap. The paper faces a few limitations due to a reduced data set of only 8 States and 2 Union Territories. The information is taken from the Skill Gap Report of the regions and hence are subject to the limitations of the same. The paper considers only 4 major problems faced by VETs, but in reality, there are many more that these institutes face that are not mentioned in the study.

# References

- Akoojee, S., Mcgrath, S., & Gewer, A. (2005, November). South Africa: skills development as a tool for social and economic development. HSRC.
- Alderete, M. V. (2017). Examining the ICT access effect on socioeconomic development: the moderating role of ICT use and skills. INFORMATION TECHNOLOGY FOR DEVELOPMENT.

- ARORA, D. R., & Chhadwani, M. (2018, November 01). Analysing the impact of skill India as a tool for reshaping Indian economy. IJRAR- International Journal of Research and Analytical Reviews.
- Bloom, D., Canning, D., & Chan, K. (2006, February). Higher Education and Economic Development in Africa. Harvard University Press.
- Gupta, D. D., & Agarwal, S. (2018, April). SKILL DEVELOPMENT INITIATIVE-LITERATURE REVIEW. Journal of Modern Management & Entrepreneurship (JMME).
- Kim, J., & Park, C.-Y. (2020). Education, skill training, and lifelong learning in the era of technological revolution: a review. The Australian National University and John Wiley & Sons Australia, Ltd.
- Mayer, M. J., & Altman, M. (2005, March). South Africa's economic development trajectory: implications for skills development. Journal of Education and Work, Taylor & Francis Group Ltd.
- Nilsson, A. (2010). Vocational education and training an engine for economic growth and a vehicle for social inclusion? International Journal of Training and Development, Blackwell Publishing Ltd.
- Oviawe, J. I. (2018, January 10). Revamping Technical Vocational Education and Training through Public-Private Partnerships for Skill Development. Makerere Journal of Higher Education.
- Pandey, A., & Nema, D. (2017, July). Impact of skill India training programme among the youth. International Journal of Multidisciplinary Research and Development.
- Paul, S. (2014, January). The Impact of Technology on Skill Development. Shri Ram Centre for Industrial Relations and Human Resources.
- Strydom, J. (2005, March). Tracking study on skills development and employment generation of small retail establishments in Mamelodi, Tshwane. Southern African Business Review.
- https://nsdcindia.org/nsdcreports