

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

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A report in support of developing understanding and finding
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Dr. Ursula Renold and Dr. Katherine Caves

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The New Constitution 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.

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Expert biographies



Dr. Ursula Renold is head of the research centre for comparative education systems at the Swiss Federal Institute of Technology (ETH) in Zurich. Co-Director of the Centre on the Economics and Management of Education and Training Systems (CEMETS). In addition, she is Chairman of the University Board of the University of Applied Sciences and Arts, North-western Switzerland. She was a Visiting Fellow at the Harvard Graduate School of Education between September 2012 and March 2013.

Prior to this, Renold was Director General of the Federal Office for Professional Education and Technology (OPET) until June 2012. In this position, she headed Switzerland's competence centre for professional education, the universities of applied sciences, and led programme innovation starting in 2005. Before becoming Director General, she was head of OPET's Vocational Education and Training Division and Director of the Swiss Federal Institute of Vocational Education and Training (VET teacher education). During her career, Renold has launched numerous key initiatives that have had great impact on the Vocational and Professional Education and Training system in Switzerland.

Dr. Renold was responsible for the transition process in the wake of Switzerland's constitutional reform of 1999, in which the occupational fields of health, social work, art, agriculture, and forestry became federal competences under one ministry. She has also been involved in the constitutional reform of 2006 and was involved in all related legal reforms in the field of higher education, vocational and professional education and training, continuing education, and the education monitoring process. She holds an honorary Professorship in Professional Education at the University of Applied Labour Studies in Mannheim (Germany).



Dr. Katherine Caves is a postdoctoral researcher in the research centre for comparative education systems at the Swiss Federal Institute of Technology (ETH) in Zurich. She has a bachelor's degree from the University of California at Berkeley and earned her master's degree in the field of Education. Her PhD research was on the economics of education at the University of Zurich.

Her research interests centre around the economic, institutional, and infrastructure foundations of strong vocational education and training (VET) systems all over the world, especially what those foundations are in successful VET systems and how they can be developed in nascent VET systems. In addition to this project, she is currently working on identifying the success factors and barriers to labour market-oriented education systems reforms with the Centre for the Economics and Management of Education and Training Systems (CEMETS).

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We are also very grateful to the many stakeholders, experts, and leaders from Nepal's government and TVET system who met with us to discuss the situation in Nepal and upcoming changes through the new constitution. Finally, thank you to all of the stakeholders who went on to respond to our online questionnaire about good governance for TVET in Nepal. The contributions of the above-listed individuals provides the background and normative foundation for what Nepal's ideal TVET system should be.

Executive summary

This report maps out how Nepal's new constitution (NC) explicitly and implicitly foresees the federalization of the technical vocational education and training (TVET) sector, and outlines how that sector can best be federalised. Our goal is to broaden the understanding of key stakeholders in the Nepali TVET sector on the issues of equitable, effective and efficient TVET services in a federalised context. The insights in this report are based on consultation with key leaders and stakeholders in Nepal's TVET system, along with current research and scholarship on TVET governance plus the expert's own experiences with constitutional reforms and TVET federalization in Switzerland and Germany.

The specific objectives of the assignment are as follows:

- Identify how the NC explicitly and implicitly foresees the federalization of the TVET sector. Identify gaps, and especially identify where the constitution is not specific or ambiguous, and leaves room for interpretation.
- Based on international experience and the particularities of the Nepali TVET sector, identify pros and cons of different options for federalizing the sector.
- Recommend the most equitable, efficient and effective option for the federalization of TVET system based on consultations with the relevant stakeholders.

Vision for TVET

The first task of the report is to develop a vision for TVET in Nepal. To identify the characteristics of Nepal's ideal TVET system, we draw on theory, international best practices, and research. We can use the vision to evaluate the strengths, weaknesses, opportunities, and threats to TVET in Nepal under its existing legal framework and NC later in the report.

The purpose of TVET is threefold. It should provide individual control ability so that Nepal's citizens have the tools they need to shape their own lives. It should enable equality of opportunity through access and programmes at multiple levels and in many occupations so

Purposes of TVET:

- Individual control ability
- Equality of opportunity
- **Human capital**

Principles of TVET systems:

- Good governance in the **coordinated output-oriented model**
- **Occupation-driven** education-employment linkage
- Permeability
- Quality

that all citizens can participate in the labour market. Finally—and most importantly—TVET should develop the quality and quantity of human capital to support economic development for the country and gainful employment for individuals. These purposes are true across all TVET systems.

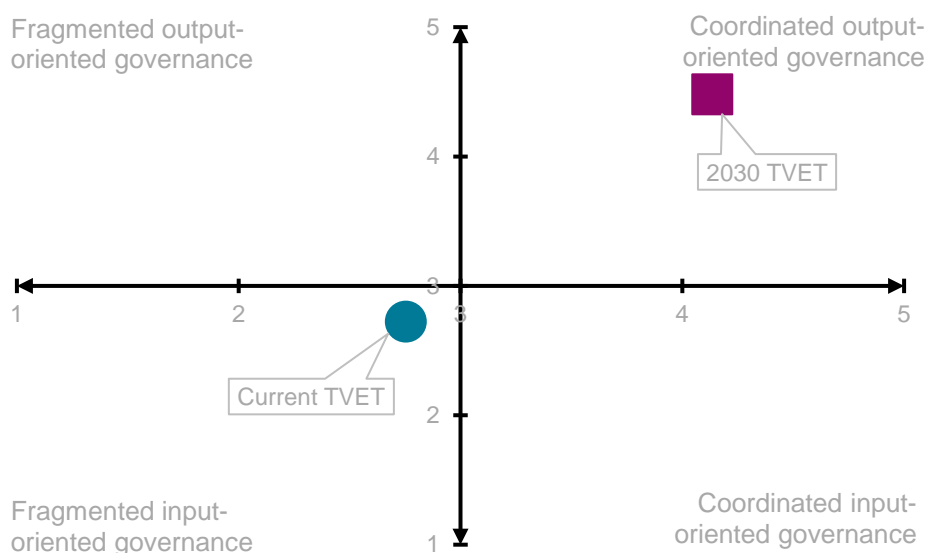
In order to achieve those three purposes, there are four principles we can use to describe strong TVET systems. The first is good governance, a pivotal principle for efficiency, effectiveness, and equity. The second is education-employment linkage, wherein the private sector is engaged in TVET curriculum development, offers work-based training in enterprises, and updates TVET curricula when they no longer match labour market demand. Third is permeability, both vertically across levels of education and training and horizontally between

TVET and the general education system. Finally, the fourth principle is quality: enterprises and individuals know TVET is useful content, valuable degrees, and non-exploitative training.

While permeability and quality are relatively self-explanatory, education-employment linkage and good governance are more complex. There are three potential structuring principles for education-employment linkage. In market-driven systems, the state may not provide much TVET at all. Companies structure the labour market by looking for narrow skill sets that match jobs. In state-controlled systems, the state attempts to allocate workers into a planned labour market—these have weak linkage to the labour market and struggle when planning is not accurate. Finally, the occupation-driven principle is based on occupations as the structuring principle of the labour market. Occupations are defined by employers and employer organizations to help develop curricula for TVET. They are offered on an apprenticeship marketplace that keeps training supply in consonance with labour market demand. Research indicates the occupation-driven system’s outcomes outperform the others, so we focus there.

While education-employment linkage can be designed based on clear international best practices, good governance is based on normative standards of what each country considers ideal for its own TVET system. To determine what Nepal’s TVET leaders and key stakeholders think the best system is for TVET, we developed a survey based on Rauner’s (2009) framework. According to that framework, governance models can range from fragmented to coordinated and from input-oriented to output-oriented. Rauner points out that the strongest European systems are coordinated output-oriented models. We surveyed Nepal’s TVET experts to measure their opinion. Results are shown in Figure E1.

Figure E1: TVET governance models in Nepal



Based on the survey results, Nepal’s TVET leaders and stakeholders consider the current system to be a **fragmented input-oriented model of governance**, but would like to move towards a strongly **coordinated output-oriented model** by 2030. We agree with this assessment and use it as the basis for our assessment of Nepal’s current and potential future TVET system.

To finalize our vision for TVET, we use the purposes and principles already defined to determine which functions of TVET should go to which government level. Tables E1-3 show the functions allocated to the federal, province, and local governments.

Table E1: Functions allocated to the federal government

Federal Governance
Relevant coordination partners
Regulation and System management
Regulation of TVET system management under TVET Umbrella Act
Strategic planning, implementing policies and strategies
National (Vocational) Qualification Framework
Recognizing national and international certificates and diplomas
Occupation-driven qualification standards (competences/content) for the national labour market
Types and duration of programs
Defining TVET programmes, learning locations and responsibilities
National qualification procedures (exams, tests, assessments)
Defining language policy for TVET programmes
Quality control and accreditation of institutions and/or programs
Monitoring of apprenticeship market
Collecting and maintaining federal statistics
Training of professionals in the TVET sector
Permeability and progression routes within the whole education system
Permeability throughout the education system
Transparent access conditions and exit standards
Functional differentiation of programme offerings if a representative group of a cohort fails
Recognition of prior learning (RPL)
System development and improvement
Monitoring and research for TVET
Innovation projects to develop TVET
Support for disadvantaged groups and areas
Public campaigns to strengthen TVET
Financing TVET
Direct financing and contributions to lower-level financing as well as for federal programs and institutions

Table E2: Functions allocated to the province governments (Implementation level 1)

Provincial Governance
Relevant coordination partners
Organizing and Maintaining Infrastructure and TVET schools
Coordinate TVET school infrastructure with local level
Define languages for TVET programmes in provincial TVET Schools
Accreditation of local/regional TVET schools and/or programmes
Career guidance and counselling agencies
Implementing qualification standards, procedures and exams
Collecting and maintaining province-level statistics

Educational processes from acquisition of students to issuing certificates
Career guidance and counselling offers through provincial agencies
Recognizing apprenticeship contracts
Supervision of apprenticeship training and TVET schools
Provincial qualification procedures (exams, tests, assessments)
Issuing certificates
Promoting TVET programmes
Innovation and development projects in coordination with TVET Schools
Public advertisement campaign
Financing TVET
TVET school infrastructure

Table E3: Functions allocated to the local governments (Implementation level 2)

Local Governance
Relevant coordination partners
TVET programme implementation process
TVET schools management
TVET programmes implementation (incl. work-based training)
Implementing preparation programmes (bridge courses)
Infrastructure in each village, city, municipality
Data collection
Career guidance and counselling in lower secondary education offered by career agencies
Financing TVET
TVET schools and RPL procedures and tests

A function-oriented vision for TVET is defined by the purposes and principles of TVET, and the functional analysis uses those criteria to map out what federalization could ideally look like. This abstract vision is the foundation we use to begin analysing the current system and making recommendations.

Legal framework analysis for TVET

There are currently a number of acts and policies that relate to TVET in Nepal as well as the NC itself. We describe how each relates to the general vision for TVET we have established, then perform an analysis of the strengths, weaknesses, opportunities, and threats (SWOT) created by the entire legal framework with regard to each function of our TVET vision.

Although the NC takes a non-explicit point of view on TVET, there is a great deal of space for TVET to fill the policy gaps entailed by goals like education and professional freedom, human capital development, youth engagement in national development, and equity among citizens of Nepal. There are few specific policies mentioned in the NC, but career guidance, private-sector involvement, and occupational skills research are both components of TVET systems that follow the principles of quality, linkage to the labour market, and permeability.

The legal entities that comes closest to covering all aspects of TVET are the 2012 TVET Policy, which we consider as soft law, and the CTEVT Act. However, even those miss

important aspects of TVET—most notably its relationship to the employment system and private sector—and several other acts and policies cover TVET-related issues that overlap, contradict, and duplicate one another.

Our SWOT analysis is extremely detailed and uncovers the conflicts, contradictions, and positive elements of the existing framework. Nearly all of the functions in our general TVET vision are implied as policy goals by the NC and one or two other acts or policies, though not clearly planned out by any of them. The weakest points are the lack of employer engagement, high fragmentation, and input orientation. We also find that some parts of the legal framework contradict the NC, usually because they have implementation and strategic direction happening at the same level without provinces or autonomous local governments.

The problems and contradictions in the existing legal framework are actually its biggest opportunity. Very often, the only mention of a function is the NC, along with perhaps one or more other laws also mentioning that function. Many times, functions like collecting and maintaining province-level statistics are mentioned because they will be critical for meeting development goals. Changes to make the current laws NC-compliant can be included in a general effort of improvement. A few individual elements of the legal framework actually contradict each other, and should also be updated. In this process, though, there are major threats from the tendency to favour the status quo, fear of losing power or control over a function that moves to a different level, and resistance to change.

Conclusions and recommendations

We make recommendations for each level of governance, based on one key recommendation: there should be a **new TVET Umbrella Act** that unifies the legal framework around TVET, resolves the conflicting and problematic parts of the legal framework, and lays out the responsibilities and functions of each governance level and agency clearly. Such an Act can reduce fragmentation and end the tendency towards input-orientation to create the ideal coordinated and output-oriented governance model. In addition, it can clarify and greatly increase the role of the private sector to generate occupation-based education-employment linkage. It can prioritize permeability and quality in a framework that unifies the existing ideas from other laws. The following are our recommendations for multilevel governance in general and for each level of governance specifically:

Recommendations for multilevel governance:

The NC is a window of opportunity for improving the TVET system and overcoming its existing problems. The most important obstacles to meeting the criteria for strong TVET in multilevel governance are fragmentation and input-orientation, along with missing linkage to the employment system and empowerment for the provincial and local levels. Bringing TVET under a single ministry, establishing national standards and strategies for TVET that are implemented on the sub-federal levels according to per-capita funding, bringing employers into a leadership role in TVET, and clearly outlining the rights and responsibilities of each level of governance are the key steps for improving multilevel governance of TVET.

Recommendations for the federal level:

The most efficient way to bring all of the conflicting parts of the legal framework into consonance with one another and the demands of the NC will be to develop a TVET Umbrella Act that supersedes previous legislation in the long run. The TVET Umbrella Act can formally link the economic and human resource development goals of the NC with TVET. It can separate CTEVT's current functions according to federalization so they fit better with the functional analysis presented earlier in this report. The TVET Umbrella Act can regulate the new role of CTEVT, the MoE, and institutions like TITI, while integrating institutions created through the ITTA and IP that conflict with other elements of the TVET legal framework. The TVET Umbrella Act can engage with and formalize the role of employers in TVET. It will revise and consolidate the strengths of all existing policies, laws, and NC articles to prepare a strategy for reaching Nepal's goals for the TVET sector by 2030. However, before developing the new TVET Umbrella Act, Nepal should define the following:

- Type and mode of governance
- Allocation of TVET functions on all three governance levels
- Revision of TVET Policy with a perspective of 2030

A first step is to set up a steering committee headed by someone with strong leadership capabilities to organize buy-in from all relevant stakeholders to organize the transition process from the current state to the implementation of a new TVET Umbrella Act.

TVET Umbrella Act should foster research and monitoring. The federal government should be able to stimulate research and innovation projects to ensure that TVET fulfils its purpose. An international expert group with experience establishing monitoring systems for TVET can help overcome the risks associated with the current lack of knowledge for developing strong monitoring systems.

For permeability and progression routes throughout the education system including TVET, the Umbrella Act should address and regulate a policy of "no dead-end education." It can regulate procedures for RPL inspired by the Non-Formal Education Policy and others, and use certifications like the TSLC and THSLC from the School Sector Reform Plan to develop clear levels for TVET programmes. The National Vocational Qualification Standards will be an important framework and reference system for TVET and recognition of prior learning, and should be regulated in the TVET Umbrella Act and overseen by a federal authority. CTEVT standards should contribute to National Vocational Qualification Standards development.

Recommendations for the province level:

Provinces will need to take over implementation functions, and should be supported by a new TVET Umbrella Act. Although most schools are run on the local level, provinces will likely have more control over TVET schools and programmes because they can oversee the allocation of TVET programmes and occupations to different TVET schools across the province. Provinces can concentrate programmes or occupations in fewer TVET schools and help students reach their programmes of choice. In general, TVET schools should be established where there is a need on the labour market and the provinces should coordinate and decide on the allocation of TVET schools, programmes, and occupations to various local areas. The province should promote TVET programmes so students know what is available even if it is outside their immediate area. Furthermore, they should establish independent career guidance and counselling agencies.

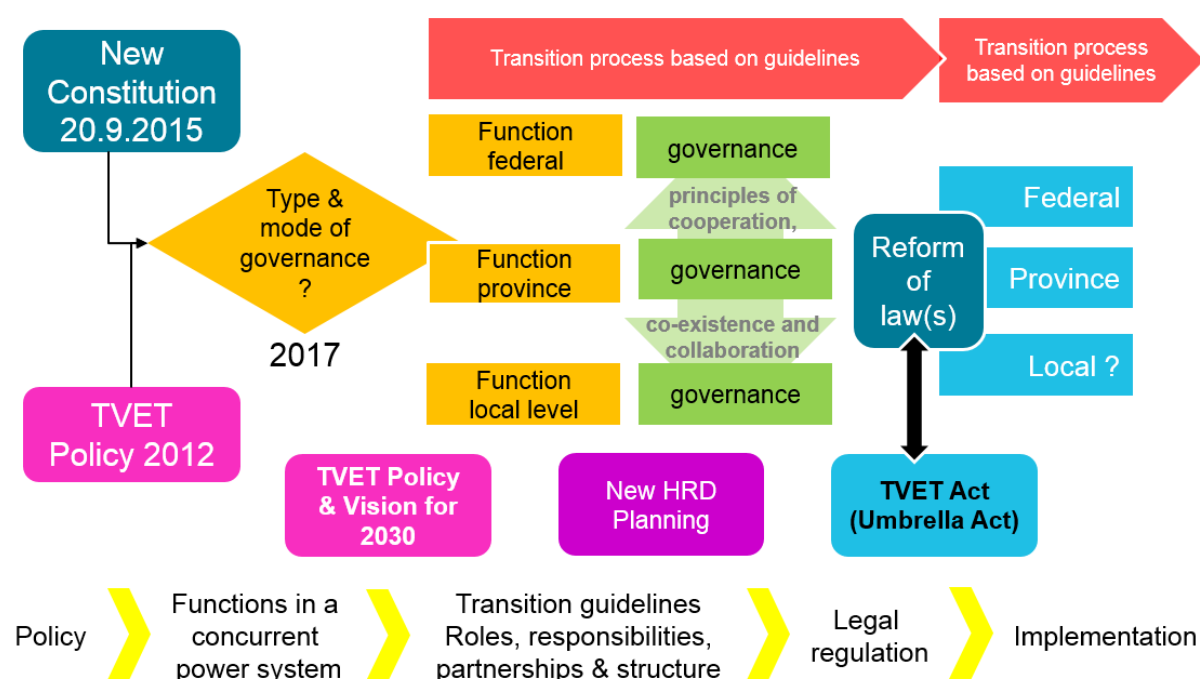
Recommendations for the local level:

The TVET Umbrella act should clearly describe what responsibilities and tasks are given to local governments. These will differ somewhat from those for general education because TVET is labour-market-oriented and requires a bit more coordination with provincial governments to allocate programmes, schools, and students in such a way that meets labour market needs. Furthermore, TVET must be engaged with the private sector not just for curriculum design and strategic direction on the federal level but also for workplace training on the individual student level. Local governments will be well positioned to facilitate placements and encourage local companies to offer training places.

Implementing TVET federalisation

The last section of the report goes somewhat beyond our mandate to elaborate on the process of implementing the system described by the TVET vision (Figure E2). The transition process from an old to a new TVET-sector structure is very demanding and multi-layered. Dr. Renold has several years of experience in implementing such complex constitutional and legal reforms in Switzerland's education system. We include this post-script to aid implementation.

Figure E2: A road map for implementation with simultaneous engineering



Source: Developed by the authors

The NC is a tremendous opportunity for the improvement of the TVET sector in Nepal, and the following [principles for guiding the transition process](#) can lead the way: structure follows function so agencies are designed based on their purposes not before them. Checks and balances let other levels and offices evaluate the work of their peers. Mutually agreed-upon guidelines for the transition process can prevent angst and reduce conflict.

We highly recommend describing the project organization of the transition process in an [overall master plan](#), illustrated in Figure E2. The multi-layered approach can also be called "simultaneous engineering", with various subprojects that must be coordinated.

It will take a long time from the beginning of NC implementation to a fully functioning new TVET sector according to the vision. This is a very complex change process, which will also be a learning process for all participants. Thus, it is important that all responsible and relevant institutions orient themselves towards [long-term goals](#) and break them down into short- and medium-term targets. This report has already begun many of the initial steps, but Nepal's stakeholders and leaders will need to agree with our conclusions before deciding to implement them. Further steps are projects that will need to be undertaken by TVET leaders and stakeholders to extend this report's conclusions and recommendations.

- [Develop a shared vision for TVET](#) (see section 5 of this report)
 - Choose a governance model
 - Allocate functions to levels
- [Plan changes for a new legal framework](#) (see sections 6&7 of this report)
 - Analyse the existing legal framework
 - Identify changes
- [Empower affected entities for the change](#)
 - Analyse the existing ministries, bodies, institutions and legal entities
- [Set clear quantitative mid-term goals](#) that match NC objectives
 - Develop goals for TVET sector
- [Plan the transition process](#)
 - Create mutually agreed-upon guidelines
 - Organise change management
- [Start the legislation process](#)
 - On the federal level, begin developing the TVET Umbrella Act
 - Provide templates for the sub-federal level

Finally, during the 10-20 years of the transition process, there will be various potential hurdles and obstacles that must be anticipated and overcome. According to the author's experience, the following should be considered as [strategies to overcome potential problems](#). These are strong leadership, diversity in implementation teams, strong project organization and monitoring, external support, and a communication campaign with informational events that include the public.

The authors of this report are very optimistic that the NC will improve governance in Nepal, especially for the TVET sector. The change process will not be simple or easy, but we hope that the recommendations and processes described here are useful to Nepal's leaders and TVET stakeholders as they move forward. The change process will not be brief, but it can have a strong positive impact on Nepal's economy and its people.

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List of abbreviations

General terms

TVET	Technical Vocational Education and Training
VET	Vocational Education and Training
N(V)QF	National (Vocational) Qualification Framework
RPL	Recognition of Prior Learning
HR	Human Resources

Legal framework

NC	New Constitution
OC	Old Constitution (Interim Constitution 2007)
Ed. Act	Education Act
ITTA	Industrial Trainee Training Act
IEA	Industrial Enterprises Act
LA	Labour Act
TVETP	TVET Policy
YP	Youth Policy
NFEP	Non-Formal Education Policy
SSRP	School Sector Reform Plan
IP	Industrial Policy

Institutions

GoN	Government of Nepal
MoE	Ministry of Education
CTEVT	Council for Technical Education and Vocational Training
TITI	Training Institute for Technical Instruction

Important definitions

Federal/GoN	Central, national government
Province	Intermediate-level government unit (we use this term instead of state)
Local	Lowest-level governments of municipalities, cities, and villages
Sub-federal level	We use this term to refer to the provincial and local levels. Since there are a number variables that are not clear with regard to the allocation of powers, we use this term when distinction is not important.

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1. Mandate and Method of Study

In September 2015, Nepal promulgated a new constitution after a long debate of more than seven years. The new constitution (NC) of the Federal Republic of Nepal outlines how various sectors will be federalised. Although education is among the sectors outlined, the technical vocational education and training (TVET) sector is not explicitly mentioned. Despite the NC's strong commitment to the rights to education and employment, it does not outline how restructuring the Nepali state into a federal system will ensure more equitable, efficient and effective TVET delivery.

Although TVET and employment are alluded to and mentioned in the NC, they are not sufficiently explained. Instead, the NC raises new questions on these topics, such as: what is the role of the federal, provincial and local government in TVET? How will its funding be managed? Who will fill the leadership role for the TVET sector? To date, there have been hardly any debates or serious reflections on the how federalization will work in the TVET sector.

In this context, it is important to understand what functions should be allocated to the federal, provincial and local government levels to make for an effective and efficient TVET system. The advantages and disadvantages of different models for dividing roles and allocating resources should be openly discussed. Hence, this report maps out how the NC explicitly and implicitly foresees the federalization of the TVET sector and outlines how Nepal's particular TVET sector can best be federalised. The insights in this report are based on current research and scholarship on TVET governance plus the expert's own experiences with constitutional reforms and TVET federalization in Switzerland and Germany.

1.1 Purpose of the assignment

The experts will help broaden the understanding of key stakeholders in the Nepali TVET sector on the issues of equitable, effective and efficient TVET services in a federalised context. The key stakeholders include the Ministry of Education and specifically CTEVT and the Technical Committee, which includes other ministries relevant for the TVET sector. In addition, selected industry representatives and development partners along with their projects will be included in consultations.

Specific objectives of the assignment

- Identify how the constitution explicitly and implicitly foresees the federalization of the TVET sector. Identify gaps, and especially identify where the constitution is not specific or ambiguous, and leaves room for interpretation.
- Based on international experience and the particularities of the Nepali TVET sector, identify pros and cons of different options for federalizing the sector.
- Recommend the most equitable, efficient and effective option for the federalization of TVET system based on consultations with the relevant stakeholders.

1.2 Methodology

The very short project is based on the following phases. The first is extended document analysis of Nepal's old constitution (OC) and NC, the legal framework of acts and policies related to TVET, and a literature review on constitutional changes and education and TVET. We implement and test an existing international survey measuring modes and types of TVET governance, then ask stakeholders involved in the fact-finding mission to respond. During the fact-finding mission, the authors met with stakeholder groups to exchange meanings and experiences on the NC as well as Nepal's TVET sector. Finally, Dr. Ursula Renold shared her own deep and long-lasting experience with governing TVET systems and managing complex reforms during a stakeholder workshop. The sequence of the work was organised as follows:

- **Pre-phase**
 - Literature review
 - Document Analysis, including the OC and NC (see Appendix 1), analysis of the existing legal framework of TVET-related acts and policies (see Appendix 2)
 - Preparing a concept for the governance of TVET under a federalised system, including a draft for the online survey (see Appendix 3)
- **Fact-finding mission, January 16-20, 2017** (see Appendix 4)
 - Conducting individual interactions and consultative workshops with the major stakeholders, collecting e-mail addresses for the online survey
 - Presenting initial reflections and potential recommendations to stakeholders at the end of the mission
- **Final phase**
 - Running an online survey on the modes and types of TVET governance and comparing it to international data (January 23-31)
 - Writing this final report, including recommendations to the GoN.

2. Literature Review

The literature presented here is divided into the following topics, all related to the broader topic of the study mandate. The topics are education and constitutional regulation (Richter, 1994); decentralised governance in general (Faguet, 2013) and specifically in Nepal (Dhungel, 2004; Hesselbarth, 2007; ADB, 2015); decentralised governance models in the TVET sector (Rauner et al., 2009); and financing decentralised TVET (Renold & Barmettler, 2007; Ahlin & Moerk, 2008).

Education and constitutional regulation

To date, there is no agreed-upon international best practice for whether and how TVET should be described and governed at the constitutional level. This is mainly because there are very few countries that have strong TVET systems that are part of their education systems. Such TVET systems are recognizable by their involvement of all relevant stakeholders, especially those from employment, business, and industry.

One example of a very successful constitutionally-determined TVET system is the one in Switzerland. The Swiss constitution outlines the foundation for its TVET system. “The Confederation shall issue regulation on vocational and professional education and training. It shall encourage the provision of a diverse and accessible range of courses in vocational and professional education and training” (Swiss Constitution, Art. 63). It does not specify many details on implementation or organisation. A federal law on vocational and professional education and training regulates details.

In contrast, the United States has a very weak TVET system and very little mention of education in its constitution. That system could work if states had responsibility for their own education programmes, there is an imbalance between the constitutional role of the federal government and its rather large enacted role in all types of education. Haubenreich (2012) examines the relationship between education and the U.S. constitution, noting that the federal government’s role is not matched by its constitutional authority. An enormous number of historical, contextual, and other factors play into the weak TVET situation in the United States, but this imbalance between constitutional mandate and enacted power is unlikely to help.

To assess the NC in the context of TVET in Nepal, we can use Richter’s (1994) article about decision-making structures for educational questions in open societies. The article analyses three models of education-sector organisation, distinguishing among *administrative*, *constitutional* and *contract* models.

In the [administrative model](#), education is part of public administration and follows the same organisational principles that the state does. This exposes young learners with social organisational principles at an early stage, familiarising them with the conditions of society. The administrative model is legally undetermined; legal regulation is not necessary for such a norm-driven approach—certainly not legal conflict.

In the [constitutional model](#), education is also part of the public organisation, though not fully integrated into the administration because it occupies its own place. Education is governed by constitutional principles, and the same principles also describe the organisation of the state. The educational power of a constitution itself is problematic. However, its legal requirements are clear: the rights and obligations of all stakeholders are regulated by law, as are the procedures for decision-making, and conflicts are resolved by independent courts.

In the [contract model](#), education is governed neither by the state administration nor by the state constitution. Citizens themselves and social groups themselves create educational organisations, under state laws that lay down certain conditions and limits. The contract model presupposes the individual freedom of the citizen (freedom of choice) and the social autonomy of groups (self-administration). The organisation of education established by contracts may correspond to social forms of organization, but it does not need to.

Though Richter himself points out that we know very little about the educational value of each organisational form, there is a logical argument that the contract model is the best fit for TVET. Richter’s models of education-sector organization help to identify principles, rights and freedoms that can be reconciled with the requirements of effective TVET. For example,

education must necessarily be public and free of costs to guarantee equal freedom for all citizens. For TVET, modern and effective systems must necessarily combine school- and work-based education. Given that they need to operate both from and outside of government control, TVET systems fit well with the contract model of education organisation.

Richter also points out that the design of TVET should mirror that of further education and training and of industry. Both TVET and further education and training are based on the integration of learning and industrial enterprises, so they share a similar pedagogical model. Therefore, it is only logical that TVET and further education and training should be organised in a similar way. In the same vein, both programmes need to fit into the overall organisation of the enterprises themselves, which are based on the production and distribution of goods and services (Richter, 1994, p. 196). This is a valuable insight; it means that interpreting the NC depends on the goal for TVET in Nepal. For a strong modern TVET system where governance is in close cooperation with the industry sector, governance needs to be organised by the contract model and modelled to combine education and training with employment and industry.

Decentralization and education

Decentralization brings political and decision-making processes to the local level. Local government bodies enable people to participate in the decision-making processes that directly affect them. The most important goal of decentralization is to bring decisions closer to citizens, thereby shrinking information asymmetries and improving accountability (Dhungel, 2004).

Some level of decentralization has existed in Nepal since the 1960s Panchayat system, but the NC introduces a new level of decentralization through federalism—allocation of power across multiple levels of governance instead of only the delegation of responsibilities. Bardhan (2002) differentiates between “the devolution of political decision-making power to local-level, small-scale entities” and “mere administrative delegation of functions of the central government to local branches” (p. 186). Nepal’s NC does the same.

Faguet (2013) analyses how decentralisation affects governance. He determines that decentralization can “increase political competition, improve public accountability, reduce political instability, and impose incentive-compatible limits on government power, but also threaten fiscal sustainability”. Decentralisation moves governments “from a hierarchical, bureaucratic mechanism of top-down management to a system of nested self-governments characterised by participation and cooperation, where transparency is high and accountability to the governed acts as a binding constraint on public servants’ behaviour” (p. 2). Faguet concludes that decentralization itself does not drive good governance, instead the quality of governance moderates the relationship between decentralization and improved outcomes.

The underlying dynamic relationships of good (or poor) governance drive the effects of decentralization. When institutions are hierarchical, opaque, or incentivise resource-hoarding more than outcome improvement, decentralization is destabilizing. The ideal situation is when “independent units must cooperate to achieve positive-sum outcomes, and this structure of incentives is replicated within political parties and the public administration, then decentralization will generate competitive incentives compatible with deepening democracy and strengthening the rule of law” (Faguet, 2013; p. 11).

Good governance and outcome-oriented incentives are also key for decentralizing education. Decentralisation can degrade service provision in poor communities that cannot voice and defend their preferences. An analysis of school decentralization and quality in Argentina finds an overall positive impact on test scores, but those gains do not reach the poor (Galiani, Gertler, & Schargrotsky, 2008). This is important for Nepal, because the NC emphasises equality of opportunity and protecting the poor and minorities.

Good governance and outcome-oriented incentives are critical for decentralizing education.

Effects of decentralization can be hard to measure because cross-country differences capture much more than the effects of governance, but Falch and Fischer (2012) used PISA and TIMSS panel data that follows the same countries over time. Their analysis shows that government spending decentralization is conducive to student performance, though the mechanisms are unclear. Faguet and Sanchez (2008) compare two countries in-depth as case studies and find that decentralization improved enrolment and government responsiveness to need in Bolivia and Colombia, respectively, while moving investment from education-related infrastructure to the services themselves in both cases. These improvements were driven by local governments in the worst-off villages and cities and reinforced by Faguet (2004).

Decentralization can improve educational outcomes in developing countries as long as there is good governance and transparent, outcome-focused incentives. Under these conditions, bureaucratic corruption is reduced because actors are not fighting for the resources to, for example, build a new school, but instead are tasked with using resources to improve student outcomes. Increased responsiveness to the needs of students, schools, and teachers—especially among rural, poor, and small local governments—drives improved educational outcomes. We will further explore the meaning of good governance in later sections.

Decentralization, governance, and TVET

TVET is part of the education system, so many general education issues also TVET issues. Therefore, decentralization can be helpful to TVET outcomes when it is accompanied by good governance and outcome-focused incentives. However, TVET is different from general education in its connection to the labour market. TVET's connection to the labour market is important in two ways. First, actors from the education and employment systems must be

TVET has to balance multilevel decentralization with central-level standardization.

linked to make sure TVET curricula are correct, relevant, properly delivered, and regularly updated. Linkage diminishes information and resource asymmetries and improves the outcomes of graduates on the labour market. Second, TVET credentials need to apply throughout the labour market. Degrees need to be recognised by employers, government, and further education and training throughout Nepal. That added requirement means that TVET has to balance multilevel decentralization with central-level standardization.

Faguet (2013) states that “decentralised governments can implement policies better suited to the local needs and preferences of a heterogeneous population” (p.14). Different villages or cities have their own local labour markets, traditional crafts, and occupational heritages. Nepal's “One Village One Product” programme exemplifies this. Decentralization enables local education authorities to decide which of the nationally-defined occupations their own

communities need. Thus, the needs of individuals for relevant skills are met at the same time that the need of local employers for the right kind of skilled workers is met.

When decentralizing TVET, there will be more concurrence among levels of government where powers are shared instead of allocated discretely to various levels. Therefore, it is important to define precisely how governance should function when powers are shared and to define which functions can be assigned to a specific governance level. This can only be done through close cooperation and transparent collaboration.

Rauner et al. (2009) address the issue of good governance in TVET. Four governance models are described by two dimensions: integration type, running from fragmented to coordinated, and governance mode, ranging from input-oriented to output-oriented. We discuss this issue in more detail in section 3.3, including the results for leading European TVET systems and for Nepal both now and potentially in the future.

Financing TVET in a decentralised context

There is a great deal of literature on the relationship between decentralization and fiscal sustainability (see e.g. Faguet, 2013; Rodden, 2006; Rodden, Eskeland & Litvack, 2003). Findings are not very optimistic due to problems of fiscal incentives and behaviours in multi-level governments. Local governments have a tendency to overspend their budgets and derive personal benefits while nationalizing the costs of such behaviour through central bailouts (Faguet 2013). The end result is that decentralization is correlated to macroeconomic instability in a number of countries (see e.g. Wildasin, 1998; de Mello & Barenstein, 2001; Montero & Samuels, 2004). Hence, financing TVET needs to be carefully planned based on a clear view of each government level's organisation and functional responsibilities.

One example of successful fiscal decentralization—albeit specific to general education—is Sweden in the 1980s and 1990s. Though there were concerns that decentralization would increase inequality by tying school funding more closely to the local tax base, Ahlin and Moerk (2008) found that there was no effect on overall spending.

Renold and Barmettler (2007) describe the process of changing the Swiss VPET system in the mid-1990s and implementing a new VPET Umbrella Act. They highlight the importance of coordination between the different political levels (confederation and cantons) as well as with industry partners. The ten years from 1998 to 2007 were decisive with regard to the current system; Switzerland went through a systematic and systemic change process in which institutions, collaborative networks and financial flows were revised.

Renold and Barmettler find that this reform process was accompanied by a far-reaching change in financial flows from an opaque input-oriented model to one that is transparent and output-oriented with lump sum payments for each student. The new approach had two goals. First, it coordinated TVET costs and available public expenditure. Second, it increased autonomy and self-governance of the cost units because the inflow of funds is no longer determined by inputs but by their task performance.

While implementing the new financial regime, Renold and Barmettler find that knowing the costs and being able to set financial priorities for their own needs encourages rational use of funds. They conclude that autonomy and transparency are the basis of active TVET policy and quality assurance. "Education can only be achieved if the participants want to and do

engage with the knowledge of things.”¹ (p. 115, own translation). Decentralization can have positive effects for fiscal management and sustainability of TVET systems, but the effects depend on good governance and outcome-oriented incentives.

Developing countries have their own considerations. Bardhan (2002) points out that countries like Nepal are moving from centralised to decentralised governments—not from small independent states to one unified system. This leaves the GoN responsible to the most poor, remote, and otherwise underprivileged citizens. Success is measured by poverty alleviation, not necessarily efficiency of resource allocation among regions. TVET is not specifically about poverty and is relevant even in rich countries, but one of its key roles is to provide individuals with access to the economy, and the economy with skilled human resources. Therefore, as Nepal decentralises, TVET funding should focus on successfully bringing all citizens into contact with the economy of the country through outcome-oriented incentives.

A number of themes run through all of the literature on decentralization, decentralizing education, decentralizing TVET, and financing decentralised TVET in developing countries. While decentralization itself is linked to positive outcomes, it is not the cause of improvement. Instead, the good governance and outcome-oriented incentives necessary to properly implement decentralization are the mechanisms through which benefits are generated. As Nepal develops and decentralises its TVET system, these standards are key.

3. Defining the criteria for strong TVET

Currently, TVET is considered as a very important part of education systems, especially for its role in developing the human resources necessary for economic growth (Staff, 2004, UNEVOC, 2016), especially in Nepal (ADB, 2015). It “is often seen as the silver bullet to the problem of youth joblessness” (Eichhorst, 2012). However, socially constructed concepts and approaches to TVET are very heterogeneous around the world. Therefore, it is important that a country determines in its TVET policy the type, scope and concept of its TVET system. In this section, [we draw on theory, international best practices, and research to derive the criteria we will use to evaluate the strengths, weaknesses, opportunities, and threats to TVET in Nepal under its existing legal framework and NC.](#)

We begin by outlining the purposes of education—specifically TVET—and four basic principles of strong TVET systems. Two of these require additional consideration, so we discuss the structure of education-employment linkage and our operating definition of good governance in detail. We do this so that our recommendations are based on a clear foundation of what the system is and should be. For example, we would make different recommendations if Nepal’s approach to TVET had to be fully school-based instead of a combined school- and workplace-learning approach. Therefore, we define the main criteria for strong TVET systems before we proceed.

¹ German text: “*Bildung kann nur gelingen, wenn die Beteiligten in Kenntnis der Dinge sich engagieren und engagieren wollen.*“

3.1 Purposes and principles of strong TVET systems

Education systems serve **three main purposes: individual control ability, human capital, and equality of opportunity** (Klieme et al., 2006). Individual control ability is individuals' capacity to shape their own lives, relate to their environments, and be part of their communities. The human capital function of education is to provide the volume of labour—both qualitatively in terms of knowledge and skill types and quantitatively in terms of how many people are educated at various levels and in various fields. Finally, the equality of opportunity function of education is about ensuring social participation and cohesion.

The most relevant function for TVET is the human capital function: preparing young people to enter the labour market through meaningful and effective education processes (Renold et al. 2015, 2016). Strong TVET systems contribute to individuals' opportunity and ability to pursue professional careers while benefiting national human resource development and skills. Because TVET is so strongly oriented to the labour market, the employment system is a key partner.

Therefore, TVET needs to engage multiple stakeholders from the public and private sectors into an effective system that maximally benefits individuals as well as the nation in terms of economic development, innovation, technological advancement, and equity. We therefore start from the assumption that a fully school-based TVET system cannot be a good solution for Nepal as it would be considered a second-choice education with weak attractiveness, low reputation and bad chances for leading to a (good) job. As we will show, these outcomes would not be in line with the NC.

The key principles of strong TVET systems are good governance, linkage to the labour market, permeability and quality. These principles determine the system's efficiency, effectiveness and equity.

- **Good governance** is a pre-requisite for efficient and effective TVET processes. We will address the scope of this principle in the next section.
- **Education-employment linkage** means that employers are engaged in designing, applying, and updating the TVET curriculum (Renold et al. 2015, 2016). This ensures that trainees learn skills and technology that are relevant on the labour market and curricula keep pace with technological change. Workplace learning is critical to this principle.
- **Permeability** is defined by the presence of progression routes throughout the TVET and education systems so individuals can enter further programmes both vertically to higher occupational qualifications and horizontally to higher general-education qualifications.
- Finally, **quality** in TVET is about accountability of programmes to national standards, monitoring and evaluation to ensure standards are being met, and accreditation or certification so graduates can demonstrate their skills to potential employers. These principles guide TVET systems toward achieving the human capital function of education.

Purposes of TVET:

- Individual control ability
- Human capital
- Equality of opportunity

Principles of TVET systems:

- Good governance
- Education-employment linkage
- Permeability
- Quality

3.2 Drivers behind structuring TVET

Linking actors of the education and employment systems through a specific composition of institutions is an important determinant of TVET's reform and success, even figuring prominently in UNESCO's recommendations on TVET (UNESCO 2015). One report on African TVET systems states, "public-private multi-stakeholder partnerships involving key players such as government ministries responsible for education and training, enterprises, international donors and development partners, local communities, training providers, professional bodies, NGOs, and the media are capable of generating synergies for the development of employable skills" (Afeti, G., & Adubra, A. L., 2012, p.18).

While it is clear that education and employment should be linked, that relationship can be structured in different ways in different normative contexts. Table 1, adapted from Clematide et al. (2005), shows three underlying principles that structure actors' relationships. A similar approach was elaborated by Georg (2000), who introduced the occupation as a work-structuring principle (see also Renold, 2016). Each approach has different consequences for governance and the allocation of functions to various levels of government. Therefore, the responsible actors need to agree on the rationale that drives reform in the TVET sector.

Table 1: Structuring principles for relationships to employment-system actors

Criteria	Market-driven	State-controlled	Occupation-driven
Rationale	Production logics	School logics	Occupational logics
Political culture	Free market, competition-oriented	Centralistic, state-centred (elitist/autocratic)	Neo-cooperative, driven by social consensus
Education-programme frameworks	Businesses and individuals	School subjects, collectivist values, labour market plans	Vocational occupations
Content	Present needs of individual enterprises: - Utility-oriented - Short-term - Specific skills	Politically determined, focus on: - General/academic knowledge - Coursework - Planned economic goals	Determined by organizations: - Occupational relevance - Tradition - Labour market need - Innovation
Relevant labour market	Internal labour market	Planned labour market	Occupational labour market
Strengths	Flexible, cheap for the state, closely matches the needs of production	Strong linkage to general education, no problems with lack of training places	Broad VET with status equal to general education. Matches labour market need.
Weaknesses	Under-investment in training and education	Weak linkage to labour market, reliance on planning	Institutional inertia
Examples	USA, UK, Japan	France, China, Singapore	Germany, Switzerland, Austria, Denmark

Source: Adapted from Clematide et al. (2005)

The most innovative VET systems in the world—and those where human capital needs are arguably best-met—are in the *occupation-driven* category. The NC of Nepal explicitly

mentions the terms occupation and profession (NC Art. 51, c, 1 and 2). Even, if this does not explicitly require the occupation-oriented approach, we use the characteristics of that category as the ideal standard for our general vision of strong TVET. We can use the others to point out areas where education-employment linkage might be structured in a way that contradicts either best practices or the practices of other criteria within Nepal's TVET system. However, TVET governance is also a key determinant of education-employment linkage's structure, so we first evaluate what the options and goals are for TVET governance.

3.3 Good governance for TVET

Good governance for TVET is realised when functions, strategies and goals are best fulfilled. In order to get there, a country needs first to decide which **type and mode of governance** it wants to achieve in its legal framework—in this case the NC. Some things are pre-defined by the NC, such as decentralised allocation of education-related power to three levels of governance (see NC, schedule 8). Other aspects of TVET governance are not yet clear.

TVET governance models differ in type and mode. The **type of governance** is its degree of integration and coordination, for example among responsible ministries and other bodies. Coordination is an important topic in the NC (see NC Art. 232), so the GoN has to decide how much it will coordinate the education sector, including TVET. **Low coordination** means public and private actors are autonomous within the rules; there is no (or little) coordination among the various parties involved. Responsibilities are distributed by subject area and not function. **High coordination** indicates that public and private actors act in concert within the legal framework. Responsibilities on all three governance levels are allocated by function.

To determine the level of coordination in Nepal's TVET governance, we need to consider several issues. For example, how many ministries should be involved in TVET, and which ones? Who is in the leadership role for TVET, and what are the responsibilities of all involved? How should quality be regulated in order to provide high standards? Good governance would mean that standards-setting for occupations, exams, instructors, career guidance, and other key strategic features of TVET is allocated to the top level, then implemented by a sub-federal level, and that there are checks and balances among levels and tasks.

The **mode of governance** controls the way legal regulations are set up. This is a normative decision, and organises how further legal regulations should be made. There are two types of government mode regulation: **input orientation** and **output orientation**. In the **input-oriented mode of governance**, detailed norms and rules are regulated, such as how a curriculum is to be implemented; or predefined pathways for all. Input-oriented governance leads to low autonomy for all actors outside the top level of GoN, which is especially problematic in a TVET system that needs to engage employers and industry actors in leadership roles and has to take into consideration small variation among local communities.

In the **output-oriented mode of governance**, standards and goals—but not processes—are mutually fixed and coordinated on a national level, then met by the sub-federal levels however they choose. For example, the GoN might fix national qualification standards that must be reached at the end of education and training, but local actors have high autonomy and flexibility in how they bring students' knowledge and skills up to those standards. This is especially useful in TVET so training companies can customise training to fit their business models while students are still guaranteed a specific level of skill upon programme completion.

Combining the two types and two modes of governance yields four possible governance models. Table 2 shows the four types, and Table 3 provides examples of what each might look like in Nepal. The four governance models lead to different approaches to nearly every policy issue related to TVET, so we focus on how each model would work in areas of leadership, standards-setting, and dealing with multilingual education policies.

Table 2: Models of governance

		Integration of governance	
		Fragmented	Coordinated
Mode of governance	Output	Fragmented output-oriented governance	Coordinated output-oriented governance
	Input	Fragmented input-oriented governance	Coordinated input-oriented governance

Source: own depiction, adapted from Rauner et al., 2009, p. 16

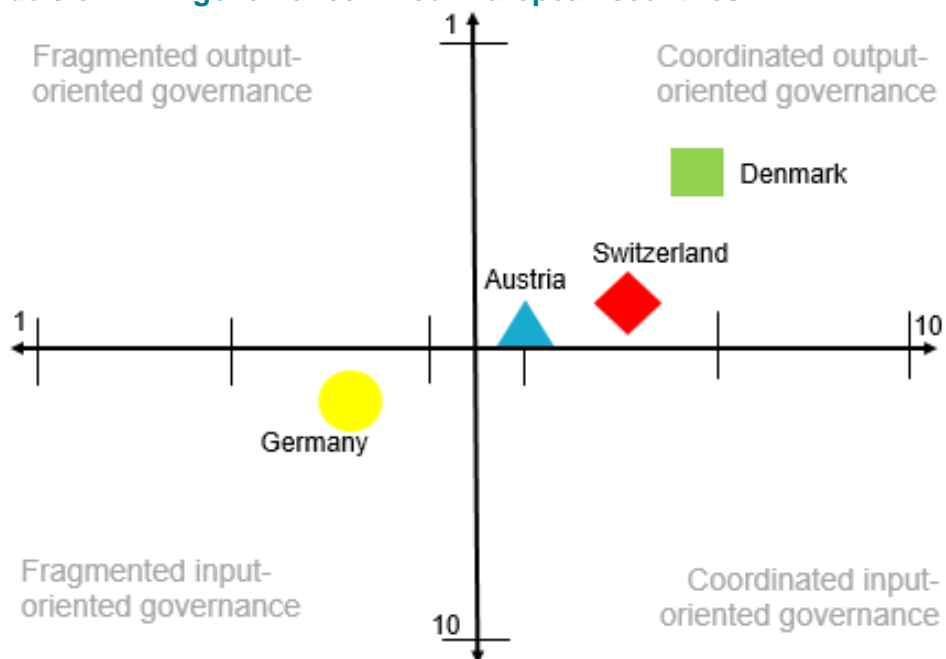
Table 3: Examples of TVET governance models in Nepal

		Integration of governance	
		Fragmented	Coordinated
Mode of governance	Output	<ul style="list-style-type: none"> - 17 Ministries are responsible for TVET and coordinate all tasks with the business sector. - Standards are set on a federal level with implementation autonomy at sub-federal levels. - Languages: every Ministry defines its own language policy and regulates in its own Act how many languages should be taught. - RPL: every province or local unit defines its own standards for RPL (informal sector) 	<ul style="list-style-type: none"> - One or two ministries are responsible for TVET and coordinate all tasks with the business sector. - Standards are set on a federal level with implementation autonomy at sub-federal levels. - Languages: TVET umbrella Act requires at least 3 languages—Nepali, English, and a third national language on which sub-federal levels are free to decide. - RPL: national occupational standards are the reference for RPL (informal sector)
	Input	<ul style="list-style-type: none"> - 17 Ministries are responsible for TVET and coordinate all tasks with the business sector. - Detailed regulations govern implementation, norms, rules and responsibilities. - Languages: every Ministry defines its own language policy and regulates in its own Act how many languages should be taught. - RPL: every province or local unit defines its own procedures for RPL (informal sector) 	<ul style="list-style-type: none"> - One or two ministries are responsible for TVET and coordinate all tasks with the business sector. - Detailed regulations govern implementation, norms, rules and responsibilities. - Languages: TVET umbrella Act requires at least 3 languages—Nepali, English, and a third national language on which sub-federal levels are free to decide. - RPL: national occupational procedures are the reference for RPL (informal sector)

Source: own depiction, based on NC of Nepal and experience of the authors

The discussion of TVET governance types and modes can get rather abstract, so we refer to an analysis by Rauner et al. (2009, p. 16) of the governance models of four European countries: Germany, Austria, Denmark and Switzerland. Figure 1 shows the results for those four countries. Germany is a fragmented input-oriented model of TVET governance, while the other three countries are all coordinated output-oriented models. These are four of the most successful TVET systems in the world, so it is somewhat surprising to see that they are not all the same. Rauner's (2009) analysis goes on to discuss that Germany's system generates very high transaction costs when actors try to coordinate, which works only because Germany, a rich country, can afford those costs of governance.

Figure 1: Models of TVET governance in four European countries



Source: own figure, adapted from Rauner et al. (2009) by authors.

To sum up: if Nepal wants to develop a strong TVET system of its own to meet the three purposes described above, it can use the best practices in each principle of strong TVET systems as a guide. However, the governance model used for TVET—in terms of type and mode—is a normative decision that should be made by Nepali leaders themselves. Governance models drive the structure of relationships between education-system and employment-system actors, and consequently all the functions that should be fulfilled and allocated to the various levels to achieve the desired effects, outcomes and purposes of TVET.

The NC is clear that Nepal should achieve the purposes of TVET: competent and well-prepared human resources, developed through “scientific, technical, vocational, empirical, employment and people-oriented” (NC, art. 51. h.1) education that should make the labour force “competent and professional” (NC, art. 51. i.1). Achieving the purposes of TVET requires first meeting the four principles of strong TVET systems. The NC addresses quality and linkage, emphasizing the role of the private sector (NC, art. 51. d.2) in economic growth and encourages investment in Nepali labour and skills to promote development (NC, art. 51. d.8). However, the NC does not define an ideal model of TVET governance.

The NC is clear that Nepal should achieve the purposes of TVET: competent and well-prepared human resources, developed through “scientific, technical, vocational, empirical, employment and people-oriented” education that should make the labour force “competent and professional”.

Nepal has its own history, context, and unique features like a very large informal economic sector, and Nepali leaders understand these best. We surveyed key stakeholders on the current and ideal-future models of TVET governance in Nepal. We describe the results of the survey in the next section before making recommendations based on that goal and the other TVET principles.

4. Survey results: TVET governance model in Nepal

We presented the four governance models for TVET based on high or low integration and output- or input-orientation to Nepal’s key TVET stakeholders. After familiarizing them with the basic concepts and hearing their ideas and opinions in person, we sent an online survey to the same stakeholders to collect their opinions about where TVET in Nepal currently stands and where it should be in 2030 in terms of governance models. This section presents the results, upon which we base our governance-model analysis and recommendations.

Out of 80 email addresses collected during the fact-finding mission, 25 responded to the online survey. Of those, 22 answered questions, about half were full responses, and the others completed up to 80% of the survey questions. We kept all responses to any question for the analysis. Respondents occupy various roles in Nepal’s TVET system: two came from government ministries, three from CTEVT, seven from the NVQS advisory committee, four from donors or NGOs, four from the research or university sector, and two from other parts of the system.

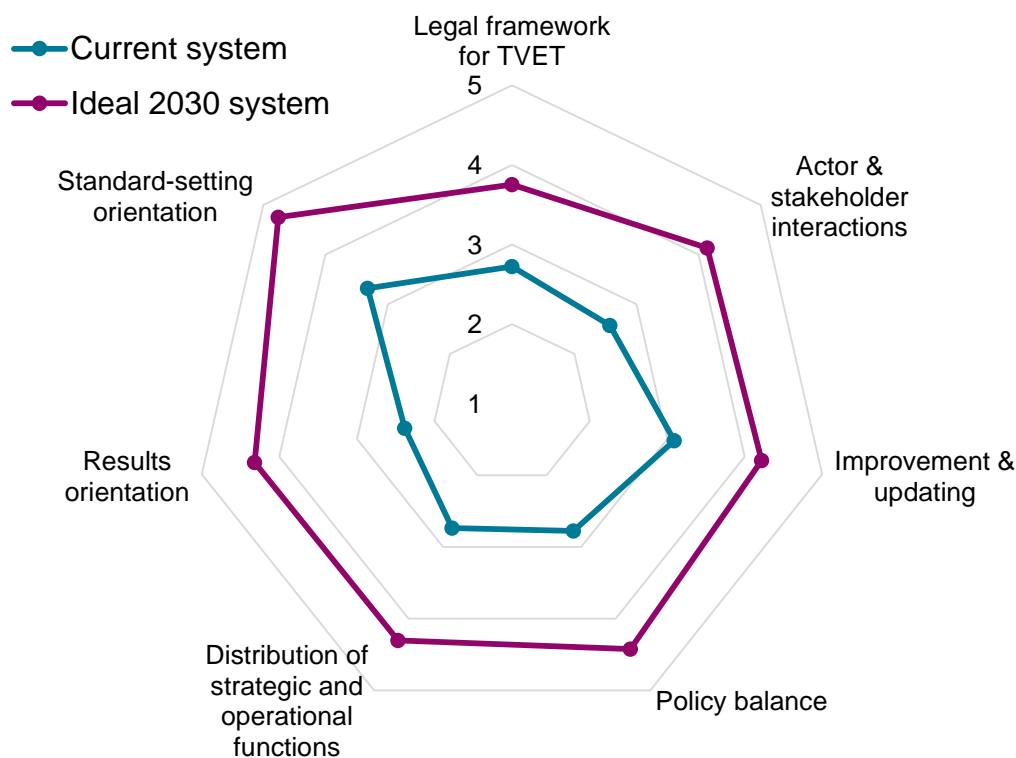
We asked respondents to rate specific characteristics of Nepal’s **current TVET system** and in the ideal **TVET system in 2030**. Questions are formatted as statements about a TVET characteristic, and scored on a one-to-five-point Likert scale from “not accurate at all” to “very accurate.” The full survey is in Appendix 3. It measures TVET governance models using 30 questions in six dimensions:

1. Legal framework for TVET
2. Actor & stakeholder interactions
3. Improvement & updating
4. Policy balance

5. Distribution of strategic and operational functions
6. Results orientation
7. Standard-setting orientation

Figure 2 shows the average scores of each dimension for the current TVET system (in blue) and ideal 2030 system (in pink). Respondents consistently rate the current system rather low in all dimensions, and choose high scores for the ideal system in 2030. Scores for Nepal's TVET system at present range between 2.383 and 3.321. The current system's strongest point is its "Standard-setting orientation" (3.321), and its weakest point is "Results orientation" (2.383). In the ideal 2030 system, scores range between 3.754 and 4.759, with "Standard-setting orientation" still the highest score and "Legal framework for TVET" the lowest.

Figure 2: Survey scores by dimension



If we want to know how the overall systems compare—instead of merely their constituent characteristics—we need to combine the dimensions into a single score. Rauner et al. (2009) use an empirically derived weighting scheme, shown in Table 4. "Actor & stakeholder interactions" is the most important at 23.90% of the total score, followed by "Legal framework for TVET" at 16.70% of the total. The least important is "Standard-setting orientation", making up only 8.10% of the total score. Individual questions—which range between three and five per dimension—load into their respective dimensions as simple averages.

When we apply this weighting scheme to the scores for Nepal, its score for the **current TVET system is 2.748** on a one-to-five scale, and the **ideal 2030 TVET system scores 4.213**. Again, the respondents' hopes for what TVET in Nepal could be are strong relative to its current state.

Table 4: Dimension weights

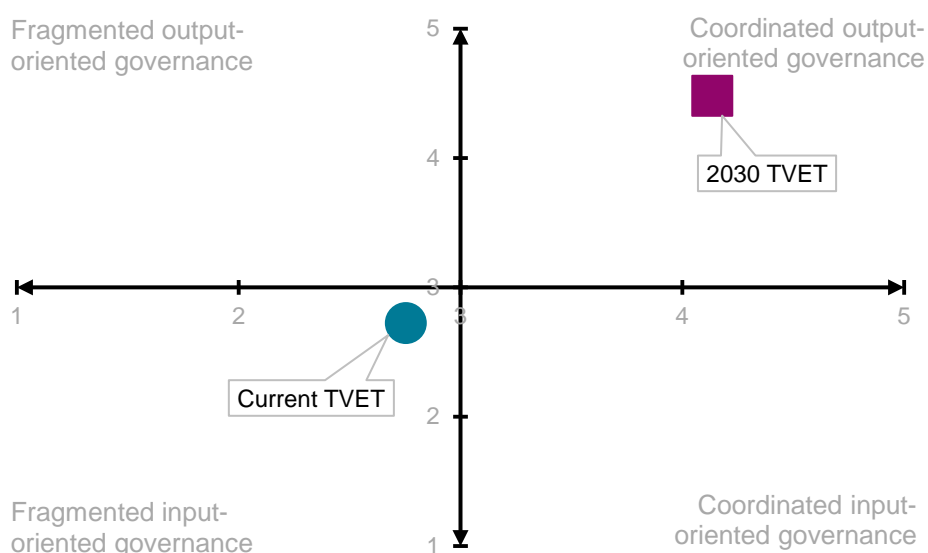
Dimension	Weight (in %)
Legal framework for TVET	16.70%
Actor & stakeholder interactions	23.90%
Improvement & updating	14.30%
Policy balance	11.40%
Distribution of strategic and operational functions	11.00%
Results orientation	14.30%
Standard-setting orientation	8.10%

Source: adapted from Rauner et al. (2009)

Finally, and most importantly, we can use the survey of key Nepali stakeholders to learn what their goals are for the governance model of TVET in the country. As we stated earlier, governance models are normative decisions that we as experts should not decide for Nepal. We can use the survey results to see what Nepali leaders want for TVET and incorporate that in our recommendations.

The two aspects of governance models are integration (fragmented to coordinated) and mode (input-oriented to output-oriented). Dimensions one to five—all except “Results orientation” and “Standard-setting orientation”—load into integration, while the other two load into governance mode. Higher scores are closer to coordination and output-orientation. We combine scores using the same relative weights as those shown in Table 4, and results for the current and ideal 2030 TVET systems in Nepal are plotted in Figure 3.

Figure 3: TVET governance models in Nepal



Nepal’s current TVET system (in blue) falls into the “fragmented input-oriented governance” model. The ideal governance system for 2030 reported by Nepal’s key TVET stakeholders is strongly in the “coordinated output-oriented governance” quadrant. This is very encouraging

for the potential of the reformed TVET system in Nepal under the NC. The best systems in the world—with the exception of Germany, which can handle the high transaction costs of a fragmented input-oriented system—are coordinated output-oriented models of TVET governance.

We will base our recommendations and analysis of Nepal’s NC and its existing legal framework related to TVET on the purposes and principles of TVET as laid out in the previous section, where the “good governance” principle is that of a coordinated output-oriented system. Given this parameter, we can also base recommendations for structuring education-employment linkage on occupation-driven relationships. Therefore, the detailed principles for achieving TVET’s purposes of individual control ability, human capital, and equality of opportunity are: permeability, quality, occupation-driven education-employment linkage, and good governance in the coordinated output-oriented model.

5. Vision for TVET in Nepal

Having established the purposes and principles of strong TVET systems and identified the normative characteristics of education-employment linkage and good governance in Nepal specifically, we can begin to formulate a general vision for what Nepal’s ideal or goal TVET system would be.

The ideal **objectives** for TVET in Nepal are the three purposes we have discussed. First, individuals having control of their own life paths. Second, supporting equal opportunity and access for all groups, regions, and previous education histories. Third and most importantly, developing the human capital Nepal needs to meet its economic goals, and that Nepal’s people need to fully participate in and benefit from further economic development.

To achieve those objectives, the goal TVET system should follow the four **principles** we have already described. Strong TVET should have good multilevel governance that is coordinated instead of fragmented, and oriented to outputs instead of inputs. The system should have strong education-employment linkage driven by an occupational organizing principle. TVET needs to be fully permeable—vertically and horizontally—to every level and type of education and further training available. This might require development of new training options on multiple levels, and that should be included. Finally, Nepal’s ideal TVET system should be high quality in terms of standards, non-exploitative workplace training, and enforcement of standards and learning goals through quality assurance and examinations. This applies especially to the informal sector, which could be linked to the education system through recognition of prior learning standards and procedures.

Abiding by the principles we use to achieve TVET’s purposes will require the system to perform a number of **functions** like standards-setting, coordination with

Purposes of TVET:

- Individual control ability
- Equality of opportunity
- **Human capital**

Principles of TVET systems:

- Good governance in the **coordinated output-oriented model**
- **Occupation-driven** education-employment linkage
- Permeability
- Quality

employers, and so forth. Each function is best carried out at a certain level of government, whether that be federal, provincial, or local. The next section specifically declares which functions should be carried out at each level by government and the private sector, and defines what those functions mean for the actors involved. This is the final step in constructing a vision for what TVET should ideally be. Next, we will analyse where TVET in Nepal currently is relative to this vision, then make recommendations for what can be done to bring TVET in Nepal into line with both the NC and the vision for the goal TVET system in Nepal.

5.1 Allocating TVET functions to levels of governance

TVET is a part of the education system, and while the system as a whole focuses on all three purposes of education, TVET focuses on developing human capital. Its purpose is primarily preparing people for the labour market. Hence, the ability of a TVET system to achieve its objective is largely determined by the strength of the linkage between actors from the education and employment systems (see Renold et al., 2016). As we have seen in the previous section, including actors from the employment system in TVET governance will require a deeper analysis of functions in the TVET system which makes a good governance efficient.

In addition to ensuring that TVET achieves its primary purpose of providing human capital that fulfils the needs of the labour market and prepares young people for success at work, Nepal's NC means that the country needs to assess which functions of TVET should happen at which levels of government. This division of powers and responsibilities to multiple governance levels is also a critical part of the mandate for this project.

Based on the authors' experience, we follow the principle that **structure follows function** and begin by describing the many functions in a TVET system, then allocating them to governance levels. We also emphasise that **money follows students**, so whatever location or level hosts a given group of students also gets the resources dedicated to their education and training. Finally, a number of **checks and balances** help the various levels coordinate, cooperate, and keep one another accountable.

The following tables give an overview of the functions that should be fulfilled in a TVET system, and allocate them to the appropriate levels of governance. Furthermore, they include possible roles and responsibilities for governance at each specific level. Where best practices are clear, we present them as such. When there are questions that need to be answered for the context in Nepal by the country's own leaders, we phrase the issues as questions.

Table 5: Functional analysis for TVET and allocation of functions to governance levels

Federal Level			
Function	Education System	Employment System	Remarks
<i>Federal Governance</i>			
Relevant coordination partners	Who will be the leading entity in GoN that will control the TVET sector and be responsible for the functions mentioned hereafter?	Which are the business and industry associations (of employers <i>and</i> employees) who should be part of national TVET governance?	

	Which other ministries are involved and what are their roles and responsibilities?	What is their legal status?	
Regulation and System management			
Regulation of TVET system management under TVET Umbrella Act	Regulate roles and responsibilities in a TVET Umbrella Act. Should include principles of cooperation, objectives and scope of the TVET sector, and principles of quality assurance		Partnership between public and private sectors should be regulated by principles
Strategic planning, implementing policies and strategies	Relevant Ministry, most likely MoE	Chamber of Commerce and Industry; Federation of Trade Unions,	To be coordinated with the <i>sub-federal level</i>
National (Vocational) Qualification Framework	Establishing a NVQF and regulate it in a legal document which is coherent with TVET Umbrella Act	Proposing the allocation of qualification standards and competences to NQF levels	Authority should stay within MoE because this function is related to recognition of certificates, diplomas and RPL.
Recognizing national and international certificates and diplomas	All approved and recognised curriculum standards lead to federally recognised certificates and diplomas and are in line with the NVQF		Federally recognised diploma raises attractiveness of TVET. Issuing certificates and diploma is done on a sub-federal level.
Occupation-driven qualification standards for the national labour market ²	Recognizing national curriculum standards	Preparing national curriculum standards for each occupation to be submitted to the GoN for recognition; Preparing training materials for professionals in associations and companies	It is highly recommended that relevant sub-federal bodies are included in this process.
Types and duration of programs	Types and duration of programmes should be fixed on the federal level in line with NVQS		
Defining TVET programmes, learning locations and responsibilities	GoN should decide on types of TVET programmes, or at least decide if programmes will include the following: a. work-based training (apprenticeship); b. classroom instruction, comprising vocational and general education subjects	Commitments from professional associations are a pre-requisite for work-based training.	TVET without work-based training will not produce the skills needed on the labour market due to technological changes affecting qualifications
National qualification procedures (exams, tests, assessments)	Supervision and consistency checks.	Establishing national exams, tests, assessments according to curriculum standard (consistency)	To be coordinated with the <i>sub-federal level</i>

² This is an assumption from the authors as the size of the country and its labour market is too small for segmentation into sub-federal units. Of course, it could be possible that the GoN wants to define occupational standards on a provincial or local level. However, this will have the effect of a very fragmented system where mutual recognition of diplomas between provinces and/or municipalities would be necessary.

Defining language policy for TVET programmes ³	Setting standards Financing translations of documents and training material according to the language principles	Applying standards in national curriculum	Depending on mode of governance
Quality control and accreditation of institutions and/or programs	Federal administration is responsible for quality improvement by establishing quality standards and monitoring compliance. An autonomous national accreditation council is responsible for developing accreditation standards for schools and/or programmes and approving accreditation decisions. Basic principles of such an accreditation council are regulated in the TVET Umbrella Act.	Business partners should be represented in the quality commission and/or accreditation authorities.	Other institutions such as universities can be included. The accreditation agency's procedures and decisions can be carried out on a sub-federal level.
Monitoring of apprenticeship market	GoN should monitor apprenticeship markets in the whole country and take action to restore imbalances	This task should be done in collaboration with professional associations	Monitoring the apprenticeship market means systematically monitoring the supply (number of places) and demand (number of students willing to start) of the program
Training of professionals in the TVET sector	Federal level should promote TVET pedagogy. TITI should be an autonomous national training institution for teachers, trainers/inspectors from companies and professional organizations, and exam experts or career counsellors. Basic principles are regulated in the TVET Umbrella Act. Define minimum standards for TVET teachers, trainers, instructors, career counsellors and exam experts.	Professional associations should work closely together with TITI to ensure there is always training for instructors and exam experts from companies	This task should NOT be allocated to a sub-federal level because teachers should be trained equivalently. Furthermore, critical mass is a pre-condition for quality and professionalism
Collecting and maintaining federal statistics	Collecting data at the federal level in coordination with sub-federal levels.	Delivering data to federal level as required for statistics projects.	
<i>Permeability and progression routes within the whole education system</i>			
Permeability throughout the education system	Establishing permeability both within the TVET sector (vertically) and between TVET and other education sectors (horizontally). Basic principles are regulated in the TVET Umbrella Act.		This is necessary for making TVET attractive (reducing stigma)
Transparent access conditions and exit standards	Designing the system and providing information to inform all parties of requirements to get into and out of all education-system programs		Avoid dead-end programs

³ See NC, art. 1.6-7; art. 3.18, 3.23; art. 4.51; art 32.287; art. 34.306.

Functional differentiation of programme offerings	Ensuring that there are programme varieties to meet the needs of all students, including different goals, different abilities, and gaps in progression routes (e.g. vocational baccalaureates, tertiary TVET programs). Basic principles are regulated in the TVET Umbrella Act.		If representative groups of students fail exams, this may signal insufficient variety in programme types. If a progression route cannot be established, missing competencies need to be covered.
Recognition of prior learning (RPL)	Recognising skills, knowledge and know-how gained outside of formal education and training programmes by appropriate standards, procedures and tests. Basic principles are regulated in the TVET Umbrella Act.	Social institutions of the informal sector should help provide access to people who could benefit from RPL	
System development and improvement			
Monitoring and research for TVET	Establishing a research strategy to strengthen evidence-based policy	Contributing to research strategy	Consider setting up an international advisory research board Basic principles are regulated in the TVET Umbrella Act.
Innovation projects to develop TVET	Establishing a TVET innovation fund to stimulate development projects	Launching innovation projects	Basic principles are regulated in the TVET Umbrella Act.
Support for disadvantaged groups and areas	Promoting TVET initiatives that help disadvantaged areas and groups		
Public campaigns to strengthen TVET	Financing public advertisement campaigns promoting TVET	Contributing to advertisement campaigns through distribution channels within industry	Basic principles are regulated in the TVET Umbrella Act.
Financing TVET			
Direct financing and contributions to lower-level financing	Directly financing TVET through accreditation council, TITI, research and innovation programmes, public advertisement campaigns for TVET, and staffing federal administration. Contributing to lower TVET financing through ear-marked money for sub-federal levels.	Professional and industry associations can contribute to curriculum development and standards-setting processes.	Financing TVET depends heavily on the type and mode of governance. It must be coherent to the chosen model.

Source: Renold et al. 2015, 2016; Rauner et al. 2009, authors' experiences

Table 5: Functional analysis and allocation, continued

Province Level			
Function	Education System	Employment System	Remarks
Provincial Governance			
Relevant coordination partners	Which is the responsible public entity that is the focal point for TVET on a provincial level and	Which are the provincial business or industry associations who can coordinate activities	

	therefore responsible for coordination with federal and local levels?	horizontally (with other province associations) and vertically (with regional and national associations)?	
Organizing and Maintaining Infrastructure and TVET schools			
Coordinate TVET school infrastructure vertically with local level	Concentration and allocation of TVET-programme types to villages according to comparative advantages	Contributing to technical infrastructure	Theoretically this function can be allocated to villages. However, villages may lack the critical mass to train every occupation. Concentrating occupations in specific villages will influence the financial scheme: <i>Money should follow the student.</i>
Define languages for TVET programmes in provincial TVET Schools ⁴	Provincial government decides how to apply national language standards	Regional professional associations should be involved in the decision.	
Accreditation of local/regional TVET schools and/or programmes	Accreditation agency organises and evaluates TVET schools and/or programmes against national accreditation standards.		Institutional accreditation may be easier to implement. However, with many private schools it may be better to accredit programmes.
Career guidance and counselling agencies	Establishing agency for career guidance and counselling	Professional association helps with advertising occupational profiles, requirements and how access the apprenticeship market.	This can be allocated to the local level. However, it requires critical mass and professionalism so is likely better at the provincial level. Larger cities may run their own centres.
Implementing qualification standards, procedures and exams	Organizing exam committee, which implements qualification procedures and exams	Regional professional associations should closely collaborate	
Collecting and maintaining province-level statistics	Collecting data required by the federal level, designing and implementing province-specific statistical projects	Delivering data to provinces as required for statistics projects.	
Educational processes from acquisition of students to issuing certificates			
Career guidance and counselling offers through provincial agencies	Career guidance and counselling should be mandatory in lower secondary education		This could be regulated as a federal standard.
Implementing preparation programmes (bridge courses)	Provinces should help prepare students for TVET programmes if they have not reached a given academic level or completed compulsory education		This could be regulated at the local level, depending on the critical mass of students.
Recognizing apprenticeship contracts	Approving contracts between companies and parents/students	Provincial professional associations can promote apprenticeship training.	Provinces have this responsibility to maintain <i>checks and balances.</i>

⁴ See NC, schedule 6, rubric 18

			Code of Obligations or Industrial Trainee Training Act may regulate such contracts.
Supervision of apprenticeship training and TVET schools	Supervision of quality in companies and schools by inspectors		
Provincial qualification procedures (exams, tests, assessments)	Supervision and consistency checks.	Provincial exam commission prepares exams, tests, assessments in accordance with national curriculum standards	This function could be allocated to the local level. However, it is inefficient for every local unit to prepare and implement exams to the same standards.
Issuing certificates	Relevant provincial government body		
Promoting TVET programmes			
Innovation and development projects in coordination with TVET Schools	Committees should constantly develop innovation and projects to improve TVET (pilot projects)	Should be involved	Could be financed by a TVET fund
Public advertisement campaign	Implementing public advertisement campaign on the provincial level	Provincial/regional professional associations should collaborate	Could be financed by a TVET fund
Financing TVET			
TVET school infrastructure	Concentration and allocation of TVET-programme types to villages according to comparative advantages	Contributing to technical infrastructure	Theoretically this function can be allocated to villages. However, villages may lack the critical mass to train every occupation.

Source: Renold et al. 2015, 2016; Rauner et al. 2009, authors' experiences

Table 5: Functional analysis and allocation, continued

Local Level (cities, villages, municipalities)			
Function	Education System	Employment System	Remarks
Local Governance			
Relevant coordination partners	Which is the responsible public entity that is the focal point for TVET and therefore responsible for coordination with the provincial level?	Which are the local business or industry associations that coordinate activities horizontally (with local companies) and vertically (with regional and national associations)?	
TVET programme implementation process			
TVET schools	Management and maintenance of TVET schools (HR processes for staff according to minimal standards, at least for teachers)		These functions can be provincial except in designated cities, villages with TVET centres. Again, <i>money follows students</i>
TVET programmes implementation (incl. work-based training)	Running TVET programmes according to national standards	Local companies cooperate by offering apprenticeship places.	

		Companies (with the help of their professional associations) offer other work-based learning opportunities (internships, traineeships).	
Infrastructure in each village, city, municipality			
Data collection	Collecting data for research and monitoring	Providing relevant data, especially for cost-benefit analysis of training	Federal-level research programme will direct data to be collected.
Career guidance and counselling in lower secondary education	Offering career guidance and counselling to lower secondary students so all are aware of their options	Companies can offer “sniffing courses” or shadowing visits for potential apprentices, and/or contribute to career fairs. Career guidance are helping people from the informal sector to get access to the RPL-procedures and tests.	
Financing TVET			
TVET schools and RPL procedures and tests	Financing and maintaining TVET school infrastructure, staff, materials and textbooks. Financing RPL procedures and tests.	Companies providing work-based learning opportunities pay: Salary for apprentice/intern/trainee Salary for instructor(s) Salary for exam expert(s) Materials for company-internal training. RPL procedures and tests should be free of charge for candidates.	

Source: Renold et al. 2015, 2016; Rauner et al. 2009, authors' experiences

6. Analysis of current TVET legal framework

6.1 Analysis of the legal framework regarding TVET

This section compares Nepal's current TVET system—as defined by the many acts and policies related to TVET already on the books and the NC itself—to the goal TVET system just described. We use a SWOT analysis to assess every relevant article from the NC, acts, and policies (see Table A.1.1, A.1.2, and A.1.3, respectively for quotations and specific article citations). The next section will provide recommendations for bringing all elements into line with the vision for TVET and the NC.

The NC joins several acts and policies already in effect to form the legal framework for TVET. The full list and text of TVET-relevant articles in each entity is in Tables A1.1-1.3 in Appendix 1. This section is an overview of how the NC, OC and various policies and acts relate to and frame TVET in Nepal. It is of utmost importance to identify opportunities and threats of the transition process from the old to the new regime. We finish by assessing the strengths, weaknesses, opportunities, and threats of the legal framework based on the purposes, principles and functions of strong TVET systems.

New Constitution

The NC is not explicit on TVET, but mentions TVET-related issues and topics at multiple points, usually from the human capital point of view. All points related to TVET are summarised in Table A1.1 in Appendix 1.

The basic economic objectives of Nepal as laid out in the constitution are sustainable economic development and rapid economic growth (NC, art. 40.3). This is to be achieved through competent and well-prepared human resources, developed through “scientific, technical, vocational, empirical, employment and people-oriented” (NC, art. 40.3.1) education that should make the labour force “competent and professional” (NC, art. 51. i.1). The NC emphasises the role of the private sector (NC, art. 41. d.2) in economic growth and encourages investment in Nepali labour and skills to promote development (NC, art. 51.d.8). **These goals relate specifically to the human capital function of TVET.**

Every Nepali citizen is guaranteed the right to free basic and secondary education, which includes TVET delivered at the secondary level (NC, art. 31.1). Citizens are similarly given the right to employment (NC, art. 33.1) and the right to choose that employment (NC, art. 33.2). The full implications of the right to employment are not clear, but a TVET system linked to the labour market would certainly be helpful in promoting the right to employment.

These goals of the New Constitution relate specifically to the human capital function of TVET.

In addition to rights for all citizens, the constitution also includes special provisions for certain populations—these are related to the equity function of TVET. Nepal should be a place where the youth can fully enjoy their “political, economic, social, and cultural rights” while participating in national and their own personal development, which refers to the function “*individual control ability*”. The constitution requires that special opportunities be created for youth in “areas including education, health, and employment” (NC, art. 51.j.7). *Dalits* are to be granted special provisions in “technical and vocational education” (NC, art. 40.2) and given the “skills and resources” (NC, art. 40.4) necessary to develop traditional occupations. The provisions for *Dalits* are most clear, but those for youth can also be interpreted to imply a role for TVET in preparing and empowering young people to enter the labour market, succeed in employment, and participate in Nepal’s ongoing development.

Nepali citizens are granted certain freedoms in the constitution, including the “freedom to practice any profession...in any part of Nepal” (NC, art. 51.h.1). If that is to be a practical as well as political freedom, Nepalis will need portable credentials that certify their skills in their chosen occupations and are recognised throughout the country. This calls for a **strong TVET system** as well as for clear **RPL procedures** and hint at the **quality principle** that certifications need to be accredited so they are recognised nationwide.

The more specific TVET-related policies are the establishment of community information centres for citizens’ development (NC, art. 51.h.4) and the carrying out of research studies at least partly to identify and define the traditional skills and occupations of Nepal (NC, art. 51.c.2). Both can apply to multiple sectors, and both are particularly relevant for TVET. Information centres could be used as career guidance and counselling centres and can disseminate information on available pathways and opportunities in a permeable system, empowering individuals to chart the courses of their own lives through education, training, and employment. Research on traditional occupations in

TVET can fill the policy gaps entailed by goals like education and professional freedom, human capital development, youth engagement in national development, and equity.

Nepal and the skills associated with them enables the creation of occupational profiles and eventually training plans and recognised certifications in those occupations, enabling them to meet the principle of quality.

Despite the constitution's non-explicit point of view on TVET, there is a great deal of space for TVET to fill the policy gaps entailed by goals like education and professional freedom, human capital development, youth engagement in national development, and equity among citizens of Nepal. These mirror the functions of individual control ability, human capital, and equality of opportunity. There are few specific policies mentioned in the NC, but career guidance, private-sector involvement, and occupational skills research are both components of TVET systems that follow the principles of quality, linkage to the labour market, and permeability.

Old Constitution (Interim Constitution 2007)

Nepal's most recent previous constitution shares many provisions with the NC, though the OC is the only one to mention TVET specifically. The full comparison of the two constitutions is in Table A2 in Appendix 2. The previous constitution states "The State shall pursue a policy of making infrastructures required to impart technical education, training and orientation for the development of that class of people dependent including farmers and workers, to have their participation in the process of development of the State" (OC, art. 35.16). In addition to referring directly to TVET, this article establishes that the human capital function of TVET is a goal: it connects TVET to economic development and citizens' engagement with development.

The two constitutions are similar on several TVET topics. Both constitutions include rights to education (NC, art. 31.1&2; OC, art.17.2) and employment (NC, art. 33.1; OC, art. 18.1), though the NC makes basic education compulsory. Both constitutions protect and create provisions for marginalised populations like the *Dalit*, and the OC specified that women should have special provisions for women's education and employment to maximise their participation in development (NC, art. 40; OC, art. 35.8). The OC and NC focus on development as the primary economic goal (NC, art. 40.3; OC, art. 34.4), with the private sector a key partner in reaching that objective (NC, art. 51.d.2; OC, art. 35.2). Finally, both constitutions emphasise the role of identifying and cataloguing traditional skills and knowledge to help drive development (NC, art. 51. c.2; OC, art.35.18) and focusing on utilizing Nepali skills and labour (NC, art. 51.d.8; OC, art. 33.1).

Where the NC differs from the OC, it is less specific regarding TVET and typically places more emphasis on human resource development for economic development. In contrast, the OC frames TVET as part of the infrastructure necessary to support development. The OC frames education- and employment-related infrastructures to raise standards of living and distribute development among citizens (OC, art. 35.1). It specifically refers to TVET as a class of infrastructure required to bring the "dependent" class of people into full participation in development (OC, art. 35.16). It also emphasises science and technology, specifically local technology, for development (OC, art. 35.11).

The NC is vague on TVET but clearly prioritises skills, human resources, and employment. While both constitutions require the state to engage with the youth as resources for development, but the NC specifies that the state must provide young people with opportunities, skills, and education to enable their full participation (NC, art. 51.j.7; OC, art. 35.20). The NC similarly requires a policy of preparing human resources through education and training (NC, art. 51.h.1) and making the labour force competent and professional (NC, art. 51.i.1) instead of only granting the right to work and providing employment (OC, art. 35.7). Specific policies

like community information centres (NC, art. 51.h.4) are not mentioned in the OC. Though both constitution's guarantee the freedom to practice any profession, only the NC includes every part of Nepal in that right (NC, art. 17; OC, art. 3.-F).

6.2 Analysis of existing legal framework: Acts and policies related to TVET

The legal entity that comes closest to covering all aspects of TVET is the 2012 TVET Policy, which we consider as soft law. However, even that misses important aspects of TVET—most notably its relationship to the employment system and private sector⁵—and several other acts and policies cover TVET-related issues that overlap, contradict, and duplicate one another. The full detailed list and relevant contents of each TVET-related Act is in Table A1.2, and the relevant contents of TVET-related Policies are in Table A1.3—both in Appendix 1.

TVET Policy, 2012

The TVET Policy of 2012 begins by pointing out Nepal's longstanding history with informal TVET for artisans, followed by its formal-TVET history beginning in 1942. Though the policy states that TVET in Nepal is “properly developed” (TVET Policy, sec. 2), it demonstrates this by listing a large number of different programmes run by a variety of providers from various sectors. Later on, it admits that there is “no consistency every year between the youth introducing to the labour market and the availability of employment” (TVET Policy, sec. 3) and that “although the technical and vocational education and training has achieved numerical progress, we have yet to do very much for its qualitative improvement” (TVET Policy, sec. 4). Though many programmes exist, they are not equitably accessible and do not match labour market needs for skills and skilled workers (TVET Policy, sec. 4).

The Policy identifies three objectives for improving TVET. First is to extend TVET so it is accessible to all, thus generating the human resources necessary for development. This speaks to the human capital and equality of opportunity purposes of TVET. The second objective is to make TVET contextually appropriate for the Nepal and international labour markets, including traditional skills and informally learned skills. This objective deals with some of the principles of good TVET systems, especially permeability through RPL and education-employment linkage. However, it tends more toward a state-controlled structure than the preferred occupational structure. The third objective is to efficiently use resources by coordinating efforts. This speaks directly to the TVET principle of good governance.

Though the objectives of the TVET Policy fit with the general vision for TVET in Nepal, the plans for meeting those objectives included in the Policy do not necessarily coincide as well with our criteria. The principle of permeability is barely addressed except for the mention of establishing certifications and including RPL. Certifications are also related to quality, which is more strongly addressed in Policy 2.2 about quality assurance and independent evaluation.

However, while linkage to the employment system is mentioned, it appears to be based on a state-controlled model wherein a Labour Market Information System is supposed to forecast

⁵ TVET systems without substantial engagement of the business sector cannot improve prestige and attractiveness. Full-time TVET approaches are always considered as “second best” and therefore “for other people's children”. The only way to make TVET attractive is to offer a functionally different programme from general education that gives people direct access to the labour market.

labour market needs and inform TVET policy in time for curricula and training numbers to react (TVET Policy, obj. 3, working policy 11). There is no example of a system like this working efficiently in any context, especially one where citizens are free to pursue any employment they wish—as guaranteed in the NC (NC, art. 3.17). In contrast, apprenticeship markets under occupation-driven systems perform very well, because in such systems linkages between actors from the education and employment systems are very high and this guarantees a smooth transition into the labour market.

Perhaps the most egregious diversion from the criteria for a strong Nepali TVET system is under the principle of good governance. Coordinated, output-oriented governance should be under one or two ministries and focused on funding per student. The recommendations in the TVET Policy include a large number of ministries and government bodies, as well as non-government bodies and even new entities created by the TVET Policy itself. The agencies and entities involved are summarised in Table 6 (TVET Policy, sch. 1). Notably, Nepal’s Training Institute for Technical Instruction (TITI) is not included in this list despite its critical importance for teacher and trainer training and professional development in Nepal’s TVET system.

Table 6: List of ministries and other bodies named in TVET Policy 2012

Full list of ministries	Other government agencies	Non-government bodies	New entities created by the TVET Policy
Ministry of Education	CTEVT	Private Organizations	TVET Fund
Ministry of Finance	National Planning Commission	Technician Training Academy	National Skill Test Committee
Ministry of Law, Justice, Constituent Assembly and Parliamentary Affairs	Department of Cottage and Small Scale Industries	Technical Education Programme in 1+ Community School per election constituency	National Vocational Qualification Authority
Ministry of Labour and Employment	Skill Development Training Directorates	Concerned non-government organizations	Labour Market Information System Authority
Ministry of Industries	Department of Labour and Employment	Universities	Coordination committees in the Centre and Regions
Ministry of Culture, Tourism and civil Aviation	District Development Committees	Nepal Federation of Chamber of Commerce and Industry	At least one vocational training structure in each district
Ministry of Agricultural Development			1+ Technical School/Multiple College per zone
Ministry of Federal Affairs and Local Development			Special facilities and training providers for remote areas

Source: TVET Policy 2012

It would be all but impossible for such a large group of steering and responsible entities to be fully coordinated. Similarly, the Policy focuses on funding teachers, textbooks, and similar inputs through the TVET Fund, which would create an input-oriented system. While the TVET Fund—which is not yet in place and would need its purpose carefully clarified within the whole financing system of TVET—seems to be an attempt to streamline and coordinate TVET funding through the one-window policy. If it ends up engaging so many ministries and funding

so many inputs, it would be part of the forces keeping Nepal's current TVET system in the fragmented, input-oriented category of governance (see section 3.3 and section 4).

There are a number of strong points in the TVET policy and it addresses many of the criteria for strong TVET in Nepal. However, the policies underlying its objectives are somewhat disorganised and definitely fragmented in their approach. Changes to the TVET policy under a new umbrella policy for TVET could strengthen the system a great deal.

CTEVT Act, 1989, and Amendments up to 2010

The CTEVT Act establishes the CTEVT along with its oversight, makeup and functions. It orients itself strongly toward the human resource development purpose of TVET, stating that CTEVT is for the "arrangement of technical education...setting standard of skill and certifying the same in order to produce basic, middle level and higher level technical human resources" (CTEVT Act, preamble).

The Act establishes a TVET Senate made up of representatives from various ministries and CTEVT itself. It is composed entirely of government representatives and does not consider education-employment linkage. CTEVT has some industry representative—a token and much-outnumbered group (CTEVT Act, art. 3.2). Its purpose is systematizing TVET, maintaining quality and coordination, and determining and certifying skills standards (CTEVT Act, art. 3). This is strongly related to the principle of quality. CTEVT certifications are to be equivalent to general-education certificates, which is excellent for the principle of permeability.

CTEVT's functions and duties (CTEVT Act, art. 6) are mostly related to standards-setting, coordination, and policymaking. These are good examples of governance. However, those responsibilities also include operating polytechnic schools and teacher training, which are input-oriented implementation tasks that should not be the responsibility of a central body like CTEVT. Similarly, CTEVT is both required to perform policy functions for developing human resources and to operate programmes for the same purpose. This confusion is not an example of good governance in the coordinated output-oriented model.

Education Act, 1971, and Amendments up to 2016

The Education Act defines Nepal's basic and secondary education system. According to the Act and its later amendments, there are only two types of secondary education: general secondary education and Sanskrit education (Ed. Act, art. 6). TVET in Nepal is mostly delivered within the secondary level, but it is not explicitly mentioned. However, the Act does mention secondary schools that offer TVET subjects and specifies that their School Management Committees should include at least two representatives from district-level industry, commerce, and trade unions (Ed. Act, art. 12.2). This is a start towards fulfilling the principle of linking TVET to the labour market. However, it is not enough to make TVET programmes attractive for youth, parents and the companies who would hire new graduates. Linkages among actor groups must be established throughout the educational process from the design of a curriculum framework through its application and feedback phases.

This current approach can be interpreted as state-controlled structure of education-employment linkage as depicted in Table 1. A positive aspect of such an approach lays in its strong link to other education levels if the higher education level recognises TVET credentials

as entry conditions into the next higher level of educational programmes. Furthermore, there is no tension about training places as the government can decide how much TVET schools and classes are needed. However, a big weakness is that students can hardly be well prepared for the labour market as there are no linkages between school sector and employment system. This is one of the reason why TVET should be considered in a separate governance regime as well as regulated in a separate law. Other aspects of the Education Act are relevant for the governance and financing of school and TVET schools, so they will be addressed in the appropriate sections.

Industrial Trainee Training Act, 1982

The Industrial Trainee Training Act of 1982 is the most relevant Act for the employer-related side of TVET. It shares many characteristics with TVET acts in countries like Switzerland, Germany and Austria that have strong TVET systems, at least on the employer side. It provides regulations for what workplace learning should be and stipulates common best-practice requirements like training contracts, curriculum-based learning, and company-external monitoring and examination. However, it also fails to include the education side of TVET and overregulates the activities of training companies to the point where training may become an administrative burden. Finally, it is not clear how fully this act has been applied given that it does not appear to be well known among the relevant stakeholders.

The Industrial Trainee Training Act is the strongest foundation for in-company training in Nepal, but it is insufficient as a model of TVET.

The act outlines how training in firms should be carried out, including the roles and responsibilities of the trainee, training company, manager at the training company, and GoN via a Training Council. Trainees and companies shall enter formal agreements (ITTA, art. 4.1) that bind the company's manager to fulfil obligations to the trainee and follow government directives (ITTA, art. 9). The training company must pay wages to trainees (ITTA, art. 8), plus allocating a specific percentage of its profits for training costs (ITTA, art. 9.1). The act protects trainees from exploitation (ITTA, art. 20.2). Trainees are awarded a company-issued certificate upon completion of training and passage of a Training Council-conducted examination (ITTA, art.14), then given priority hiring for permanent positions in the training company (ITTA, art. 15). The certificate is a good incentive for trainees, but has the disadvantage of not being recognized as a step towards higher education.

The Training Council is composed of representatives from the GoN, industry, Tribhuvan University, and a person with expertise or experience in industry and labour (ITTA, art. 16.2). The Council formulates policy for training, formulates training programmes and curricula, sets training allowances, sets trainee-selection policy, monitors and arranges training, informs the government regarding training, and gives directives to the training enterprise (ITTA, art. 17). This extensive list of duties and functions leaves little independence to the training company as this is a very input-oriented approach, and indeed the Council is also empowered to make rules governing what remaining choices a company could make (ITTA, art. 24.1). The Council itself may be directed by the government (ITTA, art. 19.1).

While the Industrial Trainee Training Act certainly contains some important basic principles of TVET, it is not sufficient because it does not include general education and creates too much external regulation of training. Oversight and examinations given by the training council are

good for the TVET principle of quality, though it is not clear how well recognised the Council's examinations would be as a marker of such. In-company training is certainly linked to the labour market, but the high level of regulation may prevent companies from innovating and updating curricula to include new technologies and processes, thus preventing training from continuing to meet labour market demand. Finally, there is no opportunity for permeability or progression. The Industrial Trainee Training Act is the strongest foundation for in-company training in Nepal, but it is insufficient as a model of TVET.

Industrial Policy, 2011

The Industrial Policy is an update to the 1993 Industrial Enterprises Act, which aimed to foster industrial enterprises through measures including tax credits for training (Ind. Ent. Act, art. 15.z). It aims to make industries competitive through investment in the institutions and infrastructures that support them, including developing workers' capacity, building managerial skills, investing in sector-level infrastructures, and providing entrepreneurship-related training (IP, "Background"). According to the Policy, lacking management capacity is a major growth inhibitor for Nepal and its industry needs more professional acumen and quality assurance of products. This is to be achieved through industrial promotion measures including training to enable full use of Nepali skills (IP, "Present Status").

The Policy states that the main challenges to Nepali enterprises are "weak industrial infrastructures, lack of competent human resources, lack of capacity to adopt new technology, low productivity...[and] weak supply management" (IP, "Main Challenges"), among others. It cites the poor "condition of industrial infrastructure development" and low "availability of required professional skills and competent labour force," demanding that the private sector engage with government to build "physical infrastructure and human resources" (IP, "Need for New Policy"). Therefore, its main objectives are to "increase contribution of industrial sector in the balanced national and regional development by mobilizing local resources, raw materials, skills and means" (IP, art. 7.2) and develop the "productive human resources and managerial capacity required for industrial development" (IP, art. 7.4). Hence, this is a policy that emphasises continuing education in the form of non-formal courses or informal learning. According to a Canadian survey, 66% of all workers' competences (55-64 years) are acquired informally (Livingstone, 1999), making these valuable channels for learning.

The Industrial Policy recommends specific policies to achieve its objectives. These include promotion of "industries that use local resources, raw materials, skills, labour and technology" (IP, art. 8.11) including local human resources through District Development Plans (IP, art. 9.3). Industrial clusters will help rural and cottage industries develop sectoral infrastructure (IP, art. 9.5), and grant funding is available to local bodies that develop industrial infrastructures (IP, art. 9.7). These policies are encouraging from a TVET point of view because it is itself part of the infrastructure to be developed.

The Industrial Policy recommends strategies to reach its objectives. It calls for knowledge and skill promotion to enhance the industry sector's competitive capacity (IP, art. 10.1) especially for micro and cottage industries (IP, art. 11.2) and agriculture-based industries (IP, art. 10.12). It emphasises "partnership among the public, private and cooperative sector" through private-sector inclusion on committees (IP, art. 10.26) and charges the Government of Nepal with facilitating and promoting industrial investment (IP, art. 10.22), partly through unified and meaningful skills development training programmes (IP, art. 10.24).

To incentivise participation in training and other schemes to improve industrial competitiveness, the Industrial Policy outlines certain tax-based incentives. Companies that invest in the “long term interests and welfare of labourers and employees” including “education and training” can deduct their expenses on income taxes (IP, art. 17.9). Similarly, technology-oriented companies can deduct at least part of expenses for “enhancement of entrepreneurship and skills development training research and development and for acquiring new technology” (IP, art. 17.11). However, these incentives are somewhat undermined because they are part of a very long list of potential deductions (IP, art. 17).

Finally, the Industrial Policy makes specific recommendations for human resource development. It calls for existing training institutes to be integrated into a single Academy for Development of Human Resources (IP, art. 20.3) and the establishment of a National Productivity Council to carry out research, training, and capacity development. It further requires that women are given access to training and related resources to enhance their own entrepreneurial capacity (IP, art. 20.8.3).

The Industrial Policy obliquely refers to TVET in its calls for human resource development, industry and sector infrastructure development, and even training specifically. However, like the NC it does not refer directly to TVET and like the Industrial Trainee Training Act it does not sufficiently include education along with training. It addresses the human capital development purpose of TVET and gives mention to equality of opportunity, but does not address individual control ability since it focuses on industry and not the workers themselves. Similarly, the Policy somewhat meets the principle of linkage to the labour market—though not completely since it leaves the responsibility and power over training to the GoN—but does not meet the TVET principles of permeability or quality since it lacks any framework for certification, curriculum development, or oversight of training. Even if this is a very thoughtful idea, it increases the fragmentation of governance.

Labour Act, 1992

The Labour Act is related to TVET in that it governs the conditions of work, including workplace learning. The Act gives the government of Nepal the right to set and enforce a minimum wage, (Labour Act, art. 21.1 & 21.6) which affects companies’ and students’ incentives to train. It also stipulates that minors should not work unless as part of vocational training, which should be formally arranged (Labour Act, art. 32A.1-2). This leaves space for TVET-related workplace training at the secondary education level, which is helpful for further developing the TVET system. The Act does not address any purpose of TVET but does allow for human capital development through training. Similarly, it does not directly meet any of the TVET principles, but it does help enable linkage to the labour market.

Youth Policy, 2010

The Youth Policy aims to “prepare capable, entrepreneur, creative and competent youths” (Youth Policy, art. 4.1) so young people can participate in Nepal’s development and share in the fruits of the same. Its TVET-relevant objective is to develop the potential, capacity, and human resource energy of young people (Youth Policy, art. 5.1, 5.3, 5.6). It calls for policies that create and develop programmes for knowledge, skills, and entrepreneurship development in all young people and especially target groups, while including the private sector to create

an atmosphere that permits career development (Youth Policy, art. 6.6, 6.9, 6.13-14, 6.16, 6.18, & 6.21). Its relevant working policies focus on youths' right to livelihood, education, employment, career guidance, access, equity, technology and partnership (Youth Policy, art. 7.1, 7.2, 7.4-6, 7.12, 7.15-17).

The Youth Policy is a clear effort to achieve all three purposes of TVET—individual control ability, human capital, and equality of opportunity. It very clearly addresses the TVET principle of linkage to the labour market, and gives some slight attention to quality. However, the policy calls for the outcomes of permeability—career development and routes to personal improvement for young people—without laying out many policies that would support permeability in TVET. The career guidance it recommends is a start, but without further training options at the higher education level or the ability to pursue higher education after TVET programmes, they may not be possible. It is also unclear how many of the initiatives called for in the policy have been implemented. This clearly addresses the importance of monitoring the successful implementation of a policy. Without knowing what works, a policy paper will lose its power to guide relevant stakeholder groups.

Non-Formal Education Policy, 2007

The Non-Formal Education Policy deals with "programmes related to life long and continuous education, skill development and income generation...training and support for developing technical and vocational skills useful for earning livelihood at the local level" (NFEP, "Introduction"). Its policies aim to expand non-formal education including practical knowledge and skills to multiple ages and levels of learners (NFEP, "Policy 1"), especially those deprived of educational opportunity and dropouts (NFEP, "Policy 2"), and generally increase access to education (NFEP, "Policy 3").

The policy clearly frames TVET as a critical part of lifelong learning and improving the opportunities and contributions of many diverse people. However, it also seems to assume that education in practical knowledge and skills is a second-option type of education only necessary for dropouts and those who could not access education in childhood—even specifying that "occupational and vocational courses including skill training programmes will be considered as non-credit courses" (NFEP, "Policy 2"). The two positions that TVET is valuable for individuals and the economy and that it is not worth academic credit are a seriously troubling contradiction and potentially undermine this policy's ability to serve and integrate non-formal students as it sets out to do. Due to the importance of lifelong learning in the 21st century, a non-formal education policy is a must for all countries regardless of development phase. It should be part of the overall education system. RPL procedures without non-formal education policy and courses will not be as effective as they could be.

The perspective of the purposes and principles of TVET clarifies the issue with this policy: it understands and seeks to use TVET for all of its purposes but neglects all the principles of good TVET. The policy uses TVET to improve individuals' control of their lives, their human capital contributions to Nepal, and their equality of opportunity. However, it explicitly undermines the principles of quality and permeability by precluding credit and fails to adequately consider how the private sector can contribute to the design or delivery of TVET in a way that simultaneously provides the benefits of formal education and training.

School Sector Reform Plan, 2009-2015

The School Sector Reform Plan is a set of policies and strategies to improve education in Nepal over a six-year period from 2009 to 2015. It notes that “many children and young people leave schools without developing their potential, and without acquiring the basic skills deemed necessary for raising their standards of living” (SSRP, sec. 1) and attempts to resolve that problem by improving the content, delivery, and quality of education. Secondary education is relevant for TVET, especially as the plan states its goals as “to meet the national development needs by producing competent and skilled human resources and to provide a sound foundation for tertiary education” (SSRP, sec. 3.4).

However, despite stating that education should enable people to improve their quality of life and that secondary education should be accessible to all and prepare human resources for participation in economic development, the plan excludes TVET from schooling in all but the most superficial ways. TVET is an alternative programme, its graduates are given separate certificates (SSRP, sec. 3.4), and TVET-related curricula and funding are to remain under the auspices of a separate agency, the CTEVT, instead of the secondary school mainstream (SSRP, sec. 5.1). TVET content will be included in secondary curricula, but only through employment-related soft skills, basic life skills, and trial programmes (SSRP, sec. 5.2, 5.5-6). The plan states that TVET curricula change to rapidly to be maintained by education authorities, and its facilities are too expensive (SSRP, sec. 5.3).

Some aspects of the plan are hopeful for TVET. Trial programmes for non-formal apprenticeships that include workplace learning are to be implemented in a few pilot schools (SSRP, sec. 5.6). This is a direct link to the labour market and can help address the challenges of curriculum updating and facility costs by engaging employers as skills providers and consumers. The plan also states that “Vertical and horizontal links among technical and vocational channels will be established with the general stream of education, providing mobility from the non-formal/technical to formal modes of learning and vice versa” (SSRP, sec. 5.4). This is the only mention of permeability, but if implemented it would be a powerful solution to issues like social stigma and dead-end pathways in TVET. The plan lays out a related system of “avenues to qualification upgrade” (SSRP, sec. 6.6) for teachers, which can be a blueprint for progression routes and permeability throughout the education and training system.

The School Sector Reform Plan mainly side-lines TVET or makes it a subject for classroom learning, but it provides opportunities to raise quality, permeability and equality of opportunity. Its provisions are not enough in any case, but they can be used as a start. The plan also deals with all three purposes of TVET, but addresses them through the education side and not sufficiently through TVET. The plan itself acknowledges that “past experiences show that literacy programmes could not directly contribute to improving peoples’ livelihoods and raising their standards of living” (SSRP, sec. 4.3), but does not go beyond prescribing more literacy programmes in an effort to improve livelihoods and raise standards of living. Something like TVET—which acts much more directly at least on livelihoods—might be a good place to start.

6.3 Limits of the analysis

Financing TVET and good governance

Due to limited time of the project and to potential variations in the implementation of federalization, this report is limited in its assessment of financing TVET. The following questions can guide and clarify the best steps and actions for financing TVET in the future.

- Are there fiscal equalization transfers both horizontally (within one level) and vertically (between levels)?
- Will fiscal equalization transfers be connected to TVET funding or treated separately?
- Who will collect income taxes, property taxes and value-added taxes (VAT)?
- Which other revenues can be used for financing TVET, and by whom?
- What is the **governance approach used for financing TVET**:
 - Will it be a **coordinated, output-oriented approach**? In a coordinated model, all money available for TVET is concentrated in one ministry. In an output-oriented mode, sub-federal levels get money for each student, either by the number of TVET students in the province or in the city/village.
 - Will it be a **fragmented, input-oriented approach**? In a fragmented model, several ministries have budgets to allocate money to the TVET sector. With an input-oriented mode, funding is allocated to all levels of government for system elements like TVET schools, staff, programmes, materials, etc.
 - Will there be some combination of the above two approaches?

If the GoN were to continue its existing fragmented, input-oriented approach and expand it to all levels of government, it would make for a very inefficient financing scheme and later to poor outcomes. In our meetings with TVET stakeholders in Nepal, participants mentioned several times that the current TVET system is full of duplications and opacity. Avoiding duplication in TVET financing, policymaking, and effort is almost impossible with more than a dozen government bodies currently responsible for some part of TVET. The system should be coordinated under one umbrella and in one ministry to reduce transaction costs for coordinating and funding TVET.

The literature and evidence reviewed in the first sections of this report emphasises that TVET governance needs to be outcome-oriented to generate the potential positive effects of decentralization. In an input-oriented mode of governance where local governments compete to invest in infrastructure like schools and other inputs like teachers and materials, there are no incentives for them to focus on students' outcomes. When funding is allocated per-student to cover all costs and combined with accountability of local and provincial governments to national standards, then the incentives encourage better outcomes for students.

TVET fund

During stakeholder meetings, the authors of this report learned that the GoN is working toward introducing a TVET fund as suggested by the TVET Policy. However, several questions

around this topic are not yet clear enough for us to make recommendations on how the TVET fund should be financed and distributed. However, the following question may help to clarify the concept:

What is the problem Nepal's Government would like to solve with the TVET fund?

- Reducing fragmentation in TVET funding. In this case, the TVET fund would channel all money spent for TVET to reduce programme duplication and increase efficiency.
- Avoiding the free-rider effect or poaching from training companies. If companies are reluctant to train because they are afraid of losing their investments and skilled workers to competitors, then all companies would pay into the TVET fund and get money back if they train (a levy system as applied in the UK, South Africa).
- Improving fiscal equalization. In this case, the TVET fund would stimulate equity and social cohesion among provinces and cities/villages by reallocating resources according to need.
- Stimulating innovation and development in the TVET sector. Then the TVET fund would finance innovative TVET development projects and research through calls for proposals.
- Encouraging private-sector companies to engage with TVET. The TVET fund could encourage companies to train and participate in curriculum development and updating through incentives, by developing infrastructure for cooperation, etc.

The authors highly recommend clarifying the overall purpose of the TVET fund within the new framework of the NC. The allocation of the TVET fund should be coherent with Nepal's approach to good governance to TVET, the funding strategy for TVET based on that good governance approach, and with the goals for the fund itself. Tinbergen's (1952) principle advises policy makers, that for each policy objective, at least one policy instrument is needed. This principle could guide solution identification for the planned TVET fund.

7. SWOT Analysis of TVET legal framework and existing acts and policies

7.1 SWOT analysis

Nepal's NC will have an impact on the governance of the TVET sector. In brief, it creates a system of multilevel governance where power and responsibilities are shared among the federal, provincial, and local levels. However, Nepal's existing policies and laws also currently affect the management of the TVET sector and will be kept on until explicitly changed. Therefore, this section analyses the strengths, weaknesses, opportunities and threats of the existing and new legal frameworks. We build on the functional analysis from earlier in this report that allocated tasks and roles to different levels of government. We are guided by the integrated, output-oriented model of good governance based on international best practices, theory, and—most importantly—the results of our survey of Nepal's key TVET stakeholders.

Table 7: SWOT analysis of TVET legal framework and existing acts and policies

	New Constitution	Acts Summary	Policies Summary
Establishment of multilevel governance (federal, provincial, local)			
S	One of the main principles of the NC is federalization. Nepal will move to a system with a central government, provincial governments, and local governments.	Central strategic power already in place, especially through CTEVT act. Delegation is present, especially in IEA.	NFEP Policy 4 calls for multi-level governance of standards and curricula as well as evaluation and monitoring. SSRP acknowledges trend towards decentralization.
W	The allocation of responsibilities—especially those for TVET—among government levels is not clear.	Policies pre-date the NC and are not prepared for multi-level governance. Sub-federal bodies that exist are designed for delegation, not governance.	TVET Policy is focused on the previous centralised governance model, most policies only apply to federal and local levels at best, no policy is clear on multi-level governance.
O	Federalizing Nepal creates opportunities to more efficiently implement TVET so that it meets local labour market needs while maintaining transportable credentials and national standards.	Some of the sub-federal bodies that already exist through acts can be sources of personnel and expertise for governance.	Updating to NC standards can improve the fragmentation of TVETP's many current actors. Other changes to bring policies in line with NC can update content and make improvements.
T	Current power structures will be disrupted by upcoming changes, raising the possibility of resistance from some parties. The many unknowns of the new system create opportunities for corruption or inaction.	Fragmentation, input-orientation, and state-controlled relationship to employers all threaten efficient decentralization and employer engagement in TVET	high level of fragmentation can create problems with decentralization because there is no clear chain of command

Federal level

Federal Governance

Relevant coordination partners

S	NC art. 4.51(d) (2) explicitly includes the private sector as a key partner in development goals. NC art. 4.51(d) (13) makes federal government responsible for coordination between itself and the provinces for national projects.	Many relevant coordination partners are present: Central strategy/standards body through CTEVT act, coordinated governance in a single ministry through Ed. Act, work-based training in enterprises through ITTA and LA, and employer engagement and cooperation through IEA.	TVETP, YP, and IP all call for public-private coordination. NFEP and SSRP call for coordination among relevant government agencies.
W	No clear ministry or body responsible for TVET.	Fragmentation is a major problem with multiple ministries and agencies controlling various parts of the system. No coordination or integration under a single leading ministry.	TVETP lists so many different participating and contributing ministries, agencies, committees, and other bodies that it would be impossible to fully coordinate. Private sector is under-represented if present at all. IP applies only to Ministry of Industries.
O	NC S7.7 states that the federal and provincial governments must work together to coordinate and manage contracts. This encourages governments to develop coordination mechanisms through further legislation (i.e. TVET Umbrella Act)	Apprenticeship and work-based training are present in CTEVT Act and ITTA. IEA creates an attitude of coordination and engagement with employers.	Changes to meet new NC requirements can catalyse improvements in current fragmentation. Existing public-private partnerships for youth programmes can be expanded to include TVET. Broad focus of YP can be an example.
T	Requirement for multilevel coordination can create problems if there is no further legislation to designate specific responsibilities	CTEVT Act makes TVET school-based and unlinked to employment, with no coordination among governance levels. Ed. Act de-prioritises TVET as a second-tier	Fragmentation creates a number of threats to strong TVET, especially territoriality and resistance to change. General education does not

	for provinces and federal government.	option. ITTA is very input-oriented and state-controlled in interactions with enterprises. IEA does not specify how cooperation should work.	need private-sector partnership and TVET will struggle if it does not have its own legislation.
Regulation and System management			
Regulation of TVET system management under TVET Umbrella Act			
S	Mandate to create new laws governing multilevel coordination is strong. NC art. 20.235(1) states that the GoN may make laws regarding coordination among government levels. NC art. 5.59(2) further states that the GoN may make laws on any topic listed as concurrent among levels. Finally, NC art. 5.59(2) gives the GoN the right to direct provinces on matters of national importance, and NC art. 5.59(8) does the same for the local level.	Some elements already exist: CTEVT Act tries to unify TVET functions, Ed. Act makes MoE leader for all education-system issues, ITTA establishes work-based training, IEA emphasises cooperation with industry, and LA calls for a new law to describe the specifics of vocational training in enterprises.	TVETP is the predecessor to a new TVET Umbrella Act. MoE placed in charge of most functions in SSRP, creating a single go-to ministry for TVET and education issues. IP frequently refers to coordination and skills development programmes.
W	NC is not completely clear about which level of government will be responsible for TVET, making the TVET Umbrella Act and consolidation in a single ministry more difficult.	Existing acts are not based on multi-level governance and keep TVET highly fragmented. CTEVT is disconnected from the private sector, Ed. Act barely acknowledges TVET, ITTA is restrictive, centralised, input-oriented, and state-controlled in work-based training implementation and lacks connection to education, and IEA and LA are both vague on TVET.	TVETP creates a highly fragmented, somewhat input-oriented system that has no decentralization and errs towards state control for employer engagement--which is itself much too low. NFEP does not call for reduction in the number of agencies and ministries involved to improve coordination. IP states that existing training institutes should be unified under a human resource development academy, thus pulling them away from the TVET system and education in general.
O	Many new acts and policies will need to be made for implementation of the NC. A TVET Umbrella Act would fit into that process and lead the way for other sectors.	All acts will need to be updated to fit with NC. Creates the opportunity to resolve weaknesses and develop good governance for TVET.	Compliance issues with the NC can create an opportunity to develop new TVET umbrella act, which would address TVET issues and formalise governance system for TVET.
T	Existing interconnections and power dynamics can make consolidation challenging unless all parties understand that the federalised system will provide more government positions even with reduced duplication.	New TVET Umbrella Act will necessarily change the allocation of powers and responsibilities, and might run into resistance.	An updated, decentralised TVETP would be vastly insufficient as a TVET Umbrella Act because of its many weaknesses. Efforts to reduce duplication have not been terribly successful to date. Education system might struggle to incorporate TVET into qualification frameworks while letting it stand somewhat alone in terms of its unique policy needs.
Strategic planning, implementing policies and strategies			
S	NC art. 3.40(3) makes sustainable economic development the singular economic objective of the state. NC S-5.5 gives the GoN responsibility for central planning.	CTEVT Act, ITTA, and IEA all put strategic planning at central level.	National strategy direction and standards: TVETP and SSRP keep CTEVT in charge.
W	TVET is not specifically mentioned in the NC.	Each act gives power to a different body: CTEVT Act chooses CTEVT	According to TVETP, a huge number of agencies are

		Senate, ITTA chooses Training Council, and IEA chooses Industrial Promotion Board. CTEVT Act conflates planning and implementation and divides responsibility among Senate, Council, and GoN generally. ITTA and IEA are about components of TVET not the whole system.	responsible for implementation. Very fragmented. SSRP points out that MoE and CTEVT responsible for both planning and implementation. IP establishes National Productivity Council to carry out all training and related functions, which conflicts.
O	NC puts TVET strategy at the federal level, which matches the ideal system.	Reorganization to multilevel governance can help resolve planning/implementation overlap in CTEVT Act. ITTA can be used to develop employer-engaged training strategies.	NC requirements will mean implementation separates from strategic planning.
T	Some responsibilities need to be allocated to the sub-federal levels, especially implementation-related tasks. These cannot be efficiently done from the federal level.	CTEVT Act currently puts many implementation tasks at the federal level, which is inappropriate in a decentralised government.	Implementation arms of MoE and CTEVT may struggle with changes.
National (Vocational) Qualification Framework			
S	NC does not prohibit NVQF	-	TVETP Establishes a model of national vocational qualifications.
W	NC does not mention NVQF	NVQF is not specifically mentioned in any of the related Acts.	Not clear whether there will be multiple levels of TVET qualifications.
O	Human resource goals create space for an NVQF	CTEVT Act and ITTA programme curricula can be included in NVQF development.	Expansion of NVQF and linkage to education system and non-formal education is good for all sectors.
T	NVQF can be lost in the shuffle as clearly required goals are pursued.	Multiple programmes defined by the various Acts will need to be brought into a single framework or duplication will continue.	Isolation of NVQF as a separate stream could limit permeability, and therefore the value of TVET.
Recognizing national and international certificate and diplomas			
S	NC art. 4.51(j) (7) requires opportunities for youth, including education that helps them enter the labour market.	Standards orientation exists: CTEVT Act calls for skills standards and certifications. Ed. Act uses school-leaving exams. ITTA grants certifications based on exams.	TVETP requires all agencies giving TVET to comply with the NVQF and requires all existing schools to come into consonance with NVQF. YP and NFEP call for equivalency and recognition of educational credentials. SSRP creates TSLC and THSLC.
W	TVET credentials are not specifically mentioned.	Current CTEVT Act framework of standards and certifications does not apply to all occupations or multiple levels of training. Ed. Act certifications do not apply directly to TVET, and ITTA certifications are not transferrable.	NVQF does not yet exist.
O	Accreditation of programmes according to standards and recognition of earned credentials help achieve this goal.	TVET expansion can bring with it more layers of standards and certifications.	A strong NVQF and programmes that all align to its occupations and levels will be enormously helpful for access, equity, effectiveness, and permeability.
T	Lack of clear mandate for TVET specifically can prevent action from happening.	Lack of occupational specificity and connection to higher education or training makes TVET a dead-end option currently.	If the NVQF is not strong, it will further undermine TVET. NFEP's attitude towards TVET can damage TVET's inclusion in an overall qualification framework.

Occupation-driven qualification standards for the national labour market

S	NC art. 3.40(4) states that the GoN shall provide skills for traditional occupations, and NC art. 3.33(1) provides right to employment.	CTEVT Act calls for standards, Ed. Act calls for standardised materials, and ITTA applies a Training Council-designed curriculum. Human resource development goals are shared.	TVETP aims to meet the needs of young people entering the labour market and refers to developing curriculum based on professions. YP wants career-oriented programmes, NFEP prioritises occupational and vocational skills. SSRP uses TVET content to accelerate school-to-work transitions. IP uses skill development to improve economic development.
W	No clear mention of TVET.	CTEVT Act does not engage fully with private sector or occupational profiles, Ed. Act focuses on general education and not TVET, n and ITTA certifications may not be transferrable.	No specific references to occupations as the organizing principle of NVQF. NFEP is generally very dismissive of vocational learning and treats it as a second-class option.
O	NC places skills development in an occupational framework, and creates a mandate for occupation-oriented TVET that helps people enter the labour market.	CTEVT act can be a starting point for occupational curriculum development, as can ITTA curricula.	Occupations can become the organizing principle of the NVQF. Policies connect occupations to skills and labour market entry, all of which are goals.
T	Lack of clarity relating goals to TVET can de-prioritise TVET	CTEVT Act's lack of private sector is a barrier to labour market relevance, ITTA's state-controlled model of education-employment linkage contradicts occupational model.	If another organizing principle (i.e. firm-specific training) becomes the foundation of the NVQF it will undermine the quality and value of TVET.

Types and duration of programmes

S	None	National definition of programmes: CTEVT Act sets programme characteristics through CTEVT, ITTA through Training Council.	TVETP mentions multiple models of programmes and upper levels, SSRP includes TVET material in general education programmes.
W	No mention of TVET programme types or durations	Clear types and durations of TVET programmes are missing from all Acts. Ed. Act excludes TVET from list of secondary programmes, and ITTA programmes are not standards-led.	Not clear what the levels and occupations would be.
O	TVET sector has full freedom to develop optimal programmes in terms of type and duration.	CTEVT Act and ITTA programmes can be expanded upon to develop TVET.	NVQF can clarify the levels and types of TVET. Non-formal TVET programmes with equivalent credentials can be massively helpful for RPL and access, equity.
T	NC art. 3.42(4) forbids child labour, which should not be interpreted to prevent work-based training in accredited programmes like apprenticeships.	Status quo of non-transferrable programmes and levels might persist, and would hurt permeability, equity, and attractiveness.	Without a clear framework for TVET levels and types, their value is diminished. NFEP making TVET programmes non-credit-bearing makes it impossible for them to be equivalent to other programmes.

Defining TVET programmes, learning locations and responsibilities

S	NC Schedules give education-related responsibilities to all levels of government and all levels concurrently.	Centralised strategic control: CTEVT Act puts CTEVT in charge, Ed. Act puts MoE in charge, and ITTA gives GoN power to make rules through Training Council.	TVETP makes an array of claims that set requirements for programme characteristics and introduces a requirement for "practical exercise". NFEP expands access of agencies to open TVET schools.
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W	No clear allocation of specific TVET functions to any level	Multilevel governance is missing from all Acts, private sector is missing from CTEVT, education sector is missing from ITTA, and Ed. Act programmes are input-oriented and state-controlled.	Not clear whether practical exercise will take place in schools or companies, though partnership is mentioned frequently. NFEP is not clear on standards for TVET. IP establishes National Productivity Council, which competes with other policies' plans.
O	NC can be used to justify any allocation of TVET-related responsibilities, creating space for optimal allocation.	New legislation (i.e. TVET Umbrella Act) can resolve contradictions and combine CTEVT programmes with work-based ITTA programmes.	Many of the new requirements for TVET programmes are based on international best practices. NFEP increasing the number of TVET schools increases access. IP engages with industry.
T	NC S-6.8 gives states the responsibility for higher education, which will need to be standardised at a national level to enable permeability across programmes. Lack of clarity means that the status quo could persist or individuals at any level of government could attempt to capture control of TVET for personal gain.	Status quo of learning locations will be difficult to overcome: private sector must be engaged as a training provider. Will require consent of schools who lose training time and workplaces who must add less-firm-specific skills.	The sheer number of requirements without a programme framework makes the TVETP very difficult to interpret and follow. Since it is a policy and not an act, this endangers its relevance. No guarantee of quality with NFEP schools, which harms at-risk populations.
National qualification procedures (exams, tests, assessments)			
S	NC art. 3.17 grants professional freedom in any part of Nepal.	Centralised qualifications: CTEVT Act makes CTEVT responsible for certification, Ed. Act makes GoN responsible for terminal exams, and ITTA programmes are qualified with Training Council exams.	TVETP is clear that all programmes should follow national qualification procedures based on a national framework of standards. NFEP establishes expected learning outcomes. SSRP creates TSLC and THSLC.
W	Relevance of professional freedom for transportable TVET credentials is not explicit.	Current CTEVT Act standards do not meet labour market needs or attract students, Ed. Act is not clear about TVET, ITTA programmes do not appear to be standardised across companies.	Framework does not yet exist, nor do expected learning outcomes. Not clear whether TSLC and THSLC can be customised to occupational programmes.
O	For individuals to have professional freedom throughout Nepal, standards and certifications must be at the national level.	Expansion of national qualification procedures can dramatically improve the quality and status of TVET, and existing ITTA curricula, standards, and exams can support development.	Framework of standards can make the value and further opportunities of every TVET credential clearer. Standard education-linked exams enable permeability and improve outcomes on the labour market.
T	Lack of clarity can undermine progress.	School-specific standards at the local or province levels would prevent TVET from achieving high status and quality. Provinces may want to have a role in designing their own exams in accordance with national standards. ITTA standards will need to add general education elements and occupation-oriented skills content.	Weak standards will hurt TVET. Standards and exams must be valuable and based on clear objectives.
Defining language policy for TVET programmes			
S	NC art. 3.31(5) declares all citizens have right to education in their mother tongues. NC art. 3.31(5)	-	-

	encourages individuals or local governments to open schools when their language is missing from instruction.		
W	NC does not clarify which languages qualify for inclusion in language policy, which languages should be learned by all students, or how many languages students should learn.	No reference to languages.	No reference to languages.
O	NC can be foundation for language policy.	-	-
T	Mother-tongue education can be difficult to regulate with regard to standards, quality if clear standards and procedures do not exist.	-	-

Quality control and accreditation of institutions and/or programmes

S	NC art. 3.29(1) grants right against exploitation.	Some elements present: CTEVT act makes CTEVT responsible for accreditation and maintaining quality. Ed. Act requires school accreditation. ITTA states Training Council accredits all training programmes	TVETP calls for a number of quality measures including independent evaluation, stakeholder involvement, training licenses, professional standards, and autonomous examination and evaluation. YP emphasises non-exploitation, SSRP emphasises quality and relevance.
W	No clear mention of what exploitation means or how it relates to TVET.	CTEVT Act methods of ensuring quality are unclear, and multilevel plans for accreditation are missing. Ed. Act has schools accredited by GoN, which is not coherent with NC. ITTA training enterprises must give up a significant amount of control over wages, hiring, etc. to the Council	The plan is strong but implementation is a question.
O	Preventing exploitation means TVET work-based learning programmes must have high quality.	Quality assurance and accreditation frameworks can be translated into new legislation (i.e. TVET Umbrella Act).	Objective for quality TVET delivery can be expanded in new TVET Umbrella Act.
T	Lack of clarity can undermine progress.	Uncertainty about the role of provinces might keep accreditation at the central-government level, and level of quality in ITTA programmes is unclear.	Lack of clear mechanisms might make quality assurance a low priority.

Monitoring of the apprenticeship/traineeship market

S	NC S-5.13 gives the GoN responsibility for central statistics. NC art. 3.34(3) grants labourers the right to unionise.	A few elements exist: CTEVT Act makes CTEVT responsible for arranging apprenticeships. ITTA gives GoN power to make rules about trainee hiring.	TVETP includes apprenticeship in the models of TVET it promotes
W	No clear reference to TVET or the apprenticeship market.	There is no apprenticeship market at present.	There is no mention of an apprenticeship market; Working Policy 3.1.11 and Sch. 1 call for labour market information system to forecast jobs. This is much more difficult than relying on a market-oriented system.
O	Statistics can be an excellent tool for monitoring. Unionization can create an actor that prioritises training quality and companies' participation in training.	Further legislation (i.e. TVET Umbrella Act) can change requirement from arrangement- and rule-making to a market-oriented system for allocating apprentices to training places.	Requirements for practical learning and encouragement of apprenticeship model can increase demand for training places.

T	Lack of clarity could lead to poor or inadequate statistics. Right to unionise can backfire if unions prioritise current workers and treat trainees as competition, or if unions demand too-high training wages that make training too costly.	State-controlled apprenticeship markets are subject to market failures. Oversight is required, but control can be counterproductive.	Lack of apprenticeship market can hinder training uptake by companies and students. Labour market prediction is unreliable and not feasible.
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Training of professionals in the TVET sector

S	None	Some requirements for teachers and managers: CTEVT Act makes CTEVT responsible for teacher training. Ed. Act requires teachers to be certified. ITTA states that the manager in the training enterprise must be prepared to fulfil a number of responsibilities.	TVETP Strategy requires training licenses for chief instructors and training facilitators, encourages professional development for teachers and instructors. SSRP mentions "avenues to qualification upgrade" for teachers, which would include TVET School teachers.
W	No mention of this topic.	CTEVT does not include workplace trainers, Ed. Act does not refer to TVET professionals, and ITTA does not clarify whether managers get training.	No provision for TVET system managers.
O	No restriction on further legislation (i.e. TVET Umbrella Act) that creates training requirements.	TITI is already prepared to be an official partner responsible for training TVET teachers and trainers. Existing rules can be used to develop guidelines for in-company trainers that are used for trainer training.	Better teachers and trainers make TVET stronger. Opportunities for improvement and upgrade encourage more and better teachers to enter the profession.
T	Lack of clarity can undermine progress.	Lack of TVET system management professionals may hinder development, especially at sub-federal levels.	Centralised trainer training infrastructure makes it difficult for remote areas to access training.

Permeability and progression routes within the whole education system

Permeability throughout the education system

S	NC art. 4.51(h) (4) mandates creation of community information centres.	CTEVT Act art. 6A states that TVET certificates shall be valuable equivalent to certain educational credentials.	TVETP establishes vertical permeability to higher levels and horizontal permeability through equivalence to general education. YP promotes career development opportunities. NFEP calls for equivalency across programme types, and SSRP establishes vertical and horizontal links among TVET channels, general education, and formal education.
W	No mention of permeability across levels (vertically) or types (horizontally) in NC.	CTEVT Act only mentions one level of credential, Ed. Act does not include TVET in types of secondary education, ITTA programmes do not include educational content.	NVQF or similar unifying framework does not yet exist.
O	Information centres could disseminate information on opportunities and how to progress.	Vertical permeability to multiple levels of TVET programmes can be built in the new framework, as can horizontal permeability to education programmes.	Permeability eliminates the opportunity cost associated with choosing TVET over general education, reducing stigma and attracting better students.
T	If TVET is not connected to further training opportunities and the general education system through transferrable credentials, bridging courses, RPL, and career guidance	If higher TVET opportunities are not developed or education-credential equivalency is not recognised, TVET will continue to be a dead end route.	If the NVQF is not fully connected to all of further TVET, higher education, and general education at all levels, permeability will not be achieved.

	then it can never be a high-status or high quality option.		
Transparent access conditions and exit standards			
S	NC S-5 gives the GoN power to determine standards for universities and health.	Exit standards exist: in CTEVT Act through CTEVT, in Ed. Act through GoN, and in ITTA through Training Council.	TVETP Requires a national model of TVET qualifications, with pre-training exams to set access conditions a clear basis of skills. NFEP includes expected learning outcomes for all programmes.
W	NC does not specifically mention standards for TVET	No mention of access conditions for TVET programmes.	NVQF does not yet exist.
O	GoN's power to determine standards could extend to TVET.	Standards can be elaborated to multiple levels, and existence of exams can facilitate new NVQF-aligned structure.	Clear conditions for entry and exit improve access by enabling students to prepare, and improve outcomes on the labour market for graduates by telling employers what they can do.
T	Lack of clarity could undermine progress, making TVET non-standard within Nepal and undermining its value and status.	TVET cannot overcome its stigma without clear and transparent progression routes within the whole education system, and these do not yet exist.	If the NVQF is not sufficiently clear or detailed, it cannot serve the purpose of helping access and outcomes.
Functional differentiation of programme offerings			
S	NC 4.51(d) (8) makes investment in Nepali skills and labour for economic development.	CTEVT Act mentions basic, medium, and higher level technical human resources.	TVETP mentions different programme models and levels, YP calls for various types of programmes, SSRP introduces new TVET-related programmes in community schools.
W	NC does not mention different types of TVET programmes to serve various levels, needs and interests.	CTEVT Act appears to only address one level of TVET programme, and limited fields of study.	None of these programmes is fully articulated.
O	Investing in Nepali skills should include all levels, needs, and interests.	Developing programmes to meet multiple levels of skills is called for under CTEVT Act.	Differentiated programmes help TVET achieve its stated goal in the TVETP of developing Nepali human resources.
T	Lack of clarity can undermine progress.	Current system is not sufficiently clear on progression routes and access conditions to enable multiple levels.	Only one level, type, or model is easier to implement but much less successful for students and companies.
Recognition of prior learning (RPL)			
S	NC art. 4.51(j) (7) requires opportunities for youth, including education that helps them enter the labour market.	CTEVT Act charges CTEVT with determining and certifying the standard of skills.	TVETP outlines a skill test system prior to training, YP and NFEP call for skill training in less-educated people, NFEP calls for increased access and standardised goals, and SSRP calls for connections between non-formal and formal education.
W	No specific mention of RPL.	No specific mention of RPL	NVQF would set the skills standards but does not exist yet. Some policies imply RPL without mentioning it specifically.
O	Creating opportunities for youth to thrive on the labour market implies RPL to certify skills they have and facilitate labour market entry.	CTEVT standards examinations can be used as RPL tools	If the standards are set, they would improve permeability, access, and equity.

T	Lack of clarity can undermine progress.	Access conditions to examinations are unclear, making it difficult or unlikely that non-formally educated individuals could access or pass the exams even if they were skilled.	If the NVQF does not establish pre-training skill requirements, RPL will be impossible.
System development and improvement			
Monitoring and research for TVET			
S	NC S-5.13 gives the GoN responsibility for central statistics. NC art. 4.51(c) (2) encourages research to catalogue and preserve traditional occupations.	Monitoring and research exist in CTEVT Act, ITTA, and IEA.	TVETP encourages a great deal of monitoring, NFEP creates common database, SSRP prioritises monitoring and evaluation, and IP unifies research programmes under National Productivity Council
W	No reference to TVET specifically.	Not clear what should be monitored and researched.	IP programme might compete with TVET-related programmes and create more duplication.
O	Central statistics can be used for monitoring and research. Research on traditional occupations would contribute to TVET curricula.	Data collection and research infrastructure can be built upon.	Monitoring can help TVET achieve its human resources purpose.
T	Lack of clarity can undermine progress.	Without further legislation (i.e. TVET Umbrella Act), monitoring and research may not improve.	Lack of research can lead to a TVET system that is quickly out of date, and fragmented research is ineffective.
Innovation projects to develop TVET			
S	NC art. 4.51(h) (1) requires preparation of human resources through technical and vocational education, and 4.51(i) (1) requires a competent and professional labour force.	CTEVT Act encourages CTEVT to systematise TVET and improve its quality.	TVETP requires research and development, SSRP establishes pilot projects.
W	No mention of innovation projects for TVET.	Unclear whether that creates a budget for system improvement.	No mention of innovation for TVET
O	NC makes TVET a key national-level strategy goal and creates opportunities for expansion, modernization, and improvement of the sector.	Improvement is already a priority.	Innovation keeps TVET up to date with best practices, technology, and efficient training and funding models.
T	Lack of clarity can undermine progress.	Previous efforts toward improvement have not yielded major changes or improvements.	Lack of innovation makes TVET slow, costly, irrelevant, and inadequate to serve the needs of Nepal's citizens.
Support for disadvantaged groups and areas			
S	NC art. 3.40(2) requires special consideration for disadvantaged groups, specifically including TVET for their development and for protection of their traditions.	Ed. Act art. 12B establishes "Rural education development fund"	TVETP guarantees access and inclusion to TVET through strategies of encouragement packages and special privilege policies. YP emphasises importance of access. NFEP is entirely focused on providing access to disadvantaged populations. SSRP discusses literacy programmes. IP promotes programmes for remote industries and areas as well as women.
W	NC only refers to TVET for the Dalit specifically, not all underserved populations.	No mention in Ed. Act of marginalised groups, only rural areas.	Not totally clear who would qualify, who would be responsible for outreach. NFEP devalues TVET.
O	This is a key purpose of TVET in Nepal.	Focus on rural education is a start, can be expanded.	Access and equity are key purposes of TVET and make

			the system relevant for achieving development goals. Frameworks for recognizing non-formal education can be massively valuable for disadvantaged populations.
T	If TVET is seen as a service only for severely disadvantaged groups, it can never be a strong high-status option.	Unwillingness to invest in all marginalised groups and prioritise equity undermines all education programmes.	Lack of clarity on programmes and qualifiers opens up risks of corruption or inefficiency.
Public campaigns to strengthen TVET			
S	NC art. 3.40(3) makes sustainable economic development the singular economic objective of the state. NC art. 4.51(h) (4) mandates creation of community information centres.	-	TVETP charges GoN with making publicity on TVET. IP states GoN should promote investment including skills training.
W	NC does not specifically mention promotion of TVET.	No mention of campaigns to strengthen TVET.	Not clear the extent and frequency of the campaign, or its goal. Attitude of the NFEP towards TVET undermines it.
O	TVET can be a critical part of fulfilling national economic goals. Information centres can disseminate information about TVET-related opportunities.	-	Publicity can bring new students and training enterprises into TVET, while raising its status and awareness of the opportunities it provides.
T	Lack of commitment to TVET can create a perception that it is a low-status option.	-	Lack of publicity can prevent even a strong system from attracting students and training enterprises.
Financing TVET			
Direct financing and contributions to lower-level financing			
S	NC art. 3.31(1) right to free education and NC 33.302(1) make TVET delivery a requirement. NC 4.51(d) (8) makes investment in Nepali skills and labour for economic development. NC 33.302 (1) states the GoN shall make necessary provisions for service delivery at sub-federal levels.	Federal direct financing and contributions to lower-level financing is the dominant model: CTEVT Act directs funds through CTEVT, Ed. Act through MoE, ITTA collects funds through training enterprise allocation of profits then distributes funds from Training Council, and IEA provides direct funding to companies for training through tax incentives.	IP encourages block grants for skills development and tax breaks for training firms.
W	No clear plan for allocating resources among levels of government	Funding is input-oriented, does not recognise principles of multi-level governance, and comes from many sources for many purposes.	TVET Fund does not yet exist. IP funding might compete with TVET funding.
O	With further legislation (i.e. TVET Umbrella Act), a strong plan can be developed to meet that requirement. This makes TVET an investment priority.	Funding allocation system exists, can be updated to match NC and new TVET sector needs.	TVET Fund can be reconceptualised in the TVET Umbrella Act to allocate funding to and through multiple levels of governance.
T	Without clear agreement that TVET is an instrument to empower human resource development, productivity and economic growth, it might not be a priority in funding discussions. If no funding plan is developed, TVET will not function effectively.	Agencies currently allocating funds for TVET might fight other agencies taking over that power. Poorly-designed incentives or training subsidies can be wasted money that does not bring in new training companies and only builds dependence on subsidization among companies who would not otherwise need it for training. ITTA profit-garnering requirement is extremely restrictive on training enterprises, disincentivises training, and prevents companies from implementing	If the TVET fund remains stalled it will be very difficult to achieve any objective. IP tax incentives and subsidies can cause problems. Other incentives in are so numerous they might outweigh the benefit of a training incentive.

		training programmes to maximise benefits.	
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Province Level

Provincial governance

Relevant coordination partners

S	NC art. 4.51(d) (2) explicitly includes the private sector as a key partner in development goals. NC art. 4.51(d) (13) makes GoN responsible for coordination between itself and the provinces for national projects.	Regional implementation bodies are briefly mentioned in the CTEVT Act.	-
W	No clear allocation of specific TVET functions to any level	No provinces or true multi-level governance in CTEVT Act.	Provinces not addressed.
O	NC S7.7 states that the federal and provincial governments must work together to coordinate and manage contracts. This encourages governments to develop coordination mechanisms through further legislation (i.e. TVET Umbrella Act)	CTEVT Act will need to change to comply with NC, so issues with lacking multilevel governance can be changed in that process.	-
T	Requirement for multilevel coordination can create problems if there is no further legislation to designate specific responsibilities for provinces and federal government.	CTEVT Council will need to understand that reallocation of responsibilities is a positive and not a negative change.	-

Organizing and maintaining infrastructure and TVET schools

Coordinate TVET school infrastructure vertically with local level

S	NC art. 20.235(1) states the provincial governments should make laws maintaining coordination between themselves and the local level.	CTEVT Act makes CTEVT responsible for coordination, though not of multilevel governance.	TVET school infrastructure is coordinated through TVET Fund.
W	No specific reference to TVET	CTEVT Act makes CTEVT responsible for running schools from the federal level, which undermines federalization.	All coordination is on the federal level; everything is highly fragmented.
O	Creates space for further legislation (i.e. TVET Umbrella Act) with coordination mechanisms for TVET. Provinces can have an important role in coordinating TVET infrastructure because they will have a critical mass of people.	Upcoming changes for NC compliance	NC creation of provinces can help reallocate implementation functions away from the federal level.
T	S8.8 makes basic and secondary education a local issue. In an occupation-driven TVET system, it will not be efficient to set up TVET schools in every city and municipality because they will lack the critical mass to train all occupations.	Potential resistance	Current implementation actors at the federal level may be unwilling to give up responsibilities.

Define languages for TVET programmes in provincial TVET Schools

S	NC art. 3.31(5) declares all citizens have right to education in their mother tongues. NC art. 3.31(5) encourages individuals or local governments to open schools when their language is missing from instruction.	-	-
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W	No clear policy on which languages qualify, which are to be learned throughout Nepal, or how many should be learned	Languages not addressed.	Languages not addressed.
O	Further legislation (i.e. TVET Umbrella Act) can create a language policy under which all students in Nepal need to learn Nepali plus one or two other languages. Provinces can choose or guide schools in choosing alternate languages.	-	-
T	Lack of clarity can undermine progress toward a feasible language policy.	-	-
Accreditation of local/regional TVET schools and/or programmes			
S	NC S-9.2 makes education a concurrent federal/provincial/local responsibility.	CTEVT Act makes CTEVT responsible for accreditation.	TVETP makes accreditation a responsibility of CTEVT.
W	No mention of provinces' roles in TVET school/programme accreditation.	CTEVT Act keeps accreditation at the central level instead of allowing delegation to provinces.	CTEVT is at the federal level, which should set the standards for accreditation to be implemented by provinces. IP makes National Productivity Council in charge of programme accreditation and existing training centres, which contradicts TVETP and SSRP.
O	Further legislation (i.e. TVET Umbrella Act) can allocate responsibilities freely. In this case, provinces would accredit TVET schools and/or programmes.	Upcoming changes for NC compliance	NC creation of provinces can help reallocate implementation functions away from the federal level.
T	S8.8 makes basic and secondary education a local issue. Accreditation should happen above the local implementation level so schools have supervision, but without province-level coordination it will be unclear who is offering which TVET programme.	Potential resistance	Current implementation actors at the federal level may be unwilling to give up responsibilities. IP attempt to re-allocate TVET programmes to industry-only approach undermines equity and permeability.
Career guidance and counselling agencies			
S	NC 4.51(h) (4) requires community information centres.	-	TVETP requires information and service for career development and progression. YP calls for awareness programmes and career guidance.
W	No clarity on which government level should establish the centres or how they would relate to TVET.	No guidance or counselling.	Career guidance is not specifically mentioned in TVETP, no policy has a clear implementation plan.
O	Community information centres can be established or managed by provinces to deliver career guidance and counselling for TVET, among other functions.	-	Career guidance for progression through the system can help individuals develop higher levels of skills and improve access and equity.
T	Lack of clarity means that the centres may not relate to TVET guidance or may be established at the federal level where they are too general, or the local level where	-	Weak career guidance can undermine the supply of students to even a strong TVET system.

	they lack the critical mass of people to be efficient.		
Implementing qualification standards, procedures and exams			
S	NC S-9.2 makes education a concurrent federal/provincial/local responsibility.	ITTA art. 14 states that enterprises will give certifications based on exams conducted by the Training Council.	TVETP makes National Skill Test Committee responsible for testing authority. NFEP decentralises implementation of national standards. SSRP makes schools responsible for implementation but leaves CTEVT in charge of existing programmes.
W	No mention of implementation	CTEVT Act keeps implementation of standards and exams at the central level instead of allowing delegation to provinces according to subsidiarity, and ITTA Training Council implements exams from the central level.	TVETP only mentions gradually developing the committee as testing authority, without a clear timeline or process. Implementing agencies are fragmented and many federal-level agencies have both strategic and implementation functions.
O	Further legislation (i.e. TVET Umbrella Act) can allocate responsibilities freely. In this case, provinces would implement standards, procedures, and exams.	Upcoming changes for NC compliance should improve subsidiarity.	NC requirements will mean implementation devolves to sub-federal levels. SSRP apprenticeships could be foundation for larger apprenticeship market.
T	Lack of clarity can undermine progress.	Central-level agencies currently carrying out implementation might feel like they are losing power when those responsibilities are devolved to lower levels.	Current implementation actors at the federal level may be unwilling to give up responsibilities. SSRP apprenticeship plan might be unfeasible for general schools to implement.
Collecting and maintaining province-level statistics			
S	NC S-6.6 gives provinces responsibility for province statistics	CTEVT Act makes CTEVT responsible for collecting TVET statistics.	NFEP decentralises data collection and monitoring.
W	No reference to TVET specifically.	No allocation of responsibility to sub-federal levels.	No policy has a plan clearly related to TVET or provinces.
O	Provincial statistics can be very important for TVET monitoring if they are clearly defined and well executed.	Upcoming changes for NC compliance should improve subsidiarity.	Data collection expertise at sub-federal levels will be necessary.
T	Lack of clarity can undermine progress.	Central-level agencies currently carrying out implementation might feel like they are losing power when those responsibilities are devolved to lower levels.	If the data collected is not right for TVET it will not help.
Educational processes from acquisition of students to issuing certificates			
Career guidance and counselling offer through career guidance centre			
S	NC 4.51(h) (4) requires community information centres.	-	TVETP requires information and service for career development and progression. YP calls for awareness programmes and career guidance.
W	No clarity on which government level should establish the centres or how they would relate to TVET.	No guidance or counselling.	Career guidance is not specifically mentioned in TVETP, no policy has a clear implementation plan.
O	Centres could provide counselling for TVET	-	Career guidance for progression through the system can help individuals

			develop higher levels of skills and improve access and equity.
T	Lack of clarity can undermine progress.	-	Weak career guidance can undermine the supply of students to even a strong TVET system.
Implementing preparation programmes (bridge courses)			
S	NC art. 4.51(j) (7) requires opportunities for youth, including education that helps them enter the labour market.	-	NFEP outlines non-formal education programmes designed to help people enter formal programmes. YP calls for the same. SSRP calls for connections between non-formal and formal education.
W	No mention of TVET or preparation programmes	No preparation programmes	Does not specifically refer to TVET.
O	Youth access programmes could include bridge courses that grant access to TVET programmes.	-	NFEP-related programmes could become the preparation programmes.
T	Lack of clarity can undermine progress.	-	Without clear entry conditions for TVET programmes, the preparation programmes cannot function.
Recognizing apprenticeship contracts			
S	S7.7 makes contract-related matters a concurrent federal-province responsibility	ITTA art 4(1) states that all trainees will have training contracts with the enterprise.	Apprenticeships mentioned as potential training model, and practical training requirements introduced.
W	That provision may or may not apply to training contracts between individuals and training companies.	No allocation of responsibility to sub-federal levels.	Apprenticeship contracts are not clearly mentioned.
O	Creates opportunity for provinces to oversee apprenticeship and training contracts.	Upcoming changes for NC compliance should improve subsidiarity.	Apprenticeship contracts enable students to trust they will be treated fairly, create an expectation for the apprentice to remain long enough to return his or her investment, and allow quality assurance oversight.
T	Lack of clarity means responsibility may be unclear, which puts TVET programmes at risk of exploitation or low quality.	Central-level agencies currently carrying out implementation might feel like they are losing power when those responsibilities are devolved to lower levels.	Lack of contracts in workplace training can make exploitation, dropout, and mistreatment more likely.
Supervision of apprenticeship training and TVET schools			
S	NC art. 3.29(1) grants right against exploitation.	CTEVT Act charges CTEVT with enforcing curriculum, ITTA charges Training Council with supervising work-based training.	CTEVT is given responsibility for supervision in CTEVTP and SSRP.
W	No reference to TVET quality specifically	Central-level supervision is logistically impossible.	CTEVT is at the federal level, which should set the standards for oversight to be implemented by provinces. IP directly conflicts with National Productivity Council.
O	Right against exploitation creates an obligation to ensure quality in TVET programmes, especially those with a work-based training component.	Upcoming changes for NC compliance should improve subsidiarity.	NC creation of provinces can help reallocate implementation functions away from the federal level.
T	Lack of clarity could mean this responsibility is ignored. Low quality or exploitative TVET programmes are unacceptable and	Unless supervision is delegated, it will be impossible to maintain quality and prevent exploitation.	Current implementation actors at the federal level may be unwilling to give up responsibilities.

	create huge risks for stigma against TVET.		
Provincial qualification procedures (exams, tests, assessments)			
S	NC S-9.2 makes education a concurrent federal/provincial/local responsibility.	CTEVT Act makes CTEVT responsible for qualification procedures.	NFEP decentralises programme evaluation
W	No clarity on qualification procedures.	No allocation of responsibility to sub-federal levels.	Not clear if this relates to exams. Does not relate to TVET.
O	Concurrence means that further legislation (i.e. TVET Umbrella Act) can allocate exams, tests, and assessments to the provincial level, according to national standards.	Upcoming changes for NC compliance	Decentralised programme evaluation based on centralised standards matches the goal for TVET.
T	Concurrence can also be interpreted to put power at the wrong level for efficiency and effectiveness.	Potential resistance	This system will need to apply to TVET.
Issuing certificates			
S	NC S-9.2 makes education a concurrent federal/provincial/local responsibility.	CTEVT Act makes CTEVT responsible for issuing certificates. ITTA art. 14 states that enterprises will give certifications based on exams conducted by the Training Council.	NFEP includes expected learning outcomes, and SSRP creates TSLC and THSLC.
W	Lack of clarity on who should be responsible for issuing certificates.	No allocation of responsibility to sub-federal levels, conflicting authorities.	Not clear where certificates are issued in NFEP, SSRP certifications are federal.
O	Concurrence makes it possible for further legislation (i.e. TVET Umbrella Act) to determine that provinces should issue certificates following national standards and local programme implementation.	Current CTEVT and ITTA certifications can be models for future TVET	Expected learning outcomes and standards are foundations for certificates. Decentralization in implementation makes provincial issuing possible.
T	Concurrence also makes it possible for responsibility to be placed at the local (inadequate supervision) or national (logistically not ideal) levels.	Central-level agencies currently granting certifications might feel like they are losing power when those responsibilities are combined under one agency	Federal recognition does not require the GoN to issue certificates, which is a logistical hassle at that level and not the role of the national government.
Promoting TVET programmes			
Innovation and development projects in coordination with TVET Schools			
S	NC art. 4.51(c) (2) encourages research to catalogue and preserve traditional occupations.	-	-
W	No reference to TVET, other occupations, or research on the TVET system and outcomes.	No promotion of TVET programmes	No TVET innovation projects
O	Further legislation (i.e. TVET Umbrella Act) can allocate funding specifically to innovation and development. Provinces and local authorities would submit proposals together to receive funding for pilot projects.	-	-
T	Without further legislation, there is no requirement or funding allocation for innovation and development.	-	-
Public advertisement campaign			
S	Provinces are not prohibited from promoting TVET.	-	IP states GoN should facilitate promotion of industrial investment, including skills training.

W	Nothing is mentioned about promoting TVET programs	No advertisement campaign	Not specifically for TVET.
O	Provinces can promote TVET to encourage participation, disseminate information on programmes and pathways, and improve the status of TVET.	-	Promotion can increase awareness, improve access, and improve utilization of progression routes and other permeability programmes.
T	Without requirements to promote TVET, it may be ignored.	-	Promotion of non-TVET programmes that are dead ends will not help achieve TVET goals.

Financing TVET

TVET school infrastructure

S	NC S-9.2 makes education a concurrent federal/provincial/local responsibility.	CTEVT Act makes CTEVT responsible for TVET school infrastructure.	NFEP expands approval and support to agencies for opening TVET schools
W	There is no mention of financial flows among government levels in the NC.	No allocation of responsibility to sub-federal levels.	TVETP financing is at the federal level through TVET fund
O	Further legislation (i.e. TVET Umbrella Act) can allocate funding and responsibilities to provinces for TVET.	Upcoming changes for NC compliance	-
T	Funding is very unclear in general, and especially for TVET.	Potential resistance	-

Local level (cities, villages, municipalities)

Local governance

Relevant coordination partners

S	NC S8.5 gives local governments power to manage local services, which will include TVET. NC S9.2 makes education a concurrent power of local, provincial, and federal governments. This creates a framework for TVET to have national curricula, standards, and occupational profiles while still having provincial and local customization and implementation.	CTEVT Act requires CTEVT to coordinate curricula across regions. Ed. Act includes district-level industry and commerce and trade union representatives in school management committees of schools with TVET programmes.	NFEP decentralization brings local governments into programme implementation according to national standards, as well as monitoring, supervision, and evaluation with coordination among agencies.
W	NC makes no explicit mention of private-sector engagement with TVET at any or all levels.	CTEVT Act keeps all responsibility at the federal level with only minimal responsibilities for local authorities and no governance powers. No direct industry representation, no representation above this level.	Decentralization is delegation to the local level, not autonomous multi-level governance.
O	NC S8.8 makes local governments responsible for basic and secondary education, which gives local authorities the power they need to match local labour markets and implement TVET programmes.	TVET schools are already in contact with industry. This can be expanded upon.	Structures set up for decentralization can be used for federalization.
T	NC S8.8 can be interpreted to mean that TVET is fully under the control of local authorities. TVET curriculum standards and occupational profiles must be set at the national level to ensure its goals are met.	Refusal to engage with industry above the local level undermines the quality and relevance of TVET curricula and standards.	Role and resources of delegated agencies may be inadequate or incorrect for true local governance.

TVET programme implementation process

TVET Schools

S	NC S8.8 makes local governments responsible for basic and secondary education.	Some TVET schools exist in various regions under CTEVT Act. Ed. Act establishes a district & village	Some TVETP implementation is at the local and district level, especially through
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		education committees, and school management committees	community schools. NFEP potentially increases number of TVET schools.
W	NC is not completely clear about how much power falls to various government levels.	CTEVT Act keeps all responsibility at the federal level with only minimal responsibilities for local authorities and no governance powers.	Some implementation is also at the federal level through CTEVT.
O	Creates framework in which federal government can have strategic control, develop standards and curricula, and set occupational frameworks while sub-federal governments implement appropriate programmes.	Local authorities exist and can provide resources and local know-how for new governance mechanisms.	NC creation of provinces can help reallocate implementation functions away from the federal level.
T	If TVET schools are fully local including their curricula and occupational profiles, credentials will not be portable and TVET will not achieve its goals.	Relationship among districts, provinces, and localities is unclear and could create friction.	If federal bodies deal with strategic direction, policymaking, and implementation their functions are not aligned with the principle of subsidiarity.
TVET programmes implementation (incl. work-based training)			
S	NC S9.2 makes education a concurrent federal-provincial-local issue.	Some TVET programmes exist in various regions under CTEVT Act. CTEVT mentions apprenticeship. ITTA programmes are all work-based training	NFEP makes TVET available, but makes occupational skills courses non-credit. NFEP also calls for standards for TVET programmes. All training referenced in IP would be work-based, and SSRP includes short non-formal apprenticeships.
W	NC is unclear about how responsibilities should be divided. No mention of workplace training.	CTEVT Act gives programme implementation to CTEVT. No clear objective of work-based training in CTEVT Act. ITTA programmes are not TVET because they lack a general education component.	Confusion over value and standards orientation of TVET in NFEP. Other policies keep programme decisions at the federal level through CTEVT. IP skill development programmes are work-based but lack education components.
O	Programmes can be aligned to national standards and implemented at sub-federal levels under the NC	Upcoming changes for NC compliance. ITTA programmes can be models for work-based training in future TVET.	Existing standards can be used to make TVET into specific programmes in multiple occupations and levels. Work-based training is very important for strong TVET. IP and SSRP models can be added to CTEVT models to expand options.
T	NC also allows for fully local programmes that would not be effective at preparing young people for the national labour market. NC does not require work-based training in TVET, which limits its utility for labour market entry.	Potential resistance. Lack of work-based training in CTEVT status quo will be difficult to overcome. ITTA programmes will need to expand from enterprise level to occupational level, include general skills, and revise the employer-government-trainee relationship.	Lack of clarity might keep TVET in a secondary role. No guarantee that the general education apprenticeships will work given schools' responsibility to implement them and their lack of connection to enterprises. Current models of work-based training are insufficiently large.
Infrastructure in each village, city, municipality			
Data collection			
S	NC S8.6 makes local governments responsible for local statistics and records.	CTEVT Act gives responsibility for data collection to CTEVT. ITTA requires managers to deliver data to GoN.	TVETP data collection carried out at local levels. NFEP states that monitoring is decentralised and fed into a common database. SSRP

			emphasises monitoring and evaluation.
W	Not clear without further legislation which statistics and records should be collected.	Ed. Act sets out the responsibilities of District Education Committees, which could include data collection if ordered but do not specifically mention it. ITTA data collection is directly between individual enterprises and the federal government, which is not the correct level for such tasks.	Not clear what data should be collected, by whom, or to which of the many fragmented databases.
O	Creates framework for strong outcome and impact measurement in TVET, including labour market outcomes, increased enrolment, and permeability tracking.	CTEVT can share data collection practices, and local governments can take over data collection	Data collection supports TVET improvement
T	Without clarity, record-collecting and -keeping could be low-quality or irrelevant.	Current data collection practices may be inadequate, current programme bypasses local governments, who may not have the necessary skills.	Problems will arise if each education sector has its own database (i.e. non-formal, TVET, general).
Career guidance and counselling in lower secondary education			
S	NC art. 4.51(h) (4) requires community information centres, which can help to improve career guidance and counselling.	-	-
W	Community information centres are not specifically linked to TVET or educational guidance and counselling.	No relation between TVET and lower secondary education	Career guidance is at the federal level
O	Centres can be a huge strength for improving access to TVET and further education and training options.	-	-
T	Unless they are utilised as stated above, centres can be useless for TVET purposes.	-	-
Financing TVET			
TVET schools (incl. work-based training) and RPL procedures and tests			
S	NC does not address financial flows for local governments, so there are no major problems.	CTEVT Act allocates funding to schools through CTEVT, Ed. Act establishes District and School funds, ITTA requires training enterprises to contribute funding, and IEA allows enterprises to deduct taxes for training.	Financing the implementation of new TVET-related programmes in community schools is the responsibility of the regular school system, while existing TVET programmes remain under CTEVT according to TVETP, SSRP.
W	NC is not clear on financial flows into or out of local governments for any purpose, including TVET. Private sector not included as a potential source of resources and expertise for TVET.	Current framework is complex and contradictory. Funding all goes through GoN and ITTA plan is much too rigid and demanding. Incentive in IEA is not strong.	Federal funding through TVET fund is tricky because the fund does not yet exist. Work-based training is almost non-existent in current programmes.
O	Lack of clarity allows for separate legislation (i.e. TVET Umbrella Act) to create an excellent system that includes well designed government funding and private-sector participation.	Funds are already locally managed and audited, which can be an excellent source of governing skills for local governments. Company-funded work-based training is critically important.	NC-related changes will help decentralise funding. Grants for promising new programmes can be a useful means of introducing innovation to TVET.
T	Lack of clarity allows for poor management or worse.	Ed. Act funding is input-oriented. Poorly-designed incentives or training subsidies can be wasted money that does not bring in new training companies and only builds dependence on subsidization among	NC-related changes could backfire. If all funding is grants from the GoN, sub-federal governments are not autonomous and the

	companies who would not otherwise need it for training. ITTA funding system might make enterprises reluctant to engage with TVET or training programmes.	governance mode is much too input-oriented.
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7.2 Conclusions and recommendations

The previous sections of this report have established the normative criteria for Nepal’s ideal future TVET system. These are based on the three purposes of TVET—individual control ability, equity, and most importantly human capital development—and the four principles of strong TVET systems: education-employment linkage, good governance, permeability, and quality. We have established that education-employment linkage should be organised based on occupational principles, and that good governance should be coordinated and output-oriented. We elaborate those criteria for Nepal’s goal TVET system into the functions of such a system. This yields objectives for how each function should be carried out in the goal TVET system that functions according to our criteria.

The final step of our analysis is to compare Nepal’s NC and existing legal framework of Acts and Policies related to TVET with the functions of the goal system. The NC is clear that it prioritises the purposes of TVET, though not clear that TVET is the mechanism Nepal should use to achieve those goals or how TVET should work. The most recent section is a detailed SWOT analysis of each element of the legal framework with respect to the goal TVET system criteria and functions. This section summarises and draws conclusions from that analysis first for each level of governance, then for Nepal’s TVET system overall.

Multilevel governance

The NC is very clear about establishing multi-level governance that involves federal, province, and local levels. However, all of the Acts and Policies that make up the legal framework pre-date the NC and are therefore not explicitly suited to multi-level governance. Even the NC itself is not terribly clear about how TVET-related functions should be allocated among levels, so there are unanswered questions. However, federalizing Nepal creates opportunities to make TVET more efficient, effective, and equitable in developing human capital, meeting labour market needs, and helping young people and adults participate in and drive Nepal’s development.

The acts and policies related to TVET already establish central authority over TVET standards and strategy—especially through CTEVT—and call for some level of general decentralization. However, that decentralization is more like delegation than governance. Federalization creates an opportunity to bring all of the acts and policies into consonance with one another and the NC. By redesigning structures to fit with multilevel governance, they can also be aligned to the criteria for Nepal’s goal TVET system. However, the sheer fragmentation currently happening—dozens of ministries, agencies, councils, and other bodies are engaged in TVET—might threaten progress if each related body grasps too tightly the role it has in a weak system instead of enabling a strong one.

Recommendations for multilevel governance:

The NC is a window of opportunity for improving the TVET system and overcoming its existing problems. The most important obstacles to meeting the criteria for strong TVET in multilevel governance are fragmentation and input-orientation, along with missing linkage to the employment system and empowerment for the provincial and local levels. Bringing TVET under a single ministry, establishing national standards and strategies for TVET that are implemented on the sub-federal levels according to per-capita funding, bringing employers into a leadership role in TVET, and clearly outlining the rights and responsibilities of each level of governance are the key steps for improving multilevel governance of TVET.

Functions on the federal level

The level with the most regulative functions in our framework is the federal level. In general, that level is responsible for the strategy, system development, and setting standards that ensure quality and permeability. The current legal framework puts the federal government in charge of strategic direction for TVET and links TVET to occupational skills and labour market goals. Some centralized certifications already exist, as do general provisions for quality control and accreditation. Central statistics and monitoring for education and TVET outcomes are planned for, as are some provisions for TVET-related research and innovation. Much of the TVET-related legal framework—especially the policies—call for recognition of prior learning, entrance and exit standards, and equivalence across education levels and types—key ingredients of permeability.

Although the mandate for strong TVET leadership from the central government is clear in the NC and existing legal framework, there are weaknesses in how that translates to action. For example, publicizing TVET is an important way for the central government to increase access and equity by sharing information and encouraging participation in TVET, and while the NC sets goals that clearly require such publicity it is not yet adequate. Similarly, there is a mandate to create the NV(Q)F, which would help permeability and recognition of prior learning by setting standards for entry and exit into all educational programmes including TVET and non-formal and remedial courses. However, that framework does not yet exist—though development is underway—and permeability is at risk without it. Finally, there are conflicts between strategic direction and implementation, where many agencies like CTEVT and the MoE that should ideally be focused on strategy and standards are also charged with implementation—an inappropriate and inefficient allocation of tasks.

Coordination among ministries within government and between the government and private sector are already explicitly included in the NC, with the federal government responsible for managing such coordination. In the TVET-relevant acts and policies, most of the relevant coordination partners are already present including CTEVT, TITI, and employer engagement for work-based training. However, employer representation is very weak and rarely puts members of the private sector in positions to make decisions or direct strategy. Fragmentation is a major problem within the government in terms of the bodies involved and the conflicting points of view offered by various acts and policies. However, updating TVET to reflect the NC's model of governance can be an opportunity to fix many of the problems in the current legal framework. Without a well-designed new framework, however, the existing problems will persist.

Recommendations for the federal level:

The most efficient way to bring all of the conflicting parts of the legal framework into consonance with one another and the demands of the NC will be to develop a **TVET Umbrella Act** that supersedes previous legislation. The TVET Umbrella Act can formally link the economic and human resource development goals of the NC with TVET. It can separate CTEVT's current functions according to federalization so they fit better with the functional analysis presented earlier in this report. The TVET Umbrella Act can regulate the new role of CTEVT, the MoE, and institutions like TITI, while integrating institutions created through the ITTA and IP that conflict with other elements of the TVET legal framework. The TVET Umbrella Act can engage with and formalize the role of employers in TVET. It will revise and consolidate the strengths of all existing policies, laws, and NC articles to prepare a strategy for reaching Nepal's goals for the TVET sector by 2030. The first step is to set up a steering committee headed by someone with strong leadership capabilities to organize buy-in from all relevant stakeholders during the transition process.

In terms of **system development and improvement**, the TVET Umbrella Act should foster research and monitoring. The federal government should be able to stimulate research and innovation projects to ensure that TVET fulfils its purpose according to the NC. A specific fund should be set aside for TVET improvement and publicity campaigns. An international expert group with experience establishing monitoring systems for TVET can help overcome the risks associated with the current lack of knowledge for developing strong monitoring systems.

For **permeability and progression routes** throughout the education system including TVET, the Umbrella Act should address and regulate a policy of "no dead-end education." It can regulate procedures for RPL inspired by the NFEP and others, and use certifications like the TSLC and THSLC from the SSRP to develop clear levels for TVET programmes. The NVQS will be an important framework and reference system for TVET and RPL, and should be regulated in the TVET Umbrella Act and overseen by a federal authority. CTEVT standards should contribute to NVQS development instead of allowing that project to replicate work already done.

Functions on the province level

Provinces are responsible for coordination at the provincial level, organizing and maintaining infrastructure and TVET schools, implementing educational processes from student recruitment to issuing certificates, promoting TVET programmes, and financing some aspects of TVET. Provinces are a critical part of establishing multilevel governance that can bring service delivery closer to Nepal's citizens.

The NC establishes provinces, so most parts of the existing legal framework do not refer to provinces outside of some general discussion on decentralization. As a result, there are some conflicts between acts and policies—especially the CTEVT Act and TVET Policy—and multilevel governance of TVET. This creates some risk of resistance from bodies that currently occupy many roles including strategic oversight and implementation, but the reallocation of implementation functions to the provinces strengthens TVET and must be done to comply with the NC.

Recommendations for the province level:

Provinces will need to take over implementation functions, and should be supported by a new TVET Umbrella Act that outlines their specific rights and responsibilities for that role. Although most schools are run on the local level, provinces will likely have more control over TVET schools and programmes because they can oversee the allocation of TVET programmes and occupations to different TVET schools across the province. Depending on the needs of the local and regional labour markets, there will likely not be enough students in every single village to meet critical mass for providing every single occupation. Therefore, provinces can concentrate programmes or occupations in fewer TVET schools and help students reach their programmes of choice. In general, TVET schools should be established where there is a need on the labour market and the provinces should coordinate and decide on the allocation of TVET schools, programmes, and occupations to various local areas. The province should promote TVET programmes so students know what is available even if it is outside their immediate area.

Functions on the Local level

Local governments in cities, villages, or possibly even districts are responsible for necessary local-level coordination, managing TVET schools and programmes in their areas, and facilitating work-based training. Each local government will collect data as directed by higher-level governments for monitoring, and organize career guidance and counselling for lower-secondary or primary students. Finally, the financing responsibility at the local level should be for TVET schools and work-based training, though funding is especially unclear at present.

The existing legal framework allocates a number of implementation and management tasks to the local level, though the current role of local governments is to simply carry out instructions instead of any autonomous governance. In addition, many of the implementation and management tasks that should fall to the local or at least provincial level—for example running and maintaining TVET schools—are currently being done at the highly inefficient national level. Career counselling is very unclear, though the NC requires community information centres that could become a central pillar of TVET and other educational and career guidance. Industry representation and work-based training can exist but are either allocated to higher-level governments or so inadequate they do not address the need for such programmes.

Recommendations for the local level:

The TVET Umbrella act should clearly describe what responsibilities and tasks are given to local governments. These will differ somewhat from those for general education because TVET is labour-market-oriented and requires a bit more coordination with provincial governments to allocate programmes, schools, and students in such a way that meets labour market needs. Furthermore, TVET must be engaged with the private sector not just for curriculum design and strategic direction on the federal level but also for workplace training on the individual student level. Local governments will be well positioned to facilitate placements and encourage local companies to offer training places.

8. Implementing TVET federalisation

The transition process from an old to a new TVET-sector structure is very demanding and multi-layered. Dr. Renold, has several years of experience in implementing such complex constitutional and legal reforms in Switzerland's education system. Switzerland's post-reform TVET system has excellent stakeholder engagement and involvement. In their analysis of the mechanism behind the most recent Swiss constitutional reform process, Fischer, Scarini and Traber (2010) find that "shared beliefs and a common frame of reference, the procedural separation between constitutional and distributional issues, neutral brokers, and informal structures were all beneficial to the success of the reform project". The following remarks are based on this experience and are intended to support those responsible in Nepal.

Though the main text of this report provides recommendations for the end state of federalized TVET governance in Nepal, the process of implementing such a system is a project in and of itself. This section offers brief principles, goals and stepping stones, transition process advice, and warnings about potential hurdles and obstacles. The goal of including this post-script is to facilitate the change process so that the ideal TVET system laid out here can be created.

In her report on implementing decentralized TVET for Nepal, Hesselbarth (2007) lays out some research-based principles. The first is high-level political commitment for decentralization, which is now provided by the NC. Second is an interim vision to maintain commitment during the lengthy process of revising the legal framework—in this case the development of the TVET Umbrella Act. Next is government commitment throughout the process, then vertical and horizontal coordination, joint studies to strengthen coordination, and establishing frameworks for funding and decentralization support. Finally, Hesselbarth notes that local capacity-building must proceed throughout these processes.

To build a TVET system that promotes individual control ability, human capital, and equality of opportunity, Nepal needs one that has occupation-driven education-employment linkage, good governance in the coordinated output-oriented model, permeability, and quality. It should allocate functions according to our functional analysis for multilevel governance. It should be governed by a single TVET Umbrella Act. That vision will take time and effort to enact.

8.1 Principles

The first set of recommendations we provide are principles for guiding the transition process. The NC is a tremendous opportunity for the improvement of the TVET sector in Nepal. It makes it possible to rethink and reorganise functions and processes. Our legal framework analysis and recommendations highlighted the strengths, weaknesses, opportunities and threats facing the federalized TVET sector. As Nepal's TVET leaders and stakeholders develop the TVET Umbrella Act and begin to implement the NC, the following principles can lead the way.

Structure follows function

We recommend that Nepal's TVET leaders and stakeholders begin by deciding on the functions that should be fulfilled in a given office or governance level before organizing its structure. The functional analysis in this report can help to lead the way. The organization of

an administrative unit should be appropriate and efficient to what it needs to do, not any other criteria. For example, CTEVT should be re-organized once its new functions become clear, not before.

Checks and balances

Whoever is responsible for carrying out a policy should not be the same person evaluating that policy's performance. The principle of checks and balances is very important in federal structures, and increases the quality of all processes. This principle can be applied both horizontally among different actors in a single governance level, or vertically with different government levels checking the work of those above and below them.

Mutually agreed-upon guidelines for the transition process

In order to successfully develop a TVET Umbrella Act and implement the NC, it is crucial that the actors involved agree on common guidelines. These should in particular ensure that no loss of knowledge or human resources takes place and that all decisions are taken by mutual agreement. For example, when Dr. Renold was organising the transition to federal control over healthcare training standards, she and her team developed a framework of guidelines that included one promising that workers who lost their jobs would be given help to find new positions.

8.2 Long-term goals and stepping stones

It will take a long time from the beginning of NC implementation to a fully functioning new TVET sector according to the vision. This is a very complex change process, which will also be a learning process for all participants. Thus, it is important that all responsible and relevant institutions orient themselves towards long-term goals and break them down into short- and medium-term targets.

Long-term objectives can be anchored in the TVET Umbrella Act. However, the system cannot wait until that Act is fully written, vetted, and published in the Nepal Gazette to begin. Therefore, the short- and medium-term objectives are of decisive importance for effective implementation. One strategy is to develop an appendix to the current TVET Policy (2012) with a "TVET Action Plan" that describes the priorities and the projects and defines a timeline for implementation. Once agencies know generally what their functions will be based on that action plan, they can begin to re-structure following those functions. In addition, such a plan supports the monitoring required by the NC. It can also be the basis for annual reporting (see NC, Part 4, Art. 54).

8.3 Transition process

Change processes are necessary for innovation and improvement, but very difficult to oversee or even endure. Projects like the one ahead in Nepal are long-term, lasting 10-20 years and

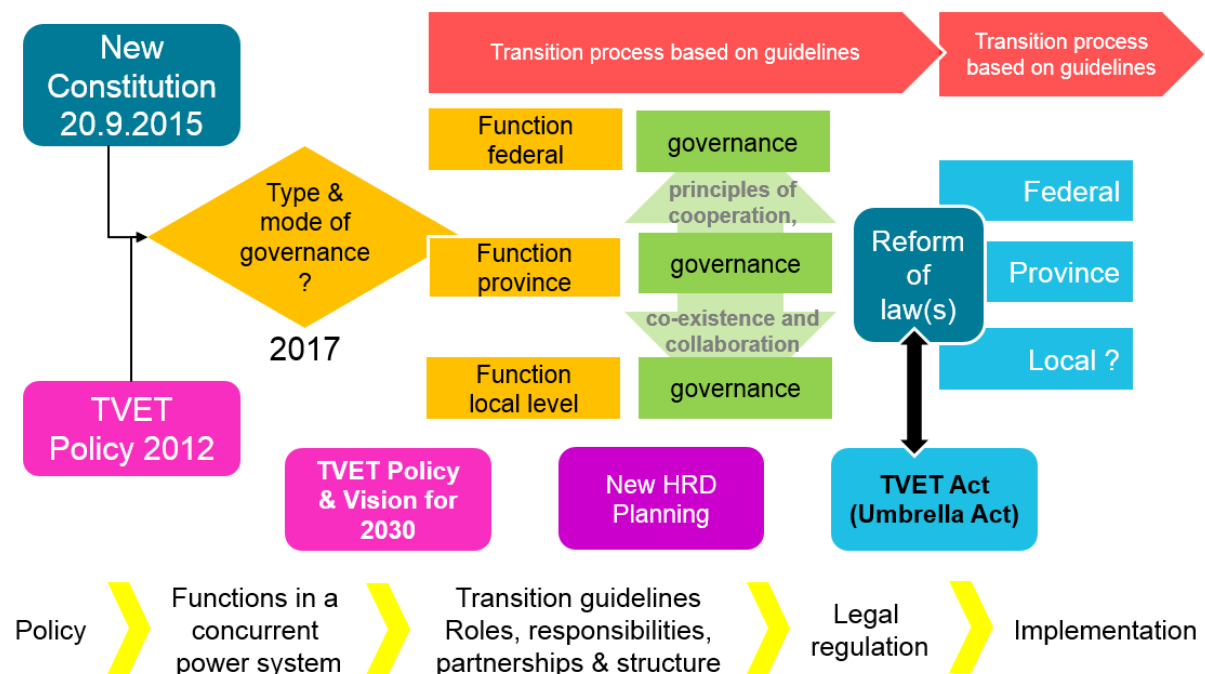
requiring a long-term perspective that can be difficult to maintain in government. This section provides a map of the potential change process through development of the TVET Umbrella Act and implementation of that Act and the NC. Readers will note that the process involves multiple simultaneous processes at multiple levels of governance, so it will require capable leadership and extended focus.

Multi-layered change process

The functional analysis already shows clearly that the conversion from the old to the new legal framework will bring with it dozens of reform projects. A plan of action is an important requirement before starting implementation processes. To ensure that the action plan can be achieved by all actors and respects the constitutional principles (see NC Art. 232), careful planning must be carried out.

Figure 4 illustrates a plan on a very general level. The multi-layered approach can also be called "simultaneous engineering". It involves various subprojects that must be coordinated with one another without knowing exactly whether they can succeed. Simultaneous engineering requires defining a critical path, then careful coordination of the various subprojects on a central level. This increases complexity in the change process, but is the only way for complex reforms to be implemented in a reasonable timeframe. The advantage is that innovations made in one subproject can be passed on to others, which would not be possible with a serial reform process.

Figure 4: A road map for implementation with simultaneous engineering



Source: Developed by the authors

Pathway to impact: Specific stepping stones

The stepping stones described here are intended to help to set the priorities and initiate the corresponding project organization. This report has already begun many of the initial steps, but Nepal's stakeholders and leaders will need to agree with our conclusions before deciding to implement them. Further steps are projects that will need to be undertaken by TVET leaders and stakeholders to extend this report's conclusions and recommendations.

- **Develop a shared vision for TVET** (see section 5 of this report)
 - **Choose a governance model:** Decide on the ideal type—fragmented vs. coordinated—and mode—input- vs. output-oriented—of governance for all levels (see section 4 of this report).
 - **Allocate functions to levels:** Analyse all tasks in the field of TVET and their appropriate levels of governance (see section 5.1 of this report).
- **Plan changes for a new legal framework** (see sections 6&7 of this report)
 - **Analyse the existing legal framework** in both the education and employment system (see section 6 of this report)
 - **Identify changes** that must be made for the new legal framework like a TVET Umbrella Act (see section 7 of this report)
- **Empower affected entities for the change**
 - Analyse the existing **ministries, bodies, institutions and legal entities** which will be affected by the change and map their competences to empower local entities for the change
- **Set clear quantitative mid-term goals** that match NC objectives
 - Develop a **human resource development strategy for 2030**, including goals for TVET sector like numbers of skilled TVET graduates on the upper secondary level
- **Plan the transition process**
 - Create **mutually agreed-upon guidelines**
 - Organise **change management** to empower actors on all levels
- **Start the legislation process**
 - On the federal level, begin developing the **TVET Umbrella Act**
 - Provide **templates for the sub-federal** level to develop necessary legislation to implement TVET.

In order to master this transition process successfully, a strategic steering group at the top level is necessary. We highly recommend describing the project organization of the transition process in overall master plan.

8.4 Strategies to overcome hurdles and possible obstacles

During the 10-20 years of the transition process, there will be various obstacles that must be anticipated and overcome. According to the author's experience, the following should be considered.

Strong leadership

The person who leads the Steering Committee should have proven leadership experience, have a strategic vision, and be able to conduct a change process. Furthermore, he or she must have a passion for embracing and convincing people who are against the change.

Diversity in implementation teams

Project organizers should ensure that all possible stakeholder groups are represented in one form or another in the steering committee. For the executive leader, it is crucial to know what critics think and where they see problems, hurdles and obstacles to implementation. All project groups should include advocates and opponents of implementation. This will make some processes take more time, but will improve the quality of implementation.

Strong project organization and monitoring, external support

Such highly complex projects are rarely carried out, so most government officers will never experience this type of process. Therefore, as a rule, the necessary knowledge of how such projects are organised and controlled does not exist. Therefore, technical assistance in organizing and controlling the project groups is crucial. This can be acquired by external professional bodies. If the knowledge is not available within the administration, professional project controllers should be consulted. This is of central importance for success and long-term cost efficiency.

Communication campaign and informational events

In the case of such complex projects, it is important that an information and awareness campaign be organised parallel to the operational projects. The general public should be convinced of the merits of the new reform and should support it gradually. This is why a communication group should deal with these communication questions and strategic information-sharing. Communication should be coordinated from the highest political level to the implementation levels so that there is one voice for all.

9. Final Remarks

The authors of this report are convinced that the NC is a window of opportunity for improving Nepal's TVET system. Even if it will take years until all roles and responsibilities are clear on all three governance levels and in all institutions, it is worthwhile for today's leaders to forge a path forward for TVET as it will generate enormous benefits in the next generations. TVET systems can be complex and confusing because of the many connections they have among governance levels, the public and private sectors, and education with employment. However, strong TVET enables young people and the economy to thrive while enhancing equity and providing opportunities for citizens who might otherwise be left behind.

The best TVET systems in the world today are not the product of long histories or unassailable traditions. They are the product of constant refinement, innovation, and updating to meet and continually serve the needs of students, teachers, parents, enterprises, schools, and the economy. Nepal's TVET system can join the group of strong international TVET systems while enhancing the economic and individual development of the country.

The promulgation of Nepal's NC is the moment when the country can resolve old challenges while implementing the new decentralised model. If the TVET sector is among the first to move, its decentralisation goals, processes, and plans can be models for other sectors in Nepal. The leaders who find a way to embrace and rise to the challenge of decentralisation can lead the way for the country as a whole. We firmly believe that—though the process ahead is long and certainly challenging—the leadership in Nepal and the current window of opportunity can lead to excellent outcomes and impact in TVET and beyond.

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Appendix 1: Legal Framework

Table A1.1: Specific articles from NC related to TVET

Topic	Quotation
Rights	3.31(1) "Every citizen shall have the right of access to basic education. (2) Every citizen shall have the right to get compulsory and free education up to the basic level and free education up to the secondary level from the state."
	3.31(5) "Every Nepalese community residing in Nepal shall have the right to get education in its mother tongue and, for that purpose, to open and operate schools and educational institutes, in accordance with law."
	3.33(1) "Every citizen shall have the right to employment. The terms and conditions of employment, and unemployment benefit shall be as provided for in the Federal law. (2) Every citizen shall have the right to choose employment."
	3.29 (1) "Every person shall have the right against exploitation"
	3.34(3) "Every labourer shall have the right to form and join trade unions and to engage in collective bargaining, in accordance with law"
	3.42(4) " No child shall be employed to work in any factory, mine, or engaged in similar other hazardous work"
Special Groups	4.51(j)(7) "to create an atmosphere conducive to the full enjoyment of the political, economic, social, and cultural rights , while enhancing the participation of youths in national development , to make their personality development , while providing special opportunity in areas including education, health and employment for the empowerment and development of the youths and provide them with appropriate opportunities for the overall development of the State."
	3.40(2) "...Special provision shall be made by law for the Dalit in technical and vocational education."
	Mentioned a lot
Freedom	3.17 "Freedom to practice any profession, carry on any occupation, and establish and operate any industry, trade and business in any part of Nepal "
Plan/Policies (basic needs)	4.51(h)(1) "to prepare human resources that are competent, competitive, ethical, and devoted to national interests, while making education scientific, technical, vocational , empirical, employment and people-oriented"
	4.51(i)(1) " to make competent and professional the labour force that has remained as the main socio-economic strength of the country and enhance employment within the country, while ensuring a situation enabling all to work "
	3.40 (4) "The Dalit community shall have the right to use, protect and develop their traditional occupation, knowledge, skill, and technology. The State shall accord priority to the Dalit community in modern business related with their traditional occupation and provide skills and resources required therefore."
	4.51(c)(2) "to carrying out studies, research works, excavation and dissemination for the protection, promotion, and development of ancient, archaeological, and cultural heritages"
	4.51(h)(4) "to establish and promote community information centres and libraries for the personality development of citizens"
	3.40 (3) "The economic objective of the state shall be to achieve a sustainable economic development, while achieving rapid economic growth..."
	4.51(d)(2) "to achieve economic prosperity by way of optimum mobilization of the available means and resources, while focusing on the role of private sector in the economy"
	4.51(d)(8) "to protect and promote domestic industries and resources and accord priority to domestic investment based on Nepalese labour, skills, and raw materials for the development of national economy."
Federalism	4.51(d)(13) "to give dynamism to the economic development by establishing coordination between the States and the States in the Federation in relation to industrial corridors, special economic zones, national projects , and projects involving foreign investment"
	20.235(1) "The Federal Parliament shall make necessary laws in order to maintain coordination between the Federation, State and Local level. (2) The State Assembly may maintain coordination between the State and Village Bodies or Municipalities..."

	5.59(2) "The Federation may so make necessary policies, standards and laws on any of the matters enumerated in the Concurrent List and other areas of financial powers as to be applicable also to the States"
	20.232 (2) "The Government of Nepal may , pursuant to this Constitution and the Federal Law, give necessary directions to any State Council of Ministers on matters of national importance and on matters to be coordinated between the States, and it shall be the duty of the concerned State Council of Ministers to abide by such directions" & (8) "The Government of Nepal may, directly or through the State Government, render necessary assistance to, and give necessary directives to, any Village Executive or Municipal Executive , pursuant to this constitution and the Federal law. It shall be the duty of the Village Executive or Municipal Executive to abide by such directives."
	S-5.5 "Central planning ..."
	S-5.13 "Central statistics ..."
	S-5.15 " Central universities, central level academies, universities standards and regulation, central libraries "
	S5.16 "... standards, quality and monitoring ..." for health
	S-6.6 "State statistics "
	S-6.8 " State universities, higher education, libraries, museums "
	S7.7 "Contracts, cooperatives, partnership and agency related matters
	S7.11 "Social security and employment, trade unions ..."
	S-7.15 " Industries and mines and physical infrastructures"
	S-8.5 " Management of the Local services"
	S-8.6 "Collection of local statistics and records"
	S-8.8 " Basic and secondary education "
	S-9.2 " Education, health and newspapers "
Transition to federalism	33.296 (4) "The legislative power of the State Assembly with respect of matters set forth in Schedule-6 shall, upon the commencement of this Constitution, be vested in the Legislature-Parliament set forth in clause (1) until the State Assembly is formed. Any law so made shall be inoperative in relation to that State after one year of the date of formation of the State Assembly set forth in this Constitution."
	33.302 (1) "The Government of Nepal shall make necessary provisions for the delivery of services at the state and local levels "
	33.303 (1) "The Local Bodies existing at the time of commencement of this Constitution shall continue to exist until the determination of the number and areas of the Local level in accordance with this Constitution"
	33.304 (1) "The Nepal laws in force at the time of commencement of this Constitution shall continue to be in force until such laws are repealed or amended"
	33.298 (1) "The Council of Ministers existing at the time of commencement of this Constitution shall continue to exist until the Council of Ministers set forth in clause (2) is formed."

Table A1.2: Specific articles from Acts related to TVET

Act	Topic	Quotation
CTEVT Act, 1989 (and amendments up to 2010)	Preamble	establishes CTEVT for "arrangement of technical education...setting standard of skill and certifying the same in order to produce basic, middle level and higher level technical human resource
	TVET Senate	Ministry of Education, National Planning Commission, Public Service Commission, ministry of Education, ministry of Industry, Ministry of Labour, Ministry of Tourism and Civil Aviation, chairperson of CTEVT.
		Senate composition
		Senate can direct council, but also arrange for implementation. Does long term plan but also implementation.
	Purpose	3. "In order to systemise and maintain quality..."
		3. "maintain co-ordination"
3. "determine standard of skills and certify the same"		

	Makeup	3.2 includes ministry of Education national planning commission, university, chamber of commerce and industries, and industrial enterprises
	Functions and duties	6.1 "arrange various teaching, training and research...and to make arrangement for operation thereof"
		6.2 "confer permission of teaching" 6.3 "focus on standard education or training" 6.5 "scope and standard of the programs" 6.8 enforce curriculum 6.13 "classification, examination and certification of skills" 6.14 'prepare skill certification guidelines"
		6.4 "determine policy" 6.15 "synchronise...training curriculum" 6.19 "provide required advice"
		6.7 "to establish and operate...polytechnic schools" 6.10 "to operate...technical teacher trainings"
6.11 "arrange necessary arrangement of apprentice training"		
6.6 "to operate basis level skill and training programme and to produce medium level human resources" 6.16 "to perform...functions required to produce basic, medium level and higher level technical human resources"		
Certificates	6A "the certificate--conferred by the council to the student...shall be valid as equivalent to the proficiency certificate level of university and other educational institution"	
Delegation	13 "government of Nepal may issue direction" 15 "the government of Nepal may make rules"	
Education Act 1971	TVET	8th Amendment: National Education Board is responsible for national-level school termination exams
		6. "Types of Secondary education shall be as follows: (1) General Secondary Education (b) [deleted] (c) Sanskrit secondary education"
		12(2) "In the School Management Committees of such Secondary schools as offer courses on Technical or vocational Subjects or conduct training on the same, two Members will be represented from the District Level Industry and Commerce and Trade Unions. "
	Financing	12B "Rural education development fund" central level; operated by 12C "Fund Management Committee" also central level. Led by MoE with MoFinance, MoLocal Development, and Office of the Auditor General.
		13: "District education fund" money comes from GoN, district development committee, donations, etc. Audited by central Dept. of Auditor General
		13a. "Fund of the School" money comes from GoN, district education fund, village development committee/municipality, fees, donations, etc. Audited by GoN.
		16 (1) "The property under the right of Community School will be considered as public property."
		16D (1) "The education provided by Community Schools up to the Primary level will be free... (5) The fees that a school is to collect from the students should be decided only with the permission of His Majesty's Government or the person authorised...based on the classification of schools" (fees show up starting at lower secondary)
	Distributed powers	19 (1) "His Majesty's Government may frame Rules in order to execute objectives of this Act." Outlined in (2), includes fees, grants, exams, transferability of credits, extra-curricular activities, admission, hostel operation, income/expenditure, recordkeeping, curriculum/textbooks, conduct, teacher training, headmaster duties, special education, counselling and guidance, operation.
		14 "(1) His Majesty's Government may, as per necessity, give directives to the District Education Committee and School Management Committee. (2) It shall be the duty of each District Education Committee and School Management Committee to obey the directives given pursuant to Sub-section (1)."
5 "Conduct and Control of Examination: The conduction and control of Primary School Leaving Examination, Lower Secondary Leaving Examination and School Leaving Certificate Examination shall be as prescribed."		
8 "Curriculum and Textbook of the School: The School shall be required to implement the curriculum and text-book as approved by His Majesty's Government."		
9 (1) "His Majesty's Government may establish Regional Education Directorate in each development region" 10 (1) His Majesty's Government may establish a District Education Office in each district"		

Industrial Trainee Training Act 1982		11 (1) "In each district a District Education Committee will be formed to supervise and manage the schools within the district." Members detailed in (2)	
		11(5) "(5) The functions, duties and rights of the District Education Committee will be as follow: (a) To formulate district level plans for education , (b) To encourage the Village Development Committees and Municipalities in assisting the Community Schools financially, (c) To assist in conducting the examinations in the district... (d) To arrange for accumulating resources for the...district, (e) To fix the remuneration for the auditor of the Community School, (f) To distribute and adjust the teachers' positions available among the Community Schools of the district... (g) To forward required instructions to the School Management Committees."	
		11A "...District Education Committee may be dissolved by His Majesty's Government."	
		11B (1) "A Teacher Service Commission will be instituted to appoint teachers in the vacant positions..."	
		11K (1) "(1) In each of the Village Development Committees, a Village Education Committee will be formed in order to supervise and manage the schools that run within the area of the Village Development Committee, and also to establish coordination among the various schools" Members detailed in (2).	
		12 (1) "For every Community School a School Management Committee...will be constituted for its operation, supervision and management" Function is mainly carrying out orders.	
		12a "...the District Education Officer may, stating the reasons thereof, dissolve the School Management Committee of the Pre-primary School and Primary School, and the Regional Education Director may, stating the reasons thereof, dissolve the School Management Committee of the Lower Secondary School and Secondary School..."	
		4(1) "Every trainee shall sign an agreement as prescribed..."	
		9 "Obligation of Manager: (a) To manage for training... (b) To fulfil the obligation created by the agreement... (c) To abide by the directives issued by the Council... (d) To forward the particulars and data sought by the Department, Council or Advisors (3) To conduct training by consulting with the Advisors..."	
		8 "Training allowances: The training allowances to be paid for trainee by the enterprise shall be as prescribed by the Council"	
		9 (1) "Every enterprise shall allocate an amount equivalent to the percent as prescribed by the Department from its net profit to meet the training cost"	
		Certificate	14 "Issuance of certificate: Concerned enterprise shall issue a certificate in such format as prescribed by the Council to the trainee who has passed in the examination conducted by the Council "
		Hiring	15 "Trainee shall be given preference: Every Manager shall, while appointing workers in his/her enterprise, give preference to the trainees who have completed the training from an enterprise."
		Training Council	16 (2) "The following representatives shall be designated: (a) Representative of the Ministry, Department, or Office of the Government of Nepal. (b) Representative of factory or industrial enterprise. (c) Representative of Tribhuvan University. (d) Industrial and Labour expert or experienced person 17 "Functions and duties of the council: ... (a) formulate policy in respect of conducting the training and coordination therefore; (b) To determine the subject of training , to formulate the programme and to approve theoretical and practical curricula of the training... (c) To fix the training allowances ... (d) To determine policy relating to the selection of trainee (e) To supervise and monitor the training (f) To make necessary arrangement for timely and well-arranged training (g) To submit an information or opinion and advice sought by Government of Nepal in relation to the training (h) to issue necessary directives in relation to the training to the enterprise that conducts training. 18 "The council may...formulate a Committee in order to formulate training related curricula and set the standard."
Oversight	19 (1) "The Government of Nepal may issue directives to the Council" (2) "Council may issue directives to the manager..."		

	Penalty	20 (2) if a manager exploits/mistreats a trainee they are "liable to a fine not exceeding one thousand rupees"
	Rules	24 (1) "The Government of Nepal may frame necessary Rules to carry out the objectives of this Act..." (2) "... (a) Conduct of training. (b) Kinds of training and its duration. (c) Qualification of trainees. (d) Numbers and selection of the trainee. (e) The format of agreement to be signed by the trainee. (f) Provisions relating to health and safety of the trainees. (g) Conduct and discipline of trainees. (h) Provisions on record relating to training and trainee. (i) Provisions relating to the secretariat of the Council. (j) Other necessary matters related to industrial trainee training."
	Bylaws	25 (1) "Enterprise may...frame bylaws in respect of the conduct and discipline to be followed by the trainees"
Industrial Enterprises Act, 1993	Purpose	Preamble: "for the overall economic development of the country, it is expedient to make arrangement for fostering industrial enterprises in a competitive manner through the increment in the productivity by making the environment of industrial investment more congenial, straightforward, and encouraging."
	Industries	3 is a list of industries by classification that might be a great starting point for occupations to be given standards.
	Board	13(a) "To render necessary cooperation in formulating and implementing policies, laws, and regulations pertaining to the industrialization of the country"
		13(b) "To maintain coordination between the policy level and the implementation level of the industrial policy"
	Tax credit for training	15(*z) "An industry will be entitled, for the purpose of the income tax, to deduct the amount of expenses incurred by it for the long-term benefit provided to its workers and employees including housing, life, insurance, health facilities, education and training. "
	Human resources	22(1) "The human resource required for any industry shall have to be recruited from among Nepali citizens"
	Delegation	26(1) "The Board may delegate any or all of its power...to the concerned Department, Office, official Committee, any member of the Board or any other committees or sub-committees constituted by the Board as necessary"
26(2) "The Department may delegate any or all of its power...to any other department, office or official as necessary"		
Labour Act 1992	Minimum wage	21 (1) "Government of Nepal may fix the minimum remuneration on the recommendation of the Minimum Remuneration Fixation Committee and the notification on rates so fixed shall be published in the Nepal Gazette."
		21 (6) "No agreement may be entered into between the manager and workers or employees in a way to make the minimum remuneration, dearness allowances and facilities lesser than those fixed pursuant to Sub-section (1)."
	Minors	32A (1) "No minor shall be engaged in works without adequate directives about the concerned working areas or vocational training."
		32A (2) "Provisions with regard to adequate directives about the concerned working areas or vocational training to be given to minors pursuant to Sub-section (1) shall be as prescribed."
Changing laws	84 (1) "Government of Nepal may ...grant exemption from application of any matter provided for in this Act in respect of any Enterprise."	

Table A1.3: Specific articles from Policies related to TVET

Policy	Topic	Quotation
TVET Policy, 2012	Background	Nepal has a long history of informal TVET. Formal TVET has had many stops and starts since 1942.
	Present situation	Policy considers it "properly developed" but lists huge diversity of training providers, types, models, etc. Makes the system highly fragmented and undermines its status as an educational pathway.
	Youths and Employment	3 "no consistency every year between the youth introducing to the labour market and the availability of employment"
	Plans	4 "Although the technical and vocational education and training has achieved numerical progress, we have yet to do very much for its qualitative improvement"
		4. "only a very poor number of the trainees from the poor and marginalised community have their access to such institutions"
		4. "training programmes are not operated in consonance with the demand of the market"
	Objectives	OBJECTIVE 1. "Establish the inclusive and equitable approach of the whole interested citizens by making wide extension of the opportunities..."
		OBJECTIVE 1. "...so as to prepare the capable, efficient, competitive, and productive human resource for the economic development of country and to create opportunity of employment for all"
		1.1.1 "to be addressed the need of the whole geographical areas and communities"
		1.1.2 "Create an environment of extensive participation...decentralization, partnership, autonomy, flexibility, simple regularization..."
		1.1.3 "applying the appropriate standard"
		1.1 (1) "to extend the opportunities of technical education and vocational training through the governmental, non-governmental, cooperative and private training providers by developing the technical education and vocational training as a separate stream"
		1.1 (3) "to operate...programmes of different models including the centre-based, apprenticeship , and mobile ones"
		1.1 (4) "To develop the undertaken schools and vocational training centres operated under the Council for the Technical Education and Vocational Training as the model training institutions"
1.1 (5) "To operate the vocational training programmes also through the community schools..."		
1.1 (6) "To act in partnership and joint venture with the government, non-government, community and private sector so as to provide vocational training to the persons introducing to the labour market"		
1.2 "Guarantee of access to the vocational training and inclusion"		
OBJECTIVE 2. "To provide appropriate, contextual, and qualitative technical education...in consonance with the demand of the national and international employment market" including traditional skills		
OBJECTIVE 2. "by making...qualification and by covering the skill that is learnt formally or informally"		
2.1 "To make adjustment and determination of quality of the academic path..." through working policies for RPL, further TVET, "equivalence towards the ordinary education also", and career development/guidance including National Skill Test Committee and National Vocational Qualification Test Authority		
2.2 "To emphasise the quality and appropriateness in the implementation ...independent evaluation...involvement of stakeholders" through clear standards, licenced instructors, curriculum based on professional standards, and autonomous examination/evaluation of training.		
OBJECTIVE 3. "To make maximum utilization of resources and means by proceeding...in a coordinative manner"		

Youth Policy 2010	Division of powers	<p>3 (policy) Establishing a fund. One window system, labour market information system, monitoring and evaluation system.</p> <p>3 (working policy 1) TVET fund to involve every "concerned" ministry plus CTEVT, federations, chambers of commerce, organizations, associations, providers, private sector, and professionals.</p> <p>3 (working policies) there are 17 working policies, very complex and not particularly well organised. Mix all the functions and levels, principles and goals. For example: Includes making publicity about TVET which is good, but also requires regular forecasts of the "demand for skilled manpower" which is basically impossible.</p>
		<p>Schedule 1: "Responsible agencies for Implementation of Policy"</p> <p>17 ministries, plus CTEVT, various departments, universities, academies, NGOS.</p> <p>Full list of ministries:</p> <ul style="list-style-type: none"> • Ministry of Education • Ministry of Finance • Ministry of Law, Justice, Constituent Assembly and Parliamentary Affairs • Ministry of Labour and Employment • Ministry of Industries • Ministry of Culture, Tourism and civil Aviation • Ministry of Federal Affairs and Local Development • Ministry of Agricultural Development <p>Other government bodies:</p> <ul style="list-style-type: none"> • CTEVT • National Planning Commission • Department of Cottage and Small Scale Industries • Skill Development Training Directorates • Nepal Federation of Chamber of Commerce and Industry • Department of Labour and Employment • Registered mail • District Development Committees <p>Non-government bodies:</p> <ul style="list-style-type: none"> • Private Organizations • Universities • Technician Training Academy • Concerned non-government organizations <p>New bodies & systems created</p> <ul style="list-style-type: none"> • National Vocational Qualification Authority • National Skill Test Committee • Coordination committees in the Centre and Regions • At least one vocational training structure in each district • At least one Technical School/Multiple College in each zone • Technical Education Programme and Vocational Training Centre in at least one Community School per election constituency • Special facilities and training providers for remote areas • TVET Fund • Training Cost and Scholarship Policy and Standard • Labour Market Information System • Training Management Information System • Equivalence system • One Window system
		<p>4(1) "The long-term vision of this National Youth Policy shall be to prepare capable, entrepreneur, creative and competent youths...so that they can render a meaningful contribution to the economic, social, political and cultural spheres of the nation..."</p> <p>4(2) "The main goal of this Policy shall be to make qualitative the role of youths and capacity inherent in them for building prosperous, modern and just Nepal, while integrating the youths in the mainstream of national development, through meaningful participation, capacity and leadership development."</p>
Objectives	<p>5 (1) "To develop and expand the role and potentiality of the youths in the nation building and national development;"</p> <p>5 (3) "To develop the youths as the basic energy of development by developing creativeness, entrepreneurship and innovative aptitude on the youths, and bring out the capacity inherent in them;"</p> <p>5 (6) "To support individual and social development including education, employment and career of the youths who are in the course of imparting education and in the sensitive stage of establishing their identity in the society;"</p>	

	<p>6 (6) "Special focus shall be given to launch programmes targeted, in particular, to the youths who are in the process of imparting education and in search of career opportunity, while taking into consideration of the needs of their age groups."</p> <p>6 (9) "The youths shall be developed as a driving force of social change, through collaboration with the private, non-governmental and local bodies, as well."</p> <p>6 (13) "Appropriate investment shall be made also with participation of the private sector for the development of knowledge, skills and capacity of the youths, in order to empower and institutionalise the search for youth talents, and boost up the talent latent in the youths, develop their skills and capacity and utilise the same in the productive area."</p> <p>6 (14) "Various programmes shall be launched in order to develop entrepreneurship on the youths."</p> <p>6 (16) "Appropriate opportunities of quality education, training, study and research shall be generated and developed for the development of the role and potentiality of the youths in the national development."</p> <p>6 (18) "Environment shall be created to prevent brain drain by creating opportunities of career development within the country for talent youths in various sectors."</p> <p>6 (21) "There shall be developed a policy of coordinating, in an integrated manner, the programmes launch by various bodies of the State for the youths."</p> <p>7 "(1) Basic rights of livelihood: (a) Programmes shall be launched in a coordinated manner in order to establish the rights of food, shelter, clothing, education, health, employment and security of the youths."</p> <p>7 "(2) Education: (a) Access of the youths to education shall be ensured, while taking initiation to make education up to higher secondary level free and compulsory in a gradual manner. (b) Education shall be made scientific, empirical and skills-oriented and linked with labour, and youths shall be made competent to earn normal livelihood post the school living certificate level examination. (c) Technical human resources shall be prepared by establishing technical schools, focusing on matters such as water resources, forest resources, tourism resources, agriculture, animal husbandry and herbs. ... (g) Such educational programmes as to develop skilled human resources required at the national and international labour markets shall be launched. Special educational programmes shall be launched, targeting the youths involved in foreign labour market. ... (i) Skills-oriented training and literacy programmes as required for the youths who are deprived of formal education shall be launched. (j) Skills training centres shall be established and training imparted on tourism, cottage industry and agro-industry in a manner to utilise natural resources of Nepal, and investment being made by the government and non-government sectors in education shall be centred for the development of appropriate technology in the fields including agriculture, tourism, animal husbandry, forestry, herbs production and processing and hydro-power.</p>
Working Policies	<p>7 "(4) Social security: ... (b) Provisions shall be made to provide consultancy service to the youths on areas such as health and career development."</p> <p>7 "(5) Employment: (a) Development of rural and agro-industry shall be focused on, by providing entrepreneurship and other vocational training, in order to enhance employment. (b) For the development of professionalism and entrepreneurship and generation of employment of the youths, initiation shall be taken to establish and develop financial institutions, as required. In order to develop entrepreneurship on the youths who have technical knowledge and skills, programmes shall be launched to provide youth friendly loans and seed money on the basis of certificate. (c) Generation of youth human resources according to the need of labour market shall be focused on, while mitigating disharmony noticed in the labour market and labour force production. ... (g) The youth employment programme shall be expanded up to the local level in a coordinated manner by establishing the "youth employment promotion centre..." (j) Programmes to send the youths for foreign employment after providing them with formal and technical training within the country according to the demand for human resources prior to going for foreign employment shall be promoted. ... (p) Eight-hour working day and minimum wages shall be determined for labour youths and made effective; and physical and mental exploitation of and discrimination against youth labours at workplace shall be ended. (r) Development of youth labours shall be focused on, while guaranteeing safe, healthy and decent work and encouraging programmes establishing the labour right."</p> <p>7 "(6) Youth empowerment and leadership development: (a) Youth awareness and orientation programmes shall be launched for the economic, social, political and cultural empowerment of youths. (b) Programmes shall be launched through Local Bodies for the individual and social capacity building of youths. ... (g) Counselling and service centres shall be established for the career and leadership development of youths."</p> <p>7 "(12) Access of youths to science and information technology: (a) Such environment shall be created as to encourage brighter youth talents in the field of science and technology and provide them with respectable position in Nepal, by providing for abroad study and training to them. (b) Special scholarship shall be provided for so as to attract brighter youths towards</p>

Non-Formal Education Policy 2007		<p>the development of modern technology in the fields including the use of resources, agriculture, animal husbandry, herbs production and processing and hydro-power. (c) Programmes shall be operated in a coordinated manner for ensuring the access of the youths in rural areas to information and communication technology. (d) Training on information and technology shall be launched for the youths falling in the special priority group. (e) Programmes shall be put forward for making the Nepalese youths in general competent in information and communication technology and success in competition at the world market, at this era of globalization."</p> <p>7 '(15) Equitable development: (a) Special programmes shall be operated for the implementation of the policy of social inclusion, having regard to the youths falling in the special priority group. (b) The State shall put forward such programmes as to identify the poor youth talents undergoing economic deplorability and support their development."</p> <p>7 "(16) Special group priorities (a) Schools and education centres with facilities shall be established, while adopting special teaching methods so that the youths with disability may inculcate education easily. Employment that the persons with disability can be engaged in shall be identified and necessary arrangements shall be made, while providing skills oriented and vocational education according to their capacity... (b) There shall be pursued a policy of rehabilitating the vulnerable youths in the society by providing for appropriate employment by imparting skill oriented and vocational education... (c) Rehabilitation programmes shall be initiated by arranging for special priority to the youths who are victims from conflict in the fields of education, health and employment. In addition, programmes on making appropriate arrangement for employment by way of skill-oriented training shall be launched. (d) Special programmes shall be launched to enable the minority and marginalised youths to have access to natural, social, cultural and traditional resources. In addition, special focus shall be given to the protection, promotion and modernization of traditional occupation and skills..."</p> <p>7 "17. Partnership: (a) Various programmes shall be launched in partnership between the government, local bodies, youth organizations, donor communities, nongovernmental organizations and private sector for the development of the youth community."</p>
	TVET	<p>8. "(2) Non-governmental sector: Youth organizations, national and international non-governmental organizations, private sector, civil society and Local Bodies shall be encouraged and mobilised for the operation of programmes relating to youths, and appropriate environment shall be created to that end. Such organizations shall be mobilised as partners so that their resources can be mobilised in programmes relating to youths. The national youth council shall direct and coordinate this activity."</p>
	Background	<p>"Programmes related to life long and continuous education, skill development and income generation...training and support for developing technical and vocational skills useful for earning livelihood at the local level."</p>
	VET in non-formal education	<p>"Policy 1: Non-Formal Education will be expanded to provide the academic and practical knowledge, skills and information to different age and levels of learners...Provision of vocational education will be made for those who are not able to obtain school education."</p> <p>"Policy 2: Non Formal Education equivalent to Formal Education will be provided to those who are deprived of educational opportunity or who dropped out of education...Occupational and vocational courses including skill training programmes will be considered as non-credit courses."</p> <p>"Policy 3: Special provisions will be made to increase access to education...Different agencies will be given approval and support to run open school, and professional and vocational education institutes."</p>
Federalizing non-formal education	<p>"Policy 4: Development and distribution of curricular and learning materials will gradually be decentralised and localised...The quality of the materials...will be as per the standard set by Non Formal Education Centre...The competency level of the curriculum, textbooks and learning materials of open school will be as per the standard set by concerned authority...Agencies and the Non-Governmental Organizations...will be involved while developing the framework of core curriculum and materials."</p> <p>Strategies for Policy 4: "Non Formal Education Centre will identify and make a list of expected learning outcomes... Non Formal Education Centre will update the expected learning outcomes... For the purpose of equivalency the curriculum, learning materials... should be prepared in agreement with the expected learning outcomes of Non Formal Education."</p> <p>"Policy 6: The implementation of monitoring, supervision and evaluation of non-formal education programmes will be decentralised." Strategy: "Agencies involved in Non-Governmental Organizations should provide their monitoring and evaluation reports to District Education Offices Non Formal Education Unit."</p> <p>"Policy 7: Networking and coordination and partnership will be maintained with the agencies involved in Non Formal Education for resource generation and mobilization...Non Formal</p>	

School Sector Reform Plan		Education Centre will work as the central authority...will coordinate with various ministries to reduce duplication..."
		"Policy 9: Common database will be developed and shared among the agencies involved in non-formal education programmes...Local bodies will conduct survey and create the Non-Formal Education Management System..."
	TVET	3.4 goal of secondary education: "To meet the national development needs by producing competent and skilled human resources and to provide a sound foundation for tertiary education."
		3.4 TVET as alternative programme: "Introduction of technical education, with a focus on vocational skills through alternative arrangements."
		3.4 Quality and relevance "Introduction of TVET in secondary schools, including soft skills, on a pilot basis with subsequent integration into school education."
		3.4 examination reform "At the secondary level, two certificates will be provided: a) Secondary Level Certificate (SLC) or Technical Secondary Level Certificate (TSLC), and b) Higher Secondary Level Certificate (HSLC) or Technical Higher Secondary Level Certificate (THSLC)."
		3.4 examination reform "Under the national examination framework, provided by the National Examination Board, the Council for Technical Education and Vocational Training (CTEVT) will conduct the certification examinations (including skills testing) for students in the short-term vocational, technical and traditional skills schemes."
		4.3 in literacy and lifelong learning "Past experiences show that literacy programmes could not directly contribute to improving peoples' livelihoods and raising their standards of living."
		5.1 CTEVT is still going to be in charge of TVET, but we're adding some TVET-related soft skills into the secondary curriculum on a trial basis. Plan does not fund equipment/facilities for TVET schools. Hints at expansion of TVET under another plan or policy
		5.2 goal of including TVET soft skills in secondary "To equip students with employable skills, which will assist and accelerate their transition from school to work and help them explore a variety of career opportunities"
		5.3 challenges for TVET: technological change makes curriculum development hard, infrastructure can be expensive.
		5.4 policy directions for TVET "Vertical and horizontal links among technical and vocational channels will be established with the general stream of education, providing mobility from the non-formal/technical to formal modes of learning and vice versa."
		5.5 key results: " Basic life skills and introductory contents on vocational skills will be integrated in grades 6 to 8 curricula. Vocational curricula focusing on soft-skills will be developed for secondary education. Different technical/vocational components , focusing on soft skills such as crafts and business skills, computer skills and so forth, will be piloted and tested in 100 public secondary schools for model building."
		5.6 strategies: Integrate TVET into school curricula , and "the following options will be piloted/ tested in the selected schools: (i) Non-formal apprenticeships in grades 9 and 10, using private sector training opportunities. (ii) Three learning tracks (science/technology, business/commerce and liberal arts) in grades 11 and 12."
		6.6 talks about "avenues to qualification upgrade" for teacher training. Idea of permeability is there but isn't considered outside teaching field.
		Federalization
3 "This plan has given similar emphasis to institutionalization of decentralised governance and management systems in education."		
Implementation	3.3 "National norms and standards for input, process and learning outcomes...MOE has retained its responsibility for policy formulation, planning and budgeting, coordination and monitoring progress towards national policy goals and strategic objectives...The local government is entrusted with the responsibility for the planning, implementing and monitoring of ECED and Basic Education,"	
	Intro "three important areas related to the implementation of the plan: Monitoring and Evaluation, Financial Management, and Aid Coordination and Management."	

Industrial Policy 2011		Education will provide policy directions to the education sector including TEVT sub-sector, and the Education Review Office (ERO) will play an important part in the overall review of the TEVT component."
		7.4 "Strengthening the capacity of MOE and its line agencies to plan, implement, evaluate and sustain the benefits of capacity development activities."
	Background	Update to Industrial Enterprises Act 1993, which was gradually gutted or ignored until 2010 and fail to accomplish its goals. "Efforts to make the industries competitive by making available to them other institutional and basic infrastructure services were continued." "...various efforts were made such as capacity development of labourers, enhancing managerial skills...increasing sectoral investment...imparting trainings for entrepreneurship promotion..."
	Present status	"...the available resources, means and potentialities could not have been exploited due to lack of appropriate management capacity..." "...Nepali industries have to enhance productivity and demonstrate professional acumen...Similarly, Nepali industries have to ensure quality of products..." "Nepali industries have to be promoted by way of activities for industrial promotion such as trainings, exchange of information, creating investment friendly atmosphere, and industrial fairs." "...Nepali labour and skills will be utilised..."
	Main challenges	"...weak industrial infrastructures, lack of competent human resources, lack of capacity to adopt new technology, low productivity...weak supply management..." "Lack of the mentality and atmosphere to adopt industrial enterprises as a means of livelihood" "Lack of competent human resources from management level to labourers in Nepal and the available important resources are remained unused"
	Need for new policy	"...condition of labour productivity, condition of industrial infrastructure development, availability of required professional skills and competent labour force, use of latest technology, honour to and protection of innovative research and invention..." "...to involve even private sector in building physical infrastructures and human resources, a new industrial policy is required with a new vision, strategies, aims and objectives and implementation capacity."
	Objectives	7.2 "To increase contribution of industrial sector in the balanced national and regional development by mobilizing local resources, raw materials, skills and means;" 7.4 "To create strong basis of investment having developed productive human resources and managerial capacity required for industrial development thereby establish Nepal as an attractive place for investment in the South Asian region and in the world as well by;"
	Policies	8.6 "Special emphasis shall be given to promote the industries that use local resources, raw materials, skills, labour and technology" 8.11 "In order to attract creative youth talents in industrial enterprises to create opportunities of self-employment, capacity enhancement activities for development of industrial skills and entrepreneurship and sound industrial management shall be launched as a campaign." 8.12 "System of avoidance of inconsistency with industrial development shall be followed while making and reforming macroeconomic policies, revenue policy, local tax and other sectoral policies and while affording protection, facilities and concession to industries, consistency shall be maintained with multilateral and regional agreements." 9.3 "District entrepreneurship development plan shall be prepared in coordination with District Development Committee Municipality/Village Development Committee on the basis of natural resources, human resources and opportunities of investment and shall be implemented in phase wise manner in collaboration with such bodies" 9.5 "Industrial clusters shall be developed having established community or cooperative micro enterprises, cottage and small industries village in order to make available Business Development Services to the production-oriented industries in rural areas. 9.7 "Provision of making available grant shall be made to the local bodies taking initiative to develop industrial infrastructures for micro enterprises, cottage and small industries village based on the proportion of expenses they have made for it."
	Strategies	10.1 "Competitive capacity of industry sector shall be enhanced by utilization of managerial capacity, creativity and promotion of knowledge and skills and adoption of appropriate technology." 10.4 "The labour law shall be made flexible in an objective manner with a view to enhance productivity capacity of labourers and to increase additional employment." 10.7 "The provisions of multilateral, regional and bilateral agreements shall be effectively implemented in consistency with the condition, context and needs of the country" 10.12 "Programmes to assist in technology, market, skills and research shall be made available to the industries based on agriculture, non-timber forest products, animal husbandry, dairy industries, bird farming and industries based on fruits and herbs."

	<p>10.22 "Government of Nepal shall play roles of a facilitator in promotion of industrial investment"</p> <p>10.24 "In order to make the research on industries and skills development trainings meaningful, such programmes shall be unified"</p> <p>10.26 "To internalise the concept of partnership among public, private and cooperative sector and to enhance work efficiency, professional persons from cooperative sector shall also be involved in Committees, Authority, Board and so on to be formed under the Ministry of Industries."</p> <p>11.2 "To the extent possible, the micro and cottage entrepreneurs shall be associated with groups and provisions shall be made for providing unified business development service to provide them entrepreneurship and skills development trainings, and to assist them in selecting appropriate technology, production management, access to capital, and in marketing."</p>
Taxation & Incentives	<p>17(A) Industries set up in underdeveloped areas are entitled to exemptions from income tax up to 90%</p> <p>17.9 "The expenses incurred for serving long term interests and welfare of labourers and employees of an industry such as residence, life insurance, health facilities, education and training, child care centres sports/ exercises for physical fitness may be deducted for the purpose of income tax."</p> <p>17.11 "For the purpose of income tax assessment, an amount not exceeding five percent of the total sales income of the industry may be expensed for enhancement of entrepreneurship and skills development training research and development and for acquiring new technology."</p>
HR Development	<p>20.3 existing training institutes "shall be integrated and an Academy for Development of Industrial Human Resources shall be established under a separate law"</p> <p>"In order to conduct functions relating to research, consultancy, training, and capacity development for productivity, a separate National Productivity Council shall be established..."</p> <p>20.8.3 "In order to strengthen and expand the working efficiency of the Bureau [of standards and metrology], provisions shall be made for additional technical human resources, regional offices with laboratories, training centres, and timely reform shall be made in working procedures and means and resources."</p> <p>21.6 "In order to develop women entrepreneurship and to encourage women to become an entrepreneur, women shall be involved in trainings, meetings, seminars, study visits on technology development."</p>

Appendix 2: Constitutional comparison for TVET

Table A2: Comparing relevant quotations from the NC and 2007 Interim Constitution (OC) for TVET

Topic	Specific topic	NC quotation	OC quotation	Difference in old	Strength
Rights	Right to education	3.31(1) "Every citizen shall have the right of access to basic education. (2) Every citizen shall have the right to get compulsory and free education up to the basic level and free education up to the secondary level from the state."	17(2) "Every citizen shall have the right to get free education up to the secondary level from the State, as provided in law."	Different wording, similar	Similar
		3.31(5) "Every Nepalese community residing in Nepal shall have the right to get education in its mother tongue and, for that purpose, to open and operate schools and educational institutes, in accordance with law."	17(1) "Every community shall have the right to get basic education in its own mother tongue, as provided in law."	No opening/operating schools but similar	New, slightly
	Right to employment	3.33(1) "Every citizen shall have the right to employment. The terms and conditions of employment, and unemployment benefit shall be as provided for in the Federal law. (2) Every citizen shall have the right to choose employment."	18(1) "Every citizen shall have the right to employment, as provided in law"	Right to employment less broad, choice of employment added	Similar
Special Groups	Youth	4.51(j) (7) "to create an atmosphere conducive to the full enjoyment of the political, economic, social, and cultural rights , while enhancing the participation of youths in national development , to make their personality development , while providing special opportunity in areas including education, health and employment for the empowerment and development of the youths and provide them with appropriate opportunities for the overall development of the State."	35(20) "The State shall pursue a special policy of mobilizing the youthful human resources in the development of the country."	Similar but the NC is much more holistic and contributes opportunities/atmosphere/empowerment to youth instead of only demanding contributions to development.	New (slightly)
	<i>Dalits</i> and other marginalised groups	3.40(2) "...Special provision shall be made by law for the Dalit in technical and vocational education."	35(10) "The State shall pursue a policy of uplifting the economically and socially backward indigenous peoples, Madhesi, Dalit, marginalised communities, and workers and farmers living below the poverty line, by making a provision of reservation in education, health, housing, food sovereignty and employment, for a certain period of time"	Similar	Similar

Freedoms	Women	Mentioned a lot	35(8) "The State shall pursue a policy of making the women participate, to the maximum extent, in the task of national development, by making special provisions for their education, health and employment."	Both mention special provisions for women etc.	Similar
	Professional freedom	3.17 "Freedom to practice any profession, carry on any occupation, and establish and operate any industry, trade and business in any part of Nepal "	13.3(f) Freedom to practice any profession, carry on any occupation, industry and trade.	Missing "in any part of Nepal"	New
Plan / Policies (basic needs)	Human resources	4.51(h)(1) "to prepare human resources that are competent, competitive, ethical, and devoted to national interests, while making education scientific, technical, vocational , empirical, employment and people-oriented"		No human resource development in the OC.	New
	TVET		35(16) "The State shall pursue a policy of making infrastructures required to impart technical education, training and orientation for the development of that class of people dependent including farmers and workers, to have their participation in the process of development of the State."	Specific TVET-related point that is not present in the new construction.	Old
	Technology		35(11) "The State shall, for the progress of the country, pursue a policy of giving priority to the development of science and technology and also pursue a policy of developing local technology."	Similar to other policies but NC does not mention developing science and technology	Old
	Labour force	4.51(i)(1) " to make competent and professional the labour force that has remained as the main socio-economic strength of the country and enhance employment within the country, while ensuring a situation enabling all to work "	35(7) "The State shall pursue a policy of ensuring the right to work of the labour force, which remains as the major social and economic strength of the country, by providing them with employment and raising their participation in the management of enterprises, while at the same time protecting their rights and interests."	OC only addresses the right to work, not preparation for work as in the NC.	New
	Traditional occupations	3.40 (4) "The Dalit community shall have the right to use, protect and develop their traditional occupation, knowledge, skill, and technology. The State shall accord priority to the Dalit community in modern business related with their traditional occupation and provide skills and resources required therefore."	Both constitutions mention Dalits	Dalits mentioned in OC but not regarding special educational priorities	New

	4.51(c)(2) "to carrying out studies, research works, excavation and dissemination for the protection, promotion, and development of ancient, archaeological, and cultural heritages"	35(18) "The State shall pursue a policy of identifying, protecting and modernizing the traditional knowledge, skills and practices existing in the country."	Not as research-specific but its there	Similar
Guidance / Info	4.51(h)(4) "to establish and promote community information centres and libraries for the personality development of citizens"		Not mentioned in OC.	New
Development	3.40 (3) "The economic objective of the state shall be to achieve a sustainable economic development, while achieving rapid economic growth..."	34(4) "The fundamental economic objective of the State shall be to transform the national economy into an independent, self-reliant and progressive economy by making...such provisions as to eliminate economic inequalities and prevent economic exploitation..., and by giving priority and encouragement to national enterprises, both private and public."	Economic objectives about growth etc., old mentions private sector.	Similar
	4.51(d)(2) "to achieve economic prosperity by way of optimum mobilization of the available means and resources, while focusing on the role of private sector in the economy"	35(2) "(2) The State shall pursue a policy of developing economy of the country through the governmental, cooperative and private sectors."	Private sector mentioned in passing by both	Similar
		35(1) "The State shall pursue a policy of raising the standards of living of the general public through the development of infrastructures such as education, health, housing and employment of the people of all regions, by equitably distributing investment of economic investment for the balanced development of the country."	Old constitution uses infrastructure to raise the standard of living, including education and employment.	Old
	4.51(d)(8) "to protect and promote domestic industries and resources and accord priority to domestic investment based on Nepalese labour, skills, and raw materials for the development of national economy."	33(l) "To pursue a policy of extensively increasing opportunities for employment and income generation by increasing investment for promoting industry, trade and export and ensuring the professional rights of labours;"	Similar	Similar
Federalism Coordination & federal control	4.51(d)(13) "to give dynamism to the economic development by establishing coordination between the States and the States in the Federation in relation to industrial corridors, special economic zones, national projects , and projects involving foreign investment"			
	20.235 (1) "The Federal Parliament shall make necessary laws in order to maintain coordination between the Federation, State and Local level. (2) The State Assembly may maintain coordination between the State and Village Bodies or Municipalities..."	33(d) "To make an inclusive, democratic and progressive restructuring of the State, by ending the existing centralised and unitary structure of the State so as to address the problems..."	NC refers to decentralization but not federalism.	New

	<p>5.59 (2) "The Federation may so make necessary policies, standards and laws on any of the matters enumerated in the Concurrent List and other areas of financial powers as to be applicable also to the States"</p> <p>20.232 (2) "The Government of Nepal may, pursuant to this Constitution and the Federal Law, give necessary directions to any State Council of Ministers on matters of national importance and on matters to be coordinated between the States, and it shall be the duty of the concerned State Council of Ministers to abide by such directions" & (8) "The Government of Nepal may, directly or through the State Government, render necessary assistance to, and give necessary directives to, any Village Executive or Municipal Executive, pursuant to this constitution and the Federal law. It shall be the duty of the Village Executive or Municipal Executive to abide by such directives."</p>			
Federal exclusive	<p>S-5.5 "Central planning..."</p> <p>S-5.13 "Central statistics..."</p> <p>S-5.15 "Central universities, central level academies, universities standards and regulation, central libraries"</p> <p>S5.16 "...standards, quality and monitoring..." for health</p>	139(1) "decentralization and devolution of authority in order to promote the participation of people..."	Decentralization and devolution of authority, no specific reference to federalism.	New
State exclusive	<p>S-6.6 "State statistics"</p> <p>S-6.8 "State universities, higher education, libraries, museums"</p>			
Fed-State concurrent	<p>S7.7 "Contracts, cooperatives, partnership and agency related matters</p> <p>S7.11 "Social security and employment, trade unions..."</p> <p>S-7.15 "Industries and mines and physical infrastructures"</p>			
Local exclusive	<p>S-8.5 "Management of the Local services"</p> <p>S-8.6 "Collection of local statistics and records"</p> <p>S-8.8 "Basic and secondary education"</p>			
Fed-state-local concurrent	S-9.2 " Education , health and newspapers"			

Transition to federalism	Temporary control	33.296 (4) "The legislative power of the State Assembly with respect of matters set forth in Schedule-6 shall, upon the commencement of this Constitution, be vested in the Legislature-Parliament set forth in clause (1) until the State Assembly is formed. Any law so made shall be inoperative in relation to that State after one year of the date of formation of the State Assembly set forth in this Constitution."	138(1) "There shall be made progressive restructuring of the State with inclusive, democratic federal system of governance, ⁹⁷ by doing away with the centralised and unitary structure of the State so as to end discriminations based on class, caste, language, gender, culture, religion and region."	Decentralization will be progressive in OC, but no specific process.	New
		33.302 (1) "The Government of Nepal shall make necessary provisions for the delivery of services at the state and local levels "			
	Temporary continuation	33.303 (1) "The Local Bodies existing at the time of commencement of this Constitution shall continue to exist until the determination of the number and areas of the Local level in accordance with this Constitution"	164(2) "laws existing at the time of the commencement of this Constitution shall continue to be in force"	No reference to local bodies or ministers in the OC, only laws.	New
		33.304 (1) "The Nepal laws in force at the time of commencement of this Constitution shall continue to be in force until such laws are repealed or amended"			
		33.298 (1) "The Council of Ministers existing at the time of commencement of this Constitution shall continue to exist until the Council of Ministers set forth in clause (2) is formed."			

Appendix 3: Online survey questionnaire

Thank you for participating in this survey!

Your responses will be held strictly confidential and used solely for research purposes. This survey is about **technical and vocational education and training (TVET) in Nepal**.

Instructions:

- Please rate the following characteristics of TVET in Nepal for the **current TVET system** in Nepal and your **ideal TVET system in 2030**. You can leave optional comments if you wish.
- **If you have any questions**, please write to Dr. Katie Caves: caves@kof.ethz.ch
- Thank you very much!
-

Definitions

- Technical and vocational education and training (**TVET**) is an educational process involving general education combined with practical skills and knowledge relating to occupations in various sectors of economic life. (Adapted from UN definition)
- The **legal framework** is the law or set of laws that defines the basic outline of TVET, including which occupations are included, where they are taught and trained, how stakeholders are engaged, and who is responsible for all parts of the system.
- The **occupational standards** and **framework curriculum** for each occupation define the skills and knowledge required to earn a qualification. They broadly define what should be taught and trained, and what will be on the final examination.
- **Training plans** define what students do and how their time is divided according to places, tasks, and topics.
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Respondent Characteristics

[q01] What is your role in Nepal's TVET system?

- Government ministry
- CTEVT
- NVQS Advisory Committee
- Donor/NGO
- Research/University
- Other: _____

[q02] In which Ministry or Office do you work? _____

1. Legal framework for TVET

Please rate the following statements from 1 (not accurate at all) to 5 (very accurate).

For every question, you will give one rating Nepal's current TVET system and a second for your ideal TVET system in 2030.

[q11] TVET is governed by a single set of rules.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when TVET is fully regulated by one law or body of legislation.
- This is partially true when there are several laws in the same sphere that complement one another and act as a composite legal framework (e.g. a national legislation on education).
- This is not true if many laws apply to different legal areas and political spheres (e.g. laws for education, economy, labour, etc.).

[q11a] Comment (optional): _____

[q12] Occupational standards are all set at the same legal level.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when occupational standards are set at the national level.
- This is not true when occupational standards are made at different levels (e.g. national, provincial, local, etc.).

[q12a] Comment (optional): _____

[q13] There are centralised mechanisms for curriculum development.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when occupational standards and framework curricula are set nationally then turned into concrete curricula at the provincial level and training plans at the local level through a clear and regulated process.
- This is not true and the process is fragmented when there are no national occupational standards and curricula are developed separately both vertically (federal, provinces, training providers) and horizontally (standards are different across provinces or learning locations).

[q13a] Comment (optional): _____

[q14] There are binding rules for cooperation among learning places.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when the legal framework for TVET covers all learning places (i.e. vocational schools, workplaces, training centres, etc.) in its scope and gives clear instructions for them to cooperate.
- This is not true when instructions for cooperation are unclear or missing, or when only some learning places are covered by the legal framework.

[q14a] Comment (optional): _____

[q15] All learning places are included in testing and grading students.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when all learning places are included in testing and giving grades.
- This is not true when only one or some learning locations (i.e. only vocational schools) can give tests and grade students.

[q15a] Comment (optional): _____

2. Actor & Stakeholder Interactions

Please rate the following statements from 1 (not accurate at all) to 5 (very accurate).

For every question, you will give one rating Nepal's current TVET system and a second for your ideal TVET system in 2030.

[q21] All TVET actors are formally included in the TVET dialogue.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when all actors, including the federal government, provincial government, employers, students, schools, and researchers are included in the TVET system at the appropriate level.
- This is not true when any relevant actor (i.e. businesses, students, etc.) is not included in the TVET dialogue or legal framework.

[q21a] Comment (optional): _____

[q22] All TVET actors have clear roles and responsibilities.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when all potential TVET actors (i.e. Ministry of Education, Ministry of Labor, provincial education and labour authorities, businesses, employer associations, vocational schools, training centres, students, etc.) have clear roles and responsibilities in the legal framework.
- This is not true when any actor's role or responsibilities are not clear.

[q22a] Comment (optional): _____

[q23] A single institution coordinates the whole system.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when there is a single institution (i.e. the Ministry of Education) responsible for managing coordination. Coordination includes stakeholder engagement, communication, and moderation of the TVET dialogue.
- This is partially true when the responsibility for coordination is divided among many institutions.
- This is not true when there is no specified coordinating role or body.

[q23a] Comment (optional): _____

[q24] All actors are involved from the start of new planning, standards development, or curriculum development.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when the legal framework requires all TVET actors be involved from the outset of planning for curriculum and standards development.
- This is not true when any actor—often employers or vocational schools—is excluded from having the right to initiate changes or ideas when necessary.

[q24a] Comment (optional): _____

[q25] Cooperation between learning places is institutionalised in law and practice.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when there are clear mechanisms for cooperation between actors like schools and business, educators and employers, or teachers and trainers (e.g. professional conferences, curriculum development processes, etc.).
- This is not true when there is no law requiring cooperation or when it is not carried out.

[q25a] Comment (optional): _____

3. Improvement & Updating

Please rate the following statements from 1 (not accurate at all) to 5 (very accurate).

For every question, you will give one rating Nepal's current TVET system and a second for your ideal TVET system in 2030.

[q31] There is an ongoing requirement for TVET updating and further development.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when continuing improvement and updating is required as part of the TVET legal framework. For example, curriculum updates every three years.
- This is not true when the TVET legal framework does not require improvement or updating.

[q31a] Comment (optional): _____

[q32] Curricula and standards are regularly evaluated.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when there is a requirement and resources for regular (i.e. every three years) evaluation of new and ongoing TVET standards, curricula, and practices.
- This is not true when there is no requirement or resources for evaluation or new or ongoing TVET standards, curricula, and practices.

[q32a] Comment (optional): _____

[q33] TVET is improved through better cooperation among learning places.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when there are TVET improvement programmes focused on maximizing the potential of all learning places and improving cooperation.
- This is not true when there is no plan for improving TVET by improving learning-place cooperation.

[q33a] Comment (optional): _____

[q34] TVET is improved by measuring and evaluating occupational standards and their development.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when there are TVET improvement programmes focused on tools and methods for measuring the quality of TVET, especially standards and curriculum development processes.

- This is not true when there are no plans for improving TVET by improving occupational standards or their development.

[q34a] Comment (optional): _____

4. Policy balance

Please rate the following statements from 1 (not accurate at all) to 5 (very accurate).

For every question, you will give one rating Nepal's current TVET system and a second for your ideal TVET system in 2030.

[q41] TVET goals apply to all relevant policy areas: education, the economy/business, the labour market, and social policy.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when there are clear TVET goals for all relevant policy areas. **TVET goals** might include enrollment, training rates, successful employment of graduates, etc.
- This is not true when there is no goal in one or more relevant policy area.

[q41a] Comment (optional): _____

[q42] The actors involved in TVET represent all relevant policy areas.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when there are actors involved in TVET from all relevant areas, including education, the economy/business, the labour market, and social policy.
- This is not true when one or more policy area is not represented. Often the under-represented groups are private enterprises/businesses or workers.

[q42a] Comment (optional): _____

[q43] The interests of actors from different policy areas are balanced in TVET decision-making processes.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when actors from all relevant policy areas (education, the economy/business, the labour market, and social policy) all share power over TVET decisions in a balanced way.
- This is not true when one or a few policy areas or actor types dominates the others and decision-making power is unbalanced.

[q43a] Comment (optional): _____

[q44] The educational objectives and content of all learning places (i.e. schools, training companies) are complementary and fit together.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when the objectives of each learning place are defined by clear agreements and complement one another. For example, when practical skills are taught in the workplace and general knowledge is taught at school.
- This is not true when learning places have widely diverging or overlapping goals and contradict or replicate one another.

[q44a] Comment (optional): _____

5. Distribution of strategic and operational functions

Please rate the following statements from 1 (not accurate at all) to 5 (very accurate).

For every question, you will give one rating Nepal's current TVET system and a second for your ideal TVET system in 2030.

[q51] The legal framework clearly separates the processes of setting standards and implementing them.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Ideal 2030 TVET system.						

- This is true when strategic and framing tasks (standards and curriculum development, research) are separated from operational tasks (programme delivery, training plans, daily teaching).
- This is not true if one body is responsible for all tasks or if they are not clearly divided. For example, this would not be true if the national government were responsible for each student's training plan.

[q51a] Comment (optional): _____

[q52] TVET tasks are appropriately distributed among levels of government.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

This is true when the federal government is responsible for strategic and framing tasks (standards and curriculum development, research) and provincial or local authorities are responsible for implementation (operations, programme delivery, training plans, etc.).

- This is not true when one level of government (i.e. federal, provincial) is responsible for everything or if the division of tasks is not appropriate (i.e. federal government interacts with students while provincial governments make curricula).

[q52a] Comment (optional): _____

[q53] Occupational standards and curricula are national, while training plans are local or provincial.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when the standards and curricula for TVET are the same throughout the country, and local/provincial authorities are responsible for specific training plans that enact those standards and curricula.

- This is not true when there are no national standards/curricula or when the national government takes over training plans and all TVET processes from local/provincial authorities.

[q53a] Comment (optional): _____

[q54] Learning places have autonomy in the implementation and design of their training.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when learning places can design their own daily training within the frameworks of relevant standards, curricula, and training plans.
- This is not true when learning places must follow specific daily teaching and learning set out by extremely detailed implementation plans from local/provincial/federal authorities.

[q54a] Comment (optional): _____

6. Results orientation

Please rate the following statements from 1 (not accurate at all) to 5 (very accurate).

For every question, you will give one rating Nepal's current TVET system and a second for your ideal TVET system in 2030.

[q61] The legal framework contains binding objectives and standards for TVET.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when there are strong and binding standards and goals in the TVET legal framework.

This is not true when goals are not clear, standards are not clear, or the goals and standards in the TVET legal framework are not binding.

[q61a] Comment (optional): _____

[q62] There are systematic evaluations of progress towards TVET policy goals.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when there is an evaluation of the overall system that checks for progress in TVET policy indicators like training rates, numbers of graduates, or measures of transition into employment and further training.
- This is not true if goals are not set, if goals are set but not evaluated, or if evaluations are irregular and not systematic.

[q62a] Comment (optional): _____

[q63] The results of evaluations are taken into account in future policy decisions.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true if the results of research and outcomes evaluations are taken into account for updating standards and curricula, providing professional development, or otherwise improving TVET.
- This is not true if research or evaluation results are not explicitly part of the improvement and updating decision-making process.

[q63a] Comment (optional): _____

[q64] Examinations are based on standards attainment and readiness for future work and training.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when examinations accurately measure students' ability to meet occupational standards, preparedness to work in their occupation, and capacity to pursue further training or education.

This is not true if examinations do not accurately measure occupational standards or do not demonstrate that students are ready to work or pursue further training.

[q64a] Comment (optional): _____

[q65] Examinations allow for different routes to learning.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true when examinations are able to recognise prior and non-course learning. For example, examinations are available to people with experience in the occupation who have not followed the regular training programme.
- This is not true when examinations are only available to course-takers or designed to exclude prior learning.

[q65a] Comment (optional): _____

7. Standard-setting orientation

Please rate the following statements from 1 (not accurate at all) to 5 (very accurate).

For every question, you will give one rating Nepal's current TVET system and a second for your ideal TVET system in 2030.

[q71] The legal framework of TVET gives actors scope for independent design.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true if the legal framework allows local authorities or even individuals to control and redesign at least part of the TVET experience within the framework of basic objectives.

This is not true if all details or implementation and progression in the TVET system are required without flexibility or space for innovation.

[q71a] Comment (optional): _____

[q72] Requirements for admission to final examinations are clear.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true if there are clear and widely accessible requirements for taking the final examination. For example, taking a sequence of courses, having some amount of experience, or some combination thereof.
- This is not true if the exam is not strict on who is allowed to take it or if there is no way for non-traditional students to meet requirements and attend the exam without taking the full course.

[q72a] Comment (optional): _____

[q73] Standards measured by final examinations are clear.

	1 - not accurate at all	2	3 - neutral	4	5 -very accurate	I don't know.
Current TVET system.						
Ideal 2030 TVET system.						

- This is true if all actors (students, instructors, learning places, and future employers) understand what students will have to know and do in order to pass the examination.
- This is not true if examinations are unclear to any of the above actors.

[q73a] Comment (optional): _____

Conclusion

You have reached the end of this survey. Thank you very much for your highly valuable collaboration and goodbye.

If you have any further questions, please write to Katie Caves: caves@kof.ethz.ch

Submit your survey. Thank you for completing this survey.

Appendix 4: Fact finding mission – Programme of meetings with stakeholders

Date	Time	Activities	Responsible
15 Jan 2017	9:30AM (with AI213 from Delhi) 3 pm	<i>Arrival and transfer to hotel</i> <i>Preparatory meeting</i>	Hotel Usha Bhandari/Barbara Weyermann
16 January	9 am-10:00 10:30-12:30 12:30-13:30 14:30-15:30 16:00-17:00	Meeting at SDC (with Jörg Frieden, Ambassador) Further discussion, Planning of days Lunch Meeting with MOE (Secretary, Joint Secretary and TVET focal person) Briefing of Nepal's constitution	Usha/Barbara Dr. MM Khanal Usha/Barbara Prakash/Usha/Barbara
17 January	10:00-12:00 12:00-1:30 14:30-17:00	Meeting with Dr. Hari Lamsal Meeting with Buddhi Bahadur Khadka Meeting with NVQS Project Advisory Committee members	Dr. MM Khanal/Usha/Barbara
18 January	9:30 to 11:30 12:30 to 14:30 15:30 onwards	Interaction with TVET donors Meeting at CTEVT (VC and all directors) Preparation for Stakeholder workshop	Usha/Barbara Usha Ursula

19 January	9:00 to 14:00	Stakeholders workshop (Sharing of international practices: different options for federalizing the sector) Discussion on possible options for Nepal	Usha/Ursula/Barbara
	15:00 onwards	Reflection on the workshop and prepare for debriefing	
20 January	9:00 to 11:00	Meeting with Usha and Barbara (further discussion on Ursula's impression about the TVET sector of Nepal; the people's understanding of Federalization of TVET sector; possible way forward)	Usha/Barbara
	11:00 to 12:00	Debriefing with SDC management Lunch	
	14:00 to 17:00	Meeting with Kathmandu University School of Education; Lecture of Ursula Renold	Ursula/Usha
	17:00-17:30	Debriefing at SDC with Ambassador J. Frieden	all
21 January	Morning	Free for sight seeing	
	15:35 (with AI 216)	Departure to CH	