

# TVET Reform in Federal Republic Nepal<sup>1</sup>

**Hari Prasad Lamsal**

Ministry of Education, Science and Technology

lamsahl@hotmail.com

## Abstract

The Technical and Vocational Education and Training (TVET) includes two components - education and training that offers both academic and skill development. However, there is no uniform understanding among the countries on what these aspects should entail and variations can also be observed in governance and management. The Constitution of Nepal 2015 has demanded a complete restructuring of the country's governance, including the reform of the education and TVET sector.

This paper aims to shed light on the status of TVET in Nepal in the federal context and explores the management structures for the country to move forward in the changed context. Reviewing international practice, proposals are made with regard to the restructuring of the TVET. It suggests Nepali education system adopted a two-pronged strategy to facilitate the required reform in TVET sector and setup: a) reforms in existing programs and, b) structural changes.

## Introduction

The Technical and Vocational Education and Training (TVET) includes both education and training that can be operated within one or combination of different modes (informal, non-formal and formal) of the education system. This indicates that education and training should be considered as the two primary components of TVET. The education component is closely related to the formal education system, whereas the training component is associated with the labour market (Cardoso, n.d.). UNESCO and ILO also agree on such definition (<https://unevoc.>

[unesco.org](https://unesco.org)). In addition to the general education, TVET includes the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life (UNESCO, 2014; and Mack & White, 2019). Based on this understanding, the scope of TVET programs should be understood to range from livelihood courses to the higher education (university) degrees.

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1. The opinions expressed in this paper are personal opinions.

In Nepal, TVET programs are broadly categorized into three groups- skill development activities through short duration with short-term interventions including professional development training; secondary education and diploma level program under the formal schooling system; and the technical higher education program (MOEST, 2019). However, these programs are all structured against a traditional design that has not seen reforms over the past decade that were based on stocktaking different practices observed abroad, such as the German dual system, workplace-based learning, England's modern apprenticeships (Cardoso, n.d., Caves & Renold, 2018).

The main objective of TVET program in Nepal is to contribute to the preparation of lower level and mid-level human capital, thereby contributing to the economic and overall development of the country and enabling people to be engaged in self-employment (CTEVT, 2021). TVET programs as such are viewed as a tool for productivity and enhancement and poverty reduction (Pavlova, 2014). In line with this thinking, Caves and Renold (2018) also note that quality TVET program provides benefits to individuals, as well as the wider society and its industry. So, the provision of adequate and quality TVET can be understood instrumental to reduce poverty by expanding the economic and social benefits of individuals and the communities they live in.

Although TVET is not a new concept in Nepal, its modalities and institutional setup

have not seen any meaningful adaptations and reforms in the past decade. At the same time, the country has seen drastic changes in its structure and the markets to which its people's skills need to respond accordingly. This obviously demands a thorough restructuring of the TVET system-both its governance and program aspect. In order to make the TVET system compatible with the federal system, readiness is must to engage in reengineering of its programs, institutions and delivery mechanisms. In this context, this paper aims to describe the existing status of the TVET in Nepal and explore models that will be suitable for the federal structure.

### **International Context**

Study of human evolution indicates that skill development has evolved alongside human civilization. Over the centuries, this has been gradually modified, refined and developed into the present stage. Skill development is traditionally linked with the ability of humans to adapt to their livelihoods and within their communities.

This goes back to when the initial hunter-gatherers started to apply new techniques to hunt animals and gather plants, thereby refining their techniques and weapons to increase their food intake and protect themselves from threats (humanorigins.si.edu). In course of time, humans continue to develop and adapt themselves and their tools to survive and thrive. The acquisition of new skills and survival strategies is based on trial and error practices, with new methods being successfully introduced would become

dominant practices replacing less efficient ones (<https://humanorigins.si.edu>).

Formal education emerged alongside skill development, but where practices related to skills and securing basic commodities resembled each other across the globe. Irrespective of different contexts and cultures, formal education saw a more diversified path. Its development is closely linked with the emerging civilizations around the world. The concept of education is believed to have come into practice around 3500BC although several sources argue that education emerged earlier in the Hindu tradition.

There are several events that have served as catalysts in upgrading skill development and education. In Europe, for instance, the introduction of crop-rotation and the agricultural and industrial revolutions prompted practices to be marketization and urbanization ([www.courses.lumenlearning.com](http://www.courses.lumenlearning.com)) that ultimately led to modernization. In the instances where new techniques and technologies were introduced, labors are either expelled from their works or they are forced to acquire new skills and techniques to fit the changed ambience. These times of innovations drive development of new skills and competencies. The extent to which a country or community is able to exploit new developments largely depends on the way the formal system can accommodate the supply of required persons to the market.

Industrial revolution brought major shift in country's economy ([www.oposinet.com](http://www.oposinet.com)). This revolution increased the production

of goods in cheaper rates than manual production; promoted market, thereby moving the society towards urbanization; changed the lifestyles together with the food habits and consumption culture. All these changes are named as modernization where the machines, supply of skillful persons, provision of higher wages for such skillful persons contributed to the urbanization. It further caused the creation of middle class in terms of work conditions, consumptions, and lifestyles. But, such system had not happened in uniform manner across the globe. In the beginning, it happened in Europe and America, and gradually in the East Asian countries. All these development facilitated the skill development process within the formal education system.

In 1989, the United Nations adopted the Convention on Technical and Vocational Education, recognizing the development of technical and vocational education. In 1999, the World Congress on TVET was held in Seoul, South Korea. Among other agendas, the Congress also recognized the term Technical and Vocational Education and Training officially for the first time. Before this, other terms had been used to describe similar educational and training activities, such as Workforce Education (WE), and Technical-Vocational Education (TVE), Apprenticeship Training, Vocational Education, Technical Education, Technical-Vocational Education (TVE), Occupational Education (OE), Vocational Education and Training (VET), Career and Technical Education (CTE), etc. The UN Convention

in 1999 passed a resolution to establish an international center for TVET. The UNESCO-UNEVOC, an International Centre for Technical and Vocational Education and Training was established in 2002 in Bonn, Germany as the UNESCO's designated center for TVET. (<https://www.unevoc.unesco.org>)

As mentioned earlier, the development of TVET, however, is not uniform across the globe (Caves & Renold, 2018). In the developed countries, it is closely linked with the enterprise development. Diversity is being observed in TVET in terms of program, duration, management and governance. However, vocational education within education systems as a whole remains a matter of scholarly debate not only in the past but also at present.

### **National Context: TVET in Nepal**

Technical and Vocational Education and Training (TVET) in Nepal has been further prioritized recently with the government reiterating the importance of TVET in several policy documents. TVET programs have been grouped into four categories; skill development activities, TVET in secondary education, diploma level program, and higher technical education program (MOEST, 2019). However, TVET program under the Council of Technical Education and Vocational Training Act, 1989, a main legal tool to govern this sector throughout the country, aims to produce the middle level and lower level human resources by implementing short-term skill development

activities and long-term training (academic program) (<https://www.ctevt.org.np>). In response to the provisions given in the Act, different structures and institutional arrangements are created.

The long-term training programs (academic programs - diploma level program) are being coordinated by the CTEVT with its constituent and extended agencies, public agencies of different ministries and affiliated agencies (private companies) (CTEVT, 2021). The short-term programs are implemented by several government and private agencies with varied duration and purposes (CTEVT, 2021). In addition to this, Ministry of Education, Science and Technology (MOEST) has also run grade 9-12 TVET oriented secondary education in the community schools (<https://www.moest.gov.np>).

At present, Nepal aims to transit to developing country by 2022 and upgrade as a low middle-income country by 2030 (NPC, 2075). These timelines are set in line with the SDGs 2030 framework as set by the international community. The available indicators relating to education, health and economic aspects show that the current pace of growth is not sufficient for achieving such target. Nepal is yet to leapfrog its economic growth and development including improvement in social development to achieve its long term goals and targets. The average economic growth in Nepal over the last decade has been observed at 4.6 per cent which is considered low compared to the South-Asia average. There is huge trade

deficit and remittance inflow is about one third of the country's GDP (<https://www.mof.gov.np>). The society is dependent both on consumer demand for goods and services. The production sector is poorly developed and is not able to produce goods to supply the demand created in country (NPC, 2075, and <https://www.mof.gov.np>). Among others, shortage of skill workforce and inadequate skills of the graduates remain as a challenge.

### **Issues and Challenges**

Skill development in ancient time was linked with the survival of people. It was directly linked with the production, safety and movement. The development was driven by trial and error through both informal and formal systems. Whereas some countries jumped ahead through revolutionizing their practices and industries, others remained to rely on traditional models, largely defined by manual work and family related occupation. As such, skill development efforts should be seen as an integral part of the economy. If economy does not promote or force people towards further skill development, the efforts to produce adequate human capital through the formal education system may not be sufficient.

In Nepal, the history of skill development through the formal system is less than 75 years. However, informal systems have been in place to facilitate transfer of skills from one generation to the next one since ancient times. As a result, indigenous practices remain major option to be used to develop skills among youth.

The issues and challenges faced by the TVET in Nepal has been recorded by various scholars (e.g. Caves & Renold, 2018; Gautam, Poudel & Poudel, 2018; and Poudel, 2020). It is also a frequently publicly debated topic. Among others, the major issues are fragmentation in allocating resources, inadequate access, poor quality and relevance, inadequate coordination with the private sectors, and poor linkage with the markets. The change in the political and governance system- from unitary to federal structure (federal, provincial and local governments) will have a significant impact on the skill development sector.

TVET in Nepal till now is managed and coordinated by the CTEVT which is placed at the federal level (CTEVT, 2021). It is yet to be restructured and decentralized in line with federal setup. School education falls under the exclusive functions of local level, but it is still to be confirmed whether the TVET programs governed by the CTEVT will be moved under the mandate of these governments.

In Nepal, the debate has not provided adequate focus on whether the market should follow TVET or TVET should follow the market as mentioned by Mack and White (2019). Both should move ahead in a coordinated manner, not as parallel streams. The fragmentation of skill development programs in the Nepali context manifests itself in different ways, there is, for example, a huge demand to run a nursing program under the health stream, while simultaneously, some other programs under the health have not found student

enrolment as per their capacity. This raises serious question why there is not demand of student enrollment in certain health programs. The obvious answer is there is no demand of graduates of these programs in the market. It means, first we should create demand from the market, then need to think diploma program in the education institutions. These processes of demand and supply must be understood while running and expanding the TVET program in the country. In order to create demand in the market, the economy and livelihood of people need to be kept in mind.

### **Discussion on TVET, Economy and Livelihood**

Cave and Renold (2018) mention that TVET helps to develop human resources for economic growth, which is often seen as a key to address the youth joblessness. The quality TVET has direct link with the literacy and education, skill development, employment, income, and livelihood, whereas economic growth, poverty reduction, health conditions, life expectancy are some of the areas of indirect linkages. However, the understanding on TVET is not uniform across the globe. It is socially constructed and heterogeneous concept across the world.

As stated earlier, Nepal government has already implemented 15<sup>th</sup> periodic plan with

a vision of upgrading the country to the status of developing country by 2022, transforming economy into middle income status by 2030 and realizing prosperous Nepal in 25 years from the base year 2018 (NPC, 2075). In order to achieve such these goals, we need to achieve two-digit economic growth, to which quality TVET can play a significant role. Two terms – two-digit economic growth and quality TVET -are main concerns which are interrelated and interdependent. Absence of one, another may be difficult to achieve. Skilled workforce can contribute to the economic growth. And economic growth may not be sufficient if there is a lack of an adequate redistribution of its gains (Stiglitz, 2019). Pertinent questions that should be discussed in this regard are:

Stiglitz (2019) raises concerns about the progressive capitalism where focus should be given to the universal basic income and other welfare scheme by the State. This also relates to us. As we discussed earlier, the long term goal of 15<sup>th</sup> plan is to achieve prosperity, have we defined the term "prosperity" in Nepali context? What does this mean to citizens? Let's take an example, what dose prosperity mean to a poor family living in high hill or mountainous region or remote village of Terai region? Once defined, questions will have to be addressed, such as; What is the roadmap to reach this? Have we identified our destination with timeframe?



When are we expecting to reach the identified destination? How much resources are required and how much resources do we have at present? And, how can we explore the additional resources that is required to reach the goal? What are we expecting from citizens in this whole process?

Therefore, the ultimate aim of any economy should be fulfilling the goals of decent life of citizens irrespective of their differences in capacity and livelihood. In simple term, among others, few can be narrated as- all children must have access to quality education, at least quality TVET for those who are in need, and all citizens must have affordable services (in addition to the basic services) in terms of their fees and service charges.

It means the State should aim its policies to create the ideal, fair and just society. The question is: Will there be such ideal society? The experience from some of the OECD countries show that such society may be achieved where all citizens will enjoy the jobs as per their capacity and social security schemes within the country. And the basic health services are made available free of costs, and children have access to quality education.

For this, we must focus economic growth with social justice. As per Stiglitz (2019), economic growth depends upon two major

factors - growth in the size of the labour force, and productivity (output per hour). Only national outputs should not be taken as growth. It is not necessary that national productivity can provide a fair share to ordinary people. If ordinary people do not get fair share from the growth and productivity, the benefits only go to the people who are on top in terms of wealth capacity. It is also important to identify best practices observed within the society, such as; jobs will be more decent and working conditions will be further improved, and a better work-life balance and reduction of exploitations.

In order to achieve all these conditions in our society, it is necessary to achieve more dynamic economy, growing faster an economy that serves people (Stiglitz, 2019). The concern that must be considered here is: How can we provide middle class lifestyle to all citizens, a major challenge of our future endeavors? In order to provide a foundation for this, the State should ensure universal access to health care and quality basic education, as well as guarantee a minimum income to all.

Government must play a role to ensure that the exploits of economic growth are shared fairly within the society (Stiglitz, 2019). Furthermore, the relation with the private sector needs to be revisited, and based on mutual gains and trust, private sector can be

allowed to focus its productivity to be driven through wealth creation rather than through exploitation.

The second concern in skill development is the management and organization of skill development activities, which should be accomplished by the education system. Once demands are created in the market/economy, the supply can be fulfilled by the education system. In order to match the quality and standard of the demand and supply, the market and education system should work together in a coordinated manner (Gautam; Poudel & Paudel, 2018). One of the biggest challenges of the TVET in Nepal is demands in the market and supply from the education system do not match each other. On the one hand, the graduates are not getting jobs in the market, the markets are not getting skilled person on the other. Critics argued that education system is characterized as a machine to produce unskilled and unfit people. First, economy must introduce machines in the production sector (agriculture, tourism, fisheries, forestry, mining, farming, biodiversity, waste management, hotel and restaurants etc.), modernize the production functions, establish and strengthen the supply chain, and expand the service sector. All these demand skillful people which can be supplied by the education system.

The third concern is whether the skill

development activities are implemented in a coordinated manner or through a fragmented approach. At present, skill development programs are under the jurisdiction of different ministries. Rather than bringing all functions under a single umbrella, innovative approaches are required to facilitate and coordinate activities from different agencies. The regulating agency should be made strong and independent. The existing CTEVT can be restructured into this unit. The representation from different ministries can be ensured in such regulating bodies which can provide overall policy direction and coordinate among various agencies.

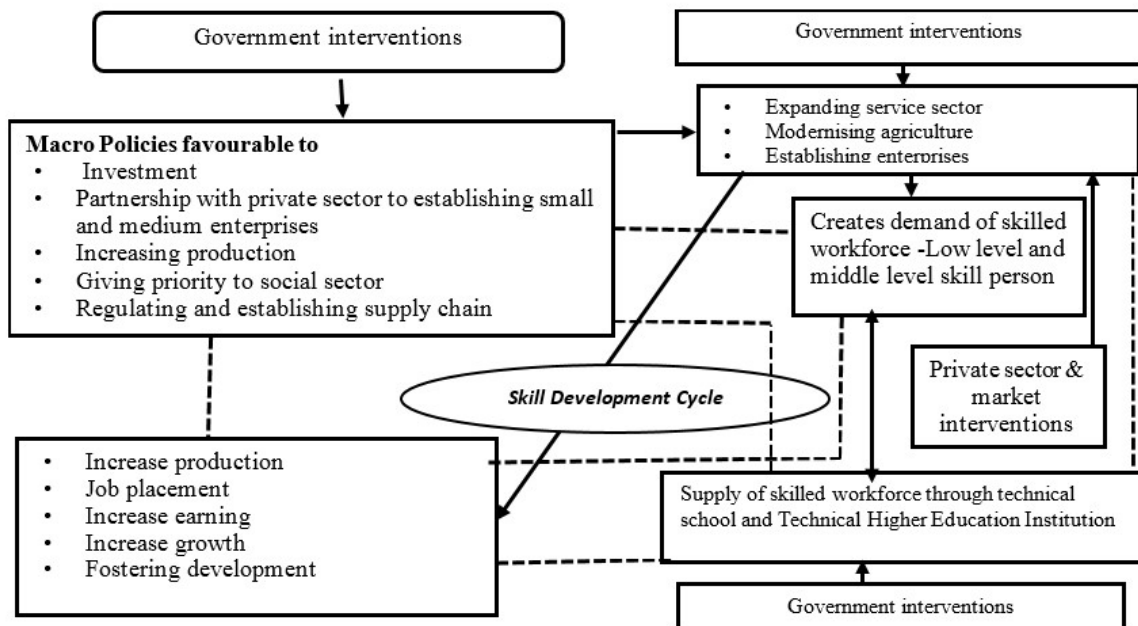
### **Next Step**

#### **a) Setting the Macro Framework of Skill Development**

One of the urgent tasks in TVET of Nepal is the need to identify the steps to move ahead. TVET development in Nepal is only possible if it is linked with the macro-economic aspects of the country. Expansion of domestic demand, scientific and technological innovations to foster new growth drivers, reform and energize the market and quality TVET should move in a chain. The quality TVET programs must be linked with the economic growth as shown in the diagram below.

#### **b) Assigning the responsibilities of TVET**





### in Line with the Federal Structure

Two pronged strategies - reform in existing strategies, structures and programs, and formulation of new legal tools should go hand in hand. Two strategies should move together where one complements other. It is difficult to say we move to second once we complete the first strategy. Clarity on roles and responsibilities of three tiers governments should be outlined in federal legal tools as given below.

### c) Operationalizing the Framework

Once the above mandates are reflected in legal tools, there is a need to develop a framework to materialize these concepts into working policies. Secondary schools could be categorized into general and technical vocational. Similarly, general schools should

not be allowed to run technical vocational education program. Technical vocational secondary school should only be allowed to run such programs, for example, diploma, higher diploma and other intermediate courses. Such technical vocational schools can be a venue for both skill development and testing.

Technical vocational secondary schools must be linked with small and medium level enterprises, collaborating to run technical vocational program under an integrated framework, where the former runs academic course and the latter focuses practical aspects. Large companies can also work with the schools to train their employees and allow students to work in such companies as an intern for the period of certain duration. In this way, technical vocational secondary education will consist of both school-based

Areas or Themes	Federal Government	Provincial Government	Local Government
Policy	Framework policy	Program level policy	Skill development level policy
Curriculum	Framework and Standard	Curriculum elaboration for academic program	Curriculum elaboration for skill development program
Teachers	National Standard and competencies	Managing teachers for academic programs and focusing their development and performance assessment	Managing facilitators for skill development activities
School/ Institutions	Norms and standards to open and run institutions	Establishing schools of academic programs and running of programs	Establishing skill centers and running skill development activities
Exams	Norms and standards of exam procedures, certification, validation	Examination and certification in coordination with Federal level	Assessment and certification of skill testing
Skill Testing	NVQS and NVQF	Managing skill testing and certification for skill graduates	Managing skill testing activities
Research Development	Mega research, norms and standards	Medium size program level researches	Rapid assessment in the areas of skill testing
Monitoring and Evaluation	Monitoring and Evaluation framework and standards - policy level	Monitoring and evaluation framework and standards - program level	Monitoring and evaluation framework and standards - skill development level

learning and workplace-based learning. The composition of these components could be determined based on research and international best practices.

Children should be allowed to attend technical vocational education and training after completing their basic education and on the basis of certain criteria (for example, merits) and interests of students. Quota system must be introduced at secondary level - for general secondary education program and technical vocational education

program. Increasing numbers of students should be motivated to enroll in technical vocational secondary education program by introducing incentivized schemes and other motivational initiatives. Technical vocational secondary schools are only allowed to run the technical vocational academic programs which are compatible with the focus areas or specialized areas and the areas identified or recognized by the government.

In addition to the above working policies, other major principles responsible for the re-

form are as follows:

1. Consensus on integrated and holistic vision: Skill development should not be limited to the jurisdiction of education ministry as this ministry alone cannot develop diverse skills. In addition to the public sector, market is also equally responsible for its development because skill development process and products are highly influenced by the market.
2. Focus on small and medium enterprises: Small and medium enterprises can be useful tools to boost up the rural economy as the majority of the people live in village and they are relying on agro-based economy. So, macro policies should aim to promote rural economy through providing incentives to establish and run small enterprises. Government should facilitate to regulate the supply chain i.e. managing to purchase the local production. Further linkage of skill development activities with locations are required where enterprises are established e.g. by allowing communities to run schools with the relevant program relation to the local economic activities. There should be a close tie up between local economic activities and skill development program offered by schools. Medium level enterprises should establish linkage with the technical higher education institution.
3. Investment in an integrated manner: Unpacking the model that is applied to reach the vision of the constitution-

Nepal to be made a socialist country. For it to happen, it is imperative to develop legal infrastructure, policies, program and budgets, and institutional mechanisms which would facilitate the model. Only privatization, marketization and globalization cannot work for all. They may increase disparities, pushing the poor and marginalized further into the periphery. Therefore, state interventions are required to provide incentives, which is only possible through economic policies. For socialism, we need economic policies that ensure basic services including education, health, food and shelter to all citizens.

4. Introduction of practical economic policy that promotes utilization of labor force within the country and seeks to encourage skilled workforce for decent jobs abroad. Creation of job within the country or in the rural areas, and village- economy-oriented economic policy especially focusing agro-based small and medium size enterprises and modernization of agriculture sector should be in place that prevent the people to go abroad for 3Ds jobs - dangerous, dirty and difficult.

## Conclusions

Federalism is a process of power sharing among/between different levels of governments to govern the country to which the foundation is laid by the constitution. Education is one of the basic functions of every government and society; and the power and authority of the governments

under the federal structure depend upon the law as determined by the constitution.

In Nepal, the functions relating to school education are assigned to local level where higher education and universities are kept under the jurisdictions of the provincial and federal governments. This provision indicates that TVET belongs to the functions of the local governments. This does not mean that federal and provincial governments will not have any roles in school education because the federal government has the authority to formulate policies, norms and standards in TVET sub-sector. But, the role that the provinces can have in the provision of TVET needs to be further defined in a clear manner.

The experiences gained over the year by the TVET system itself, and practices from the international arena suggest that policies, norms and standards relating to curriculum, exam, certification, teacher development and licensing, certification and equivalence, and standards of polytechnics and institutions are the basic functions of the government of Nepal. And, local government will have the basic responsibility of managing and running the school education program, including skill development activities. By nature, many functions relating to the running of polytechnics, development of programs, conducting examination, skill testing functions should be kept under the jurisdiction of the provincial governments.

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