

CTEVT Toward Skills Enhancement in Nepal

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Abstract

This article highlights the role of CTEVT for skill enhancement in Nepal. Therefore, the objective of this article is to evaluate the role of CTEVT in producing technical and vocational manpower in different professions by examining its achievements in organizing skills training, institutional partnership building, and number of skilled human resources produced. Data has been collected from secondary sources i.e. published annual progress reports and journals of CTEVT and other associated partners. The collected data have been examined, summarized, and interpreted by adopting a descriptive research design. This study has identified that CTEVT has progressively developed complete mechanisms for skill enhancement through arrangements of technical and vocational training programs, institutional strengthening through partnership development, identification of current and future market skill needs in collaboration with industries and academia, development of innovative curriculums, and production of qualified professionals via skill tests programs. Therefore, it is concluded that CTEVT has played a vital role in the production of skilled workers and professionals based on current as well as future market needs in Nepal. The findings of this article will be very beneficial to industry owners, un-employed youths, semi as well as self-employed personnel, and interested private and community skill training institutions.

Keywords: CTEVT, Skill, Technical, TVET, Vocational

JEL Classification: I25, J21, J24, O15, O53



Introductory Background

Ritter and Mostert (2017) have stated that there are two categories of skills i.e. cognitive and technical. Further they explain that cognitive skills training is related to enhancing thinking patterns to generate creative ideas. Technical skills are required to implement such creative ideas successfully (p. 1). Pareek and Rao, 1999 cited by Pant et al. 2018 have stated that training is a very important means to contribute to developing skillful human resources.

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Nepal government is using skill training as one of the main instruments to intervene in the labour market. Training can be traced to substantial increase in Nepal basically for three reasons. The first reason is to fulfill the human capital needs in the country. Visibility, tangibility, and ease of organizing are making training technically and politically attractive is the second reason behind its increased popularity. The third reason is the availability of funding and technical support from the donor countries to organize skills training through many programs and projects under various ministries (ADB, 2004; World Bank, 2011; ADB, 2013a; World Bank, 2017, cited in Dushyanth, 2018).

Council for Technical Education and Vocational Training (CTEVT) is functioning under the Ministry of Education. CTEVT was established under CTEVT Act in 1989 (Adhikari; 2023) and is responsible for the overall development of Technical and Vocational Education Training (TVET) in Nepal (Acharya et al., 1999). CTEVT is committed to the production of technical human resources through the means of skills training. Skills human resources are important to enhance productivity in the nation.

CTEVT produces skilled human resources through its constituents and affiliated technical schools and institutions. It has designed skill training ranging from 39 to more than 1500-hour longer duration based on the skills demand in the country. A total of 1078 affiliated training centers are providing short-term skills training. It has prepared 190 short-term vocational training curricula related to different occupations. CTEVT is implementing many projects for Skill Development in Nepal. The major donors are the Asian Development Bank (ADB), the Swiss Agency for Development and Cooperation (SDC), and the European Union. All projects aim to enhance the skills base in the country (MoEST, 2019). Therefore, this article examines and describes the efforts and progress made by CTEVT in different aspects of the promotion of technical and vocational education to develop human resources in various occupational areas in Nepal.

Literature Review

The acquisition and transmission of skill knowledge helps to promote development through the skilled workforce in Nepal (Nepal South Asia Center, 1998; Rondinelli, Middleton, and Vesport, 1990 cited by Kafle, 2007). Handicraft works express the great tradition and proud culture of Nepal. It has been represented as a valuable part of Nepalese heritage. Wood carving is a craft that was developed among the Newar tribes. They were traced in an association with this profession during the ancient Malla Regime of the fifteenth and sixteenth centuries (Bajracharya, Sharma, and Bakshi, 1993 cited by Basnet, 2001).

Several training policies have been passed by the Nepal government over the years. The Nepal government has been emphasizing to produce technically skilled human resources through skill development training programs. Such training programs are being annually planned and executed through various ministries of the Nepal government. The district offices of such ministries are executing such training in the industry, agriculture, and other sectors. Among them, Ranabhat (2007) has given an example of the Department of Cottage and Small Industry (DCSI) as one of the pioneer skill training providers through its offices located all over the country. According to him, this department's trainings are focused on developing skilled manpower capable of utilizing locally available resources and generating income and employment opportunities (p. 176). There are more women trainees produced by DCSI offices compared to men. (Basnet, 2001; Singdel, 2015, p. 41).

Agriculture development received attention from the fifth periodic development plan of Nepal (NPC, 1975). The Ministry of Agriculture and its departments are contributing to develop this sector. The Ministry of Education (MoE) is responsible leading the Technological and Vocational Education and Training (TVET) sector in Nepal. Moreover, various Federal Ministries are also contributing to deliver TVET programs in the country in association with private, NGOs, and donor funded programs.

According to Gaihre (2019) about 75 years ago, Nepal had started TVET formally. In the year 1947, Nepal started school level TVET in sectors like agriculture, construction, weaving, tailoring, and handicrafts. Nepal compulsorily launched a vocational secondary education system. Plans of the technical and trade school policy were implemented in the year 1980. These plans and policies have best contributed to the institutionalization of TVET in the country. Such efforts have assisted the nation in producing needful lower and middle-level skilled

workforces. These policies are the foundation of the National Technical Education and Vocational Training Committee as a wing of the National Education Committee.

Vocational subjects in general and vocational schools were reduced by 50% and separate technical schools were designed and established at the same time in both rural and urban parts of Nepal. It indicated a great change in TVET. TVET in rural parts aims to produce the needed workforce in the agricultural, health, rural construction, and mechanical sectors. TVET in urban parts is purposed to produce needed workforce for cottage and modern industries. Among all the technical schools established with donor funding support in the nation Switzerland is one of the major donor country for skill development (Ramse, 1993; Sharma, 1998 cited by Kafle, 2007). Quality and relevance, permeability; education and employment linkage with industry; and governance of TVET are four major pillars of TVET (Bajracharya&Badal; 2021).

The Council for Technical Education and Vocational Training (CTEVT) is playing a pivotal role in pursuit of technical and vocational excellence of Nepal. It is established in 1989 under the CTEVT Act to produce skilled manpower in engineering, health, agriculture, hospitality and tourism; and informal technology sectors. CTEVT has extended its outreach through affiliated institutions all over the county. CTEVT therefore exists to fuel the engines of Nepal’s development by cultivating skilled professionals in different industrial sectors. Rather than producing skill manpower haphazardly, CTEVT has emphasized to design and delivering skill courses as per the industrial and job market requirements. According to Adhikari (2023), CTEVT is strategically collaborating with industries and service sector employers. This has helped it to generate a synergy effect between industries and academia. He further added that CTEVT is proactively aware on maintaining symbiotic relationships with industries being manifested through various mechanisms (p. 51).

Methodology

A descriptive research design is used in this study. This article is based on secondary data. The published annual progress reports, articles in CTEVT journals, TVET reports published by the Ministry of Education, and other academic journal articles are examined in this study. The performances of CTEVT to produce human resources in various technical and vocational fields including short-term and long-term training, curriculum development, institutional partnership, and undertaking projects are evaluated and presented in this article.

Results and Discussions

Technical and Vocational Skill Development Programs and Training

Skill training and TVET courses are being conducted through CTEVT constituent, partner, community schools, and privately affiliated schools. TEVT’s courses are offered in many streams like health, agriculture, engineering, social mobilization, office management, hospitality, tourism etc. Entry requirements and minimum qualifications are varied according to the duration and types of offered courses.

Technical Education

CTEVT has offered Technical School Leaving Certificate (TSLC), Proficiency Certificate Level (PCL), and Diploma level programs to deliver technical education in various professions. TSLC programs are uniformly designed for the 18-month duration from the academic year 2072/073. Alternatively, it has also offered 24-month Apprenticeship Training at this level (CTEVT, 2016; 2020). According to CTEVT, students required to enroll in Certificate Level programs should pass SEE which is designed for 3-year duration. The list of TSLC, PCL, and Diploma level technical education courses is presented in Table 1.

Table 1

List of TSLC/Proficiency/Diploma Level Technical Education Program under CTEVT

S.No.	Levels/Programs	Specialization Area
1	Diploma in Agriculture	Animal Science, Plant Science, and Food and Dairy Technology

S.No.	Levels/Programs	Specialization Area
2	Diploma in Engineering	Civil, Mechanical, Electrical, Geometrics, Computer, Information Technology, Architecture, Hydropower, Electronics, Electrical and Electronics, Auto Mechanical, Bio-Medical Equipment (18 months duration)
3	Diploma in Health Science	Pharmacy
4	Diploma in Hospitality	Hotel Management
5	Diploma	Entrepreneurship Development
6	Diploma	Social Works
7	Diploma	Forestry
8	Proficiency Certificate	Dental Science, Ophthalmic Science, Physiotherapy, Acupuncture, Acupressure and Moxibation General Medicine, Nursing, Pharmacy, Medical Lab Technology, Radiography, Ayurvedic and General Medicine, Homeopathy
9	TSLC Agriculture	JTA Animal Science, JTA Plant Science, Textile and Sericulture
10	TSLC-Engineering (Sub-overseer)	Civil, Mechanical, Electrical, Electronic, Automobile, TSLC in Computer Engineering, Air-Conditioning and Refrigerator, Sanitary, Survey
11	TSLC-Health	CMA, ANM, AAHW, Acupuncture, Amchi
12	TSLC	Culinary Arts
13	TSLC	Social Mobilization
14	TSLC	Entrepreneurship Development
15	TSLC	Computer Application and Secretarial Management
16	TSLC	Hotel Management

Source: Compiled from *Technical and Vocational Education: EkJhalakby CTEVT, 2020*

A total number of passed students in pre-diploma or diploma/proficiency level is more than 4,00,000 till 2080/81 and prepared 33 pre-diploma level and 49 diploma/Proficiency level curriculums (CTEVT, 2024). This indicates a pivotal role played by CTEVT in producing skilled manpower in Nepal.

Short-term Vocational Skill Development Training

Apart from long-term technical courses, there are so many market oriented short term vocational skill development programs trending under CTEVT as presented in Table 2. These trainings are being delivered through constituent and affiliated training institutions.

Table 2

Short-term Vocational Skill Training Programs under CTEVT

S.No.	Sector/Programs	Skill Subjects	Duration
1	Agriculture/ Animal Science	Dairy product/Sweets Maker, Community Livestock Assistant, Wood Processor, Slaughter House Technician, Village Animal Health Worker, Poultry Farm Worker, Goat Keeper, Junior Fishery Technician, Community Livestock Assistant Technician	Curriculum of specific courses is 390 to 550 hours long.

S.No.	Sector/Programs	Skill Subjects	Duration
2	Agriculture/ Plant Science	Sericulture Technical Worker, Nursery & Garden Assistant, Garden designer, Flower Decorator, Fruit Processor, Allo Processor, Cardamom Processor, Off-Season Vegetable Producer, Banana Fiber Craft Person, Assistant Tea Technician, Assistant Coffee Technician, Beekeeper, Community Agriculture Assistant, Vegetable Processor, Herbal Farm Worker, Mushroom Producer, Banana Handmade Paper, Khoto Collector, Ginger Farmer, Banana Farming Technician, Community Agriculture Assistant	Curriculum of specific courses is 140 to 1400 hours long
3	Forestry	Junior Wildlife Technician	390 hours
4	Engineering/ Civil	Mason, Shuttering Carpenter, Bar Bender, Scaffolder, Tile and Marble Filter, Assistant Furniture Maker, General Carpenter, Marble Polisher, Junior House Painter, Construction Worker, Stone Layer Mason, Gypsum Installer, Plasterer, Assistant Plumber, Trail Bridge Technician, Gabion Weaver, Geo-Engineering Lab Technician, Loal Road Supervisor, Furniture Maker, Professional Carpenter, Professional Plumber, Professional Mason, Rural House Retrofitting Mason for Stone Masonry in Mud Mortar, Plumber	Curriculum of specific courses is 175 to 1696 hours
5	Engineering/ Computer	Basic Computer Application; Computer Hardware Technician, Computer Repair & Maintenance Technician, System Administrator & Developer	Curriculum of specific courses is 220 to 1320 hours
6	Electronics/ Electricals	Telecom Technician, Telecom Outside/External Plant Technician, Junior Building Electrician Revised, Electrical Appliances Repair, Radio TV Repairer Revised, Electromechanical Technician, Solar PV Technician, Telecom Lineman Revised, Mobile Phone Repairer, FM Radio Technical Assistant, Electric Motor Rewinder, Cell-Mobile Phone Repair Technician, Building Electrician Final, Professional Building Electrician, Micro-Hydro Assistant	Curriculum of specific courses is 390 to 1696 hours
7	Mechanical	Repairing and maintenance of pump set, Assistant Welder, Cycle ad Riksa Mechanic, Metal Work Helper, Water Pump Repair Assistant Auto Painter, Light Vehicle Driver, Lathe Setter Operator, Junior Auto Mechanic, Boiler Operator, Professional/Motor Cycle Mechanic, Ref. and A/C Mechanic, Ordinary Seaman, Stainless steel fabricator, Power Tiler Repair, ACP Insulator, Aluminum Fabricator, Steal Furniture Maker, Offset press Operator, Office press operator, excavator operator, Structural/Professional Fabricator, Junior Industrial Machine Operator, Junior Mill Machine Operator, Junior Optical Dispenser, Mechanical Filter, Metal Handicraft Assistant, Professional Welder, Professional Light Vehicle Mechanic, Assistant/Metal Worker	Curriculum of specific courses is 190 to 1696 hours

S.No.	Sector/Programs	Skill Subjects	Duration
8	Health	Caregiver, Dental Chair side Assistant, Dental Lab Mechanic, Traditional Ayurveda Worker, Physical Rehabilitation Assistant, Assistant Massage Therapy, Community Ear Health Worker, Village Nature Cure Worker	Curriculum of specific courses is 390 to 6 months
9	Tourism/ Hospitality	Commercial Cooking/Baking, Assistant Cook, Chinese Cuisine Cook, Indian Cuisine Cook, General Cook, Baker, Fast food cook, General/Professional Cook, Baristha, Sweets and Snack Maker	Curriculum of specific courses is 211 to 1696 hours
10	Front office/ House Keeping	Waiter/Waitress, Room Attendant, Housekeeping cleaner, Hotel Assistant, Bar Tender, Trekking Guide, Homestay operator	Curriculum of specific courses is 260 to 390 hours
11	Secretarial/ Management	Saving and credit mobilizing, Library Assistant, Receptions Cum Cashier, Enterprise Development Facilitator, Sales person, Cooperative Manager	Curriculum of specific courses is 40 to 1500 hours
12	Education/ Pedagogy	Early Childhood Montessori Facilitator, Psychosocial counselor, Paralegal Assistant, Singer, Community Based Rehabilitation Facilitator, Social Worker, Stationary/Education Material Producers, Basic Yoga Instructor	Curriculum of specific courses is 390 to 780 hours
13	Handicrafts	Doll Cushion Maker, Deads, Pearls, and Crystal Items Maker, Junior Ceramics Assistant, Junior Paper Artisan, Junior Bamboo Artisan, Junior Wood Artisan, Carver, Tuner, Nepali Hand Paper Maker, Wooden Handicraft Maker, Woolen Hand Knitter, Woolen Machine Knitter, Tharu-Handicraft Maker, Bans Furniture Maker, Bans Shilpakar, Gold Silver Smith	Curriculum of specific courses is 244 to 1500 hours
14	Miscellaneous	Assistant studio photographer, Asst. Beautician, Shoe maker, security guard, Mithila Folk Artist, Fashion Designer, Asst./ Tailor, Fabric Painter, Thanka Art Maker, Assistant Barber, Hand Embroider, Dhaka Weaver, Thread Spinner, GalaichaBunkar, Garment Fabricator Final, Child protection worker, Beautician, Junior Book Binder, SahayaPurohit, PrarambhikJyotish, Jute Spinner/Weaver, Pre-spinning yarn machine operator, post-spinning yarn machine operator, plastic loom operator	Curriculum of specific courses is 390 to 1000 hours

Source: Compiled from *Technical and Vocational Education: EkJhalakby CTEVT, 2020*

The varieties of short-term skill training courses in Table 2 indicate that CTEVT under its constituent, affiliated, and from community school has focused to produce market-driven skilled manpower in several fronts. CTEVT has established its offices in all the provinces of Nepal and expanding its long-term and short-term skill programs in various professions across the country.

Institutional Partnership Building

CTEVT has expanded its networks in all provinces of Nepal to deliver TVET. The total number of institutes

offering CTEVT curriculum based programs and trainings till the F/Y 2080/81 are presented in table 3.

Table 3

Number of Affiliated TVET Institutions to CTEVT

S.No.	Types of Affiliation	Number of Institutes
1	Constituent Institutes	66
2	Partner Institutes	57
3	TECS (Community Schools)	639
4	Private Institutes	407
5		

Note: From CTEVT News Bulletin-2024. Bhaktapur: CTEVT Research and Information Division.

Apart from broadly expanded networks of partners for skill delivery in all the provinces of Nepal, CTEVT is also actively promoting its programs through F.M. radio channels. The contents broadcasted through the radio channels are students' success stories, counseling on the benefits of TVET courses, TVET reports, interviews, and group discussions. According to CTEVT (2023), it is delivering TECS courses in all provinces by utilizing available physical and administrative infrastructures and human resources at community schools. Till the F/Y 2079/80, it has partnered with 44 community schools at Koshi, 91 at Madhesh, 118 at Bagmati, 60 at Gandaki, 88 at Lumbini, 107 at Karnali, and 139 at SudurPaschim provinces to deliver TECS programs. There are altogether 1618 private institutions affiliated to CTEVT to deliver short-term skill training courses in all provinces.

Produced Number of Skilled Human Resources in Different Fronts

CTEVT has produced 263185 and 140269 skilled human resources till the financial year 2079/080 in pre-diploma and diploma programs respectively as presented in Table 4.

Table 4

Human Resources Developed till F/Y 2079/080 in Pre and Diploma Level Programs

S.No.	Sectors	Pre-Diploma Level	Diploma Level	Total
1	Health	1,05,143	91,396	1,96,539
2	Engineering	76,314	29,672	1,05,986
3	Agriculture	75,473	17,131	92,604
4	Hotel Management and Other	6,315	1,770	8,085
	Total	2,63,185	1,40,269	4,03,214

Note: Compiled from Annual Progress Report-2079/80. Bhaktapur: CTEVT Research and Information Division.

Table data indicate that health sector programs are most demanded in the market followed by engineering sector. Market demand for agriculture sector training is in third rank. Similarly, total number of admission capacity in Diploma/PCL level program is 57070 and 29743 in Pre-diploma level program till Ashadh end 2080 B.S. The number of prepared curriculums in Diploma/PCL and in Pre-diploma level are 49 and 33 respectively. Similarly, CTEVT has prepared 274 short-term skill development curriculums in different sectors till Ashadh end 2080 (CTEVT, 2024).

Conclusion

Delivery of short-term skill training as well as conduction of TSLC/PCL/Diploma level skill development programs for the production of lower and middle level professionals on different fronts are key concerns of CTEVT. In this respect, CTEVT is offering technical education on 16 fronts. It is also offering vocational short-skill courses in

more than 13 sectors. Apart from 66 constituent institutions, CTEVT is offering TEVT courses from other 1100 institutions affiliated as partners, private sector training institutes, and community schools. There are 1618 private institutions affiliated to CTEVT for conducting short-term training. It has developed more than 356 curriculums of market-oriented skills in TSLC/PCL/Diploma level and short term skills training till Ashadh end 2080.

According to Dollinger (2008), the demand for skill training is evergreen since it is not only the requirement of unskilled persons, but skilled professionals also need it to update their knowledge to stay competitive forever. In this sense, CTEVT has played a central role in producing skilled human resources in the country in many technical and vocational areas. It has not only covered various technical and vocational areas but the various long-term as well as short-term programs and subjects offered in such areas are market-driven. Therefore, the Nepali skill-education landscape is found highly supported by CTEVT. Apart from lower and middle-level skill manpower development in the country, its role on market-driven curriculum development and extended partnership for program accreditation has increased outreach of CTEVT in all the provinces. Demand of CTEVT's curriculum based skill training is entrusted by people as attractive for training institutions. Therefore, CTEVT has developed a co-working mechanism with academia and industry to develop market oriented training curriculums in many fronts. Such mechanisms will ensure the longer sustainability of TVET programs under CTEVT.

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