



A Report of Comparative Study from 2017-2020

on the

Current Situation of TVET Implementation and Policy Reform

Submitted by

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List of Abbreviations

ACC	Accreditation			
ADB	Asian Development Bank			
AITC	Agriculture Information and Training Center			
CBS	Central Bureau of statistics			
CDED	Curriculum Development and Equivalency Division (CTEVT)			
CEHRD	Center for Education and Human Resource Development			
CERID	Center for Educational Information Development			
CSSIPC	Cottage and Small Scale Industry Promotion Center			
CTEVT	Council for Technical Education and Vocational Training			
DACUM	Develop a Curriculum			
DCSI	Department of Cottage and Small Industries			
EC	European Commission			
ECO	Examination Controller Office			
ELMS	Employer Led Management Service			
EU	European Union			
FCAN	Federation of Contractors' Association Nepal			
FNCCI	Federation of Nepalese Chamber of Commerce and Industries			
FNCSI	Federation of Nepalese Chamber of Small Industries			
HAN	Hotel Association Nepal			
HR	Human Resources			
HRD	Human Resource Development			
ILO	International Labor Organization			
IOSS	Industrial Occupational Skills Standard			
KII	Key Informant's Interview			
LMI	Labor Market Information			
LMIS	Labor Market Information System			
MIS	Management Information System			
МоА	Ministry of Agriculture			
MoEST	Ministry of Education, Science and Technology			
MoLESS	Ministry of Labor, Employment and Social Security			
NATHM	National Academy of Tourism and Hotel Management			
NPC	National Planning Commission			
NOSS	National Occupational Skills standards			
NSCO	Nepali Standard Classification of Occupation			
NSTB	National Skill Testing Board			
NVQ	National Vocational Qualification			
NVQF	National Vocational Qualification Framework			
NVQS	National Vocational Qualification System			
OJT	On the Job Training			
OS	Occupational Standard			
PCC	Policy Coordination Committee			
PSU	Policy Support Unit			

RMA	Rapid Market Appraisal			
RPL	Recognition of Prior Learning			
SC	Steering Committee			
SDC	Swiss Development Cooperation			
SEE	Secondary Education Examination			
ТС	Technical Committee			
TD	Training Division			
TITI	Training Institute for Technical Instruction			
TNA	Training Needs Assessment			
TSP	Training Service Providers			
TVET	Technical Education and Vocational Training			
TVET	Technical Vocational Education and Training			
TVET TMIS	Technical Education and Vocational Training: Training			
	Management Information System			
TVET-PP	Technical Education and vocational Training Practical			
	Partnership			
UNDP	United Nations Development Program			
VSDA	Vocational Skills Development Academy			
WBL	Work Based Learning			

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Contents ACKNOWLEDGEMENT
Executive Summary
. Background Context
1.1 Introduction
1.2 Green Economy
2. The assignment
3. Purpose of the assignment
4. Objectives:
5. Scope of Work:
5. Required outcome:
7. Methodology:
3. Approaches:
9. Comparative analysis on each issue
9.1 TEVT Policy implementation:
9.2 National TEVT Strategy and Roadmap
9.3 Federalization
9.4 Basis of TVET institution establishment
9.5 Training on demand
9.6 Tracer Studies
9.7 Nepali Classification of Occupations
9.8 Occupations Standards (OS) and skills Training Standards:
9.9 Experiential Learning with Business and Industry
9.10 TEVT Quality Assurance
9.11 Private sector involvement
9.12 Current curricula development systems
9. 13 Recognition of Prior Learning (RPL)
9.14 Learning for credit and credit transfer45
9.15 Human Resources Development (HRD)

Contents

9.1	6 Capacity Development of TVET4	7
9.1	8 Effective Coordination Mechanism in TVET5	1
9.1	9 Challenges and opportunities of COVID 195	3
10. C	onclusion	5
Anne	x: Comparative Matrix of TVET Reviews from 2017 to 20205	6
9.1	TEVT Policy:	7
9.2	2 National TEVT Strategy and roadmap5	9
9.3	Federalization	0
9.4	Basis of TVET institution establishment	1
9.5	5 Training on demand	3
9.6	5 Tracer Studies	5
9.7	Nepali Classification of Occupations	6
9.8	Occupations Standards (OS) and skills Training Standards:6	7
9.9 E>	xperiential Learning with Business and Industry	8
9.1	.0 TEVT Quality Assurance	0
9.1	1 Private sector involvement	2
9.1	2 Current curricula development systems	3
9. 2	13 Recognition of Prior Learning (RPL)	5
9.1	4 Learning for credit and credit transfer7	6
9.1	.5 Human Resources Development (HRD)7	7
9.1	.6 Capacity Development of TVET7	8
9.1	7 Resource Management	9
9.1	.8 Effective Coordination Mechanism in TVET	0
19.	. Challenges and opportunities of COVID 198	2

Executive Summary

Dakchyata Project started its series of annual reviews in 2017 and continued it in each year onwards, for the purpose of analyzing the situation and identifying the issues associated with TVET policy implementation. On looking back on these years of systematic sector assessment, it was soon realized to be beneficial to all sector stakeholders to have a comparative analysis of these annual review reports and document, enabling to follow progress made in each year as compared to previous years. Information documented in annual reviews from 2017 to 2020 revealed that TVET policy implementation had little progress in 2017, but there have been progressive leaps made, as year 2020 completed. There has been a gradual improvement in expansion, access, relevancy, and inclusion in the sector, but still no progress in finding ways to ensure sustainable TVET funding. It was reported that the initiation to establish TVET coordinated Fund in 2018 had been taken, but this initiation did not materialize in the preceding years.

There was little progress in terms of strategic and road map developments in 2017 and 2018. The initiation taken to develop a national strategic road map by ADB did not appear in circulation with a proper endorsement by the Ministry of Education. CTEVT had its strategic plan, which is organizational, but there was no publishing of a TVET strategic plan at national level. The suggestions to revise the TVET policy materialized by enforcing integrated Education Policy 2019, but developing the road map, a strategic plan, a policy implementation plan, and the dissemination of the new policy are all yet to be performed. Similarly, there are initiatives being taken to materialize the federalism by every organization. Some of the institutions and programs under sector ministries are TVET-activities handed over to training centers and to provincial governments, while others are implementing programs from central level. CTEVT is expanding TVET access with the strategic objective of covering all activities in the municipalities, both rural and urban, over the next five years. However, there is a lot to be performed for translating the true spirit of federalism by decentralizing the power and authority vested in the center to the provincial and local levels.

Involvement of business and industries has been gradually increasing after 2017. Creation of sector skills committee, their engagement in the preparation of occupational standards and their participation in the dual mode of apprenticeship training programs is noteworthy in 2020. However, business and industries are still reluctant to invest in human resource development.

Training programs of TVET professionals are being developed, but without any plan or targeting any national projected priority. There is no other university except Kathmandu University, which has a small number of intakes to develop TVET professionals. Those who are trained and made qualified are often transferred to irrelevant positions. Despite scattered efforts in capacity development of TVET at individual, institutional and organization development levels, there is still not a TVET capacity development plan in existence at the national level. If it is compared with the initiatives taken in 2017, there was negligible information available addressing the issue? Moreover, with gradual efforts, the scenario has improved in capacity development of individuals, institutions, and organizations over the time reviewed. Now, there are at least strategic plans available in MoEST and CTEVT. The issue of sustainable financing has been reviewed and suggestions have been provided from the Annual Review study 2018. The issue was one of the key policy intentions of TVET policy 2012. The other intentions of the policy received were that of attention towards the concerned authority; however, consolidated one-door TVET financing has remained untouched.

Now, the TVET policy 2012 has been superseded by the integrated National Education Policy 2019 and the policy intention is carried over into the latest policy. In this regard, MoEST is now preparing a 10-year strategic plan by bringing six vocational training offering ministries together and the plan has given room for the sustainable and coordinated financing in TVET. Moreover, there is legal provision to coordinate TVET stakeholders through the Technical Committee at MoEST. However, the effectiveness of the committee needs to be reviewed and intensified through the provision in TVET Act. There is a coordination mechanism at the policy level in place, but coordination at province and local level needs to be made effective. There is coordination among government agencies, but business and industries are not coordinated in any systematic way. OJT, apprenticeship, and internship programs are good means of coordination towards business and industry, which needs to be made an integral part of TVET programs. Overall, coordination - both vertical and horizontal - from central level to local levels needs further clarity.

The issue worth highlighting has to do with the procedure of establishment of TVET institutions and selection of the TVET programs. The information indicates that there is some kind of basis of institution establishment. However, there is not any similar approach among TVET implementers, nor has a commonly accepted and practiced system at the national level prevailed. Institutional expansion and program selection should be based on skills demand, which is reflected in a well-functioning labor market information system. The issue is also related to expansion, equitable access, and inclusion. The speed of expansion of TVET can indicate that access to TVET has increased significantly, but there is a strong need of geographical mapping, based on skills demands and coverage, to be undertaken before establishing any institution or programs, for balanced access of TVET in all provinces

The cluster of issues related to relevancy is captured in this paragraph. There are efforts being made for developing LMIS in a separate mechanism by individual organizations. There used to be market signaling of demands and window shops to collect data of demands, but such practices did not establish continuity. There are job portals but these are not effective. The existing LMI systems are loaded with supply side information. MoLESS has established employment service centers in all Palika level; however, there is no system to link the information of centers to the central LMIS. ELMS project operated by business and industry supported by the Dakchyata project is working to establish LMIS, based on demand side information. The LMIS of ELMS needs to be made focal in the center and linked to all other LMIS and TMIS for effective demand forecasting mechanism to be established. CBS or NPC needs to assume a leading role for the consolidated demand forecasting mechanism to take root.

The overall picture of tracer studies is not satisfactory. Some institutions have conducted tracer studies but most of the other institutions were unaware of it. There is still no legal provision to conduct tracer studies on a regular basis. The reports and information of tracer studies conducted in the past are not available to the general public. The information of such studies is not linked to the LMI system, nor have institutions been utilized for program and curricula improvement or development. However, there is a realization of the significance of tracer studies among TVET implementers and CTEVT has made it mandatory in its institutions in 2020.

The existing NSCO is incomplete, except for the global standards of tourism sector. There were not any significant initiatives to standardize the NSCO in previous years, but the ELMS project is planning to develop Industrial Occupational Skills Standards (IOSS) of at least 10 job titles in agriculture, tourism, and construction each. The ELMS start off needs to be magnified to be follow-up by development of a complete NSCO, fully owned and endorsed by business and industry. There is a pretty good involvement of the private sector in developing occupational standards, though further initiatives are required to increase the institutional ownership of business and industry in the process. There is no connection between occupational standards and training competencies in terms of employment outcomes, which needs the connection between occupational standards, training standards and employment outcomes. The practice of experiential learning with business and industry has gradually increased in a form of OJT since the beginning of TVET operations. Now, most of the TVET providers understand the significance of experiential learning to make training programs labor market responsive. OJT and internship programs have been made integral part of many TVET curricula. Engineering institutions have been providing TVET training in close collaboration with business and industry. Similarly, tourism and health related programs have work based learning inbuilt in curricula. TITI has been producing industry-experienced instructors through skills upgrading programs. CTEVT has started dual VET (apprenticeship) programs for a number of trainees. Despite of these efforts, experiential learning needs to be expanded through capacity development of industries as training institution backed by legal provisions.

There were negligible efforts made to maintain the quality of the programs when the first review study was conducted in 2017, but by the time of the review study in 2020, the situation is quite exciting. Quality of TVET programs is a big concern of every entity. There are several efforts made to maintain quality of the TVET training programs. However, employers are still not satisfied with the quality of TVET graduates, due to mismatch between demand and supply. People are being trained from supply side, but demand side is not receiving the desired output. Therefore, there is an urgent need of establishing a reliable mechanism or coordinated forum to avoid the mismatch situation between demand and supply of TVET programs. There is private sector involvement in some programs, such as conducting research studies, developing curricula and occupational standards, and providing facilities for OJT, apprenticeship and internship training. But private sector input in the fields of program selection and curriculum development process is vital. Organizational ownership of employers' community and their involvement is yet to be institutionalized through the legal provisions and coordinating mechanism.

There is a well-accepted and well-practiced system of curriculum development in CTEVT. CTEVT has a standardized format and process of curriculum and occupational skills standard development. However, CTEVT as being mandated to coordinate and facilitate all TVET actors has not won the confidence of them, at least to implement the same standards, frameworks, and curricula. The different ministries are offering skills training without coordinating with CTEVT,

resulting in duplication of efforts, waste of resources and quality variations. But recently, some progress is observed in using CTEVT developed standardized curricula in some sector ministries, which are offering skills training.

Now there is an approved qualification frame-work, against which human resources are trained and designated. Awareness campaigns are made. Information of RPL-seekers has been collected and individual portfolio is being prepared. Legal provisions and governance structure preparation is in process and soon RPL will take off. Credit transfer system, even in general education in Nepal rarely exists. The concept in TVET is totally new. However, there is an indirect credit transfer system, for example there are common courses in some programs in the first year and students can move to the specialized courses of their choice from the second year. Students from NATHM can transfer to other universities but cannot come to NATH due to TU regulation. Now, approved NVQF has provisions of credit transfer and will be effective, once NVQF comes into implementation. A system of credit accumulation and transfer through RPL towards acquiring qualification is prepared in 2020.

COVID 19 pandemic began from China in December 2019 for the first time and has since then spread all over the world and affected every sector throughout the year and is still out of control. The review report 2020 incorporated the COVID 19 effects and demonstrated that there are irreparable losses caused by COVID 19. The whole world came to a standstill and Nepal too, at least for four months due to lockdown. There is still no normal situation established. Schools and colleges have still not opened. There are billions of Rupees of loss in the construction industries. Over 60% industries have not returned towards full operation yet. Tourism industry is in pure red zone. It will take at least two years to return everything into normalcy, but only if vaccination will be effective over the deadly virus. Thousands and thousands of workers have returned home, because they lost their foreign employment and there is a huge challenge to assimilate them into employment. The academic calendar of education system has been obstructed and batches are overlapping. The COVID 19 also created some opportunities. Virtual programs are developed through development of e-learning technology, materials, and facilities. There is awareness in people to remain safe by maintaining high standards in health and hygiene. Health sector got priority for developing effective facilities to face the pandemic challenges. Some industries such as producing food, health equipment and items of daily needs have been flourishing. Mask worth of fifty million rupees were exported to the US. The pandemic taught a lesson to develop

alternative approaches and compatible infrastructure to face similar types of pandemics in the future. There is an ongoing discussion on how to assimilate returning migrant workers into communities. CTEVT has collected information of 30,000 individuals to prepare individual portfolio and offer RPL to certify their skills learned through work experience. NSTB has a plan to assess 5,000 individual and certify them for their skills level. EVENT II has plans to offer vocational training to 5,000 returning migrants for skilling, re-skilling and up-skilling them. Similarly, FNCCI has prepared a vision document to offer employment opportunities to 400,000 youths every year.

Comparative report produced on TVET implementation and policy reform from 2017- 2020 as issues identified in 2017

1. Background Context

1.1 Introduction

Nepal is aspiring for high economic growth and improving people's life through human capital development, which is expressed in the national policy priority of Nepal's developmental agenda. It has been realized by the Government of Nepal that education and training can play a major role in promoting inclusive and sustainable growth. It has also been realized that a strong base of skilled human resource contributes to the economic growth, increase in productivity, and provide career and economic benefits to people leading to social stability and national development. The Nepalese Government has identified a well-functioning; market relevant, high quality and unified Technical and Vocational Education and Training (TVET) can play a major role in promoting economic growth of the country and improve the quality of life of Nepali people. In this context, the European Union has supported Nepal Government through the TVET Practical Partnership programme for strengthening the country's TVET by promoting shared partnership between supply and demand side for sustainable development and delivery of an effective TVET system. The EU supported TVET-pp programme has envisioned the three distinct result areas:

- Result Area 1 (R1): The quality of TVET provision and implementation scaled up ensuring that it is made available to the most disadvantaged,
- Result Area 2 (R2): Innovative TVET Practical Partnership Program models piloted to enhance relevance, quality and sustainability of TVET provision in Nepal.
- Result Area 3 (R3): Enhanced capacity and coordination role of government of Nepal in the TVET system and improve the TVET governance

The Council for Technical Education and Vocational Training (CTEVT) is assigned to implement activities related to result area 1 under the Sakchyamta Project. The main activities within Result Area 1 include improving the human resource management system in CTEVT and its institutions, upgrading financial information system, developing and upgrading a range of training resources for students and teachers, upgrading trainers' skills, organizing meetings,

training workshops and seminars and arranging CTEVT staff to participate in international TVET events and supporting partnership activities to strengthen the capacity of CTEVT.

The British Council was given responsibility of executing activities related to Result Areas 2 and 3, which are being implemented by the "Dakchyata Project" with financial assistance from the European Union to support and strengthen the TVET sub-sector of Nepal. The Project works on three major areas such as: assisting CTEVT for capacity strengthening of training programs, supporting Government of Nepal, Ministry of Education in coordinating TEVT programs and services and working on the TVET Practical Partnership model for ensuring relevance, quality and sustainable output of TVET programs in Nepal. Dakchyata has been conducting annual TVET progress reviews to support MOEST as a part of the project.

This comparative analysis report is based on the analysis of annual review reports produced in the last four years, i.e. from 2017 to 2020. The comparative analysis is focused on the original issues on TVET policy implementation, as identified in 2017. The first review study was conducted in 2017 and the practice of such studies continued each year, till 2020. The main purpose of this comparative study is to monitor the progress, identify best practices, identify issues not addressed yet and identify areas for further improvement in the TVET sector. In short, this comparative analysis report intends to document the achievements made, changes brought in practice and shortcomings left for future improvement with respect to policy implementation issues identified already in 2017.

1.2 Green Economy

TVET, as closely related as it is with both sociological and technological changes always need to adapt to and work with the conditions at hand. This is also true for environmental considerations. An example of such adaptations in TVET is to those developments, which are often captured under the heading of green economy. Green economies require a transition to green energy generation, based on renewable energy to replace fossil fuels as well as energy conservation and efficient energy use. In terms of regularly monitoring of TVET sector developments, i.e. how TVET promotes and deals with those forces that reduce greenhouse gases is a global issue that has to be translated and interwoven into all human interaction, incl. planning for and implementing TVET programs and in monitoring their progress. Monitoring of TVET developments will also soon be faced with requirements of developing policies-with matching indicators –that TVET as a sector is also proactively contributing to a green economy agenda. Greening TVET helps production to advance to more environmentally conscious practices;

- A 'green' worker is a more employable worker; a 'green' workforce will enhance the profitability of the enterprise;
- National governments need to seize the potential for job creation by providing skills needed in the new green sectors;
- Disadvantaged groups in the labour market (young people, women, persons with disabilities, rural communities and other vulnerable groups) require targeted

2. The assignment

As a part of Result Area 3 of the EU supported TVET-project, Dakchyata has been reviewing annual progress on TVET policy implementation status of Nepal on behalf of Ministry of Education, Science and Technology (MOEST) since 2017. In this connection, Dakchyata has engaged a team of experts in TVET to support MoEST to provide a comparative picture of annual reviews and the progress made of TVET policy implementation from the 4-year period, i.e. from 2017 to 2020. This comparative study report thus consolidates the information of all the reports produced from 2017 to 2020.

3. Purpose of the assignment

The purpose of the current assignment is to produce a report by conducting a comprehensive comparative analysis on the progress made in TVET policy-related areas by reviewing the annual report of 2017, 2018, 2019 and 2020 and submit the report to MoEST through the Dakchyata project.

4. Objectives:

- Carry out a comparative study of the Annual Review studies of 2017, 2018 and 2019 with the study of 2020.
- Prepare summary comparative template showing key information on TVET policy implementation from 2018 to 2020.
- Prepare a precise report on findings, in coordination with Technical Education Division of Ministry of Education, Science and Technology and submit the report to Dakchyata.

5. Scope of Work:

The team will review the available literature (reports of 2017, 2018 and 2019 and current baseline report of 2020). The comparative study of Baseline Studies of 2017-2020 and a comprehensive analytical report is prepared and submitted to Dakchyata project.

6. Required outcome:

- 1. Comprehensive review of TVET policy implementation and progress made in specific TVET related issues identified in 2017.
- 2. A comparative analysis of national TVET policy implementation review reports from 2017 to 2020, with a comparative summary chart showing progress made with respect to the key issues identified in 2017.

7. Methodology:

Previous review reports of 2017, 2018, 2019 and the current report of 2020 are the main source of information for this comparative analysis task. The last three years input and output data source are also useful for comparative analysis. Desk review and discussion among the members of consultant team are the main approaches of comparative analysis. Frequent consultations are made with the Technical Division of MoEST and Dakchyata project throughout.

8. Approaches:

- Consultation meetings of consultants are conducted, together with consultation with the officials of Technical Division of MoEST. The terms of reference provided to the consultants is followed to prepare the comparative report and submitted it to the Dakchyata project. The comments provided by Dakchyata project are incorporated in the report and final report is prepared.
- For the review of the reports produced from 2017 to 2020, a comparative matrix is prepared against each issue identified by the studies of all four years and information analyzed, compared and presented accordingly.

9. Comparative analysis on each issue

In this section, the comparative information comprising of the issues from each report has been presented and analytical information is given for each of the particular issues. The comparative picture of each of the TVET policy implementation issued identified in 2017 is presented in the following section.

9.1 TEVT Policy implementation:

Issues identified in 2017 were concentrated around implementation of the TVET policy 2012 and necessary policy reform. The first issue identified was related to the policy implementation plan, monitoring scheme and management. The review of 2017 which was considered as baseline information stated **"there is lack of clear implementation with M&E planning and management.**

There were actions and annual work plans for the TEVT secretariat, M&E framework development, capacity analysis for developing roles and responsibility of government agencies to implement TVET programs in 2017, but such plans had not materialized. However, there was no national level policy implementation plan and systematic monitoring mechanism, neither in MoEST nor in CTEVT. This situation remained the same until 2020. In 2020, MoEST has prepared a coordinated TVET implementation plan and monitoring is expected to be carried out by activating a coordination committee and technical committee constituted in 2018.

Concerning policy reform, the review report 2018 indicated that MoEST with the help of technical committee conducted more than 60 policy dialogue workshops throughout the country to disseminate TVET, created awareness among TVET stakeholders and collected feedback for further improvement of the policy. However, there were no TEVT Policy Implementation Plan, goals and deadlines; no M&E strategy for TEVT reform; no capacity analysis carried out for policy implementation; no specific roles of TEVT related agencies to implement policy; HRD in terms of leaders, managers and experts development were not focused in order to implement TVET were some of the issues to be resolved for implementing TVET policy effectively as stated in the annual review of 2018. These issues were not addressed in 2019 as well. Similarly, active inter-ministerial TVET coordination committee and technical committee of MoEST were not functional in 2019 and 2020.

The review report 2019 stated that there had been remarkable achievements in the field of TVET expansion. Formal TVET was started with five technical schools in 1980s and there were more than 1,000 such institutions in 2019. Additionally, there were 1,081 non-formal training institutions offering vocational short-term programs. To facilitate recognition of non-formal and in-formal learning and mobility, NVQF of various levels of qualifications was developed for facilitating wider participation. There were initiatives taken to promote TVET access, relevance, quality, and integration, but no attempts were made towards sustainable TVET funding. Policy Guidelines Materials and Tools on TVET Practical Partnership approaches have been developed. Suggestions were provided for TVET implementation reform by identifying TVET Issues each year from 2017. There had been significant progress in access to non-formal skills training through massive expansion of various programs and projects in attempts of implementing the TVET policy 2012. Policy directives, apprenticeship guidelines, vocational course implementation guidelines and TVET implementation guidelines were developed. A TVET implementation plan was an integral part of the TVET Road Map document and that was prepared by 2019 but that document was not approved and implemented.

The 2020 Review reveals that there has been continued expansion of TVET institutions and programs. There were 1557 formal TVET institutions and more than 1,100 non-formal training institutions offering vocational short-term programs in 2020. Similarly, NQF is approved and legal provisions and governance structure of NVQA is being developed. All preparatory work has been completed for launching RPL. Information of skills mapping of 30,000 returning migrant workers has been collected. Portfolio of individual RPL seeker is being developed. Various guidelines for curriculum development, National Occupational Standards Development, Assessors training, counselors training, instructors training and occupational skills upgrading have been developed by the year 2020. The E-learning system, curricula and materials are being developed. Virtual classes have been conducted for training implementation. CTEVT has 72743 in take capacity in formal TVET and trainees have been admitted accordingly in 2020, as the number was more than 60,000 in 2019. Similarly, 42,000 people received vocational training through CTEVT at provincial level. 25,000 people got vocational training through EVENT II project in 2020. The long waited apprenticeship training was started in 2018 and is growing, and 1626 trainees completed Dual VET (apprenticeship) training, assisted by ENSSURE project in 2020. 116771 candidates were certified in skills tests in the last three years. In response to equity in TVET, 6,485 students of long term got scholarships in 2020. There are 299 National Occupational Skills Standards and 320 curricula developed and made responsive to market demands by now. There is a plan to train for 59,500 unemployed and ultra-poor youths for ensuring minimum 100 days employment and other government agencies and project have been offering vocational training to thousands of training recipients. Comparative progress made in TVET policy implementation from 2017 to 2020 is presented in the following Table 1.

CNT		2017	2010	2010	2020
SN	Areas of Progress	2017	2018	2019	2020
1	Expansion	No information	No information	1000 formal	1557 formal
	-			institutions	institutions
				1081 non-formal	1100+ non-formal
				institutions	institutions
2	Dissemination		60 policy dialoged	No activity	No activity
			workshops		
3	Act/ Laws guidelines			Policy guidelines	Various guidelines
	_				for RPL
4	Formal intake capacity				72743
	within CTEVT				
5	Dual Vet			100	500 (total 1626)
6	Skills certified	No information	41317	37519	37935
7	Scholarships (formal)				6480
8	Plan to train to ultra-				59500
	poor under PMEP				
9	Available curricula				320+
10	Available NOSS				299

 Table 1: Progress made in Policy implementation

(Source: TVET Review Reports)

There was little information about the progress made in implementing TVET policy and programs in 2017, while the first review study was conducted. More than 60 policy dialogue and awareness building workshops throughout the country were conducted to disseminate TVET policy in 2018. However, awareness building, capacity building and professional support to TVET implementation were not continued after 2018. TVET policy guidelines were developed for effective implementation of TVET policy in 219. There has been a progressive leap made as 2020 completed in expansion, access, relevancy, and inclusion, but still no progress in sustainable TVET funding. Although the establishment of national TVET fund was planned in 2018, it has not been materialized yet. Vocational skill training for gainful employment is provided, but in a fragmented and scattered manner.

Suggestion(s) for improvement

- Functional roles, responsibilities of authorities of central, provincial, and local government should be made clear through the Act and regulation for the effective TVET implementation and monitoring the progress.
- Professional support should be provided to the provincial and local level for the preparation of TVET implementation plans along with monitoring scheme for results. A mechanism should be developed in each level of government for facilitating vertical and horizontal coordination.
- TVET expansion should be made based on the geographical mapping, local economy, skills development, and employment potential for promoting equitable access, relevancy, and inclusion by maintaining quality of the programs. Input of the employers' community is mandatory while selecting programs.

9.2 National TEVT Strategy and Roadmap

ADB supported to development of a TEVT strategy and roadmap, and TVET-PP support for capacity building activities in implementation of TVET strategy and roadmap in 2017.

According to the review study report 2018, ADB supported TEVT policy roadmap was not endorsed by the Government. CTEVT strategic plan was available, focusing on its own institution, but there was no national strategic plan of TVET and strategic plan was not connected with yearly plan of operation of CTEVT. Policy related strategic plan 2014-2018 was developed and implemented by CTEVT but the results of the evaluation of such a strategic plan are not made available.

The review report 2019 indicates that TVET Act was developed and was in a draft form. TVET policy and integrated Act capturing responsibility of all level (Palika to Centre) was in process. But the new TVET Act has not yet been passed by the parliament. TMIS was tied up with TVET policy and programs launched and information were linked to the MoEST data base system, but it was not connected to all TTPs. TVET policy 2012 needed amendments in the context of the federal structure. After 2018, CTEVT have not published TVET policy strategic and related implementation plans.

The study report of 2020 points out that new integrated National Education Policy 2019 has been approved and enforced for implementation. CTEVT developed a strategic plan for the period of

2020-2024, which is in a report form. MoEST developed a coordinated strategic plan of six vocational training offering ministries for ten years. National Planning Commission has introduced the 15th National Periodic plan with provisions for TVET development. PMEP has plans to train 59,500 ultra-poor youths to ensure 100 days 'work and there is a vision document from FNCCI to create employment opportunities to 400,000 youths each year and CTEVT is developing three centers of excellence in Pokhara, Lahan, and Tikapur as model TVET institutions. These institutions develop strategic plan and implement programs, services and activities according to a strategic plan.

There was little progress in terms of strategic and road map in 2017 and 2018. The initiation taken to develop a national strategic road map by ADB did not appear in circulation through proper endorsement. CTEVT had its strategic plan till 2018 but remained without a plan thereafter and there was no strategic plan at national level. The suggestions to revise TVET policy in 2018 has materialized. There is strategic plan 2020-24 in a draft, prepared by CTEVT. Similarly, MoEST is preparing a 10-year strategic plan to implement integrated education policy 2019. By enforcing the integrated Education Policy 2019, developing the road map, the strategic plan and dissemination of the new policy are all underway at MoEST

Suggestion (S) for improvement

- A strategic plan should be made mandatory in all agencies responsible for TVET. The strategic plan should be backed up with action plans and action plans should be incorporated by the annual plans, programs, and budget of all TVET offering institutions.
- Coordinated strategic planning and corresponding action plans along with periodic review and monitoring should be continued by TVET Division of MoEST by activating inter-ministerial coordination and technical committee.

9.3 Federalization

Role definition, functional divisions and authority delegation were some of the issues to be addressed after implementation of the new Constitution, having a federal structure of government. A new TVET Act was needed to specify decentralization of functional division and authority-sharing in TEVT implementation at the national, provincial, and local levels of Government. Such a legal mandate is not available yet. In 2017, the federalization practices of TEVT were uncertain. CTEVT drafted its federalized structure through SDC support. Functional division and authority delegation suggested in this report is not being implemented by

CTEVT/MoEST, due to the absence of legal provision. All concerned are waiting for the new TVET Act, spelling out the functional roles and authority at each levels of government to come. Similarly, the review report 2018 points out that CTEVT decided to establish at least one provincial office with full authority in each province. Sector Ministries involved in TVET were working for federalization of TVET programs. For example, Ministry of Labor and Employment and Ministry of Agriculture have transferred their vocational training activities to the provincial government. MoEST has established TVET units in each province under the Provincial Directorate of Education. CTEVT was in the process of TVET restructuring in line with the federal context with assistance of development partners. However, there were no plans of federalism with TVET institutions by 2020.

The review report of 2019 included that CTEVT merged its regional offices and established Provincial level offices with roles and responsibility assigned by the Council. There was a restructuring scheme of CTEVT in the federalism concept prepared but no progress in implementation of restructuring of CTEVT in a changed context. The integrated TVET Act, which was in a draft form is not moving ahead, which could address the restructuring issue. All agriculture training programs under MoA had been handed over to provincial government. Extension, in service training and agriculture information are kept as the responsibility of the central level. Thirteen skills training centers under DoL were handed over to the provincial government. Three autonomous skills development centers were developed in Bhainsepati, Butwal and Itahari. The nation was in a transition phase. A recent review revealed that every sector ministry was in the process to develop policy, laws, rules and regulations at all levels from center to Palika. NATHM had a policy to open up its branches in all provinces.

The study conducted in 2020 indicates that CTEVT Provincial Offices are functional in all Provinces with sufficient staffs and facilities in a decentralized approach. TITI and NSTB have their units in all provinces sharing the facilities of CTEVT provincial offices. MoEST has brought Technical Division in operation within the Ministry and is functional and has opened up Technical Sections in each provincial office. CTEVT is developing model polytechnic institutions, at least one in each province. CTEVT has its restructuring report at hand but have not approved for its implementation. NATHM is in plan to open up its branches once it will have the status of Deem University.

There are initiatives being taken to materializing the federalism by every organization. Some of the institutions handed over the training centers to the provincial governments, while others are expanding their access in the provincial level. However, there is a lot to be performed for translating the true spirit of federalism by decentralizing the power and authority vested in the center. The need of amendment of the CTEVT Act as realized was prepared in a draft form but has still not been approved. As a result, restructuring in a spirit of federalism has not been implemented.

Suggestion(s) for improvement

• The nation has been practicing federal structure with the independent seven provinces. Some organizations have handed over their training institutions to the province government whereas others have expanded their presence through opening of branch offices. According to the spirit of federalism, there should be laws and regulations to be formulated and implemented with the spirit of federalism by decentralizing the power and authority vested in the center.

9.4 Basis of TVET institution establishment

The fourth issue raised by the annual review of 2019 was concerning equitable access to TVET and development of TVET institutions. The annual report for that year stated that "the equitable access in TVET does not include proper system to select or establish training institution.' This issue was not identified originally in 2017 and also not included in the study report of 2018. The issue was made valid only from the review study of 2019. According to the review report 2019, there were needs assessment for skills development through rapid TNA for local people and demand of business and industry and plan of provincial government, which were some bases of prioritizing or establishment of training institutions but in absence of a system with transparent criteria for TVET institution expansion to address equity in TVET. However, CTEVT has taken pro-poor responsive TVET by holding approval of high fees charging privately managed institutions and by increasing affordable TVET in community schools (TECS). CTEVT increased the number of "Technical Education in Community Schools' programs from 117 in 2017 to 563 toward the beginning of 2020. Expansion of TECS was also in line with the Government's policy of establishing at least one TVET institution in each municipality for the purpose of ensuring equitable access to TVET to all.

Similarly, MoEST introduced TVET as a separate stream in community schools of Nepal and there were about 100 such institutions offering TVET. In 2020, the number of schools offering TVET in grades 9-12 has reached 484 with wider geographical coverage. The purpose of the expansion of these institutions as a separate TVET stream was to increase equitable access to TVET. Despite wide coverage of TVET, making it accessible in remote locations, the quality and employability of school-based TEVT is questioned by the general public. However, there was not any effective system for ensuring employers' involvement in identifying skills demand and prioritization of TVET programs. There are only three sector skills committees, but due to the absence of authorized councils in all sectors, no system existed to provide information of skills on demands to identify occupations or job titles. There were programs from Window 1-Window 7 and up to Window 5; vocational skills are included with the concept of challenge fund to share 50-80% by the Skills for Employment Project. The programs focused on industry led activities to train industry employees and migrant workers.

There are the provisions of scholarships as Special TVET programs for DAG, Dalit, and the poor, fully funded by the government. The number of scholarship recipients is increasing after 2017 as reviewed to address the issue of equitable access to TVET. However, available scholarships are limited to cater for the massive needs of skills trainings for DAG, Dalit, and the poor. Dual modes of apprenticeship program were introduced with 100 people in 2018 and the number of apprenticeship training recipients has increased to 1626 by 2020. Apprenticeship programs are also targeted to offer affordable skills training to the poor, disadvantaged and marginalized youths through the ENSURE project of CTEVT. Donors supported vocational skills training programs are also giving top priority for equitable access and gender equality. Study reports of donor support are available on these issues, but such supports are time bound which always contain a sustainability challenge.

CTEVT provides 10% scholarship in formal programs. MoEST administers scholarship programs in higher education and offers subsidized programs at school level. All agencies except NATHM provide vocational training free of cost. EVENT II project provides scholarship to 1,200 students of formal programs and CTEVT has been training 500 students under its dual VET. CTEVT offers special scholarship to 560 DAG people each year. EVENT II targets to conduct vocational courses to 115,000 people throughout the project period with approved criteria under an innovative result-based voucher system. Similarly, a total of 6,000 students of

Diploma and Pre-diploma programs receive scholarships. Participants of tourism vocational courses implemented by NATHM have to pay 25,000 NRs. per program. There is no scholarship, but there are cases of individual sponsorship. NATHM also conducts both formal and non-formal vocational skills training courses in the tourism sector and various levels of TVET programs are being conducted from bachelor level (B. Tech.) to demand-based vocational short courses in Nepal. CTEVT and TITI offer professional training courses to skills assessors, managers, instructors, and curriculum development professionals.

According to the report of 2020, there are TVET institutions of various modalities in operation such as: CTEVT constituent institutions, recognized institutions, institutions managed in partnership such as Technical Education in Community Schools (TECS), Manmohan Polytechnic Institute, Krishna Prasad Koirala Trust, and Tansen Nursing School. The Secondary School System is offering Grade 9-12 Technical education streams. Technical education at the professional level is being offered by universities. Similarly, the review report of 2020 highlights that some bases of program selection or establishing training institutions are followed as stated in the review report 2019. Employers' involvement is not made effective in identifying skills demand and prioritization of TVET programs. There are only three sector skills committees led by business and industries.

This issue is concerned about the procedure of establishment of TVET institutions and selection of the TVET programs in response to equitable access and inclusiveness in TVET. The information indicates that there is some kind of basis of institution establishment. However, there are not any plan-supported criteria supporting equitable access and inclusiveness. Also, a similar approach to selecting TVET programs is not lacking among TVET implementers, nor has a commonly accepted and practiced system at the national level been present. The issue is also related to expansion, equitable access, and inclusion. The speed of expansion of TVET can indicate that access to TVET has increased significantly, but there is a strong need of geographical coverage, balanced access of TVET and program selection, based on employment demands in all provinces.

Suggestion(s) for improvement

• There should be mapping of the need of TVET before establishing or prioritizing the selection of TVET programs for the balanced development of TVET throughout the

country. The employers' involvement should be ensured a pertinent role in selection of the program or establishment of the institution.

- There has always been the issue of mismatch between employment demands and supply. Such a contradicting situation creates issue on relevancy of the program. Therefore, selection of TVET programs and establishment of training institutions should be backed by recent research and studies, owned by employers' community.
- Training quality should be ensured while initiating massive expansion of TVET in response to addressing equitable access, inclusiveness, and affordability in TVET.

9.5 Training on demand

Training on demand is an issue raised for a long time in TVET sector of Nepal. The annual report of 2017 stated that there is no reliable system of labor market information and available LMI sources do not include occupations or skills on demand. Matching supply with demands for skills is essential to make TVET market relevant. The review study 2017 did not find LMI tools or indicators to specify occupation or skills demand, the LMI demand information framework, a national institution to collect LMI and a national agency responsible for information systems linked with employer demand requirements, nor any employer organization to relay demand requirements.

The study report of 2018 highlighted that CTEVT developed TEVT-MIS and started training information data (supply information) in synchronization with the support of UNDP Skills project. There was a practice to select TVET programs through TNAs and RMAs, but the information obtained through such assessments did not represent any overall picture of labor market demand. CTEVT started to conduct labor market signaling in selected sectors, but it was not as a regular system. There were Data from CTEVT, MOE, MOL and CBS/NPC available in a scattered way but not in the form of a complete national labor market information (LMI). There was no system to utilize skills of returnee migrants. Employment Information Services under MoL were not effective. Moreover, HAN was initiating its own Employment Information Center. Job Portal was initiated in MoL but the base of job information needed further improvement.

Similarly, the study report of 2019 pointed out that there was a program for integrated LMIS under the Skills Project supported by UNDP. The system of collecting and disseminating supply

information was in place; however, wider coverage of supply and demand information was needed to operate a demand-responsive LMIS. CTEVT and MoEST were working on standardized LMIS which was in a final stage. LMIS was scattered and needed to be consolidated. Employment shops were operated in some districts but such efforts were not linked to any national network. There was need assessments at institutional level through rapid TNA and other researches prior to developing new program and implementing such, but no concrete data were available at national level; Dakchyata/Sakchyamta developed demand collection tools by assigning consultants. There was provision of demand forecast in the document of a periodic plan by National Planning Commission and CTEVT strategic plan, but there was no system of national demand forecast of skilled workers. Training information portal was supported and developed by ILO and operated by CTEVT within the CTEVT website, which needed further update.

The review study of 2020 revealed that there used to be studies signaling labor market information in the past, but such studies have not been institutionalized and continued. CTEVT, MoEST and MoLESS have LMI systems which needed to be consolidated and operated by a single authority. The systems are mostly loaded with supply side information. The balancing of information from both supply and demand is required. Information of job portals is there, but effectiveness of such portals needs to be ensured. CTEVT and MoEST have integrated TMI, which needs to be linked to LMIS. MoLESS is establishing Information Service centers at each Palika level. The information at the Palika level is to be linked to the central LMIS. The Dakchyata supported ELMS project is working on a National LMI, led by business organizations which need to be made into a focal LMIS and linked to the information of all the systems in existence, so supply and demand run through a unified system, creating a real LMIS. CBS has a kind of forecasting mechanism during the national population census, but such forecasts are limited only to unemployed people.

There are efforts being done for LMIS in a separate mechanism by individual organizations. There used to be market signaling of demands and window shops to collect data of demands but such practices did not acquire continuity. There are job portals but they are not effective. The existing LMI systems are loaded with supply-side information. MoLESS has established employment service centers in all Palikas; however, there is no system to link the information of these centers to the central LMIS. ELMS project operated by business and industry supported by Dakchyata project is working on to establish LMI on the demand side. The LMI of ELMS needs to be made focal in the center and linked to all other LMI and TMIS for effective demand forecasting mechanism, as in a true LMIS. CBS or NPC needs to play a leading role for the consolidated demand forecasting mechanism.

Suggestions (s) for improvement

- NPC or CTEVT should have mainframe established to collect both supply and demand information by developing a fully-fledged labor market information system (LMIS), where both supply and demand information is gathered/processed.
- MoEST/CTEVT should lead the coordination of such a system among Ministries, employer organizations and effectively with legal mandate.
- Employment Information and Support Centre under MoLESS should be strengthened with trained professionals and information of the centers should be linked to the system operated at central level.

9.6 Tracer Studies

Tracer studies are an essential activity of TVET providers to periodically examine employment outcomes of the graduates, the main success criteria of TVET. Annual review of 2017 raised the issue that there was no recognized national framework for Tracer Studies of TEVT graduates. Moreover, the tracer studies were not made as regular activities of TVET institutions. The review study 2017 revealed that there was no national policy for Tracer studies. Impact studies were carried out centrally by CTEVT as a sample exercise. There was no tracer study methodology applied to TEVT centers as part of their registration or accreditation process. TEVT centers were unable to justify recruitment numbers of learners and were unable to justify choice of learning programs by LM demand.

The study report 2018 pointed out that follow-up studies were conducted on an occasional basis but were not provisioned in the prevailing laws. Tracer studies were conducted, but reliability in the information produced was in question. No tracer study was repeated yet, but CTEVT had plans to conduct tracer studies in the interval of five years periods, which needed to be institutionalized. Technical Schools conducted tracer studies of their programs supported by projects. Neither tracer studies were regular in TVET institution nor information received from tracer studies, nor has CTEVT attempted to use tracer studies as a means of labor market signaling of demands. Information obtained from tracer study conducted helped identify labor market information, from which new programs are useful to introduce new programs.

The review report prepared in 2019 revealed that some TTPs and institutions did conduct tracer studies occasionally. Others stated that they included tracer study in the programs for coming studies. For those who conducted tracer studies, the information obtained from these were not linked to LMIS. Further, the tracer study reports were not in wide circulation.

The progress of tracer studies during the review study of 2020, the situation remained the same. Legal provisions to make tracer studies and follow-up studies are not made an integral part of the TVET program implementation. However, CTEVT has made tracer studies mandatory at its TVET institutions in 2020. Further action is needed to use the information of such studies to link to the labor market information system of the center, so that the information can be utilized for program selection and curriculum development in a systematic way. EVENT II project has a functional monitoring system but only for nine months from the date of training commencement. There is a growing realization of the significance of tracer studies among TVET stakeholders; however, sufficient initiations have not been taken in this direction.

The overall picture of tracer studies is not satisfactory. Some institutions conducted tracer studies, but most of the institutions were unaware of the importance of such. There is still no legal provision to conduct tracer studies on a regular basis. The reports and information of tracer studies conducted in the past are not available. The information of such studies is not linked to the LMI system, nor have institutions utilized these for program and curricula development. However, there is realization of the significance of tracer studies among TVET implementers. Results of mandatory provision of tracer study in TVET institution under CTEVT is yet to be assessed.

Suggestion(S) for improvement

 Tracer studies should be made mandatory in all TVET institutions and the institutions should be capacitated to conduct tracer studies utilizing a procedural manual provided by the mandated entity. Training providers need to be trained and their capacity should be developed to regularize the conduct of tracer studies with proper methods. The information generated by tracer studies of TVET institutions should be linked to the database system of CTEVT to enable them to come up with national projection of the overall quality, relevance, and employability. Resources should be allocated each year to carry out follow-up studies on a regular basis and the information received from tracer studies or feedback provided by employers should be linked to LMIS and made the basis of program selection, curriculum revision and switching training programs to newly emerged areas of employment.

9.7 Nepali Classification of Occupations

Occupational classification with respect to the nature of labor market requirement and occupational standards is the source of competency standards and TVET curriculum. Annual review of 2017 pointed out the need of the clear occupational classification and corresponding occupational standards. The report stated that the then classifications were confusing and did not offer a realistic view of the labor market structure and requirements. There were 4 digits Nepali Classification of Occupations being used for LMI and TEVT organizations. However, TEVT classifications, testing and curricula did not reflect the situation realistically, nor the current occupation workplace descriptions.

The review report of 2018 revealed that NSCO was available as prepared by ILO, but it was not being followed by training institutions, and business/industry. NSCO was incomplete in some cases; for example: there was vocational teacher, which was more general and did not suggest any specific vocation. Revision of NSCO was required (CTEVT); the employers community was supposed to contribute to the classification of occupations but they did not have capacity to do it. National Format of NSCO was available, which was prepared by CBS but not fully owned by business and industry. Moreover, there are classifications of occupations in tourism sector since they follow global standards.

According to the review report of 2019, attempts were made to improve occupational classification and occupational standards by mobilizing sector skills committees represented by business and industries. Nepal was facing difficulty to revise or develop Nepali Classification of occupation that reflected the reality of labor market and conducive to life-long learning, skills upgrading and demand forecasts. The National Format of NSCO was available, which was prepared by CBS but not fully owned by business and industry. Similarly, the report of 2020 highlights that National Format of NSCO is available as prepared by CBS which is not fully owned by business and industry. There are classifications of occupations in tourism sector because tourism standards are the same in all countries.

There were not any significant initiatives to standardize the NSCO in previous years but ELMS project is planning to develop Industrial Occupational Skills Standards (IOSS) through at least 10 job titles in agriculture, tourism, and construction each. This ELMS start off needs to be magnified and be developed into a complete NSCO fully owned and endorsed by business and industry including employers in the public sector. The lead needs to be taken jointly by CTEVT and Business and Industry.

Suggestion(s) for improvement

- Capacity development of employers' community in classifying and analyzing occupations and collection of information on labor market demands should be established.
- Employer endorsed national classification occupations and corresponding occupational standards should be developed and should be used for qualification/skills assessment and for curriculum development.

9.8 Occupations Standards (OS) and skills Training Standards:

Occupational Standards developed from properly classified occupations is the main source of skills testing/qualification assessment and curriculum development. Curricula relevance can be accomplished only when employers developed those curriculum standards, on which curriculum is based and developed. This was one of the TVET issues identified by the annual review of 2017, which stated "No national framework for the development of occupation standards. " There was confusion in the definition of Occupations Standards (OS) and Competence / Skills / Training Standards. The private sector did not benefit from the use of OS to increase performance and efficiency. Occupation skills standards were not developed from the activities defined in the national occupational standards. Skills standards and assessment standards were not based on learning outcomes to ensure that the necessary competences were developed by trainees to enable them to function at an agreed level of performance. There was no link between curricula content and skills assessment and desired learning outcomes.

The study report 2018 points out that National Format of OS was available. Sector Skills Committees represented heavily by private sector developed OSs each year. There was no practice of employer-led development of occupational standards; capacity gap could be the reason. Both private and government experts were involved in OS development and endorsement process but it was done on an individual level and as a result, employers' organizations did not take ownership. CTEVT involved private sector representatives to develop training and

competency standards, but these standards do not meet the expectations of the employers of the private sector. It means that competency standards were not developed from the national occupational standards. Thus, there was no link between curricula content, skills, skills assessment and expected learning outcomes.

According to the review report of 2019, DACUM or Functional Analysis approach was used to develop occupational standard and writing corresponding training standards. Experts involved in the DACUM process take part from both public and private sectors. Sector Skills Committee members involved in development and the revision process of occupational standards. Sakchyamta project in CTEVT supported to develop new occupational standards involving sector skills committees and developed 4 curricula based on these new standards. Up-scaling was expected of this process in developing or revising CTEVT curricula. The National Skill Testing Board is represented 50-50% from public and private sectors to endorse the skills standards. However, private sector involvement in skills standard endorsement was considered in an individual level which caused problem in taking its ownership at institutional level. The connections among occupational standards, training standards, curriculum and assessment of learning outcomes are missing in 2019 as well. NVQS project was attempting improvement in leveling by bringing connections between occupational standards, assessment of competencies and learning outcomes in 2019.

There was no change in developing or revising occupational skills standards in 2020 as well. However, Sector Skills Committee members were involved in the development and revision process of occupational standards. Along with sector skills committee members, Professional Associations and NATHM experts were involved in skills competency development and occupational standard revision processes. Although representatives of business and industry are involved in the process of developing occupational standards, competency standards, curriculum and testing standards, ownership of the output is not taken by the business and industries. There is currently no link between occupational standards, curricula content, competencies testing and assessment. NVQS attempts to assess the skills on credit basis once the system comes into enforcement.

There is a pretty good involvement of the private sector in developing occupational standards though further initiatives are required to increase the institutional ownership of business and industry in the process.

Suggestion(s) for improvement

 Stakeholders and beneficiaries should be educated or informed about NOSS and their development process for employers' wider acceptance. The development and endorsement process of NOSS should be institutionalized, with active initiative of CTEVT and substantial participation of business and industry through sector skills committee. To address the issue, the waiting NVQF with its legal base should be brought into the picture for implementation.

9.9 Experiential Learning with Business and Industry.

Work-based learning is an essential aspect of TVET for developing work-related competency among the learners. This important aspect of training was documented as one of the TVET issues in the past annual review report. Past annual reports in TVET policy implementation pointed out that work-based learning in business and industries was weak. The progress within this issue was not visible in the previous review report in 2017 and 2018, but it was examined during the study of 2019. The report 2019 revealed that the TVET engineering institutions attempted to implement work-based learning and tourism and health related programs have inbuilt component. However, systematic planning and execution of the experiential learning was not properly enforced, due to the capacity gap of TVET providers. Work based learning was made mandatory for Skill Training programs supported by ENSSURE Project. Many formal TVET programs offered by CTEVT and its recognized institutions placed the trainees on "On-the -job Training" for experiential learning from three to six months. TITI trained 100 instructors supported by EVENT II for work-based learning, but industry could not release such technicians to be developed as trainers within the industries, due to the limited number of people working with them. Trainees of construction occupations were placed on OJT in construction sites. Not only vocational training graduates, but also overseers and engineers needed experience in experiential learning in industry, which did not have this practice. There was experiential learning attached to some professional degree programs within Nepal and abroad, in tourism and hotel management and health related programs, but no experiential learning for all vocational courses delivered by NATHM. There were some practices of industrial experiential learning in the form of OJT and internship, however, formalization of partnership in TVET was absent and also no supportive policy to motivate employers to take part in partnership. Cooperation mechanism between industry and training provider were not effective. Manufacturing industries did not involve themselves in such activities. Existing labor law is also not favorable for

flourishing apprenticeship or work-based learning. Similarly, government or CTEVT did not develop professional experts and a system to have dialogues, rapport buildings and facilitation to business and industries in order to bring them under partnership for experiential learning is missing. Seven different models were identified through a comprehensive study for pilot test of TVET-PP approach in TVET under the Dakchyata grant scheme. Results are expected from this TVET-PP approach in late 2021.

The study report 2020 includes that the TVET engineering, health and tourism institutions have been exercising work-based learning. However, systematic planning and execution of the experiential learning is not properly enforced, due to the capacity gap of TVET providers. Many formal TVET programs offered by CTEVT and its recognized institutions place the trainees on "On-the –job Training" for experiential learning from three to six months, which is not effective. Several other work-based learning practices were continued as in 2019. There is a potential in construction and other relevant industries in skilling human resources of various levels with upgrading provisions as well as recognizing prior learning and acquiring recognized qualifications through informal and non-formal means. Seven different models have been identified by Dakchyata through a comprehensive study for pilot test of TVET-PP approach in TVET and pilot test is undergoing with ten different partnership institutions in construction, agriculture, and tourism.

The practice of experiential learning with business and industry has gradually increased in a form of OJT since the beginning of TVET operation. Engineering, health and tourism institutions have been providing TVET training in close collaboration with business and industry. TITI has been producing industry-experienced instructors through skills upgrading programs. CTEVT have started dual VET (apprenticeship) programs for a number of trainees. Despite of these efforts, experiential learning needs to be expanded through capacity development of industries as training institution, backed by legal provisions. Rapid increase in the number of institutions and participants operating apprenticeship training through partnership with business and industry in 2020 is encouraging. Increase in the involvement of the employers in apprenticeship program paves the way for work-based learning practices.

Suggestion(s) for improvement

- Apprenticeship Act in consultation with business and industry should be developed with the
 provision to provide work-space, machine/equipment and 50% salary by industry and 50%
 by government or government-related projects to TVET trainees under WBL and training
 facilities and trained industrial experienced instructors of participating business and
 industries in work based learning should be supported
- There should be the provision of incentive (monetary or non-monetary) to employers to motivate them to take part in work-based learning scheme. The incentive provision for participating employers should be spelled out in the Act or regulations.

9.10 TEVT Quality Assurance

Along with the expansion of TVET provisions to maximize equitable access to TVET, quality assurance is equally essential. TVET expansion without quality is wastage of resources and time, which Nepal with limited resources cannot tolerate. The annual review of 2017 raised this issue, stating that there was no national framework of TVET quality assurance. It was realized that until 2017 there was no national TEVT Quality Assurance model or framework in existence in Nepal. TEVT programs and centers were not accredited or validated under the national framework of quality assurance. Although there was accreditation division in CTEVT for this purpose, it was over-occupied with granting approval of opening new TVET institutions or programs. Monitoring of TVET programs and institutions was done by the Technical Division of CTEVT, without using approved quality standards and tools.

According to the study report of 2018, there were quality assurance provisions (such as competency-based curricula, monitoring mechanism, monitoring of TVET institutions, testing and evaluation, training of teachers etc., but such provisions were not integrated in the form of a quality assurance model or a framework. Accreditation of TVET institutions or programs is a means of Quality assurance, which Accreditation Division of CTEVT is expected to do, i.e. to assess input quality, process quality, output quality and outcome quality and award quality assurance certificate to operating TVET institutions and programs. But accreditation of CTEVT mainly focused into input quality, such as assessment of facilities, equipment, learning resources, curriculum, and instructors. This assessment quality usually was carried out at the time of approval of new TEVT institutions. Accreditation in any real sense was non-existent. Other aspects of quality, such as quality of training instructors and managers, training curriculum developers, training skills assessors were successfully carried out. Concerning output quality,

Examination Division and Skill Testing Board conduct examination or tests to assess competencies and award recognized certificates to the successful candidates. There are several elements of quality assurance in practice within CTEVT system, but all of those QA measures are performed in scattered manner. Performance of TVET institutions, other ministries, and skills training projects was measured through quantity of trainings and trainees were oriented towards allowance rather than gainful employment, hence, quality was compromised. Proper monitoring and supervision of training programs were not in place. Motivation factors were included by some training institutions through providing commodity support to trainees (machines, tools and materials) to create relevant enterprises. Entrepreneurship skills were provided together with skills training for promoting self-employment. Joint monitoring mechanism was also in practice, with the concept of tripartite monitoring team in some project-supported programs. Training institutions deliver more theory to trainees, but industries need more skills exposure. CTEVT curricula, TOT provision and skills test were made compulsory in development partnersupported training programs.

The review report 2019 includes that Feasibility Study, registration of training institution or programs based on the quality infrastructure, trained instructors, and necessary provision of resources were some of quality assurance measures in practice. Demand-based and updated curriculum, monitoring, supervision and evaluation and skills tests, end of program exams and certifications were the key factors of quality assurance applied by CTEVT. Curriculum development and revision in regular consultation with employment market was realized. Experts and sector skills committee members engaged to jointly develop and revise TVET curricula in hotel and tourism and in the construction sector. Curriculum development in line with national occupational standard was initiated. TITI was contributing in quality improvement processes by training instructors, TVET managers, curriculum developers and professionals. From venue verification (training facilities) to income verification were done for quality assurance by third party six times during the training cycle for the trainings supported by EVENT II Project. Certificates and awards were received against quality output provided by employers to the programs offered by NATHM in the tourism sector. In the programs supported by EVENT II, 70-80% employment is to be ensured by training providers. There was more than 85% employment in formal professional degree programs offered by NATHM in the tourism sector. In order to maximize relevance in TVET, SEP collected demands of skills gap through

consulting 620 industries supported by FNCCI. Sector-wise gaps were identified at micro level in agriculture, tourism, hospitality, construction ICT, hydro and light manufacturing sectors. **The** Dakchyata project – through Sakchyamta and CTEVT - attempted to develop QA in TVET in a systematic and integrated manner under the TVET-PP EU funded programme. The system developed was to be piloted and replicated in all TVET institutions. The Skills Development project (2014-2018) supported by ADB selected 10 CTEVT schools and facilitated them for quality strengthening by developing 9 parameters, 72 standards and 246 indicators. Such tools were very effective to maintain the quality delivery; however, replication of the established system is required to be made effective.

Two important interventions were carried out with respect to TVET quality assurance by CTEVT through donor supported projects in 2019. First, development of the TVET quality assurance national framework with the support of Sakchyamta Project in which quality improvement and quality assurance was integrated. The framework consisted QA standards and descriptors of the standards and description of how the framework is to be applied for TVET quality assurance purposes. Similarly, a QA manual describing standards, tools and assessment procedures was also prepared as a guide for QA Division and TVET institutions. Second important progress towards QA was the preparation and practice of new TVET monitoring mechanism, standards, and tools. These monitoring tools and standards were made in line with QA framework.

The review report 2020 includes that there are guidelines for program affiliation, a standard process to develop and revise curricula, well designed tools for regular monitoring and supervision, trained and experienced instructors, well established labs, and workshops in place. Experiential learning is enforced in the form of OJT, apprenticeship, and internship to expose the trainees in the real world of work. There are more 299 National Occupational Skills Standards and 320 curricula developed according to the need of the labor market. Curriculum development and revision in regular consultation with the employment market is realized. Experts and sector skills committee members are engaged to jointly develop and revise TVET curricula in hotel and tourism and the construction sector. TITI is contributing in quality improvement process by training instructors, TVET managers, curriculum developers and professionals. They have conducted such trainings of 6,615 person/weeks to 1,400 individuals this year. TITI is now with full capacity to train instructors and instructors of TVET programs need to be trained through

TITI. From venue verification (training facilities) to income verification is done for quality assurance by third party six times during the training cycle for the trainings supported by EVENT II Project. There is more than 75% actual employment of the graduates of EVENT II project in the country. Certificates and awards are being received against quality output provided by employers to the programs offered by NATHM in tourism sector. There is more than 89% employment in its formal programs.

Continuous efforts are being made to maintain the quality of the TVET institutions and programs, after the first review study was conducted in 2017. By the time of the review study in 2020, the situation is quite exciting. Renewed monitoring standards, tools and process, preparation of national TVET Quality Assurance Framework, endorsement of National Qualification Framework, training and building capacity of trainers and institutions, increasing employers' involvement in work-based learning and apprenticeship training and continued donor's support in quality assurance are some noteworthy positive scenarios of TVET quality assurance in Nepal. Quality of TVET programs is a big concern of every entity. There are several efforts made to maintain the quality of the programs. However, employers are still not satisfied with the quality of TVET graduates, due to mismatch between demand and supply. People are being trained from the supply side, but the demand side is not achieving the desired output. There is an urgent need for a reliable mechanism or coordinated forum to avoid the mismatch situation between demand and supply of TVET programs.

Suggestion(s) for improvement

- Quality assurance framework should be endorsed by the CTEVT Board and a comprehensive quality assurance manual which is already developed should be piloted, refined, and widely used.
- Capacity development support and training of personnel within TVET should be provided to
 use relevant tools and instruments for the assessment of quality and program evaluation,
 including accreditation system in TVET, which should be made regular and effective as a
 means of quality assurance.
- Competency assessment system should be focused to assess curricular outcomes through a reliable system of assessing learners' outcomes. Assessors should be made capable through training and exposure to practice.

- Accreditation system at the province and TVET institutional level applying already designed accreditation mechanism and tools and should be implemented to ensure input and process quality; follow-up study and tracer study should be carried out at least in every three years to ensure outcome quality.
- Introduction of a practice of self-assessment of quality using quality assurance manual prepared by CTEVT in all TVET institutions should happen. Training institutions should make necessary arrangement to maximize training quality and relevance in order to achieve high level of graduates' employment and employers' satisfaction. Mandatory tracer study by each TVET institution should be enforced.

9.11 Private sector involvement.

Involvement of business and industry in the process of TVET development, delivery and assessment is essential for the quality and relevance of TVET. The TVET review report of 2017 pointed out that clear guidelines and coordination of private sector participation in TEVT was missing. According to the review report 2017, there was no national legal framework or guidelines for TEVT-PP and its implementation. The report also pointed out that there was no national framework for employers 'validation of TEVT programs or employers' participation in learning assessment.

The review report 2018 includes that there was weak involvement of the private sector in terms of designing occupational standards, contributing to curriculum development processes, supporting curriculum delivery, assisting in measuring training competence and supplying information of demands to LMIS. Involvement of the private sector in PCC encouraged them to take part in TEVT events. Projects such as ENSURE, NVQS, EVENT, and SKILLS & TEVT-PP contributed additionally to bringing the private sector in the TEVT development process. Star hotels had their own human resource and training departments, but trained HR was interested to go into foreign employment, rather than for local employment. During the sector analysis, the donors made a lot of promises and as a result, Business & Industry were reluctant to provide necessary information and support. The private sector is still reluctant to involve itself in TVET development, due to the absence of legal provisions.

The review report 2019 stated that private sector involvement was gradually increasing after formation of sector skills committees. Participation of the private sector (business and industries was observed in TNA, designing curricula, developing or upgrading occupational standards and

leading sector skills committees, but with little involvement in prioritizing selection of TVET programs. The involvement of private sector was increased due to ENSSURE, NVQS and TVET-PP projects. The voice of the sector was heard, but more commitment from private sector was required for the development of TVET. Private sector involvement was increased in CTEVT programs but saw less involvement in the TVET programs implemented by other public agencies. The Dakchyata Project conducted a comprehensive study of Private Sector Investment in TVET and conducted a series of workshops of key stakeholders from public and private sectors to raise awareness about the importance and benefits of private sector's involvement in TVET. National policy, guidelines and even laws to institutionalize the job learning practice are required.

Almost similar activities were carried out, involving the private sector in 2020 as well. The review report 2020 indicates that private sector is involved in TNA, RMA, research, and studies, designing curricula, developing or upgrading occupational standards and leading sector skills committees, but little involvement in prioritizing or deciding to select TVET programs. The involvement of private sector has increased significantly due to ENSSURE, NVQS and TVET-PP projects. Dakchyata project has supported the ELMS project being implemented by business and industry itself to establish LMI and develop Industrial Occupational Skills. This initiative will support more involvement of the sector. The investment of private sector involvement in some programs such as conducting research studies, developing curricula and occupational competencies, and providing facilities for OJT, apprenticeship, and internship training. Such contribution of private sector is limited to an individual basis. Organizational ownership of their involvement has not been institutionalized, due to the absence of legal provisions and coordinating mechanism. However, there are the legal provisions of private sector involvement at policy level.

Partnerships with business and industries were initiated in 2019 and are continuing in 2020 in developing apprenticeship programs. This was a long-awaited program in TVET. Swiss government supported ENSURE project and EU supported Dakchyata project have become instrumental in the process of expansion of dual model apprenticeship programs in Nepal and the result is encouraging to see in 2020.

Suggestion (s) for improvement

• Policy support to offer incentives for skills training programs including work-based learning under partnership with business and industry should be developed and necessary legal provisions should be made to attract the sector for TVET development.

9.12 Current curricula development systems

Business and industry endorsing the national occupational standards are the main source of curriculum development. TVET review report of 2017 stated that the then curricula development systems were not linked with occupation learning outcomes to a national standard but based on program duration and occupational profile. There were no national standards for TEVT program implementation, which were only based on examination requirement and duration of training. Without national occupation learning standards, learners entering TEVT institutions did not receive training to a national standard.

The review report 2018 says that national framework of curricula was available for formal TVET programs and were followed by all providers. There was the framework of non-formal and informal TVET courses. There was a dual system within CTEVT in relation to Curriculum and NOSS development, and no coordination between CDD and NSTB of CTEVT. There were less work-based learning provisions in curricula. Initiations were made to involve sector skills committees for curricula and NOSS development and revision. Although training institution, business and industry and related associations were involved in development and revision process of curricula, there are the issues of ownership taken by business and industry, updating instructors through training, timely revision, adopting newly changed technology and effective monitoring and supervision.

The review report 2019 says that curriculum development and revision were done using the DACUM approach. Curriculum developers received training in Functional Analysis approach with the support of the Sakchyamta and the Dakchyata projects, which could be an alternative to the DACUM process. National formats are available with a standardized development process. Other government entities developed their own curricula in a traditional fashion. Thus, it was a duplication of efforts and waste of resources. Initiations were made by Dakchyata project to increase employers' involvement in standardizing and developing market and credit-based curricula and training materials.

CTEVT, with the help of sector skills committees, are developing new or updating the previous occupational standards, based on which new curricula are developed. In 2019, occupational

standards were prepared through sector skills committee and four new curricula were developed and piloted through the Sakchyamta project. The information acquired indicated that this process would be continued.

The review report 2020 highlights that curriculum development and revision process follow DACUM and Functional Analysis approaches up to pre-diploma level. Experts and sector skills committee members jointly develop and revise TVET curricula. CDED of CTEVT has also developed the curriculum development guidelines this year. CTEVT follows these set of procedures, which is more relevant to the requirements of business and industry. The Sakchyamta project has supported development of 15 vocational short term new curricula and 15 to revise the existing ones. The Dakchyata project has helped to increase the involvement of private sector in standardizing the curricula, which are based on credit and market demands. Occupational skills standards are being updated and developed by the NVQS project as well.

There is a well-accepted and well-practiced system of curriculum development in CTEVT. CTEVT has standardized format and process of curriculum and occupational skills standard development, but other government agencies have been developing curricula through a conventional method. However, CTEVT, mandated to coordinate and facilitate all TVET actors, has not won the confidence of them, at least to implement the same standards, frameworks, and curricula. It was learnt that other agencies being involved in TVET or short-term vocational skill development are gradually using the curricula developed by CTEVT. CTEVT's leading and convincing role needs to be strengthened.

Suggestion (s) for improvement

- Private sector and CTEVT should work together to upgrade and update Nepal's occupational standards, based on which curricula and qualification testing standards should be developed.
- Sectors skills committees should be made effective with legal mandate by activating heavy
 institutional involvement of employers through utilizing information of LMIS and ensure
 influence in the selection of programs. More emphasis should be given to include workbased learning opportunities as an integral part of skills development programs

9. 13 Recognition of Prior Learning (RPL).

Knowledge and skills acquired through non-formal and informal means can be assessed and can be awarded with recognized qualification or the candidate can accumulate credits towards a recognized qualification. Although skill testing under CTEVT can recognize skills for employment up to L4, there was no system of earning credit through recognition of prior learning (RPL). The review report 2017 says that TEVT curricula are not linked with skills assessment. The RPL could not receive formal recognition in terms of formal qualifications and certification. Only sample performance assessment is carried out by the skills testing centers and portfolio of evidences is not used in current skills assessment.

According to the report 2018, skills tests and certification were done by NSTB, but RPL recognition was not widely accepted; recognition is given only for employment. Realizing this situation, NVQS was in the process of development of National Qualification Framework (NQF). Awareness building of NQF, advocacy of RPL and discussions concerning integration of various modes of learning and pathways were main activities related to RPL and NQF in 2018. Test Centre mapping was completed and the report was then to be published. Accreditation of skills testing centers were in process and waiting for approval. Sector-wise NVQF/NSTB was working through sector skills committees to develop NOSS, conduct tests and certifies successful candidates and documentation was completed to link RPL with NVQF.

The report of 2019 includes that RPL is a fully institutionalized concept within NVQF with qualification level L1- L8. The manual of RPL was developed and was in the implementation process. Necessary human resources for RPL have been trained. Pilot test on three occupations was conducted on the basis of full competency and unit competency evaluation. However, massive awareness, approach to evaluate RPL and establishment of RPL desk were yet to be done. Skills tests were organized by the World Bank supported EVENT project in coordination with CTEVT. NVQF and NQF were submitted to Cabinet through MoEST for endorsement. The framework comprised of L1-L8 vocational qualifications including the provision of RPL. The Cabinet decided to have further input by organizing meetings with related experts.

The review report 2020 incorporates that RPL is a fully institutionalized concept within NVQF with qualification level L1- L8. The manual of RPL is developed. Various guidelines have been developed. Necessary human resources for RPL are trained. Pilot test of three occupations has been conducted on the basis of full competency and unit competency evaluation. Awareness

advertisement has been done through "Ujyalo Radio". The information of 30,000 RPL seekers has been collected and individual portfolios are being prepared. RPL desk has been established and RPL is in ready mode for the assessments of 5,000 recipients this year. Skills tests were conducted for more than 160,000 applicants and 116771 successful candidates were certified in the last three years. Further, legal provisions and governance structure is being made by hiring a consultant for the functional NVQA.

SN	SN Year Applie		ants		Appea	red		Passed		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	2019/020	25948	31551	57499	22918	28906	51824	17310	20625	37935
2	2018/019	27905	30874	58779	25755	29071	54826	18217	19302	37519
3	2017/018	34583	27420	62338	32246	25525	57771	24121	17196	41317
4	2016//017	-	-	-	-	-	-	-	-	-
Gra	nd Total	192028	8		155422	L		11677	L	
Gra	na rotai	192028	•		15542.	L		110//	L	

(Source: NSTB/CTEVT)

Now there is an approved qualification framework. Human resources are trained and designated. Awareness campaigns are made. Information of RPL seekers has been collected and individual portfolio is being prepared. Legal provisions and governance structure preparation is in process and soon RPL will take off. Massive campaign for the significance of RPL is required to bring all people within the RPL who have acquired skills informally.

Suggestion(s) for improvement

• Wider recognition and horizontal and vertical mobility of RPL should be ensured through NVQF, empowered with legal mandate and commodities associations together with government agencies should be convinced for wider recognition of RPL

9.14 Learning for credit and credit transfer

Credit accumulation and credit banking, leading to recognized qualification is the main purpose of RPL. The 2017 report stated that there is no national system of learning for credit accumulation or credit transfer or credit towards a qualification through RPL.

According to the report 2018, there was no system for recognizing credit earned through RPL and transfer it towards earning recognized qualification. Scheme of earning credit from informal and non-formal learning through RPL and transfer credit to earn formal qualification or equivalent learning was being developed by NVQS and system would be available by the end of 2018. However, the scheme only came into effect as a qualification framework in 2019.

The review report 2019 indicates that there were some practices on credit transfer through incorporating in curriculum and endorsing it within its limited condition. There was no practice to transfer credit in TVET programs, nor was there a practice-awarding credit regarding informal and non-formal learning. To facilitate credit transfer, mobility across occupations National Qualification Framework was prepared in 2019.

The review report of 2020 incorporates the information that there are some practices on credit transfer through incorporating in curriculum and endorsing it within its limited condition. The approval of NQF by the government of Nepal has laid the foundation for credit transfer, credit accumulation and earning of equivalent qualifications. There is a system of credit transfer of NATHM students to other universities but no system of credit transfer for students who want to transfer from other universities to NATHM due to TU regulation, since NATMEM is affiliated with TU.

The concept of credit transfer in TVET is totally new. The CTEVT/ NVQ project has prepared guidelines for RPL and credit accumulation and transfer. The guidelines were widely discussed among the TVET and education experts and feedback received was collected to finalize the guideline in 2020.

Suggestion(s) for improvement

• A clear and precise credit transfer system needs to be developed, matching with the newly developed National Vocational Qualification Framework with legal provision. This system of

credit accumulation and transfer should be applied at all levels of qualifications under the National Qualification Framework.

• NVQF/NQF, which facilitates horizontal and vertical mobility and the credit transfer system should receive legal mandate and a system of earning credit for the informal and non-formal learning should be in place, once the NVQA and NVQS is in operation

9.15 Human Resources Development (HRD)

Well trained and capable professionals are needed for effective implementation of TVET and for increasing productivity of TVET training. Trained employees are the strongest resources of any organization. However, the TVET review report of 2017 raised the issue that the private sector has little understanding of human resources development and its importance. The private sector considers that training human resources is liability, whereas it is an asset only for the trainees. The review report 2017 includes that the private sector has little understanding of Human Resources Development (HRD) and the value of enterprise and employee performance and rewards associated with recognition of work performance and qualification is underrated. They did not take it as their social responsibility and did not see the value of investment for the future.

The review report of 2018 indicates that industries are not prepared and are not ready to pay levy for human resource development needed for their business and industry. However, big industries have their own system for human resource development. TITI support is not enough in terms of developing trainers in association with business and industries for the skills upgrading of the workers working in the private sector. There is the concept that government-produced workers are not good in skills, attitude, and intended for unionization. As a result, business and industries are reluctant to invest in HRD. There is no collaboration between industry and training institutions for the investment in HRD. There is a growing trend to procure products rather than investing in HRD and employment.

The review report 2019 indicates that by then, 6,198 Skills Test Assessors and 456 Skills Test Managers were trained and certified. 6,000 person/week's trainings of various levels were conducted by TITI, of which 40 master trainers are in all provinces, 100 industry-based instructors were trained as well as 260 people were provided TOTS. Further education of B. Tech. Ed. has been provided to TVET personnel and 7 staffs have been undergoing master's degree in TVET. Numerous professional trainings in and abroad were provided together with professional visit, seminars, workshops, and meetings. SDP and EVENT projects offered

scholarships to develop TVET professionals through further education and training. However, there were no systematic plans of HRD in all institutions. The selection process for HRD was not appropriate and even the trained ones were frequently transferred to irrelevant positions.

The review report 2020 points out that TITI provided 6,615 person/weeks professional trainings to 1,400 instructors and managers this year. TITI has also offered skills upgrading training to instructors by placing them in industry and business. CTEVT provides further education to its professionals in Bachelor and Master level degree programs. Seven CTEVT staffs have completed M. TVET. Numerous professional trainings in and abroad are being provided together with professional visits, seminars, workshops, and meetings. EVENT project offers scholarships to develop TVET professionals through further education and training. MoEST has a plan to develop three colleges to produce human resources in Railway, Mining, Hydro and Tunnel engineering. They have also studied report of human resource projection needed for the MoEST system. However, there is no human resource development plan for systematic development of TVET professionals in national level.

Industries are still reluctant to invest in human resource development with the fear that they may lose trained personnel. Business and industries are expected to consider HRD as investment rather than cost. They can reap the benefits of having competent and trained employees. TVET professionals are developed but without any plan and national projected priority. There is no other university except Kathmandu University which has a small number of intakes to develop TVET professionals. Those who are trained and made qualified are often transferred to irrelevant positions.

Suggestion(s) for improvement

 Networking and collaboration should be established for information-sharing and identification of needs of HRD of business and industry and CTEVT/TITI should build partnership with both business and industry and providers for developing trained human resources needed for increasing performance and productivity of business and industries.

9.16 Capacity Development of TVET

A favorable environment is needed for increasing organizational and individual performance. The TVET review of 2017 realized the need for capacity development of institutions, organizations, and individuals. The review report 2018 includes the issue for the first time and indicates that there are provisions for institutional, organizational, and individual capacity development. Individual trainers are trained and refreshed. Some organizational capacity development initiatives are underway. CTEVT is developing TVET-MIS whereas DOL is handling the job portal as a part of LMIS. Capacity development needs of TEVT professionals are not assessed properly and no plan to address such needs seem to exist. There are no higher education degree programs in Nepal to prepare TEVT professionals, managers & leaders. Communication for collaboration between private and public sectors is missing in terms of capacity development. There is resistance for policy acceptance due to attitude, timely communication, and a system to receive feedback for improvement of the policy. The concept of 9 model technical schools and polytechnics supported by EU financed TVET-pp was an example of organizational capacity development.

The review report of 2019 points out that in assistance with EVENT II project, leadership, management, TOT, and assessors' trainings have been conducted in coordination with TITI. Human resource development of TVET within the MoEST has started. There have been adequate efforts in developing capacity at individual level. However, adequate attention is not given in developing capacity at organizational and institutional levels. A Capacity Development Framework of TVET Sector as assisted by the Dakchyata project is in the process of development. Capacity development needs of TVET professionals are not assessed properly and no plan to address such needs are made available. There is no provision of lifelong learning and career progression in new labor act. There is no system for positive recognition of skills upgrading and testing within industry. There are training wings in some big industries, but industries are reluctant to develop human resources with the fear of salary bargain and high rate of turnover. Mostly Indian workers have been replaced by Nepali workers in hospitality profession. However, the hospitality sector is suffering from a high rate of turnover.

The review report 2020 includes the information that there is a report of human resource plan prepared by the team needed for MoEST. But it is unknown yet how the HRD plan developed by MoEST will be implemented. TITI provided instructional training to 1,400 instructors. Seven TVET professionals of CTEVT completed M. TVET from Kathmandu University. Various seminars, workshops and trainings were conducted to expose the TVET professionals in and outside of the country. Labs and workshops were updated in CTEVT schools and E-learning facilities, software and manuals have been developed. Various guidelines for TVET implementation have been developed. MoEST has been establishing three colleges to produce human resources in tunnel, mining, hydro and railway engineering. CTEVT is developing three Centers of Excellence in Lahan, Pokhara and Tikapur and also developing Model Polytechnics, at least one in each province. The new TVET Act has been developed and is in a report form. NQF has been approved by the Cabinet and CTEVT has been developing legal provisions and structural governance for NVQA. There is a strategic plan comprising of six vocational trainingoffering ministries and CTEVT has developed a strategic plan of 2020-2024.

Despite of scattered efforts in capacity development of TVET professionals at the individual level as well as within institutional and organization development, there is still not a plan at national level. If compared with the initiatives taken in 2017, there was negligible information available addressing this issue. Moreover, with gradual efforts, the scenario has improved in capacity development of individuals, institutions and organizations. There are at least strategic plans available in MoEST and CTEVT.

Suggestion(s) for improvement

- Government of Nepal should support Universities to run Bachelor and Master degrees in occupational education or in TVET and the capacity of TITI should be enhanced to prepare quality instructors and TVET professionals capable of planning, delivering and evaluating trainings to prepare skilled human resources.
- Organizational and institutional capacity should be enhanced to produce quality human resources, capable of delivering quality skills training and prepare skilled workers, acceptable to business and industry.

9.17 Resource Management

TVET is comparatively expensive as compared to general education. There should be assurance of continuity of an adequate resources flow to ensure equity, relevance, and quality of TVET programs. Therefore, the annual review of 2018 raised the issue of financial sustainability of each TVET institution. The review study report 2018 further included the information to develop a national TVET fund for effective resource management. Legal foundation was to be approved and implemented. Human, physical, and financial resources were considered for the quality outcome of TVET programs and knowledge management through media and on-line learning was to be focused on. However, a national TVET fund could not materialize, despite reports and discussions about establishing TVET national fund at the government level.

The review report 2019 highlighted that there was no significant achievement made on the policy intent of sustainable and coordinated funding. The policy document was very good, but implementation of the policy was not up to the satisfactory level because some of the policy intents were still untouched. Despite of scattered and isolated efforts, no initiatives were taken for coordinated funding of TVET implementation. One-door TVET funding was one of the key issues of the TVET development. There were many TVET projects supported by development partners, but once the projects have completed and in absence of a consolidated TVET fund, the continuity of the achievements made by such projects and lessons learnt would likely disappear. Moreover, the Dakchyata Project provided inputs on how to establish a TVET Fund for sustainable financing, encouraging MoEST to work further on these ideas.

The review report 2020 includes that MoEST is planning for sustainable and coordinated financing through the 10-year strategic plan, bringing at least six vocational training offering ministries together. However, sustainable and coordinated financing as provisioned by the TVET policy 2012 remained untouched. Now there is a greater scope of efforts to consolidate and develop sustainable financing. The budget allocated to TVET from Government, though increasing every year, is not sufficient for CTEVT programs and needs to be better prioritized and increased. There are negligible efforts to generate income sources such as charging fees to students, examination fees and production units at school level. Such efforts are not enough for sustainable financing. There are many TVET projects supported by development partners, but once the projects are completed and in absence of a consolidated TVET fund, continuity of the achievements of such projects and lessons learnt will easily disappear. The issue has been reviewed and suggestions have been provided from the review study 2018 to 2020. Any scheme for sustainable financing has not come from the Government, despite TVET is highly prioritized by the current government. In almost all TVET policies from 2003 to 2019, suggested for creation of TVET fund, bringing all TVET and skill development related budget in one basket and allocation of funds from that basket to the providers have been put forward. Training levy from business and industry, local resource generation, allocating 2-5 percent of the development budget for TVET were some of the schemes suggested for financial sustainability in these past policies.

The issue was one of the key policy intents of TVET policy 2012. The other intents of the policy got much attention of the concerned authority; however, consolidated one-door TVET financing

remained untouched. Now the TVET policy 2012 has been superseded by the integrated National Education Policy 2019 and the policy intent is carried over by the latest policy. In this regard, MoEST is preparing a 10-year strategic plan by bringing six vocational training offering ministries together and the plan has given room for the sustainable and coordinated financing in TVET.

Suggestions (s) for improvement

- There should be the legal provision for the creation of a TVET fund with appropriate fund flow mechanism in all tiers of government, from central, provincial to local governments to ensure the sustainable financing of TVET.
- The Government needs to increase the budget for TVET. The increased government budget and donor's contribution and training levy or payroll levy should be collected in these funds. Such funds should be managed at all levels.
- The achievements of the projects which is the outcome of pilot test should be institutionalized and up-scaling and replicating mechanism should be developed through coordinated and sustainable financing. Industry and business should be convinced to pay levy in return, they will get quality skilled workers through training support

9.18 Effective Coordination Mechanism in TVET

Although CTEVT is the main responsible agency for the development, quality assurance and coordination among employers and providers, there are several other ministries involved in vocational skills training, but coordination among them has been difficult. Therefore, TVET review of 2019 stated "There is no effective coordination mechanism in TVET implementation and monitoring progress of policy implementation". The issue was not reviewed during the review study of 2017 and 2018. However, the issue was identified and included in the review study 2019 for the first time. The report 2019 includes that there is a need to coordinate all TVET institutions in both public and private sectors through policy review and revision, standard (NOSS) based curricula and, regular monitoring and supervision, mandatory national testing and examinations, coordination regulation and one-door TVET funding. HAN is leading the sector skills committee of NSTB and is represented even in the policy level of NATHEM. It is a good start of coordination among the public and private sectors, which needs improvement and expansion. Linkage between NSTB and CSSI has been developed and CSSI training center is

being utilized as a skills testing center. Coordination is effective at higher and at policy level but needs to be developed at provincial and local levels as well. EVENT II claims that there is an effective coordination mechanism among CTEVT, NSTB, TITI, ENSSURE and Skills Training Centre in relation to conducting vocational training courses. There is coordinating committee at MoEST to coordinate all Ministries and Departments involved in TVET development, but the committee needs to be made more functional and effective. MoEST believes that **c**oordination of TVET is not systematic and is on an *ad hoc* basis. Some progress on policy implementation is noted..

The review report 2020 indicates that there is a need to develop a coordination mechanism in both public and private sectors through policy review and revision, competency (NOC) based curricula and, regular monitoring and supervision, testing and examinations, coordination regulation and one-door TVET funding. Private sector is leading sector skills committees and NATHM is represented in NOSS development and testing. Other government agencies offering vocational training have weak coordination within government agencies and with private sector. Coordination is effective at higher and policy level but needs to be developed at provincial and local levels. EVENT II claims that there is effective coordination mechanism among CTEVT, NSTB, TITI, ENSSURE and Skills Training Centre in relation to conducting vocational training courses. The committee at MoEST is functional and coordinating the TVET stakeholders. The initiation of MoEST to develop 10-year strategic plan comprising of six vocational training offering ministries can play the role of bridging to bring all TVET stakeholders including business and industries under a unified and strong consolidated and coordinated system. OJT, Internship, and apprenticeship programs are the means to coordinate with business and industries. Such programs are to be intensified and made effective.

There is legal provision to coordinate TVET stakeholders through the technical committee at MoEST. However, the effectiveness of the committee needs to be reviewed and intensified. These structures should be backed up by a legal mandate. There is a coordination mechanism at the policy level but coordination at province and local level needs to be made effective. Both vertical and horizontal coordination among key stakeholders is needed at all three levels of government. There is coordination among government agencies but business and industries are not coordinated in a developed system. OJT, apprenticeship, and internship programs are good

means of coordination among business and industry, which needs to be made an integral part of all TVET programs.

Suggestion (s) for improvement

- Umbrella policy though strong decision with one door-system for training programs and budget should be developed by the government and resource-utilization should be made effective with regular monitoring and supervision.
- A system of accountability assessment of TVET institutions and providers should be endorsed. Based on the assessment results, funding decisions should be made by the mandated authority for financing.

9.19 Challenges and opportunities of COVID 19

COVID 19 pandemic began in China in December 2019 for the first time and has since spread all over the world and affected every sector throughout the year and is still out of control. The review report 2020 incorporated the COVID 19 effects, stating that there is an irreparable loss caused by COVID 19. The whole world came to a stand-still and Nepal too, due to lockdown. There is still no normal situation. Schools and colleges are still not opened. There is billions of Rupees of loss in construction industries. Over 60% of the industries have not returned to operation yet. Tourism industry is in red zone. It will take at least two years to return everything to normalcy if vaccination will be effective over the deadly virus. Thousands and thousands of workers have returned home by losing their foreign employment and there is a huge challenge to assimilate them into employment. The academic calendar of the education system is obstructed and batches are overlapping.

Not all is black in black - the COVID 19 has also created some opportunities. Virtual programs are developed through development of e-learning technology, materials, and facilities. There is awareness in people to remain safe by maintaining health and hygiene. The health sector got priority for developing effective facilities to face the pandemic challenges. Some industries such as those producing food, health equipment and items of daily needs have flourished. Masks worth of fifty million rupees were exported to the US only. The pandemic taught a lesson to develop alternative approaches and compatible infrastructure to face similar types of pandemics in the future.

There is discussion on how to assimilate returning migrant workers into communities. CTEVT has collected information of 30,000 individuals to prepare individual portfolios and offer RPL to

certify their skills level. NSTB has plans to assess 5,000 individual and certify them for their skills level. EVENT II has plans to offer vocational training to 5,000 returning migrants for skilling, re-skilling, and up-skilling them.

Suggestion (s) for improvement

- Alternative approaches should be developed and adjusted towards the obstructed academic years. The projects supporting TVET should be diverted for the development of software, facilities, and human resources for effective implementation of digitally supported TVET programs.
- There should be a strong mechanism to collect individual information of returning migrant workers to identify their skills level so that skilling, re-skilling, and up-skilling training can be provided before assimilating them into employment at community level.
- There should be plans in all Federal, Province and Local levels to assimilate returning migrant workers into the community and a joint forum of government and private sector in all levels should be created to utilize the returned work force.

10. Conclusion

The report has included 19 issues which have been clustered in seven broader categories. The policy related issues were compared with the findings of review studies of consecutive years from 2017-2020. The policy implementation and reforms took speed in most of the policy intents except the policy intent of sustainable financing. The government investment in TVET has still not increased as it was expected. The TVET policy 2012 has been superseded by the integrated National Education Policy 2019. The policy dissemination has to be intensified among all TVET actors from federal to the local level.

The TVET expansion and access are in a good condition. There are more than 1,700 formal and more than 1,100 non-formal institutions which offer technical education and vocational training programs. There are scholarship provisions in all TVET programs for equitable access. Mostly, non-formal vocational training programs are delivered free of cost, which ensures the justified access to TVET. The TVET offering institutions are managed in different modalities, such as constituent, affiliated, partnership and community schools. The mode of training delivery is also based on practical exposure through in-house labs and workshops, OJT, internship, apprenticeship, on site, mobile and satellite. Despite of the achievement made, systematic planning based on geographical mapping needs to be considered for future TVET developments. Relevancy is being checked through development of demand-driven curricula, conducting studies of market needs and producing skilled human resources, demanded by the business and industry. There are scattered efforts being made for reliable labor market information system, connecting information from both demand and supply sides. Private sector is involved in many programs within the policy level, but their involvement is not institutionalized. Tracer studies, follow-up studies and even impact studies have been and are conducted, but information obtained from such studies is not connected to the LMIS and not utilized for TVET development. Quality is another significant issue incorporated in this report. Quality is being ensured through designing demand-driven programs, trained and experienced instructors, well-equipped training facilities, well-developed infrastructure and timely monitoring and supervision. Despite of such efforts, there is always an issue of mismatch of TVET programs between demand and supply. Therefore, a strong mechanism involving business and industry throughout TVET implementation is required to mitigate this mismatch issue.

Mobility within TVET programs and inclusion is another issue, which has been incorporated in this study. NQF has been approved by the Government and legal provisions are being developed for an autonomous NVQA. There are various guidelines available to bring people within the RPL system for their vertical and horizontal mobility. Skills test has included many people and many skills certificates have been awarded. All preparation has been completed for RPL provisions and people will start getting benefit from RPL from this year. There is no credit transfer system in TVET programs. NVQF will have such provisions, once it comes into effect. National Occupation Competencies are developed by involving experts from business and industry. There are three sector committees led by business and industry. Such committees need to be expanded in every occupation.

Capacity development is another important issue in TVET. There is no visible plan to develop capacity of individuals, institutions, and organizations. Moreover, activities are being performed in a scattered way. TITI has been providing professional training to TVET professionals. Kathmandu University is educating TVET professional by providing M. TVET, though the number is very small. There are scholarship provisions through projects for further studies. Seminars, workshops, and excursions in and abroad are being conducted to equip TVET professionals. Similarly, institutions are capacitated with guidelines, labs/workshops, physical facilities, and e-learning facilities. Organizations are backed up by rules, regulations, strategic plans, and revision of policies.

The deadly virus COVID 19 has created several challenges in human life, even by threatening the lives of people all over the world. The pandemic began from China one year ago and is still out of control. Every corner has been hit by this virus. Schools and colleges have not been fully opened yet. During the pandemic, alternative approaches were applied to resume the academic activities; however, there were many difficulties in implementation because the world has faced such catastrophic after many years. It will take at least two years to come to complete normalcy, but only if vaccination will be available and will be effective against this deadly virus.

Annex: Comparative Matrix of TVET Reviews from 2017 to 2020

Comparative Matrix of Annual Review of TVET Implementation from 2017 - 2020

9.1 TEVT Policy:

(Lacks clear implementation with M&E planning and management)

TVET Implementation	TVET Implementation in 2018	-	VET Implementation in 2019	TVET Implementation in 2020
in 2017	•		•	·
• There were the	MOE with the help of Inter-	•	There have been remarkable	 Formal TVET was started with five
actions taken to	Ministerial Technical Committee		achievements in the field of TVET	technical schools in 1980s and there are
develop annual work	conducted more than 60 policy		expansion. Formal TVET was started	more than 1700 such institutions in
plan for TEVT	dialogues consultative		with five technical schools in 1980s	2020. Additionally, there are more than
secretariat, develop	Workshops at regional basis for		and there are more than 1000 such	1100 non-formal training institutions
M&E framework	policy dissemination and		institutions in 2019. Additionally,	offering vocational short- term
based on the annual	feedback collection.		there are 1081non-formal training	programs.
work plan, carry out	Involvement of inter-ministerial		institutions offering vocational	 NQF has been approved and legal
capacity analysis for	technical committee in policy		short- term programs.	provisions and governance structure of
TEVT government	dialogue process promoted	•	To facilitate recognition of non-	NVQA is being developed. All
implementation	collaboration, facilitated		formal and in-formal learning and	preparatory work has been completed
agencies, carry out	coordination and helped to		mobility, NVQF of various levels of	for launching RPL.
capacity building of	identify policy gaps.		qualifications is being developed for	• There is the target this year to conduct
TEVT implementation	 Most of the stake holders are 		wider participation.	RPL assessment. Information of 30000
agencies and develop	aware of TVET policy; however,	•	There has been significant progress	returning migrant workers has been
specific roles,	all employment sectors are not		in the access to non-formal skills	collected. Portfolio of individual RPL
responsibilities and	aware of it. SKILLS project		training through massive expansion	seeker is being developed.
functions for TVET	supported by UNDP is working		of various programs and projects	 Various guidelines for curriculum
related agencies in	on policy revision based on		but workings in isolation are	development, National Competency
2017.	feedbacks received from policy		creating duplication of efforts.	Development, Assessors training,
	dialogue process.	•	Attempts were made to implement	counselors training have been
	 TVET Policy Coordination 		the TVET policy 2012. Policy	developed.
	Committee chaired by Minister		directives, apprenticeship guide-	 Instructors training and occupational
	of Education received draft		lines, vocational course	skills upgrading have been developed.
	report of policy review. Initiation		implementation guidelines and TVET	Development of E-learning is in priority.
	for establishing TVET Fund is in		implementation guidelines were	The E-learning system, curricula and

	-		
process.		developed and are in the process of	materials are being developed.
There were no TEVT Policy		implementation.	 Virtual classes have been conducted for
Implementation Plan, goals and	•	It was claimed that TVET	training implementation.
deadlines; no M&E strategy for		implementation plan is within	 Nearly 75 thousand students have been
TEVT Reform; no capacity		limited organizations such as CTEVT,	admitted in formal TVET programs. 42
analysis carried out for policy		NPC and MoEST. The plan was	thousand people received vocational
implementation; no specific		neither in wider circulation among	training through CTEVT provincial level.
roles of TEVT related agencies to		TVET providing agencies nor	25 thousand people got vocational
implement policy; HRD in terms		regularly monitored the progress.	training through EVENT II project. 9000
of leaders, managers and	•	TVET implementation plan was an	trainees are undergoing Dual VET
experts development is not			(apprenticeship) training assisted by
focused in order to effective			ENSSURE project.
implementation of TVET policy.			• More than 140, 000 candidates were
	•	There were initiatives taken to	certified in skills tests in the last three
		promote TVET access, relevance,	years. 6485 students of long term got
		-	scholarships.
			• There are 620 curricula and national
			competency standards by now. There is
	•	0	a plan to train 59500 unemployed and
		-	ultra-poor youths for ensuring minimum
		•	100 days employment.
			 Other government agencies and project
			have been offering vocational training to
			thousands of training recipients.
			thousands of training recipients.
	There were no TEVT Policy Implementation Plan, goals and deadlines; no M&E strategy for TEVT Reform; no capacity analysis carried out for policy implementation; no specific roles of TEVT related agencies to implement policy; HRD in terms of leaders, managers and experts development is not focused in order to effective	There were no TEVT Policy Implementation Plan, goals and deadlines; no M&E strategy for TEVT Reform; no capacity analysis carried out for policy implementation; no specific roles of TEVT related agencies to implement policy; HRD in terms of leaders, managers and experts development is not focused in order to effective	 There were no TEVT Policy Implementation Plan, goals and deadlines; no M&E strategy for TEVT Reform; no capacity analysis carried out for policy implementation; no specific roles of TEVT related agencies to implement policy; HRD in terms of leaders, managers and experts development is not focused in order to effective implementation of TVET policy. Implementation. It was claimed that TVET implementation plan is within limited organizations such as CTEVT, NPC and MoEST. The plan was neither in wider circulation among TVET providing agencies nor regularly monitored the progress. TVET implementation plan was an integral part of TVET Road Map document but it was not approved and implemented.

9.2 National TEVT Strategy and roadmap

(No strategies and roadmap available)

TVET Implementation in 2017	TVET Implementation in 2018	TVET Implementation in 2019	TVET Implementation in 2020
 ADB would complete TEVT strategy and roadmap, TVET PP would support capacity building activities and support in the implementation of TVET strategy and roadmap. 	 TVET strategic plan or road map is not available but ADB's TA support has prepared TEVT policy roadmap which needs endorsement CTEVT strategic plan is available but there is no strategic plan of TVET. TVET strategic plan is not connected with yearly plan of operation of CTEVT. 	 Policy related strategic plan 2014-2018 were developed and implemented by CTEVT. However, there is no policy strategic plan after 2018. TVET strategies and road map were developed with the support of ADB which was not approved and did not appear in circulation. New TVET Act is developed and is in a draft form. TVET policy and integrated Act capturing responsibility of all level (Palika to Centre) is in process. The TVET policy 2012 is relevant in present context but its implementation is not effective due to the ownership taken by any authority for its implementation. TMIS is tied up with TVET policy and programs launched are linked to MoEST data base system but it is not connected to all TTPs. TVET policy 2012 needs amendments in the context of present federal structure. 	 New integrated National Education Policy 2019 has been approved and enforced for implementation. CTEVT has developed a strategic plan of the period of 2020-2024which is in a report form. MoEST has developed a coordinated strategic plan of six vocational training offering ministries for ten years. National Planning Commission is planning to introduce 15th National Periodic plan with provisions for TVET development. PMEP has plan to train 59500 ultra-poor youths to ensure 100 days work. There is a vision document of FNCCI to create employment opportunities to 400,000 youths each year and CTEVT is developing three centers of excellence in Pokhara, Lahan and Tikapur.

9.3 Federalization

(Decentralization of functional division and authority sharing in TEVT implementation)

TVET	TVET	TVET Implementation in 2019	TVET Implementation in 2020
Implementation	Implementation in		
in 2017	2018		
 Federalization practices of TEVT were uncertain but could offer many positive opportunities. CTEVT drafted its federalized structure and not yet approved. SDC developed and recommended TVET Federal structure. 	 CTEVT decided to establish at least one provincial office with full authority in each province. Sector Ministries involved in TVET, were working for federalization of TVET programs. CTEVT was in TVET restructuring in line with the federal context with assistance of development partners. There were no federal plans available. 	 CTEVT has merged its regional offices and established Provincial level offices with roles and responsibility endorsed by Council but Provincial Governments intended to operate such offices under their Social Development Ministry. There was restructuring scheme of CTEVT in the federalism concept prepared but no progress in implementation of restructuring of CTEVT in a changed context. The approved integrated TVET Act which was in a draft form could address the restructuring issue. All agriculture training programs under MoA had been handed over to provincial government. Extension, in service training and agriculture information were the responsibility of the central level. Thirteen skills training centers under DoL were handed over to the provincial government. Three autonomous academies were developed in Bhainsepati, Butwal and Itahari i. Academy management is done by government officials and training programs were conducted by outsourcing experts and contracting institutions. The nation was under transition phase. Every authority was in process to develop policy, laws, rules and regulations at all levels from center to Palika. NATHM had policy to open up its branches in all provinces. 	 CTEVT Provincial Offices are functional in all Provinces with sufficient staffs and facilities. TITI and NSTB are plans to operate the branches in all provinces. MoEST has brought Technical Division in operation within the ministry and is functional. MoEST has opened up Technical Sections in each office of Directorate. CTEVT is developing model polytechnic institutions at least one in each province. Ministry of agriculture has handed over its training centers to the provincial government. Ministry of Labour, Employment and Social Security has handed over all training centers to the respective provincial governments and three autonomous Academies are managed by the Centre in Lalitpur, Butwal and Itahari. NATHM is in plan to open up its branches once it will have the status of Deem University. CEHRD of MoEST regulates TVET streams in 484 community schools. CTEVT is in the process of restructuring its structure in the center.

9.4 Basis of TVET institution establishment

(The equitable access in TVET does not include proper system to select or establish training institution)

TVET	TVET	TVET Implementation in 2019	TVET Implementation in 2020
Implementation	Implementation		
in 2017	in 2018		
	· ·	 There were needs assessment for skills development through rapid TNA for local people and demand of business and industry and plan of provincial government which were some bases of prioritizing or establishment of training institutions but in absence of a system of approval of privately managed institutions, the establishment procedure was not trustworthy. There was not any effective system for employers' involvement in identifying skills demand and prioritization of TVET programs. There are only three sector skills committees but due to the absence of authorized councils in all sectors, no system existed to provide information of skills on demands to identify occupations or job titles. There were programs from Window 1-Window 7 and up to Window 5; vocational skills are included with the concept of challenge fund to share 50-80 % by Skills for Employment Project. The programs focused on industry led activities to train industry employees and migrant workers. There are the provisions of scholarships as Special TVET programs for DAG, Dalit and poor fully funded by the government. The following three types of scholarships are provided in TVET: a) Special scholarship for DAG. Dalit and poor, b) sponsored free 	 There were needs assessment for skills development through rapid TNA and RMA for local people and demand of business and industry and plan of local, provincial and federal governments which are some bases of prioritizing or establishment of training institutions. Individual requests and requests of institutions are also made the basis of program selection and establishing the training institutions. Employers' involvement is not made effective in identifying skills demand and prioritization of TVET programs. There are only three sector skills committees led by business and
		Special scholarship for DAG, Dalit and poor, b) sponsored free vocational training courses and c) performance-based scholarship (intelligent performance). However, available scholarships are	committees led by business and industries. Such committees need to be expanded in each

r			
	limited to cater the massive needs of skills trainings for DAG, Dalit		occupational area.
	and poor.	٠	Donors put on top priority for
•	Supports for 100 people are provided under ENSSURE project as		access and gender equality.
	an apprenticeship model. Donors put on top priority for access		Study reports of donor supports
	and gender equality. Study reports of donor supports are available		are available on these issues but
	on these issues but such supports are time bound which have		such supports are time bound
	always a sustainability challenge.		which have always a
•	EVENT II targets to conduct vocational courses to 115,000 people		sustainability challenge.
	with approved criteria under result and voucher-based	•	There are scholarship provisions
	approaches during the project period. Similarly, total 6000		in TVET system. CTEVT provides
	students of Diploma and TSLC programs receive scholarships.		10% scholarship in Pre-diploma
•	Participants of tourism vocational courses implemented by		and Diploma level programs.
	NATHM have to pay 25000 per program. There is no scholarship		MoEST administers scholarship
	but there are cases of individual sponsorship. Special courses such		programs in higher education
	as housewife, housemaid and caregiver are provided at free of		and offers subsidized programs
	charge to DAG people by NATHM. NATHM also conducts both		at school level.
	formal and non-formal vocational skills training courses in tourism	•	All agencies except NATHM
	sector.		provide vocational training at
•	Various levels of TVET programs are being conducted from		free of cost. EVENT II project
	Bachelor in Technical Education (B. Tech.) to demand based		provides scholarship to 1200
	vocational short courses in Nepal. CTEVT and TITI offer		students of pre-diploma and
	professional training courses to skills assessors, managers,		diploma programs.
	instructors and curriculum development professionals.	•	CTEVT has been training 9000
•	There are TVET institutions of various modalities in operation such		students under its dual vet and
	as: CTEVT constituent institutions, recognized institutions,		CTEVT offers special scholarship
	institutions managed in partnership such as, Technical Education		to 500 DAG people each year.
	in Community Schools (TECS), Manmohan Polytechnic Institute,		
	Krishna Prasad Koirala Trust, and Tansen Nursing School.		
	Secondary School System is offering 9-12 Technical education		
	streams. Technical education at the professional level is being		
	offered by universities.		
	oncrea by aniversities.		

9.5 Training on demand (Current LMI sources do not include occupation or skill demand)

TVET Implementation in	TVET Implementation in 2018	TVET Implementation in 2019	TVET Implementation in 2020
2017			
 There were no LMI tools or indicators to specify occupation or skills demand, no national LMI demand information framework, no national institution to collect LMI and no national agency responsible for information systems linked with employer demand requirements and no employer organization to relay demand requirements of the employers 	 There was no functional LMIS. Sector assessment in form of studies was started by CTEVT but required a system for regularization. CTEVT developed TEVT- MIS and started training information data synchronization with the support of UNDP Skills project. There was practice to select TVET programs through TNAs and RMAs but the information obtained through such assessments did not represent overall picture of labour market demand. CTEVT started to conduct labour market signaling in selected sectors but it was not as a regular system. There were Data of CTEVT, MOE, MOL and CBS/NPC available in a scattered way but not in a complete document. In absence of effective LMIS, training programs (including Development Partner supported skills training) were mismatched 	 There was program for integrated LMIS under Skills Project supported by UNDP. The system collecting and disseminating supply information was in place, however; wider coverage of supply and demand information was needed to operate demand responsive LMIS. CTEVT and MoEST were working on standardized LMIS which was on a final stage. LMIS was scattered and needs to be consolidated. No studies were done and reports published on a regular basis for demand side information. Employment shops were operated in some districts but such efforts were not linked to national network. There was need assessments at institutional level through rapid TNA and other researches prior to developing new program and implemented it but no concrete data were available at national level; Sakchyamta developed demand collection tools by assigning its consultants. 	 There used to be studies signaling labour market information in the past but there are not such studies being conducted. CTEVT, MoEST and MoLESS have LMI systems which need to be consolidated and operated by a single authority. The systems are mostly loaded with supply side information. The balancing of information from both supply and demand is required. Information of job portals are there but effectiveness of such portals needs to be ensured. CTEVT and MoEST have integrated TMI which needs to be linked to LMIS. MoLESS is establishing Information Service centers in each Palika level is to be linked to the central LMIS. ELMS project is working on National LMIS led by business organizations which need to be made focal LMIS and linked the information of all the systems in

 with labour market demands. There was no system to utilize skills of returnee migrants. Employment Information Services under MOL was not effective. Moreover, HAN was initiating its own Employment Information Center. Job Portal was initiated in MoL but the base of job information needed further improvement. 	 There was provision of demand forecast in the document of periodic plan of National Planning Commission and CTEVT strategic plan but there was no national demand forecast of skilled workers. Training information portal was supported and developed by ILO operated by CTEVT within CTEVT website but needs further update. Necessary tools were developed to identify the most demanding 	 existence. CBS has a kind of forecasting mechanism during the national population census but such forecasts are limited only for unemployed people. More requests are received even each day from small and middle scale industries of tourism and hotel management but graduates prefer employment at big industries.
	occupations in TVET.	

9.6 Tracer Studies

(No recognized national framework for Tracer Studies of TEVT graduates)

TVET Implementation	TVET Implementation in 2018	TVET Implementation in	TVET Implementation in 2020
in 2017		2019	
 in 2017 There is no formal or national policy for Tracer studies. Impact studies were carried out centrally by CTEVT as a sample exercise. Tracer studies were not implemented by most TEVT centers. There was no tracer study methodology applied to TEVT centers as part of their registration or accreditation process. TEVT centers were unable to justify recruitment numbers of learners and were unable to justify 	 Follow up studies were conducted on an occasional basis but were not provisioned in the prevailing laws. There was practice of tracer study on project basis, however; such studies were not regularized and linked with LMIS and TVET programs. Tracer studies were conducted but reliability in the information produced was in question. No tracer study was repeated yet but CTEVT had plans to conduct tracer studies in the interval of five years period which needed to be institutionalized. Technical Schools conducted tracer studies of their programs supported by projects. There was no labour national market institution for utilizing information generated from tracer studies. Sector skills committees were formed without legal foundation. There was no practice to utilize the information generated by tracer study. Reports of tracer study are utilized for institutional accreditation. CTEVT has attempted to use tracer studies as a means of labour market signaling of demands. 	 Some of TTPs and institutions conducted tracer studies occasionally. Others stated that they included tracer study in the programs for coming year. Those who conducted tracer studies, the information obtained from it were not linked to LMIS. The tracer study reports were not in wide circulation. There were attempts to develop LMI system but was not functional. Supply related data were available in some extent but demand related information was 	 Tracer and impact studies have not been conducted on a regular basis. Legal provisions to make tracer studies and follow up studies are not made integral part of the TVET program implementation. CTEVT has made tracer studies mandatory at school level, however; the information of such studies is not linked to the information system of the centre, nor is the information utilized for program and curriculum development in a systematic way. EVENT II project has functional monitoring system but only for nine months from the date of training commencement. There is realization of the
applied to TEVT centers as part of their registration or accreditation process. TEVT centers were unable to justify recruitment numbers of learners and were unable to justify choice of learning	 programs supported by projects. There was no labour national market institution for utilizing information generated from tracer studies. Sector skills committees were formed without legal foundation. There was no practice to utilize the information generated by tracer study. Reports of tracer study are utilized for institutional accreditation. CTEVT has attempted to use tracer studies as a 	• The tracer study reports were not in wide circulation. There were attempts to develop LMI system but was not functional. Supply related data were available in some extent but demand related information was missing.	 centre, nor is the information utilized for program and curriculum development in a systematic way. EVENT II project has functional monitoring system but only for nine months from the date of training commencement. There is realization of the significance of tracer studies
programmers by LM demand.	helped identify labour market information from which new programs were developed such as caregiver and mobile repairer.	• There was not any significant progress between tracer study and labour market institution.	among TVET stakeholders, however; sufficient initiations have not been taken in this direction

9.7 Nepali Classification of Occupations

(Current classifications are confusing and do not offer a realistic view of the labour market)

TVET Implementation in	TVET Implementation in 2018	TVET Implementation in 2019	TVET Implementation in 2020
2017			
 There were currently 4 different types of Nepali Classification of Occupations being used by LMI and TEVT stakeholder organizations. TEVT classifications, testing and curricula did not reflect realistic and current occupation workplace descriptions. 	 Nepali Classifications of Occupations were available as prepared by ILO but it was not being followed by training institutions, and business / industry. NESCO was incomplete in some cases for example: there was vocational teacher which was more general and did not suggest any specific vocation. Revision of NESCO was required (CTEVT); Employers community was supposed to contribute to the classification of occupations but they did not have capacity to do it. National Format of NESCO was available which was prepared by CBS but not fully owned by business and industry. There were classifications of occupations in tourism sector because tourism standards are the same in all countries. Global standards are followed. 	 Attempts were made to improve occupational classification and occupational standards mobilizing sector committees represented by business and industries. Nepal was facing difficulty to revise or develop Nepali Classification of occupation that reflected the reality of labour market and conducive to life-long learning, skills upgrading and demand forecasts. National Format of NESCO was available which was prepared by CBS but not fully owned by business and industry. There were classifications of occupations in tourism sector because tourism standards are the same in all countries. Global standards are followed. 	 National Format of NESCO is available which is prepared by CBS but is not fully owned by business and industry. There are classifications of occupations in tourism sector because tourism standards are the same in all countries. Global standards are followed. No new intervention is available to standardize the existing NESCO in government agencies. Three Sector Skills Committees of NSTB are being led by business and industries but in other sectors, conventional approaches are being followed. ELMS project led by business and industries and supported by Dakchyata project is having initiation to develop NSCO in three occupations selecting at least 10 potential job titles of each occupation.

TVET Implementation in	TVET Implementation in 2018	TVET Implementation in 2019	TVET Implementation in 2020
2017			
 There was confusion in the definition of Occupations Standards (OS) and Competence / Skills / Training Standards. The private sector did not bonofit from the uses of 	available. Sector Skills Committee represented heavily by private sector developed OSs each year. There was no practice of	• Experts involved in DACUM process take part from both public and private sectors. Sector Skills Committee members involved	 DACUM or Functional Analysis approach is being used to develop occupational standard and writing corresponding training standards. Experts involve in DACUM process take part from both
 benefit from the uses of OS to increase performance and efficiency. Occupation skills standards were not developed from the activities defined in 	 employers led development of occupational standards; capacity gap could be the reason. Both private and government experts involved in OS development and endorsement process but it 	occupational standards. • National Skill Testing Board is represented 50-50% from public and private sectors to	 process take part from both public and private sectors. Sector Skills Committee members involve in development and revision process of occupational standards. There is well representation of
 national occupational standards. Skills standards and assessment standards were not based on learning outcomes to 	 was done on an individual level as a result, ownership on an organization was not taken. CTEVT involved private sector representatives to develop training and competence 	 taking its ownership at institutional level. Experts of professional associations involved in skills standard development and revision process. CTEVT involved private sector representatives to develop training and competence standards 	 private sector in the board of NSTB, however; the involvement is still in an individual level. Professional Associations and NATHM experts involve in skills
 ensure that the necessary competences were developed by a person to enable him or her to function at an agreed level in an occupation. There was no link 	standards but not happening to match competence/skills/ training standards as set by private sector. Individual representation in committee raised ownership question, organizational involvement in	raised ownership question, organizational involvement in setting occupational and training standards was needed.	 competency development and revision process. CTEVT involves private sector representatives to develop training and competence standards but these standards are not connected with

9.8 Occupations Standards (OS) and skills Training Standards:

(No national framework for the development of occupation standards)

between curricula content	setting training standards	uses by skill testing is based on hours of	occupational standards
and skills assessment	needed.	training and years of work experience	endorsed by private sector.
through learning	Occupation skills standards	 NVQS project was attempting improvement 	• There is currently no link
outcomes.	were not developed from the	in leveling by bringing connections between	between occupational
 Leveling uses by skill testing is based on hours of training and years of work experience and not on learning outcomes 	activities defined in national occupational standards. There was no link between curricula content and skills assessment through learning outcomes.	occupational standards, assessment of competencies and learning outcomes.	standards, curricula content, competencies testing and assessment. NVQS attempts to assess the skills on credit basis once the system comes into
			enforcement.

9.9 Experiential Learning with Business and Industry.

(TVET programs do not focus on experiential learning by mobilizing business and industry)

TVET	TVET	TVET Implementation in 2019	TVET Implementation in 2020
Implementation	Implementation		
in 2017	in 2018		
This issue was not identified separately in 2017	This issue was not identified separately in 2017 and 2018.	 Some of the TVET institutions attempted work-based learning such as MPI, KNIT, BTS, BIT and BSET. However, systematic planning and execution of the experiential learning was not properly enforced due to the capacity gap of TVET providers. Work based learning was made mandatory to Skill Training programs supported by ENSSURE Project. Many formal TVET programs offered by CTEVT and its recognized institutions placed the trainees on "On-the –job Training" for experiential learning from three to six months. TITI trained 100 instructors supported by EVENT II for work-based learning but industry could not release such 	 Some of the TVET institutions attempted work-based learning such as MPI, KNIT, BTS, BIT and BSET. However, systematic planning and execution of the experiential learning is not properly enforced due to the capacity gap of TVET providers. Work based learning is made mandatory to Skill Training programs supported by ENSSURE Project. Many formal TVET programs offered by CTEVT and its recognized institutions
		technicians to develop as trainers within the industries due	place the trainees on "On-the –job

 to the limited number of people working with them. Trainees of construction occupations were placed on OJT in construction companies. Not only vocational training graduates, overseers and engineers also needed experience in experiential learning in industry which was not in practice. There was potential in construction and other relevant industries in skilling human resources of various levels with up-grading provisions as well as recognizing prior learning and acquiring recognized qualifications through informal and non-formal means. There was experiential learning attached in some professional degree programs within Nepal and abroad in tourism and hotel management and health related programs but no experiential learning for all vocational courses delivered by NATHM. There were some practices of industrial experiential learning in the form of OJT and internship, however; remarkable partnership in TVET was absent and also no supportive policy to motivate employees to take part in partnership. The industries were not equipped and willing to provide experiential training. Cooperation mechanism between industry and training provider were not effective. Manufacturing industries did not involve in such activities. Existing labour law is also not favorable for flourishing apprenticeship or work-based learning. There is no system to have dialogues, rapport buildings and facilitation to business and industries under partnership for experiential learning. Seven different models were identified through a comprehensive study for pilot test of PPP approach in TVET. 	 TITI has been providing skills upgrading training to instructors by placing them in business and industries. There is potential in construction and other relevant industries in skilling human resources of various levels with up-grading provisions as well as recognizing prior learning and acquiring recognized qualifications through informal and non-formal means. There is experiential learning attached in some professional degree programs within Nepal and abroad in tourism and hotel management and health related programs but there is no experiential learning for all vocational courses delivered by NATHM. The industries are also not equipped though they are willing to provide experiential training. Coordination mechanism between industry and training provider is not effective. Manufacturing industries have not yet involved in such activities. Seven different models have been identified through a comprehensive study for pilot test of PPP approach in
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9.10 TEVT Quality Assurance

(No national framework for TEVT Quality Assurance)

TVET	TVET Implementation in 2018	TVET Implementation in 2019	TVET Implementation in 2020
Implementation			
in 2017			
 There was no 	• There were quality assurance	• Feasibility Study, registration of training	 There are guidelines for program
national TEVT	provisions (such as competency-	institution or programs based on the quality	affiliation, standard process to
Quality	based curricula, monitoring	infrastructure, trained instructors, and	develop and revise curricula, well
Assurance	mechanism, accreditation, testing	necessary provision of resources were some of	designed tools for regular monitoring
model or	and evaluation, TOT) but such	quality assurance measures in practice. Demand	and supervision, trained and
framework in	provisions were not integrated in	based and updated curriculum, Monitoring,	experienced instructors, well
Nepal. TEVT	the form of quality assurance	supervision and evaluation and skills tests, end	established labs and workshops in
programs and	model. Quality assurance was	of program exams and certifications were the	place.
centers had no	assessed looking into: Input:	key factors of quality assurance applied by	• Experiential learning is enforced in
national	facilities, curriculum, trainees and	CTEVT. Curriculum development and revision in	the form of OJT, apprenticeship and
framework of	teacher licensing, Process:	regular consultation with employment market	internship to expose the trainees in
validation and	Delivery, evaluation, certification	was realized.	the real world of work.
accreditation	and recognition. Output/	• Experts and sector skills committee members	• There are more than 600 curricula
	outcome: Success rate,	engaged to jointly develop and revise TVET	and 299 competency standards of all
	employment rate and	curricula in hotel and tourism and construction	level developed according to the
	employment verification.	sector. Curriculum development in line with	need of the labour market.
	• No systematic quality assurance	national occupational standard was initiated.	Curriculum development and
	mechanism was in place. Input	Relevancy in learning outcome was questionable	revision in regular consultation with
	quality, process quality, output	because TVET programs did not fully address the	employment market is realized.
	quality and to some extent	needs of job market.	• Experts and sector skills committee
	outcome quality were assessed	• TITI was contributing in quality improvement	members are engaged to jointly
	but in fragmented manner. No	process by training instructors, TVET managers,	develop and revise TVET curricula in
	special quality guidelines were	curriculum developers and professionals. As a	hotel and tourism and construction
	available for quality assurance of	part of quality assurance, instructor licensing	sector.
	TVET. Teacher trainings were	was discussed but not yet materialized.	 TITI is contributing in quality

conducted and licensing of		improvement process by training
teacher was under process.	income verification was done for quality	instructors, TVET managers,
Performance was measured	assurance by third party in six times during the	curriculum developers and
through quantity of trainings and	training cycle for the trainings supported by	professionals. They have conducted
trainees were oriented to	EVENT II Project.	such trainings of 6615 person weeks
allowance rather than gainful	 Certificates and awards were received against 	to 1400 individuals this year.
employment, hence, quality was	quality output provided by employers to the	• Relevancy in learning outcome is
compromised. Proper monitoring	programs offered by NATHM in tourism sector.	questionable because TVET programs
and supervision of training	Follow up study of graduates to assess the	do not fully address the needs of job
programs were not in place.	effectiveness of TVET programs were conducted	market as business and industry raise
Motivation factors were included	by some TVET institutions (e.g. NATHM and	the issue of mismatch between
by some training institutions	VSDA under MoL).	demand and supply.
through providing commodity	 In the programs supported by EVENT II, 70-80% 	• From venue verification (training
support to trainees (Machines,	employment is to be ensured by training	facilities) to income verification is
tools and materials) to create	providers. There was more than 85%	done for quality assurance by third
relevant enterprises.	employment in formal professional degree	party in six times during the training
Entrepreneurship skills were	programs offered by NATHM in tourism sector.	cycle for the trainings supported by
provided together with skills	In order to maximize relevance in TVET, SEP	EVENT II Project.
training for promoting self-	collected demands of skills gap consulting 620	• Certificates and awards are being
employment. Joint monitoring	industries supported by FNCCI. Sector wise gaps	received against quality output
mechanism was in place with the	were identified in micro level in agriculture,	provided by employers to the
concept of tripartite monitoring	tourism, hospitality, construction ICT, hydro and	programs offered by NATHM in
team in some project supported	light manufacturing sectors.	tourism sector. There is more than
programs.	• Quality assurance was received due importance	89% employment in its formal
Training institutions deliver more	by CTEVT, attempted to develop QA in TVET in a	programs. Follow up study of
theory to trainees but industries	systematic and integrated manner under TVET-	graduates to assess the effectiveness
need more skills exposure. CTEVT	pp EU funded project. The system developed	of TVET programs are being
curricula, TOT provision and skills	was to be piloted and replicated in all TVET	conducted by some TVET institutions
test were made compulsory in	institutions. Quality standards were developed	(e.g. NATHM and VSDA under
development partner supported	in assistance of Dakchyata project to ensure	MoLESS and CTEVT).
training programs.	TEVT quality.	,

9.11 Private sector involvement.

(Private sector participation in TEVT lacks clear guidelines and coordination)

	TVET Implementation in 2018	TVET Implementation in 2019	TVET Implementation in 2020
in 2017			
 There was no national framework or guidelines for TEVT PPP and implementation and there was no national framework for validation of TEVT programs or learning assessment by the private sector 	 There was the weak involvement of private sector in terms of designing Occupational standards, contributing to curriculum development process, supporting curriculum delivery, assisting in measuring training competence and supplying information demands to LMIS. Involvement of the private sector in PCC encouraged them to take part in TEVT events. Projects such as ENSURE, NVQS, EVENT, and SKILLS & TEVT-PP contributed to bring private sector in the TEVT development process. Star Hotels had their own human resource and training departments but trained HR were interested to go to foreign employment rather in local employment. In some sector, OJT and apprenticeship was popular but in others it was not introduced due to absence of national policy, guidelines and even laws to institutionalize the OJT practice. 	 Private sector involved in TNA, designing curricula, developing occupational standards and leading skills sector committees but little involvement in prioritizing or deciding to select TVET programs. The involvement of private sector was increased due to ENSSURE, NVQS and TVET-pp projects. The voice of the sector was heard but more commitment of private sector was also required for the development of TVET. All industries were registered by Office of Company Registrars. The feature of industry was different by sector. Therefore, the sector council for registration of new industries was required as per the nature of business and industry. Private sector involvement was increased in CTEVT programs but less involvement in the TVET programs implemented by other public agencies. In some sector, OJT and apprenticeship was popular but in others it was not introduced due to the absence of national policy, guidelines and even 	 Private sector is involved in TNA, RMA, research and studies, designing curricula, developing occupational standards and leading skills sector committees but little involvement in prioritizing or deciding to select TVET programs. The involvement of private sector is increased significantly due to ENSSURE, NVQS and TVET-pp projects. The voice of the sector is being heard but more commitment of private sector is also required for the development of TVET. Private sector involvement is increased in CTEVT programs but less involvement in the TVET programs implemented by other public agencies. In some sector, OJT and apprenticeship is being popular but in others it is not introduced yet due to absence of national policy, guidelines and even laws to institutionalize the OJT practice. Dakchyata project has supported the ELMS project being

During the sector analysis, the donors made a lot of promises as a result Business & Industry were reluctant to provide necessary information and support.	 laws to institutionalize the OJT practice. Dakchyata Project conducted a comprehensive study of Private Sector Investment in TVET and the report would be published by August 2019 implemented by business and industry to establish LMIS and work on developing National Standard of Occupational Classification. This initiative will support more
	involvement of the sector.

9.12 Current curricula development systems

(Current curricula development systems are not linked with occupation learning outcomes to a national standard)

TVET Implementation	TVET Implementation in 2018	TVET Implementation in 2019	TVET Implementation in 2020
in 2017			
Curricula	National framework of	 Curriculum development and revision 	Curriculum development and revision
development systems	curricula was available for	were done using DACUM approach.	are being done using DACUM and
were not linked with	formal TVET programs and	Curriculum developers received training	Functional Analysis approaches.
occupation learning	followed by all providers.	in Functional Analysis approach with the	Experts and sector committee
outcomes to a	There was the framework of	support of SACHHAYAMATA project	members jointly develop and revise
national standard but	non-formal and in-formal TVET	which could be alternative of the DACUM	TVET curricula, for demand collection
based more on	courses but many providers	process.	of both private and public sectors
program duration	were not following it.	 Experts and sector committee members 	through TNA, ROA, DACUM workshop,
and occupational	 Being the members of PCC and 	jointly developed and revised TVET	and Job profile verification. Finalization
profile.	TC under MOE, other sector	curricula, for demand collection of both	of course structure, competency and
 There were no 	ministries were using single	private and public sectors through TNA,	content writing in consultation with
national standards	standard curricula prepared by	ROA, DACUM workshop, and Job profile	employers, activating and mobilizing
for TEVT program	CTEVT.	verification. Finalization of course	technical committee for input, and
implementation	• There was dual system within	structure, competency and content	curriculum orientation are the key
which were only	CTEVT in relation to	writing in consultation with employers,	steps followed
based on	Curriculum Development and	activating and mobilizing technical	• CTEVT follows these set of procedures
examination	OS development, and no	committee for input, approval of the	which is more relevant to the
requirement and	coordination between CDD	board, curriculum orientation and	requirements of business and industry.
duration of training.	and NSTB of CTEVT.	dissemination were the key steps	For the revision of the curricula, the
Without national	• There were less work-based	followed.	entire process of curriculum

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occupation learning	learning provisions in curricula.	 For the revision of the curricula, the 	development is followed.
standards, a learner	• Initiations were made to	entire process of curriculum development	• Each curriculum is revisited at least
entering TEVT	involve sector skills committee	was followed. Each curriculum was	within the five years span of time.
institutions did not	for curricula and OS	revisited at least within the five years	Roasters of the experts are prepared
receive training to a	development and revision.	span of time. It was difficult to have a	and involve the experts from the
national standard.	Curriculum revision was made	roaster of experts for short term	roaster to develop the vocational
Without national	in each interval of 5 years	curriculum development.	short-term courses.
occupation learning	period.	 CSSI, Agriculture and NATHM under MoT 	 Sakchyamta project has supported to
standards, a learner	 Although, training institution, 	and other government entities developed	develop 15 new curricula and 15 to
entering workplace-	business and industry and	their own curricula on a traditional	revise the existing ones.
based training and	related associations involved	fashion. It was completely duplication of	• Dakchyata project is supporting to
work experience	in development and revision	efforts and waste of resources. Such	involve private sector in standardizing
programs were more	process of curricula, there	different efforts might result in variation	the curricula as per credit and demand
likely to receive work	were problems such as,	on outcome standards which raised the	based.
experience on the	Practical delivery of the	issue of training quality.	• CSSI, Agriculture and NATHM under
basis of enterprise	curricula, skills assessment,	 Initiations were made by Dakchyata 	MoT and other government entities
resources and not	orientation and training to	Project to increase employers'	develop their own curricula on a
learning outcomes.	instructors, timely revision	involvement in standardizing and	traditional fashion.
	with respect to changing	developing market and credit-based	
	technology, and minimum	curricula and training materials.	
	institutional level of	-	
	involvement of private sector		
	and in effective monitoring		
	and supervision of TVET		
	programs.		

9. 13 Recognition of Prior Learning (RPL).

(Current skills testing does not support reliable RPL)

TVET Implementation	TVET Implementation in 2018	TVET Implementation in 2019	TVET Implementation in 2020
in 2017			
 TEVT curricula is not linked with skills assessment RPL cannot receive formal recognition in terms of formal qualifications and certification Only sample performance assessment is carried out by skills testing centers Portfolio of evidences is not used in current skills assessment 	 Skills Test and certification is done by NSTB but RPL recognition is not widely accepted, recognition is given only for employment but recognition for qualification is not accepted yet. NVQS is in the process of development, without it RPL will not be accepted in qualification. Hence, there is no system of mobility from RPL. Skills Test Centre mapping has been completed and the report will be published in March. Accreditation of Skills testing centers are in process but not approved yet. Sector wise NVQF/NSTB is working through sector skills committee to develop OS, conduct tests and certify successful candidates. Documentation is completed to link RPL with NVQF 	 RPL is fully institutionalized concept within NVQF with qualification level L1- L8. The manual of RPL is developed but not implemented yet. Necessary human resources for RPL are trained. Pilot test on three occupations was conducted on the basis of full competency and unit competency evaluation. However, massive awareness, approach to evaluate RPL and establishment of RPL desk is yet to be done. Vocational Skills Development Academy claims that RPL is conducted by outsourcing the instructor, however; RPL is not yet legally endorsed Skills tests are organized by World Bank supported EVENT project in coordination with CTEVT NVQF and NQF have been submitted to Cabinet through MoEST for endorsement. The framework comprises of L1-L8 vocational qualifications including the provision of RPL. The Cabinet decided to have further input from organizing meetings with related experts. 	 RPL is fully institutionalized concept within NVQF with qualification level L1- L8. The manual of RPL is developed. Necessary human resources for RPL are trained. Pilot test on three occupations has been conducted on the basis of full competency and unit competency evaluation. Awareness advertisement has been done through "Ujyalo Radio". The information of 30000 RPL seekers has been collected and individual portfolio is being prepared RPL desk has been established and RPL is in ready mode for the assessments of 5000 recipients this year. Skills tests were conducted for more than 160, 000 applicants and more than 140,000 successful candidates were certified in the last three years Legal provisions and governance structure is being made by hiring the consultant for the functional NVQA.

9.14 Learning for credit and credit transfer

There is currently no national system for TEVT credit

TVET Implementation in	TVET Implementation in	TVET Implementation in 2019	TVET Implementation in 2020
2017	2018		
 The current methodologies for curricula development, there is not national system learning for credit and credit transfer Credit towards a qualification cannot be gained through non formal and informal learning 	 There is no system for credit transfer from informal and non-formal learning to formal learning. Document for credit transfer is being developed by NVQS and system will be available by 2018 as it has been reported. 	through incorporating in curriculum and endorsing it within its limited condition	 There are some practices on credit transfer through incorporating in curriculum and endorsing it within its limited condition There is no practice yet to transfer credit in TVET programs but NVQS will have the provision There are common courses in some of the TVET programs in the first year and from the second year the students can join their own occupational specialization. There is a system of credit transfer of NATHM students to other universities but no system of credit transfer for students who want to transfer from other universities to NATHM due to TU regulation since NATMEM is affiliated with TU

9.15 Human Resources Development (HRD)

(The private sector has little understanding of Human Resources Development)

TVET Implementation in	TVET Implementation in 2018	TVET Implementation in 2019	TVET Implementation in 2020
2017			
• The private sector has little understanding of Human Resources Development (HRD) and the value of enterprise and employee performance and rewards associated with recognition of work performance and qualification. They did not take it as their social responsibility and investment for future	 Industries are not prepared and are not ready to pay levy for human resource development needed for their business and industry, however; big industries have their own system for human resource development. TITI support is not enough in terms of developing trainers in association with business and industries for the skills upgrading of the workers working in private sector. There is the concept that government produced workers are not good in skills, attitude, and intended for unionization, as a result, business and industries are reluctant to invest in HRD. There is no collaboration between industry and training institutions for the investment in HRD. There is a growing trend to 	 By now, 6198 Skills Test Assessors and 456 Skills Test Managers were trained and certified 6000 person/ week's trainings of various levels were conducted by TITI on which 40 master trainers in all provinces, 100 industry-based instructor, and 260 people were provided TOTS. Further education of B. Tech. Ed. has been provided to TVET personnel and 7 staff have been undergoing Master's Degree in TVET Numerous professional trainings in and abroad are being provided together with professional visit, seminars, workshops and meetings, however; there is no human resource development plan for systematic development of TVET professionals. SDP and EVENT projects offer scholarships to develop TVET professionals through further education and training Currently, there is no planned system in HRD in all institutions. It is just a patch 	 TITI provided 6615 person/weeks professional trainings to 1400 instructors and managers this year TITI has also offered skills upgrading training to instructors by placing them in industry and business CTEVT provides further education to its professionals in Bachelor and Master level TVET qualifications. Recently, seven CTEVT staffs have completed M. TVET. Numerous professional trainings in and abroad are being provided together with professional visit, seminars, workshops and meetings, however; there is no human resource development plan for systematic development of TVET professionals. EVENT project offers scholarships to develop TVET professionals through further education and training MoEST has plan to develop three colleges to produce human resources in Mining, Hydro and Tunnel engineering. They have also studied report of human resource projection needed to MoEST system

ocure products rather vesting in HRD and	work. Selection process for HRD is not appropriate and evens the trained ones	
mployment.	are frequently transferred to the	
	irrelevant positions.	

9.16 Capacity Development of TVET

(Institution, organizations and individuals)

TVET	TVET Implementation in 2018	TVET Implementation in 2019	TVET Implementation in 2020
Implementation			
in 2017			
	 There are provisions for institutional, organizational and individual capacity development but requires a lot of improvement. Capacity development need of TEVT professionals is not assessed properly and no plan to address such needs. There are no higher education degree programs in Nepal to prepare TEVT professionals, managers & leaders but scholarships are provided for such studies in India. Communication for collaboration between private and public sectors is missing in terms of capacity development. There is resistance for policy acceptance due to change resistance attitude, timely communication 	 Capacity development need of TVET professionals is not assessed properly and no plan to address such needs There is no provision of lifelong learning and career progression in new labour act. There is no system for positive recognition of skills upgrading and testing within industry. There are training wings in some big industry but industries are reluctant to develop human resources with the fear of salary bargain and high rate of turnover There are three pillars in hospitality sector such as quality infrastructure, system management and trained human resources. Now mostly Indian workers have been replaced by Nepali workers. However, continuous improvement is required. Hotel management sector is being suffered with high turnover High level human resources are available but level of trust to such human resource is not high due to weak provision of their industrial experiential learning. Big industries have their own training departments to groom their technicians. Basic 	 There is a report human resource plan prepared by the team needed for the Ministry of Education, Science and Technology TITI provided instructional training to 1400 instructors 7 TVET professionals of CTEVT completed M. TVET from Kathmandu University Various seminars, workshops and trainings were conducted to expose the TVET professionals in and outside of the country Labs and workshops were updated in CTEVT schools and E-learning facilities, software and manuals have been developed. Various guidelines for TVET implementation have been developed MoEST has been establishing three colleges to produce human resources

to them and receive feedback	level skilled workers are not available as	in mining, hydro and tunnel
from them. Even if the feedback	demanded by industry	engineering
is given by them, policy has not	 In assistance with EVENT II project, leadership, 	• CTEVT is developing three Centers of
been changed.	management, TOT and assessors' trainings have	Excellence in Lahan, Pokhara and
 Institutional improvement in 	been conducted in coordination with TITI	Tikapur and also developing Model
terms of its capacity is always	• Human resource development of TVET within the	Polytechnics at least one in each
incomplete, individual trainers	MoEST has been started	province
are trained and refreshed no	 There have been adequate efforts in developing 	 New TVET Act has been developed
input for career enhancement.	capacity at individual level. However, adequate	and is in a report form. NQ
 Some organizational capacity 	attention is not given in developing capacity at	Framework has been approved by
development initiatives are	organizational and institutional levels.	the Cabinet
underway in CTEVT and DOL.	• Capacity Development Framework of TVET Sector	 CTEVT has been developing legal
CTEVT is developing TVET-MIS	as assisted by Dakchyata project is in the process	provisions and structural governance
whereas DOL is handling job	of development	for NVQA
portal as a part of LMIS.		• There is a strategic plan for ten years
		comprising of six vocational training
		offering ministries and CTEVT has
		developed a strategic plan of 2020-
		2024

9.17 Resource Management

(TVET sustainability and financing)

TVET	TVET	TVET Implementation in 2019	TVET Implementation in 2020
Implementation	Implementation in		
in 2017	2018		
•	 There is some initiation to develop national TVET fund for effective resource management Legal foundation 	 No significant achievement is made on the policy intent of sustainable and coordinated funding Policy document is very good but implementation of policy is not up to the satisfactory level because some of the policy intents are still untouched for example 	 No significant achievement is made on the policy intent of sustainable and coordinated funding Sustainable and coordinated financing as provisioned by TVET policy 2012 remained untouched. Now there is a greater scope of efforts to consolidate and develop sustainable financing The budget allocated to TVET from government is not

yet to be approved and implemented. • Human, physical and financial resources are to be considered for the quality outcome of TVET programs	 sustainable financing Scattered and isolated efforts are there. No initiatives are yet taken for coordinated funding of TVET implementation One door TVET funding is one of the key issues of the TVET development. There are many TVET projects supported by development partners but once the projects are completed in absence of consolidated 	 sufficient which needs to be prioritized and increased There are negligible efforts to generate income sources such as charging fees to students, examination fees and production units at school level. Such efforts are not enough for sustainable financing. There are many TVET projects supported by development partners but once the projects are completed, in absence of consolidated TVET fund, continuity of the achievements of such projects and
outcome of TVET programs. • Knowledge	development partners but once the projects are completed, in absence of consolidated TVET fund, continuity of the achievements of	completed, in absence of consolidated TVET fund, continuity of the achievements of such projects and lessons learnt will disappear
management through media and on-line learning is	such projects and lessons learnt willdisappearDakchyata Project has been providing	• MoEST is planning for sustainable and coordinated financing through the 10-year strategic plan bringing at least six vocational training offering ministries together
yet to be focused.	necessary input to establish the TVET Fund for sustainable financing	

9.18 Effective Coordination Mechanism in TVET

(There is no effective coordination mechanism in TVET implementation and monitoring progress of policy implementation)

TVET	TVET Implementation	TVET Implementation in 2019	TVET Implementation in 2020
Implementation	in 2018		
in 2017			
•	•	 There is potential to coordinate all TVET institutions in both public and private sectors through policy review and revision, standard (NOSS) based curricula and regular monitoring and supervision, testing and examinations, coordination regulation and one door TVET funding HAN is leading sector skills committee of NSTB and is represented even in the policy level of NATHEM. It is a good start which needs 	 There is need to develop a coordination mechanism in both public and private sectors through policy review and revision, competency (NOC) based curricula and regular monitoring and supervision, testing and examinations, coordination regulation and one door TVET funding Private sector is leading sector skills committees and NATHM is representing in NOC development and testing

	improvement and expansion.	 Other government agencies offering vocational
•	Linkage between NSTB and CSSI has been	training have weak coordination within
	developed and CSSI training centre is being	government agencies and with private sector
	utilized as a skills testing centre.	 Coordination is effective at higher and policy
•	VSDA under MoL claims that within the Ministry	level but needs to be developed at provincial
	level programs, there is strong monitoring,	and local levels.
	supervision and coordination mechanism even to	 EVENT II claims that there is effective
	reach to Palika level	coordination mechanism among CTEVT, NSTB,
•	Coordination is effective at higher and policy	TITI, ENSSURE and Skills Training Centre in
	level but needs to be developed at provincial and	relation to conduct vocational training courses.
	local levels.	 There is coordinating committee at MoEST to
•	EVENT II claims that there is effective	coordinate all Ministries and Department
	coordination mechanism among CTEVT, NSTB,	involved in TVET development. The committee
	TITI, ENSSURE and Skills Training Centre in	is functional and coordinating the TVET
	relation to conduct vocational training courses.	stakeholders
•	There is coordinating committee at MoEST to	 The initiation of MoEST to develop 10-year
	coordinate all Ministries and Department	strategic plan comprising of six vocational
	involved in TVET development but the	training offering ministries can play a role of
	committee needs to be made effective. MoEST	bridge to bring all TVET stake holders including
	believes that c oordination of TVET is not	business and industries under a strong
	systematic and is on ad hoc basis	consolidated and coordinated system
•	Partly there is progress on policy	 OJT, Internship and apprenticeship programs
	implementation. There is start of departure to	are the means to coordinate with business and
	province and local level implementation. The	industries. Such programs are to be intensified
	amendment of TVET Act is in process	and made effective

TVET Implementation	TVET Implementation in	TVET Implementation in	TVET Implementation in 2020
in 2017	2018	2019	
			• There is irreparable loss caused by COVID 19 that is the loss of human lives
			• The whole world became stand still and Nepal too at least for four months due to lockdown
			• There is still no normal situation. Schools and colleges are still not opened
			• There is billions of loss in construction industries. Over 60%
			industries have not returned in operation yet. Tourism industry is in red zone. It will take at least two years to return everything in normalcy if vaccination will be effective over the deadly virus.
			 Thousands and thousands of workers have returned home by losing foreign employment and there is huge challenge to assimilate them into employment
			• The academic calendar of education system is obstructed and batches are overlapped. The COVID 19 also created some opportunities. Virtual programs are developed through development of e-learning technology, materials and facilities
			• There is awareness in people to remain safe by maintaining health and hygiene. Health sector got priority for developing effective facilities to face the pandemic challenges
			• Some industries such as producing food, health equipment and items of daily needs have been flourished. Masks worth of fifty
			million rupees were exported only in US.
			• The pandemic taught a lesson to develop alternative approaches and compatible infrastructure to face similar type of pandemic in
			future
			• There is discussion on how to assimilate returning migrant

19. Challenges and opportunities of COVID 19

 workers into communities. CTEVT has collected information of 30000 individuals to prepare individual portfolio and offer RPL to certify their skills level. NSTB has plan to assess 5000 individual and certify them for their skills level
 EVENT II has plan to offer vocational training to 5000 returning migrants for skilling, r-skilling and up-skilling them CTEVT has plan to collect information of returning migrant workers to identify the skills gap for skilling, re-skilling and up-
skilling so that they can be involved in agriculture sector in self- employment