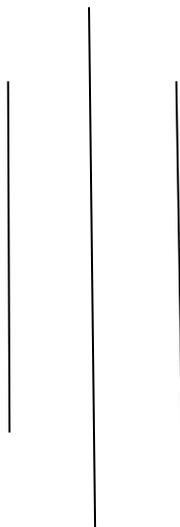


# **Tracer Study of the Graduates of Diploma and TSLC Programs under CTEVT**



**Submitted to  
Council for Technical Education and Vocational Training  
Sanothimi, Bhaktapur**

**Submitted by  
Accountability Initiative (Acin) Private Limited  
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# **Tracer Study of the Graduates of Diploma and TSLC Programs under CTEVT**

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# ACRONYMS

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AAHW	: Assistant Ayurveda Health Worker
ANM	: Auxiliary Nurse Midwifery
BPH	: Bachelor in Public Health
CMA	: Community Medical Assistant
CTEVT	: Council for Technical Education and Vocational Training
FGD	: Focused Group Discussion
FGI	: Focused Group Interview
HA	: Health Assistant
INGO	: International Non Governmental Organization
JTA	: Junior Technical Assistant
NGO	: Non Governmental Organization
OJT	: On the Job Training
PCL	: Proficiency Certificate level
SD	: Standard Deviation
TSLC	: Technical School Leaving Certificate
TVET	: Technical Vocational Education and Training
VJTA	: Veterinary Junior Technical Assistant

## EXECUTIVE SUMMARY

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Council for Technical Education and Vocational Training (CTEVT) has been running long term and short term training programs of vocational nature under the trade of Health, Agriculture and Construction since its establishment in 2037 B.S. At present, CTEVT delivers both long and short term vocational programs as well as three years academic diploma programs in different faculty. Although large numbers of students have already been graduated from the programs of CTEVT, information about the situation of these graduates is still limited within speculation due to lack of effective and reliable study. This tracer study was conducted with the main objective to provide CTEVT with information on the graduates' employment status as well as labor market needs, status of the quality of its Diploma and TSLC level training programs and to suggest the measures to promote the quality of TVET programs thereby employability and efficiency of graduates.

The Tracer Study covered the graduates of academic year 2013 of eight diploma level programs, i.e. Proficiency Certificate in Nursing; Diploma in General Medicine; Diploma in Pharmacy; Certificate in Medical Laboratory Technology; Diploma in Civil Engineering; Diploma in Electrical Engineering; I. Sc. in Agriculture Science and Diploma in Computer Engineering. Similarly, the eight TSLC Level programs covered were: Community Medicine Assistant (CMA); Auxiliary Nurse Midwifery (ANM); Medical Lab Assistant; Civil Sub-overseer; Electrical Sub-overseer; Veterinary-Junior Technical Assistant (V-JTA); Basic Surveying and Assistant Ayurveda Health Worker (AAHW).

The total number of graduates in the selected eight diploma level programs in the academic year 2013 was 7,114 and corresponding number of selected TSLC program graduates was 5,694. The proposed sample size of graduates in diploma level program was 1623 and from TSLC level program was 1640. Total number of graduates from both was 3263. However, targeted data collection was found difficult because of the effect of devastating earthquake of 25 April and 12 May 2015, and the undeclared blockade in the border area. Therefore, the study team could not reach to all the proposed target graduates. Only 2009 graduates (1110 graduates from Diploma level and 899 graduates from TSLC level programs) were traced during the field visit considering the 99% confidence level and below 5% margin of error. Likewise, training institutes were selected purposively so as to cover all parts of the country. Both quantitative and qualitative approaches were used for data collection. Quantitative information was collected through survey of the graduates. Focus group discussion and Key-informants' interview were also used for getting qualitative information.

Two sets of questionnaires; one for the graduates and another for their employers were designed and used to collect the post-training information. Most of the graduates were interviewed face to face. However, telephone interview was also conducted from the graduates if face-to-face interview was not possible. The survey questionnaire included both status and opinion type of questions. In the case, where both face-to-face and telephonic interview were not possible, Limited numbers of post training information (status type of questions) was also collected from third sources like their teachers, guardians, friends etc incase where face-to-face and telephonic interview were not possible.

Semi-structured questionnaire were used for the graduates and rating scale type of questionnaire for employers. Likewise, semi-structured interview checklists were used to interview key informants. The study instruments were pre-tested with 50 graduates randomly selected mainly from Kathmandu Valley and improved based on the experiences gained from pre-test. .

SPSS program was used to analyze the collected data from the graduates. In the quantitative data analysis, tools like frequencies, cross tabulations, mean comparison were basically used. In addition to these analytical tools, ANOVA, Chi-square, t-Test were also considered as per the nature of data and necessity of analysis. Some qualitative information in the questionnaires were analyzed using cross tabulation and frequency tables.

The analyses of the tracer study are organized in the five thematic sections which are (a) Profile of respondents (b) Employment status of graduates (c) Income level of the graduates, (d) Proficiency and satisfaction level of graduates and; (e) Quality and Relevance of TVET Programs.

**The key findings of the study are presented under following headings:**

### **Profile of respondents**

Of the total 2009 traced graduates of sixteen different TVET programs, 55.5% were female and 44.5% were male. Programs like Proficiency Certificate in Nursing and Auxiliary Nurse Midwifery are accessed only for female. Except these two, female representation was found highest (62.3%) in TSLC Lab Assistant Program followed by Community Medicine Assistant (58.2%). Participation of female is comparatively lower in engineering related programs. Highest representation of the graduates in the study was from province one (23.5%) followed by Province Five 22.6%. Only 5.6% were represented from Province Six.

Majority of traced graduates were from hill Brahmin/Chhetri group (58.1%) followed by hill Janajati 21.5%. Hill Dalit, Tarai Dalit, Madhesi Middle Caste and Muslim have very negligible representation. Average age of the respondent was 22 years with minimum 17 years and maximum 49 years.

The large majority (62.86%) of employers'-organization were from private sector followed by government organization (20%). Likewise, 77.15 % of employers interviewed were from Health and Social Service Sector, followed by 11.43 % from Education Sector. Representation of employers from Agriculture Sector and Construction was equal to 2.86%. None of the employers were interviewed from manufacturing sector.

### **Employment status of the TVET graduates**

Out of 2009 traced TVET graduates, 982 (49%) were employed, 928 (46%) were unemployed, and the rest 99 (5%) were working as volunteers. The gap between the percentage of employed and unemployed graduates is not that big. At least 70% employment of the graduates is acceptable in TVET program. But the tracer study showed only 49% employment of TVET graduates.

In Diploma Level programs, 51 % were employed, 44% were unemployed, and 5% were working as volunteers. Forty nine percent graduates were employed in PCL Nursing. The highest number of graduates working as volunteer was also from nursing program. Nursing Institutes having direct linkage with large hospitals have greater employment rate. The employment rate is highest in the Certificate in Medical Lab Technology (65 %) among the eight diploma programs traced out. In TSLC program, 46.9% traced graduates were employed and 49 % were found unemployed.

Health related program graduates were involved as volunteers without any salary for six months to one year and there is no job guarantee for these graduates even after completing the terms and conditions of volunteer service. Employment rate in TSLC level graduates is found only 47 % that is quite low. TSLC level graduates of Health trade, i.e. ANMs and CMAs, were found being replaced by Diploma level Staff Nurse and Health Assistant graduates and indicate ANMs and CMAs being phased. In TSLC level Survey course, employment is found only 28%. Very few graduates of Computer engineering program are wage employed.

Graduates who are self employed are earning more; for example, the graduates of VJTA program and therefore needs to be encouraged for self employment. There is higher opportunity of self employment in this trade. Graduates of Lab technology program are also happy with their self or part time employment as they can take more than one work at a time in their own discretion.

Although the earnings of the graduates employed in formal sector is less than the graduates in informal sector or self-employment or in foreign employment; they are found satisfied with their income.

Still 22.8 % (458 persons) of the traced graduates out of 928 unemployed are hopeful for getting the job and are searching for job. Remaining 11.3 % of the total traced graduates who were unemployed have decided to pursue higher education and progress in their academic level so that they can get higher level job. Likewise, 1.5 % graduates were preparing for public service commission examination, and 0.9 % were preparing to initiate their own business. This shows that the TVET graduates have choices; either to go into job market having skill to perform well in the job or go in for higher education. Preference of the employer to hire diploma graduates in place of the TSLC graduates, especially in health trades indicates the need to review these programs.

The skill and knowledge learnt during their study is found relevant to the requirement of the job market. Only 8.4 % unemployed graduates mentioned that the skill and knowledge they learnt during study do not match with the required job in the job-market. Normally, the gap between graduation and employment is around 3 months. Soft skills were instrumental for getting employment or to retain on it. Communication skill, honesty/positive attitude toward work and organization, and interpersonal skills were very vital for retaining in the job, especially in private sector. Placement and counseling support of the institute to the graduates is crucial for promoting employment.

### **Income level of the graduates**

There is large variation in the income level of graduates which ranges from Rs. 4000/ to Rs. 87000/per month. The average income is found Rs. 15861.05/month. Graduates who are in self-

employment earn better than graduates who are in wage employment in both formal and informal sector. Graduates of agriculture trade of both Diploma and TSLC level program have the highest monthly income. This could be due to higher number of graduates involved in self employment where earning is significantly higher, a portion of which is the return on the investment too. Average earning of graduates of engineering trade was also over 20 thousands. Earning is least in Health program graduates among the traced out.

Graduates of formal employment are relatively more satisfied with their income, although they earn less than the graduates in informal sector or self-employment or in foreign employment. Earning of male graduates is found greater than female graduates. In the engineering trades, male graduates are earning Rs. 19776.36, whereas females are earning only Rs. 14785.71. Regarding the job satisfaction, 74.8 percent of the respondent employed graduates were satisfied with their current job. 25.2 percent showed their dissatisfaction with the job they had. Some respondents showed their dissatisfaction with their job because of low remuneration, especially in private sector.

### **Satisfaction Level of Employers Regarding the Graduate's Performance**

Majority of the graduates were satisfied with the TVET program that they received. The graduates under the lab technician or lab assistant program were not found confident due to inadequate practical opportunities in the training institutions, especially in private institutions. 61.5 percent of employers found no significant difference between the performances of the graduates trained at CTEVT institutions and other training institutions. 31 % employers have the opinion that TVET graduates were performing better than other technical staffs. The employers were satisfied about the overall performance of graduates, and especially with the graduates having required individual and teamwork skills.

The performance level of the TVET graduates at the work place is to the acceptable level for the employers. Employers are found willing to hire TVET graduates and further emphasized to provide training as per labour market needs and required standard. Employers have the opinion to make four year diploma program including one additional year of workplace training packages for better performance. They also urged to revise the curriculum to address new and emerging technologies.

Practical opportunity is inadequate in both Diploma and TSLC level program. Therefore, the graduates are not much confident to perform the work even if they get the job. Hence, despite acceptance of job performance level of the graduates by the employers, there is a need for the graduates to improve their skills.

### **Quality and Relevance of TVET Programs**

It was found that the graduates are lacking skills due to inadequate practical opportunities. Time provided for practicing skill is inadequate in most of the programs of the private institutes. There is a need of substantial improvement on workshop and lab equipment. Ample opportunity need to be provided for practice and industrial attachment. Periodic revision of the Curricula is also

needed to make the program relevant, practical based to address the latest development of labor market.

Lack of job opportunities in the job market is revealed as the main reason for unemployment. This indicates lack of relevancy of the training programs in the job market. And also indicates the time for updating its programs to prepare the human resource according to the skill demand of the job market. Lack of linkage with the employers', and 'inadequate technical and other soft skills' were other reasons for being unemployed.

## **Conclusions and Recommendations**

### **Conclusions**

TVET program has been contributing to the employment and overall economic growth of the country and needs to be further strengthen. However, the employment percentage is comparatively low. Therefore, there is a high need to strengthen the linkage with the industry and job market and also review the programs to address the changing market needs.

Practical opportunities for the participants are inadequate especially in Private Institutes as specified in the curriculum. Effective monitoring mechanism has to be established and implemented to ensure the effective implementation of the curriculum.

Overall income and earning of employed graduates was satisfactory. Not only the graduates but the employers are also happy and satisfied with their employees' job performance, although some additional skills and knowledge are required for the TVET graduates. Hence, it can be concluded that TVET program of CTEVT has helped to improve the economic life of the targeted group to some extent.

### **Recommendations:**

- Labour market studies are recommended to conduct in a Periodic manner to identify the changing needs of the labour market. Consequently, it is recommended to review Curricula to cater the market demand.
- Recommended to ensure effective monitoring is carried out to ensure that the curriculum is fully implemented. Specially to ensure adequate practical opportunities for the students as envisaged by the curriculum. It was found lacking specially in private institutes.
- Recommended to carry out the tracing of the graduates by each training institute in a regular basis to update the market demand and course updating.
- Linkage between institutions and industries or employers should be strengthened so that the TEVT program is offered according to the human resource demand of the employers.
- It is recommended to establish functional placement and counseling unit or any other such mechanism in each training institute and in the CTEVT as well to support graduates linking with job market.
- It is recommended for assessing by subject experts regarding the necessity of on the job training (work place practice) provision for diploma programs. For the existing TSLC program with OJT provision, it is also recommended to ensure that the graduates get opportunity of working in the related job during the OJT. Developing a roaster of potential organizations for OJT placement in each program would be instrumental.

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# SECTION ONE: INTRODUCTION

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## 1.1 Background/Rationale

Council for Technical Education and Vocational Training (CTEVT) has been carrying out three years diploma level courses since 2058 B.S. Presently, almost 530 institutes are running under CTEVT. Out of them, 110 institutions are running PCL Nursing programs, 47 are running General Medicine (HA) programs, 38 running Civil Engineering Programs and so on. Large numbers of students have already been graduated from these programs however; lack of effective and reliable study, information of whereabouts of these graduates is still limited with in speculation (CTEVT, 2073).

CTEVT is running long term and short term training programs of vocational nature under the trade of Health, Agriculture and Construction since its establishment. Gradually it elaborates its activities not only in geography but also in nature and sector of trade. Presently, it caters both long and short term vocational programs as well as three years diploma as an academic program. The broader objectives of CTEVT is to make significant contribution on employment creation or poverty reduction of country either by preparing graduates as per the employment needs of country or making them capable enough to create new employment (self-employment). CTEVT should, therefore be well informed about the employment status of their graduates as well as needs of the labour market. Although, tracer study can't be the substitute for labour market study; it can provide great deal of information in this aspect.

Since monitoring, supervision and evaluation are three crucial aspects of quality control. Like any evaluation, tracer study is also an evaluation which explores its importance in various ways. It provides realistic expectations concerning what a program can and can't do: it can provide information to program administrators and employees concerning ways to improve their services and it can aid policy makers in determining basic changes in programs structure or funding and finally it can be used as political ammunition to attack or defend a program.

The quality of training programs should be viewed not only in the examination score but also on employability of its graduates. This concept of evaluation is further relevant in the case of TEVT graduates. Thus, the tracer study should be made inextricable function of CTEVT which provides the status on employability of its graduates and more realistic signals of labour market.

Anecdotes say that the floods of youth, who want to enroll in CTEVT's training programs, are decreasing year by year. This arise two possibilities, whether the supply capacity doesn't dovetail with the labour market needs or the graduates of these institutes are below the quality threshold. The tracer study gives valuable information regarding these issues and sketches a way-out for future programmes.

Tracer study is a major evaluation tool to measure both effectiveness and quality of training programs. Outcome and impact of any type of training programs are not constant over time. Fluctuations of such impacts can be occurred and observed in labour market. Tracer study is therefore, an essential technique to get information of overtime fluctuation of both employability

of graduates and demand of labour market. It also provides the crucial information for policy makers or planners whether to continue or modify or terminate the existing training programs.

The follow-up research or tracer study has significant importance as an evaluation strategy. However, there are some specific considerations to make the result more valid and reliable. In this regard, Flaherty and Morell, 1978<sup>1</sup> argued that if follow-up techniques are to be used to their fullest potential, it is necessary to consider the unique nature of evaluation as a form of social research. Basically tracer study must be guided by the two principles. First, data bear a heavy responsibility for generating information on the value and validity of what has been found. Second, tracer study can't be interpreted in isolation from knowledge which is gained from a multiplicity of sources that are external to the research itself (Morell, 1978)<sup>2</sup>.

Therefore, the main objective of tracer study was to trace the graduates not only to find out their whereabouts but also to get the information on activity status to make sure that the knowledge and skills of individual learned during the training are in use. This can be verified by their post training information. The gathered information from the tracer study is not only applicable to identify the employment status of graduates but also analyses or update the demand of labour market.

## **1.2 Objectives of the study**

The major objectives of the study was to trace the graduates to find out their employment status as well as their income and performance level at workplace. The other specific objectives of the study were as follows;

- Identify the employment status of graduates of the Diploma and TSLC level programs;
- Analyze the work place performance level of employed graduates;
- Spell out the determinants of employability and efficiency for such graduates;
- Suggest the measures to promote the quality of TVET programs thereby employability and efficiency of graduates.
- Understand the different ways in which graduates learn about labor market opportunities and transition to employment.
- Perform the above analyses disaggregated by socio-economic characteristics and locational factors (e.g., rural vs. urban).

## **1.3 Scope and limitations of the study**

This tracer study covered eight diploma level programs and equal numbers of TSLC level programs. The eight diploma level programs were: 1. Proficiency Certificate in Nursing, 2. Diploma in General Medicine, 3. Diploma in Pharmacy, 4. Certificate in Medical Laboratory Technology, 5. Diploma in Civil Engineering, 6. Diploma in Electrical Engineering, 7. I. Sc. in Agriculture Science and 8. Diploma in Computer Engineering. Similarly, the eight TSLC Level programs are; 1. Community Medicine Assistant (CMA) 2. Auxiliary Nurse Midwifery (ANM)

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<sup>1</sup> Flaherty, E. W., and Morell J. A. 1978. Evaluation: Manifestation of a new field. Evaluation and Program Planning 1: 1-10

<sup>2</sup> Morell, J. (1978). Follow-up research as an evaluation strategy (Theory and Methodology). Hand book of Vocational Education Evaluation.

3. Medical Lab Assistant 4. Civil Sub-overseer, 5. Electrical Sub-overseer 6. Veterinary-Junior Technical Assistant (V-JTA), 7. Basic Surveying and 8. Assistant Ayurveda Health Worker (AAHW).

The trainees who were graduated in 2013 of the sampled institutes were the total population, out of which valid and reliable sample size was drawn as specified in the methodology.

Sudden natural disaster like the devastating earthquake of 12 Baisakh and 29 Baishakh 2072 B.S. (25 April and 12 May 2015 AD), and the unexpected and undeclared blockade in the border area that caused big trouble in data collection, have also been considered as the limitation for this study. Therefore, the study team could not reach to all the proposed target graduates. Likewise, training institutes were selected purposively so as to cover all parts of the country, which is also considered as another limitation.

In case of diploma level graduates, they had shorter period for the employment and the tracing may not perfectly represent the employment opportunity due to the smaller gap between the graduation and the employment tracing. The gap was only about 6 months for 068 batch. Due to this, the gap for getting the job was shorter. However, in case of the TSLC level, due to the sufficient gap between the graduation and the tracing, the employment might be realistic.

The gap in case of the nursing course was only about 6 months due to the council exam. In other diploma program, the gap was 8/9 months which seems adequate for maturity for the employment tracing.

The study is conducted at the time of extreme recession phase of national economy caused by the devastating earthquake and border blockade. The employment rate of graduates may be underestimated than in the regular situation.

#### **1.4 Institutional arrangements to conduct the study**

This tracer study is designed and conducted by Research and Information Division, CTEVT by outsourcing the expert group from a consulting firm named Accountability Initiative Private Limited where high level skills is needed. The primary data was collected by mobilizing the internal staffs of CTEVT whereas the qualitative data collection was made by external expert group of consulting firm. For collecting post training information of the graduates, priority was given to face to face interview. For this, two data collection teams were deployed to eastern and western part of country. Likewise, individual enumerators were deployed for the data collection at Kathmandu Valley and Neighboring Districts. All of the related institutes had also facilitated the whole data collection activities by providing the contract information of graduates. Moreover, some institutes also gathered the selected graduates in the respective institutes at the time of data collection.

Besides the above mentioned quantitative data, qualitative data was also collected from employers, teachers and managers at institution level. Similarly, the member of professional associations were also interviewed about the employment status in their corresponding profession.

## 1.5 Study Design and Methodology

The methodology adopted for this study was mainly quantitative; however various qualitative approaches were also adopted while conducting the study. Tracer study mainly deals with the post training information of the graduates, which is collected by means of survey of the graduates. However, work-place performance level of the employed graduates was also the concern of this study which requires both quantitative and qualitative information. Focus group discussion and Key-informants' Interview were also the basic tools for getting qualitative information which is explained in brief in next topics. As explained in the previous topic (scope of the study), graduates of eight diploma level programs and equal number of TSLC level programs, graduated in 2013 were covered in this study.

Two sets of questionnaires were designed to collect the post-training information of the graduates, one was for the graduates who are in paid employment and second one was for their employers. Most of the graduates were interviewed face to face whereas telephone interview was also conducted to take the information from the graduates if face-to-face interview was not possible. The survey questionnaire includes both status and opinion type of questions. In the case, where both face-to-face and telephonic interview were not possible, limited numbers of post training information (status type of questions) was also collected from third sources like their teachers, guardians, friends etc.

The proposed sample size of graduates was 1623 from Diploma level program, and 1640 (a total of 3263) from TSLC level program. The political unrest and unexpected *nakabandi* (Blockade) at the border areas made data collection difficult from the intended sample of graduates. Therefore, only 1110 graduates from Diploma level program and 899 graduates from TSLC level (Total 2009) were traced for the study.

The total number of graduate in the selected eight diploma level programs in the academic year 2013 was 7,114. Similarly the corresponding number of TSLC graduates was 5,694 of the eight selected TSLC programs. In aggregate, 1,110 and 865 graduates respectively from diploma level program and TSLC level program were traced during the field visit taking 99% confidence level and below 5% margin of error. The detail of population, sample (traced graduates), confidence level and margin of error for each of the selected program is presented in the Table 1.1.

The program wise sampling validity is also presented in the Table 1.1, where confidence level is considered 95% for all programs, but margin of errors were considered differently for different trades. Out of the total 16 programs, the size of sample taken for Diploma in Computer Engineering, Diploma in Electrical Engineering, Electrical Sub-overseer and Junior Computer Technicians are not that much strong to claim the statistical validity of the result in the form of disaggregated findings. In these trades, the margin of errors are considered far greater than generally considered in sampling, however it provides signals to speculate the general demand situation.

Table 1.1: Sample, Population and Sampling Criteria

SN	Name of Trade	Institutes		Graduates		Sampling Criteria			
		Total	Selected	Total	Traced	CL	ME		
<b>Diploma Level Program</b>									
1	Proficiency Certificate in Nursing (Staff Nurse)	96	47	3492	321	95	5.21		
2	Certificate in Medical Laboratory Technician	46	34	1034	217	95	5.92		
3	General Medicine (HA)	45	34	1230	183	95	6.69		
4	Diploma in Civil Engineering	31	24	489	128	95	7.45		
5	Diploma in Pharmacy	26	21	509	107	95	8.43		
6	Diploma in Computer Engineering	16	5	95	15	95	23.34		
7	Diploma in Electrical Engineering	11	7	146	37	95	13.97		
8	Intermediate in Agriculture Science	6	6	119	102	95	3.69		
9	Total	277	178	7114	1110	99	3.56		
<b>Technical SLC Level Programs</b>									
1	Community Medical Assistant	76	60	2636	217	95	6.37		
2	Auxiliary Nurse Midwifery	45	43	999	261	95	5.22		
3	Civil Sub-overseer	17	12	560	63	95	11.64		
4	Electrical Sub-overseer	6	3	70	17	95	20.83		
5	Veterinary- Junior Technical Assistant	21	9	503	77	95	10.29		
6	Basic Surveying	8	8	158	68	95	9.00		
7	Medical Lab-assistant	28	22	693	155	95	7.00		
8	Junior Computer Technician	8	2	75	7	95	35.35		
9	Total	209	159	5694	865	99	4.04		

Note: CL = Confidence Level, ME= Margin of Error

Source : CTEVT, Controller of Examination, Administrative Data

The study instruments were pre-tested with 50 graduates randomly selected mainly from Kathmandu Valley. Feedback received from pre- testing was helpful to minimize ambiguities, enhance clarity and increasing internal consistency and reliability of the study instruments. Necessary reviews of the questionnaire were made after consultation with client and feedback received from pretesting.

### 1.5.1 Approaches of data collection

The main data collection instruments included were field survey using semi-structured questionnaire for graduates and rating scale type of questionnaire for employers. Likewise, semi-structured interview checklists were used to interview key informants.

The questionnaire was developed around the key variables of investigation of: employment situation of graduates, employment rate in both formal and informal, relevance and effectiveness of learning in the institutions, waiting time to get first employment, employer satisfaction with regard to their skills, skills gap and performance level and possible networking opportunities between industries and training institutions.

### **1.5.2 Data analysis and report writing**

The collected data from more than 2009 graduates were first coded then entered in to the specially designed format in SPSS (Statistical Program for Social Science). After completing the data entry, some inconsistencies were revised and incomplete questionnaires were omitted during the data cleaning process. In total, 2009 complete set of questionnaires were included in the analysis.

Some qualitative information in the questionnaire were analyzed using cross tabulation and frequency tables. Similarly, five points Likert Scale with responses “Excellent”, “Very Good”, “Good”, “Poor” and “Very Poor” and another 4-point Likert scale with responses “ Very Relevant” “Relevant” “Not much Relevant” and “ Completely Irrelevant” were used to collect the responses of the graduates about the quality and relevancy of the TVET program that they received. These information were analyzed calculating means and standard deviation considering weightage of the points from 1 -5,1-4, and 1-3 respectively.

In the quantitative data analysis, tools like frequencies, cross tabulations, mean comparison were basically used. In addition to these analytical tools, ANOVA, Chi-square, t-Test were also considered as per the nature of data and necessity of analysis.

## SECTION II: DATA PRESENTATION AND ANALYSIS

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The analysis in this Tracer Study Report is based on quantitative data collected from two semi-structured questionnaires, one was designed to collect information from graduates and another was designed for employers' interview. Besides, some qualitative data were also gathered from principals, teachers and member of related professional association either conducting their in-depths interview or Focus Group Discussion (FGD) among them. These analyses are also enriched by other sources of information including literature review and some advance statistical analysis. Attempt is made to organize the analysis with respect to the study objectives. Although, employment status and income level of graduates is the major focus area of analysis, this report also attempts to provide brief overview on respondents profile, quality and relevancy of the TVET programs, proficiency and satisfaction level of employed graduates and early impact of the TVET programs. Moreover, analysis in this report also concentrates to spell out and explore the factors that can affect the quality of the TVET programs.

The analyses of the tracer study are organized in the five thematic sections which are (a) Profile of respondents (b) Employment status of graduates (c) Income level of the graduates, (d) Proficiency and satisfaction level of graduates and; (e) Issues Related to the Quality and Relevance of TVET Programs. Based on the analysis presented in this section, the next section consisting of findings and followed by implications and institutional reforms, and recommendations are presented.

### 2.1 Graduates' Profile

As mentioned earlier, the sampling for this study was conducted in to two stages. At the first stages, institutes were selected purposively covering all geographical and development region of the country as far as possible. In the second stages, graduates were listed out of these institutes and statistically representative sample size was drawn based on the criteria as mentioned in methodology section. Since the previous classification as per the five development regions is no more relevant after executing the New Constitution of Nepal 2072 B.S. (2015 A.D.), analysis in this report is also made accordingly.

#### 2.1.1 Gender of the Graduates

Of the total 2009 traced graduates of sixteen different TVET programs, 55.5% were female and 44.5% were male. However, the programs like Proficiency Certificate in Nursing (Staff Nurse) and Auxiliary Nurse Midwifery are accessed only for female. If we exclude these two trades, the corresponding percentage of female and male becomes 37.4 and 62.6% respectively. Excluding these two female friendly programs, female representation in this survey was found highest (62.3) in TSLC Lab Assistant Program followed by Community Medicine Assistant (58.2%), Certificate in Medical Lab Technology (53.9%). Unlike these three programs, participation of female is comparatively lower in engineering related programs. As an example, participation of female is nil in Diploma in Electrical Engineering, followed by 5.9% in Electrical Sub-overseer and 13.2% in Basic Surveying. The detail figure of gender wise distribution of traced graduates together with its corresponding proportion is depicted in Table 2.1.

Table 2.1: Gender of the Respondents

SN	Name of Programs	Gender of the respondents		Total
		Male	Female	
1	Diploma in Civil Engineering	109(85.2%)	19(14.8)	128(100)
2	Diploma in Computer Engineering	13(86.7)	2(13.3)	15(100)
3	Diploma in Electrical Engineering	37(100)	0	37(100)
4	Proficiency Certificate in Nursing		321(100)	321(100)
5	Diploma in General Medicine	138(75.4)	45(24.6)	183(100)
6	Diploma in Pharmacy	71(66.4)	36(33.6)	107(100)
7	Diploma in Agriculture	72(70.6)	30(29.4)	102(100)
8	Certificate in Medical Lab Technology	100(46.1)	117(53.9)	217(100)
9	Community Medical Assistant (CMA)	105(41.8)	146(58.2)	251(100)
10	Auxiliary Nurse Midwifery (ANM)		258(100)	261(100)
11	Lab Assistant	58(37.4)	97(62.6)	155(155)
12	Veterinary Junior Technical Assistant	57(74)	20(26)	77(100)
13	Civil Sub-overseer	54(85.7)	9(14.3)	63(100)
14	Electrical Sub Overseer	16(94.1)	1(5.9)	17(100)
15	Basic Surveying	59(86.8)	9(13.2)	68(100)
16	Junior Computer Assistant	5(71.4)	2(28.6)	7(100)
	Total	894(44.5)	1115(55.5)	2009(100)

Note: Figures in parenthesis indicate the row percentage.

### 2.1.2 Provincial Distribution of Respondents

The Table 2.2 depicts the distribution of respondent graduates as per their home address which may be different than the address of their institutions. Of the total 2009 respondent graduates, larger majority (23.5%) were from Province One, followed by Province Five 22.6%, Province Seven 20.9%. Likewise, 12.7% were represented from Province Three, 5.6% were represented from Province Six, 9% from Province Four.

Table 2.2: Provincial Distribution of Number of Graduates

SN	Province	Frequency	Percent	Cumulative Percent
1	Province One	476	23.7	23.7
2	Province Two	110	5.5	29.2
3	Province Three	256	12.7	41.9
4	Province Four	180	9.0	50.9
5	Province Five	455	22.6	73.5
6	Province Six	113	5.6	79.1
7	Province Seven	419	20.9	100.0
8	Total	2009	100.0	

Source: Field data, 2015/16

### 2.1.3 Ethnicity of Respondents

Graduates are also categorized as per 8 ethnicity or caste groups. On the total, majority of traced graduates were from hill Brahmin/Chhetri group, which occupies 58.1% of the pie followed by hill Janajati 21.5% and Tarai Janajati 10.7%. Rest of the ethnic groups such as Hill Dalit, Tarai Dalit, Madhesi Middle Cast and Muslim have found very negligible representation in the sample which is more or less similar with the real situation.

Table 2.3: Caste Group/Ethnicity of traced graduates

SN	Caste Group	Graduates Number	Percent
1	Hill Brahmin/Chhetri	1168	58.1
2	Terai Brahmin/Chhetri	11	5
3	Hill Dalit	46	2.3
4	Tarai Dalit	33	1.6
5	Hill Janajati	432	21.5
6	Terai Janajati	214	10.7
7	Madhesi Middle Caste	100	5.0
8	Muslim	5	0.2
	Total	2009	100

Source: Field data CTEVT, 2015/16

### 2.1.4 Age of the Respondents

Since the collection of information was not possible by interviewing personally to all selected graduates, information of some 464 graduates was therefore collected either from TTPs or some other secondary sources and analysis of all aspect does not cover 2009 graduates. Information about the age of the respondents was obtained only of those graduates who were either interview personally or by telephonic interview. The average age of the respondent was 22 years whereas 17 years is the minimum age of the respondent and 49 is the maximum. The group of respondents is found homogeneous since the standard deviation is almost 4 which means almost 66% of respondents were between 18-27 years of age. The table 2.4 and the Chart 2.1 reflects the total distribution of the respondents.

Chart 2.1: Histogram of Age of Respondents

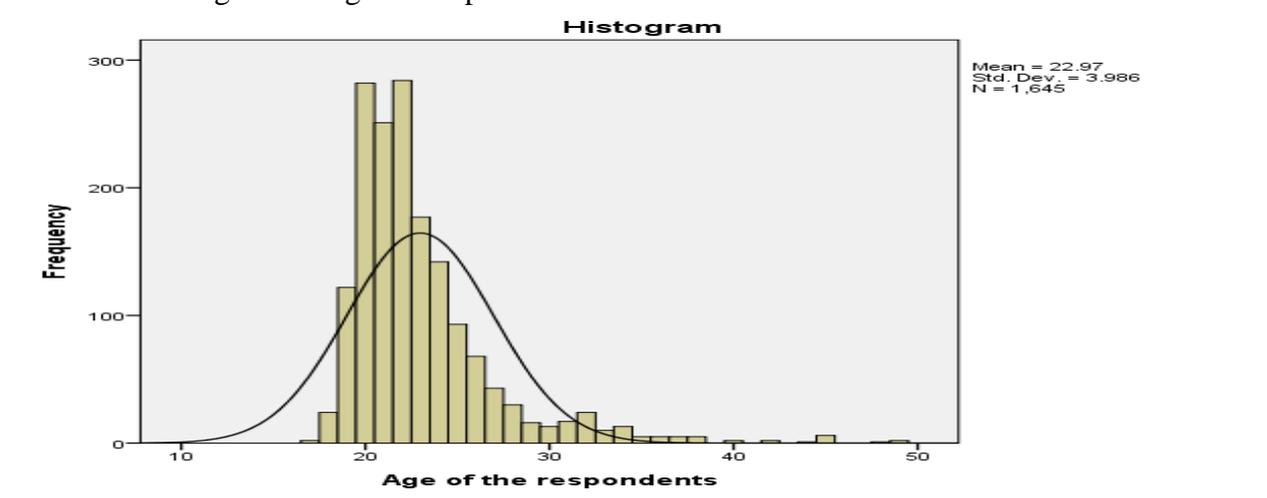


Table 2.4: Age Group of Graduates

	Number of Cases	Minimum Age	Maximum Age	Mean Age	Standard Deviation (Deviation from Mean)
Age of the	1645	17	49	22.97	3.987
Valid N	1645				

### 2.1.5 General Profile of the Employers:

Beside post training information of the graduates, information about the performance level of the graduates was also collected from the respective supervisors or employers' of the wage-employed graduates. Despite previous plan to interview 33% employers of the paid employed graduates, 35 employers could be contacted and interviewed because of the political unrest, difficult situation of the country due to the earthquake and undeclared stumbling blockade in the border. The large majority (62.86%) of employers'-organization were private sector organization followed by government organization (20%), NGO (11.43%) and Cooperative (5.71). The detail breakdown of legal status of respondents is given in Table 2.5.

Table 2.5: Employer Organization by Legal Status

SN	Nature of Organization	Number	Percent	Remarks
1	Government	7	20.00	
2	Non-government	4	11.43	
3	Private	22	62.86	
4	Co-operative	2	5.71	
5	<b>Total</b>	<b>35</b>	<b>100</b>	

The employer's organizations are also classified as per the economic sector. In this classification, large majority (77.15) of employers' organization were accumulated under Health and Social Service Sector, followed by Education Sector 11.43%, Agriculture Sector (2.86%) and Construction 2.86%. None of the employers were interviewed from Manufacturing sector. The detail of the sector wise distribution is depicted in Table 2.6.

Table 2.6: Employer Organization by Economic Sector

SN	Sector of Employer	Number of employers	Percent	Remarks
1	Agriculture	3	8.57	
2	Construction	1	2.86	
3	Education	4	11.43	
4	Health and Social Work	27	77.15	
5	<b>Total</b>	<b>35</b>	<b>100</b>	

## 2.2 Employment status of graduates

This topics includes the analysis on employment status of graduates among various groups including types and nature of employment, transition periods, role of soft skills getting employment. Although information regarding employment status were gathered from all 2009 traced graduates, other information was missing of those graduates whose employment status was gathered from secondary sources.

### 2.2.1 Employment status of graduates

Out of 2009 graduates contacted 982 (49 %) were found employed, 928 (46%) were still unemployed, and the rest 99 (5%) graduate students were working as volunteers. The largest number of employed graduates is in Proficiency Certificate in Nursing program followed by Certificate in Medical Lab Technology. Similarly, the largest number of graduates who are working as volunteers are also from Proficiency Certificate in Nursing program. Out of 321 graduates in Proficiency Certificate in nursing program, 157 (49%) graduates are employed, while 133 (41%) graduates and 31(10%) graduates are unemployed and are working as volunteers respectively (Table 2.7). Interview with the institutional officials revealed that in case of the Nursing program, if the institutes are linked or attached with large hospitals, relatively greater numbers of graduates of the institute are employed or can get employment. The study reveals that the employment rate is highest in the Certificate in Medical Lab Technology among the eight diploma programs traced out where 65% graduates are found employed. In contrary, the employment rate is minimum (30%) in Diploma in Civil Engineering. However, the percentage of graduates either in education or in employment is 74.1% and the percentage of the graduates either in employment or engaged in education in Diploma in Civil Engineering program is 82% with 105 graduates (Annex-2).

Table 2.7: Employment status of graduates by programs

SN	Level of Program	Employed		Unemployed		Engaged as Volunteer		Total
		No	%	No	%	No	%	
<b>Diploma level</b>								
1	Diploma in Engineering	38	30	90	70			128
2	Diploma in Computer Engineering	5	33	10	67			15
3	Diploma in Electrical Engineering	21	57	15	41	1	3	37
4	Proficiency Certificate in Nursing	157	49	133	41	31	10	321
5	Diploma in General Medicine (HA)	89	49	84	46	10	5	183
6	Diploma in Pharmacy	52	49	46	43	9	8	107
7	I.Sc. Agriculture in Plant Science	57	56	41	40	4	4	102
8	Certificate in Medical Lab Technology	141	65	68	31	8	4	217
Total		560	51%	487	44%	63	5%	1110
<b>TSLC Level</b>								
9	Community Medical Assistant	120	48	122	49	9	4	251
10	Auxiliary Nurse Midwifery	121	46	124	48	16	6	261
11	TSLC in Lab Technology	64	41	81	52	10	6	155
12	Veterinary JTA	52	68	25	32			77
13	TSLC in Civil Engineering	30	48	32	51	1	2	63
14	TSLC in Electrical Engineering	11	65	6	35			17
15	TSLC in Survey Engineering	19	28	49	72			68
16	TSLC in Computer Engineering	5	71	2	29			7
Total		422	47	441	49		4	899

Source: Field Data, CTEVT, 2015/16

This reveals that significant numbers of graduates of the Diploma in Civil Engineering program are studying higher education. The number and percentage of graduates either in employment or

engaged in education in each program and by program level wise is given in Annex-2 and Annex-3 respectively. Employment opportunity may scale up after the reconstruction work expedites. Likewise, employment rate seems highest (71%) in the TSLC in the Computer Engineering followed by Veterinary Junior Technical Assistant (68%). However, it is difficult to conclude the highest employment rate in TSLC in the Computer Engineering only based on the very small number (7) of graduates traced out.

In the same way, out of 15 graduates traced from Diploma in Computer Engineering Program, 5 (33%) graduates are employed. The following Table 2.7 depicts the number and percent of the graduates from eight diploma level program and 8 TSLC level programs who are either employed or unemployed or are engaged as volunteers in their related training areas.

Out of 1110 traced graduates of Diploma level program 560, (50.5%) were employed, while 487 (43.9 %) were unemployed, and only 63 (5.7%) were engaged as volunteers. Normally, those who were working as volunteers were expected to be in employed status after completing their volunteering terms. But, as reported by the traced graduates, they do not automatically get the job after volunteer service agreement is over. They have to sit in the competition when job vacancies are opened. There is no guarantee that they will get the job. So when they are turned down, they have to go to another organization as volunteers. However, Graduates working as volunteer are given preference when vacancy announced in the same hospital.

Likewise, 422 (46.9%) traced graduates of TSLC level programs were employed, and 441 and 36 graduates were either unemployed or were working as volunteers respectively. Comparing the employment status between the diploma level graduates and TSLC level graduates, more graduates of TSLC level program were unemployed, and more graduates of Diploma level program were engaged as volunteers. According of qualitative information during the field visit, the TSLC level graduates of Health trade (i.e. ANMs and CMAs) are being replaced by Diploma level graduates such as Staff Nurse and Health Assistant. In the job also employers are ready to take Diploma level graduates than TSLC level graduates, because the formers have more skill and knowledge than the graduates of TSLC level. Due to this, TSLC graduates are losing job opportunities. Staff nurse are working in the salary of ANM. However, in private sector, CMA/ANM is working in position of staff nurse. The following Table 2.8 represents employment status of traced graduates by level of programs.

**Table 2.8: Employment status of traced graduates by level of programs**

S N	Status	Employment Status			Total
		Employed	Unemployed	As Volunteer	
1	Diploma Level	560(50.5)	487(43.9)	63(5.7)	1110 (100)
2	TSLC Level	422(46.9)	441(49.0)	36(4.0)	899 (100)
	Total	982(48.9)	928(46.2)	99(4.9)	2009 (100)

*Note: Figures in parenthesis indicate the row percentage.*

*Source: Field data, CTEVT, 2015/16*

In relation to the trade-wise employment status of the TVET graduates, the largest numbers of both employed and unemployed graduates were in Health trade (744) and (658) respectively, followed by Engineering trade that had 204 (60.9 %) unemployed graduates and 129 (38.5 %)

employed out of 335 graduates traced. Similarly, the highest number of graduates (93) working as volunteers were also from Health trade. Table 2.9 shows the trade-wise number of graduates who are either employed or unemployed, and are working as volunteers.

Table 2.9: Trade-wise employment status of graduates

	Trade Group	Employment Status			Total
		Employed	Unemployed	As Volunteer	
1	Engineering Group	129(38.5)	204(60.9)	2(0.6)	335(100)
2	Health Group	744(49.8)	658(44)	93(6.2)	1495(100)
3	Agriculture Group	109(60.9)	66(36.9)	4(2.2)	179(100)
4	Total	982(48.9)	928(46.2)	99(4.9)	2009(100)

*Note: Figures in parenthesis indicate the row percentage.*

*Source: Field data, CTEVT, 2015/16*

During field visit, it was observed that there were cases of Staff Nurses who were compelled to work as volunteer for 6 months to one year. They have to work either as volunteer or to work in the salary of ANM, which is one level low status job, even after completing volunteering service agreement. It was also found that staff nurses are under paid with up to NRs. 4500. Remuneration in private hospitals is low.

Looking at the employment status of TVET graduates among the seven Provinces of the country, Province five had the highest number and rate of employed TVET graduates where 256 (56.3%) are employed. Then comes Province one with 255 (53.6%) employed graduates. In case of unemployed TVET graduates, Province seven had the highest number and rate of unemployed graduates (259) among the traced graduates followed by Province One with 194 unemployed graduates. Unemployment rate of TVET graduates in province 7 is 61.8 %. Similarly, province five had the highest number of graduates working as volunteers. Then comes Province one with 27 numbers of graduates working as volunteers. The following Table 2.10 represents the status of employment of traced TVET graduates in each seven provinces.

Table 2.10: Province-wise employment status of TEVT graduates

SN	Name of Province	Employment Status			Total
		Employed	Unemployed	Volunteers	
1	Province One	255 (53.6)	194(40.8)	27(5.70)	476(100)2
2	Province Two	56(50.9)	53(48.2)	1(0.9)	110(100)
3	Province Three	123(48)	113(44.1)	20(7.8)	256(100)
4	Province Four	81(45)	84(46.7)	15(8.3)	180(100)
5	Province Five	256(56.3)	170(37.4)	29(6.4)	455(100)
6	Province Six	56(49.6)	55(48.7)	2(1.8)	113(100)
7	Province Seven	155(37)	259(61.8)	5(1.2)	419(100)
	Total	982(48.9)	928(46.2)	99(4.9)	2009(100)

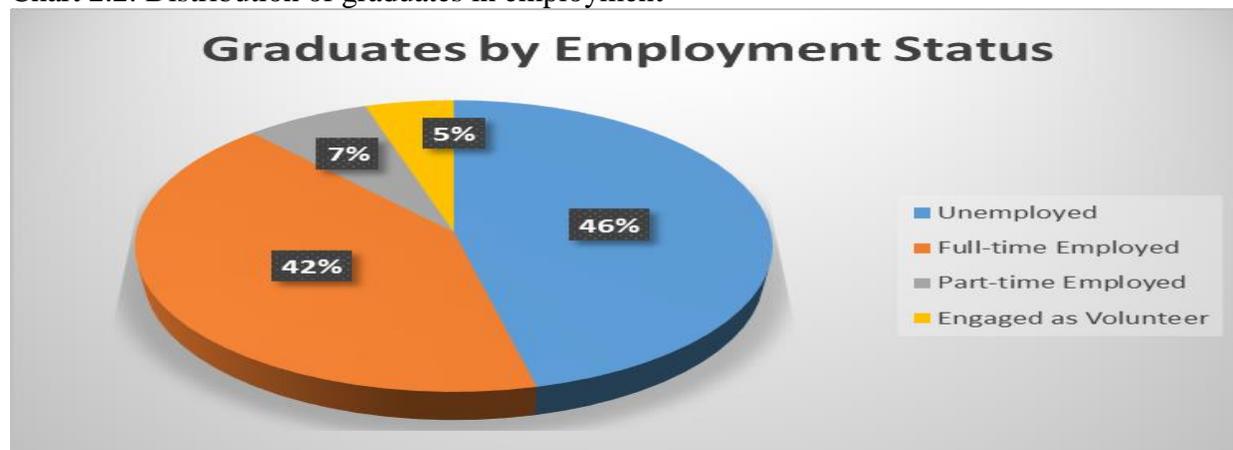
*Note: Figures in parenthesis indicate the row percentage.*

*Source: Field data, CTEVT, 2015/16*

### 2.2.2 Types of Employment

The employed graduates were engaged in two types of employment: full time and part time. 842 (85.7 %) traced graduates were engaged in full time job, while 140 (14%) had part time job. Although 14 percent of the employed graduates had part time employment, they were quite content with the part time employment. Because, according to them, they could take 2-3 part time jobs at a time which leads to quite good earning.

Chart 2.2: Distribution of graduates in employment



Source: Field Data, CTEVT, 2015/16

During the field visit It was known that Lab assistant/Technicians were working only on hourly basis. Despite this, they were happy to work on hourly basis, because they could be engaged in another work for rest of the time. Table 2.11 shows number of graduates involved in different types of employment.

The Chart 2.2 also depicts the present status of respondents in terms of total figure. Of the total 2009 traced graduates, 46% were unemployed followed by full time employed 42%, part time employed 7% and 5% are engaged as volunteer.

### 2.2.3 Nature of Employment

The traced TVET graduates were engaged either in self-employment or wage employment in formal sector. Some were also engaged in wage employment in informal sector and/or employed abroad. The highest number of graduates (704) or 71.7 percent was in wage employment in formal sector. The number of graduates (177) or 18.0 percent, involved in self-employment is also remarkable. Observation in the field and qualitative information revealed that especially graduates of TSLC level program who were involved in self-employment were mostly from agriculture: Veterinary Junior Technical Assistant, and/or lab technician trade. Some of the graduates shared that the Veterinary Junior Technical Assistant (TSLC level) is highly employable trade and most of the graduates are employed. It was also found that graduates of VJTA and Plant JTA program were engaged in family business in the same field and significant numbers of graduates were employed.

After the government's permission to establish clinics by Pharmacists only, the graduates have opened their own clinics. It was also found during field visit that some diploma level graduates of general medicine (HA) program were self employed in the clinics connected with the

pharmacists, while some others were employed in NGOs and INGOs. Earning of a pharmacist falls in the range of NRs. 15000 to NRs. 30000.

In the engineering field graduates were found working as contractor, and on part-time basis. It was also revealed that there is greater possibility of engineering graduates to get job in the earthquake affected 14 districts as the re-construction is being started. Normally salary range is from NRs. 15000- NRs. 30000. It exceeds in INGOs.

There is no specified employment opportunity available in computer engineering trade. It was found that very few graduates are wage employed. Some graduates have established computer items selling business and are self employed. Some of them are engaged in developing software like accounting software. Very few graduates are employed as trainer as well. Table 2.11 shows nature of employment and the numbers of graduates involved.

Table 2.11: Nature of employment

SN	Nature of Employment	Frequency	Percent	Remarks
1	Self Employment	177	18.0	
2	Wage employment in formal sector	704	71.7	
3	Wage employment in informal sector	84	8.6	
4	Foreign Employment	17	1.7	
	<b>Total</b>	<b>982</b>	<b>100.0</b>	

#### 4.2.4 Means for Getting Employment

The study team also wanted to look into the approach that helped the graduates find employment. 263 graduates got employment through taking part in the selection competition, while 210 used personal networking to get employment. Graduates' family relationship also helped them to get employment. Door to door visit for job hunting was used by very few graduates. Table 2.12 indicates approaches through which the graduates got employment with frequency, percent and valid percent.

Table 2.12: Approaches used by graduates to acquire employment

SN	Means for getting employment	Frequency	Percent	Valid Percent
1	Door to door (job hunting )	56	2.8	7.0
2	Media advertisement and notice	140	7.0	17.5
3	TTP helped	64	3.2	8.0
4	Selected from competition	263	13.1	32.8
5	Family relationship	68	3.4	8.5
6	Personal Networking	210	10.5	26.2
	<b>Total</b>	<b>801</b>	<b>39.9</b>	<b>100.0</b>
7	Non responded	1208	60.1	
	<b>Total</b>	<b>2009</b>	<b>100.0</b>	

Source: Field Data, CTEVT. 2015/16

### 2.2.5 Status of Unemployed graduates

Out of 928 unemployed graduates, 441 were from TSLC level program and 487 were from Diploma level programs. Among these 928 unemployed graduates, 458 were still searching for job, while 227 went for further study instead of looking for job, because they preferred to pursue higher education to get higher level job rather than to stick on lower level job with their current certificate level. This means, the unemployed graduates of Diploma level programs were pursuing for Bachelor in Nursing, and graduates of TSLC level program were going in for Diploma level course.

Some of the traced graduates have started higher education due to unavailability of job in the field they studied. Significant numbers of graduates of General Medicine (HA) program of Diploma level are also engaged in further study mostly in BPH (Bachelor in Public Health).

Likewise, 30 graduates were preparing for public service commission examination, and 19 were preparing to open their own business. Graduates from lab technology program and Veterinary Junior Technical Assistant program were willing to open their own business. During the field visit, it was found that some graduates of these two programs had opened their own veterinary clinic and laboratory in small scale and in partnership with 1 or 2 friends from same program. They were happy with their job and the earning. Although the percentage of those graduates who were willing to go for own business is very small, their effort is very appreciable. The objective of TVET is to prepare youth not only for formal job, but for informal job as well. These graduates of TVET programs were fulfilling the objectives of TVET. Following Table 2.13 represents the status of traced unemployed graduates of TVET programs.

Table 2.13: Status of unemployed graduates

SN	Present Status of Unemployed	Frequency	Percent	Valid Percent
1	Searching employment	458	22.8	59.6
2	Discouraged due to not finding job	34	1.7	4.4
3	Engaged Further study	227	11.3	29.6
4	Preparing to own business	19	.9	2.5
5	Preparation for Public Service Commission Exam	30	1.5	3.9
6	Total Response	768	38.2	100.0
7	Not Applicable & Not Responded	1241	61.8	
8	Total	2009	100.0	100.0

Source: Field Data, CTEVT, 2015/16

### 2.2.6 Reasons for Unemployment

The study team wanted to find out with the unemployed TVET graduates reasons for being unemployed. It was quite amazing to know that 72.2 percent of the unemployed graduates who responded the question reported that because of lack of job opportunities in the job market they had to be unemployed despite having competence in technical and vocational area for which they were trained. In the same way, 45 unemployed graduates indicated that the skill and knowledge

that they have received through TVET programs do not match with the required job in the job-market. Similarly, ‘lack of linkage with the employers’, and ‘inadequate technical and other soft skills’ were reasons for being unemployed as indicated by the respondents. However, 392 out of 928 unemployed did not respond the questions. Table 2.14 depicts reasons for being unemployed as indicated by traced TVET graduates.

Table 2.14: Reasons of unemployment

S. N.		Responses		Percent of cases
		N	Percent	
1	Lack of job Opportunities in the Market	387	72.2%	78.7%
2	Mismatch between Skill and Required Jobs	45	8.4%	9.1%
3	Due to inadequate technical and other soft skills	20	3.7%	4.1%
4	Lack of linkage with employer	84	15.7%	17.1%
<b>Total</b>		<b>536</b>	<b>100.0%</b>	<b>108.9%</b>
Non respondents		392		

Source: Field Data, CTEVT, 2015/16

In the above data 387 (72.2 % of total responses) graduates informed that there is no job opportunity in the job market, hence they are unemployed. Because TSLC graduates (i.e. ANMs and CMAs) are being replaced by Staff Nurse and Health Assistant, and Staff nurse are working in and with the salary of ANM. Employers are also ready to take Diploma level graduates than TSLC level graduates, how could the TSLC graduates get the job? Therefore, TSLC graduates are losing job opportunities. In other word, we can say that there are very few job opportunities for TSLC graduates, especially in health sector.

The above responses of the unemployed graduates indicate the issue of relevancy of TVET program with the job market. The statements suggest that it is time that with changed context, CTEVT should think about changing its programs so that it can prepare the human resource according to the skill demand of the job market.

### 2.2.7 Relation of job to the TEVT program

Although 387 (72.2) percent of the unemployed graduates indicated lack of job opportunities in the job market, 939 (95.6%) of the employed graduates reported that the job they are currently doing, is related to the training they received from TVET program. 43 (4.4%) of the employed graduates indicated that the current job they were doing was not related to their TEVT training. In the field visit, it was also found that very few graduates have changed their field of training. For example, a HA graduate was also found working in fishery due to higher earning and already existing profession. Table 2.15 below shows the response of the traced graduates regarding relation of the job with TVET program they undertook.

Table 2.15: Whether the Job is related to the TVET program

SN	Nature of Job	Frequency	Valid Percent	Remarks
1	Having Related Job	939	95.6	
2	Not Having Related Job	43	4.4	
Total		982	100.0	

Source: Field Data, CTEVT, 2015/16

### 2.2.8 Transition Period between job and completion of TVET Program

The study team wanted to find out the time duration that a graduate took to get a job after completing the TVET program (receiving certificate after final examination). Out of 982 employed graduates, 823 graduates responded to this query. According to the responses, the graduates took about four months to get job after completing the TVET program. According to the FGD with the officials of training institutions also it was revealed that normally, the gap between graduation and employment is around 3 months. The data in Table 2.16 shows that the graduates got a job after about 4 months of completing the TVET program. This means they did not have to wait for long period to get a job. Four months is reasonable period to wait until one gets a job after completing his/her study period.

Table 2.16: Time taken by graduates to get job (Duration in Month)

Statement	N	Minimum	Maximum	Mean	Std. Deviation
Transition Period in Months	823	0	120	8.81	14.472

Source: Field Data, CTEVT, 2015/16

### 2.2.9 Activities during Transition period

Out of 2009 traced graduates, only 709 (35.3 percent) graduates responded when asked about the activities they did after completing the TVET program. The rest 64.7 percent did not response to the question. On the basis of the responses it can be scrutinized that during transition period between completing the TVET program and getting job, 8.3 percent of the total traced graduates preferred to pursue higher education. 3.1 percent were engaged in their own business, while 2.7 percent did volunteer work in the related field of the TVET program. During the field visit it was found that some of the staff nurse graduates were preparing for the exam of the nursing council and not doing the job. Those who were working as volunteers, were mostly from health and agriculture trades. However, most of the graduates (21.2 percent) went to look for job. Following Table 2.17 represents frequency and percentage of the different activities that the graduates did after completion of the TVET program.

Table 2.17: Activities during transition from training to employment

S.N.	Type of Activities	Frequen cy	Percent	Valid Percent	Cumulative Percent
1	Searching for employment	426	21.2	60.1	60.1
2	Engaged in further study	166	8.3	23.4	83.5
3	Engaged in own business	63	3.1	8.9	92.4
4	Doing Volunteer	54	2.7	7.6	100.0
5	Total	709	35.3	100.0	
6	Not responded	1300	64.7		
<b>7</b>	<b>Total</b>		<b>2009</b>	<b>100.0</b>	

Source: Field Data, CTEVT, 2015/16

### 2.2.10 Holding More than One Job

In response to the query whether the graduates hold more than one job at the moment 128 (6.4 percent) out of 779 graduates said that they hold more than one job at the moment. 651

graduates denied holding more than one job at present. Rest of the graduates i.e. 203 (20.7) out of 982 (excluding unemployed graduates) did not respond the query.

It was also found that those who said that they were holding more than one job are the graduates doing part time job. Those graduates doing part time employment were quite happy with the part time employment. Because, according to them, they could take 2-3 part time jobs at a time which gave them quite good earning. Especially graduates from health trades were holding more than one job. Table 2.18 gives frequency and percent of the response that show number of graduates holding more than one job at present.

**Table 2.18: Graduates holding more than one job**

S. N.	Response	Frequency	Percent
1	Holding more than one job	128	13.0
2	Holding only one job	651	66.3
3	Total	779	79.3
4	Not Responded	203	20.7
	<b>Total</b>	<b>982</b>	<b>100.0</b>

Source: Field Data, CTEVT, 2015/16

### 2.2.11 Soft Skill – how much important for employment?

The graduates were also asked whether any soft skills were instrumental for getting employment or to retain in the employment, 452 (55.5 percent) graduates out of 814 responses indicated significance of soft skills for employment. On the contrary, 362 (44.5 percent) graduates reported that soft skills are not important in employment. Rest 168 graduates did not response to this question.

Likewise, communication skill was regarded as the most important soft skill by 295 (39.4 percent) graduates out of 749 respondents. 187 (25 percent) graduates pointed out that an employee should have positive attitude and honesty in employment. In the same way, interpersonal skill as well as English language also play vital role in maintaining good performance in employment. 233 graduates did not response the question. Table 2.19 indicates number and percentage of responses on the importance of four different types of soft skills.

Table 2.19: Types of soft skills and its importance given by graduates

S.N.	Types of Soft Skills	Responses		Percent of Cases (Distribution of 456)
		Number	Percent	
1	English Language	105	14.0%	23.2%
2	Communication Skill	295	39.4%	65.1%
3	Interpersonal Skill	162	21.6%	35.8%
4	Honesty Attitude	187	25.0%	41.3%
	Total	749	100.0%	165.3%
	Non- respondents	233		

Source : Field Data, CTEVT, 2015/16

## 2.3 Income Level and Its Variation

The employed graduates were further asked about their income status. Out of the 982 employed graduates, only 814 graduates reported their income level. Large variation was found in the

income level among the graduates which ranges from Rs. 4000/ to Rs. 87000/. per month. The average income is found Rs. 15861.05/month and standard deviation 11,384. The table 2.20 depicts the total descriptive statistics of the income level among the graduates.

**Table 2.20: Descriptive Statistics of income level**

Heading	N	Minimum	Maximum	Mean	Std. Deviation
Monthly Income	814	4000	87000	15861.05	11384.502
Valid N (listwise)	814				

### 2.3.1 Income Comparison among sectors

The study wanted to know earning level of the graduates from both Diploma and TSLC program of three trades in order to understand whether their life has been comfortable with the income they earn, which eventually indicates the effectiveness of TVET program. Following Table 2.21 represents the income level of graduates of health, engineering and agriculture trades of both Diploma and TSLC level program

**Table 2.21: Income level of TVET graduates by Sectors and level of programs**

S.N.	Trade wise Distribution	Diploma Level			TSLC Level		
		Mean	N	Std. Deviation	Mean	N	Std. Deviation
1	Engineering	19738.98	59	14710.330	18735.38	65	9174.275
2	Health	15406.69	317	12165.232	11849.20	264	7706.566
3	Agriculture	21524.25	57	5747.614	24798.08	52	15001.392
	Total	16802.31	433	12130.055	14791.31	381	10385.599

*Source: Field Data, CTEVT, 2015/16*

The above Table 2.21 shows that the graduates of agriculture trade of both Diploma and TSLC level program have the highest monthly income followed by the graduates of engineering trade. In comparison to the income of agriculture, health and engineering program graduates, it looks that health program graduates have the least income. In agriculture group, average salary of TSLC graduates looks higher than that of the graduates of diploma level program. This is because of higher number of graduates are involved in self employment where earning is significantly higher. Therefore, In case of the self employment, all earnings should not be counted as the contribution of the study alone. Because there is investment of the graduates in self employment and it is also the return on the investment. For example, the graduates of VJTA programs were engaged in kennel club with their investment.

In the field visit also the graduates shared that VJTA/Plant JTA were not getting the standard rate of remuneration as the field is not still commercialized. They provide the services and accept what they are given by the owner as remuneration.

### 2.3.2 Income Comparison among Employment Types

Although the number of graduates who went for foreign employment is low (only 17), their monthly income is the highest in comparison to those who are involved in other types of employment. Graduates involved in self employment also have considerable amount of monthly income. The income of the graduates involved in wage employment in either formal or informal

sector seems low but manageable. Table 2.22 showed the monthly income of traced TVET graduates who were in different types of employment in Mean and Standard Deviation.

Table 2.22: Comparison of income among graduates in different types of employment

SN	types of employment	Mean	N	Std. Deviation
1	Self Employment	21751.88	160	15008.827
2	Wage employment in formal sector	13588.62	555	8101.234
3	Wage employment in informal sector	13963.54	82	10994.864
4	Foreign Employment	43758.82	17	9546.011
	Total	15861.05	814	11384.502

Source: Field Data, CTEVT, 2015/16

### 2.3.3 Income Comparison among Program

Comparing the trade-wise income level of the graduates, it was found that the graduates of Veterinary Junior Technical Assistant (VJTA) program under agriculture trade had the highest average income level of 24798.08 per month. Likewise, graduates of I. Sc. Agriculture Plant Science had average income of 21524.25 per month. TSLC in Electrical Engineering and Diploma in engineering program had average income level of 21272.73 and 21212.12 respectively. Graduates of health trade had average income between the range of 10878.64 (Auxiliary Nurse Midwifery (ANM) to 19117.65 (Diploma in General Medicine (HA)). The highest level of income of Veterinary Junior Technical Assistant (VJTA) program could be due to the combination of earnings and return on investment.

Table 2.23: Trade wise income level of graduates

SN	Name of Technical program attended by graduates	N	Mean	Std. Deviation
1	Diploma in Civil Engineering	33	21212.12	12690.443
2	Diploma in Computer Engineering	5	10600.00	4669.047
3	Diploma in Electrical Engineering	21	19600.00	18466.862
4	Proficiency Certificate in Nursing	105	14195.43	9801.778
5	Diploma in General Medicine (HA)	68	19117.65	14254.980
6	Diploma in Pharmacy	47	20074.47	15295.630
7	I Sc. Agriculture in Plant Science	57	21524.25	5747.614
8	Certificate in Medical Lab Technology	97	11854.64	9714.079
9	Community Medical Assistant (CMA)	97	11872.06	6442.931
10	Auxiliary Nurse Midwifery (ANM)	103	10878.64	5084.649
11	TSLC in Lab Technology	64	13376.56	11786.012
12	Veterinary Junior Technical Assistant	52	24798.08	15001.392
13	TSLC in Civil Engineering	30	17760.00	9298.001
14	TSLC in Electrical Engineering	11	21272.73	10973.522
15	TSLC in Survey Engineering	19	19842.11	8001.827
16	TSLC in Computer Engineering	5	14800.00	8983.318
17	Total	814	15861.05	11384.502
	Non respondents	168		
	Total	982		

Source: Field Data, CTEVT, 2015/16

The Data in Table 2.23 showed that graduates of Agriculture Trade (VJTA) had the highest income level. Engineering trade graduates' income level was also over 20 thousands. The income level of Health sector of TSLC level program was lower than Agriculture and Engineering sector. However, out of 982 employed graduates 168 did not give any information on their income. Table 2.23 represents trade wise average income level of Diploma and TSLC level programs graduates.

In Table 2.21, the average salary of TSLC graduates of agriculture sector is higher than diploma this is because of higher number of TSLC graduates are involved in self employment than diploma graduates which is depicted in the analysis presented in Table 2.24. Of the total, 12.28% graduates of I. Sc. Agriculture Program are found engaged in paid employment whereas the corresponding proportion of TSLC in Veterinary JTA is 53.85. The detail figure is depicted in table below.

Table: 2.24 Income Comparison among types of employment in Agriculture Group

SN	Employment Type	Diploma		TSLC Level	
		Number	Percent	Number	Percent
1	Self Employment	7	12.28	28	53.85
2	Wage employment in formal sector	46	80.70	17	32.69
3	Wage employment in informal sector	3	5.26	2	3.85
4	Foreign Employment	1	1.75	5	9.62
5	Total	57	100.00	52	100.00

### 2.3.4 Income Comparison among Sex

There is significant variation in income level of graduates between gender. The average monthly income of the Male Graduates is Rs. 19100 whereas the corresponding figure of female graduates is Rs. 12791 only. To find out whether this variation is due to the trades, nature of jobs, it is the gender discrimination, income variation was also compared in the same groups. There seems some association between the nature of job and gender of the respondents. Of the total 982 employed number, self employed proportion is 18.0% whereas the corresponding proportion of female is significantly lower than this figure (13.4%). Unlike this nature of job, there is no significant difference between the type of job (full time/part time) between sex. The proportion of female graduates involved in full time job is 86.3% against the proportion in total employment 85.7%. Table 2.25 represents the gender wise earning level.

Table 2.25: Gender of the Respondents

SN	Gender of the respondents	Mean	N	Std. Deviation
1	Male	19100.71	396	13432.485
2	Female	12791.89	418	7897.160
	Total	15861.05	814	11384.502

If we compare the trade wise monthly income of respondents against gender, the monthly income of female is found consistently lower than their male counterparts in all trades. In the

engineering trades, when male graduates are earning Rs. 19776.36, females are earning only Rs. 14785.71. The corresponding monthly income level of male and female graduates are Rs. 17,116, Rs. 11,907 and Rs. 23,605, Rs. 21,890 respectively of Health Trade and Engineering Trades.

Table 2.26: Income Level by Gender and sector

SN	Trade wise distribution	Gender of the respondents	Mean	N	Std. Deviation
1	Engineering Trade	Male	19776.36	110	12553.379
		Female	14785.71	14	6091.338
		Total	19212.90	124	12086.645
2	Health Trade	Male	17116.67	210	14058.189
		Female	11907.30	371	7215.654
		Total	13790.21	581	10521.617
3	Agriculture Trade	Male	23605.03	76	11758.362
		Female	21890.91	33	9971.063
		Total	23086.07	109	11229.320

### 2.3.5 Income Comparison Among Trades

Graduates monthly income is also compared among the three different trades-Engineering Trade, Health Trade and Agriculture Trade. In the trade wise income comparison, The income level of graduates of Agriculture Trade is obtained highest (Rs. 23,086) and Health Trade is obtained lowest (Rs. 13790) among the three groups. The income variation across and within trades is more or less similar which is 12086, 10561 and 11229 respectively among three trade groups. The detail figure is depicted in the Table 27.

Table 2.27: Income Comparison among Trade Groups.

SN	Trade wise distribution	Average Income	Number	Std. Deviation
1	Engineering Trade	19212.90	124	12086.645
2	Health Trade	13790.21	581	10521.617
3	Agriculture Trade	23086.07	109	11229.320
4	Total	15861.05	814	11384.502

### 2.3.6 Perception Regarding the TVET Programs and Graduates

The positive feeling about a job is generally considered as the job satisfaction. More specifically compensation and benefits, supervision, communication, team work, work environment etc are the major components falling under the job satisfaction.

In response to the question whether they were satisfied with their current job, out of 820 respondents 613 (74.8 percent) graduates informed that they were satisfied with their current job. 207 (25.2 percent) showed their dissatisfaction with the job they had. Some of the graduates shared that because they were not getting enough salary, especially in private sector, they are not satisfied with their job. Table 2.28 depicts frequency and percent of graduates' job satisfaction.

Table 2.28: Job satisfaction of graduates

S.N.	Satisfaction Status	Frequency	Valid Percent
1	Satisfied	613	74.8
2	Not Satisfied	207	25.2
3	Total	820	100.0
	Non respondents	162	

Source: Field Data, CTEVT, 2015/16

While analyzing about the reason of dissatisfaction, the respondents answer was compared against their income level conducting the statistical test of Independent Sample t-test. The mean difference in income between the graduates who are satisfied and not satisfied from their present jobs is obtained 4233 which is statistically significant at 99% confidence level. The table 29 depicts the supplementary statistics of independent sample t-test.

Table: 2.29 Independent Samples Test- Monthly Income Vs Satisfaction Level

Group Statistics					
	Are you satisfied with this job	N	Mean	Std. Deviation	Std. Error Mean
Monthly Income in the Present Job	Satisfied	585	16618.96	11341.018	468.893
	Not Satisfied	177	12385.88	10300.313	774.219

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	3.863	.050	4.442	760	.000	4233.085	952.962	2362.334	6103.836
Equal variances not assumed			4.677	315.978	.000	4233.085	905.139	2452.225	6013.945

## 2.4 Proficiency and satisfaction level of graduates

In order to measure the level of satisfaction with the TVET program provided, five statements were used as a single global rating approach. The traced graduates were asked to rate a number between 1 and 5 where there were the answers from “strongly disagreed” to “strongly agreed”. The following Table 2.30 describes the satisfaction level of the TVET graduates about their satisfaction with the training provided through ‘Mean’ and ‘Standard Deviation’.

The graduates were satisfied to some extent in regard to easily changing employment within his/her area of specialization. The statistic (mean=3.58 and SD 1.006) shows (Table 2.30) that they were clustered near to “agree”. Since SD is slightly more than one it implies that there was small variation or dispersion exists from the average or mean. Another important thing is that the response rate for this particular statement is 53.0%. Since most of the given statements are either relevant to be answered by presently employed graduates or had employment at past after graduation. This is also the question directly answered by respondents and not relevant to be collected from secondary sources. It is therefore only 1065 respondents were found relevant to answer.

Table 2.30: Level of satisfaction with the skill provided

S N	Statements	N	Mean	Std. Deviation
1	My training has adequately prepared me for work	1179	3.944	.89586
2	My employer is satisfied with my level of knowledge and skill	1047	3.994	.82386
3	It is easy for me to get a job because of level of knowledge and skill learned in the institute	1047	3.750	.99806
4	I find myself to be very effective in my current job	1006	3.854	.89599
5	I can easily change employment within my area of specialization	1065	3.582	1.00612
6	I am being able to perform the skills required by the job	1075	4.031	.78447
7	I am satisfied with my current job	1012	3.707	1.02463
8	I am fully satisfied with the TVET program I had	1199	3.975	.90551
9	Valid N (listwise)	917		

Source: Field Data, CTEVT, 2015/16

The responses over other remaining six statements (Table 2.30) also indicates the more or less same phenomenon like above analysis of statement one. The mean of all statements is near to 4. It indicates that the participant graduates were clustered near to the “agree” region. The above analysis shows that the satisfaction level of the graduates with the TVET program provided is found acceptable. Specifically the graduates under the lab technician or lab assistant program were not found confidence in obtained skill. However, there are many rooms for the improvement. During field study also, it was found that the graduates of lab assistant/technician program are lacking skills due to inadequate practical opportunities. Graduates revealed that the practical opportunity is inadequate in all programs of the private institutes.

The graduates were satisfied in regard to being able to perform the skills required by the job. The statistic (mean=4.0 and SD .78) shows (table 2.30) were clustered to “agree”. The response rate of this particular statement is 53.3 %. Here again, it means out of 2009 sampled graduates only 1075 graduates responded for this. Why the remaining graduates were not interested to rate this particular statement? It shows that there was the problem of confidence about the skill they obtained. Nonetheless, there is still room for improvement.

#### 2.4.1 Satisfaction Level of Employers Regarding the Graduate's Performance

Information about the satisfaction level of the employers’ on graduates’ job performance was also collected from the respective supervisors or employers of the wage-employed graduates. In this connection, they were asked to compare the performance of TEVT graduates with that of other technical staffs who were trained from training institutes other than CTEVT. Out of 35 employees, 16 (61.5 percent) of them reported that there is no significant differences between the job performances of the graduates trained at CTEVT institutions and other training institutions. Eight employers found TVET graduates perform better than other technical staffs, while only 2 out of 26 respondents found the performance of TVET graduates poor. It can be said that TVET graduates perform well in their job. Table 2.31 depicts responses of the employers regarding comparison of work performance.

Table 2.31 Work Performance Comparison between TVET Graduates and Other Technical staff

SN	Comparative Status	Frequency	Valid	Cumulative Percent
1	Poorer than TVET	2	7.7	7.7
2	No significant difference	16	61.5	69.2
3	Better than TVET	8	30.8	100.0
Total		26	100.0	

Source: Field Data, CTEVT, 2015/16

However, during the field visit, employers of the private training institutes shared that the graduates were lacking self confidence and practical skills. Opportunity for practicing skills was inadequate. Therefore, they were not confident to perform the work even if they got the job.

### 2.4.2 Need for additional training

The team wanted to know if the TVET graduates needed additional training in order to perform very well in their work, 80.0 percent of the interviewed employers agreed that the graduates need additional training, and only 20 percent informed that the graduates did not need additional training. Table 2.32 represents the response of the employers in regard to the question whether TVET graduates need additional training.

Table 2.32: Employers' response on need of additional training

SN	Response	Frequency	Percent	Cumulative Percent	Remarks
1	Yes	28	80.0	80.0	
2	No	7	20.0	100.0	
3	Total	35	100.0		

Source: Field Data, CTEVT, 2015/16

When asked what additional training would help the TVET graduates to perform according to the standard of the employers, they suggested that Instead of three years programs, diploma programmes should be four years with one additional year of workplace training packages (OJT). Employers also reflected that even the TSLC graduates having the provision of OJT are not getting adequate opportunities of working in the related job during OJT. Additionally, some soft skills training packages should be incorporated, and also in-depth practical skill should be provided including more advancement in technical field. Employers of health and social work sector wanted TVET program to incorporate Skill Birth Attendant (SBA) and Family Planning training in ANM Curricula, as well as Basic computer training in each TVET programs. They also suggested the TEVT graduates to be trained additionally to handle emergency cases and some knowledge on OT.

Employers of lab technicians wanted TVET graduates to have Bio medical training and training for culture test in Lab assistant/technician Courses. They also wanted the TVET graduates to be acquainted with new and emerging technologies and have some knowledge of pharmacies in every course.

### 2.4.3 Willingness of employers' to hire TVET graduates

The study team wanted to know if the employers were willing to hire TVET graduates in future too. Table 2.32 shows that thirty three (94.3 percent) out of 35 employers were willing to hire and responded 'Yes', and the rest 2 (5.7 percent) said 'No' and were not willing .

Table 2.32: Responses of employers on hiring TVT graduates

SN	Response	Frequency	Percent	Cumulative Percent	Remarks
1	Yes	33	94.3	94.3	
2	No	2	5.7	100.0	
3	Total	35	100.0		

Source: Field Data, CTEVT, 2015/16

When asked about the reason for not being interested to hire TVET graduates, one employer blamed TVET program to be of low quality. Although one particular employer pointed out TVET program to be of low quality, the following data presented on Table 2.33 in Mean and Standard Deviation, reflects the employers' impression on the graduates' work performance. Employers were asked to rate the graduate employees' work performance using 5 point rating scale from 1 = strongly disagree; 2= disagree; 3= undecided; 4= agree; to 5= strongly agree.

Table 2.33: Employers' rating on TVET graduates

Statements On work performance	N	Mean	Std. Deviation
The graduates have adequate theoretical knowledge	35	3.97	.707
The graduates have highly developed practical trade skills	35	3.66	.906
The graduates are willing and eager to learn	35	3.94	.684
The graduates are hard working and committed	35	3.91	.981
The graduates are able to work independently	35	3.69	1.132
The overall performance of graduates is satisfactory	35	4.14	.733
The graduates have adequate job specific skills	35	3.83	.785
The graduates have good Leadership Skills	35	3.60	.976
The graduates have required individual and teamwork skills	35	4.14	.692
The graduates have required individual and team work skill	35	3.86	.810
Valid N (listwise)	35		

Source: Field Data, CTEVT, 2015/16

In order to rate the TVET program graduates' work performance; five statements were used as a single global rating approach. The employers were asked to rate a number between 1 and 5 where there were the answers from "strongly disagreed" to "strongly agreed". The above Table 2.33 describes the rating of the TVET graduates about their work performance through 'Mean' and 'Standard Deviation'.

The employers were satisfied to some extent with the overall performance of graduates, and the graduates having required individual and teamwork skills. The statistics (mean=4.14 and SD .733) and (mean4.14 and SD= .692) show (Table 2.33) that they were clustered to "agree". Although the rating falls in the cluster of agree, this shows that the employers do not have confidence to fully agree with the statement. This implies that the training providers are required to put more efforts to improve proper skill for their graduates.

The responses over other remaining eight statements (Table 2.33) also indicate the more or less same phenomenon like above analysis of two statements. The mean of all statements is near to 4. It indicates that the participant graduates were clustered near to the “agree” region. The above analysis shows that the employer’ satisfaction level with the graduates’ work performance is found acceptable. However, there are many rooms for the improvement.

#### 2.4.4 Issues Related to the Quality and Relevance of TVET Programs

Customers’ satisfaction is the essential indicator of quality. Therefore, graduates’ level of satisfaction determines the quality of the training. The traced graduates were asked to rate the quality of the TVET program they received using five descriptive qualifier such as Excellent; Very good; Good; Poor; and Very Poor. Out of 2009 total traced graduates, 680 graduates informed that the quality of the TVET they received was good, while 630 graduates found the TVET program very good. Similarly, 312 graduates found the TVET program to be excellent. The following Table 2.34 shows the grading of quality of TVET program by the graduates.

Table 2.34: Grading of quality of TVET program

SN	Grading on Quality	Frequency	Percent of Total Cases	Percent of Valid Cases
1	Excellent	312	15.5	18.8
2	Very Good	630	31.4	38.0
3	Good	680	33.8	41.0
4	Poor	33	1.6	2.0
5	Very Poor	5	.2	.3
6	Total	1660	82.6	100.0
7	Non Responded	349	17.4	
	Total	2009	100.0	

Source: Field Data, CTEVT, 2015/16

Although the graduates rated the quality of TVET program as ‘very good’ and ‘excellent’, during field visit, in case of lab assistant/lab technician program, it was found that the graduates are lacking skills due to inadequate practical opportunities. Graduates revealed that the practical opportunity is inadequate in all programs of the private institutes. If one TVET graduate lacks practical skills, how can we expect the training to be excellent or very good?

Besides this, the graduates were requested to appraise the TVET program they participated based on quality components such as content knowledge, opportunities for practical skill, and Curriculum or content; laboratory practice, instructional technique, industrial attachment, on the job experience etc. They were to rate the extent to which the following components of TVET Program should be improved to address the need of the job market. The respondents graduates of the study assessed the quality of training delivered by training institutions by expressing their views about various quality components of TVET program using 3 point rating scale ( 3 = 'substantial improvement is necessary'; 2= 'some improvement was necessary'; and 1= 'No improvement is necessary'). The following Table 2.35 shows the graduates’ perception expressed through number of response and percent.

Table 2.35: Graduates' perception on quality of TEVT programs

SN	Statement	Substantial Improvement		Total	
		N	Percent	N	
1	Content Knowledge (Theory) in related to TVET Program	271	16.78	1003	1615(100)
2	Opportunities for Practical Skills	376	23.22	989	1619(100)
3	Curriculum or Content	267	16.52	973	1616(100)
4	Language level and textbook	256	15.92	866	1608(100)
5	Workshop/Lab equipment	385	23.91	866	1610(100)
6	Instructional delivery methods	276	17.16	847	1608(100)
7	Instructors' Level of Theoretical Knowledge	229	14.29	814	1602(100)
8	Instructors' Commitments for the quality delivery	253	15.82	850	1599(100)
9	Instructors' competency for the quality delivery of the program	247	15.40	879	1604(100)
10	Teaching/ Learning Environment	295	18.22	789	1619(100)
11	Industrial attachment	370	23.26	842	1591(100)
12	Total	3225	18.23	9718	17691(100)

Source: Field Data, CTEVT, 2015/16

Although the graduates were asked to rate the quality of TVET program using 3 points rating scale, they have expressed their views that the given components of TVET program need substantial improvement in order to meet the need of the employers or job market. Referring to the Table 2.35 above, 385 graduates have expressed that 'workshop/lab equipment' need to be improved substantially. The other components that the large numbers of graduates have expressed their view for substantial improvement are: opportunities for practical skills (376 numbers of graduates) and industrial attachment (370 numbers of graduates).

Table 2.36: Graduates' perception on relevancy of TVET program

S.N.	Grading on Relevancy	Frequency	Percent of Total Cases	Percent of Valid Cases
1	Very Relevant	240	11.9	14.7
2	Relevant	1323	65.9	81.3
3	Not Much Relevant	54	2.7	3.3
4	Completely Irreverent	11	.5	.7
	<b>Total</b>	<b>1628</b>	<b>81.0</b>	<b>100.0</b>
6	Non Responded	381	19.0	
	<b>Total</b>	<b>2009</b>	<b>100.0</b>	

Source: Field Data, CTEVT, 2015/16

Similarly, the traced graduates were asked to assess the curriculum of TVET program that they studied in terms of relevancy to the job using four grading points as ‘very relevant’; ‘relevant’; ‘not much relevant’; and ‘completely irrelevant’. Graduates’ perception is presented in the following Table 2.36 expressed through Frequency, Percent of Total Cases, and Percent of Valid Cases.

During the FGI with employers, most of them mentioned that the existing TVET curricula are outdated with dominance of theoretical components. Therefore, regular revision and updating of the curricula is very necessary to make it relevant, practical based with latest development of labour market. Some respondent employers also shared that the existing course is also inadequate for expected performance.

## 2.5 How Much Training is Applicable to the Graduates

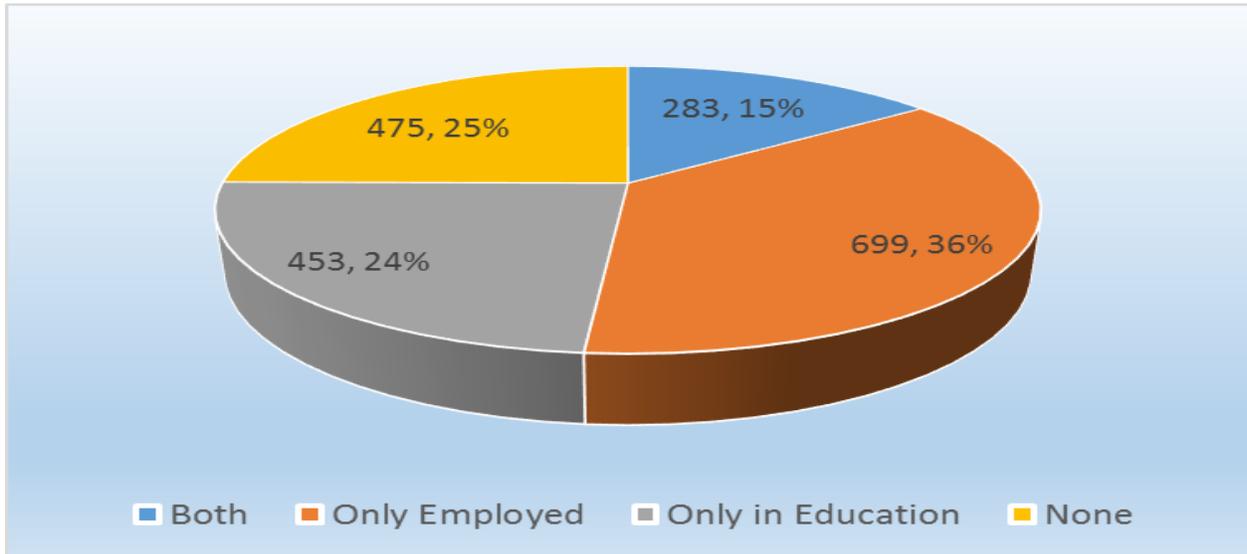
Presently, CTEVT not only prepares workforce focusing on the need of immediate employment market but also conducts academic programs heading towards higher degree. Most of the diploma level programs have dual purpose of addressing either labour market needs or preparing students to enroll in to undergraduates course of universities. In this line of reasoning, NEET ( People Neither in Education and Training nor in Employment) rate is more appropriate to measure the relevancy of the TVET programs than the rate of employment. Since, TVET programs are considered applicable to those graduates who are either employed in study related jobs or enrolled in related subjects of universities programs. Opposite may be the case for remaining graduates.

In this way, this study explored that TVET programs are supposed to be beneficial to almost 74.1% of graduates however rest 25.9% graduates are found no more directly benefited by TVET programs. This proportion varies as per the trade and programs. The NEET Rate is highest in Health Trade and lowest in Engineering Trade. In engineering trade, 81.5% of graduates are either found employed or engaged in further study, the corresponding proportion of health and agriculture trade is 72.4% and 25.9% respectively. The detail of the program wise NEET Rate is depicted in annex III.

Table 2.37: NEET Rate by Trade

SN		NEET Rate		Total
		Either Employed or in Education	Neither Employed nor in Education	
1	Engineering Trade	273 (81.5%)	62(18.5%)	335 (100%)
2	Health Trade	1083 (72.4%)	412(27.6%)	1495 (100%)
3	Agriculture Trade	132(73.7%)	47(26.3%)	179 (100%)
	Total	1488(74.1)	521(25.9)	2009 (100%)

Chart 2.2 Graduates Engagement Status



Similarly, respondent's status is also analyzed as per their education and employment status. Of these 2009 respondents, 36 % respondents were only employed but not in study. Unlike, 24% respondents are only in study but not in employment. Similarly, 15% respondents are involving both in employment and study simultaneously. And, almost 25% of graduates are totally out of education and employment. The pie Chart 2.2 presents detail picture regarding this matter.

## **SECTION III: MAJOR FINDINGS, CONCLUSION AND RECOMMENDATIONS**

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The findings of this tracer study are based on quantitative data collected from the selected 5 provinces and the qualitative information generated from field study based on survey, observation, FGD, interaction with the stakeholders, and telephone conversation with the graduates where direct contact was not possible. Attempts are made to organize the findings with respect to the study objectives. These findings are enriched by both quantitative and qualitative data. This chapter on findings is expected to provide insight on employment status of the graduates and the effectiveness of TVET program in terms of quality, relevance and stakeholders' satisfaction of graduates work performance.

The findings of the tracer study in this chapter are organized in the following thematic sections:

(a) Employment status of the TVET graduates, (b) Satisfaction Level of Employers Regarding the Graduate's Performance, (c) Characteristics, Expectations and Aspirations of Graduates; (d) Quality and Relevance of TVET Programs. Based on the findings presented in these sections, final section consisting of conclusion and recommendations is presented.

### **3.1 Employment status of the TVET graduates**

3.1.1 Out of 2009 traced TVET graduates, 982 (49%) were employed, 928 (46%) were unemployed, and the rest 99 (5%) were working as volunteers. The gap between the percentage of employed and unemployed graduates is not that big. At least 70% employment of the graduates is tolerable in TVET program. But the tracer study showed only 49% employment of TVET graduates. This shows that either the curriculum is not need based, or the coordination or connection between the training institutions and potential employers is lacking or placement support is missing.

3.1.2. Health related program graduates were involved as volunteers without any salary for six months to one year. Most unfortunate matter for these graduates is there is no job guarantee after completing the terms and conditions of volunteer service. In a way, they can also be regarded as unemployed.

3.1.3 More graduates of TSLC level program were unemployed (441 or 49 %) than employed (422 or 46.9 %), especially in Community Medical Assistant, Auxiliary Nurse Midwifery (ANM), Lab Technology, Civil engineering and Survey programs. In case of ANM and CMA, Employers prefer to give job to staff nurse from Diploma level program, which clearly indicates that ANM and CMA are being phased out by Staff Nurse. In such situation, TSLC graduates are losing job opportunities. If this situation continues, continuing TSLC level TVET program is not justifiable.

3.1.4 The employment status of graduates of Survey course of TSLC level program is very distressing. While the number of employed graduates is 19, the number of unemployed graduates is 49. Here also, the graduates of Survey trade are not getting job. This means, either there is no

job in the job market for TSLC level graduates or the quality of the program does not match the demand of the job. If such situation of unemployment for the graduates of Survey trade is valid for other batches too, it will not be rational to continue this course.

3.1.5 The employment status of Diploma level graduates is also not that satisfactory. Although 50.5 % of total traced graduates were employed, 43.9 % were unemployed. The difference between employed and unemployed is insignificant.

3.1.6 In Civil Engineering and Computer engineering trades of Diploma level program also the number of unemployed graduates is greater (90 and 10) than employed graduates (38 and 5 respectively). This means graduates of these trades are not getting job. Either there is less job opportunities in the job market or they are not well-trained to match the demand of the market or there is lack of employment support program.

3.1.7 The graduates, especially graduates of VJTA program, who are involved in self employment, are satisfied with their work. There is much room for self employment in this trade. Similarly, those graduates of Lab technology program who are also involved in self-employment or part time job are quite content with their job. They can take more than one work at a time in their own discretion. TVET graduates need to be encouraged for self-employment.

3.1.8 Soft skills were instrumental for getting employment or to retain in the employment, especially communication skill, honesty/positive attitude toward work and organization, and interpersonal skills are very crucial for retaining in the job, especially in private sector.

3.1.9 Although the graduates employed in formal sector earn less than the graduates in informal sector or self-employment or in foreign employment; they are quite satisfied with their income. Graduates who are in self-employment earn better than graduates who are in wage employment in both formal and informal sector. They should be encouraged to go for self-employment.

3.1.10 Placement support to the graduates is crucial for promoting employment. It works better if the Training Institutes establish functional placement and counseling unit and support graduates linking with job market.

## **3.2 Satisfaction Level of Employers Regarding the Graduate's Performance**

3.2.1 The performance level of the TVET graduates at the work place is to the acceptable level of the employers. However, there is always space for doing better.

3.2.2 Employers are willing to hire TVET graduates if they are provided additional knowledge and skills to perform according to the standard of the employers. In case of Diploma Course, additional workplace training packages (OJT), some soft skills training packages and in-depth knowledge and practical skill would be very much helpful for both the employers and the graduates. Trade specific subjects such as Skill Birth Attendant (SBA) and Family Planning training in ANM Curricula, and additional skills such as handling emergency cases and some knowledge on OT would be advantageous to the TVET students. Bio medical training and

training for culture test in Lab assistant/technician Courses would be beneficial for graduates of Lab Technology/ Assistant program for employment.

3.2.2 TSLC graduates, especially in health sector are not the preference of the employers over Diploma level graduates, because they do not have adequate skills to handle the patients. Practical opportunity is inadequate in both Diploma and TSLC level program. Therefore, the graduates are not confident to perform the work even if they get the job. Hence, despite acceptance of job performance level of the graduates by the employers, the graduates need to improve their skills.

### **3.3 Characteristics, Expectations and Aspirations of Graduates**

3.3.1 Among those who were unemployed (928 graduates), 458 (22.8%) graduates were still hoping to get job. That's why, they were searching for job. The other 227 (11.3%) decided to pursue higher education and progress in their academic level so that they can get higher level job. This shows that the TVET graduates have choices; either to go into job market having skill to perform well in the job or go in for higher education.

3.3.2 If the employers prefer to take Diploma level graduates than TSLC level graduates, what would TSLC graduates expect from the TVET program? It is not that possible for all the TSLC graduates to go in for higher education too. If TSLC graduates continue to lose job opportunities, some alternatives should be thought for them.

### **3.4 Quality and Relevance of TVET Programs**

3.4.1 It was found that the graduates are lacking skills due to inadequate practical opportunities. Time for practicing skill is inadequate in all programs of the private institutes. If one TVET graduate lacks practical skills, how can we expect the training to be excellent or very good?

3.4.2 The unemployed graduates have reported that there are no job opportunities in the job market. Such expressions indicate issue of relevancy of TVET program with the job market. The statements suggest that either the curriculum of TVET program is not need based, or the linkage between industries and training institutes is missing or it could be both reasons. It is time that with changed context, CTEVT should think about changing its programs so that it can prepare the human resource according to the skill demand of the job market.

### **3.5 Conclusion**

With the broader objectives as to make significant contribution on employment creation or poverty reduction of country either by preparing graduates as per the employment needs of country or making them capable enough to create new employment (self-employment), CTEVT has been running long term and short term training programs of vocational nature under the trade of Health, Agriculture and Construction. Therefore, in order to make CTEVT well informed about the employment status of their graduates as well as needs of the labour market this tracer study was conducted with a view to trace the graduates to find out the employment status as well as their income and performance level at workplace.

TVET program has been contributing to the employment and overall economic growth of the country and needs to be further strengthened. However, the employment percentage is comparatively low. Therefore, there is a high need to strengthen the linkage with the industry and job market and also review the programs to address the changing market needs.

Practical opportunities for the participants are inadequate especially in Private Institutes as specified in the curriculum. Effective monitoring mechanism has to be established and implemented to ensure the effective implementation of the curriculum.

Overall income and earning of employed graduates was satisfactory. Not only the graduates but the employers are also happy and satisfied with their employees' job performance, although some additional skills and knowledge are required for the TVET graduates. Hence, it can be concluded that TVET program of CTEVT has helped to improve the economic life of the targeted group to some extent.

### **3.6 Recommendations**

Based on data analysis and findings, following recommendations are made:

- Labour market studies are recommended to conduct in a Periodic manner to identify the changing needs of the labour market. Consequently, it is recommended to review Curricula to cater the market demand. It is recommended to ensure that the soft skills are incorporated while revising and developing the curricula of each program and be implemented properly.
- It is recommended to incorporate basic computer skills in the curriculum of each program.
- Recommended to ensure effective monitoring is carried out to ensure that the curriculum is fully implemented. Specially to ensure adequate practical opportunities for the students as envisaged by the curriculum. It was found lacking specially in private institutes.
- Recommended to carry out the tracing of the graduates by each training institute in a regular basis to update the market demand and course updating.
- Linkage between institutions and industries or employers should be strengthened so that the TEVT program is offered according to the human resource demand of the employers.
- It is recommended to establish functional placement and counseling unit or any other such mechanism in each training institute and in the CTEVT as well to support graduates linking with job market.
- It is recommended for assessing by subject experts regarding the necessity of on the job training (work place practice) provision for diploma programs. For the existing TSLC program with OJT provision, it is also recommended to ensure that the graduates get opportunity of working in the related job during the OJT. Developing a roaster of potential organizations for OJT placement in each program would be instrumental.

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## **ANNEXES :**

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## Annex I: Location and number of employers interviewed

SN	Address of Employers	Frequency	Percent	Cumulative Percent	Remarks
1	Kathmandu Valley	4	11.4	11.4	
2	Pokhara, Kaski	7	20.0	31.4	
3	Bharatpur, Chitwan	5	14.3	45.7	
4	Butwal, Rupandehi	2	5.7	51.4	
5	Dhangadi, Kailali	1	2.9	54.3	
6	Amarbhumi, Surkhet	1	2.9	57.1	
7	Banepa, Kavrepalanchok	1	2.9	60.0	
8	Bhairahawa, Rupandehi	1	2.9	62.9	
9	Hetauda, Makwanpur	4	11.5	74.3	
10	Khalanga, Jumla	3	8.6	82.9	
11	Lamki, Kailali	1	2.9	85.7	
12	Biratnagar, Morang	1	2.9	88.6	
13	Tansen, Palpa	1	2.9	91.4	
14	Sandhikharka, Arghakhanchi	1	2.9	94.3	
15	Tamgash, Gulmi	2	5.7	100.0	
16	Total	35	100.0		

## Annex II: Graduates either in education or employment vs. neither in education nor employment

SN	Name of Program	EE Rate		Total
		Either in Emp. or in Education	Neither in Emp. nor in Education	
1	Diploma in Civil Engineering	105 (82.0)	23(18.0)	128(100)
2	Diploma in Computer	11(73.3)	4(26.7)	15 (100)
3	Diploma in Electrical	33(89.2)	4(10.8)	37(100)
4	Proficiency Certificate in	242 (75.4)	79(24.6)	321(100)
5	Diploma in General Medicine	146(79.8)	37(20.2)	183(100)
6	Diploma in Pharmacy	79(73.8)	28(26.2)	107(100)
7	I Sc. Agriculture in Plant Science	77(75.5)	25(24.5)	102(100)
8	Certificate in Medical Lab	122(56.2)	95(43.8)	217(100)
9	Community Medical Assistant	168(66.9)	83(33.1)	251(100)
10	Auxiliary Nurse Midwifery	192(73.6)	69(26.4)	261(100)
11	TSLC in Lab Technology	134(86.5)	21(13.5)	155(100)
12	Veterinary Junior Technical	55(71.4)	22(28.6)	77(100)
13	TSLC in Civil Engineering	43(68.3)	20(31.7)	63(100)
14	TSLC in Electrical Engineering	11(64.7)	6(35.3)	17(100)
15	TSLC in Survey Engineering	64(94.1)	4(5.9)	68(100)
16	TSLC in Computer Engineering	6(85.7)	1(14.3)	7(100)
Total		1488(74.1)	521(25.9)	2009(100)

Source: Field Data, CTEVT, 2015/16

## Annex III: Graduates either in education or employment vs. neither in education nor employment by level of programs

SN	Level	NEET		Total
		Either Employed or in Education	Neither Employed nor in Education	
1	Diploma and PCL Level	815 (73.4)	295(26.6)	1110
2	TSLC Level	673(74.9)	226(25.1)	899
3	Total	1488(74.1)	521(25.9)	2009

Source: Field Data, CTEVT, 2015/16

## Annex IV Questionnaire for Graduates

### Council for Technical Education and Vocational Training Tracer Study of Graduates of TSLC and Diploma Level Program under CTEVT *Questionnaire for Graduates*

#### Graduate Questionnaire

**Dear Graduates,**

You are kindly requested to spare some of few minutes to help to complete the survey regarding the Tracer study of graduates of TSLC / Diploma level programs under CTEVT. The data obtained will guide CTEVT to effectively formulate the training plans as well as making the training programs relevant to the Labour market. All information obtained will be kept with utmost confidentiality.

*(Note: Get the personal information only if the interviewee is willing to provide it)*

#### Source of Information Collection:

1. Face to Face interview
2. Telephonic Interview
3. Response from mail
4. If others, Mention.....

*In case the graduate is unavailable and any person who knows about the graduate can provide some information, please note the available information on the blank space of last page.*

#### SECTION A: BIOGRAPHICAL DATA AND SOCIOECONOMIC STATUS

1. Name of interviewee \_\_\_\_\_
2. Address: VDC/Municipality \_\_\_\_\_ District \_\_\_\_\_  
Telephone \_\_\_\_\_ Email: \_\_\_\_\_
3. Age \_\_\_\_\_ Gender \_\_\_\_\_
4. Caste/ Ethnic group:
  1. Hill Brahmin/Chhetri
  2. Terai Brahmin/Chhetri
  3. Hill Dalit
  4. Terai Dalit
  5. Hill Janajati
  6. Terai Janajati
  6. If Others,  
mention.....
5. Which of the followings best describes your annual family income range?
  - 1) Less than Rs.25, 000
  - 2) Rs.25, 001 - Rs.50, 000
  - 3) Rs.50, 001- Rs.100, 000
  - 4) More than Rs.100, 000



4.	Language level and textbook				
5.	Workshop/Lab equipment				
6.	Instructional delivery methods				
7.	Instructor's level of theoretical knowledge				
8.	Instructor's commitment for the quality delivery				
9.	Instructor's competency for the quality delivery of the programme				
10.	Teaching/learning environment				
11.	Industrial attachments (collaboration with industry)				

13. In the following box, some statements related to the adequacy of the market oriented TVET programmes are given. Please put your opinion for every statements using tick (✓) inside the related small box using rating scale:

1 = strongly disagree; 2 = disagree; 3 = Neutral; 4 = agree; 5 = strongly agree.

S.N.	Statements	1	2	3	4	5	NA
1	My training has adequately prepared me for work						
2	My employer is satisfied with my level of knowledge and skill						
3	It was easy for me to get a job because of the level of knowledge and skill learned in the institute						
4	I find myself to be very effective in my current job						
5	I can easily change employment within my area of specialization						
6	I am being able to perform the skills required by the job						
7	I am satisfied with my current job						
8	I am fully satisfied with the TVET program I had						

NA: This is only for unemployed graduates.

#### SECTION D: TRANSITION PERIOD TO EMPLOYMENT

14. Which of the followings is your current employment status?

1. Employed
2. Unemployed (**Jump to Question 26**)
3. Engaged as a volunteer

**If you are employed, give the following information.**

15. Your employment is:

1. Full time
2. Part Time (less than 40 hrs/week)

16. What type of employment are you engaged in?

1. Self- employment
2. Wage employment in formal sector
3. Wage employment in informal sector
4. Foreign employment

17. Is this job related to the TVET Program you have completed?

1. Yes
2. No

If no, why did you take the job different from the job area in which you were trained?(Multiple response is permitted)

1. Did not get job in training related area
2. Lack of career progression
3. Poor remuneration
4. Poor working conditions
5. If others, mention .....

18. What is your monthly earning in the present job?

(Mention in Nepalese Rupees) Rs. ....

19. If you are employed in formal sector, please provide the following information

1. Name of employer organization:
2. Address and phone number:

20. How long did it take to get the employment after completing the TVET programme?

1. Mention the duration ..... Years .....Months
2. Immediately after completion of the training

21. What did you do after graduation until you were employed?

1. Searching for employment
2. Engaged in further study/Training
3. Engaged in own business
4. Others (If others, mention the activities.....)

22. How did you get this job?

1. Door to door (Job hunting)
2. Media advertisement and notice
3. Technical Training Provider (TTP)/Trainer helped
4. Selected from competition
5. Family relationship
6. Personal networking
7. If others, mention.....

23. Did any other soft skills were instrumental to get the present job?

1. Yes
2. No

If yes, which of the soft skills becomes more instrumental? (Multiple response is permitted)

1. English language
2. Communication skills
3. Interpersonal skills
4. Honesty/attitude
5. If others, mention.....

24. Are you satisfied with this job?

1. Yes
2. No ,



30. Please list out some suggestions to improve the quality of the TVET programs for better employability and efficiency.

.....  
.....  
.....

**THANK YOU FOR YOUR TIME AND COOPERATION**

## Annex V : Questionnaire for Employers

### Council for Technical Education and Vocational Training

Sanothimi, Bhaktapur

*Tracer Study of Graduates of Diploma and TSLC Program under CTEVT*

*Questionnaire for Employer*

#### **Dear Sir/Madam**

You are kindly requested to spare some of few minutes to help complete a survey. All the information will be kept confidential and will be used only for statistical purposes. The survey is intended to assist CTEVT for preparing students for the work environment and will better serve your company and industry needs. If you have any questions, please call 01-5639451.

Thank you for taking the time to fill out this questionnaire. Once again, we assure you that all information obtained will be used with utmost confidentiality.

-Council for Technical Education and Vocational Training

*(Use a tick (✓) to indicate your response where appropriate)*

#### **Section A: Profile of Employer**

1. Name of Employer/Organization: .....
2. Address: .....
3. Phone Number/ Mobile Number: .....
4. Email address: .....
5. Name of interviewee: .....
6. Date of interview (dd/mm/yy): .....
7. Program of traced graduate: .....
8. Economic sub-sector of the enterprises:
  1. Agriculture
  2. Fishing (fisheries/ fish-keeping)
  3. Mining & Quarrying
  4. Manufacturing
  5. Electricity, Gas and Water
  6. Construction
  7. Wholesale and Retail trade
  8. Hotel and Restaurant
  9. Transport, Storage and Communication
  10. Financial Intermediation
  11. Real estate, renting and business activities
  12. Public administration and defense
  13. Education
  14. Health and social work
  15. Other community, social and personal service

**Section B: Nature of Employer**

1 To which of the following sector does your business/company belong? *(Please choose only one)?*

- 1. Government                      2. Non-government                      3. Private
- 4. If other, mention .....

2. Which is the nature of your company, please indicate?

- 1. Formal    2. Informal

3. How many employees are presently working in your office/enterprise?

No. of employees.....

4. How many TVET graduates are presently employed in your organization?

TVET Program	Number of Graduates Employed
Diploma	
TSLC	
Vocational	

5. How do you recruit these people?

- 1 Media Advertisements or public notice
- 2 Personal contact to prospective employees
- 3 By the help of recruitment agencies
- 4 Direct contact to the TEVT institutions
- 5 Other (please specify).....

6. Have you also recruited technical employees other than from TVET graduates?

- 1. Yes    2. No

If yes, how have you found their performance level?

- 1. Poorer than TVET Graduates    2. No significant difference
- 3. Better than TVET Graduates

7. Do you think that the TVET graduates need additional training in their respective technical area in order to meet your company's/business's needs?

- 1. Yes    2. No

If yes, please specify the specific requirements of your company?

- 1. ....

- 2. ....
- 3. ....
- 4. ....

17. Would you be interested in hiring more graduates from CTEVT program in the future?

- 1. Yes
- 2. No

18. If 'No' why? please specify,

.....

.....

.....

**Section C: Perception of Employer**

1. How do you rate the following statements on the graduates of CTEVT program? (Scales of answer ranges from: 1 = strongly disagree; 2= disagree; 3= undecided; 4= agree; to 5 = strongly agree)

1	2	3	4	5	Statements
					The graduates have adequate theoretical technical knowledge
					The graduates have highly developed practical trade skills
					The graduates are willing and eager to learn
					The graduates are hard-working and committed
					The graduates are able to work independently
					The overall performance of the graduates is satisfactory
					The graduates have adequate job specific skills
					The graduates have adequate problem solving skills
					The graduates have required individual and teamwork skills
					The graduates have good leadership skills

2. To what extent does/do your employee/s require knowledge and skills in the following fields? (Scales of answer ranges between: 1 = Not at all; 2= barely; 3= to some extent; 4= to high extent; 5 = To very high extent)

Rating Scale					Area/fields
1	2	3	4	5	
					Practical skills
					Theoretical knowledge
					Entrepreneurial skills (how to run a business and to treat customers, marketing)
					Other soft skills/work ethics (Communication, punctuality, team work etc.)

3. Do you have any suggestions for CTEVT so that its programs can be improved?

.....

.....

.....

.....

.....



**Thank you for your time and cooperation**