

Towards Productivity Considerations for
TVET Policy in Nepal

A Political Economy Perspective



Foreword

This study of the Technical and Vocational Education and Training (TVET) Sector in Nepal was produced by Niti Foundation—a Nepali not-for-profit public interest organization that accompanies locally-led policy reform.

Federalism provides a unique opportunity for TVET-related reforms. It is critical to understand how the resultant restructuring of government and other various political, social, and economic factors affect sectoral reforms within TVET, and the ways in which TVET in Nepal can shift its focus away from just ensuring equity through poverty reduction. The study was commissioned with this purpose.

This study emphasizes: 1) requirements for re-imagining of TVET governance in a context shaped by devolution of authority; 2) challenges for TVET-related reforms; and 3) private sector engagement with TVET. The study also provides critical public policy and administration considerations for TVET-related engagement, especially from an economic productivity perspective.

We are grateful to Mohan Das Manandhar for leading the study; Nir Bahadur Jirel, Janardan Nepal, and Rajendra Dahal for their subject matter expertise; Dr. Dhruva Raj Regmi, Prashant Raj Pandey, and Anna Gautam for their analytical and written inputs; and Alabhya Dahal for his support in coordination. This study has also benefitted from Niti Foundation's Strategic Advisory Group led by Dr. George Varughese. We thank Bishal Chalise, Sushav Niraula, and Iain Payne from the group for contributions.

We hope that this study is a useful baseline on critical productivity considerations for TVET in Nepal and serves to inform programs and policies concerning TVET sector reform.

Contents

Abbreviations	i
Summary	ii
1. Introduction	1
2. Context	2
2.1 Governance Transition	2
2.2 Unproductive Economy, Labour Flight, and Youth Insecurity	3
2.3 The Impact of COVID-19	3
3. Evolution Of TVET In Nepal	4
3.1 Early TVET Development: Until 2006	4
3.2 The Interim Years of TVET Development: 2007-2015	5
3.3 TVET Development and Federalism: 2015 onwards	5
4. Key Considerations For TVET As A Development Sector	6
4.1 A Donor Driven Sector	6
4.2 Provisioning TVET as a Public and Private Good	7
4.3 Occupational Skills linked to So Called Lower Castes	8
4.4 Demotion/Segregation of TVET within the Policy Hierarchy	9
4.5 Contentious CTEVT-MoEST Dynamic	10
4.6 Poor Positioning of TVET Governance across Federal Structure	10
4.7 Technical Education Delinked from Industrialization and Private Sector	11
5. Institutional Arrangements For TVET Governance	14
5.1 Legislative Framework	14
5.1.1 Barriers to Implementing TVET Legislation	18
5.2 TVET Governance	18
5.2.1 CTEVT Structure and Financing	19
5.2.2 9-12 Vocational Streams in Schools	20
5.2.3 Short-term Vocational Training Courses	21
5.2.4 Provincial Provisions for TVET Governance	22
5.2.6 International Assistance for TVET Governance	25

6.	Other Institutional Considerations For TVET Governance	26
6.1	The Centrist Mindset – A Key Barrier in Implementing Nepali Federalism	26
6.2	Federalism	26
6.3	Local Governments and TVET	27
6.4	Bureaucracy and TVET	27
6.5	Political interest in promoting TVET	28
6.6	Public Financing of TVET	28
6.7	Skills for Employment for Poor and Marginalized: Global Development Agenda	29
6.8	Private Sector Relationship with TVET	30
6.8.1	Private Sector Disinterest in Promoting TVET	30
6.8.2	Supply Side Challenges	31
6.8.3	Private Sector Cost Considerations for TVET	32
6.8.4	Recruitment Constraints for TVET Trainers and Instructors Teachers Association	32
6.8.5	Preference for Informal Recruitment	33
7.	Critical Considerations For TVET Reform In Nepal	34
8.	Bibliography	38
	Annex 1: Analytical Framework	41
	Annex 2: Timeline Of TVET Education In Nepal	43
	Annex 3: Recent Major Studies On TVET	45
	Annex 4: Financing Of TVET In Nepal	46
	Annex 5: Legal And Policy Arrangements For TVET In Nepal	48

Abbreviations

ANM	Auxiliary Nurse Midwife
CEHRD	Center for Education and Human Resource Development
CMA	Community Medicine Assistant
CTEVT	Council for Technical Education and Vocational Training
DCSI	Department of Cottage and Small Industries
ENSSURE	Enhanced Skills for Sustainable and Rewarding Employment
FDI	Foreign Direct Investment
FITTA	Foreign Investment and Technology Transfer Act
FNCCI	Federation of Nepalese Chambers of Commerce and Industry
HA	Health Assistant
HDI	Human Development Index
HDR	Human Development Report
HRD	Human Resource Development
JTA	Junior Technical Assistant
MDGs	Millennium Development Goals
MoE	Ministry of Education
MoF	Ministry of Finance
MoEST	Ministry of Education, Science and Technology
MoLESS	Ministry of Labour, Employment and Social Security
MoSD	Ministry of Social Development
MOST	Market-oriented Skill Training
MoWCSC	Ministry of Women, Children and Senior Citizens
NESP	National Education System Plan
NPC	Nepal Planning Commission
NVTC	National Vocational Training Centre
OJT	On the Job Training
PCL	Proficiency Certificate Level
SEE	Secondary Education Examination
SLC	School Leaving Certificate
SSDP	School Sector Development Plan
SSRP	School Sector Reform Plan
TU	Tribhuvan University
TVET	Technical and Vocational Education and Training

Summary

Technical and Vocational Education and Training (TVET) provides practical knowledge and skills for employment by using both formal and non-formal learning methods. Although Nepal's TVET system dates back to the early 1950s, not much attention was given to TVET in Nepal's development policy and planning until recently. It was only after 2006 that TVET was promoted as a means to close the equity gap and contribute to economic growth. However, the TVET system continues to underperform; it suffers from several structural problems, including multiple governing mechanisms, delays in developing and implementing federalism-related policies, a lack of involvement from the private sector, and the questionable quality of the training programs themselves.

TVET in Nepal is currently governed by more than 14 federal institutions and mechanisms. Among these, while Council for Technical Education and Vocational Training (CTEVT) has played a pivotal role in expanding TVET, it has also resisted reforms. In the early 1990s, CTEVT was the primary institution implementing TVET, along with its monitoring and affiliation responsibilities. However, its reputation and quality degraded as it turned into a convenient venue for political quid pro quo on appointments. Over the years, CTEVT has come to employ more administrative than professional staff. The politicization of CTEVT along with an unsuitable workforce has made it resistant to change. This has also set the stage for CTEVT as an institution to become unprepared for the transition to federal Nepal.

Nepal's transition to federalism provides a unique opportunity for sectoral reforms, including TVET. However, there are several challenges. A resistance to devolution and the lack of vertical alignment and coordination between federal, provincial, and local governments have created an impasse for progressive laws and regulations, particularly in subnational governments. At the center of this recalcitrance is the federal government's unwillingness to decentralize governing mechanisms and hand over TVET institutions downstream. For example, the federal TVET bill has been under review for two years but has not yet been enacted by parliament. This delay has slowed and obstructed provincial law-making processes and has paralyzed CTEVT, the apex body for TVET.

Similarly, elected representatives and bureaucracy at the federal level have proved to be a major hindrance for subnational governments who wish to support TVET because of the former's centralizing tendencies. In 2020, for instance, the federal cabinet blocked the Ministry of Education from handing over polytechnic institutes to provincial governments. Further, by eliminating CTEVT from the School Sector Development Plan (SSDP), the Ministry of Education effectively segregated CTEVT from its programs and activities. Similarly, the Ministry of Finance, citing financial burdens, also rejected the hiring of permanent teachers at CTEVT institutions. Such distancing from key federal institutions has not only affected the quality of CTEVT programs and activities but also jeopardized its financial sustainability.

The lack of a clear role under a federal dispensation is decreasing CTEVT's relevance. As an autonomous body and without enabling federal legislation, provincial governments are not obligated to recognize or work with CTEVT's provincial offices. They can instead formulate their own TVET-related laws and operate their own TVET institutions. In the absence of a federal act, local governments are also not interested to partner with current CTEVT-run institutions. Instead, 9-12 vocational stream schools have currently proliferated among local governments. Such schools are an effective mechanism to decentralize TVET programs and provide an opportunity to bring TVET within the discourse of formal education at the local level. More importantly, as 9-12 schools operate under public schools, they are also free of cost, thereby increasing TVET access to rural students. Although such schools reduce the equity gap, they also provide a convenient platform to gain political capital and electoral advantage, and turn into a placement option for

political appointments. Further, 9-12 schools also face similar challenges as CTEVT institutions, i.e., lack of quality training and inadequacy of permanent teachers.

As a result of this confounding mix of TVET-governing mechanisms amid a difficult federal transition, short-term trainings have burgeoned. Their appeal lies in the fact that they are able to show results quickly, require short funding horizons and envelopes, and attract lesser institutional resistance and obstructions. The proliferation of short-term training programs has been largely driven by development partners and local governments. Historically, development partners have promoted TVET in Nepal as a measure to empower and uplift marginalized communities, hence the focus on vocational training. Local governments have also promoted short-term trainings because local elected leaders can show tangible results within a short period and can thus promote themselves more effectively for political advantage. At the individual level, too, shorter training programs are preferred because of lower tuition fees and reduced time away from employment.

Despite their appeal, short-term training programs suffer from significant shortcomings that can have a binding effect on the provision and quality of TVET. Currently, such programs lack a specific curriculum, are not standardized, and are neither supervised nor monitored. And although they remain a reasonably attractive option to provide TVET at the local level, their proliferation also means policy attention and resources are diverted from the design and deployment of systematic and high-quality TVET. This dilemma of balancing local relevance and buy-in with quality assurance needs to be resolved.

Given Nepal's attempts to transition from an agriculture-based to a modern consumption-driven economy, another potentially significant stakeholder in TVET is the private sector. Upward movement across the value chain by small-scale enterprises such as bakeries, dairies, high-value niche crops, furniture and metal work industries, electrical and electronic repair shops, vehicle maintenance services, and pharmacies can provide opportunities for meaningful employment. However, private sector engagement with the public sector has not been successful, and the former's lacklustre engagement can be attributed to sectoral biases and to risks and uncertainties caused by political instability and policy volatility over the past two decades.

The private sector invests only around one percent of overall revenues in developing human resources, which is relatively low when compared to the investment in marketing and sales. Essentially, human resource development budgets in Nepal are allocated only after the financial needs of the other departments are met. The Nepali private sector has relatively low stakes in human resource development; thus, hiring TVET-trained professionals is a low priority affair, especially for small firms who may prefer their employees to be trained on the job. Furthermore, the private sector also views TVET as an equity measure instead of a productivity-enhancing tool, which is reflective of how the wider Nepali society also understands TVET. And finally, the high levels of informality within the Nepali economy means that a significant number of private enterprises lie outside the formal legal and regulatory system of TVET governance. These important stakeholders must also be engaged.

It is therefore crucial to reimagine TVET governance in a context that is shaped by a devolution of authority, a decentralization of public administration, and the troubled transition from an informal to a formal economy.

- » The pending federal TVET bill needs to be augmented through further support in drafting regulations, directives, action plans, and policies for TVET-related institutions. Provincial governments need similar support. Further, the devolution of TVET governance under federalism requires support in the development of new partnership models with subnational governments at both provincial and municipal levels.

- » CTEVT needs a strategic action plan to remain relevant for TVET. To begin with, CTEVT should produce the Nepal Skills Report; using it to strengthen new and substantive linkages with the private sector, and to develop curriculum for pre-employment and on-the-job training.
- » The performance of 9-12 vocational schools needs to be evaluated, following which a strategy for technical and financial support must be developed. Relatedly, the education sector plan should be reviewed and revised to include all TVET entities and not just 9-12 vocational schools.
- » Sectors that have demonstrated resilience and growth during the pandemic, like health, agriculture, and ICT, should be prioritized for TVET-focused interventions.
- » In addition to reforms in the public sector, TVET reforms must adopt a market perspective that considers the private sector as an essential partner. Reorienting TVET towards economic productivity requires a value-for-money analysis and an economy-wide survey mapping the demand and supply of skills to meet workplace needs. These can then be used to support formulation of policies and projects aimed at increasing private sector investment in TVET and TVET policy formulation.
- » Political parties must imagine TVET as a strategy for economic growth that provides Nepali youth with employment opportunities, engages marginalized groups, and improves the resilience and productivity of an economy dependent on remittance, tourism, and agriculture.

Introduction

The positive relationship between TVET and economic development has long been established.¹ It serves as a mechanism to impart employable skills that improve workforce productivity and enables economic transformation through value addition and poverty reduction. Further, TVET prepares young people entering the labour market through meaningful and effective education processes and provides a foundation for further educational pathways.²

Yet, developing nations like Nepal continue to struggle to provide quality and accessible TVET services to citizens, despite considerable investment and longstanding efforts of the government and stakeholders in education. A recent study on financial flows found that TVET remains a deprived sector in Nepal and requires multiple interventions to deliver positive outcomes.³

The 2015 Constitution recognizes TVET as a key pillar of Nepal's education sector, and political parties across the spectrum have committed to align TVET with the realities of the labour market.⁴ However, supply and demand constraints prevent TVET from contributing meaningfully to the education sector and the national economy.

On the supply side, the constraints to progress in TVET largely emanate from the public sector. Historically, Nepal has allocated woefully low resources to TVET in comparison to general education. According to the National Education Account in Nepal, between 2009-2016, annual expenditure on TVET accounted for only 2-3 percent of the national budget, while education accounted for 10-15 percent of the national budget. However, with new plans to include up to 70 percent of students in TVET, as well as expected rise in costs of TVET education, future budgetary allocations for TVET should be around 6-8 percent of the national budget.

Nepal's national projects are classified on a priority scale. Priority One projects are allocated higher resources and budgets, while Priority Two projects are regarded as 'secondary' with lower resource allocation. During 2003-2014, TVET was designated as Priority Two, significantly affecting an already underinvested sector.

After promulgation of the 2015 constitution, TVET came under the concurrent rights of all three spheres of Nepali government, each with its own mandate. But the lack of vertical alignment and coordination amongst various levels of government has severely affected TVET. For instance, the federal government is yet to pass a TVET Act, affecting provincial law-making processes related to TVET and making local governments reluctant to deploy long-term TVET programs in their jurisdictions. Further, the Nepali private sector has not engaged with TVET adequately; neither during the policymaking process nor in the job placement space.

On the demand side, factors such as the role of the macro-economy in shaping the labour market and the geographic distribution of employment affect the TVET sector. Driving these demand dynamics are a number of foundational factors — or embedded norms and values — which shape how TVET is viewed by Nepalis, and how this perception in turn affects the decisions of individuals to choose TVET as a path to employment. These factors also affect supply-

¹ Hewko 2016

² Becker 1962; Renold et al. 2015

³ Parajuli et al. 2020

⁴ The 2017 election manifestoes of the Nepal Communist Party (NCP) and Nepali Congress (NC) both emphasize the importance of TVET. For more information on the NCP manifesto, please follow: <https://ratopati.com/story/20024>. The details of NC's manifesto is available in the bibliography.

side actors whose socialization is largely based on existing norms. In Nepal's case, for instance, informal norms and values influence and limit the number of those who opt for skill-oriented educational training that TVET offers. While foundational and demand factors are critically important for the qualitative impact of TVET, they are seldom taken into consideration during the design and evaluation of TVET policy.

The analysis that follows in the next several sections reviews the development and implementation of Nepal's TVET policies and programs, to help identify entry points to influence the TVET reform process. The analysis aims to shed light on the contextual opportunities and challenges to TVET investment, the functioning of the TVET system in Nepal, the interest in TVET across important segments of Nepali society, and the potential value of a well-functioning TVET sector to drive Nepali progress in development.⁵ Please see Annex 1 for more details about the analytical framework.

Context

2.1 Governance Transition

The most important contextual factor to consider in any analysis of TVET reform is Nepal's turn in governance over the past three decades. The transition from a unitary, centralized state to a devolved, federal state can be disruptive and costly, but can also be potentially transformative for politics, society, and the economy. In theory, the federal structure in place today provides an opportunity to shift power and resources from Kathmandu to the rest of the country. In practice, however, the political elite in Kathmandu and the bureaucracy are not only reluctant, but at times also impede the enactment of laws and the transfer of resources to subnational governments. For instance, the High-Level Provincial Coordination Council chaired by the Prime Minister has rarely met and is barely functional. The political fallout between the UML and the Maoist Center, and the subsequent dissolution and restoration of the federal parliament in 2021 along with the UML losing its majority in provinces, have major implications for Nepal's political future. With a Nepali Congress-led federal government distracted by coalition management and elections, Nepal's development partners will look to subnational governments for political stability and accountability. In this scenario, it is even more crucial to strengthen subnational governance arrangements strategically.

From a subnational governance perspective, the Constitution of Nepal 2015 fundamentally changed Nepal's political landscape. The Constitution requires the devolution of state power to provinces and municipalities through federalism. The 2017 elections were a significant milestone towards the institutionalization of federalism, with seven provincial governments and 753 local governments (both urban and rural municipalities) sharing state power within the new federation. Accordingly, all governments have the right to make laws, plans, and policies, and implement them within their jurisdiction in adherence to the constitutional division of powers.

In theory, provincial and local governments develop their own budgets and raise revenues to implement their programs. Via constitutionally devolved powers, local governments are now empowered to enact legislation and policies and regulate basic and secondary education.⁶ In practice, however, subnational governments are unable to utilize constitutionally devolved powers and responsibilities for provisioning public goods and services, including in the education sector. This inability is largely because of an absence of an enabling legal and regulatory framework for

⁵ The analysis draws from SDC/IDS's Practice Guide, 'A Combined Approach to Political Economy and Power Analysis; USAID's TWP: A Guide for Practitioners'; and other practice-based approaches to analysis of politically-charged contexts of development.

⁶ Schedule 8, Constitution of Nepal 2015.

subnational public administration. Despite federal reforms on paper, Nepal's public administration continues to be orchestrated by the federal government in practice, resulting in a bureaucracy that essentially answers to the center rather than to either provincial or local governments. Reform in any sector is thus a complicated affair, and TVET is no exception to this centralized mindset. The centralizing tendency of the federal government indicates that TVET services too will have to navigate the tensions of political devolution and be attuned to the competing interests and influences of the federal, provincial, and local spheres of government.

2.2 Unproductive Economy, Labour Flight, and Youth Insecurity

Liberalisation and the democratic opening of the 1990s brought new hopes to private sector development in Nepal. However, following the start of the armed conflict in 1996, economic growth was minimal. A significant drop in industrial production was seen, and a number of industries closed down. The market was unable to absorb the working population because of sluggish economic growth. Combined with a decade-long armed conflict, this led to labour flight of Nepal's working population to the Middle East and to East Asian countries.

Out-migration of Nepalis for low-quality jobs continued to rise even after the conflict ended in 2006. Because of the unending political instability and lack of economic growth, ordinary Nepalis continue to prefer foreign employment over local livelihood options. A recent government study found that 59 percent of Nepali youth work in low-skill jobs abroad.⁷

Nepal is at the midpoint of a demographic window of opportunity: at least 4 in every 10 individuals is classified as youth.⁸ The ratio of working-age population to dependent-age population is extremely favorable for investments that can bring in rapid economic growth, generally viewed as a positive development outcome. The inclusion of youth in development and nation-building is a recurrent theme in Nepali public policy, which recognizes youths as "invaluable assets of the nation." However, formal statements of intent by government contrast starkly with high youth unemployment, youth dependence on low-quality foreign employment, and high youth participation in the Nepali informal sector, where wages are meagre and job security remains poor.

Despite their demographic prominence, little attention has been paid to the youth's potential to drive economic growth. Enhancing the skill sets of young Nepalis before they pursue migration for livelihood is critical TVET-related policy consideration.

2.3 The Impact of COVID-19

The economic crisis caused by the ongoing COVID-19 pandemic has further disrupted production and supply systems and increased unemployment in the country. The pandemic has hit the informal economy hardest, especially landless agricultural labourers, daily wage workers and the poor. Similarly, as the tourism and services sector remained closed for over a year, employment in the formal sector has dropped. ILO reports that between 1.6 million to 2 million individuals may lose their jobs due to the pandemic (ILO, 2020). However, sectors like health, agriculture and ICT (primarily in urban centres) have proven to be resilient despite the pandemic. Agriculture has seen a steady increase in investment and interest since the 2017 local elections, and the lockdowns have given further impetus to prioritize domestic agricultural production. Similarly, the ICT sector boomed in urban centres as Nepal went to lockdown in early 2020. Small and medium-sized industries previously unknown to online marketplaces adapted their products

⁷ Ministry of Labor, Employment and Social Security, Government of Nepal 2020.

⁸ National Population and Household Survey.

and technology to the fast-changing business environment. Lastly, as the health sector grappled with the second wave of COVID-19 pandemic in 2021, it is crucial that investments in its human resources be increased.

The COVID-19 pandemic's impact on employment and travel – domestic and foreign – has also renewed the focus on TVET services. As a response to high levels of unemployment, federal and provincial governments have planned TVET interventions for the youth. Recent budgets and related programs suggest the federal government has made provisions for providing skills training to the labour force. For example, youth in sectors that are likely to take a longer time to recover will be provided with “skill-transfer” training to help them transition into other areas of production. Provincial governments have also budgeted for TVET-related intervention strategies to cope with COVID-19 induced unemployment. In addition to these crisis-specific coping strategies, the changed context of COVID-19 points to the need for a thorough analysis of past policies and better coordination and planning.

Evolution of TVET in Nepal

3.1 Early TVET Development: Until 2006

It was in 1956 that technical education was recognized as a distinct stream by Nepal's National Planning Commission. The commission emphasized introducing vocational education in schools with the concept of a multi-purpose school. The Technical Institute for Technical Instruction (TITI), for technical human resource preparation and technical courses was harmonized within the framework of formal education. By 1960, 29 multi-purpose schools were in operation, including the Balaju Technical Training and Mechanical Training Centre, which was set up in 1961, and the National Vocational Training Centre (NVTC) in 1967.

According to the NESP review, NESP was scrapped because it did not meet the basic standards of practical exercise, while policymakers also realised that TVET by its nature needed to be run separately. And finally, it was also realised that general education had suffered due to the focus on technical education.

The Council for Technical Education and Vocational Training (CTEVT) was formed in 1989 as a vehicle to promote and operationalize TVET in the country. Unfortunately, the institution turned into a political battleground right from its start. As multi-party democracy was reintroduced in 1990, the makeup of the governing structure of CTEVT ensured that the institution was constantly entangled in the incessant political infighting of Kathmandu rather than operate as

The turning point for the education sector, including for TVET, was the National Education System Plan (NESP) of 1971. The Government of Nepal introduced NESP for the period 1971-76 to standardize the educational system. The reforms outlined in the NESP were rooted in the idea that promoting science and technical education would produce the human capital needed for economic development. NESP introduced a Technical Vocational Education (TVE) curriculum for grades 8, 9 and 10 along with general education. The NESP also provisioned for three types of schools: General, Sanskrit and Vocational. Even general schools had to offer the technical subjects that vocational schools offered, which amounted to 200 credits (MOE, 2009). NESP also prioritized technical education in higher education by offering subjects such as veterinary sciences, agriculture, science, forestry, medicine, and engineering under the Tribhuvan University. However, with minimal resources allocated, the quality of education suffered. NESP was formally scrapped eight years later, drastically narrowing the scope of technical education in Nepal.

an independent institution. The TVET Act was amended in 1993, which provisioned two leadership positions in CTEVT's governing structure. The Vice-Chair (VC) of the institution is a political appointee (by the Cabinet) and thus has strong political backing. However, as the party in power changes, so does the VC. On the other hand, the CTEVT Act assigns the executive role to the Member Secretary of the Council, who is appointed by the Cabinet for four years through an open-selection process among CTEVT employees. This sets up potential conflicts in TVET governance between the VC and others in the Council.

3.2 The Interim Years of TVET Development: 2007-2015

The next noteworthy reform in TVET came after the Maoists entered formal politics and adopted inclusivity, federalism and skills training for employment as part of their mainstream agenda. The CTEVT Act, which was amended in the 1990s, indicated technical education was to be harmonized with general education. However, the School Sector Reform Programme (SSRP), set up between 2009-2015, specifically stated that the MOEST intended to promote 'TVET Soft' as a measure to incorporate TVET with on-going programs. Rather than utilizing SSRP funds for "heavy equipment and construction in secondary schools, the further expansion of TVET was to be worked out within secondary schools" (SSRP, 2009).

The School Sector Reform Programme (SSRP), set up between 2009-2015, intended to promote 'TVET Soft' as a measure to incorporate TVET with on-going programmes.

Aligning Nepali TVET with global practices, the SSRP outlined the importance of school-to-work transition. It proposed three major strategies for TVET. First, apart from technical education, TVET curriculum would also incorporate softer skills training. Second, vertical and horizontal links between TVET and the general stream of education would be established, allowing students to switch between the two easily. Third, the existing collaboration between CTEVT, other technical training providers including FNCCI and the Department of Labour, and private providers would continue.

In 2012, action plans and regulations were developed for the TVET policy approved in 2007. The new policy reintroduced TVET within mainstream education. Its objective was to provide demand-oriented (from the job market) technical education and vocational skills, while safeguarding and promoting traditional Nepali craftsmanship. Similarly, the policy provisioned for qualification transfer, i.e. with a technical education degree, a student could transfer into general education if they so desired. Most importantly, this new action plan promoted TVET to Priority One in National Plans.

3.3 TVET Development and Federalism: 2015 Onwards

Federalism potentially offers TVET several opportunities. With a federal structure in place, provincial and local governments are now responsible for implementing TVET training and projects. In line with the spirit of the constitution, the 15th National Plan 2018/19-2023/24 has also widened the scope of TVET. The current National Plan has provisioned to expand TVET programs extensively to ensure opportunities and access to technical and vocational education and skills at the local level. It also plans to introduce a National Qualification System to incorporate the mobility and permeability from one stream to another, and has prioritised skill mapping, the setting of standards of technical education, and developing and using the distribution grid.⁹

⁹ A distribution grid is based on the skills mapping (skill-needs identification) of a particular territory to rationally expand technical and vocational education and training programmes, and to ensure access to such education for the local youth.

Similarly, collaboration with the industrial sector and an apprenticeship approach to work-based training has also been envisioned, as is the capacity-building of TVET schools, curriculum reform, and financial assistance to economically deprived, marginalized and disabled students. The Plan has an ambitious mission to provide career counselling to students, teach a technical subject in each community school, provide skill passports to trainees, develop the National Occupational Competency Standard (NOCS) in TVET curriculum, and provide Quality Assurance and Accreditation for private sector training providers. However, although more than half of the five-year-period of the plan has elapsed, visible actions have yet to be initiated.

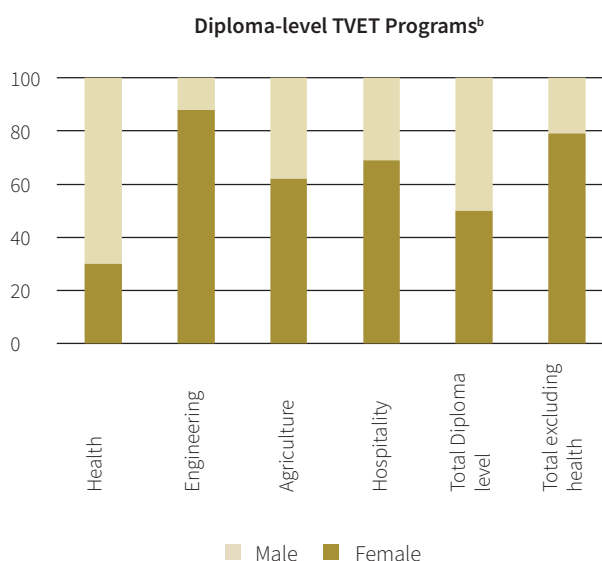
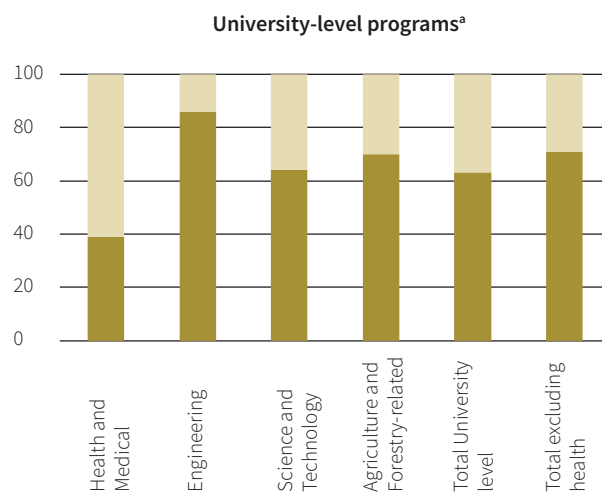
Key Considerations for TVET as a Development Sector

4.1 A Donor Driven Sector

In Nepal, international development organizations and institutions channeled the principles of liberal economics and human rights to provide support for opening up the economy and increasing the emphasis on human rights. The international development landscape promoted public service spending via aid in education and health, while the human rights discourse was framed under the objectives of decreasing intersectional inequality i.e. how class, caste, identity and gender intersect to compound inequality. This was largely disseminated and endorsed through the first Human Development Report (HDR) produced by the United Nations in 1990, with Nepal releasing its own HDR report eight years later. To address inequality and increase public service spending, development partners funded projects that increased access to education.

Since the 1990s, TVET has also been framed as skills development under the discourse of empowerment, inclusion, and social justice. TVET emerged as a means to alleviate poverty by providing access to employment for the poor rather than as a means to augment and propel economic development. This framing was incorporated in state policy, whereby TVET was meant for increasing the capacity of under-privileged, disadvantaged, and marginalized groups in Nepali society.

Nepali public policy was significantly influenced by the larger global development agenda of the 2000s. Nepal's national plans and policies incorporated the Millennium



^a Total enrollment in university-level professional technical courses (such as medical and engineering): 65,944

^b Total enrollment in diploma-level TVET Programs: 73,413

Development Goals (MDGs) as performance metrics. Incorporating global development agenda within the country's policy making framework had two crucial effects on the TVET sector. First, Nepal's national projects were classified on a priority scale. Priority One projects were allocated higher resources and budgets, while Priority Two projects came to be regarded as 'secondary', and lower resources were allocated to them. TVET was classified under Priority Two in the 10th Five-Year Plan in 2002, resulting in few incentives for the government to mobilize resources towards TVET projects. This decision further weakened an already feeble TVET system.

Second, with the incorporation of MDGs within its national policies, Nepal prioritized school enrolment in its 10th Plan (2002-2007). Subsequently, expenditure on primary education increased from 53 percent to 63 percent as part of total education expenditure in the period FY 2000/01-FY 2004/05, whilst the combined share of expenditure on primary and secondary education increased from 75 percent to 88 percent in the same period. Projects such as 'Education for All' gave further impetus to increase access to education. Formal education up to the secondary school level began to be treated and provisioned as a public good. The MDG targets for increasing secondary education enrolment rate were ambitious and, in reality, difficult to achieve.

Realizing the need to combine education with skills and employment for a vibrant workforce, the Government of Nepal implemented Skills for Employment programs in cooperation with Department of Cottage and Small Industries (DCSI) among others, but rarely through the Department of Industries. These programs were run either through grants or loan assistance. Their objectives included Market-Oriented Skill Training (MOST) to women, Dalits and disadvantaged groups to enhance their access to the TVET system. Although these interventions increased women's and low-income communities' participation in the workforce (albeit informal) remarkably, they had an insignificant effect on generating meaningful and sustainable employment opportunities for women and had an even smaller effect on the country's economic advancement.

Even though significant donor and government resources have been spent to make TVET more inclusive and pro-poor, the data presents a different picture. For instance, CTEVT's data shows that the only sector where women's participation is significant in TVET is in nursing. Outside of nursing, women's participation is dismally low.¹⁰

4.2 Provisioning TVET as a Public and Private Good

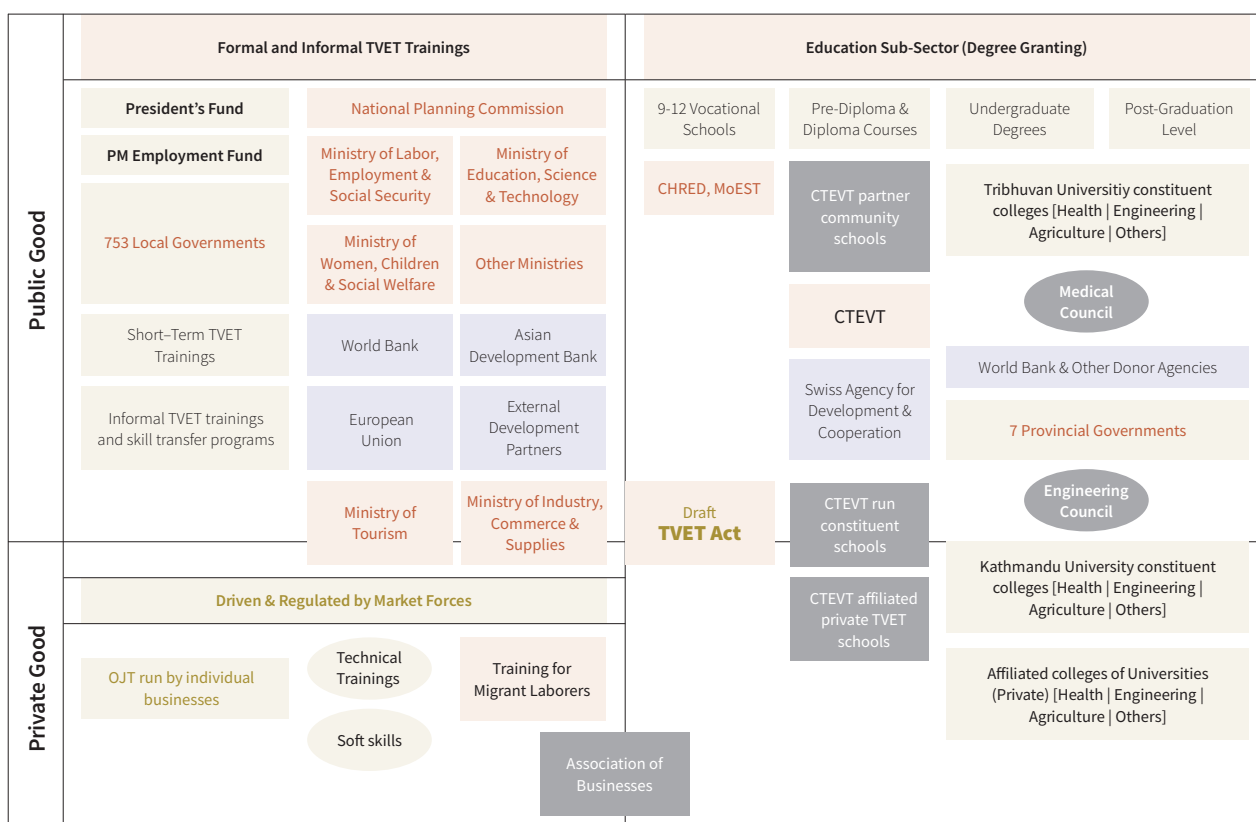
In order to better understand the public administration challenges around TVET provision, it is useful to appraise the nature of TVET from a goods/services perspective. In addition, it is useful to consider how provisioning of TVET intersects with public policy measures of human development, such as the Human Development Index (HDI), which is a summary measure of average achievements in key dimensions of human development: a long and healthy life; being knowledgeable; and possessing a decent standard of living. Within these three HDI dimensions, TVET's primary linkage is with the education sector, where the sector's objective is to impart useful knowledge and skills for access to employment opportunities.

The government's recent decision to promote 9-12 vocational streams in secondary and higher secondary education within the existing public schools network in rural areas can be viewed as evidence of its renewed interest in promoting skills for employment. This decision has positioned TVET within the education sector, conferring it with the essential characteristic of being a public good under the right to free education as set out in the 2015 constitution. While further clarity is needed on the public-private dynamic of post-secondary TVET, the broader linkage with skills for employment and ultimately to prosperity and social justice posits a public good orientation to provisioning pre-employment TVET.

¹⁰ Poudel, 2019

It is also relevant to consider the private good orientation of TVET given TVET education’s prerequisite of investing in tools and equipment, and the need to maintain a strict teacher-to-pupil ratio. But such trainings are mostly undertaken to overcome the skills mismatch problem and are not perceived to improve employee productivity per se, particularly among semi-skilled and unskilled workers. Competing within a small market space, these perceptions prohibit businesses from reaping the benefits of labour productivity gains. Ideally, such skills should be imparted in TVET institutions themselves, making it a prerequisite initially for employment and subsequently to improved standards of living.¹¹ The logic is that on-the-job training transfers basic (or prerequisite) skills that are needed to qualify for a particular job. For example, to qualify for an office position, one needs to know how to operate a computer irrespective of their academic background. At the individual level, on-the-job training improves productivity, but from an organizational perspective, it barely meets basic employee qualifications.

The Complexity of TVET as a Development Sector in Nepal



CHRED- Centre of Education and Human Resource Development
 MoEST- Ministry of Education, Science and Technology
 OJT- On the Job Trainings

4.3 Occupational Skills Linked to So Called Lower Castes

Historically, caste determined one’s occupation and subsequently either one’s inclusivity or exclusivity within Nepali society. Occupational castes, such as carpenters, gardeners, blacksmith, cobblers and leather tanners, were historically considered low caste and their identity was established through their professions (Gurung, 1998). In the Western

¹¹ Interviews with private sector representatives 2021

context, ‘technical skills’ are rooted in craftsmanship and make a vital contribution to economic growth. But in Nepal, craftsmanship has caste-based associations, which is why even contemporary Nepali society struggles to consider it as a technical skill, essential for economic development.

The objective of the current TVET system is not just to develop craftsmanship, but to also develop the workforce’s occupational skills to make it more productive and efficient (Singh 2005). But in Nepali society, ‘occupational skills’ has remained a marker of marginalization via its association with the caste system. If formal education is seen as a way out of entrenched marginalization towards ‘respectability’, TVET, by its focus on ‘occupational skills’, remains firmly within the discourse of social exclusion. Thus, even though the importance of a skilled workforce is recognized, technical education continues to be seen as ‘second-class education.’

4.4 Demotion/Segregation of TVET within the Policy Hierarchy

Similarly, vocational education is often considered to be for occupations that do not require academic and tertiary education. The non-academic labelling of TVET also gives the impression that such training offers pathways for academically weaker students (Bosch and Charest, 2008). The Nepali bureaucracy has similarly been influenced by this mindset. One historical example of this is the discontinuation of the National Education System Plan (NESP) in 1985 at the behest of royal advisors who were dissatisfied with the programme. The advisors argued that NESP’s emphasis on technical education came at a cost of English-learning, which they believed to be a mark of a ‘modern’ nation. Along with the number of TVE subjects, credits for TVE subjects were also reduced. The exclusion of TVE subjects from the public education system coincided with the private sector’s entry into Nepal’s education system as operators of ‘English medium’ schools. When such schools began to proliferate around urban centres, the public education system lost the attention of policymakers and started to deteriorate.

Even though the advisors to the monarch were disinterested in technical education, King Birendra pursued his interest in promoting TVET in Nepal. He appointed Dr Suresh Raj Sharma to be the Member Secretary of the National Education Committee. Sharma initially tried to develop a TVET authority with full autonomy, but the unwillingness and rigidity of the then bureaucrats resulted in a constricted CTEVT Act that set up the CTEVT. Sharma went on to become the first executive director of CTEVT in 1988. However, the democratic movement of 1990 reduced King Birendra to a constitutional monarch, and as a precursor to the politicization of CTEVT in the coming decades, Sharma resigned from his position due to the growing mistrust between the ruling Congress party and the monarch’s allies.

CTEVT’s governing structure changed after the reintroduction of multi-party democracy in 1990. This in turn made the institution even more vulnerable to political pressure and political appointees. For instance, as a quid pro quo for appointments as vice-chairperson (VC) and member-secretaries (MS), ministers would want their allies recruited in CTEVT. Then, given the rapid frequency with which governments changed from the 1990s until the 2017 elections, the ratio of administrative staff to professional and finance/logistics staff within CTEVT also increased drastically.¹²

CTEVT was also quick to provide affiliation to private sector institutions under ministerial pressures. Following the entry of the private sector in TVET, private TVET institutes increased from 3 in 1991 to 110 in 2000, and to 429 in 2020. However, CTEVT does not have the capacity to monitor the quality of training provided by these private institutions. Political parties also used the expansion of TVET as part of their electoral politics after 2015 and established and named TVET institutes after well-known political leaders. For example, 14 out of 61 CTEVT institutions are currently named after political leaders and martyrs. The majority of these institutions – eight out of the 14 – were established after the 2017 federal elections. Thus, beginning with the 1990s until the present, CTEVT turned into a political instrument for granting favours or advancing political interests.

¹² Interview with CTEVT Official.

TVET Institutions Established after 2016 in the Name of Martyrs

S.N.	Name of Institution	Established
1	Ratnakumar Bantawa Polytechnic Institute, Ilam	2017
2	Sumnima Polytechnic Institute, Deurali, Bhojpur	
3	BP Memorial Polytechnic Institute, Sapahi, Janakpur	2017
4	Santa Alpamai Ramnarayan Yadav Polytechnic Institute, Malangwa, Sarlahi	
5	Nirmal Lama Polytechnic Institute, Bardibas Mahottari	2017
6	Diwakar Memorial Polytechnic Institute, Madi, Chitwan	2017
7	Dinesh Ramji Memorial Polytechnic Institute, Chautara, Sindhupalchowk	2017/18 (2076 BS)
8	Post Bahadur Bogati Polytechnic Institute, Nuwakot	2020
9	Martyr Krishna Sen Polytechnic Institute, Ghorahi, Dang	2017 (2075 BS)
10	Jeevraj Ashrit Polytechnic Institute, Isma, Gulmi	
11	Martyr Netra Lal Abhagi Polytechnic Institute, Khalanga, Salyan	2018
12	Martyr Yagyeshwar Memorial Polytechnic Institute, Jahari, Rukum	
13	Bhimdutta Polytechnic Institute, Patan, Baitadi	2016/17 (2074 BS)
14	Martyr Bris Bahadur Singh Polytechnic Institute, Bajhang	

4.5 Contentious CTEVT-MoEST Dynamic

In 2014, the Department of Education and HRD/MoEST started 9-12 vocational schools as a pilot project to promote vocational skills in agriculture, livestock management, civil engineering, electrical engineering and computer science among rural students. Rather than implementing this project through CTEVT, MoEST executed this project on its own, citing its research that indicated CTEVT's inability to provide access to the targeted groups.¹³

The government's decision to incorporate TVET curriculum in public secondary schools was also motivated by the prevailing idea of 'one TVET school in every local government.' Further, instead of using CTEVT's curriculum, MoEST decided to use the proficiency certificate level (PCL) curriculum for grades 11 and 12. From 100 secondary schools in 2014, the number of schools offering 9-12 vocational schools had reached 493 in 2020, more than 33 percent of the total number of TVET schools in Nepal.

This decision to expand and promote 9-12 vocational schools in contrast to CTEVT-run community schools is emblematic of the implicit tensions between MoEST and CTEVT. Another point to note is that the Department of Education and HRD will not be able to pull back from supporting these streams as the project has already moved beyond the pilot phase.

4.6 Poor Positioning of TVET Governance across Federal Structure

Although political parties have emphasized upon an education system dominated by technical and vocational skill, which is also reflected in national visions and strategies, the governance of TVET programs has not been well-defined in the 2015 Constitution and other associated laws.

¹³ Upadhyay Dhungel et al. (2017). A Study on Technical and Vocational Education in Secondary School as a Separate Stream: Required Policies, Strategic Measures, Implementation Arrangement and Improvements Needed in Teaching Learning to Enhance Program Effectiveness.

The National Education Policy (2019) acknowledges TVET as a key instrument to develop a technical workforce that can fulfil the current gap in middle-level human resources. However, current scenarios show that the existent legal provisions are not updated in line with the policy's aspirations. The government in 2020 unbundled Annex 9 of the Constitution which specifies the role of the provincial ministries of Social Development (MoSD). Under the new legal avenues, provinces can develop their own policies, laws, standards and guidelines to govern the TVET system. But this said provincial autonomy comes into question as all policies, laws and directives need to be constrained within the federal framework. As for local governments, while they are necessary to reduce the urban bias of TVET institutions, they rarely pursue formal TVET interventions actively, and instead provide trainings in skills such as bakery production, beauty and grooming, knitting, and handicrafts under their own initiatives. Again, local governments rarely collaborate with CTEVT for such trainings.

Therefore, TVET in Nepal suffers not just from a mismatch between annual budgets and its quantitative expansion, but also from a poor structural set-up in the federal context and disharmony between TVET programs and implementing agencies, beyond the lack of technical human resources. Notwithstanding the spirit of the constitution, provincial and local governments have engaged minimally with the policy.

TVET's Rural Disconnect

Formal education in Nepal is mostly limited to urban areas and focuses on the elite. In contrast, the developmental objective for TVET was to close the equity gap through a "rural bias" in principle. Although the rural bias was intended to be strategic, in practice, TVET institutions have come to be centered in urban areas, mostly for practical reasons. The lack of trainers, infrastructure, labs and equipment has been a binding constraint for establishing and sustaining a rural-focused TVET program. This disconnect between formulating a policy that is pro-poor but adapting the policy in urban areas is a critical reason for TVET's decreasing relevance in Nepal's developmental portfolio.

Geographical Region	Constituted			Affiliated			Annex		
	TSLC	Diploma	Total	TSLC	Diploma	Total	TSLC	Diploma	Total
Mountain	3	1	4	3	1	4	2	0	2
Hill	5	4	9	30	16	46	12	0	12
Tarai	4	9	13	73	86	159	16	0	16
Kathmandu Valley	1	1	2	24	63	87	0	0	0
Total	13	15	28	130	166	296	30	0	30

Source: CTEVT 2010

4.7 Technical Education Delinked from Industrialization and Private Sector

The private sector is expanding within the Nepali economy, which in FY 1990/91 was estimated to be around NRs. 120 billion. Before 1990, the size of the market, especially of industry and service sectors producing goods and services, was small. Large industries and services such as Himal Cement, Janakpur Cigarettes, and Royal Nepal Airlines were run as state-owned enterprises and public sector companies. Subsequent to the 1992 market liberalization measures,

16 public enterprises were privatized and three were liquidated by 2000. A new Industrial Enterprises Act (IEA) was brought in. The Trade Policy of 1992 scrapped all licensing provisions and allowed unrestricted private and foreign investment in all sectors except those listed as “sensitive.” Likewise, the Foreign Investment and Technology Transfer Act (FITTA) 1992 facilitated foreign direct investment (FDI) into Nepal.

In part due to these policy changes, about 800 new manufacturing companies were established in the five years between 1993 to 1997. About 100 of these companies had FDI investments. FDI commitment in the manufacturing sector amounted to NRs. 411 million in FY 1994/95. As a result, the manufacturing sector’s share of employment rose from 2.72 percent in 1991 to 9.52 percent in 2011. During the decade of the 90s, economic growth averaged at around 4.95 percent. For three years in the mid-1990s, growth crossed five percent per annum. However, economic growth slowed down to 3.78 percent in the 2000s, with growth rate reaching a record low of 0.12 percent in FY 2001/02. This slowdown can be attributed to the Maoists insurgency, which peaked in the first half of the 2000s.

The armed insurgency seriously impacted private sector investment, which declined from 15.4 percent to 12.6 percent between 1996 and 2004.⁶ Economic growth could not rise to more than 3.5 percent even in the post-conflict period. Industrial production declined tremendously, and private sector sales in rural markets declined by 20 to 25 percent during the conflict. The growth of local production of goods and services declined to as low as 2 percent in the aftermath of the 2005 royal coup. Exports were affected by the dramatic fall in production of carpets, garment, textile, tobacco, beverages and other products.

Similarly, frequent strikes, blockades, shutdowns and extortion discouraged domestic and foreign investors from investing. Many investors, including joint ventures and multinational companies, were compelled to halt production as their staff living in rural areas were threatened. Some instances include Dabur Nepal; Surya Nepal; GMR, which was working on Upper Karnali and Upper Marshyangdi projects; and United Telecom Limited. Multinationals like Colgate Palmolive Nepal Pvt. Ltd. had to close its operations in Hetauda. Several industries also faced the brunt of Maoist attacks, such as Jyoti Spinning Mills in Sarlahi which was burnt down, while Unilever Nepal, Coca-Cola Company, hotels and distilleries were frequently targeted by the rebels.

Technical education needs a vibrant private sector not just to absorb skilled workers, but also to provide critical feedback for training curricula and pedagogy. A mature market will also allow productivity gains emanating from trained employees to lead to increased benefits through economies of scale. However, the severe stunting of industrial growth due to the conflict and subsequent investment-hostile political and policy issues meant that the private sector could not have a gainful relationship with TVET in Nepal.

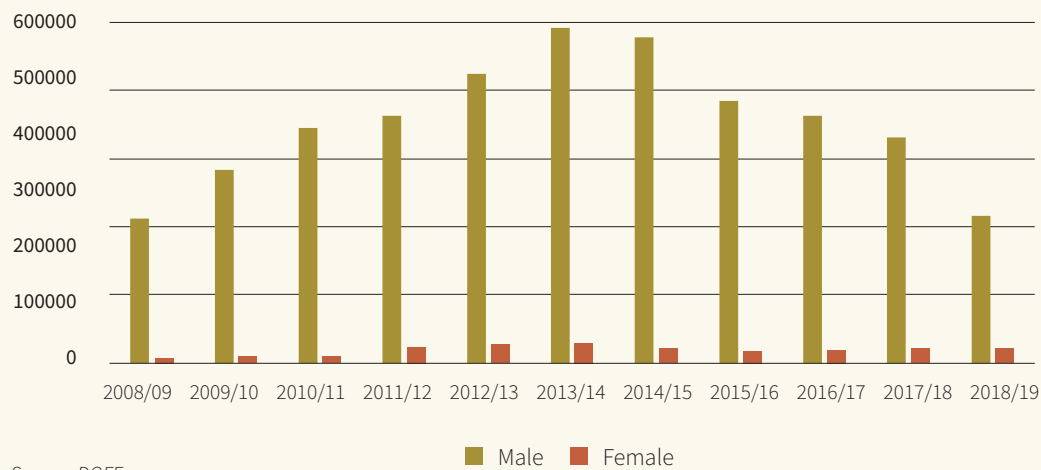
In sum, caught between perpetual political instability and an armed conflict, industrialization withered prematurely in Nepal. With no direct link to industries to enable a school-to-work transition for potential employees and slow economic growth, TVET programs did not gain adequate demand or appreciation. Instead, TVET came to be associated with international aid and became singular in its focus: pro-poor development.

Enhancing Skills for Labour Migration

The migration of Nepal's working population has become a salient feature of its socio-economic landscape. Remittances have more than tripled in the last decade, rising from USD 2.54 Billion in FY 2010-11 to USD 8.79 Billion in 2018-19. Over 236,000 labor approvals were obtained for 128 countries in FY 2018-19 alone. Cashing on this lucrative business of labor migration, manpower agencies and recruitment companies have proliferated in the country.

One of the priorities of the government is to enhance the skills of migrant workers so that they can improve their earnings and subsequently boost inward remittance flow. This is demonstrated by the Foreign Employment Board's goal to provide skills training free of cost to over 15,000 migrant laborers across 13 trades in 2019-20 in coordination with CTEVT. Skills certification leads to increased wages for migrant laborers, and this has led to an increase in demand for training completion certificates. This in turn has incentivized manpower agencies to engage in malpractices such as providing short-term training and giving out certificates that benefit both migrant laborers as well as employers abroad. But in the absence of sufficient regulation and a certification agency to vet such training programs, their quality has reduced drastically.

Trend in Labour Approvals (Disaggregated by Gender)



Source: DOFE

Institutional Arrangements for TVET Governance

In Nepal, institutions have undergone two significant political shifts since 1951: the democratic opening of the 1990s, and subsequently the political developments from 2006 up until promulgation of the 2015 constitution. This section will explain and analyse: (a) the legislative framework, wherein three key reforms in the TVET sector are discussed; and (b) TVET governance mechanisms including TVET financing and other assistance (please see Annex 5 for a list of relevant laws and policies)

5.1 Legislative Framework

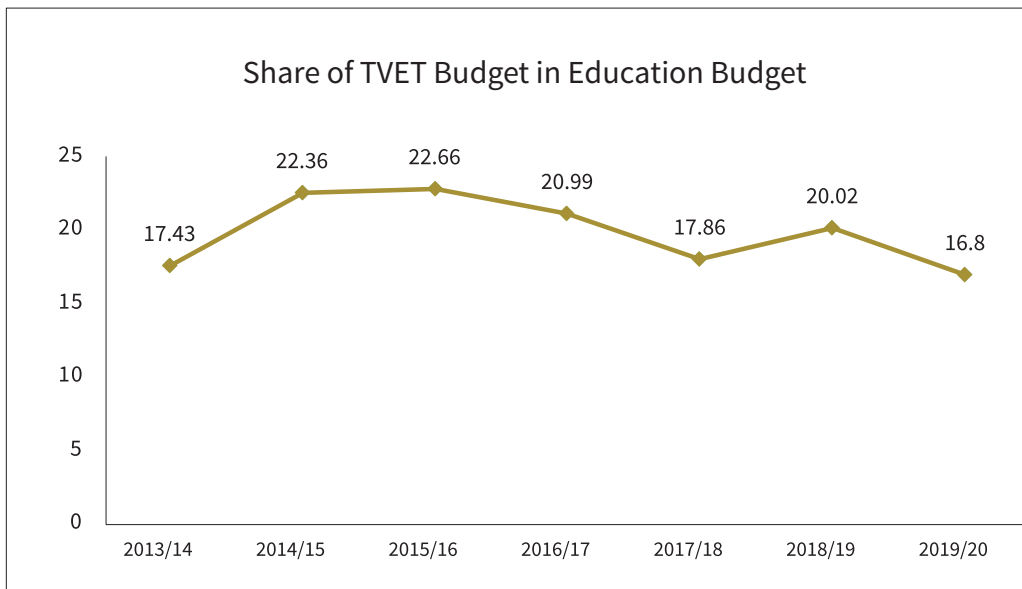
As Nepal went through various political shifts, the TVET sector underwent three major policy reforms. The first reform occurred in 1993, as Nepal transitioned to a constitutional monarchy. The second reform was initiated in 2007, as the Maoists entered the political mainstream after the Comprehensive Peace Agreement. Nepal's transition to a federal structure from 2015 prepared the ground for the third reform.

The TVET Act was amended in 1993, right after CTEVT was formed. This amendment provisioned for a TVET Assembly and a TVET Council that was headed by the education minister. Other key areas in the amendment included:

1. The Technical School Leaving Certificate (TSLC) curriculum was changed from 7+3+1 years to (a) 10+2 years plus 3-6 months on the job training (OJT) for students passing 10th grade and; (b) 15 months + 3-6 months OJT for students who had cleared the SLC. Most public institutions adopted the first option.
2. After the amendment, Tribhuvan University (TU) could no longer operate technical programs in the university, which were then taken over by CTEVT. In particular, CTEVT took over the Community Medicine Assistant (CMA), Auxiliary Nurse Midwife (ANM), Health Assistant (HA), Junior Technical Assistant (JTA), Overseer, Proficiency Certificate Level Nursing, programs from TU. However, some of the PCL Nursing campuses continue to operate under the aegis of TU.
3. Subsequent to the amendment, TVET saw some innovations such as the development of polytechnic institutions, expansion of technical diploma programs, initiation of annex programs providing technical education in general schools¹⁴, vocational training and community development programs for the literate rural population, the development of trade schools programs in partnership with FNCCI, and a significant increase in sponsored-vocational skill training programs.

The second major reform was initiated in 2007, with the TVET Policy being formulated. The Policy was elaborated and turned into an TVET Action Plan in 2012. Both initiation and elaboration of the policy were undertaken by the Maoist-led government. Subsequently, during the formulation of the National Plan in 2014, TVET was moved up to Priority One in the general budget outlay. However, policy reforms within the TVET sector were not matched by government resource allocation. Of the total budget in 2013-14, TVET was allocated only 0.5 percent. Although the budget outlay increased to 6.8 percent in 2019-20, this remains significantly low when compared to resources allocated to formal education. Further, the increase in CTEVT's budget was not allocated towards improving the quality of existing

¹⁴ Now, Technical Education in Community School (TECS).



programs but towards the construction of buildings of new polytechnic institutes that were established in different parts of the country under political pressure and without conducting any feasibility studies. TVET also falls under the jurisdiction of other ministries as discussed previously; unfortunately, resources allocated to TVET by these ministries decreased from 1.87 percent in 2013-14 to 0.81 percent in 2019-20.

In line with the 2015 Constitution, the 15th National Plan expanded the scope of TVET and recognized TVET as a key to human resource development in the country. To this end, some policy actions can be anticipated:

1. Collaboration with the private sector to address high human resource needs and to conduct vocational and skill-based training programs per the domestic demand for labour;
2. Capacity/quality to be enhanced through collaboration, coordination, and integration among various skills development institutions and programmes within the government
3. Quality human resources capable of competing in national and international labour markets to be prepared by providing opportunities for research-based higher and technical education
4. Facilities including scholarships to be provided for TVE for economically and socially backward groups;
5. Mandatory internships/apprenticeships for aligning human resources and employment opportunities;
6. Returnee migrant workers with specific skills to be mobilized as vocational training instructors.

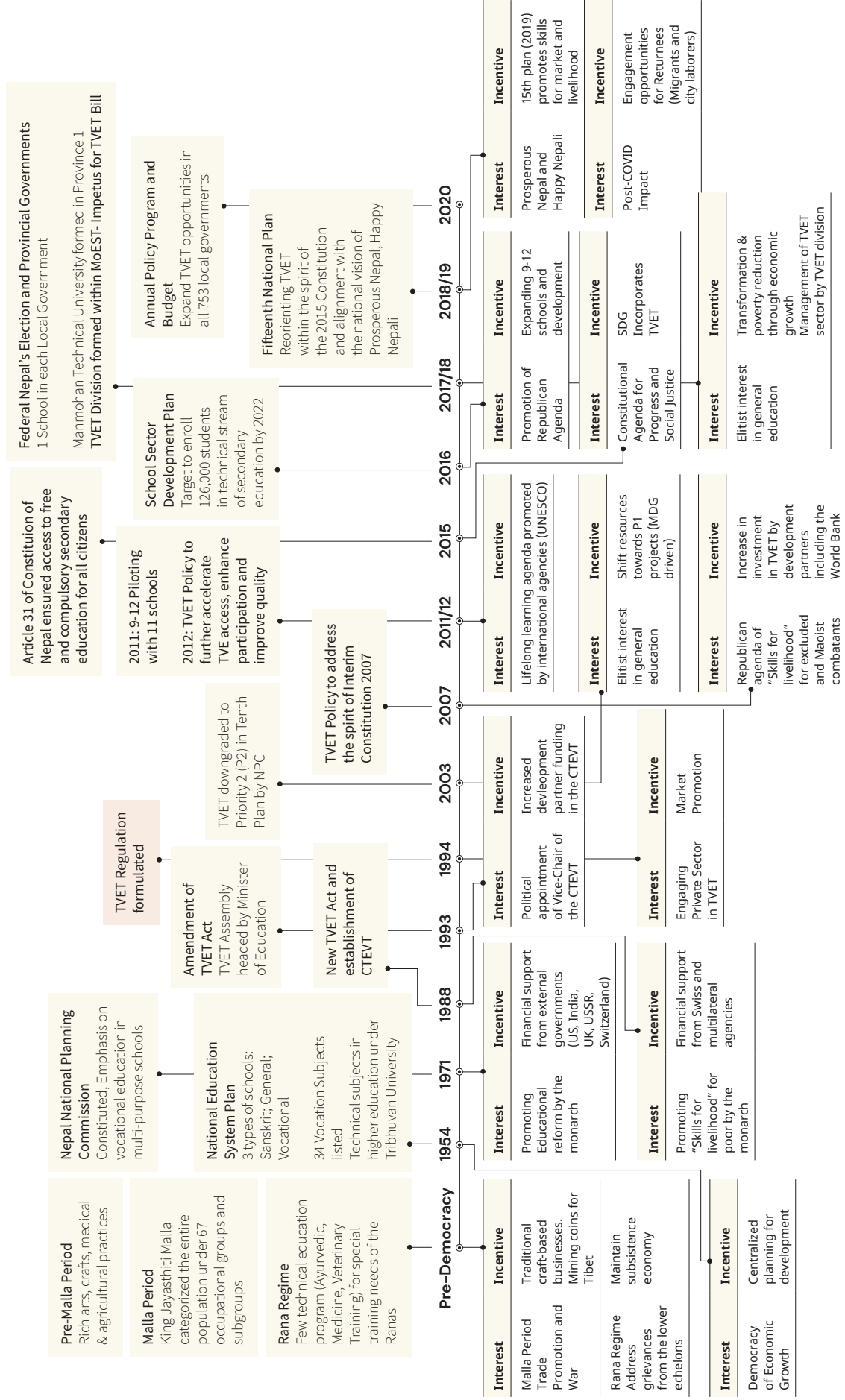
Finally, the most recent development in the TVET policy space is a new federal bill that is pending enactment. The draft TVET Bill was prepared with a view to embrace the following aspects of TVET:

- Enhancing access of poor and marginalized to TVET education, including setting up a 'Skill Bank';
- Establishing a national standard for TVET curriculum and pedagogy, which addresses aspects of informal and non-

- formal TVET education that have so far been difficult to regulate;
- Recognising TVET as formal education to bridge 10+2 education and the 3-year diploma;
 - Accreditation of quality TVET by providing skills accreditation and certification through formal and informal programs under the National Qualification Authority;
 - Establishing a national authority to regulate and accredit formal and informal TVET learning to regulate the proliferation of private sector schools that provide training certificates;
 - Establishing CTEVT as an autonomous entity with wider representation. The proposed CTEVT board expansion will include key actors such as the NPC vice-chair, secretaries of other important ministries, and representatives of private sector and local government associations. The Minister of Education will chair CTEVT and the member-secretary will be appointed through a formal recruitment process.

Two key issues have emerged with this bill. First, a TVET Fund had been provisioned for in the initial draft but was deleted in later drafts of the bill. It is good that provisions for the fund were deleted, as a centrally governed fund would quickly get politicized and potentially undermine subnational interest in TVET. Second, since provinces have no legal requirement to recognize CTEVT's provincial offices at the moment, the TVET Bill should indicate a mechanism that allows for CTEVT's provincial offices to be formally recognized and utilized by provincial governments. The following diagram shows the timeline of TVET legislations and related interests and incentives.

Complexity in TVET Dynamics under an Interest-Incentive Framework



5.1.1 Barriers to Implementing TVET Legislation

The formulation of legislation, policies, and plans is only the first step. Their implementation requires further steps that are usually ignored by development partners and civil society organizations. After a legislative bill is passed as an Act, the bureaucracy generally develops regulations, directives and by-laws that define how the Act is to be implemented. Further, sectoral and annual plans, and action plans detailing activities are also outlined. This includes projecting the resources – technical, financial and human – required to implement the planned activities. Administrative structures have to be defined and service centres need to be established. And even if elected representatives are crucial to formulating and passing an Act, implementation is primarily the bureaucracy’s responsibility.

In the case of TVET, any new Act must urgently define the governance and financing system for the implementation of activities, since these have several financial implications if additional administrative structures and functions are provisioned under the ACT. The CTEVT Act was limited to establishing a legal entity to develop curriculum and provide certification. Further, the CTEVT Act also had the authority to implement TVET programs through the technical schools it managed directly, supporting public schools to implement TVE programs, providing affiliation to private schools, and implementing development partner supported programs for short-term TVET trainings.

The current draft TVET bill, which is being finalized by MoEST after consent from MoF and MoLJ, will not be sufficient by itself to implement the reforms envisioned. For reforms to be realized, developing directives and formulating guidelines will be equally crucial once the TVET Act is passed. The legislative and regulatory framework is one of three key aspects to effectively implement the TVET system.

CTEVT’s TVET activities are not included in education sector plans such as the School Sector Development Plan (SSDP). There is no mention of TVET activities except 9-12 schools in the SSDP draft for 2024–2030. Bringing in TVET activities within the SSDP domain will provide a framework for projecting the technology, finance and human resources required. This in turn will give a legal mandate to the CTEVT and to subnational governments to request resources from the federal government to implement TVET programs.

There is critical need to engage with the bureaucracy of MoEST and Centre for Education and Human Resource Development (CEHRD) to include TVET activities within SSDP. This will ensure legitimacy while projecting for resources required to implement planned activities. An indicative action plan is also required for TVET to ensure that major activities are included within SSDP.

5.2 TVET Governance

TVET in Nepal is currently governed through various institutions and state machineries as discussed previously. At the federal level, apart from the ministries, CTEVT oversees and implements TVET programmes and activities. Provinces may have jurisdiction over provincial CTEVT centers and polytechnic institutes but have minimally utilized these for various reasons. Local governments run short-term vocational training courses; some have partnered with CTEVT to run a few technical courses, whereas others operate 9-12 schools within public secondary schools. International development projects add another layer to this governing mechanism by supporting any one or several of the government institutions mentioned above.

As is evident, this duplicative and disparate governing mechanism has turned the governance of TVET into a cluttered and congested affair. The absence of any vertical and horizontal coordination between institutions and ministries have further weakened the TVET ecosystem. Legal and regulatory mechanisms are required to federalize TVET and

plan TVET budgetary resources across governments. But there has been no progress towards this. As such, there is no legally defined structure and accountability framework at the provincial and local level. It is thus unclear as to who are the appropriate agencies responsible for TVET service delivery.

5.2.1 CTEVT Structure and Financing

CTEVT has come to be regarded as a synonym for TVET in Nepali minds, and rightly so. For decades, it remained the flag-bearer for technical education in Nepal. However, CTEVT's actions and its treatment at the hand of other state entities post-federalism also illustrate the challenges facing TVET reform within the federal structure. CTEVT's centralized governing structure and its high ratio of administrative staff to technical staff has made it resistant to change and has set the stage for it to turn institutionally worse in federal Nepal. For example, even though CTEVT has a provincial office in each of the provinces, these offices do not have any direct administrative linkages with MoSD. Their scope of work is limited to the disbursement of budget, and coordination and monitoring of traditional TVET activities. Moreover, since CTEVT is an autonomous body and not a government institution, provinces have no reason to recognize or work with the provincial offices.

CTEVT's waning influence can also be regarded as a self-inflicted injury to a certain extent. CTEVT's TVET activities are also not included in education sector plans such as SSDP, as mentioned previously. However, including TVET activities within the SSDP will provide a framework for the required technology, financing and human resources. This in turn will give a legal mandate to CTEVT, and subnational governments can then request for resources from the federal government to implement TVET programs.

Similarly, the Finance Minister's Budget Speech of 2021-22 mentions that technical schools will be run at the local level to prepare skilled manpower based on the needs of the municipal government. Conditional grants will be provided to municipal governments to facilitate such programs and establish technical schools in their respective municipal areas. The grants will be provided to the local government in alignment with the fiscal transfer. However, CTEVT will continue to have the authority for developing the curriculum, appoint and transfer teachers and instructors, standardize the quality of education, and for accreditation and regulation. Thus, the role of local governments will be limited only to financing TVET institutions, while all other aspects of TVET will be overseen from the federal level.

Further, CTEVT has been underfunded for the last decade. Federalism is partly a reason for this, but CTEVT's financial problems began before federalism was implemented in Nepal. When the 2015 constitution provisioned free education for all, CTEVT stopped raising fees from their own schools and pressured private schools not to charge fees either. In addition, the Department of Education, now CEHRD, implemented a 9-12 vocational stream in public schools, where no tuition fees are charged, further reducing the number of students applying to CTEVT-run community schools to 56 percent of all TVET students. Because of continuous pressure from CTEVT, CEHRD has currently halted the plans to expand 9-12 vocational schools. However, these school remain a more financially viable option for students than CTEVT-run schools.

Another reason for CTEVT's financial crunch is its budget, which has remained unchanged even as its operational costs have risen. Although Nepal has committed internationally to increase its education budget to 20 percent, the total education budget is actually below 12 percent.¹⁵ Based on this ceiling, MoEST allocates the budget available towards schools, higher education institutions, and TVET. According to MoEST, CTEVT receives only two-thirds of its required budget for reasons given below. The high proportion of administrative staff means a large chunk of its budget also goes towards financing regular expenditure such as salaries and operational costs as priority, while investment/

¹⁵ 20% is recognized as a global covenant for international assistance in education

development costs like equipment, infrastructure, and training programs are considered of secondary importance. Moreover, CTEVT's annual budget remains the same despite the year-on-year increase in number of TVET institutes across the country. The Ministry of Finance (MoF) refuses to finance this budget gap by, for example, funding positions for head teachers, subject teachers, and accountants who run technical education in community schools. The MoF instead suggests CTEVT employ teachers on a 'contract basis', as the approval of teachers in community schools is a long-term financial obligation.

Similarly, tensions in resource allocation between the existing position of CTEVT and the approach of the National Natural Resources and Fiscal Commission (NNRFC) and its intergovernmental fiscal transfers have caused a dilemma for fund distribution towards CTEVT support. NNRFC regulations state that fiscal transfers can only proceed via provincial or local governments. Thus, provincial social development ministries respectively release allocated budgets to provincial CTEVT offices. However, CTEVT argues that the budget is arbitrarily allocated, and there is no follow-up on either the utilization of the funds or the monitoring of training activities.

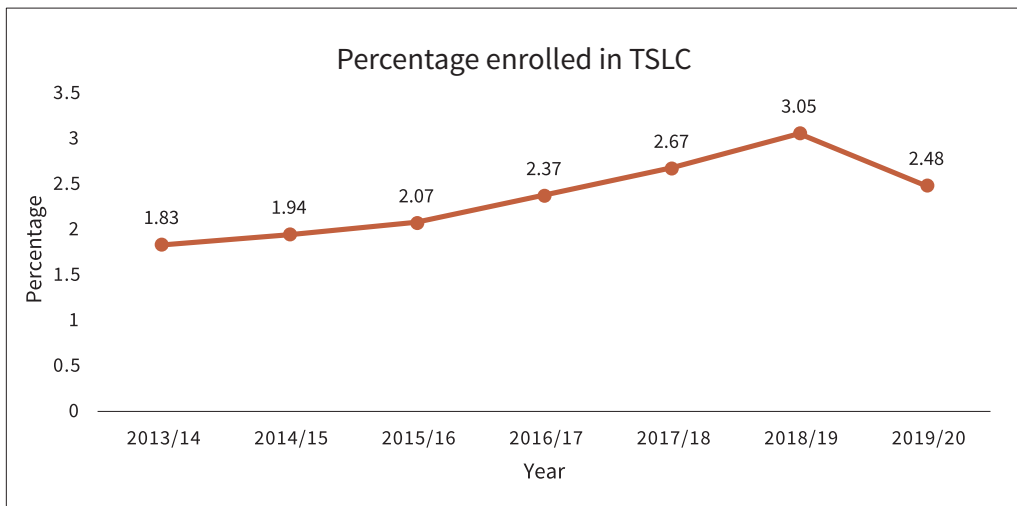
There is also an issue with CTEVT regarding its internal income and budgeting. Being a semi-autonomous organization, CTEVT has its own internal funding mechanism. The 1988 CTEVT Act allows the organization to charge fees for examinations, tuitions, affiliations, and skill-testing, and generate income through production and services. The purpose of the internal fund was to safeguard the staff's social security and benefits while contributing to the annual budget as a supplement when the government's budget was deemed inadequate. For a few years after the 14th Plan (2016/17-2018/19), MoEST and MoF directed CTEVT to utilize its internal funds in the annual budget to match with the government's grants. In recent years, CTEVT has therefore contributed around 20 percent of its annual budget from its own funds, which is why CTEVT needs to strengthen and increase its internal income.

5.2.2 9-12 Vocational Streams in Schools

For the past three years, 9-12 vocational schools have overshadowed CTEVT and its affiliated institutions. Their classification as public schools have made them an affordable and more attractive option for students. They also receive far more interest when compared with CTEVT because of their inclusion in federal plans and policies. However, 9-12 schools also face several challenges, the primary being both secondary schools and subjects are chosen arbitrarily and do not follow any evidence-based research. Rather, the basis for school selection appears to have been electoral calculations for both local and federal elected leaders. This has ultimately resulted in weaker technical education, as schools are selected neither on demand nor capability.

The 9-12 school curriculum is currently derived from the Proficiency Certificate Course (10+2) implemented by Tribhuvan University and attempts to harmonize itself with formal education. However, this requires qualified teachers and physical infrastructure, which schools currently lack. Moreover, the curriculum was designed for high-scoring students, and schools expect meritorious students to enrol themselves in the technical streams. However, because meritorious students prefer 'general education', the lesser able students currently enrolled in TVE streams struggle to cope with the tough curriculum that consists of higher science and math and cannot complete their education cycle within a defined timeframe.

Unavailability and instability of qualified teachers is another problem TVE schools face. Permanent positions are not approved by the government for this programme. Similarly, the salaries and benefits are too low to motivate teachers to apply for those positions. These schools thus have a tough time finding qualified teachers. And even if the right candidates are found, the teachers treat TVE schools as a stop-gap arrangement while looking for better opportunities to either move abroad or to be employed in more attractive positions in the government or international organizations.

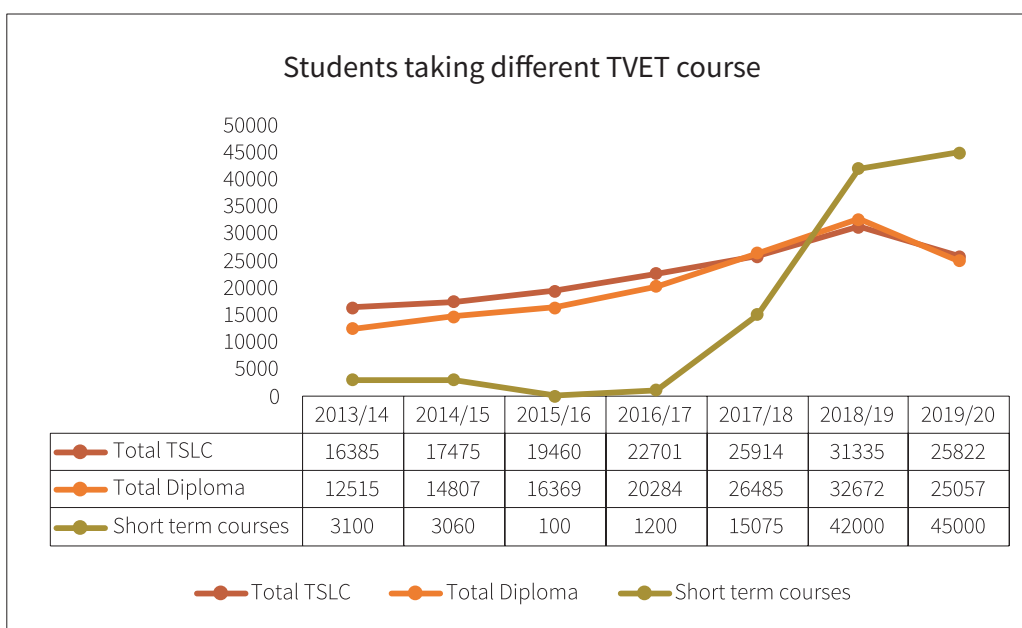


Such supply constraints are one reason why the demand for vocational education has remained minimal. In the past five years on average, only 2.34 percent of the total number of students enrolled in class 9-10 were enrolled in TSLC. While the rate of enrolment in TSLC has indeed been growing, the numbers are small in magnitude, increasing from just 1.83 percent of total students in grade 9-10 in FY 2013-14 to 3.05 percent in FY 2018-19. Overall enrolment in vocational school remains low, being no more than 4 percent of the total.

Finally, although technical and vocational education typically require more investment than general education, TVET financing has been significantly lower in Nepal (see Annex 4 for details on TVET financing in Nepal). Therefore, while low TVET enrolment rates may be a factor in low investment, it may also be vice-versa, that low investment in TVET is hindering its growth, as illustrated by the examples below.

5.2.3 Short-term Vocational Training Courses

In recent years, there has been an exponential rise in demand for short term vocational training, which provide immediate employment and/or self-employment opportunities. According to the Economic Survey 2019-20, candidates enrolled in short-term training increased by 1256.25 percent in FY 2017-18 compared to the previous year. Similarly, the numbers again increased by a massive 278.60 percent the following year.



This sharp rise in enrolment in short-term training courses can be attributed to various factors, including the Prime Minister's Employment Fund, the President's Women Empowerment Programme implemented by MoWCS in 2017, and the World Bank's EVENT programme, which is now in its second phase with almost 25,000 trainings every year. Currently, EVENT II (2018-22) is being implemented directly by establishing a project unit under MoEST outside of CTEVT's aegis. This programme intends to enhance employability by providing short-term training opportunities to the youth.

Similarly, on the demand side, short-term training programs have a lower opportunity cost than a longer-term programme, especially with regard to tuition fees and time spent away from employment. Shorter training programs are also easier to finance and promise a quicker return. The Asian Development Bank suggests that people who have undergone short-term vocational training have higher employment rates compared to long-term TVET students as the former focuses on a specific skill and technical know-how that fits the needs of employers and of those who want to start their own businesses. For instance, 85 percent of short-term training programme graduates are employed, compared to 54 percent employment among long-term TVET graduates (ADB, 2015).

Short-term vocational training programs are provided by various departments in Nepal along with CTEVT. One example is the Youth Employment Transformation Initiative Project, which is funded by the World Bank and run under the aegis of MoLESS. Similarly, the Employment and Social Security's Vocational and Skill Development Training Academy under the Ministry of Industry, Commerce and Supply provides short-term programs in general mechanics, agriculture, electronics, tailoring, make-up, masonry, plumbing and electrical wiring. The Department of Cottage and Small Industries also provides up to 60 different types of training under the Cottage and Small Industries Development Board.¹⁶ Approximately 8,000 and 19,000 are enrolled in annual vocational training programs under the Department of Cottage and Small Industries and the Vocational and Skill Development Training Academy respectively (CTEVT, 2018). The Department of Roads also provides training through Road Sector Development Units, where training is provided towards construction, transport logistics, operation of heavy machinery like bulldozers, and hydraulic excavators. The Department of Roads also provides training to repair and maintain heavy equipment. A review of ENNSURE states that nine ministries provided various types of short-term training, with the Ministry of Agriculture and Livestock Development training over 400,000 individuals in 2017 and in 2018 combined.

5.2.4 Provincial Provisions for TVET Governance

Under the federal structure, provinces today have two major opportunities to strengthen TVET governance in coordinated ways. Firstly, the MoSD is the executing ministry at the provincial level for six social sectors, namely education; science and technology; health; women, children and senior citizens; labour and employment; and tourism. All of these sectors are associated with TVET, and MoSD thus has a wider scope to establish a robust TVET system at the provincial level. Secondly, the unbundling of constitutional rights (Annex 9) through the federal government's 58-point directive allows provinces to formulate their own policies, laws, guidelines, plans and standards for TVET. Hence, provinces have the authority to implement their vision under the current administrative structure.

Provincial Legislation for TVET: Provinces today have the authority to formulate several laws and guidelines as long as they align with federal laws. With respect to TVET, most provinces are currently waiting for the Federal Education Act and TVET Act to finish drafting their own legislations. Bagmati and Gandaki are the two exceptions to this.

Bagmati Province has promulgated the Provincial Technical Education and Vocational Training Act (2018) that provides for a TVET council at provincial level, and a CEO as member-secretary of the council. The Act is silent about

¹⁶ 60 different trainings are shown in the website of Micro, Cottage and Small Industries Promotion Center <https://www.mcsipc.gov.np/>

the legacy of CTEVT and the operating of TVET programs by local governments. The Act has made the provincial TVET council independent of CTEVT in terms of administration, curriculum, and certification, but Bagmati is yet to implement the Act.

Similarly, Gandaki Province has promulgated the Gandaki Institute of Technical and Vocational Education and Training Act, 2020. However, the province has not allocated any financial or human resources yet, nor has it developed any sectoral plans, directives or guidelines to implement the Act. The Social Development Minister, and the secretary and the vice-chair of the Planning commission realized that the Provincial TVET Act needs to be aligned with the federal Act. Among other provinces, Lumbini province has drafted a provincial TVET act, but has halted any further action awaiting the federal Act. Other provinces have not deliberated about the legal arrangements for TVET governance yet.

Without a sectoral plan with a detailed projection of resources required (technology, finance and HR), provincial governments cannot earmark a budget for planned TVET activities. Even though Gandaki Pradesh passed the TVET Act (which may yet be refined to bring in local governments), the provincial government will not be able to implement any TVET activities without an action plan. The principal reason for the lack of sectoral plans, regulations and directives is the frequent transfer of bureaucratic staff, as well as a general shortage of staff. Provincial governments do not have sufficient gazetted officers; some have only one section officer to oversee TVET programs.

Provincial Strategies for TVET: Provinces continue to face dilemmas while developing an education sectoral plan and a TVET sub-sector plan. The education division of MoSD is preparing an Education Sector Plan (2022-2030) for all provinces. However, it doesn't include TVET as a separate stream, acknowledging only technical and vocational streams within secondary education (grades 9-12). However, the first provincial periodic plans as developed by the provincial policy planning commissions (except for Sudurpaschim province) have identified TVET as an important component of education sector. This substantive inclusion of TVET in provincial planning needs more attention and support, particularly to avoid the binding constraints as seen in national TVET governance previously.

Most provincial governments are also currently interested in establishing technical universities. Province One has upgraded the Man Mohan Polytechnic to a technical university, while Gandaki Province has established Gandaki Technical University. Lumbini and Karnali provinces are developing similar plans. The position of TVET in provincial plans is summarized as follows:

Province	Objectives	Strategies	Observation
1	Expansion of school-based TVET	Expansion of school-based TVE under local municipal governments	TVET as a whole has been overlooked, while the resources for plan has not been clearly defined.
2	Promotion of employable education	<ul style="list-style-type: none"> » Agricultural education from the secondary level » Establishment of a technical institute » Formation of a TVET board » Provision of scholarships » Labour market analysis and create employment opportunity within the province » Develop an employment information system 	<ul style="list-style-type: none"> » Youth-oriented policy, and labour and employment policies also foster TVET » Provincial goals identical with 15th National Plan » If the plan is effectively implemented, it would be a milestone for the provincial government.

Bagmati	Development of technical, vocational, skilful, and practical education	<ul style="list-style-type: none"> » Policy and standard development of TVET » Life-oriented education to develop employment and entrepreneurship » Expansion of technical schools » Capacity development for teachers » Private sector collaboration » Recognition and accreditation of traditional skills and other skills gained in foreign countries » A polytechnic in each district » Promotion of skills training and establishment of a skill-training centre under the labour policy 	<ul style="list-style-type: none"> » Awareness on TVET is well reflected » Categorization of school-based, CTEVT-based and skill-trainings is weak » Cost projected, but sources of finance are not well-defined
Province	Objectives	Strategies	Observation
Gandaki	Emphasis on TVE	<ul style="list-style-type: none"> » Study on demand and supply of skills » TVE in school and university education » Establishment of Gandaki Technical Institute and a technical university » TVE through schools and universities 	<ul style="list-style-type: none"> » Focused on higher technical education » Intends to establish new institutions rather than strengthening existing ones » Silent about financial resources and costs » Silent about CTEVT-based programs
Lumbini	Increasing access to TVET	<ul style="list-style-type: none"> » Expansion of TVE schools at all local levels » Development of a provincial plan, policy and standard, » Institutional set up for planning, training and skill testing » Promotion of skilful employment through training opportunities 	<ul style="list-style-type: none"> » Less space is given for TVET » Resources are not aligned with the plan » Plan to retain immigrant labour within Nepal with employment opportunities
Karnali	Expansion of TVE	<ul style="list-style-type: none"> » Preparation of a strategic plan as basis for TVET » Competency-based training opportunity » Establishment of a polytechnic 	<ul style="list-style-type: none"> » CTEVT-based training has been overlooked » No vision for strengthening existing institutions
Sudur-paschim	Not applicable	Not applicable	Sudurpaschim Province Policy Planning Commission has recently been formed, which puts them in the inception phase of any strategic planning for the province.

5.2.6 International Assistance for TVET Governance

Development partners (DPs) have implemented different strategies and approaches to strengthen TVET in Nepal, although there has been no demarcation in the scope of work between the government agencies and the DPs. A thematic working group of DPs involved in TVET sectors currently connects with the government in coordinated ways. The working group recently identified the following priority areas for TVET: passing the TVET Act as soon as possible; minimizing overlap and duplication in training delivery; increasing inter-ministerial and intergovernmental linkage; the financing of TVET; and implementing regulations for quality assurance, accreditation, and training benchmarks. Development partners seem ready to implement the Sector-Wide Approach (SWAP) model, in which financial assistance from development partners and government budget is put together in a basket and the funds utilized according to common principles and understanding. Development partners are also eager to work with provincial and local governments within the broader framework of the federal TVET Act and the long-term National TVET Strategic Plan.

The following action points emerge as important for the DPs Working Group:

1. Conduct a labour market survey and develop a robust information system;
2. Provide refresher training programs for upgrading the skills of trainers and employees;
3. Integrate soft skills like official writing, communication, use of ICT, and financial literacy and skills;
4. Conduct online training delivery to minimize the effect of COVID-19; and
5. Design upcoming projects based on Nepal Vocational Qualification Framework.

Although there is an abundance of short-term courses provided by various ministries and government funds, the quality of their curriculum and pedagogy remains dubious. DPs are keener about short-term TVET courses. However, it has to be recalled that technical education and vocational trainings serve different purposes. Technical education is geared towards employability while vocational trainings focus on empowerment and livelihood. The new TVET Act should bring in a provision to harmonize these variations in different TVE courses, providers and curriculum.

DPs are more interested in providing short-term training for multiple reasons. The impact and output of short-term courses is quicker compared to longer-term trainings. Similarly, shorter training durations mean fewer stakeholders, fewer institutional bottlenecks to navigate, and ultimately significantly lesser funding. Local governments promote short-term training for the same reason; because their output is visible more quickly, elected leaders can promote their impact on the community.

The World Bank and the Asian Development Bank are active in promoting TVET education in Nepal. ADB has been providing technical assistance for TVET strengthening, enhancing the quality of training programmes, and promoting private sector engagement in training delivery. The employment-oriented short-term programmes through the skill development project under the CTEVT (SDP, 2013-2019) has been phased out. Similarly, the World Bank's EVENT programme began its second phase and targeted training 115,000 women and disadvantaged youth by 2022. The project has already trained more than 60,000 Nepali youth (mostly women and Dalits) as of mid-2021.

Other Institutional Considerations for TVET Governance

6.1 The Centrist Mindset – A Key Barrier in Implementing Nepali Federalism

Despite the fact that Nepali political parties and their leadership have committed to federalism, their political culture and mindset continues to favour centralization of power. The culture in Nepali political parties is for the central leadership to stick with posts and power, while reciprocating the monarchy's culture of sycophancy (*chakari*) and developing a lower party system, consisting mostly of youth leaders, that would remain obedient and loyal to the top leadership, and thus maintain the dominance of the hierarchy and retain the patron–client system. Such a culture continues to proliferate in post-federal Nepal as well.

With respect to TVET, the political leadership and the bureaucracy at the federal level has been keen in establishing a centralized TVET fund that hands out funds based on relations. Such an outlook is especially geared towards kinship-based patronage, and awards positions and resources based on loyalty. The existing system also favours ethno-centrism, resulting in the privileging of members of one's ethnic or caste group in all interactions, whether official or personal, and in party affiliates such as community groups. Similarly, MoEST's proposal to hand over polytechnic institutes to provincial governments was blocked by the federal cabinet as the federal leadership and the bureaucracy is inclined towards centralization of power.

6.2 Federalism

The 2017 elections promised a stable government that would complete a full five-year term. However, the now-scraped unification of the Maoist Centre and the CPN-UML, and the subsequent intra-NCP power tussle spilled over into irregular bureaucratic appointments and transfers. The law-making process has been delayed by the frequent transfers of secretaries, joint secretaries and even ministers. Prime Minister K.P. Oli reshuffled his cabinet 16 times between February 2018 and June 2021. Along with the TVET bill, the Federal Education bill is also pending in Parliament, and work is backlogged at the Ministry of Law and Justice at the moment. In general, the ruling party has undue influence and control in law making, resulting in the unwanted politicization of sectors and issues. However, in the case of TVET, neither political influence or interest is strong enough to evince adequate interest.

Under the federal structure, provincial governments now have new opportunities to promote TVET. And since primary and secondary education fall under the jurisdiction of local governments, provincial governments are interested in investing in either university-level education or TVET. As per the unbundling of constitutional mandates on education, MoEST has accordingly proposed to transfer a regional polytechnic institute in each of the seven provinces. However, owing to the differences in political interests of federal ministers, the Cabinet has not approved the proposal.

Despite federal reluctance, provincial governments have attempted to set up polytechnics while simultaneously also drafting a TVET Act, as seen in the previous section. In Gandaki Pradesh, one of the reasons why the province hasn't allocated any human or financial resources to implement its comprehensive TVET Act is the transfers of the bureaucracy, which is still controlled by the federal government. The MoSD secretary for example is transferred once every four months, so once appointed, their focus remains on their impending transfer to other federal government

agencies rather than on the provincial government. Other provincial governments are following similar efforts to draft a TVET Act. Province 1 has passed an Act to establish a TVET university (the Man Mohan Polytechnic University). However, its chief minister was not aware that the Act to establish a polytechnic university is one of its kind in South Asia.

6.3 Local Governments and TVET

CTEVT runs 38 different TVET institutes under the partnership model, most are in Provinces 1 and 2. Twelve of these schools were running under a collaboration model with local governments. However, based on our interactions with local government, this partnership model is, at best, still in infancy.¹⁷ Both elected officials and bureaucrats in most municipal offices were unclear about TVET institutions operating under this model in their respective areas. The role of local governments is limited to financing the polytechnic within their municipalities. While some allocate a budget only for financing the administrative cost of the institutions, others not only finance the administrative cost but also provide finance to support prospective students, develop and maintain the infrastructure, and provides expenses for practical and laboratory costs. However, most municipalities only finance administrative costs.

Local government interest in the partnership model is low because they see no benefits in partnering with CTEVT, except the few who have already partnered with CTEVT, such as Mechinagar and Mulakpur municipalities. Mechinagar municipality officials actively lobbied for a handful of TVET courses with CTEVT based on the municipality's needs. Two courses in architecture and IT, both diploma-level, were approved by CTEVT. The first batch was enrolled in 2020, with 48 students pursuing a three-year diploma in architecture and 23 students pursuing a diploma in IT. The municipality has also provided the polytechnic with other support, such as housing for teachers and students, administrative costs, and scholarships etc.

Similarly, Mulakpur Municipality has also actively supported the Mulakpur Polytechnic, albeit not as much as Mechinagar. The local government here provides financial support to the polytechnic to subsidize student fees and other expenses. The municipal grant covers almost 50 percent of the polytechnic's expenses. Further, non-formal training, such as in microfinance, has been provided under the initiative of the municipality and private sector providers. However, elected officials here have no interest in the CTEVT partnership model and do not plan to upgrade the polytechnic under a partnership model.

Most other municipalities interviewed, however, showed no interest in the model. Local governments rarely reach out to CTEVT and have no plans to move forward with TVET programs as long as federal and provincial legislation regarding TVET remains unclear. At the moment, local governments are more interested in providing non-formal short-term training depending on local needs, which is done at the ward level rather than at the municipal level.

6.4 Bureaucracy and TVET

Until 2017, subnational governments units were run by bureaucrats under the central government. Chief District Officers (CDOs) had most of the administrative power in districts, including the power to mobilize security forces. And although elected representatives are stronger on paper after the 2017 local elections, the bureaucracy, with its experience of not only administering districts but also being responsible for law-making, continues to believe that provincial and local governments do not have adequate understanding and capacity to make policy decisions.

¹⁷ Partnership models here means TVET institutions that are not run wholly by the CTEVT and are supported by other agencies.

Despite federalization and the devolution of power, the bureaucracy in Nepal continues to hold a great amount of power when it comes to law-making. On the other hand, elected representatives lack the capacity and interest to actively engage in the law-making process. As a result, laws in Nepal are developed without any participatory discussions with stakeholders. While a formal network has been established for inter-agency coordination, the bureaucracy remains quite territorial and disregards ministries other than their own. This is more defined in the education ministry; education secretaries are rarely transferred to other ministries. The ministries overseeing education and labour also differ on the fundamentals of the TVET sector. While MoEST wants to harmonize technical education with formal education, MoLESS wants TVET to remain under non-formal education to give it more access to the sector.

6.5 Political Interest in Promoting TVET

Despite the bureaucracy's lack of drive, there remains a strong political interest to promote TVET as necessary skills for livelihood and increased economic activities to attain prosperity. The agenda of 'one TVET school in every local unit' has been driven by political interest. Elected representatives are keen to promote TVET for three crucial reasons: one, the potential increase in income and employment opportunities both at home and abroad, especially among marginalized groups; two, the potential to gain influence within political parties by imparting skills training to cadres along with allowances and rent-seeking opportunities; and three, the pressure to be seen as being responsive to local needs expressed directly by local constituents. Apart from these, one important dimension of the political interest in TVET is also to pre-emptively manage their constituents' grievances and thus preserve the existing political leadership. The interest of local elected leaders in TVET is thus far higher than provincial and federal leadership.

6.6 Public Financing of TVET

Even though TVET has been moved to Priority One in terms of resource allocation, the sector continues to suffer from inadequate budgetary allocation when compared with 'formal' education sectors. This is further highlighted by the absence of a separate TVET budget in the government's Red Book.

Similarly, there are many financial implications of the new TVET Act. The proposed TVET Fund Board, qualification authority, provincial TVET councils, and local governments will demand substantial resources and increase the financial burden to the national budget. According to officials involved in the law-making process, the TVET Act's draft is almost ready. A TVET fund was provisioned for in the draft Act. The draft almost finalized an independent TVET funding agency with three committees respectively. The first would have ministries and government agencies as members and address respective ministry's issues of interests. The MoEST was proposed to lead this committee but MoLESS opposed this proposal by claiming since they were the main agency to promote and protect migrant laborers, it should fall upon them to build the skill capacity of labourers for higher pays. The second committee included development partners, and the third included private sector representatives.

The National Planning Commission (NPC), which is a centralized agency responsible for planning programs, has shown interest in leading the TVET fund. Even though NPC is an advisory agency without any executing mandate, political appointees and administrative staff are incentivized in implementing programs and projects and manage funds. Currently, the NPC is preparing a concept note that will establish TVET fund as an independent institution led by the NPC vice-chair or a member.

Officials also claim that the proposed TVET fund board has been removed as nothing has yet been put down about financing TVET. The MoF is opposed to any independent funding mechanisms or efforts for financial autonomy by GoN institutions. Doing so would remove their influence in these institutions. The MoF also seeks to mobilize all development assistance through the budgetary route and oppose non-budgetary support quite openly.

6.7 Skills for Employment for Poor and Marginalized: Global Development Agenda

TVET returned to the global development agenda when development partners turned to non-formal education as a means to increase youth involvement. This return of TVET to the development agenda is partly a reaction to the emerging skills divide between richer and poorer countries, with least-developed countries falling further and further behind, particularly in sub-Saharan Africa and South Asia. TVET was regarded as an important step to achieving relevant and high-quality education for all (EFA), education for sustainable development (ESD), and millennium development goals (MDGs). TVET has also come to be viewed as part of the lifelong-learning agenda (King 2011).

In Nepal, the inclusion of marginalized groups in formal politics became a dominant narrative after 2007, and this was expressed in ideas such as proportional representation, positive discrimination and reservation. This emphasis on inclusion coincided with the global interest in addressing intersectional inequality. Proponents of human capital theory have begun to emphasise on education's role in alleviating poverty and promoting social welfare, including women's welfare, as a basis for promoting growth and human security. There has also been worldwide recognition of the need to prepare workers for participation in the 'global knowledge economy' and address the growing skills divide between skilled and unskilled workers that leads to vast income differences.

These shifts are also linked to the recognition in demographic changes of the unemployed youth making up a growing proportion of the global population. Reflecting this shift in emphasis, the World Bank education strategy (2011), suitably subtitled *Investing in People's Knowledge and Skills to Promote Development*, argues that 'growth, development, and poverty reduction depend on the knowledge and skills that people acquire, not the number of years that they sit in a classroom' (World Bank, 2011, p. vii). This global strategy was implemented in Nepal too once the World Bank started funding short-term training courses targeting the marginalized.

The 10-year-long Maoist armed conflict (1996-2006), followed by a peace agreement, two constituent assemblies and the 2015 constitution transformed Nepal into a federal and secular republic. TVET returned to the political agenda when the 2008 government of CPN Maoists promoted 'skills for employment' as one of their agendas. A new TVET policy was formulated in 2011, during the first Constituent Assembly (2008-2012), but it failed to materialize as an Act or even an action plan as neither the bureaucracy nor development partners supported the policy. Development partners wanted the policy to focus on formal education within the 'Education for All' policy. By the time Nepal had its second CA election, the CPN-M had lost its popularity. The draft language of the 2015 constitution then began to accommodate the political narrative of traditional parties – the Nepali Congress (democrats), CPN-UML (centre-left) and the RPP (right). Nonetheless, left-leaning parties gave the TVET policy a new impetus when they were able to form a government.

The 2015 constitution defined two key goals for Nepal – prosperity and social justice. Both goals demand investment in human capital: market skills for prosperity and targeted skills for social justice. This has incentivized the government to promote TVET and renewed the desire to bring TVET within mainstream education.

Since the left-leaning alliance of the CPN-UML and the Maoists won a majority of seats in the local, provincial, and federal elections in 2017, promoting TVET has remained on the government's agenda. The Nepal Communist Party (NCP) government also declared its intent to establish one TVET school in each of the 753 local governments. This provided a positive signal for policy makers, development partners and private sector actors to invest in and promote TVET in Nepal. But this renewed interest also brings with it several risks that need to be managed.

6.8 Private Sector Relationship with TVET

Private sector performance in TVET education, particularly until grade 12 or its equivalent level, has been dismal. This is in stark contrast to private sector involvement in general education, where they have consistently bettered public sector players. There are several reasons for this.

TVET education requires investments in quality trainers, equipment and physical infrastructure, which can be costly. Further, owing to the public good orientation of TVET, the sector’s historical linkage with social justice and employment, and its focus on rural and poverty alleviation makes it hard for private sector providers to recover their costs. The low rate of return on investment would not entice investment in training infrastructure. The problem grows more complex in short-term training practices. The absence of a regulatory body means there is no oversight over the training quality provided by private sector players. Public sector TVET trainers have been found to have a better track record and are perceived to be better in terms of the quality of trainers, investment in infrastructure, as well as in enrolment rates, as their fees are subsidized due to their focus on poverty alleviation.

Economy and Market Growth in Nepal: Nepal’s economy has structurally changed dramatically over the past half century or so. Between 1975 and 2019, agriculture’s share in the GDP declined continuously from 61.3 percent to 27 percent (see below table). Similarly, industry’s share in the GDP increased from 10.3 percent in 1975 to 19.4 percent in 1995, but declined to 15.2 percent in 2019. The service sector is the only segment to have experienced a continuously growing share of GDP, reaching 57.8 percent in 2019.

Sectoral Contribution to Gross Domestic Product (in percent)

GDP by Sector	1975	1985	1995	2005	2015	2021*
Agriculture	71.6	51.2	41.7	35.2	31.7	26.4
Industry	8.2	15.0	19.4	17.2	14.8	12.5
Services	20.2	33.8	38.9	47.6	53.5	61.1

Source: Economic Survey, MOF

* Estimates

In FY 1990-91, Nepal’s economy was valued at around NRs. 120 billion, and grew to NRs 4.3 trillion in FY 2020-21. Nepal’s economic growth was less than 4 percent per annum during the 2000s. This slow growth is partially attributed to shortages in the supply of electricity for both traditional and modern industries. However, this situation has been changing. The country recorded about 6 percent growth in 2013 and about 7.3 percent growth on average from 2016 to 2019, after a significant slowdown in 2014 and 2015 (mainly resulting from the impacts of the earthquake). It is believed that increased access to communication infrastructure and recent improvements in electricity supply to industrial and service sectors have contributed to better economic growth. This indicates that investment in TVET skills should focus on the service sector (such as ICT, banking, and tourism) and not on industry (mechanical and industrial skills).

6.8.1 Private Sector Disinterest in Promoting TVET

On the whole, private sector employers are not aware or are wary about the quality of trained professionals graduating from TVET institutions. This comes as no surprise, as TVET is looked upon as a residual education system in Nepal. Compared to traditional tertiary management institutions in urban centres like Kathmandu, the links of the private sector with TVET institutions remain weak. None of our respondents looked at TVET as a productivity-enhancing tool that could lead to higher profits for businesses. This outlook does not incentivize the private sector to proactively pursue employing TVET-trained professionals.

Similarly, the lack of new affiliations to private sector TVET institutes, coupled with the recent 9-12 technical schooling within the traditional public school system, will further exacerbate the issue of low perceptions about quality employees, limiting TVET to an agricultural or rural setting outside of sectors that can employ more people, such as industries and the service sector. In some specific sectors such as the hotel industry, trade unions limit the hiring of new employees fearing they will lose out on their share of service costs paid by the consumer.

Our extensive interactions indicate an inherent equity orientation towards employing TVET-trained human resources in Nepal's private sector, i.e., as a tool to address poverty through employment for the backward and marginalized. This is particularly relevant to manufacturing and industrial sectors where, historically, jobseekers have belonged to the poorer, rural and marginalized communities. This is in stark contrast to the traditional outlook of the private enterprise, which seeks to harness productivity gains in the production process and monetize such gains by selling produced goods in the market.

The key to initiate TVET's market linkages will be to manage an effective transition from the 'equity' perspective of TVET to a 'productivity' perspective. This will motivate the private sector to look at employing TVET graduates/trainees by the latter's potential impact on the respective organization's bottom line, rather than the economic status of those at the bottom.

6.8.2 Supply Side Challenges

On the supply side, our interaction with training providers indicated flaws within the existing apprenticeship model. The model in itself is necessary to impart quality skills, as improved curricula, trainer quality trainers or even certifications can prove to be insufficient, particularly in a technologically evolving world. However, such a model has failed to live up to its expectations and potential for several reasons.

Trainees prefer to work for large-scale organizations with a pan-Nepal presence; they anticipate that by doing so, they will get exposure to new technology, adapt to the best organizational practices, and get access to lucrative job opportunities after the training. For many TVET institutions, however, establishing networks with such credible private sector organizations remains a key problem by itself. As a result, trainees are then sent out to small and medium enterprises against their initial expectations. Such organizations have inherent limitations on skills as demanded by the modern workplace.

Respondents also spoke about rampant exploitative practices where private sector enterprises who were entrusted to impart necessary skills through work exposure under the TVET curricula instead made trainees work long hours at below minimum wage. The findings seem to indicate that private sector businesses were disinterested in imparting the right skills to their employees even with minimal resource outlay, let alone through additional investments in HR and training costs.

However, the larger reason for this lack of interest is related to the private sector's perception that it cannot benefit from productivity gains from any investment in TVET. This perception needs to be corrected. From a productivity perspective, there are two ways from which gains can be reaped from TVET. Trained employees can be taught to increase production output, although Nepal's limited market size inhibits organizations from reaping the benefits of economies of scale. The second method is to employ a fewer number of employees to generate the same output, reducing overall costs while increasing productivity and profits. But hiring and firing decisions cannot be made so easily. Furthermore, there is always the risk of the employee being poached or moving abroad – making it imperative for the business to maintain an adequate number of employees.

The final issue pertains to the lack of quality in the TVET curriculum, but this arises mostly due to an inherent distrust of TVET institutions to impart the right set of skills that are linked to the workplace. The private sector understands this and thus wants to retain control over the skills that it will require at the workplace.

6.8.3 Private Sector Cost Considerations for TVET

Costs are a major concern for Nepal's private sector, which prefers to emphasise on marketing and sales functions to increase revenue. Low budgetary allocation towards human resource development within the private sector points to the relatively low importance imparted towards training and investment in employees. Our extensive policy lab interactions estimate an average of 1 percent of overall private sector revenue is invested in training and development of human resources, which is relatively low when compared to the investment in marketing and sales. This is also because human resource development remains a residual concept in Nepal, and HR budgets are drawn only after the financial needs of other departments are met. With such low stakes and a low importance associated with HRD, it is not surprising that private sector interest in hiring TVET-trained professionals is low.

From the private sector or employer's perspective, investing in skills can be a negative incentive. Trained employees with short-term interests are perceived to demand higher wages, migrate abroad or worse, join competing firms. As such, partnering with training institutions is not a good enough incentive for the private sector which already struggles with inherent budgetary limitations, as such institutions are perceived to lack resources, power and even legitimacy in some instances. Thus, strengthening the institutional capacities of TVET institutes and creating credible partnerships with professional business houses is an urgent need of the hour to strengthen TVET's market linkages.

However, most policies, plans, and programs are designed based on a supply-side approach. The government, as supplier, takes the overall responsibility to design and implement policies. Unfortunately, this process has not changed by much even after federalism. As noted previously, the bureaucracy carries with it a territorial mindset, while the political leadership focuses on narrow, self-serving interests that look to capture 'low-hanging fruits'.

The key to long-term sustainability of Nepal's TVET sector is to create and enable market linkages with private sector employers. This will require changing the perceptions of those who currently view TVET training as inadequate to meet workplace needs, particularly involving soft skills and machine-operating skills. This is also why OJTs must be a necessary part of their training and development plans.

6.8.4 Recruitment Constraints for TVET Trainers and Instructors Teachers Association

Another supply-side issue for TVET institutions is the recruitment of quality instructors, considering the low supply of technically sound trainers. This issue is further compounded by the frequent turnover of TVET trainers, who are recruited on a temporary or contractual basis. Experts believed over 95 percent of the recruitment in the 66 CTEVT-affiliated institutions are hired on a contractual basis.¹⁸

These trainers, much like other jobseekers, strive for permanent positions in other government roles and/or private sector jobs. As such, trainers do not view TVET training as a core profession, but rather as a temporary provision until another lucrative opportunity presents itself to them. The temporary nature of their appointments means trainers do not have a major stake in TVET training, and they also cannot mobilize themselves to pressure relevant authorities to intervene in the matter.

¹⁸ Youth Policy Lab Interaction

Any attempts to recruit permanent trainers by CTEVT were challenged in courts by associations of temporary instructors, which led to the invalidation of the process and contractual recruitments. Most recently, the Ministry of Finance has also opposed the decision to recruit permanent technical staff by saying long-term payment puts extra financial burden on the state's coffers.

6.8.5 Preference for Informal Recruitment

The private sector entities interviewed for the study stated that they met the need for skilled employees at their respective workplaces through informal networks, including hiring labourers from India. This was true both for areas near the border and in urban centres like Kathmandu and Pokhara. Such employees do not associate themselves with trade unions, which makes it easy for businesses to make hiring-and-firing decisions. Further, it is easier for established businesses to procure employees with requisite skills because they have already developed accesses to such networks over time. However, such networks are not readily available to start-ups or new businesses, which in turn prefer OJTs over more formal means of training. And while the Covid-19 pandemic has made it difficult for cross-border migration of labour and thus has impacted the hiring of such employees, the pandemic has also simultaneously reduced overall demand for goods and services, and subsequently lowered the need for hiring such employees.

Critical Considerations for TVET Reform in Nepal

This section discusses the agency of TVET-related actors with regard to the draft TVET Act that is currently awaiting parliamentary ratification. It then evaluates their interests and incentives to suggest some pragmatic strategies, including potential partnerships, to institutionalize much-needed reforms for Nepal's TVET sector. The section concludes with specific reflections that are critically important to consider for TVET reform in Nepal.

The proposed TVET Act intends to remove affiliation rights from CTEVT, rights that placed it in a position of privilege and power when providing affiliations to private sector institutions. The proposed legislation also limits CTEVT's role to a curriculum designing authority, which can be construed as an unbundling of the three core responsibilities of overseeing TVET in Nepal – i.e. accreditation, curriculum design, and affiliation. This provision will hurt all CTEVT personnel, past, present and future, and particularly aspirants to leadership positions. Furthermore, the provincial interest in TVET, through polytechnic institutes or strengthening the provincial offices as seen previously, will likely weaken CTEVT further. But CTEVT's reorientation, while worrying to some aspirants, will not be of much concern to the broader polity as the provisions will open up new opportunities for organizations that will provide affiliation to TVET institutions.

However, the proposed TVET Act has been under review in the federal Parliament since 2017, with differing positions on the national basket fund and its modality. The proposed Act envisages a national basket fund for TVET, which promises lucrative benefits both in terms of increased authority and financial incentives emanating from programme design, field visits and patronage-based appointments. Most ministries initially agreed to establish the fund as an autonomous entity with three oversight committees led by MoEST. However, neither MoLESS nor MoF accepted the creation of an autonomous fund. MoF has historically opposed such funding mechanisms and will most likely object to the proposed funding provisions. Essentially, the ministry is reluctant to give up its power, which is derived from the centralization of GoN's fiscal resources under its mandate. Thus, it is most likely that the ministry will forward the TVET bill without the provision of an autonomous fund to the Ministry of Law and Justice for further action.

Given the relative hierarchy in fiscal decision-making and MoF's posture, it will be essential to mitigate the ministry's concerns, convert key opposers into allies, and propose necessary changes to the draft Act. Moving TVET forward requires establishing technical education as a tool to address the twin problems of inequality and poverty. As an economy reliant on remittance incomes, the linkage between employment and migration remains strong in Nepal. As such, the TVET agenda is likely to be supported by the Ministry of Women, Children and Senior Citizens, the Youth and Small Entrepreneurs' Self Employment Fund, and the Poverty Alleviation Fund that was established in 2003 as a special targeted programme to bring excluded communities within the aegis of mainstream development. At the provincial level, Provinces 1 and 2, and Gandaki Province are likely to spearhead the TVET reform process as potential allies based on their comparative advantages in agriculture, tourism and service sectors.

At the same time, the interest groups championing TVET are rather small and fragmented. The broader interest in TVET as a public good for the marginalized and the poor rests with political ideology based on social inclusion. As such, the Maoist party is one important potential partner at the political level to promote TVET in Nepal. The UML, with deep-rooted links in the existing civil administration, is unlikely to promote TVET over general education. Furthermore, considering the large population of the marginalized and the poor, Madhesh and Tharu-based parties are also likely to support TVET reforms to promote technical education in their constituencies. Enlarging TVET-related political

conversations to focus on smaller, regional and marginalized group-focused parties is a viable policy strategy because of the latter's inherent preoccupation with marginalization, exclusion, and labour exploitation.

The Ministry of Industry is less likely to have interest in promoting TVET, owing to the limited contribution of the industrial sector in the economy and TVET's sparse market linkages. MoLESS, however, is a key TVET enabler in Nepal and, as such, it spends 20 percent of its budget on technical education or training to potential and returnee migrants. National industrial umbrella organizations such as the FNCCI, however, will be interested and can assist in the reforms process. Sectors most interested in TVET would likely be the hotel industry, tourism, agriculture and hydropower. Associations promoting pharmacy and nursing personnel can turn into strong advocates for TVET-trained assistants, along with livestock and agro-processing industries.

It is important to continue to foster partnerships with international development partners who are interested in addressing the problems of inequality, inclusion and poverty to spearhead TVET reforms. Further, it is critically important to position and embed TVET support within the broader economic development discourse. By embedding TVET in the discourse, it will be easier to overcome initial problems of low interest in the sector while leveraging institutional networks and resources to push much-needed changes. This will help overcome initial administrative hurdles for the proposed TVET Act and assist during the implementation stages where actual reforms will take place.

Given the interests and incentives for various TVET-related actors to enable or constrain reform, the specific reflections provided below are critical to consider:

1. **The pending federal TVET bill needs to be augmented through further support for drafting regulations, directives, and action plans.** Specifically, formulating policies and standard operating procedures for proposed institutions like a TVET examination board and a TVET development fund will be crucial for effective implementation of the proposed Act.
2. Progress in TVET hinges upon provincial TVET legislation and regulations that can enable or hinder subnational promotion of TVET. Gandaki Province's TVET Act demonstrates the support needed by provincial governments when formulating legislation and regulations, as it is silent on the role of local governments in either promoting or implementing the Act. **Support will be needed to amend Gandaki's and Bagmati's TVET Act accordingly, disseminate lessons from Gandaki's TVET-related legislative process, and review TVET legislation and regulation for other provinces.**
3. CTEVT will scale down considerably once the pending federal TVET bill is enacted. Institutional demoralization and degradation are real risks. **There is therefore an urgent need to formulate and deploy a strategic action plan that will assuage CTEVT anxiety and sustain its functionality in support of TVET in Nepal.** This can be achieved as follows: first, CTEVT can be funded to produce the Nepal Skills Report, as they are already responsible for it; second, CTEVT can be utilized as a vehicle to strengthen new and substantive linkages with the private sector, for instance through pre-employment training and curriculum development for on-the-job training.
4. At present, the performance of 9-12 vocational schools is riddled with issues of quality and resources. Nonetheless, the model provides an opportunity to shift away from the prevailing discourse of technical education being a stepchild of general education and also address the urban bias of technical institutes. Their increasing harmonization with general education could increase the demand for technical education. **It is imperative that 9-12 schools be evaluated following which a strategy for technical and financial support be developed.**

5. The new education sector plan developed by the Ministry of Education refers to technical education only through 9-12 schools. **It is important that the education sector plan is reviewed and revised to include other TVET entities.**
6. The devolution of responsibility for TVET governance under federalism can only pay dividends if CTEVT-run schools can **develop new partnership models with subnational governments.** In addition to the more obvious and visible provincial level option, support for pilot partnership models with local governments will be required.
7. Historically, interventions in TVET were conducted through approvals and involvement of MoEST and MoLESS. However, as TVET is also considered a policy instrument to address inequality and poverty alleviation, the support and active engagement of the Ministry of Women, Children and Senior Citizens as well as the Ministry of Health will also be required. **Support is thus required for discussions on how to enlarge federal and provincial ministerial teams to better assist TVET.** To complement this strategic adjustment in state TVET architecture, advocacy and Monitoring, Evaluation and Learning (MEL) links can be explored with TVET-related associations.
8. Several development partners working in the TVET sector focus their resources on short-term TVET courses, while some assist the government in strengthening the legal framework. Some recommendations would include:
 - » **Conduct a skills survey and developing a robust information system**
 - » **Design a new project based on NVQF**
 - » **Provide refresher training courses to upgrade skills of trainers and employees**
 - » **Integrate soft skills such as official writing, communication, use of ICT, and financial literacy/skills into such training**
 - » **Set up online training delivery mechanisms to mitigate the effect of COVID-19 pandemic**
9. With supply chain disruptions and reduced consumption post the COVID-19 pandemic, private sector businesses have increasingly voiced the need to make credit affordable, including the reduction in interest rate spreads, longer moratorium periods, and payment deferrals. Badly hit sectors such as tourism, hotels, and restaurants, which have traditionally absorbed TVET-trained resources, will recover slowly and require investments unrelated to TVET. **Therefore, for TVET to be contextual and relevant to durable economic growth, sectors that have demonstrated resilience and have grown during the pandemic, particularly health, agriculture, and ICT sectors, should be a priority for TVET-focused interventions.**
10. Nepal's transition from a predominantly agricultural to a modern, consumption-driven economy has resulted in upward movement of small-scale enterprises across the value chain. We have witnessed the emergence of enterprises that cater to specific demands of the local economy, which include businesses such as bakeries, dairies, furniture shops, electrical repairs, mobile phone repairs, and pharmacies. As this transition continues, one can expect the trend to hold, generating attractive opportunities for self-employment. **Designing specific training programs targeting such enterprises can be a lucrative opportunity to establish TVET's market linkages with employment and enterprise for over the next 5-10 years.**
11. The existing issue of low private sector interest in TVET needs to be addressed urgently by establishing a robust linkage between TVET and the market. Reorienting TVET towards productivity from the existing equity-centred outlook requires advocating for the potential rise in private sector revenues via productivity gains from TVET. But to do so, **a value-for-money analysis will first be required, complemented by an economy-wide skills survey that maps the demand and available supply for skills that cater to workplace needs.**

12. Once these potential benefits are better understood and conveyed to the private sector, policy measures can then be crafted to strengthen TVET's market linkages. Some of the key measures that can be used to enhance private sector investment in technical and vocational education and training include¹⁹ :
 - » Increased private sector participation in TVET policy formulation and training programs.
 - » Private sector investment in TVET can be stimulated by targeted fiscal interventions such as tax subsidies and exemptions, and concessional financing that is contingent on targeted TVET outcomes. Additionally, customs duty exemption on the import of technical equipment can be provided.
 - » Specific TVET trainings can be co-financed with the private sector, while TVET trainings can also gybe integrated with existing government-employment programs such as the Prime Minister's Employment fund.
 - » Government land can be leased out on a long-term lease basis to establish TVET training centres.
13. Finally, **a wider set of political party interlocuters needs to be engaged with to promote a fresh imagination of TVET as a strategy for economic growth** that provides employment of the youth during Nepal's demographic window of opportunity, directly engages with marginalized groups, and improves the resilience and productivity of a pre-industrial economy dependent on remittance, tourism, and agriculture.

¹⁹ Aryal, B. P. (2020). Financing of Technical and Vocational Education and Training in Nepal. Journal of Education and Research, 10(1), 58-80. Retrieved from <http://kusoed.edu.np/journal/index.php/je/article/view/448>

8. Bibliography

- Asian Development Bank., 2015. Innovative Strategies In Technical And Vocational Education And Training For Accelerated Human Resource Development In South Asia Nepal [online]. Available at: <https://www.adb.org/sites/default/files/publication/176564/TVET-hrd-south-asia-nepal.pdf>
- Aryal, B. P. . (2020). Financing of Technical and Vocational Education and Training in Nepal. *Journal of Education and Research*, 10(1), 58-80. Available at: <http://kusoed.edu.np/journal/index.php/je/article/view/448>
- Becker, G. S., 1962. 'Investment in human capital: A theoretical analysis'. *Journal of Political Economy*, 70 (5 Part 2), 9–49.
- Bray, J. N., Lee, J., Smith, L. L., and Yorks, L., 2000. Collaborative Inquiry in Practice: Action, Reflection, and Making Meaning. California: Sage Publications.
- Caves, K. M., Ghisletta, A., Kemper, J., and Renold, U., 2019. 'Meeting in the middle TVET programs' education-employment linkage in developing contexts'. KOF Swiss Economic Institute [online], Working Paper 3. Zurich. Available at: https://www.dcdualvet.org/wp-content/uploads/2019_CEMETS_Meeting-in-the-middle-TVET-programs-education-employment-linkage-in-developing-contexts-.pdf
- Council of Technical and Vocational Education., 2021. Comprehensive TVET Annual Report 2072/73 | UNDP in Nepal. Government of Nepal. Available at: <https://www.np.undp.org/content/nepal/en/home/library/poverty/comprehensive-TVET-annual-report-2072-73.html>
- DFAT, 2016. 'Political Economy Analysis Guidance Note'. Available at: <https://www.dfat.gov.au/sites/default/files/political-economy-analysis-guidance-note.pdf>
- Greenwood, D. and Levin, M., 2007. Introduction to Action Research: Social Research for Social Change. 2nd ed.
- Hewko, J., 2016. Education, Vocational Training and Life Skills: Three Ingredients of Inclusive Growth in Latin America. World Economic Forum Available at: <https://www.weforum.org/agenda/2016/06/education-vocational-training-and-life-skills-three-ingredients-of-inclusive-growth-in-latin-america/> [Last accessed 3 Feb 2021].
- ILO, 2020. COVID-19 Labour Market Impact in Nepal. Available at: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-kathmandu/documents/briefingnote/wcms_745439.pdf
- Kafle, A. P., 2007. Workforce Development in Nepal: Policies and Practices. Tokyo, Japan: Asian Development Bank Institute.
- CTEVT, 2012. Technical and Vocational Education and Training Development Journal, 161.
- Manandhar, M. D., Bajracharya, P., and Bajracharya, R., 2019. Nepal's Economy in Disarray: The Policies and Politics of Development. 1st edition. New Delhi: Adroit Publishers.
- Ministry of Education, 1971. 'The National Education System Plan for 1971 - 76'. Available at: https://www.moe.gov.np/assets/uploads/files/2028_English.pdf
- Ministry of Education, 2007. 'TVET Skill Development Policy, 2064 BS'. Available at: https://www.moe.gov.np/assets/uploads/files/TVET_Skill_Development_Policy_English.pdf
- Ministry of Education, 2009. 'School sector reform plan 2009-2015'. Available at: https://www.moe.gov.np/assets/uploads/files/SSRP_English.pdf
- Ministry of Education, Science and Technology, 2013. Annual Budget and Programme of CEHRD, CTEVT 2013-2020. Government of Nepal.

- Ministry of Education, Science, and Technology, 2016. Nepal School Sector Development Plan 2016-2023. Government of Nepal. Available at: <https://www.globalpartnership.org/content/nepal-school-sector-development-plan-2016-2023> [Last accessed 12 Mar 2021]
- Ministry of Education, Science, and Technology, 2019. 'National Education Policy'. Available at: https://moe.gov.np/assets/uploads/files/Education_Policy.pdf
- Ministry of Education, Science, and Technology, n.d. Nepal National Framework for Sustainable Development Goal 4: Education 2030. Government of Nepal. Available at: [https://moe.gov.np/assets/uploads/files/SDG_4_Nepal_National_Framework_\(Final_Print_Ready_Copy\)_July_2020.pdf](https://moe.gov.np/assets/uploads/files/SDG_4_Nepal_National_Framework_(Final_Print_Ready_Copy)_July_2020.pdf)
- Ministry of Education, Science and Technology and Central Bureau of Statistics(CBS), 2016. National Education Accounts in Nepal
- Ministry of Finance, 2020. Economic Survey 2019/20. Government of Nepal. Available at: https://mof.gov.np/uploads/document/file/Economic%20Survey%202019_20201125024153.pdf
- Ministry of Finance, 2013. Ministry of Finance Red Book 2013/14- 2019/20. Government of Nepal.
- Ministry of Finance, 2020. 'Fiscal year 2077-78 Budget Speech'. Available at: https://mof.gov.np/uploads/document/file/%E0%A4%AC%E0%A4%9C%E0%A5%87%E0%A4%9F_%E0%A4%B5%E0%A4%95%E0%A5%8D%E0%A4%A4%E0%A4%B5%E0%A5%8D%E0%A4%AF_%E0%A5%A8%E0%A5%A6%E0%A5%AD%E0%A5%AD_website_20201118075339.pdf
- Ministry of Labour, Employment and Social Security, 2020. 'Nepal Labour Migration Report'. Government of Nepal. Available at: <https://moless.gov.np/wp-content/uploads/2020/03/Migration-Report-2020-English.pdf>
- Micro, Cottage and Small Industries Promotion Center, Available at: <https://www.mcsipc.gov.np/>
- Nepal, G., 2019. Sustainable Development Goal 4: Education 2030 Nepal National Framework. Available at: [https://moe.gov.np/assets/uploads/files/SDG_4_Nepal_National_Framework_\(Final_Print_Ready_Copy\)_July_2020.pdf](https://moe.gov.np/assets/uploads/files/SDG_4_Nepal_National_Framework_(Final_Print_Ready_Copy)_July_2020.pdf)
- Nepal Planning Commission, 2020. 'Fifteenth Plan 2076/77-2080/81' (in Nepali). Available at: https://www.npc.gov.np/images/category/15th_Plan_Final1.pdf
- Niti Foundation, 2020. 'COVID-19 and the Forgotten Majority in Nepal: Why are Informal Workers Hardest Hit?'. Available at: https://nitifoundation.org/wp-content/uploads/2020/05/Niti-Foundation-COVID-19-and-the-Forgotten-Majority-in-Nepal_29-April.pdf
- Ojha, H., Regmi, U., Shrestha, K. K., Paudel, N. S., Amatya, S. M., Zwi, A. B., Nuberg, I., Cedamon, E., and Banjade, M. R., 2020. 'Improving Science-Policy Interface: Lessons from the Policy Lab Methodology in Nepal's Community Forest Governance.' *Forest Policy and Economics*, 114, 101997.
- Office of the President, 2020. 'Policies and Programs of Government of Nepal for the Fiscal Year 2020-21'. Government of Nepal. Available at: https://nepalindata.com/media/resources/items/16/bPOLICIES_AND_PROGRAMS_OF_GOVERNMENT_OF_NEPAL_FOR_THE_FISCAL_YEAR_2020_21.pdf
- Oliver, D., Yu, S., and Buchanan, J., 2019. Political Economy of Vocational Education and Training. In: *The Wiley Handbook of Vocational Education and Training* [online]. John Wiley & Sons, Ltd, 113-136. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781119098713.ch7> [Last accessed 12 Mar 2021].
- OnlineKhabar, 2020. 'कोरोनाका कारण साढे १५ लाख ने पालीले गुमाए रोजगारी' Available at: <https://www.onlinekhabar.com/2020/12/913072>
- Parajuli, M. N., Renold, U., Bhandari, U., and Lamsal, H. P., 2020. 'Financial Flow in TVET in Nepal: Transiting from the Old to the New Constitution'. Kathmandu Univesity and KOF Swiss Economic

- Institute, Working Paper 10. Available at: https://ethz.ch/content/dam/ethz/special-interest/dual/r4d-TVET4income-dam/documents/WP_10_Financial_Flows_Nepal_LELAM_final_2Dec19.pdf
- Upadhyay Dhungel, Kshitiz & Pokharel, Rupendra & Ghimire, Janardan & Pandit, Ram & centre, Santwona & MOE-NG,. (2017). A Study On Technical And Vocational Education In Secondary School As A Separate Stream: Required Policies, Strategic Measures, Implementation Arrangement And Improvements Needed In Teaching Learning To Enhance Program Effectiveness.
- Reason, P. and Bradbury, H., 2008. *The Sage Handbook of Action Research: Participative Inquiry and Practice*. 2nd edition. California: Sage Publications.
- Renold, U., Bolli, T., and Caves, K. M., 2018. Constitutional Reform and its Impact on TVET Governance in Nepal. ETH Zurich. Available at: <http://hdl.handle.net/20.500.11850/275454> [Accessed 12 Mar 2021]
- Renold, U., Bolli, T., Caves, K. M., Rageth, L., Agarwal, V., and Pusterla, F., 2015. Feasibility Study for a Curriculum Comparison in Vocational Education and Training. ETH Zurich. Available at: <http://hdl.handle.net/20.500.11850/112223> [Last accessed 3 Feb 2021]
- Renold, U. and Caves, K., 2017. 'Constitutional Reform and Its Impact on TVET Governance in Nepal: A Report in Support of Developing Understanding and Finding the Way Forward for Federalizing the TVET Sector in Nepal'. KOF Studien. Research Report No. 89. Available at: <https://www.econstor.eu/handle/10419/162109> [Last accessed 12 Mar 2021]
- Shrestha, P., 2020. Skills Mapping Architecture. Strategies in the Sudur Paschim Province
- SDC/IDS Practice guide: A Combined Approach to Political Economy and Power Analysis
- Stringer, E. T., 2007. *Action Research*. 3rd edition. Sage Publications.
- Tribhuvan University, 2013. 'Annual Budget Distribution of Tribhuvan University 2013-2020'.
- USAID, 'Thinking and Working Politically through Applied Political Economy Analysis: A Guide for Practitioners' 2018
- UNESCO, 2003. 'Technical and Vocational Education and Training for the 21st Century'.
- UNESCO, 2016. 'Strategy for Technical and Vocational Education and Training (TVET), (2016-2021)'

Annexes

Annex 1: Analytical Framework

At the analytical level, in addition to the three pillars emphasized within usual PEA guidelines — rules of the game, actors, and process of cooperation and contestation — Niti Foundation included a fourth pillar — foundational factors — to examine how the dynamics identified through those pillars interact with or affect the landscape of Nepal’s TVET decision-making and incentive (or constraint) structures. If the political economy is concerned with ‘understanding dynamic interaction between structures, institutions, and actors (stakeholders) to understand how decisions are made,’ (DFAT 2016) foundational factors dealing with informal structures, norms and values are an essential and integral component of TVET as they explore and query the often-ignored elements that shape TVET.

Details of the four pillars that form the basis of the analysis are as follows:

Rules of the Game

This study analyses the formal (policies, acts, regulations etc.) and informal institutions (norms, values, and structures etc.) that influence and shape TVET implementation. The rules of the game define different arenas that shape the governance of TVET. TVET is recognized at the highest level as a key pillar of the country’s education sector in the 2015 Constitution and in other related legislation. Article 51(h)(1) of the 2015 Constitution, for example, commits the state to make ‘education scientific, technical, vocational, empirical, employment, and people-oriented.’ To realize this, MoEST has been assigned to oversee the TVET sector. Likewise, Section 17 of the Compulsory and Free Education Act 2018 states that ‘every citizen who completes the basic level shall have the right to acquire secondary education or technical education equivalent to it.’ The emphasis on TVET is to produce ‘basic, middle level and higher level technical human resource.’ Similarly, technical, vocational and employment-oriented education is a recurrent theme in policy documents related to education.

The analysis identifies ‘political opportunity structures,’ ‘incentive structure,’ and other entry points that effectively influence decision making. An important constituent of these rules is the narrative of building human capital for development. In Nepal, two distinct discourses shape human resource development (HRD) in Nepal’s education system. First, HRD in education is seen as a ‘development’ agenda — i.e., to be funded with aid from donors (Manandhar et al. 2019). Thus, the politics of aid and aid-incentive structures, along with the focus on the attempts to reach the developmental goal of ‘Education for All,’ have shaped an emphasis on quantity over quality. Key policy/decision-makers in government view ‘investment’ in education system to be the provenance of the aid budget rather than as an investment to build human resources for nation-building.

Second, investment in HRD within the education system is focused on how formal modes of education equip people for the service economy, while underemphasising the skills needed for the production and manufacturing economy. The orientation of TVET also often appears as though it is designed to provide skills to those who do not succeed within the formal education system. As a result, TVET does not command the respect it deserves among policymakers. The institutional placement of CTEVT under the direct jurisdiction of the Ministry of Education, Science and Technology (MoEST) constrains its independence and ability to address the needs and spirit of TVET, and has further reinforced the idea that TVET is of secondary concern.

Businesses in Nepal often have a limited capability to define the skills they need employees to possess, thereby preventing them from organizing clearly defined internal training, remuneration, and development programs. Employers and private sector associations have not been engaged widely to develop and promote TVET. There is

thus a need to incentivize them to collaborate with the TVET sector, along with the participation of a wider range of business representatives, so as to lead to a real demand-driven TVET system. However, on one hand, there isn't much incentive to extract accurate information from the industry based on their needs and, on the other, there is equally a need to raise awareness among industry associations, professional associations, and businesses about skills development.

Process of Cooperation and Contestation

After identifying the rules of the game and the key actors, Niti Foundation analyzed how institutional structures influence and incentivize actors in the process of cooperation and contestation while developing quality TVET services. The examination will be unique to the actors concerned. For example, when it comes to government actors, the examination was directed towards gauging how incentive structures shape cooperation and contestation in the development of the federal TVET Act. With private actors, the examination was directed towards understanding incentives that prevent or encourage cooperation and contestation to invest and engage adequately in the TVET sector.

Foundational Factors

Foundational factors are concerned with informal structures, norms and values that shape the supply and demand sides for TVET. These tend to be fixed or slow to change, such as geography, history, land borders, natural resource endowments, or existing class structures. For example, Nepali society has a strong hierarchy that is traditionally defined by ascriptive parameters such as caste or ethnic identity, size and type of ancestral land, and family or kinship ties. Historically, the notion of gurukuliya shiksha focused on religious state-building and side-lined the transmission and innovation of traditional, indigenous, and practical skills (Manandhar et al. 2019). Even though the 1962 civil code outlawed caste-based discrimination, job prospects continued to be largely determined by people's caste backgrounds because of the persistent traditional outlook of the state and society (ibid). Following the political changes of 1990, political parties committed to develop Nepal's human resources to achieve large-scale economic growth. Despite these commitments, informal norms based on these traditional political structures affects the imagining of TVET and limits those who decide to opt for TVET, leading to a gentrification of the economy. On the other hand, these norms also affect the supply side as stakeholders influencing TVET policies are also equally affected and influenced by them.

Annex 2: Timeline of TVET Education in Nepal

Periods	Features	Essence
Pre-Malla Period	Despite less information on formal rules, rich art and crafts, medical and agricultural practices are major evidence of the values placed in technical education in pre-Malla Nepal.	Spontaneous
Malla Period	Earliest references of skill acquisition in Nepal appeared during the 14th century regime of King Jayasthiti Malla (1382-1435), who divided the entire population of his kingdom into 67 occupational groups and sub-groups (MOE, 2009).	Caste and family-based
Rana Regime	During the Rana regime, there were no national-level policies, commitments and guidelines in line with technical and vocational education and training. This was not different from other aspects of education policies. However, few technical education programs like Ayurveda, medicine and veterinary training existed (Sharma, 2005). In case of vocational training, a few practices were adopted based on Ranas' special training, such as the Ayurvedic school (1985 BS), a medical school (1990 BC), Kala Pathshala, ranger training, and other technical training.	Need-based, and access and quality of education and governance was very poor
After Democracy (1951) and National Education System Plan (NESP) 1971	<p>National Planning Commission (NPC) was constituted in 1954. The commission produced a report in 1956 emphasizing the introduction of vocational education in schools with the concept of multi-purpose schools. Practical and technical courses were harmonized with the academic course.</p> <p>The 1971 NESP was a turning point for education sector. The plan provisioned three types of schools: general, Sanskrit and vocational. Under vocational secondary education, 34 subjects were listed, and schools were free to choose one as a vocational subject. Twenty percent of instructional time was allocated towards vocational subjects in general and Sanskrit schools, and 40 percent in vocational schools (MOE, 2009). But the provisions couldn't be sustained. Vocational education for school education was withdrawn, disintegrating TVET from the general education system. After separation, TVET moved ahead with a focus on skills and employment and producing intermediate technical human resources for development.</p> <p>NESP also prioritized technical education in higher education by offering technical subjects like veterinary sciences, agriculture, science, forestry, medicine, and engineering under Tribhuvan University. Though a powerful high-level National Education Committee, led by the king, was responsible for policies concerning TVET, the lack of resources meant that its quality suffered.</p>	<p>Harmonized TVET with school education in limited capacity</p> <p>Introduced vocational education in secondary schools and technical education at higher level</p>
Panchayat and Multiparty System Period	Replacement of Technical and Vocational Education Directorate by CTEVT in 1988 with the introduction of a new TVET Act. After the 1990 democratic reforms, the Act was amended in 1993 to create a TVET assembly headed by the education minister. TVET regulation was once again formulated in 1994, which remains the basis for TVET in Nepal till today.	Separation of TVET with legal, structural and curricular provisions
School Sector Reform Programme (SSRP, 2009-15)	The 2009 SSRP included technical and vocational streams within the school curriculum. The main objective was to equip students with employable skills that would assist and accelerate their transition from school to work and help them explore career opportunities inside Nepal as well as in neighbouring countries and in the global market	The start of a new theoretical debate

TVET Skill development in Post-Conflict Transition Period	The 2007 TVET policy focused on (i) expansion of TVET opportunities (ii) access and inclusion in TVET (iii) academic pathway, accreditation, career guidance and integration (iv) ensuring relevancy and (v) sustainable funding	Tried to address the spirit of the 2007 Interim Constitution
TVET policy 2012	Technical and Vocational Education and Training Policy 2012 modified the 2007 Technical and Vocational Skill Development Policy.	Further accelerated TVET in Nepal with increasing access, participation and quality through partnership
Constitution of Nepal, 2015	Article 31 of the 2015 constitution has ensured access to free and compulsory secondary education for all citizens. Article 50 aims to make the national economy self-reliant, independent and developing towards a socialism-oriented economy. Similarly, Articles 51(h) and (i) relate to policies concerning basic need of the citizens and policies relating to labour and employment. (Shrestha, 2020). Article 51(h) also emphasizes a partnership with the private sector for skill development and employment generation.	Emphasizes skill-based education
School Sector Development Plan (SSDP) 2016-22	SSDP (2016-22) has continued the provision of vocational and technical education at secondary level. The plan has targeted 126,000 students to be enrolled in technical stream of secondary education by 2022.	Continuation of TVET at the secondary level
15th Plan (2019-2024)	The 15th Plan has provisioned to expand TVET programs extensively to ensure opportunities and access to technical education and vocational skills development at the local level. Opening up all approaches and avenues of learning, general education and technical education streams are expected to be strengthened through the National Qualification System. This qualification system will also incorporate the mobility and permeability from one stream to another. Skill mapping, standards-setting and developing and using the distribution grid is another priority for the plan. Similarly, collaboration with the industrial sector through apprenticeship approach to work-based training has also been envisioned. In addition, capacity building of TVET schools, financial assistance to students who are from the deprived and disadvantaged communities, economically and socially backward, or disabled, and curriculum reform are also included in the plan. The plan has an ambitious mission to apply career counselling and running a technical subject in each community school, provide skill passports to trainees, develop the National Occupational Competency Standard in TVET curriculum, and ensure quality assurance and accreditation for the training providers in the private sector.	Reorienting TVET with the spirit of the Constitution and the national vision of 'Prosperous Nepal and Happy Nepali'
Annual Policy, Programme and Budget 2020/21	In line with the 15th plan, the annual programme and budget has emphasized promoting TVET in secondary schools and proposed to expand TVET opportunities in all 753 local governments. As of now, 607 local governments are running a technical and vocational training programme at least.	Expansion of TVET without any skill mapping and need assessment

Annex 3: Recent Major Studies on TVET

	Description	Summary
2020 TVET skill mapping study by UNDP	With the technical support of UNDP, Dr Pramod Bahadur Shrestha conducted a skill mapping for Province 5 and Sudurpaschim. The study is focused on reviewing the TVET context in Nepal, current problems, issues, challenges, scope and suggested modality of skill development.	Practical exercise of skill mapping with context review
2017 SDC study on constitutional reform and its impact on TVET in Nepal	The Swiss Economic institute and ETH Zurich led by Dr Ursula conducted a study on TVET in Nepal. The study's objectives were to: (i) identify how the new constitution explicitly and implicitly foresees the federalization of TVET (ii) identify gaps, especially where the constitution is not specific or is ambiguous (iii) identify pros and cons of the options for federalizing the sector based on international experience and particularities of the Nepali TVET sector, and (iv) recommend an equitable, efficient and effective option for the federalization of TVET based on consultations with relevant stakeholders.	Reviews the TVET system of Nepal with alternatives in federal context

Annex 4: Financing of TVET in Nepal

Table 1: Comparative Analysis of TVET Budget in Nepal (NPR in Million)

Fiscal Year	Total National Budget	Total Education Budget	TVET Budget of MoEST	TVET Budget of other Line Ministries	TVET Budget from DPS
2013/14	5,17,240	80,958	2,923	9,673	1,513
2014/15	5,94,000	91,714	5,915	12,604	1,985
2015/16	8,19,469	98,643	5,647	14,447	2,254
2016/17	10,48,921	1,16,361	6,333	16,165	1,927
2017/18	12,78,995	1,26,642	6,037	14,322	2,255
2018/19	13,15,162	1,34,703	9,498	14,322	3,141
2019/20	15,32,967	1,63,766	9,899	14,322	3,288

Sources: Redbook 2013/14- 2019/20, Ministry of Finance; Annual Budget and Programme of CEHRD CTEVT from 2013/14; Annual budget distribution of TU from 2013/14*

Table 2: Expenditure by Level (in million NRs)

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Pre-primary	4,179.5	4,883.9	5,375.8	5,764.6	6,667.6	7,113.8
Primary	43,603.3	48,141.7	54,537.7	57,749.7	65,655.4	69,454.6
Lower Secondary	17,020.8	18,905.7	22,988.2	24,950.7	28,907.8	30,551.4
Secondary	13,576.4	15,261.5	17,528.6	19,681.9	23,292.1	24,584.4
Higher Secondary	5,936.5	7,283.3	8,845.8	11,335.5	14,222.4	14,814.3
TVET	2,177.7	2,730.3	4,255.9	5,411.7	6,568.8	7,650.0
Higher Education	17,773.8	20,070.7	24,087.5	31,333.6	37,525.6	39,957.5
Non-Formal	1,990.6	1,932.8	1,987.1	1,956.0	2,462.3	2,558.3
Total	1,06,258.6	1,19,209.9	1,39,606.6	1,58,183.7	1.85,302.0	1,96,684.3
In Percentage by Level						
Pre-primary	3.9%	4.1%	3.9%	3.6%	3.6%	3.6%
Primary	41.0%	40.4%	39.1%	36.5%	35.4%	35.3%
Lower Secondary	16.0%	15.9%	16.5%	15.8%	15.6%	15.5%
Secondary	12.8%	12.8%	12.6%	12.4%	12.6%	12.5%
Higher Secondary	5.6%	6.1%	6.3%	7.2%	7.7%	7.5%
TVET	2.0%	2.3%	3.0%	3.4%	3.5%	3.9%
Higher Education	16.7%	16.8%	17.3%	19.8%	20.3%	20.3%
Non-Formal	1.9%	1.6%	1.4%	1.2%	1.3%	1.3%

Source: National Education Account 2016 (UNESCO / IIEP - UIS 2016)

Table 3: Financial Flow to TVET in Nepal

	FY 2007/08	FY 2008/09	FY 2009/10	FY 2010/11	FY 2011/12
% foregin aid in TVET budget	65.74	64.66	58.15	51.61	59.72
% national source in TVET budget	34.26	35.34	41.85	48.39	40.28

	FY 2012/013	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17
% foregin aid in TVET budget	49.16	46.69	53.78	52.04	36.96
% national source in TVET budget	50.84	53.31	46.22	47.96	36.96

Source: *Financial Flow in TVET in Nepal: Transiting from the Old to the New Constitution* (Parajuli et al. 2020)

Table 4: Financing of Education Levels (2014-15)

	Pre- primary	Primary	Lower Sec	Sec	Higher Sec	Technical Education	Higher Education	Non- Formal	All
Total million NPRs	7,114	69,455	30,551	24,584	14,814	7,650	39,958	2,558	1,96,684
% by level	3.62%	35.31%	15.53%	12.50%	7.53%	3.89%	20.32%	1.30%	100.00%
Financing Structure									
% GON central	19.0%	54.1%	40.3%	30.8%	15.4%	19.1%	19.7%	44.3%	36.4%
% External sources	12.3%	6.2%	6.2%	4.7%	2.4%	33.3%	0.0%	11.4%	5.8%
% DDCs VDCs	2.6%	2.2%	1.2%	0.7%	0.5%	0.0%	0.0%	0.0%	1.2%
% Households	59.4%	33.6%	43.5%	53.3%	70.7%	41.4%	69.0%	34.8%	48.8%
% NGOs	3.6%	1.5%	3.7%	3.7%	3.6%	0.8%	0.3%	9.5%	2.2%
% Internally Generated	3.1%	2.4%	5.0%	6.7%	7.5%	5.4%	11.1%	0.0%	5.6%

Source: *National Education Account 2016* (UNESCO / IIEP - UIS 2016)

Annex 5: Legal and Policy Arrangements for TVET in Nepal

Provisions of Laws	Salient Features
<p>National Education System Plan (NESP) 1971</p> <p>The 1971 NESP was a turning point for education sector. The plan provisioned three types of schools: general, Sanskrit and vocational. Under vocational secondary education, 34 subjects were listed, and schools were free to choose one as a vocational subject. Twenty percent of instructional time was allocated towards vocational subjects in general and Sanskrit schools, and 40 percent in vocational schools (MOE, 2009). But the provisions couldn't be sustained. Vocational education for school education was withdrawn, disintegrating TVET from the general education system. After separation, TVET moved ahead with a focus on skills and employment and producing intermediate technical human resources for development.</p> <p>NESP also prioritized technical education in higher education by offering technical subjects like veterinary sciences, agriculture, science, forestry, medicine, and engineering under Tribhuvan University. Though a powerful high-level National Education Committee, led by the king, was responsible for policies concerning TVET, the lack of resources meant that its quality suffered.</p>	<p>Introducing vocational education in secondary schools and technical education at higher level</p>
<p>Technical and Vocational Education Committee (TEVC) 1982</p> <ul style="list-style-type: none"> » Vocational education and training were expected to be more skill-oriented to increase the employability of graduates. » Based on this, a technical education plan was endorsed together with the sixth plan (1980). » The main objectives of the plan were to (i) produce technical manpower to promote local labour market and community services, (ii) produce technical manpower for rural and urban development, (iii) promote horizontal linkages with job market and vertical linkages with technical higher education. » The plan also targeted establishing technical schools in different geographical parts of the country. Schools in Balaju, Butwal, Jumla and Jiri were established before 1990. » To implement the plan, a TVE regulation and the Technical and Vocational Education Committee was made operational in 1982. 	<ul style="list-style-type: none"> » Pioneer initiatives for TVET in Nepal » Separate wings of TVET as part of education was envisioned » Objectives were focused on contemporary needs of both supply and demand » TVET schools were expected to be run in strategic places with quality training.

<p>CTEVT Act (1988)</p> <p>The first law which framed TVET as a separate wing of education for the production of middle-level technical human resources for individual employability and supply to the local labour market.</p> <p>Purpose: It was necessary to establish a technical and vocational education and training council to arrange technical and vocational education and training systematically, produce basic and medium level technical manpower, and to determine and certify the level of skills.</p> <p>Objective: CTEVT was established to streamline and standardize technical and vocational education and training and to coordinate among various agencies providing such training and to determine and certify skills.</p> <p>Functions: According to the Act, there are two entities – the Assembly and the Council led by the education minister. The Assembly is responsible for policy direction, evaluation of implemented programs, approval of the annual budget, long-term planning, research, and direction. The Council is responsible for overall technical, financial and administrative functions including, curriculum, training, examination, accreditation, affiliation and quality control.</p>	<ul style="list-style-type: none"> » Two bodies set up – CTEVT Assembly and Council – but also less significance with two bodies » Most were nominated by the education minister » Most members were appointed based on their existing positions within concerned organizations regardless of their expertise in TVET » Act referred to CTEVT as autonomous institution but its working modality has always been debatable » The Act provided a framework to govern TVET sectors including curriculum, accreditation, training delivery, examination, skill testing, HRM and private sector regulation
<p>CTEVT Regulation 1994</p> <p>Replaced the Technical and Vocational Education Directorate by the Council for Technical Education and Vocational Training (CTEVT, 1988) and introduced a new TVET Act. After democracy, the act was amended in 1993 to create a TVET assembly headed by the education minister. TVET regulations formulated in 1994 are the basis for the TVET system in Nepal till today.</p> <p>The major characteristics of the TVET system are a semi-autonomous structure, internal recruitment of human resources, curriculum, delivery, certification, quality control under the same umbrella, and private sector involvement.</p>	<p>Continuation of separate TVET system in line with the 1991 Constitution.</p>
<p>TVET Skill Development Policy 2007</p> <p>The 2007 TVET policy focused on (i) expansion of TVET opportunities, (ii) expansion of access and inclusion in TVET, (iii) academic pathways, accreditation, career guidance and integration, (iv) ensure relevance, and (v) sustainable funding</p>	<p>This policy was developed while the interim constitution was promulgated. It was a milestone to widen the scope of TVET with increasing access, quality, relevancy, inclusive participation and financial strengthening.</p>
<p>TVET Policy 2012</p> <ul style="list-style-type: none"> » The 2012 policy was created to prepare qualified, capable, competitive and productive manpower for economic development and to create employment opportunities for all by establishing an inclusive, equitable and accessible system » The policy outlined the identification, safeguarding, and promotion of traditional skills and recognizing skills, abilities and qualifications gained from formal and informal processes. The policy also outlined the provision of appropriate, relevant and quality technical and vocational education and training as per demands in national and international labour markets. » The policy intended for the maximum use of available resources in TVET and taking forward TVET providers in a coordinated manner. 	<p>The policy further accelerated TVET by focusing on increased access, participation and quality through partnership models. Implementation modalities and structures were also further defined under this policy.</p>

<p>Education Policy 2019: Policy Objective for TVET</p> <p>The 2019 Education Policy intends to develop a qualified, competitive, skilled, and industrious workforce by expanding opportunities for technical and vocational education and training and establishing inclusive and equitable access for all interested citizens.</p> <p>Policy strategy</p> <ul style="list-style-type: none"> » Creating an environment of extensive participation in technical and vocational education and training by providing autonomy, decentralization, partnership, flexibility, and simple regulation. » Ensuring sustainable investment with the participation of, and in partnership with, diverse stakeholders in technical and vocational education and training sectors. » Adopting the policy of offering special concessions to backward sections, regions and communities to encompass them in technical and vocational education and training. » Providing opportunities for relevant, useful, quality-oriented, and competitive technical and vocational education and skill development, depending on qualifications and capacity, and based on the need of national, provincial, and local labour markets. 	<p>The 2019 Education Policy is the major guiding document for the entire education sector. The proposed Federal Education Act and a separate TVET Act are still pending in Parliament. In this situation, only the 2019 Education Policy can give insight into the current priority, provision and modality of TVET in Nepal.</p>
<p>15th Plan</p> <p>In line with the spirit of the constitution, the 15th plan has widened the scope of TVET programs to ensure opportunities and access to technical education and vocational skills development at the local level. Opening up all approaches and avenues of learning in general and technical education are expected to be strengthened through the National Qualification System, which will also incorporate the mobility and permeability from one stream to another.</p> <p>Skill mapping, standards setting and developing and using the distribution grid is another priority of the plan. Similarly, collaboration with the industrial sector, an apprenticeship-based approach to work-based training, building the capacity of TVET schools, providing financial assistance to deprived and disadvantaged, economically and socially backward, and disabled students, and curriculum reform are also included in the plan.</p>	<p>The plan has an ambitious mission to apply career counselling, operate a technical subject in each community school, provide skill passports to trainees, and develop the National Occupational Competency Standard in TVET curriculum and Quality Assurance and Accreditation for the private sector training providers. However, despite two-and-a-half years having passed of the plan period, there are no visible actions yet. Such scenarios show that policies are stunningly documented and poorly implemented.</p>

Proposed New TVET Act 2021: Key Highlights	Draft Act includes many new agenda but questions remain about its features:
<ul style="list-style-type: none"> » Provision of a single council at the Federal level » TV education defined as three years equivalent to grade 12 » Separate existence of both TVET-based and school-based TVET delivery » Provision of skills accreditation and certification from formal and informal ways » Development of a National Qualification Framework and establishment of National Quality Authority to implement it » Allow provinces to formulate provincial laws and operate polytechnics within national standards » Local governments also allowed to prepare local directives and run skills training and management programs » Provision of model polytechnics to be operated by the federal CTEVT » Establishing technical training institutes for trainer preparation » Examinations to be held under the National Examination Board » Formation of a council comprising 31 members from different sectors including two social development ministers from provinces, two mayors, two experts, and two employers » Provision of ED instead of member secretary » Council is expected to function as a fully autonomous body » Provision of TVET Fund Board 	<ul style="list-style-type: none"> » How would the curriculum to be delivered through CTEVT and community schools be equivalent? » How would TVET quality be ensured by quality authority? » Provinces and LG are given some authority but there is no mention of human or financial resources for them. » Why do model polytechnics need to be run by the federal government? » Can the National Examination Board examine the technical aspects of TVET students? » The Act is silent about recruitment of human resources. » Eligibility to be the ED is narrow. Why can the ED not be selected through open competition? » The proposed TVET fund board is expected to be managed by MoEST. Is there any alternative to an autonomous body? » The Act as a whole is based on supply-oriented principles. The linkages with the market and the demand side is not clear. » Will the council be chaired again by the education minister? » Will the MoEST again be the line ministry? » With 31 members in the council, is its manageable, and can it function well?

niti
FOUNDATION

Dugar Marg, Naxal, Kathmandu, Nepal
+977-1-4523430 | info@nitifoundation.org

www.nitifoundation.org