

## Technical and Vocational Education and Training for Economic Growth in Pakistan

Shirin Nooruddin  
Karachi Grammar School  
shirin.amirali98@gmail.com

### Abstract

*This discussion paper aims to highlight the existing scenario of Technical and Vocational Education and Training (TVET) for the economic growth in Pakistan. It specifically analysis the status of vocational training, related policies and practices with reference to the 18<sup>th</sup> Amendment, which abolishes the concurrent list and grants more provincial autonomy in the matters of education. Article 25A of the Constitution of the Islamic Republic of Pakistan (iv) states that the provinces should set priorities for access and quality education based on the provincial needs and develop action plans for its actualization. A developing country like Pakistan needs to devise a systematic, well thought and sophisticated policy for TVET; therefore, this paper proposes a policy following the simple framework of input, process and output. The inputs are predominantly focused on highlighting and matching demand and supply of the TVET. The process thoroughly discusses both the formal and informal education arrangements. Finally, the outputs are deliberated in the form of economic effects such as the manpower structures, technological development, manpower quality and economic behavior leading to the ultimate goal of economic growth and development of the country.*

**Keywords:** economic effect, economic growth, framework, technical vocational education and training

## Introduction

Education is perceived as the wheel which moves an economy towards progression. In all forms, mainstream and TVET education help economy to transmit knowledge, information, values and skills from one generation to another. It also plays a significant role in intellectual capacity development by stimulating our minds to explore different ways of doing things in a better and innovative ways.

UNESCO defines TVET as, “Those aspects of the educational processes involving - in addition to general education - the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of economic and social life”(p. 2). According to Shah, (as cited in Irfan & Mohammad, 2012), “Technical education in Pakistan refers to industrial technology offered in polytechnic and mono-technique institutes, colleges of technology and technical colleges to train mid-level technical professional (sub-engineers) for industry” (p. 32). Thus, “TVET refers to education and training that prepares people for an employment and makes them more productive in various economic fields” (Alam, 2015, p. 37). Ansari and Wu (2013) claim that vocational education prepares skilled workers. It can be the world of work which equips people with a wide range of knowledge and skills in the field of science and technology to improve professional and social life (Draft-National TVET policy, 2014). A developing country like ours which is population surplus on the one hand, but blessed with a diverse and abundant of natural resources; from the coastal region to the mountains of the Karakoram with a blend of fertile agriculture lands and deserts,

plain and plateaus rich in minerals to modern cosmopolitan trading cities. Thus, there is a need to have a strong structure of education catering to both mainstream and TVET.

Within this educational back drop, the TVET sector has been neglected in Pakistan since its independence and comparatively more resources are allocated for mainstream education. The status of TVET in Pakistan is considered to be low and has predominantly been operated by public institutions with a small percent of apprenticeship in companies and some private training providers. A number of national and provincial bodies are involved in TVET. These include the National Vocational and Technical Training Commission (NAVTTTC), Provincial Technical Education and Vocational Training Authorities (TEVTAs), provincial training boards and provincial administrations. According to Government of Pakistan: New Growth Strategy, Planning Commission, 2011, NAVTTTC is responsible for:

1. Standardizing and controlling policy directions for TVET.
2. Developing public private partnerships in order to balance the supply and demand of technical and vocational skilled labor.
3. Reviewing existing TVET policies and develop strategies to cultivate human capital.
4. Reviewing and upgrading the national TVET curriculum, training, assessment and certification system.
5. Evaluating and monitoring of teacher quality and technological resources.

Several researchers have acknowledged the significance of vocational and technical education in the socio-economic development of a country. A nation's demographic, cultural and economic issues are inextricably connected to its technical and vocational education framework. Furthermore, as a country undergoes reforms in its political, social and economic sectors, vocational and technical education has to be altered and crafted according to new situations. Apart from this, the impact of globalization, international competition and political development also affect the reforms (Mustafa, Abbas & Saeed, 2005). Pakistan needs to devise a systematic, well thought out and sophisticated policy for TVET; therefore, this paper proposes a policy outline following the simple framework of input, process and output adapted from Cheng, Ng and Mok (2002). The inputs are predominantly focused on highlighting and matching demand and supply of the TVET. The process thoroughly discusses both the formal and informal education arrangements. Finally, the outputs are deliberated in the form of economic effects such as manpower structures, technological development, manpower quality and economic behavior leading to the ultimate goal of economic growth and development of the country.

### **Inputs for TVET**

**Demand aspect of TVET education.** TVET has the potential of developing both the social and economic aspect of the society; however, the population data analysis with regards to education and unemployment reflect gloomy indicators. For instance the planning commission of Pakistan in 2011 indicates:

Hardly 16.3 percent of the youth completes secondary education, resulting in more than three-quarters exiting the educational system without any foundational or life skills. Moreover, less than 6 percent of the youth population has been reported not to have acquired any technical skills through TVET, while only 2.5 percent have reported on-job-trainings. Hence, the majority of Pakistan's emerging labor force is either without education and skills or has very little of both(p.57).

Firstly, at the national level, the emerging trends reflect that an escalating population will be entering the job market without appropriate education and training or skills. The long term mounting population without appropriate education and training can also be a huge burden on national economy,when this population gets old and the country's economy will have to allocate a huge amount of money for social welfare and old age benefits. It is therefore the need of the day to provide employable skills to the growing population by exploring ways to access and train people for new skills and careers (Irfan & Mohammad, 2012).

Secondly, our domestic industries are no longer protected from international competition (Draft-National TVET policy, 2014). Previously, there was a quota system and Pakistan received its share of exports which strengthened certain sectors of our industry; however, with the abrogation of this quota system in the international market the exports have significantly reduced (Draft-National TVET policy, 2014). In order to maintain and increase share of exports of both cultural and consumer goods and services, Pakistan needs to

ensure up gradation of the required skills of labor force for enhanced productivity. Most importantly in order to sustain and increase the demand of the skilled labor in international market which contributes significantly in foreign remittances, TVET programs need to be formalized, implemented and monitored. This will help Pakistan to progress and compete in the global market.

Thirdly, Pakistan needs to establish a mechanism for developing information bank providing accurate and updated information about the population and manpower predictions, so that each region of the country should have the knowledge of the configuration of their manpower. This initiative can on the one hand enable the provincial and local governments to establish TVET providing institutions and systems and on the other hand, help investors and industrial sector to develop feasibility reports for establishing industries in different regions of the country.

Fourthly, keeping in view the cultural diversity and geographic variance of the country, TVET efforts must be highly focused on the regional requirements. The kind of skilled workforce needed in the cosmopolitan city of Karachi cannot be expected to be as effective in the mountainous region of Gilgit-Baltistan. The regional demands for workforce must be carefully collected and TVET efforts must revolve around catering to these regional needs.

Finally, the industrial revolution that is taking place nationally and internationally must be closely monitored. While preparing an effective workforce, we need to closely monitor the industrial trends so that we are in a better position to accurately predict the type, quality and quantity of the workforce for the next 25 years.

### **Supply aspect of TVET education**

“In a global environment that permits easy flow of investments and people, the TVET sector in Pakistan needs to have a forward looking supply strategy of producing a sophisticated skill base” (UNESCO report, p. 20). Pakistan is at a disadvantage that it is unable to capitalize its labor in international and local markets. Pakistan’s TVET schools lack the required financial and human capital generation because the curriculum and technological resources fail to match the local and international market demands and teachers lack the required technical expertise. Highlighting these challenges, the Executive Director NAVTTC Cheema (2016), while briefing the Senate Standing Committee on Federal Education and Professional Training said, “The institution is facing capacity issues, inadequate funding, weak links with industry and shortage of internationally recognized training institutions in the country.”

Provision of site facilities, salaries for the competent teachers and instructors are prominent challenges of education providers in TVET (Draft-National TVET policy, 2014). Similarly, as a developing nation, the youth of the country is confronting the issues of high and unbearable cost of education. These challenges are hampering the efforts for developing our labor market into a productive workforce. These issues further give birth to the challenges for educational and curriculum planning, equity and equality and the overall quantity and quality of our workforce. Therefore, when initiating a certain TVET project, it must be ensured that it is relevant, productive, trustworthy and self-sustainable (Irfan & Mohammed, 2012). The policies must focus on relevancy of the initiatives within the existing demands of the industry and trade of the country. In this

regard partnerships and close collaboration between the education providing institutions, industry and trade of the country can carve a place in the international labor market. This will help in developing a productive and earning workforce which will have faith in the institution and start believing that once they complete a course they will not suffer from the vicious jaws of unemployment.

### **Process of education system**

A major breakthrough was observed in the form of the 18th Amendment bill, of the Parliament on April 19, 2010. “The Amendment abolishes the ‘concurrent list’ and gives much more provincial autonomy in matters of education, health and several other sectors” (p.5). More so, Article 25A of the Constitution of Pakistan (iv) directs the provinces to set priorities for access and quality education based on the provincial needs and targets of the Millenium Development Goals and Education for All to develop action plans for its actualization. This new arrangement has posed both challenges and opportunities for education in the country and enabled the provinces to make more contextual planning for education. However, the critics of this new arrangement have voiced a concern for the political instability, inconsistencies in policies and lack of experience, expertise and infrastructure in certain provinces.

### **Output in form of economic effects**

**Manpower Structure.** Our future careers structures in TVET education need to be clearer, interconnected and in a hierarchical order. There must be an organized way of collaboration among the provinces for the career structures in TVET so that there is uniformity



in the country under the umbrella of federal regulatory authority. Secondly, there must be enough opportunity and arrangement for the workforce to continue their upward progression even when they migrate from one province to the other. Above all, the future career structures must be closely linked with the economy of the country and aligned with the international market demands.

**Production technology.** “There are skill and technology gaps not only in industry but within the TVET system as well. Many training curricula, technologies, labs and machines are outmoded and training provided in TVET does not match market demand. Pakistan is far from reaching this elusive goal because it is still stuck with outdated technologies” (Janjua & Mohammed, 2012, p.26). Therefore, we need to introduce new technologies in order to remain updated and be able to provide relevant and high quality education and skills to our workforce.

**Manpower quality.** Future TVET should not only focus on technical knowledge and skill but also upon the human aspect of the workforce. Manpower should be developed such that they are able to sustain the pressures on job and have aptitude of adaptability in the event of change in career. In addition, the future TVET initiatives should focus on developing the qualities of efficiency and creativity.

**Effect on economic behavior.** The future TVET initiatives should not only focus on how to earn more money but also upon the management of this earned money. High quality manpower prefers to invest in their personal and family health care and further learning. Our future policies, therefore, on the one hand must focus on developing our manpower in a way that they prioritize investing in

the above mentioned areas and on the other hand the system should also enact an entity that itself provides facilities for the manpower in the area of further learning and health care. These two areas will further increase the productivity, effectiveness and efficiency of the workforce.

The ultimate goal of investment on workforce in a country is to gain, special returns, increase private returns, and initiate and foster the redistribution of wealth leading to the overall economic growth of the nation. Similarly, the ultimate aim of our TVET should focus on the redistribution of wealth and regional balance to achieve the overall economic growth of the country.

### **Conclusion**

The ultimate goal of investment on workforce in a country is to gain special returns, increase private returns, and initiate and foster the redistribution of wealth leading to the overall economic growth of the nation. Similarly, the ultimate aim of TVET in Pakistan should focus on the redistribution of wealth and regional balance to achieve the overall economic growth of the country. The economic competitiveness of a country is closely tied to the quality of its human capital which is fundamentally based on the country's quality education and training policies. For any economy to thrive, a good balance between mainstream and TVET has to be maintained, as both contribute in developing the social and economic aspects of the country. Hence, it is suggested that strong doable reforms in Pakistan's education and training policy should be made. Due emphasis on conceptual learning and high skills should be given so as to align the work force to meet the growing demands of a knowledge based economy.

## References

- Alam, N. (2015). The role of technical vocational education and training in human development: Pakistan as a reference point. *European Scientific Journal*, 11(10), 35-50
- Ansari.B. & Wu.X. (2013). Development of Pakistan's Technical and Vocational Education and Training (TVET): An analysis of skilling Pakistan reforms. *Journal of Technical Education and Training*, 5(2), 1-13.
- Cheema, Z. (2016). Technical training can help quadruple remittances: NAVTTC. *Business Recorder*. Retrieved from <http://www.brecorder.com/money-a-banking/198:pakistan/17520:technical-training-can-help-quadruple-remittances-navttc/>
- Cheng. Y. C., Ng. K.H., & Mok. M. M. C. (2002). Economic consideration in education policy making: A simplified framework. *The International Journal of Education Management*.16(1), 18-39.
- Government of Pakistan: New growth strategy, planning commission(2011). Retrieved from [http://www.pc.gov.pk/feg/PDFs/conceptual\\_framework\\_2.pdf](http://www.pc.gov.pk/feg/PDFs/conceptual_framework_2.pdf)
- Janjua.Y., & Mohammad. I., (2012).*Situation analysis to support the programme design process for national skills strategy of the Islamic Republic of Pakistan*. Islamabad: Socio-economic and Business Consultants,
- Mustafa. U., Abbas. K.,& Saeed. A. (2005). Enhancing vocational training for economic growth in Pakistan. *The Pakistan Development Review*, 2(4), 567-584

*Skills for Growth & Development - A Draft National Technical and Vocational Education and Training (TVET) Policy Consultation Document.*(2014). Retrieved from [http://planipolis.iiep.unesco.org/upload/Pakistan/Pakistan\\_National\\_TVET\\_Policy\\_Draft\\_Consultation\\_2014.pdf](http://planipolis.iiep.unesco.org/upload/Pakistan/Pakistan_National_TVET_Policy_Draft_Consultation_2014.pdf)

United Nations Educational, Scientific and Cultural Organization.(2016). Retrieved from <http://www.unesco.org/new/en/newdelhi/areas-of-action/education/technical-vocational-education-and-training-tvet/>