



Mini Review

Necessity of Linkage of TEVT with Industry in Nepal

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Abstract

This paper highlights on the necessity of the coordination of the TVET institutions and the industry in Nepal. The main goal of TVET is to develop skillful human resource needed for the country which could generate employment opportunities and entrepreneurship. Similarly, industry is the place for the job market and performing the skills that is achieved. In the context of Nepal, different studies show that the TVET graduates are unemployed, employed but in low wage, employed but not fulfilling the industry need. This is because of lack of meeting the demand of the market need by TVET courses. If the linkage is done, it increases productivity and nations economy. But the most challenging part is meeting the industry goals and skills by academic courses of TVET. So, academic skills and industry skills needs to be matched by revisiting the curriculum and other strategies. Also the industrial human resource could be upgraded by providing occupational skills upgrading training. The labor market, need assessment of the human resource, identification of the industrial skills needs to be identified to make a strong linkage. Thus, this study suggests that the urgent need of the collaboration of the industry and the TVET for the overall and sustainable development of the country.

Keywords: Technical education; vocational training; market needs; employment

Introduction

Technical and Vocational Education and Training (TVET) is getting education, knowledge and skills for the employment opportunities. The contribution of TVET is generating of gainful employment, encouraging self-employment and entrepreneurship development, better earning which ultimately helps them to uplift their living standard. With this aspects many technical and vocational schools, training centers are established over the country.

TVET is one of the key feature for the success of the country. The main essence of TVET is the overall

development of the nation with the well-equipped and advanced technology for mainstreaming the development of a nation. The main motto of the TVET is to develop entrepreneurship and build the skillful human resource for the nation building. The main aim is to make all the citizens skill full for the overall development of the nation. Not only this, it aims to develop a high level skill full human resource that is needed for the country. According to the definition by UNESCO and the International Labor Organization (ILO), TVET refers to “aspects of the educational process involving, in addition to general education, the study of technologies and related sciences,

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and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupants in various sectors of economic and social life"(Training Institute for Technical Instruction, 2016).

TVET in Nepal

In Nepal, Council for Technical Education and Vocational Training (CTEVT) is the responsible government authority for the TVET sector. It aims to enlarge the scope of TVET with the theme of sustaining Nepal with skillful human resource. CTEVT was established in 1989 under CTEVT act 1989 with the aim of strengthen the vocational technical education in Nepal. According to CTEVT act 1989. With the vision of every Nepali people should be employed with the skill of TVET program, CTEVT had taken the responsibilities of preparing skilled workforce required to the job market and introduced the different policy and program. "Major functions of CTEVT are: policy and program formulation coordination and facilitation, quality control, and program implementation. One of the responsibilities of CTEVT is to formulate policy in TVET" (Council for Technical Education and Vocational Training, 1988).

Technical education and vocational training (TEVT) is a means of growing employment and earning potential of individuals, which contributes to socio-economic development of a country. So the main aspect of TEVT is to arrange world class technicians and skillful workers who can do competition with the world class job market. So different TVET policies are formulated. In most emerging economies, educators and Industry operate in different worlds and often have little communication with each other. Regularly their social networks and association linkages have no intersection. Surveys often show a complete lack of understanding or respect for the interests and commitments of the other group. In the context of Nepal, the aim of the TVET and the marked demand is simultaneously different. The market demand is at one hand where the analysis and TVET providers are at another end. The mismatch has been one of the major area why the TVET graduates are not getting enough jobs and as per their expertise.

The aim seems very outstanding. But where the graduates go for the job placement? How are they working on the market economy? What is the linkage between the TVET institutions and industry is the most challenging question? The argument for providing vocational education has brought about the idea of revisiting the links between school and industry (Alam, 2008). The number of government TVET institutions, and the number of private organization are increasing day by day but it's the time to do analysis on how the job placement is done, what is the ratio of market demand.

Kirkpatrick (1983) has prioritized three aspects of TVET. The three purposes are: individual control ability, equality

of opportunity and human capital. They also have referred four principles of TVET system to fulfill these purposes. They are, Good governance in the coordinated output oriented model, Occupation-driven education employment linkage, Permeability and Quality. This shows that the TVET is not far from the industry. TVET and industry are supplementary to each other.

The government policy also highlights to establish and provide technical education in all the local level of all the provinces. This also shows that the necessity of TVET in the grass root level. Similarly, TVET policy has also highlighted the necessity of expansion of the TVET programs in all parts. So strong collaboration and addressing market need are the major challenge.

TVET and Industry Linkage: A Crucial Need

The major market of TVET is industry. Without the linkage with the industry TVET graduates cannot maintain professional competencies and also the industrial productivity can't be developed only with low level human resource. So skillful human resource, TVET graduates are the main for the industrial upliftment.

The graduates of TVET are working in different industries. Anamuah-Mensah (1995) reports that in most countries there is a considerable gap between what is learnt in the classroom and the real life context of pupils' present and the future world. He further adds that this peculiar problem is particularly true of the less developed countries where the needs of those not progressing beyond the compulsory stages of primary and junior secondary education are subservient to the perceived academic needs of those progressing further, particularly by the small percentage proceeding to university.

The main market of the TVET graduates is industry. The main aspect is that the interaction between TVET and the industries creates innovation in the national and international arena. It also helps for the competitive market and economic growth. According to World Bank, the status of TVET is depends on their ability to produce qualified young people who will be immediately operational in the work place. The market based economy could be sustained if a country is developed. And the country could be developed if technically it is sound, if all the systems are managed. This is possible only with the help of TVET graduates.

The legal entities that comes closest to covering all aspects of TVET are the 2012 TVET Policy, which we consider as soft law, and the CTEVT Act. But this has also not talked exactly on the TVET and industry linkage. There is no such provision which could help the linkage between the graduates and the human resources of industry. This shows that from the policy level, it should be formulated about the linkages. Now the country is in the phase of provincial level

and the necessity of the linkage is most important in each province. Some provinces have more industries and TVET institutions and some do not have. So the power balance between the academic and industrial sector is also necessary.

The linkage is very necessary between TVET and industry. For the TVET graduates, industry is the main place for the job market and for the industry, technical institutions are the main. The collaboration between two is very necessary. The job fair, seminar, workshops should have been organized between the two. It not only helps to the TVET graduates and the industry but also will help for the national economy and nation's development. If the collaboration is done between two, then it will give findings that what type of technical graduates is necessary for the next few years, which would help to fulfill the nation's vision. Companies that collaborate with learning institutions typically have higher productivity rates than companies that do not have such collaboration (Santos and Satuart, 2003). So the collaboration is very necessary.

Researches show that the linkage increases productivity too. Companies that collaborate with learning institutions typically have higher productivity rates than companies that do not have such collaboration. TVET institutions operate in an environment characterized by fast technological progress, emerging careers, changing jobs requirements and increased competition; these changes have necessitated industry-institute collaboration in order to address this challenge (Uddin ,2013).

According to Pautler (1990), the problems facing vocational and technical education are many. The courses are also not fulfilling the market needs. The new courses based on the market are the demand. The institutions must have a partner to help find solutions and this can be accomplished only by developing linkages with industries so that they can survive and accomplish their intended goals of providing the skilled manpower needs of the country. In Nepal, CTEVT is the main leading organization that has government mandate for the TVET sector. It aims to develop the skill human resource. In a tracer study done by Accountability Initiative Private limited (2015), it shows that Out of 2009 traced TVET graduates, 982 (49%) were employed, 928 (46%) were unemployed, and the rest 99 (5%) were working as volunteers. This also shows that how many of the graduates are employed and not. Even the number of unemployed is high. It is very serious case that TVET graduates are also unemployed as its main aim is to for middle level human resource.

The link between the rate of technical progress and the quality of human intervention has become increasingly evident as has the need for those active in the economy to be trained to use the new technologies to innovate. New skills are needed and educational institutions are required to

meet the need by providing not only the minimum of schooling or vocational training, but also training for scientists, innovators and high level specialists (UNESCO, 2012).

If we see the Nepali job market, every year more than 20 thousand Nepali youths enter to the job market but what is their effectiveness. Similarly, every month thousands of Nepali youths go to abroad for the job. They are neither skillful nor the essential human resource that is needed for the country. The technology that they have practiced here and they are going to practice in foreign migration is very different which seems mismatching. And the new advanced industries need skillful human resources with latest information and technology with advanced skills (Agrawal, 2012). So the linkage between the industries with latest technology is very necessary. So, that this could help for the self-entrepreneurship and also will help for the abroad migration.

Major Gap: Academic Vs Industrial skills

TVET providers are mushrooming day by day to fulfill the need of the people. In the context of Nepal, the market based curriculum and courses are not developed properly to address the current need of the industry. The main gap is that the necessity of the industry and education of the TVET graduates doesn't match. TVET system is not sufficiently market based. The limited access and equity of the needed people as per the industry requirement is not addressed by the TVET.

The first thing that can be done is to develop market based courses based on the need of the enterprises and industry so that the TVET graduates can get better opportunities and job. If collaboration is not done between TVET and industry, then the graduates have no scope in the market. So the curriculum should be focused on the market need by doing adequate research and need assessment of the market.

The second aspect is, the curriculum is not developed jointly to address the TVET graduates scope and industry need. If the curriculum is developed in collaboration with the industry and TVET providers, then it would address the need of overall development. Raihan (2014) suggests the collaboration can be done in main five areas: (1) development of curriculum and learning materials; (2) training instructors; (3) provision of practical training in the work-place; (4) facility improvement in schools/centers; and (5) employment opportunity. The curriculum is more academic rather than market based. Occupational standards, quality assurance are not fulfilling the present need.

The TVET graduates are not competent in the industrial skills. The competencies are only within the workplace were the skills exactly doesn't match in the industry. The knowledge and skills is only practiced within the narrow boundaries of the TVET institutions. Industry linkage will

help to provide systematic competencies on the skills that is learnt in the TVET institutions. UNESCO-UNEVOC (2013) has stated that the potential human resource has difficulties in getting employment in the labor market due to lack of sufficient skills. The higher level graduates also face the difficulties on getting better jobs as per their skills because of lack of skills that is needed in the industry. The quality of the TVET graduates doesn't address the need of the industry, which seems the most challenging task for the coordination.

Likewise, the machines and instruments that is practiced in the TVET sector are not as same as it is in the industry. In the technical area, the graduates need to be competent in the skills to operate the machines too, where the institutions don't have advanced technologies that is used in the industry and the global market. The skills gained on student's internship doesn't fulfill the need of the industries. Neupane (2011) also highlights that the investment in TVET is very high which aims to provide employable skills needed for the industry.

The TVET graduates from different technical schools and different TVET organizations are providing academic courses which consists of knowledge and skills. But what about its application in the real workplace, real industry? If we see the academic achievement, it sounds good but the performance in the industry seems still lacking. So skill and productive workers who are able to adopt labor market and latest technological transformation are in the need of the industry (Hoeckel, 2008). It seems that these benefits to the human resource depend greatly on the quality of the school-to-work transition that individuals, institutions, employers and policy makers are able to ensure (Billett, 2014).

This shows that TVET success on continuous alternations between TVET providers and industrial environment. The linkage and collaboration is one of the basic need for the development of the nation. Industry identifies the need and TVET develops the graduates to fulfill the need of the industry. So in many developed countries the investment is seen in the TVET sector which finally helps for the overall development of the nation.

Training as a Tool

The TVET graduates are gaining skills and knowledge but the demand of the industry isn't fulfilled. For this, in service skill upgrading training is the most. The industrial necessity can be fulfilled by providing short term trainings to enhance the capability of the human resource. Not only this, the skills that TVET provides may not meet the requirement of the industry. In this case, the occupational skill needs to be upgraded with providing short term courses that is needed to the people who are engaged in the industry. And the necessity of the training and its application in the industry can be highlighted. Apprenticeship training, industrial

training are different forms of the training that can serve the necessity of the industry and linking it with academia.

Training is taken differently in different situation. Some training focuses on skills, some of knowledge and some on attitude. However, all the components are equally delivered in the training. So companies are investing huge amount in the trainings of their staffs. Due to its increasing critical role in times of change, companies rely on and invest a significant amount of resources on training (Union, 2007). So the training has its influence in the companies and institutions.

Training is one of the essential aspects in human resource development. Denby (2010) stated the importance of training as important as recruitment, selection and compensation which is a part of human resource development. It helps the organization to make the organization active with the employees full of knowledge, skill and attitude that will improve the employees working capacity. So the trainer is responsible for the effective training methods and the good and bad aspects of it which will help to evaluate the training.

In each organization, the investment in the training is done for the improvement of the organization's functions and provides benefit. So the purpose of the investment is to gain skill that is needed to the organization which should be productive. He further added that training is evaluated with the three basic characteristics of human nature i.e. improvement on knowledge, skill and attitude and this is the key principle for the organizations benefit. So the investment on training is a good repayment for the upliftment of the organization.

Garavaglia (1993) focuses on the main purpose of the training as improving the performance and helps in the effective delivery and benefits of the organization. Within the 15 years of the tenure of the South African democratic dispensation, the organizational benefit with the productivity and the financial increase are highlighted to be the competitive market in the era of globalization. The main theme of the organizational productivity is through the efficient knowledge, high quality performance and skills of problem solving. So the transfer of learning is the main motto to grasp the goals of the organization.

Thus, the different literatures regarding training and human resource development has focused that until and unless the necessity of industry and organization is not addressed, only providing technical education and vocational training can't fulfill the present market needs. This will not help industry and TVET connection. So the effective planning for the linkage of the TVET and industry is necessary. In this aspect, vocational training, skill upgrading, short term courses based on the need of the industry are needed.

Conclusions

The direct relation between industry and technical institutions is obvious. So channelizing the ways to make the good relation is very important. The best way is collaboration between the industry and the institutions, workshops, meetings are the best way. The industry should have made the plan and the vision for the necessity of labor market and economic market in technical sector. Based on the market need, the technical and vocational institutions should have developed the curriculum and the courses.

Information sharing between the technical and vocational education providers and the industry is very essential. The graduates have core knowledge in the specific field. And also the skills during the fulfillment of the course may not be sufficient, so the practical education is very necessary. Without the linkage the practical education in the real field couldn't be successful. So industry has main role in the perfection of TVET graduates. Industry is the platform for utilizing and applying the knowledge and skills learnt in the organizations.

Also the TVET policy has not addressed this issue. In this context, the mushrooming organizations and industries from large to small base should be interlinked. They should have linkage in the same legal framework where the TVET graduates could show their efficiency. So the umbrella Act regarding these issues should be formulated and effective implementation is important. In general, TVET schools should be established where there is a need on the labor market and the provinces should coordinate and decide on the allocation of TVET schools, programs, and occupations to various local areas. The province should promote TVET programs so students know what is available even if it is outside their immediate area.

The TVET institutions have to strengthen links with industries to improve networking between academia and industries to create a better understanding of each other's needs and to identify how they can be met through the industry programs. It helps to develop the networks with the TVET providers and serve the needs of local economic development.

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