

Issues and Challenges of Technical Education and Vocational Training (TEVT) in Nepal

Kul Basnet* · Tae-Uk Eun** · Jinsoo Kim***

<Abstract>

In Nepal, unemployment and underemployment rate is very high among the youth between 15-24 ages. Generally people tend to discourage acquisition of skills for a career. Access to skill training is limited, especially for the poor, women, and disadvantaged, and the quality of skills training is variable and often not linked to market needs. Strengthening the technical education and vocational training (TEVT) sector to deliver more relevant and market oriented training is essential. To improve the country's pool of technical skilled manpower and unemployment problem, the government has attempted various programs in the last two decades to institutionalize technical education and vocational training. These had initially mixed results mainly due to poor organization and management of the TEVT sector, lack of proper linkage between the training programs and the needs of the labor market, lack of proper equipment and instructional materials and inadequately trained instructors. Council for Technical Education and Vocational Training (CTEVT) as a leading organization in TEVT sector of Nepal should focus on community-based vocational trainings for the purpose of reducing poverty in grassroots level addressing excluded and marginalized groups. It is a big challenge as well as opportunity for CTEVT and TEVT professionals.

Keywords : Nepal, Technical education, Vocational training, TEVT, CTEVT

* Graduate student in Korea National University of Education

** Gwangju Informaion High school

*** Correspondence: e-mail:jskim@knue.ac.kr, Professor of Korea National University of Education

I . Introduction

Nepal history begins in legends, and until the mid 1700s consisted of many petty kingdoms. Nepal was still in many ways a medieval oriental state in the early 1950s with practically no infrastructure and with less than one percent of the school-age children attending school (The World Bank, 1989a). The newly formed interim parliament (Constituent Assembly) declared Nepal a Federal Democratic Republic at its first meeting in May 2008, and parliament elected the country's first president the following month. The educational governance system will need to be aligned with changes in the overall government structure. The interim Constitution contains provisions pertinent to School Education, namely:

1. Each community shall have the right to get basic education in their mother tongue as provided for in the law;
2. Every citizen shall have the right to free education from the State up to secondary level as provided for in the law.
3. Each community residing in Nepal shall have the right to preserve and promote its language, script, culture, cultural civility and heritage.

Recent political changes in the country have raised people's expectations and demands with respect to public services. The educational management systems at various levels, including schools, will have to respond to these emerging challenges by improving their services.

Nepal is the ninth poorest country in the world with gross national income (per capita) of US\$ 470 (Kantipur, July, 2008), and GDP in agriculture 38%, industry 20% and services 42% (FY 2005/06 est.). Adult literacy rate of 15+ age(%) is 52. According to labor surveys, open unemployment rate is 3.26% in 2001. Underemployment is the major problem of the country which was 43.44% in 2001. The high rate of under employment and unemployment, together with low wages explains the high incidence of poverty, which is estimated to be about 30.9% (2004). Unemployment among the people having formal education of 10th grade or above is more than illiterate people. Around 400,000 people enter into the labor force annually. Most of them are either school drop out or those who failed School Leaving Certificate (SLC) examination without employable skills (Sharma, 2005).

In recent years, remittances have become one of the major income sources of the country and the inflow reached Rs. 53.46 billion in 2005/06. Income from remittance has evidently helped large numbers of people to come out of poverty and improve their living standards. As an increasing numbers of people are seeking employment abroad, appropriate training opportunities for this population becomes one of the areas to be addressed immediately.

Technical professions have no traditions of training at formal institutions within Nepal, but were usually taught within the family. Craftsmen learned their skills while assisting family members and did not consider formal training as an essential part of preparation for the job. A report published by the International Labor Organization (ILO) suggested that there should be a re-education program promoting the dignity and social usefulness of skill training (ILO, 1984).

In Nepal government generally employed graduates on the basis of academic achievements rather than for any particular type of training. Because of that, parents and students aware in order to obtain a high government job, a degree in any field without any regard to the specialization, is more important than going through vocational courses in the technical and vocational school. Education for modern skills lacks social recognition and, conversely, that the social value given to academic or university education in Nepal is correspondingly high (Ramse, 1993).

In this paper, educational system and issues and challenges of the technical education and vocational training of Nepal were reviewed.

II. Educational System

The formal school education development was very limited in Nepal before 1950s, and was available only for elite and their associates. Therefore, it would not be surprising to note that in the early 1950s, the literacy percentage of the country was about 2 percent only.

In the history of Nepalese education, from 1953 to 2001 eight commissions have been formed and reports have been submitted (Garanja, 2008). The National Education Commission report (1992) outlined the goals of education emphasized the need for expanded access, structural change in order to make school education compatible with the school system in neighboring countries, inclusion of private school education in school structure and establishments of National Centre for Educational Development with the responsibilities of preparing and developing necessary human resources for education sector (Sharma, 2005).

The government of Nepal has demonstrated its commitment to embark on School Sector Reform (SSR) with grades 1-12 as an integrated school system in a phased manner from 2009/2010. In February 2007, a concept paper on SSR was endorsed by the Education Policy Committee and started implementing its aspects (MOES, 2007).

1. Primary Education

Primary education or the first level of education in Nepal comprises five years of schooling. The minimum entry age for this level is 6 years. But it is not a rigid requirement to enter into the primary school. Although there has been significant increase in the access to primary education, still more than 12.6% of primary age children have never been to school. The quality and usefulness of primary education is another concern that Nepal needs to address.

2. Lower Secondary Education and Secondary Education

According to the recommendation of National Education Commission 1992, the lower secondary level of education is operated from grade 6 through 8 with an objective to prepare morally and ethically upright citizens possessed of an appropriate level of knowledge in subject matters like Nepali language, mathematics and science.

The secondary level of education comprises grades nine and ten. The SLC examination, which is regarded as an important national level examination conducted centrally, is held at the end of grade ten. From just 11 secondary schools in 1950/51 the number of schools increased to 7,436 lower secondary and 4,547 secondary in 2004 (MOE, 2005). Similarly, majority of rural children, especially girls are deprived of the access to secondary school. Low quality of public secondary education is a serious concern in Nepal. Poor management, heavily politicized teachers, irregular classes, lack of resources and poor teaching learning environment are some of the constraints of education quality of secondary schools.

3. Higher Secondary Education

Since 1992, Nepal started the higher secondary education system consisting of grades 11 and 12. The higher secondary level is available in specialized streams such as Science, Commerce, Humanities and Education. In the traditional education system, students would continue their studies at the Proficiency Certificate Level (PCL) of the university education system after passing the SLC examination. There are 1197 affiliated schools all over the country. After finishing SLC, more than 70 percent students have been attracted towards Higher Secondary Education Board (HSEB) and 3, 50,000 students are being associated to its program (Koirala, 2005).

According to the SSR policy 2007, the structure of school education will be comprise grades one to twelve, basic education running between grade one and

eight and secondary from nine to twelve. The vocational education stream will begin at grade 9 and have two levels: (i) junior technical for two years beyond grade 8, (ii) senior technical for four years beyond grade 8.

4. Higher Education

The first level of university education after grade 12 is of three - years duration and is called Bachelor's Degree. The bachelor's Degree courses in technical institute like Engineering and Medicine are of four-year duration. The Master's Degree follows the Bachelor's Degree and is of two-year duration. The university education also includes Ph.D. degree in most of the non-technical disciplines and subject areas. Tribhuban University (TU) is the oldest and the largest university was established in 1959. After restoration of the multi-party democracy in 1990, Nepal adopted the policy of multi-university. At present, there are six universities including Nepal Sanskrit University (1986), Kathmandu University (1991), Purbanchal University (1994), Pokhara University (1997) and Lumbini Buddha University (2005) enrolls the students in different faculty.

III. Technical Education and Vocational Training

Technical Education and Vocational training in Nepal has evolved since 1930 when the engineering school was established to produce skilled workforce in the country. However, the Butwal Technical Institute (1962) and the Balaju School of Engineering and Technology (Mechanical Training Centre, 1963) have been the milestone for producing the trained and skilled workforce in the country.

In 1954, the National Education Planning Commission was formed and the National Education Committee was formed in 1961, and subsequently SLC regulations were amended to accommodate technical education. The Commission called for the inclusion of vocational education on a large scale, and the multi-purpose Secondary Schools, a structure were opened. At its peak, the multipurpose education program (1970) saw 29 multi-purpose schools in the country that could offer general and vocational education curriculum (Shrestha 1991, Buttler 1973). This expanded curriculum provided educational experience in home science, agriculture, trade and industry and business. Another important development of 1960s was the opening of the National Vocational Training Centre (1967) in Sanothimi with the purpose of providing training to vocational teachers of multi-purpose secondary schools (Sharma, 2000).

The New Education System Plan (NESP) was introduced in 1971, after the failure

of multi-purpose school system. UNESCO (1995) reported that despite the effort made by the government from 1951 to 1970, substantial output of the investment and programs on education was little and many constraints as well as difficulties were felt to achieve the meaningful goals set for the system. The NESP attempted to establish vocational education in every secondary school throughout the country. Agronomy, poultry, animal husbandry, accounting, secretarial science, home economics and bamboo works etc were the subjects emphasized in vocational secondary school. The concept in both vocational training and general education schools was not related to obtaining employment that was connected with their vocational training.

The introduction of vocational education in such a massive scale proved to be too big a challenge for the government from the point of view of availability of materials, infrastructure, funds, human resource and above all the national capacity. The scheme implemented without considering labor market demands, parental expectations, cultural beliefs, image of the vocational education and administrative and professional capacity to manage vocational education. Consequently, and as recommended by an evaluation study of Research Centre for Educational Innovation and Development (CERID), 1977, the Country had to do away with the vocational concept of the secondary schools.

Based on the recommendations of the evaluation of CERID, the National Education Committee introduced a Technical School Work plan in 1979. The Technical School Scheme emphasized skill training and occupational preparation in small number with adequate physical facilities, equipment, and training materials in different geographical locations, both rural and urban.

The technical schools were expected to impart skills, knowledge, and attitudes to school dropouts, school-leavers, non-college bound youth including economically poor population that was unable to pursue higher education. The Technical and Vocational Education Committee was formed with the responsibility of managing technical schools following the establishment of the Directorate for Technical and Vocational Education (DTVE), which was a division of Ministry of Education.

Skill development programs were initiated by various government departments and agencies in Nepal. They were not coordinated by any one agency. The curricular contents, duration of training, preparation of instructors/ trainers, recognition of the training etc. were being done in isolation.

Neither the government sector nor the private sector was keen on employing the graduates of such training. It was being assumed that most of them will be self employed. The effectiveness of such training programs was never assessed and no tracer study was ever made to estimate the extent of employment. A few reports were prepared by the UNDP-ILO, Asian Development Bank, Swiss Association for Technical Assistance on skill development in Nepal. These reports had focused the

need of a common apex body in order to co-ordinate all these training activities (Sharma, 1999).

A national seminar was organized in 1988 with the participation of all the donor agencies, the government departments engaged in training activities, the university and the private sector. The major outcome of this seminar was the creation of CTEVT. CTEVT was established by the Technical Education and Vocational Training Council Act, 1989 (amended in 1993 and 2006). The Act declares that CTEVT is established for the purpose of regulating and upgrading the standard of technical education and vocational training, maintaining co-ordination among different agencies imparting such training, determining and certifying the standard of skills and produce basic, middle and upper level technical manpower.

IV. Status of Technical Education and Vocational Training

1. Major functions and achievements

TEVT sector of Nepal comprises a range of government & private training providers. Major government general trainings providers are the Ministry of Industry, the Department of Labor & Employment Promotion & institutions of CTEVT.

Many government institutions other than CTEVT are sectorally focused in that they provide training for a given economic sector (tourism & agriculture). The Department of Labor & Employment Promotion for example focuses on skilled labor for the formal sector whilst CTEVT technical schools largely train for technician levels (TSLC) or Diploma levels in polytechnics. The location of training also varies. The Ministry of Industry provides training in all 75 districts whereas the Department of Labor & Employment Promotions provides training in 16 districts. CTEVT technical schools are located in 55 districts including affiliated & annex schools. The major activities that have been performed by the CTEVT are as follows:

1) Service and program development

The CTEVT serves the country through technical schools, polytechnic and rural training centers. At present 18 technical schools including polytechnic and rural training centre are in operation under direct ownership and management. These

institutions provide training in various areas such as agriculture, construction, health, mechanical, electrical, tourism and sanitation etc. In addition more than 250 institutions are run under the CTEVT affiliation. Efforts have been made to streamline all these initiatives to fulfill the government expectation from these programs.

The programs cover all sectors of economy in different level. The description of the courses is tabulated in the table 1 & 2 belows.

<Table 1> Details of Diploma Programs run by CTEVT

Health	Engineering	Agriculture
General Health Nursing Pharmacy Medical Lab Technology Ophthalmic Science Dental Science	Civil Engineering Architecture Electrical Engineering Electronics Mechanical Computer Surveying	Agriculture Science Food Technology
Diploma programs: SLC (School Leaving Certificate) +3 year Produced : 4636 (A planner 2007, CTEVT, Technical Division) Enrollment capacity: 4293 per year		

Source: CTEVT, Sanothimi, Bhaktapur

<Table 2> Details of TSLC Program run by CTEVT

Health	Engineering	Agriculture	Others
Community Medical Assistant (CMA)	Civil Sub-Overseer		
Assistant Nurse Midwife (ANM)	Electrical Sub- Overseer Mechanical Sub-Overseer	Veterinary Junior Technical Assistant	S o c i a l Mobilization
Lab Assistant	Junior Computer Technician	Plant Science Junior Technical Assistant	O f f i c e Management
Assistant Ayurvedic Health Worker	Refrigerator and Air conditioning Sub-Overseer		
Dental Hygienist	Automobile Sub-Overseer		
- Technical School Leaving Certificate (TSLC) Programs : SLC + 15 months and 10 pass + 2.5 yrs. - Produced : 45239 (A planner 2007, CTEVT, Technical Division) - Enrollment capacity : 9159 per year			

Source: CTEVT, Sanothimi, Bhaktapur

In addition to regular programs, these institutions provide skill development opportunities through short term training programs. All programs are expected to address needs of the rural areas and economically disadvantage community. From

the short term training programs CTEVT provide services to 34,006 peoples till 2003/2004 (A planner 2007, CTEVT Technical Division).

Annex program is an additional program, attached to general high schools, which provides Technical Education & Vocational Training. CTEVT has given approval to 15 high schools to carry out the TSLC level programs. The Local School Management Committee (SMC) is responsible for the management of such programs.

CTEVT also carries out different types of studies such as needs assessment, follow up studies, feasibility studies and other EMIS and LMIS related research activities. The main objective of the present 3 year interim (2007-2010) plan is to extend the opportunities for the basic and middle level skill training as per human resource development need of the country. The target is to produce 24000 basic and middle level work force through long term training and other 21000 people with skill in various field produced through short term training programs of CTEVT (CTEVT Report, 2008).

2) Skill testing and certification

Skill testing activity was initiated in Nepal in 1983 through an autonomous body called Skill Testing Authority (STA). The National Skill Testing Board is responsible for developed skill standard and tests the people who have informally acquired skills. The Board already developed 157 skill standards in various trade areas and in different level. Up to now, the board has entertained over 21,000 workers as the candidate of skill tests. Among the tested 11160 candidate have been declared passed and provided skill certificates of various levels.

3) Curriculum and textbook development

CTEVT is responsible for developing curriculum and textbook for TEVT programs. To carry out this function, there is Curriculum Development Board. CTEVT extends its co-operation and coordination through designing and standardizing the curricula of the training institution. The board also provides equivalency to the people studied/trained in abroad in the related field.

4) Quality control

To ensure the quality of the TEVT graduates, CTEVT has established an examination board. The board conducts entrance, final and practical tests of each long term program. The CTEVT grants accreditation and affiliation to private institutions. Up to now more than 250 private training institutions are given

temporary (candidature status) affiliation to run short and long term training program(CTEVT, Dec., 2008).

To ensure quality output in TEVT, CTEVT provides training to the instructors through Training Institute for Technical Instruction (TITI). TITI conducts training to equip instructors in class room, field and lab instruction, skill upgrading, instructional management, curriculum development specialist, community development and other related training areas. TITI has trained over 7000 instructional, curriculum developers and managerial people from various countries. TITI has provided Technical Education and Vocational Training consultancies and other services to Technical Cooperation- Federal Republic of Germany (GTZ), Netherlands Development Organization (SNV), ILO/UNDP, UNICEF, SDC, DFID and other national and international organizations in Nepal and abroad.

2. Other Vocational Training Providers

In addition to CTEVT Program, various governments' ministries, departments and agencies also provide training outside the formal education systems. Among them are: Ministry of Local Development, Ministry of Agriculture, Ministry of Health and Population, Ministry of Forest, Ministry of Science and Technology, Ministry of Tourism and Civil Aviation, Ministry of Women, Children and Social welfare, Department of Labor, Department of Cottage and Small Industries, Cottage and Small Industries Development Committee, Department of Cooperatives, Department of Road, Nepal Telecommunication Centre. Similarly many private agencies, NGOs and INGOs are also involved in various kinds of vocational training activities. A summary of vocational training provided by the various ministries in 2002 is presented in the table 3.

<Table 3> Vocational Training Provided by Various Ministries

	Ministries	Target	Costs in Rs"000"
1	Agriculture	916	67272
2	Industry	20672	103020
3	Science & Technology	10100	176500
4	Land Reform & Management	580	5320
5	Women, Children & Social welfare	4125	3619
6	Education and Sports	2868	4380
7	Labor and Transport Management	5635	15244
8	Employment Promotion Commission	2700	55000
	TOTAL	47596	36,93,55

Source: Employment Promotion Commission (2002)

3. Skills for Employment Project

To respond the massive unemployment situation, Government of Nepal received loan from Asian Development Bank (ADB) and establish "Skill for Employment Project" to contribute to meet the needs of Market-Oriented Short-Term (MOST) skills training for gainful employment. The goal of the project is to promote poverty reduction and stability by increasing engagement in local and international employment and city-employment. The CTEVT is the implementing agency of this project. The total project cost is 25 million USD and duration of project is 6 years. The estimated projected completion date will be September 2010. About 80,000 trainees will directly benefit from skills training under the project (ADB, SEP Report, 2004).

V. Current issues and challenges of TEVT

The most significant issue in the present context that CTEVT need to address is how technical education and vocational training can be instrumental in addressing unemployment and underemployment problems in Nepal. The SSR intervention as indicated in the document regarding vocational education is to contribute to the fulfillment of the need of skilled and semiskilled workforce required for economic growth of the country, and objectives stipulated are: a) Develop vocational stream in secondary education to respond the need of labor market; b) Integration of formal, non-formal and informal education' and c) Promote employability enhancing skills.

Objectives a) and c) are identical or it can be restated in broader form because it is trying to cover supply aspects both in quality and quantity increasing access to the participants. Developing vocational stream in schools can be envisioned as increasing quantity and promoting employability can be interpreted as quality aspects or can be termed as means and ends respectively. Objectives b) seems a solution to the graduates of vocational education to further up their education linking to general education of the whole educational system contributing better articulation of learning achievements. Thus these two objectives, no need to argue, need significant attention of the nation (Dhungel, 2007).

The primary problem is to impart skills and knowledge to the wider group of population who are economically active and are required by the business and industries. In this connection, secondary school population could be included but not limited. The integration of educational streams and implementing norms and standards is the secondary problem as far as the TEVT in Nepal is concern.

Hence, the major concern to be sorted out at this moment is the coverage of wider economically active population not only school age population to capacitate them on employability skills and knowledge. It will be beyond the scope of school education to cover all those population demanding another system (CTEVT) and will bring all the compatible problems if the goal of the TEVT school education remains developing basic and middle technical human resource required for the country's business and industries. Some of the challenges and issues are following:

1. Poor access to training

The TEVT sector in Nepal performs poorly in terms of providing access to training, particularly skills training. Most people, particularly the poor and disadvantaged, lack access to skills training that enhances earning capacity. About 400,000 people lack to enter the labor market each year. No more than 50,000 are currently have access to skills training. TSLC programs, by CTEVT, which require 10 years of schooling, cannot be accessed by most, particularly the poor, women, Dalit (low caste), and members of disadvantaged groups because of the low people local a TSLC program. Even if training were provided free of charge, the advance would be paid that the poor must forgo daily wages (Adhikari, 2005). Expansion of cost effective training opportunity to address the needs of rural and disadvantaged population is access, cannot be a challenge for CTEVT.

2. Training irrelevancy

The Nepalese TEVT sector is often disconnected from the world of work. There is no up to date and reliable labor market information (Joshi, 2005). Many students from both general and technical/vocational streams are unable to relate their training and education to their future career goals. Career counseling is neglected and placement services are non-existent. Instructors without industrial work experience are not being able to make connection between training and employment nor can they prepare successful entrepreneurs. Training programs are supply driven and are designed with minimum inputs from the employers (Sharma, 2005). The result is high unemployment among general, vocational and technical education graduates.

The trend in the labor market indicates that there will be a growing demand for skilled laborers and a decline in the demand for unskilled laborers. Technical and vocational training programs need to be directly related with labor market. Skill training program is considered a means of employment promotion and augmenting earning potential of trained graduates. Technical and Vocational training program,

which are linked with the labor market demands, will certainly fulfil the employment and earning needs of the individual and socioeconomic development needs of the country.

3. Low quality of training

Training programs are poorly designed and/or poorly delivered. Curricula are not regularly revised to reflect changing market demands. Training providers focus on delivering content, as specified in their curriculum, and not on achieving the performance expected for employment, as specified in skills and training standards. Trainers, in turn, have no benchmark to measure their own technical and instructional capability, and thus have no means of determining the gap between their current performance and their desired capability. Most public provider sites lack tools, equipment, materials and supplies.

Quality control of private technical school and vocational training institutions operating with a strong profit motive is challenging for CTEVT. A great deal of effort will be required to standardize the existing programs by applying effective quality control mechanism (Dhungel, 2007). The coordination and support activities require a large number of highly skilled professional staff.

4. Ineffective coordination among training providers

TEVT programs in Nepal are controlled by number of uncoordinated control bodies. Several vocational training is being operated under different ministries and organization. There has been inadequate communication and networking among them. Each contributor has a target group, but there is an overlap and duplication. Bureaucratic bottlenecks have often hindered innovations in training institutions. There are number of other privately run training program in absence meaningful coordination and quality control. It has been realized that developing a system to coordinate is a massive challenge for CTEVT. Each organization has its own objectives, and their training course massifulfilled in terms meanheir objectives but not the necessice meanhe employers. Information relating to labor demand and the TEVT sub sector, including training program information, trainees, and program effim ency and effectiveness,mase scarce. Moreover, government funding for training to each public agency is based on the needs of the given department rather than the priorities within the training market. Incentives and rewards for well-performing institutions are lacking, as are sanctions for non performing institutions.

5. Inadequate attention on basic level training and funding

More than 85% of the school age children are out of school system. There is very little or virtually no program for them (Collum & Asher, 2004). There is no structure to respond to the needs of such population (out of school children/youth adults). The human resource development strategy in the past has been inverted, which has produced a large number of university educated mass and highly educated technical expertise but very small number of skilled people at the lower level. This has created imbalance in availability of skilled human resources that has induced conditions for unemployment and underemployment of highly skilled persons and lack of adequate number of skilled workers at the lower level.

6. Lack of Information and Communication Technology

Information and Communication Technology (ICT) is still in primary stage of development in TEVT sector in Nepal. The use of computers in teaching learning situation has begun. The use of ICT by management is relatively more than that is used teaching learning process in technical training providing institutes.

The facilities available are not reliable and under utilizes because of lack of knowledge and skills on using it. Ignorance of how to fix simple problem of ICT equipments also prevents the user relying on the facilities available, compelling to use conventional method and technology. Training to the training providers on use of ICT not initiated as a campaign to meet the international level and also not incorporated on human resource development plan nationally. Personal exposed through local or international training events in ICT are few in numbers and are not able to advocate and bring sensation of importance of ICT on TEVT sector.

VI. Conclusion

In response to current issues and challenges the CTEVT programs will have to be more effective, flexible and adaptive to change. Training programs which facilitate enterprise creation and promote self-employment should also receive top priority. Employer's participation in program planning, experiential training, job placement, skill testing and evaluation and teacher's preparation will enhance the connection between vocational training and employment. Participation of employers in a national coordinating boards and local management committee of training institutions would help to bring the educators and employers close together.

CTEVT should seek support and share experience from and among international communities for the expansion and improvement of TEVT system of Nepal.

Vocational stream can partially provide skills and knowledge required in business and industries. So it will be relevant vocational stream may be designed in such a way that orientation and positive attitude towards jobs and occupation on vision of the documents as "a student respects labor and appreciates work and occupation" can be developed in the school graduates. As previous vocational schools system was impaired by inadequate preparation mainly teachers and facilities indicate same fate for SSR policies and Plan regarding TEVT. A strong and autonomous institution which has strong linkage with business and industries can only run occupational education and training effectively.

References

- Adhikari, Purna Kanta (2005). *Technical Education and Vocational Training (TEVT) and its financing policy*.
- Collum, John & Asher, Larry (2004). To be born in Nepal-1985: A story of fatality, frustration, failure. Swiss Contact, Kathmandu.
- CTEVT broacher (2008). *CTEVT*.
- CTEVT (2008). Management Conference, Final Report, *Technical Division of CTEVT*.
- Dhungal, Dhruva Prasad (2007). *Quality Training Standards for Accreditation*.
- Garanja, M. B. (2008). The Role of WTO in Development of Nepalese Economy and Education, *Socio - Economic Development Panorama*, 1(3), pp. 131-146.
- Joshi, Kush Kumar (2005). Partnership scheme (Linkage between skill training and labor market).
- Ministry of Education and Sports. (2007). *School Sector Reform, Core Documents; Policies and Strategies*.
- Ramse, David Arthur (1993). *A Follow-up evaluation model for technical education in Nepal*.
- Report and Recommendation for Skill for Employment Project (2004). *Asian Development Bank*, (RRP: NEP36611).
- Sharma, Suresh Raj (1999). *Rationale behind inception of CTEVT and concurrence between expectation and achievement in the future perspective of TEVT sectoral development*.
- Sharma, Tanka Nath (2005). *Nepal National TEVT policy framework*.
- Technical Education and Vocational Training in Nepal - A sector Analysis, (1993). *New ERA*.

<국문초록>

네팔의 공업교육과 직업훈련의 쟁점 및 과제

쿨 바스넷* · 은태욱** · 김진수***

네팔 국민의 30% 이상은 빈곤 수준 이하로 살고 있다. 15-24살 젊은이의 실직과 불완전고용 비율은 매우 높다. 일반적으로 국민들은 진로를 위한 기능 습득을 단념하는 경향이 있다. 특히, 빈곤자, 여성, 불우한 사람들은 기능 훈련의 접근이 제한적이며, 기능 훈련의 질은 가변적이며 시장의 요구에 부응하지 못하고 있다. 좀 더 관련 있고 시장 중심의 훈련에 대응하기 위해서는 공업교육과 직업훈련 영역의 강화가 필수적이다. 공업 분야의 기능화된 인력과 실직 문제의 국가적인 어려움을 개선하기 위하여, 정부는 지난 20여 년 동안 공업교육과 직업훈련을 제도화하기 위하여 다양한 프로그램들을 진행해 왔다. 이러한 프로그램은 초기에 TEVT 영역의 잘못된 조직과 관리, 훈련 프로그램과 노동 시장 요구의 적절한 연계성 부족, 적합한 기자재와 수업 자료의 부족 및 불충분하게 훈련된 교사들 때문에 대부분 혼란스런 결과를 낳았다. 네팔의 TEVT 영역의 선도적인 기관으로서 공업교육훈련원(CTEVT)이 사회적으로 무시되고 제한된 서민 수준에서의 빈곤을 감소시키기 위한 목적으로 공공사회 기반의 직업 훈련에 집중해야만 한다. 이것이 바로 CTEVT와 TEVT 전문가들을 위한 기회일 뿐만 아니라 커다란 도전이다.

주제어 : 네팔, 공업교육, 직업 훈련, TEVT, CTEVT

* 한국교원대학교 대학원

** 광주정보고등학교

*** 교신저자 : 김진수(jskim@knue.ac.kr), 한국교원대학교 기술교육과 교수