

Renold, Ursula; Bolli, Thomas; Caves, Katherine

Research Report

Constitutional reform and its impact on TVET governance in Nepal:
Second report in support of developing understanding and finding
the way forward for federalising the TVET sector in Nepal

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Constitutional Reform and its Impact on TVET Governance in Nepal

Second report in support of developing understanding and finding the way forward for federalising the TVET sector in Nepal.

Dr Ursula Renold, Dr Thomas Bolli, and Dr Katherine Caves

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Constitutional Reform and its Impact on TVET Governance in Nepal

Second report in support of developing understanding and finding the way forward for federalising the TVET sector in Nepal.

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Expert Biographies

Prof. Dr. Ursula Renold



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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. Thomas Bolli

Post-Doctoral Researcher, Comparative Education Systems, KOF Swiss Economic Institute, ETH Zurich

Before starting his current position in April of 2013, Thomas Bolli was awarded a Swiss National Science Foundation grant to visit the University of Lancaster as a postdoctoral researcher. He wrote his PhD thesis on the production and measurement of knowledge capital in the Research Division on Innovation Economics of the KOF Swiss Economic Institute, ETH Zurich. Building on this, his research interests consist of the statistical analysis of knowledge, in particular applying microeconometrics to questions regarding the economics of education, research, and innovation.



Dr. Katherine Caves

Postdoctoral researcher in the research centre for comparative education systems at the Swiss Federal Institute of Technology (ETH) in Zurich.

Katherine Caves 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 TVET systems and how they can be developed in nascent TVET 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, including the Social Development Minister of state 1 and the Mayors of *Palikas* and the metropolitan city of Biratnagar in state 1.

Executive Summary

Background

Nepal promulgated a new constitution in September 2015 that makes the country a federalised democracy. The governance structure extends the existing centralized model to one with federal, state, and local governments; each with dedicated roles, rules, processes, and institutions. While the constitution of Nepal outlines the federalisation of many sectors and makes a clear commitment to education in general, TVET is not specifically clarified.

In January 2017, Prof. Dr. Ursula Renold together with her Post-Doc Dr. Katherine Caves travelled to Nepal as a technical advisor on the invitation of the SDC to help design a plan for TVET federalisation. That plan was delivered in a March 2017 report, presented in Nepal by Ursula Renold in April of 2017 (see Renold & Caves, 2017). After the country completes elections, the government of Nepal (GoN) will have to work with the states and local authorities to implement the new constitution. However, many questions remain open and some normative decisions should be made by the GoN before implementation can begin.

The present report should help the GoN to map out key elements to facilitate TVET federalisation. The report is intended to help stakeholders involved in Nepal's TVET sector understand the key steps to be taken towards federalisation.

Overall objectives of this study:

- Help the GoN create milestones for the implementation process of TVET federalisation from start to finish.
- Support SDC-funded projects in their federalisation processes.
- Clarify the need to conduct a study on financial flows in the TVET sector.
- Identify potential roles for donor organizations in the TVET federalisation process based on international experiences and the particularities of donor-government relationships in Nepal. Recommend how donors can support the implementation process.

Since the first visit to Nepal in January 2017, the Nepali government has taken many steps to make federalisation a reality. The report summarizes the main findings and challenges arising from the current situation in April 2018.

Political developments

The impressive preparatory work Nepal has already undertaken towards federalisation points the way to further development steps. Important normative questions have already been addressed, including the number of GoN ministries responsible for TVET. This was a key issue in the previous report, and the GoN has now opted for coordinated governance of TVET, assigning *formal education* to Ministry of Education, Science and Technology (MoEST). The Ministry of Labour, Employment and Social Security (MoLESS) is responsible for *labour market-oriented short-term courses*. This is a very positive development and will help improve the reputation of TVET by bringing it under the main ministry responsible for education matters.

Another important development is that it is now possible to begin legislation to design the new federalised TVET sector. This is largely thanks to the *Unbundling Report*, which clarifies that occupational competencies will be defined at the national MoEST level and curricula will be set at the local level. In particular, the *Bill on Local Government Operations* categorizes local government types by size. This clarifies that TVET school infrastructure does not have to be the same in all 753 municipalities. Large cities can take on some central functions, especially for expensive infrastructure in schools like CNC machines or other large training equipment.

Unbundling Report and other relevant legal decrees

The Unbundling Report (2017) specifies which public authorities will be regulated at each government level. It also lists the concurrent competencies shared by two or more levels. Finally, it describes the organisational structure and the terms of reference for central working groups. *In this report we identify and highlight the parts of the unbundling report that matter for TVET*. Function assignments generally reflect Renold and Caves' (2017) recommendations.

In addition to the Unbundling Report, a group of new legal decrees affect TVET federalisation. The available and relevant decrees as of the end of May 2018 include the *Nepal Gazette* that regulates the new Government of Nepal, a bill outlining local government operations, and the *Inter-Governmental Fiscal Management Bill* (IGFMB). We examine these for items affecting TVET-sector federalisation and have derived appropriate conclusions and recommendations.

Categorizing local units clarifies that TVET school infrastructure does not have to be the same in all 753 municipalities. Large cities will take on a certain centre functions, especially for expensive school infrastructure like CNC machines or other training equipment. Therefore, we make the following recommendations for continuing to drive federalisation in TVET.

Recommendations

Carry out a TVET Landscaping Process

Because there are different size classifications of local governments, states responsible for the respective municipalities must make an inventory of existing TVET school infrastructure to know their available resources and identify existing gaps at the local level.

Inter-Governmental Fiscal Bill

As the financial flows are a central topic in this report, we attach particular importance to the IGFMB. This new law clearly shows which government level has which powers to raise money and which mechanisms exist to balance financially weak and financially strained regions (fiscal equalization). Of course, this law does not say anything about sectoral TVET policy. Regulations and incentives for controlling TVET and for cooperation at all three government levels must be anchored in a special **TVET Act**. However, to establish the annual budgets of all three government levels, their responsibilities and current financial flows must be clear. It is very important that there are no breaks in the transition from the old to the new system.

The normative question of whether TVET governance should be coordinated or fragmented has already been answered since our last report, but a second such question needs to be answered before a TVET Act can be fully legislated. This time, the question deals with financial flows: should control be input- or output-oriented? Based on our review of literature in this report, one strong possibility is *per capita financing* in the TVET sector, which may improve performance.

Developments in the field of Education in Nepal

GoN presented an Education Road Map at the beginning of 2018 which summarizes all activities for the field of education. During the second mission of Ursula Renold a TVET Strategy with additional pillars was presented in one of the stakeholder meetings. Together, the **Education Road Map** and **TVET Strategy** point an inspiring way forward for federalisation. They should be implemented in the coming months, starting with a High-Level Steering Committee, clarification of normative issues in the TVET Policy, and legislation of the TVET Act. Points 4-9 of the **TVET Road Map** (which is part of the Education Road Map) can be specified in the TVET Act.

TVET-Related Items from the Education Road Map

1. Integrated TVET Act
2. TVET Policy Design (3-level Government)
3. High-Level Steering Committee on TVET
4. TVET Fund
5. TVET services to all local units
6. Restructuring CTEVT
7. Good governance for TVET
8. Industry-Business Linkage
9. National Vocational Qualification Framework

Important measures for the TVET implementation process

It is not yet clear about how the federalisation process in Nepal's TVET sector will be organized. This is particularly important because the federalisation process requires coordination among the federal, state, and local levels. It is therefore very important that the GoN makes decisions quickly and coordinates with the state and local levels.

Four very urgent tasks that the [GoN and MoEST](#) should accomplish in the coming weeks and months are highlighted in the report. These are creating an Inter-Governmental TVET Council Coordination committee led by TVET division in the MOEST to act as high-level steering committee, defining a TVET policy for 2030, developing a TVET Act, and conducting a financial flows study. Prioritize and urgently implement those four key tasks in the coming months will be critical for the TVET sector's success.

Recommendations

Establish an Inter-Governmental TVET Council/Coordination committee

A high-level body with representatives of all three government levels must be set up urgently to ensure that all TVET federalization activities are coordinated among the federal, state and local levels. This task can be led by TVET division in the MOEST.

Create a TVET Policy 2030

The same high-level committee must address the remaining unclear normative issues. These include allocating responsibilities formal and non-formal education, defining what Nepal means by "good governance" and the TVET programme approach, allocating detailed tasks to all three government levels—unless they are already clearly defined in the unbundling report—and defining specific objectives for the TVET sector.

Identify and describe key TVET processes

To honour the principle that structures follow functions and ensure that organizational structures are not designed before structures become clear, identify and describe in detail the key processes of the TVET sector (see section 4, for examples see section 6). Every task and process can be allocated to the appropriate level, which helps support a consistent federalisation process.

Legislate a TVET Act

Based on the TVET Policy 2030, a TVET Act should be developed as quickly as possible. This is the most important element of the critical path to federalising TVET because the seven states depend on a national TVET legal framework to develop their own state laws.

Financial flows

It was already clear in the previous report based on the two missions of Ursula Renold and her team that a very central issue for re-engineering the TVET system in Nepal concerns its financial flows. Effective and transparent financial flows are an extremely important prerequisite for efficient TVET systems. Because of the numerous institutions involved, it is not always easy to achieve full transparency.

Although we could not undertake a large literature review, existing studies on financing the TVET sector in Nepal show that a more in-depth analysis will be required to strengthen the TVET sector as a whole. Therefore, we make some recommendations for finding the way to a successfully federalised TVET system.

Recommendation

Carry out a comprehensive TVET financial flows analysis in three steps.

Step 1: Update and extend the data published in Tables 1 and 2 in Parajuli and Shakya (2012), if possible until 2018. Record data from the local units and any local donor partner support to improve the transparency of existing TVET funding.

Step 2: Calculate annual TVET revenues and spending to make it transparent. Include the development of both revenue and spending over time. This helps create a robust calculation scheme parallel to the development and implementation of legislation, which can also be transitioned into a financial management system (FIMS).

Step 3: Carry out a full cost survey to generate a complete picture of financing conditions at the local and state levels. As part of a pilot study in one state, include a representative number of vocational schools, other educational institutions, and education administration. The pilot study should improve knowledge of cost types and factors, contributing to the FIMS.

Federalisation of ongoing SDC projects

The last challenge we discuss in this report is how donor partners can adapt their current projects to the new circumstances. Here it is necessary to distinguish between the content of the projects and their financial flows. For content, the important question is whether the project fits into the system. For example, whether a project works with sector-level control and coordination, whether it affects part or all of the TVET system, and how projects relate to TVET institutions.

In the report we discuss possible solutions and conditions for existing donor projects by using two SDC projects as examples. These are the National Vocational Qualification System (NVQS) and ENSSURE, both initiated and funded by the SDC.

Recommendations

Plan out NVQS federalisation

As with other federalisation processes, describe the main tasks associated with the NVQS and assign them to the appropriate government level. Then the project is ready to be federalised and its tasks are ready to be transferred to their future institutions and agencies.

Continue ENSSURE and update its financial flows once CTEVT federalises

The ENSSURE 24-Month Apprenticeship should continue as planned for the time being. Once the CTEVT is federalised, the project's financial flows will change along with that process. Most likely, funding will go directly to local implementation units instead of through CTEVT. Until then, existing procedures should not be changed.

Conclusions

A complex reform like this one that affects a whole country is unique. This has the disadvantage that there are very few experts with experience in similar complex sectoral reforms. Accordingly, high-level leaders need support to succeed. The [Center on the Economics and Management of Education and Training Systems CEMETS](http://www.cemets.ethz.ch) (www.cemets.ethz.ch) will continue to support Nepal's leader in that change process.

Furthermore, a [Master's programme in TVET Management \(MTVET\)](#) is being developed at Kathmandu University in cooperation with ETH Zurich and will start in August 2018. This should contribute to capacity-building for TVET professionals throughout Nepal.

Nepal is already on track for a massive positive change in the TVET sector and its governance. The process will take time. Today's leaders can improve the future of the country by continuing to embrace change, take on challenging projects, and clarify difficult issues. A stronger TVET sector gives Nepal a better chance at developing economically, gives young people more access to opportunity, and creates a stronger skills base for continued economic development.

The recommendations in this report will support the continued development and federalisation of Nepal's TVET sector. The key projects are creating an [Inter-Governmental TVET Council/Coordination committee](#) developing a [TVET Master Plan](#), writing a [TVET Policy for 2030](#) with goals and a vision for the sector, legislating a [TVET Act](#) that identifies and allocates tasks to government levels, and carrying out a [financial flows study](#) that can inform the process of allocating funding according to task functions. These are all big tasks, but with the current momentum for federalisation they can be accomplished.

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List of abbreviations

General terms

ENSSURE	Enhanced Skills for Sustainable and Rewarding Employment
FIMS	Financial Information Management System
GDP	Gross Domestic Product
HR	Human Resources
ISCED	International Standard Classification of Education
MTVET	Master in TVET Management (KU)
N(V)QF	National (Vocational) Qualification Framework
N(V)QS	National (Vocational) Qualification System
NOSS	National Occupational Skill Standard
PCF	Per Capita Funding
RPL	Recognition of Prior Learning
RPL	Recognition of Prior Learning
SSC	Sector Skill Council
TVET	Technical Vocational Education and Training
VET	Vocational Education and Training

Legal framework

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

Institutions

ADB	Asian Development Bank
CEMETS	Center on the Economics and Management of Education and Training Systems
CTEVT	Council for Technical Education and Vocational Training
DDE	District Development Committee
GoN	Government of Nepal
MoE	Ministry of Education
MoEST	Ministry of Education, Science and Technology
MoF	Ministry of Finance
MoLESS	Ministry of Labor, Employment and Social Security
NGO	Non-Governmental Organisation
NSTB	National Skill Testing Board
SDC	Swiss Development Cooperation
TITI	Training Institute for Technical Instruction
VDC	Village Development Committee

Others

FIMS	Financial Information Management System
MIS	TVET Management Information System

Important definitions

Federal/GoN	Central, national government
State	Intermediate-level government unit; in some documents they are called “provinces”
Local	Lowest-level governments including municipalities, cities, and villages

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1. Mandate and Method of Study

Background

Nepal promulgated a new constitution in September 2015 that makes the country a federalised democracy. The governance structure extends the previous centralised model to one with national, state, and local governments; each with dedicated roles, rules, processes, and institutions. While the constitution of Nepal outlines the federalisation of many sectors and makes a clear commitment to education in general, Technical and Vocational Education and Training (TVET) is not specifically clarified.

In January 2017, Prof. Dr. Ursula Renold and her Post-Doc Dr. Katherine Caves came to Nepal upon the Swiss Development Cooperation's (SDC's) invitation as technical advisors to help design a plan for TVET federalisation. That plan was delivered in their report and presented in Nepal by Ursula Renold in April 2017 (Renold & Caves, 2017). After elections, the government of Nepal (GoN) and its new state and local authorities will have to implement the new constitution. However, a lot of questions are still open and normative decisions should be made by GoN before implementation can begin.

The present report, based on further research and Dr. Renold's March 2018 visit to Nepal with Post-Doc Dr. Thomas Bolli, should help the GoN map out the most important elements for facilitating TVET federalisation. The report shall help Nepal's TVET understand the next key steps to federalisation.

1.1 Purpose of the assignment

With the present report, we aim to help broaden the understanding of key Nepali TVET stakeholders on the issues of equitable, effective and efficient TVET services in a federalised context. The key stakeholders include the Ministry of Education, Science and Technology (MoEST) the Council for Technical Education and Vocational Training (CTEVT), and the Technical Committee, which includes other ministries related to the TVET sector. In addition, selected industry representatives and development partners along with their projects may be interested Renold's findings from her research and two missions, undertaken in December 2017 and April 2018.

Overall objectives of this study:

1. Help the GoN create milestones for the implementation process of TVET federalisation from start to finish.
2. Support SDC-funded projects in their federalisation processes.
3. Clarify the need to conduct a study on financial flows in the TVET sector.
4. Identify potential roles for donor organizations in the TVET federalisation process based on international experiences and the particularities of donor-government relationships in Nepal. Recommend how donors can support the implementation process.

1.2 Methodology

This study pulls together three phases of research. In the first phase, we conducted a literature review of relevant scholarship and extensive document analysis of Nepal's legal framework related to TVET. The second phase includes both missions to Nepal, during which Ursula Renold and her team met with TVET stakeholders, visited TVET-related government actors at all levels, and discussed ideas and potential recommendations with TVET insiders. The recommendations in this report combine those information sources with Renold's deep and long-lasting experience with TVET governance, implementing complex reforms, and managing TVET systems.

Project Timeline

- **Pre-phase**
 - Literature Review of relevant scholarship to TVET in Nepal. This report highlights research on financial flows (see Chapter 2).
 - Document Analysis of Nepali legal framework around TVET. This report highlights new acts, bills and policy documents (see reference list).
- **Two Fact-finding mission, December 13-16 and April 8-20, 2018** (see Appendix 2)
 - Individual interactions and consultative workshops with the major stakeholders, including follow-up communication via email.
 - Visit to one state and selected *Palikas* (metropolitan cities) to understand their federalisation views and activities.
 - Symposium presentation of initial reflections and potential recommendations to stakeholders, organized by Kathmandu University
- **Final phase**
 - This final report, including recommendations to the Government of Nepal.

2. Literature Review

We carried out an extended literature review in our first study (Renold/Caves 2017). For the specific literature review related to this second study, we focus on two topics. First, we review literature related to financing Nepal's TVET sector. We deliberately refrain from providing a comprehensive literature overview of all financing possibilities from global TVET systems because other countries' legal and socio-economic frameworks are too different, owing to different normative regulations and institutions. For the second focus of the literature review, we investigate issues that arise during educational decentralisation.

2.1 Financing the TVET Sector in Nepal

There is limited literature related to financing the TVET sector in Nepal. The Asia Development Bank (ADB, 2015) has a relevant report that looks into the CTEVT budget and expenditures. However, that document only includes three years of data from 2006-2009.

Dr. Hari Lamsal is one of the first scholars to analyse Nepali TVET finances. His 2011 study examines initial data up to 2010/11 and examines international TVET financing methods. In particular, he emphasizes the importance of diverse funding sources, which should be better explored in Nepal. He states, "existing systems of funding should be reformed to promote: flexibility and decentralization; more autonomy for training institutions, closer ties with industry and more active participation by industry and other key stakeholders in decision making; partnership and dialogue between the state and its key social partners" (p. 85). Funding that comes from private-sector sources allows for greater connection between industry and TVET.

In another study, Lamsal (2012) calls for a distinction between modes of TVET delivery, especially formal and non-formal education. Despite both program types potentially being referred to as TVET, their governance and financing guidelines will be greatly different. Lamsal goes on to address a central issue of TVET funding, saying, "while discussing about financing TVET, the first and foremost focus is who funds for what and to whom and in what way in the field of initial and continuing vocational education and training" (p. 63). These are all questions Nepal will need to address as it develops its TVET sector.

Funding is not only about sources, but also a matter of processes, usage, and effectiveness. Based on international examples, Lamsal (2012) elaborates,

"The monetary aspect attempts to quantify the amounts allocated for funding in a differentiated manner according to the different funders, i.e. the state, the company, individuals, and according to public and private budgets. The institutional-organizational aspect primarily focuses on the procedures - mutually agreed through a balance of interests between those participating in vocational training (state, employers' associations and trade unions) via political opinion-building and decision-making of resource collection, resource use and resource administration with the aim of achieving the targeted vocational training goals established through consensus".

He concludes that, "the challenge before policy makers is to introduce new and different ways of financing as well as to ensure that the resources which are available for TVET are used more effectively" (p. 64).

Parajuli (2013) undertakes a more thorough analysis by examining the financing of the entire TVET sector in Nepal until 2011/12. That scientific article is based on a study commissioned by the SDC entitled *Resource needs Assessment for TVET Sub-Sector in Nepal, Dec. 2012* (Parajuli/Shakya, 2012). The following table shows the allocation of public resources to TVET by years according to that study (p. 7):

Table 1: Allocation of Public Resources to TVET by Years (in million NPR)

Year	2064/65 2007/08	2065/66 2008/09	2066/67 2009/10	2067/68 2010/11	2068/69 2011/12
Gross Domestic Product (GDP)	815,700	988,300	1,193,700	1,369,400	1,558,000
National budget	168,996	209,416	256,480	306,496	384,900
Education Budget	28,390	39,086	46,617	57,828	63,919
TVET budget	3,841	5,920	7,477	7,345	9,618
% of TVET budget in GDP	0.47%	0.60%	0.54%	0.54%	0.62%
% of TVET budget in national budget	2.27%	2.83%	2.53%	2.40%	2.50%
% of TVET budget in education budget	13.53%	15.15%	13.89%	12.70%	15.05%

Source: Parajuli, 2013, p.7, based on *Economic Surveys* and *Red Books* by Ministry of Finance (MOF, 2004/05, 2005/06, 2006/07, 2007/08, 2008/09, 2009/10 & 2010/11), and *White Books* (Book of Annual Programs) by National Planning Commission (NPC, 2004/05, 2005/06, 2006/07, 2007/08, 2008/09, 2009/10, 2010/11).

Most of the data is based on the *Red Book*, which also provides information about donor funding in government programmes. However, Parajuli emphasizes that this donor money only covers part of the funding because some of it goes directly to NGOs and their programmes. It is therefore difficult to aggregate this important financial information. Parajuli states, “this sort of situation also contradicts with the principle of aid harmonization as included in the Paris Declaration on Aid Effectiveness made in 2005” (p.7).

The donor partner funds listed in the following table, which are based exclusively on the data in the *Red Book*, therefore represent only part of total donor financing.

Table 2: Share of Foreign Aid in TVET Programmes

Year	2064/65 2007/08	2065/66 2008/09	2066/67 2009/10	2067/68 2010/11	2068/69 2011/12
% of foreign aid in TVET budget	66%	65%	58%	52%	60%
% of government budget in TVET budget	34%	35%	42%	48%	40%
Composition of foreign aid in TVET budget					
% of grants	81%	83%	80%	81%	61%
% of loan	19%	17%	20%	19%	39%

Source: Parajuli, 2013, p.7 based on the *Red Book* and *Economic Survey* in the listed years.

The above studies demonstrate that TVET in Nepal is funded in an opaque and apparently input-oriented manner. As we move forward, the question is how Nepali TVET should be funded and how the effectiveness of funding should be evaluated. Although there is limited evidence specific to TVET in Nepal, we can draw on relevant academic-sector education studies as well as the evidence that does exist.

One academic-sector study that can inform our question is Gautam (2010), which highlights more difficulties of allocating donor partner funds in a study on auditing in *Per Capita Funding* (PCF). That study meets the challenge of auditing of PCF and shows the current financial flows chart for donor partners. The chart is a mix of a “pool funding modality as guided by the joint financing agreement” and parallel funding applied separately by some donor partners. Although the study is focused on the compulsory school sector, things are similar in the TVET sector.

Guatam (2010) also looks at the funding mechanisms used by donor partners, finding a diverse mix that even further complicates oversight and stating, “the allocation of foreign sources is a blend of soft loans and grants” (p.86). That study also finds that there is no effective monitoring, plus data mismatch between the MoEST and the schools. This asymmetry has led to delayed school funding disbursement. As we approach the topic of reorganizing financial flows in the TVET sector, all of these insights will be useful in-country experience, regardless of education sub-sector.

Back in the TVET sector, Parajuli (2013) summarizes the important findings in Nepali TVET funding. The state contribution to TVET sector funding is comparatively small, and there are accordingly very few skilled workers relative to demand. He also criticises the increasing proportion of donor partner loans, saying, “the service sector does not pay back the loan in a direct sense, loan money should not dominate the sector” (p 8).

In addition, despite increasing investment in TVET, Nepal has not successfully increased efficiency or output. Parajuli argues that the “inefficiency of the TVET system is amply illustrated by the fact that the system has seriously been suffering from the lack of information, particularly, the financial information that is so essential for planning and decision making purposes...A situation of not having any financial or other projections is a situation of planning hazard where there is a very high chance that the implemented programmes fail to achieve the intended objectives” (p. 8). Increased information-sharing and transparency may be key for improving the effectiveness of TVET funding in Nepal.

Parajuli concludes, stating, “The sub-sector needs to be understood in terms of its position in- and relation to broader political, socio-economic, and educational contexts so that a radical reorganization of the sub-sector could be made possible facilitating it to function with a synergetic collaboration and outcome effect. Growing technological advancement, fluctuating resource availability, increasing competitive environment, widening opportunities, etc. are very important factors that would largely influence the TVET environment in any country and Nepal is no exception” (p. 10). TVET has to change and will always change due to its ties to the labour market, and major reorganization will likely be necessary to make Nepali TVET successful and keep it that way.

The current moment is a better-than-ever opportunity to make TVET financing efficient and effective. The GoN will re-regulate the TVET sector in the coming months, including the allocation of tasks and finances. In light of the coming reorganization and the clear need for adjustment in the sector, this report aims to motivate and support Nepali TVET leaders as they move toward an efficient and effective TVET system.

2.2 Decentralising TVET financing

As already mentioned by Renold & Caves (2017), there is a great deal of literature on the relationship between decentralization and fiscal sustainability in education (see, e.g. Faguet, 2013; Rodden, 2006; Rodden, Eskeland & Litvack, 2003). In this report, we revisit and update the evidence in that field.

In short, TVET decentralization is linked to positive outcomes, but only when it is done well. Without careful attention to fiscal incentives, decentralising TVET funding in Nepal might create problems in various government levels' behaviour. Those problems can include local overspending (Faguet, 2013), macroeconomic instability (Wildasin, 1998; de Mello & Barenstein, 2001; Montero & Samuels, 2004). These problems can be solved or reduced through transparency and outcome-oriented funding, which pays *per capita* rather than for specific inputs.

An academic-sector of successful fiscal decentralization is Sweden in the 1980s and 1990s. In that reform, outcome-oriented funding moved down to the local level. Though some feared increased inequality, that outcome did not materialize. Ahlin and Moerk (2008) also find that funding in the system remained stable.

In TVET, we can learn from the decisive years between 1998 and 2007, which deeply impacted the Swiss system. Renold and Barmettler (2007) describe the process of changing the Swiss VPET system, including implementation of the 2004 VPET Umbrella Act. They describe how the system's funding changed from opaque and input-oriented to a transparent output-oriented model. This coordinated TVET costs with available public funding, increased autonomy and self-governance at the lower levels of the system, and incentivised local actors to perform efficiently rather than to extract personal benefits.

Renold and Barmettler (2007) point out that successful transitions like that of the Swiss system have certain prerequisites. The reform worked because its framers knew the system's costs and could set financial priorities based on different stakeholders' needs. Together, these create conditions that favour rational use of funds. According to this analysis, autonomy and transparency are the basis of successful TVET and quality assurance. As stated by the authors, "Education can only be achieved if the participants want to and do engage in 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.

The final piece of evidence is the special considerations of developing countries financing decentralised TVET. Unlike their developed counterparts, developing countries are not usually moving from semi-independent local governments to a unified system, but from centralised government to a decentralised model that creates a new need for local knowledge and skills at governing TVET (Bardhan, 2002). The GoN cannot abandon its most poor, remote, and otherwise underprivileged citizens. TVET is one way Nepali people can access economic prosperity, so its objectives should be tied to improving individuals' economic participation and prosperity. Outcome-oriented funding can incentivise specific objectives, so it is even more important in this context.

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

2.3 Conclusion and recommendation

Although this literature review is brief, it does show that transparency and output orientation are key features of successful financial decentralisation in Nepal. Designing the right incentive schemes and creating the right transparency mechanisms depends on knowledge of the system and context in Nepal. A more in-depth analysis of current and expected financial flows will be crucial for designing a strong TVET sector in Nepal. This underlies our recommendation.

Recommendations

Evaluate the *Per-Capita* Funding (PCF) Study

The *Per-Capita* Funding (PCF) Study is based on compulsory schooling, but is still relevant. Identify and use its findings for TVET.

Commission a study of current financial flows → for details see section 5

For TVET financing stimulate ongoing growth in the sector, it must be based on more detailed information. This requires a specialised analysis to uncover the comprehensive picture of existing financial flows in the Nepali TVET sector, which will be foundational for improvement.

Design efficient and effective TVET management

TVET management is currently governed by a patchwork of loosely related laws and policies. Using updated laws at the national and state levels, design TVET management so existing financial flows, future revenue, and spending power can be reconciled and developed into efficient and effective financial management.

3. Developments in the field of education

At first glance, the speed of Nepal's complex federalisation process is impressive. The Nepali Government is progressively deciding on all the main issues involved in this process. In 2017, elections were also held at all three government levels. Thanks to a clear majority, Prime Minister Oli can hope for a relatively stable government for the next five years, and he has already announced that he will prioritize enhancing the TVET sector in Nepal. This was clearly stated in all stakeholder meetings.

Implementation of the new constitution began before the elections. The central document organising federalisation activities is the *Unbundling Report*, which shows how governance functions will be allocated to the three government levels. A number of newly passed central laws are additional prerequisites for government and administration at all levels. The following is an overview of how federalisation will work in the TVET sector according to the Unbundling Report and other new laws.²

3.1 Unbundling report

The Unbundling Report (2017), published in the same period as the SDC's first two TVET missions (see Renold & Caves 2017), specifies in detail which areas of public authority will be regulated at each government level. It also lists the concurrent competencies shared by two or more levels. Finally, it describes the organisational structure and the terms of reference for central working groups. *We identify the parts of the unbundling report that matter for TVET.*

The report defines top-level leadership for the federalisation process itself in Schedule 2. The Prime Minister heads the Steering Committee of the High Level Federalism Implementation and Administration Restructuring. The Chief Secretary of the GoN leads the Coordination Committee. Six working groups of high-ranking representatives oversee federalisation activities in specific policy areas (Unbundling report, p. 184).

The education sector is assigned to working group 1, "Social." It is coordinated by Mr. Rameshwor Dangal, Joint Secretary of the Office of the Prime Minister and Council of Ministers until Nepali date *Kartik 20th*, 2073. Dr. Hari Lamsal, Joint Secretary of the MoE, represents education (Unbundling report, p. 179).

The Unbundling Report lists federal, state, local, and concurrent powers in every sector. The following are the relevant tasks for TVET and education at each level and concurrent group. This assignment of functions is largely in line with the recommendations made by Renold and Caves in their 2017 study. It lets all levels elaborate laws and enact concrete strategies.

² The limitation of this study concerns documents that are available in English only.

List of Federal Powers - *Unbundling Report (2017), p. 37-39*

Federal powers focus on central universities, central academies, university standards and regulation, and central libraries. Tasks are specified as follows:

- Policy, law, standards and regulation relating to higher education
- Policy, law, standardization, administration and regulation relating to central university
- Affiliation, accreditation, coordination and regulation of foreign universities
- Policy, formulation of law and management relating to central level academies and central library

List of Federal-State-Local Concurrent Powers

- National policy, law and standardization relating to education
- Human resource projection and national education plan formulation
- Coordination with bilateral and multilateral development partners and agencies relating to education
- Policy formulation and mobilization relating to national and international volunteer
- Preparation and regulation of national curriculum model of school level, curriculum of core subject and sample curriculum
- National policy, curriculum model, qualification, standardization of skill test and regulation of technical education and vocational trainings
- Conditions for service, standardization of qualification and capacity and regulation of school level teachers
- Determination of national standards of educational institutions, establishment and operation
- Permission and regulation of educational institutions operated by diplomatic mission and foreign educational institutions
- Permission to open the schools in foreign country according to Nepalese curriculum
- Determination of national standards of school level examination
- Management of examination of school level grade twelve
- Determination of equalization/equal status of educational qualification
- Determination of national standard relating to scholarship and stipend
- Permission of educational study, research for native and foreign citizen
- National academic research and educational statistic management

List of State Powers - *Unbundling Report (2017), p. 95*

State powers focus on state statistics, state universities, higher education, libraries, and museums. Tasks are specified as follows:

- Policy, law, administration, standards and regulation relating to state level higher education
- Policy, law, administration, standards and regulation relating to state universities
- Standardization, permission and regulation of education consultancy services
- Policy, law, standards, implementation and regulation relating to library in state level
- Policy, law, standards, implementation and regulation relating to museums in state level

List of State-Local Concurrent Powers

- State policy, law, standardization, implementation and regulation of education
- State human resource projection and formulation of education plan and implementation
- Preparation and production of school level curriculum and course books in state level
- State policy curriculum and course materials preparation, implementation and regulation of technical education and vocational trainings
- Standardization and regulation of service conditions, qualification, capacity of school level teachers in state level
- Standardization and regulation of secondary level teachers management
- Examination management of class ten of secondary level
- Scholarship management of higher level
- State policy, standards and regulation relating to technical education and vocational trainings
- Scholarship management of technical education and vocational trainings
- Academic research and education statistic management in state level

List of Local Powers - *Unbundling Report (2017), p. 132*

Local domains are basic and secondary education, as well as collecting statistics on the unemployed. Tasks are specified as follows:

- Policy, law, standards, planning, implementation and regulation relating to primary child education and school education, informal education, open and alternative (*Gurukul, Madarasa, Gumba* etc) and prolonged learning and special education;
- Plan formulation, operation permission and regulation of technical education and vocational training
- Distribution and implementation of curriculum and teaching material
- Management of school teachers and employees
- Materials relating to school mapping, permission of schools, adjustments and regulation
- Construction and maintenance of educational infrastructures
- Examination management of basic level (Class 8)
- Matters relating to student learning achievement test and management
- Management of students encouragement and scholarships
- Permission and regulation of educational consultancy services
- Protection and standardization of educational knowledge, skills and technology of local level
- Operation and management of local library and reading rooms
- Coordination and regulation of educational progress of secondary level

These lists of competences will be an important basis for TVET legislation. They show which political level has which task and what needs to be solved together.

3.2 Revision of the existing legal framework

In addition to the Unbundling Report, a group of new legal decrees have been made that affect TVET federalisation. The available and relevant decrees as of the end of March 2018 include the Nepal Gazette, a bill outlining local government operations, and the Inter-Governmental Fiscal Management Bill. As of this writing, these documents are unofficial translations. We examine their content for items that will affect TVET-sector federalisation.

3.2.1 Nepal Gazette: Changes to TVET Governance

This document regulates the organisation of the Federal Government. Nepal's MoE will become the Ministry of Education, Science and Technology, Youth, and Sports. Its tasks are listed below, and we have highlighted TVET-relevant tasks in blue.

List of tasks for the Ministry of Education, Science and Technology

1. Education related policy, laws, standard and regulation
2. Central university related policy, laws and standard
3. Affiliation with foreign universities, equivalency determination, accreditation, coordination and monitoring
4. Central library related policy, law and management
5. Human resource needs projections, educational planning and human resource development plan
6. School level national curriculum framework, curriculum of main subject, model learning materials and monitoring
7. Technical education and vocational training national plan, curriculum framework, qualification determination, skills testing standards
8. School level teachers service condition, qualification and equivalency related policy and standard
9. Teachers training related policy, standard and standardization, curriculum framework, qualification determination, skill evaluation standards and coordination with training centre
10. School level examination's national standard, secondary level's examination management and equivalency assessment
11. Approval for education institutions organized through affiliation from diplomatic agencies
12. Approval for education institutions organized through Foreign education institutions, their accreditation and monitoring
13. Coordination on State and federal level educational issues
14. University grant commission, central university, open university and central level educational academy
15. Scholarship and subsidies related policy and standard
16. Educational learning, research approval related policy, law and standard
17. National research and educational statistics management
18. Educational standard index determination, measurement and regulation
19. National educational board, technical education and vocational training centre
20. Scientific technology related policy, law and standard
21. Scientific, space science, astronomy science related learning and research
22. Scientific technology investigation, research, invention, promotion and development
23. Statistics collection, testing and survey standards of Scientific technology

24. Atomic technology, radioactive products quality and usages related statistics system establishment, management and regulation
25. Bio and atomic technology usage and promotion, control and regulation
26. Ozone study, solar radiation measurement and information dissemination
27. Scientific instrument calibration and verification
28. Use, promotion, control and regulation of chemical substances
29. Chemical products, management, reuse and investigation of unidentified resources
30. Nuclear energy related policy, law, standard, implementation and regulation
31. Nepal science and technology national academy, national forensic science academy, planetarium, science museum
32. Youth, sports and scout related policy, law and standard
33. National level sports firm organization related regulation and coordination
34. National, provincial and international sports development and promotion
35. National, provincial and international sports competition organization and participation
36. Youth initiation and development
37. National sports council
38. Youth self-employment trust
39. Treaty, agreement, contact and coordinate with international firms organization related with Ministry
40. Execution and regulation of public institutions, authorities, committee, academy, company etc. related with ministry, civil employee affiliated organization
41. Service, group and sub group execution related with subject matter of ministry

On one hand, this list of tasks is very helpful for implementing the many processes connected to federalisation. On the other hand, however, it is unclear how work already done by other ministries and institutions will be transferred to the new ministry. In the past, around 17 ministries were involved in TVET. Reducing that number and coordinating TVET governance is definitively an improvement, but the *overall transition process will need to minimise disruptions and doubled efforts* as Nepal moves to the new framework.

3.2.2 Bill on Local Government Operations

This law regulates tasks at the local level. The Nepali government classifies local governments into three groups: municipality, sub-metropolis or metropolis according to specific legal criteria law. For example, sub-metropolitan cities must have "high-level education and technical education facilities". Metropolitan Cities must run "education institutions providing post-graduate (Master's) level education programmes" and "technical schools". Below, we have listed all local tasks and competences in basic and secondary education, with TVET-related tasks highlighted in blue.

List of Local tasks in Education

1. Formulation, implementation, monitoring, evaluation and regulation of policies, laws, standards and plans for early childhood development and education, basic education, parental education, informal education, open and alternative continuous learning, community learning,
2. Establishment, approval, operation, management and regulation of community, organizational, guthi and cooperative schools,

3. Planning, operation, approval, monitoring, evaluation and regulation of technical education and vocational training,
4. Approval, monitoring and regulation of schools providing education in mother tongue,
5. Property management of the schools which have been merged or closed down
6. Establishment and management of village and municipal level education committees,
7. Establishment and management of school management committees,
8. Naming the school,
9. Land ownership; documentation, protection and management of properties of the community schools,
10. Quality enhancement of schools and reading materials distribution,
11. Positions for teachers and staff in community schools,
12. Mapping, approval, authorization, adjustment and regulation of school,
13. Educational infrastructure, maintenance, operation and management of community schools,
14. Operation, monitoring and management of basic level exams,
15. Testing and management of students' learning outcomes,
16. Management of free education, student motivation and scholarships,
17. Approval and regulation of teaching outside of school, like tuitions and coaching
18. Protection, promotion and standardisation of local level knowledge, skills and technology,
19. Operation and management of local libraries and reading rooms,
20. Coordination and regulation of education programmes up to secondary level,
21. Management of grants and its budget for the community schools, establishment of accounting discipline for income and expenditure of school, its monitoring and regulation,
22. Teaching learning, training for teachers and staff, capacity development,
23. Operation of extracurricular activities.

3.2.3 Inter-Governmental Fiscal Management Bill (IGFMB)

The federalisation process will change the entire country, including its financial flows, especially with the arrival of states as an entirely new level of government. Moving to multi-level government financing will create new revenue powers on all levels, but also create new costs defined in the IGFMB as “necessary expenditure”. What and how great these expenditures are can only be answered after enacting the TVET Act, since legislation determines spending power. An annual budget process will be necessary to reconcile spending and revenues.

Part of multi-level government financing will also include compensation and equalization payments to financially weaker state and local governments. Without this process, all learners and students cannot be guaranteed equal opportunities. Therefore, the IGFMB describes fiscal equalization procedures in Part 4 (Grants Provisions) as follows: “the Government of Nepal shall distribute fiscal equalization grants to the state and local level in the recommendation of the Commission on the basis of capacity of revenue and expenditure necessity of the state and local level”.

The IGFMB describes revenue powers and allocation in detail. Part 4 also lists the special grants that can be used for specific measures. These include “Conditional Grants”, “Complementary (matching) Grants”, and “Special Grants”. The latter explicitly includes education. According to the interviews and discussions that Ursula Renold conducted during her fact-finding missions, these grants can be used for educational purposes.

A special section of the IGFMB deals with Foreign Assistance (see Part 5 of IGFMB). That section takes up to some extent the criticism expressed by Parajuli and others (see Chapter 2 of this report) that the inflow of foreign funds should be largely controlled by the national

government. The IGFMB states, “the state and local level may not raise any type of foreign grants and assistance or may not implement and cause to be implemented any projects and programmes on foreign grants and assistance without pre-approval of the Government of Nepal” (Part 5, art. 12, [4]). The law mentions education as a priority area for the mobilization and use of foreign assistance.

3.2.4 Conclusion and recommendations

The impressive preparatory work already done for the federalisation helps us identify further concrete development steps. It has clarified important normative questions like how many ministries will be responsible for TVET. The GoN has opted for coordinated governance and assigned formal education to MoEST. MoLESS is responsible for labour market-oriented short-term courses (e.g. non-formal education). This is a very positive development and will improve TVET’s reputation, because it puts control of TVET in the hands of the main education ministry.

Thanks to the *Unbundling Report*, it is clear which tasks and competencies belong to the federal MoEST, the states, and local governments. This makes it possible to start legislating in the TVET sector. In particular, categorizing the local level clarifies that TVET school infrastructure does not have to be the same in all 753 municipalities. Large cities will take on a certain centre functions, especially for expensive school infrastructure like CNC machines or other training equipment. We make the following recommendations for continuing to drive federalisation in TVET.

Recommendations

Carry out a TVET Landscaping Project to inventory existing TVET infrastructure

Different categories of local governments (see Bill on Local Government Operations) will have different levels of responsibility for TVET infrastructure, and states need to know what already exists before they allocate funding for new development. A TVET Landscaping Project will identify existing resources and gaps in local TVET.

The IGFMB clearly shows which government levels have which powers to raise money. It also specifies fiscal equalization mechanisms to balance financially weaker and stronger regions. Of course, the Bill does not say anything about sectoral TVET policy. Regulations and incentives for controlling TVET and for cooperation among government levels must be anchored in a special TVET Act. The first step to developing a budget for all levels of TVET governance is to clarify current responsibilities and financial flows. It is very important that there are no breaks in the transition from the old to the new system—Prime Minister Oli attaches very high priority to this area of TVET.

Developing a TVET Act requires answering the normative questions of financial management. The key question is whether Nepal will move to output-oriented control or remain with its current input-oriented model. As indicated in the literature review, *per-capita* financing should be seriously considered as a mechanism to improve performance in the TVET sector.

3.3 Developments in the Ministry of Education Science and Technology

3.3.1 Education Law

Various stakeholders have pointed out to us that the Education law is also in progress and will soon be adopted by Parliament. Unfortunately, no official version is available at the time of this report's publication, which is why it is not possible to analyse how it implements the Unbundling Report and other laws.

3.3.2 Policy Guidelines: Education Road Map

GoN presented an [Education Road Map](#)³ at the beginning of 2018. This document summarizes all activities for the field of education. The following are its TVET-related elements.

Key Items from the Education Road Map

1. Within one year, GoN will develop and implement a national Educational Qualification Framework and National Vocational Qualification Framework to assure quality of formal, informal and non-formal TVET.
2. GoN will undertake structural and organizational reforms. It will formulate a high-level committee to establish and integrate TVET, including all programmes operated through the government, non-government units, and donor partners.
3. According to the new constitution, every citizen has a right to employment. Therefore, GoN will clarify the role of every governance level for TVET. The expansion of TVET will be crucial for building a prosperous nation.

Taken together, these items imply a specific group of actions for TVET in Nepal. TVET should be linked to the employment sector. TVET will be mainstream education. The management of TVET will be enhanced. All groups, including disadvantaged groups, will be able to access TVET. GoN will develop a strategic framework for TVET that involves all stakeholders. It will also have to redefine and ensure TVET governance. Finally, to carry out its own recommendations, GoN will have to improve linkage between the education and employment sectors in general, which will heavily involve TVET.

³ The document was partially translated by Usha Bhandari.

In a separate section the Education Road Map highlights the following nine points for the TVET sector:

TVET-Related Items from the Education Road Map

1. Integrated TVET Act
2. TVET Policy Design (3-level Government)
3. High-Level Steering Committee on TVET
4. TVET Fund
5. TVET services to all local units
6. Restructuring CTEVT
7. Good governance for TVET
8. Industry-Business Linkage
9. National Vocational Qualification System (NVQS)

3.3.3 Policy Guidelines: TVET Strategies

In a presentation by Dr. Mukunda Mani Khanal (MoEST), he presented elements of the new TVET strategy. The strategy rests on three pillars for expanding TVET in Nepal.

TVET Strategy

Pillar 1: Minimize the gap between demand for and supply of TVET skills

- Strategy 1: Expand the supply of trained graduates
- Strategy 2: Widen the scope of TVET services through public-private partnership
- Strategy 3: Target the unreached

Pillar 2: Enhance labour market recognition for graduates through improved training quality

- Strategy 4: Promote performance skills standards in the delivery of TVET services
- Strategy 5: Promote institutional capacity for competence-centred training

Pillar 3: Harmonize allocation of resources for TVET interventions

- Strategy 6: Coordinate allocation of skills development funds (SDFs)
- Strategy 7: Regulate application of inter-agency parameters to integrate TVET services

The goal of the TVET strategy is “to develop a market-sensitive, occupation-driven, inclusive TVET system to serve all local levels and every segment of society” (Khanal, 19.4.2018). Focus areas include agriculture, hydropower development, hospitality and ICT. Coordination should be enhanced through a TVET Management Information System (MIS) that facilitates data management. The TVET strategy also highlights the allocation of functions throughout the multi-level governance of a federal TVET system.

3.3.4 MoEST and reorganising the federal administration

After the elections, GoN appointed ministers and their chief officials. They have the task of federalising education in accordance with the provisions of the Constitution and the laws that are already enacted. They are obliged by the Constitution (Art. 232) to coordinate their work with their counterparts at the state and local levels. This point is well taken by the Education Road Map.

Federalising Nepal's TVET sector is not an easy task, because constitutionally defined concurrent powers connect all three government levels (Unbundling Report, 2017). Furthermore, the transition process from the old to the new organizational structure faces several challenges. Two of the major challenges are redistributing TVET tasks into a single ministry and out to all three levels, and redefining the role of the CTEVT.

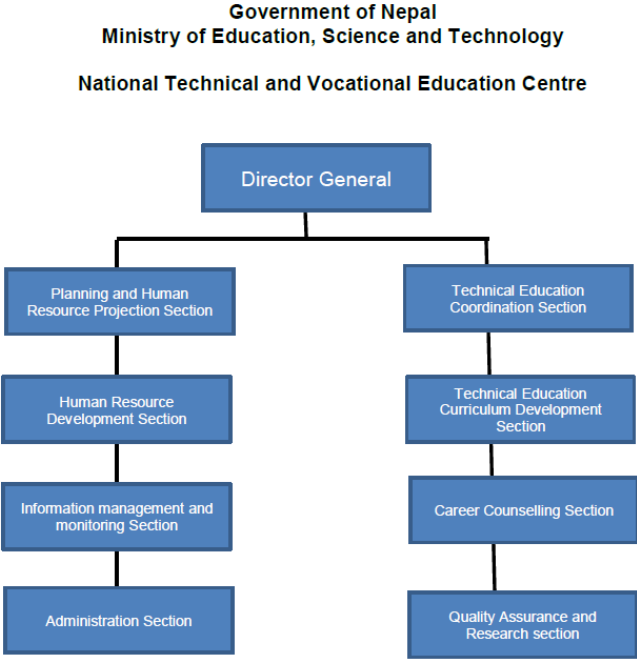
TVET-related tasks formerly distributed among approximately 17 federal-level ministries (Renold & Caves, 2017) must be recombined into the MoEST and distributed among various levels. Transition processes must be clearly described so these activities can be successfully completed, and no TVET program or activity should be ignored.

CTEVT, which was previously responsible at least part of every TVET activity in Nepal, must be included in federalisation since its tasks will be reallocated among all three governance levels. This project is already addressed in the Education Road Map.

Uncertainty among TVET institutions and actors

The two fact-finding missions have shown that there is great uncertainty about how the TVET sector will be federalised. The call for clear new structures is positive, and organisational charts for new units are already being discussed. A critical look at Figure 1 suggests that the MoEST is planning to change the federal administration. However, governance structures should follow their functions, not the other way around. We recommend carrying out functional analysis first, and defining administrative structures and/or semi-autonomous institutions later. The guiding principle is that structures follow functions, otherwise GoN risks reorganizing several times, weakening trust and faith in leadership.

Figure 1: Draft of new organizational structure on the federal administration level



Many of the roles shown in Figure 1 are related to national sovereignty and must therefore be part of the federal administration. However, others are questionable. For example, does “Career Counselling” need to be at the federal level? There is always a dilemma when new ministries are created, because the administration should be reorganized accordingly but many key issues have not yet been resolved. We advise moving to an interim solution, and making it clear especially to Ministry employees that another reorganization will take place when new legal regulations are clear.

Views on the federal, state and local levels of education

Our discussions with selected state officials, including the Social Development Minister of State 1 and the Mayors of municipalities and metropolitan cities in State 1, have confirmed an impression of *great uncertainty*. State and local actors are currently developing their own guidelines for the TVET sector and are planning to draft their own laws. This is understandable from the point of view of power politics. If one entity does not lead fast, the vacuum is usually taken over by other units.

3.3.5 Conclusion and recommendations

The *Education Road Map* combines with the *TVET Strategy* to outline an inspiring way forward for the federalisation process. They should be implemented in the coming months, in particular the High-Level Steering Committee, defining certain normative issues in the TVET Policy, and legislating the TVET Act. Points 4-9 of the TVET Road Map can be specified in the TVET act.

Recommendations

Institutionalize coordination

To avoid unnecessary conflicts and subsequent harmonization processes, we recommend coordination among responsible actors, to be institutionalized as quickly as possible.

Create a project to manage the transition phase

Organizing a project to oversee and guide the transition phase will help make sure that all necessary projects are planned and executed at all three government levels (see Master plan, section 4.1.1)

Identify and describe key TVET processes

To honour the principle that structures follow functions and ensure that organizational structures are not designed before structures become clear, identify and describe in detail the key processes of the TVET sector. Every task and process can be allocated to the appropriate level, and helps support a consistent federalisation process.

Integration of Governance: Re-Combine Tasks into Processes

The tasks previously carried out by current authorities including various ministries, CTEVT, and TITI will also be part of the future federalised TVET system. These tasks should be pulled together and re-combined by process as defined in the previous recommendation.

Transparently Reallocate Tasks

With tasks organised into key processes, the GoN can decide which tasks are best carried out by which institution (both government and non-government) and at what level. If this process is systematic and transparent, new organisational structures can be efficiently defined.

4. Important measures for TVET implementing process

As we have already mentioned, there is latent uncertainty about how the federalisation process in Nepal’s TVET sector will be organized. This is particularly important because the federalisation process requires coordination among the federal, state, and local levels. It is therefore very important that the GoN makes decisions quickly and coordinates with the state and local levels.

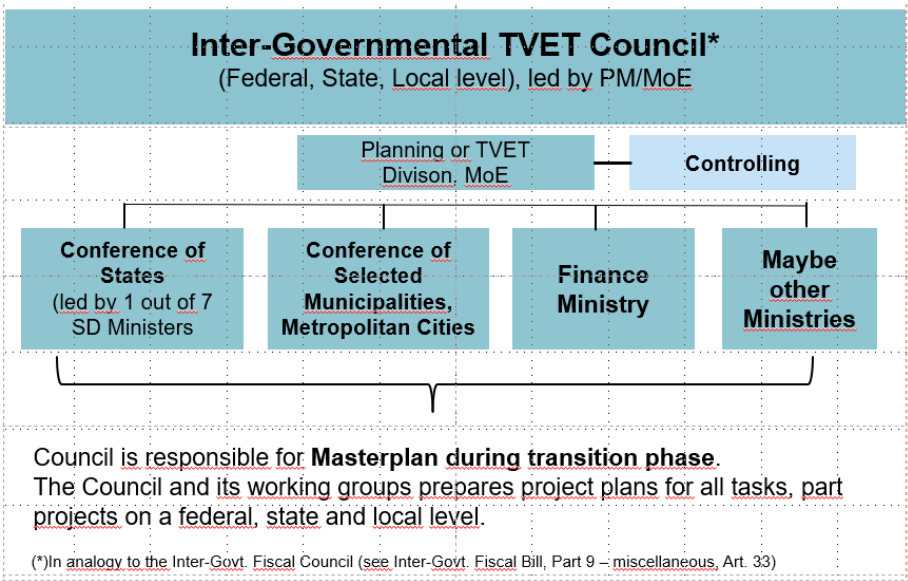
In the following, we describe four very urgent tasks that the GoN and MoEST should accomplish in the coming weeks and months. These are creating an Inter-Governmental TVET Council/Coordination Committee or similar institution to act as high-level steering committee, defining a TVET policy for 2030, developing a TVET Act, and conducting a financial flows study.

4.1 Inter-Governmental TVET Council

Federalisation requires a high degree of coordination among government levels. Coordination is also required, as stipulated by Art. 232 of the Constitution. One possible measure to facilitate this coordination is creating an Inter-Governmental TVET Council/Coordination Committee (or High-Level Steering Committee), which should be led either by the Prime Minister or the Minister of Education. This body would fit well with the Inter-Governmental Fiscal Bill (see Part 9, Art. 33), which places similar importance on coordination among government levels.

We show one possible model for the composition of this council in the following figure 2. As a political body, its primary task is to make the necessary decisions so that working groups can carry out the work commissioned by the Coordination committee.

Figure 2: Composition of the Inter-Governmental TVET Council/Coordination committee or similar institution



(Source: authors’ own depiction)

In addition to the Federal Government, which should be represented in particular by the MoEST, the Ministry of Finance and/or other ministries, a representative number of political decision-makers from the state and local levels must be involved.

The secretariat of this Council is run by an administrative unit of the MoEST. The Council determines its organization (number of meetings per year) and sets up working groups, which form the basis for decisions in each meeting. The working groups may also include experts from the TVET sector or external technical advisors.

4.1.1 Developing a TVET Master Plan

As mentioned before, federalising education includes concurrent powers shared among government levels. Therefore, all three levels must work together (Constitution Art. 232).

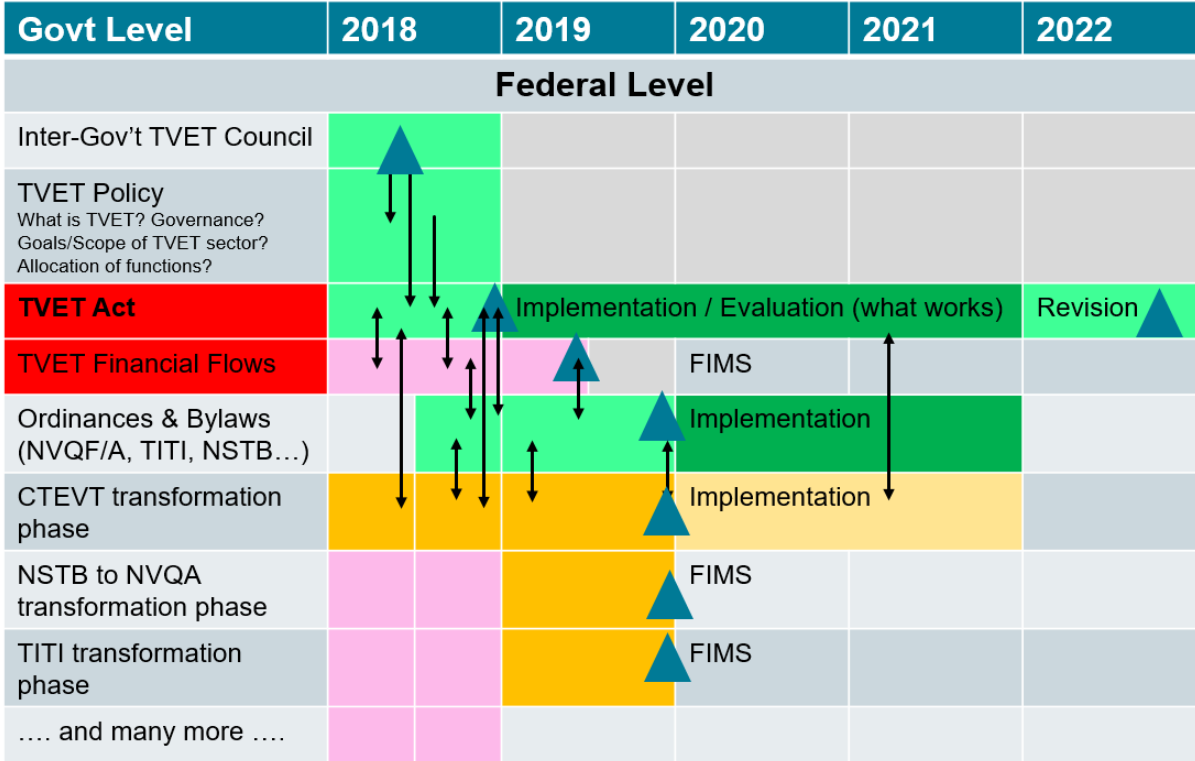
Joint planning is essential for an orderly transition from the old to the new regime. This requires all three levels to transparently decide upon and schedule transition tasks. Organising this coordination through the Inter-Governmental TVET Council will help prioritize and schedule tasks. It is especially important for tasks that are part of the critical path, tasks that can be executed simultaneously, and tasks that depend upon one another sequentially.

In addition to coordination, a Master Plan is a useful and proven strategy for managing complex change processes. The Master Plan should summarize the transition's organizational structure and all necessary projects it entails, making the activities within the transition process transparent. This increases trust, confidence and efficiency. The TVET Strategy, presented by Dr. Khanal (MoEST), already calls for such a Plan.

Reading Guide for Figures 3, 4 and 5

Figures 3, 4 and 5 exemplify possible outlines for Master Plans at the federal, state and local levels respectively. These visualize the concept rather than suggesting an actual Master Plan. **Each row** represents a project or subproject, and the **columns** display the timing between 2018 and 2022. Blue triangles indicate completion or deliverables. Vertical arrows are examples interrelations among projects and subprojects.

Figure 3: Examples of urgent projects on the federal level



(Source: own depiction of the authors)

Figure 3 shows examples of urgent projects and subprojects on the federal level.

- Creating an **Inter-Governmental TVET Council/coordination committee** is the cornerstone of coordination among the federal, state, and local levels. The Council should be responsible for developing the **Master Plan**, which defines subprojects, priorities, and the critical path.
- Defining the **TVET Policy** is closely related to developing the TVET Act. The Policy clarifies a series of normative questions, creating a foundation for developing the TVET Act.
- The cornerstone of the plan is developing a **TVET Act** as soon as possible—indicated by the blue triangle at the end of 2018. The first version of the TVET Act should be followed by its implementation and the evaluation thereof. This will probably lead to a revision of the TVET Act in 2022 based on its results and TVET leaders learning from experience.
- A **TVET Financial Flows Study** is another key project that will help guide federalisation. The study, discussed in detail below, will ideally be formalised into a financial management system for TVET.
- Figure 3 shows subprojects as **ordinances or bylaws of the TVET Act**. They include CTEVT federalisation, transforming the NSTB into the NVQA, and federalising TITI.
- Since this is a non-exhaustive list of necessary subprojects, the last row refers collectively to the many more important subprojects.

Figure 4: Examples of urgent projects on the state level

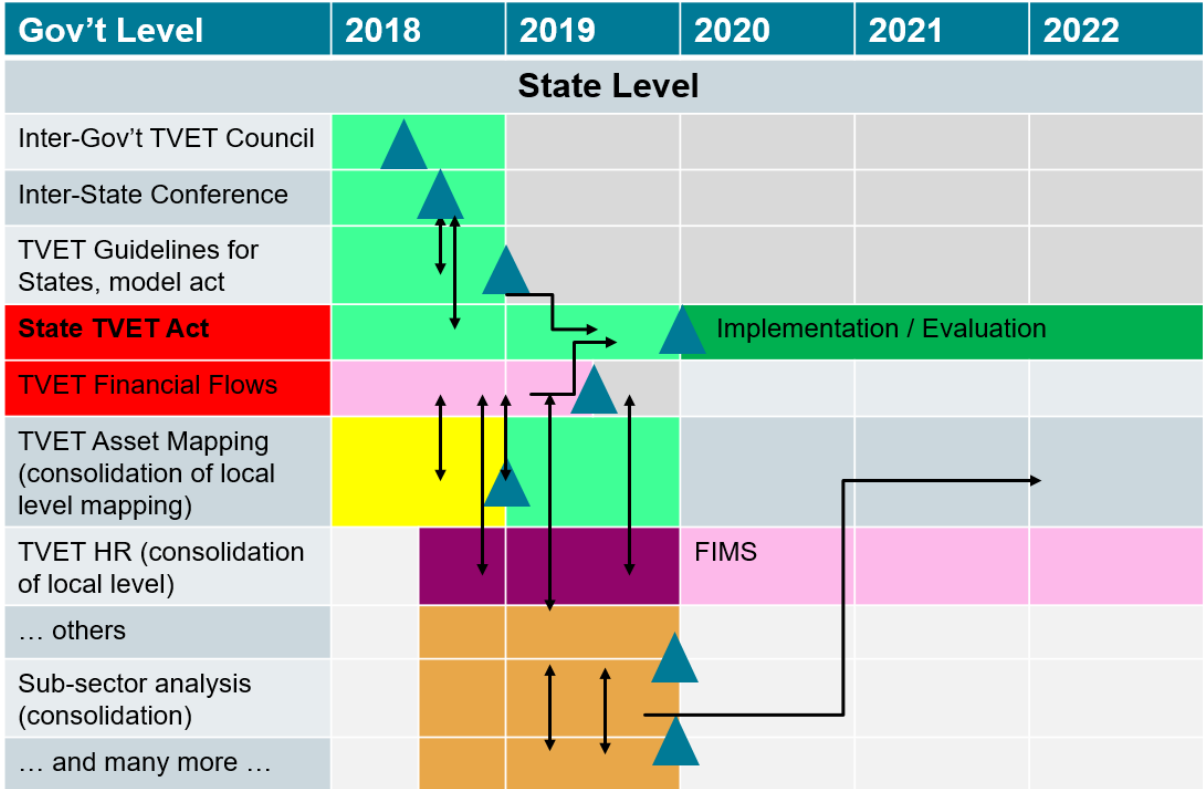
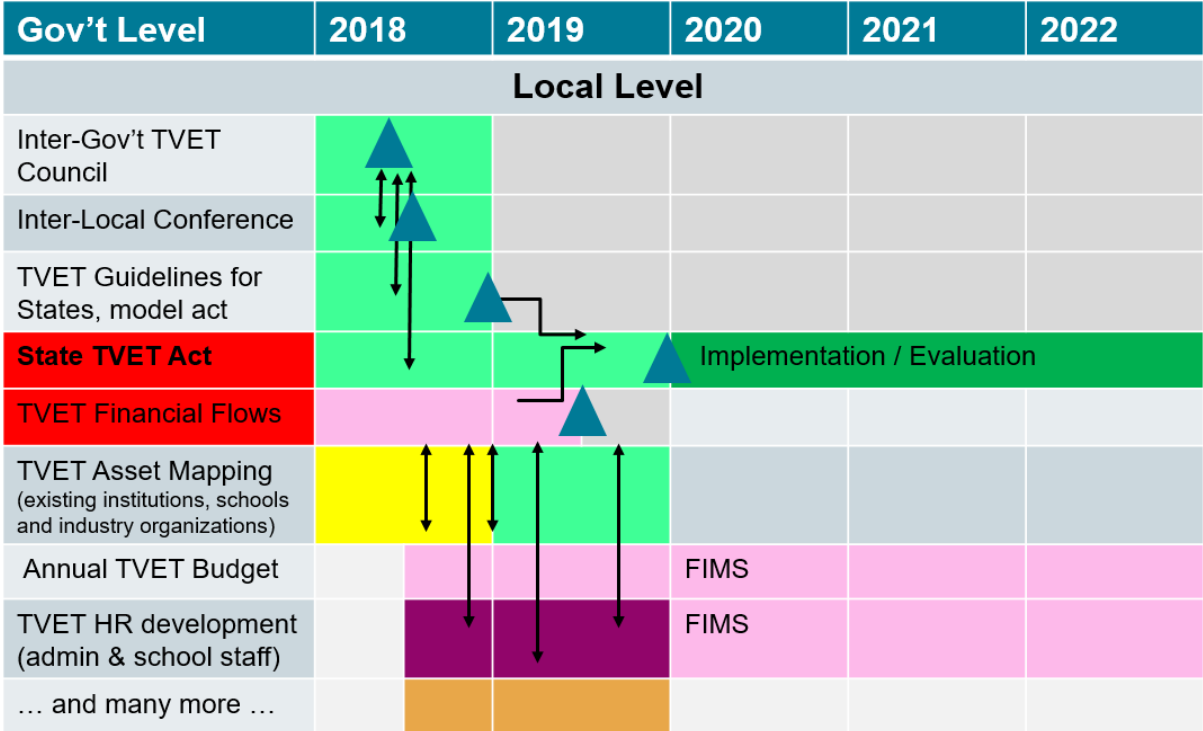


Figure 4 displays examples of urgent projects and subprojects on the state level.

- Participation of states in the [Inter-Governmental TVET Council/coordination committee](#) supports coordination among government levels.
- States may also organise an [Inter-State Conference](#) that coordinates state federalisation work.
- The cornerstone of federalising TVET at the state level is developing [State TVET Acts](#) based on the federal TVET Act. These clarify the interconnections among projects and subprojects on the federal and state levels. The state TVET act is related to developing state TVET guidelines and designing a corresponding Model Act to help states create their own TVET Acts.
- The State TVET Acts also build on the [Financial Flows Study](#), which highlights how closely related the Master Plan for different government levels need to be.
- Other examples of urgent subprojects on the state level include consolidating local subprojects like local level asset mapping, sub-sector analysis, and HR development. As a result, the Master Plans for the state and local levels are closely interlinked.

Figure 5: Examples of urgent projects on the local level



(Source: own depiction of the authors)

Figure 5 shows examples of urgent projects and subprojects on the local level.

- Local governments coordinate with the federal and state levels through representatives in the [Inter-Governmental TVET Council/Coordination committee](#).
- An [Inter-Local Conference](#) among local levels within states can help coordinate local actors.
- The [Financial Flow Study](#) depends on [TVET Asset Mapping](#). The latter project will gather information on existing institutions, schools and industry organizations already involved in TVET at the local level.
- The Financial Flow Study is a key ingredient for setting local-level [annual TVET budgets](#).
- Furthermore, local actors need [developing the human resources](#) necessary to steer and implement TVET. This human resource development refers to both administrative and school staff.

4.1.2 Organizational structure and working groups

A [working group on Master Plan Management](#), based in the Inter-Governmental TVET Council/Coordination committee, should initiate the various subprojects together with states and local governments and plan their timing.

- [List all projects and subprojects](#) necessary for federalising the TVET sector at each government level in the [next five years](#).
- [Define the critical path at each level](#) and coordinate it with all governmental levels. What needs to be done first?
- [Define necessary working groups](#) on each level and allocate projects among them.
- [Check the vertical coherence or multi-level governance](#) of project work, For example, how are projects on each level interlinked? What is the critical path for the whole TVET federalisation process? What can be done in a simultaneous engineering mode?

4.2 TVET Policy 2030: Setting normative goals

An important task of the Inter-Governmental TVET Council/coordination committee is to clarify a series of normative questions within the framework of policy guidelines (TVET Policy 2030). For example, what [type of governance](#) should be chosen for the TVET system, how are the [TVET functions allocated among government levels](#), and what will be the [role of industry](#) in the future? These questions and others determine Nepal's ideal TVET for the long term. They concern the sovereignty of Nepal and should be answered jointly by TVET leaders at all levels.

4.2.1 Scope of the TVET Act: formal – non-formal and informal TVET

International education policy distinguishes between [formal, non-formal and informal education](#), especially in the context of lifelong learning. The TVET Policy 2030 should define these three different forms of education.

[Formal education](#) programmes are classified in the National Qualifications Framework and are related to the ISCED classifications⁴. They follow their own governance logic such that, for example, they may be free of charge for young people or TVET schools may be held to accreditation and quality standards. In order to improve the social status of formal TVET programmes, they must be recognized as independent formal qualifications with comparable value to academic qualifications. They must also be able to show where they fit in the education system and how they connect to further formal education programmes. This is permeability.

[Non-formal education](#) is structured but not regulated by a law. These courses are very diverse in terms of content, providers, quality, governance, and financing. They are usually undertaken by adults to find a job or get access to formal education programmes. They are mostly short-term courses. Non-formal courses are important for skills development in general. However,

⁴ The **International Standard Classification of Education (ISCED)** is a statistical framework for organizing information on education maintained by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

they are not considered TVET programmes, though they can be considered job-related continuing education courses.

Finally, **informal education** is unstructured, unintentional, and unregulated. Due to its large **informal labour market**, this type of education is very important in Nepal. Procedures for the recognition of informal and non-formal education (called recognition of prior learning or RPL) can help informally educated people to find their way into formal education.

Because of their distinct and important roles in skills development and individuals' educational careers, **all three forms of education should be individually addressed in both the TVET Policy and the TVET Act**. Kathmandu University's overview of Nepal's existing formal, non-formal and informal programmes shows the current diversity. The same study also provides important information on which programmes have been regulated and recognised by which ministries or by the CTEVT thus far (Baral, Durga Prasad, forthcoming).

As described by Lamsal (2012), formal, non-formal, and informal education should be treated differently in terms of funding mechanisms. Due to ministry reorganization we assume that the MoEST is solely regulating formal education programmes at the federal level and local providers are running the programmes. State and local actors will also be involved. The MoLESS, on the other hand, will be responsible for the labour market-oriented courses which is considered as non-formal education.

4.2.2 Good governance

Good governance for TVET is a normative issue, but we established in the previous report (Renold & Caves, 2017) that Nepal's TVET leaders prefer an **output-oriented and coordinated governance model**. The current model is fragmented and input-oriented, so that goal will require significant change in both the type and mode of governance.

Governance type is its degree of coordination or fragmentation. Coordinated governance means that all actors act in concert within a clear and unified legal framework. Fragmented governance involves multiple potentially conflicting legal directives around TVET, or divided authority over different actor types. Previous to the current reform and federalisation process, about 17 ministries were responsible at least in part for TVET in Nepal and the sector was highly fragmented. Already that problem is being resolved as TVET moves under the MoEST. Governance will be further coordinated by the TVET Act and TVET Policy for 2030.

Governance mode is about how funding is allocated, whether it is input- or output-oriented. Input-oriented governance means that funding flows to actors in the form of specific resources like textbooks, teachers, and other materials. Output-oriented funding is usually allocated on a *per capita* basis according to student numbers modified by levels of need. This is a question that is still relatively unclear in Nepal because of the opacity of financial flows in the TVET sector, though the financial flows study suggested in this report would help immensely.

In short, it is not enough to simply call for good governance over TVET. Instead, everyone involved in the changing TVET sector needs to specify exactly what that means. Changes can be made when everyone understands exactly where the current situation stands relative to the ideal situation. Therefore, we emphasize that **good governance for TVET in Nepal is about a coordinated type and output-oriented mode**.

4.2.3 TVET programme approach

Nepal's approach to its TVET programmes is another normative issue, but again we already have a general vision for where leaders and stakeholders want the sector to be. As presented by the MoEST during our mission for this report, the general strategy of the TVET sector is “to develop a market-sensitive, occupation-driven, inclusive TVET system to serve all local levels and every segment of society” (Khanal, 19.4.2018). In addition, point 8 of the Education Road Map calls for strengthening the link between education and business sector. Therefore, [the approach to TVET programmes in Nepal will be one of strong education-employment linkage based on occupation-driven programmes.](#)

4.2.4 Allocation of TVET Functions to the three government levels

Allocating TVET-sector functions to all three levels of government is a difficult issue. The levels are new, and many of their functions and capacities are unknown. Added to that, TVET is not the same as general education or primary education because it cannot be quite so locally driven. Individuals with TVET credentials need mobility, so their credentials must be based on standards that extend at least to the regional and ideally the national level. Relationships between employers and education-system actors are built at every level of society, and implementation is most likely to be a local issue.

Renold and Caves (2017) fully describe the allocation of functions to government levels, but the approach follows two essential principles. First is subsidiarity, and second is that structures follow functions. [Subsidiarity](#) dictates that each level of governance should only perform those functions that cannot be performed by a lower level. For example, the central government does not need to actually grant certificates and diplomas because state and/or local governments can better reach individuals to give them their physical credentials. However, the federal government should recognize diplomas because that enables mobility.

The principle that [structures follow functions](#) is easily maintained by following a simple process for function allocation: list every key task in a given sector, then allocate them according to subsidiarity rather than according to the existing institutions. This way, TVET governance at each level is constructed to accomplish its delegated tasks instead of given tasks that match its pre-existing institutional structure—one that may not be well suited for the goals of the TVET sector.

The developments of new laws, explained in the previous chapter, clearly show that this allocation has already been made in broad terms. The Unbundling Report determines most functions' allocation, and is also a good list of the tasks that will be carried out by the national MoEST and other authorities.

4.2.5 Goals for the TVET Sector

This TVET policy should also set the [scope and targets for the TVET sector](#) for the next 15 years so that all three government levels can align their activities and budgets accordingly. Prime Minister Oli has already mentioned such a goal by announcing that students in all local units should have access to a TVET school. Identifying key issues and setting quantitative, time-limited goals will help with budget calculations and forecasting. They also improve dialogue with donor partners by setting clear priorities and identifying areas of need.

Example: Setting goals for the TVET sector

- How many young people (as a percentage of each age cohort) should have completed formal TVET training by 2030?
- By 2030, how many adults or people from disadvantaged populations should have gained access to formal educational qualifications through non-formal programmes, RPL, or other measures?
- Which industrial sectors have a particularly high need for well-trained employees?
- Which sub-sectors are critical for national economic development?
- How important is TVET quality?

Although the TVET strategy presented by MoEST addresses some the points we suggest, it will be critical for [all three government levels to act in concert and agree on priorities for goals and geographies](#). This presupposes that the Inter-Governmental TVET Council (or the High-Level Steering Committee) can be set up as quickly as possible.

4.3 TVET Act

Another [working group or task force from the Inter-Governmental TVET Council/coordination committee](#) should draft a new TVET Act as foreseen in the Education Road Map. This is a very urgent matter because states are already beginning to develop their own concepts. Article 232 of the Constitution reinforces that it is very important to initiate this work quickly. The situation is also urgent because many managers of institutions and ongoing projects are uncertain about what measures they must take to federalise their work.

Work on the law should be done simultaneously with the development of the TVET policy in order to reach an initial TVET Act as soon as possible. This is known as [simultaneous engineering](#). The normative decisions underlying the framework of the TVET Policy will influence the character and terms of the law.

To ensure that the federalisation process can offer all TVET actors security, confidence and opportunities as quickly as possible, it should be [formulated as open to development](#). This means that the wording of the articles allows a certain [flexibility for implementation](#). All three government levels need to gain experience in their roles, and may find certain tasks are better allocated to different bodies.

We also recommend including a chapter with **transitional provisions**. These encourage actors on all levels to examine what works and what needs to be improved as part of implementation. Before the next elections, the law may be revised if necessary. This uses time and experience to prepare a TVET law that works and will be accepted by all stakeholders.

In all discussions and meetings during Ursula Renold's two missions, stakeholders agreed on Nepal's need for a separate TVET Act.

TVET Act - Example

Possible content and regulation topics for federal-level functions

Structure/section	Content
A. General provisions	
	<ul style="list-style-type: none"> • Principle of cooperation among partners • Permeability within the education system • <i>Goals and scope for TVET sector</i> • <i>HR projections and planning</i> • Development of the TVET sector (incl. Information and training material) • Quality assurance and accreditation • Research, monitoring and statistics
B. Upper-secondary TVET (formal education)	
B1. General provisions	<ul style="list-style-type: none"> • Preparation programmes for TVET (<i>what happens before age 15?</i>) • Monitoring apprenticeship markets (<i>if necessary, maybe later</i>) • <i>Apprenticeship contracts, linked to labour law</i>
B.2 Structure	<ul style="list-style-type: none"> • Subject matter & competencies • VET segments, learning locations, responsibilities • Types and duration of programmes • Accounting for individual needs • VET ordinances and framework curricula (principles and responsibilities)
B.3 Providers	<ul style="list-style-type: none"> • Host company (roles, responsibilities) • VET school (roles, responsibilities) • <i>Inter-company courses on industry level, if necessary</i>
B.4 Supervision	<ul style="list-style-type: none"> • <i>Who is in charge of supervising whom?</i>
B.5 Other academic programmes	<ul style="list-style-type: none"> • <i>Vocational Baccalaureate</i>
C. Non-university tertiary TVET (to improve permeability)	
C.1 Subject matter & competencies	
C.2 Forms of non-university tertiary TVET	
C.3 Providers	
D. Job-related Continuing Education and training (CET) – in coordination with MoLEWCHS	
D.1 Subject matter & competencies	
D.2 Job-related CET courses	

D.3 Government & donor partner support

E. Qualification Procedures, Qualifications and Titles, NVQF

E.1 General provisions

- Examinations & other qualification procedures
- Prerequisites for qualification procedures
- Protection of titles
- NVQF, allocating programmes to NVQF levels

E.2 Upper-secondary TVET

- National TSLC certificate
- National TVET Diploma
- *National Vocational Baccalaureate*
- Qualification procedures
- Examination fees

E.3 Non-university tertiary TVET

- *Polytechnics Diplomas*

F. Training of TVET Professionals

- Requirements for TVET trainers
- Requirements for teachers
- Other TVET professionals
- *Master of TEVT (KU)* as prerequisite for staff at federal/state TVET administration
- TITI

G. TVET Career Guidance and Counselling

- Principles
- Guidance counsellor qualifications
- Tasks for state & local governments

H. National Subsidies for TVET Sector; TVET Funds

H.1 National Subsidies for TVET Sector

- Principles
- Lump-sum funding for state & local governments (*depends on Governance approach*)
- Grants & Subsidies for projects to develop TVET programmes and improve quality
- Grants & Subsidies for specific activities that serve the public interest
- Conditions and requirements
- Budgets, allocation of national & state funding

H.2 TVET Funds

I. Appeals, Criminal Provisions, Implementation

J. Final provisions

4.4 TVET Financial Flow Study

A fourth central project concerns [financial flows, including both allocation and spending](#). This project will be elaborated more carefully in the next chapter. Its implementation should be in parallel to the projects mentioned above.

Why is that project so important? In order for the TVET sector to be successful and meet its goals as formulated in the TVET policy, all stakeholders all levels must be clear on current and future financial flows. Parajuli and Shakya (2012) analyse TVET financing under the previous constitution, showing that clarity is not an easy undertaking. Furthermore, the challenge is to [align the goals formulated in the TVET policy with the revenue power of the government](#) at all levels.

TVET leaders at the federal, state, and local levels can calculate financial flows in cooperation with the Ministry of Finance, the Finance Commission, and the Inter-Governmental Fiscal Council. The example of the new annual budget 2018/19 is a good starting point for planning. Calculating [spending flows](#), on the other hand, depends on how the [TVET Act](#) allocates functions among levels and the [TVET Policy](#)'s scope and goals. Therefore, determining spending flows has to be done simultaneously with drafting the TVET Act—another example of [simultaneous engineering](#).

Donor partners' financial flows and the role of the TVET Fund are especially important in Nepal. GoN's existing requirements, set in the Inter-Governmental Fiscal Bill, have to be respected. As soon as its function is clear, the [TVET Fund should be clearly defined and regulated by specific legislation in the TVET Act](#).

In the next chapter, we show models for achieving financial flow transparency. It requires cooperation among Ministries, universities and stakeholders in the field. The work can be carried out and coordinated under the direction of Prof. Mahesh Parajuli (Kathmandu University) and the Joint Secretary of the MoEST Planning Division to build on existing knowledge.

4.5 Conclusion and recommendations

Prioritize and urgently implement four key tasks in the coming months—these are critical for the TVET sector's success.

Recommendations

Establish an Inter-Governmental TVET Council or similar institution

A high-level body with representatives of all three government levels must be set up urgently to ensure that all TVET federalization activities are coordinated among the federal, state and local levels.

Create a TVET Policy 2030

The same high-level council must address the remaining unclear normative issues. These include allocating responsibilities formal and non-formal education, defining what Nepal means by "good governance" and the TVET programme approach, allocating detailed tasks to all three government levels—unless they are already clearly defined in the unbundling report—and defining specific objectives for the TVET sector.

Identify and describe key TVET processes

To honour the principle that structures follow functions and ensure that organizational structures are not designed before structures become clear, identify and describe in detail the key processes of the TVET sector (see section 4). Every task and process can be allocated to the appropriate level, which helps support a consistent federalisation process.

Legislate a TVET Act

Based on the TVET Policy 2030, a TVET Act should be developed as quickly as possible. This is the most important element of the critical path to federalising TVET because the seven states depend on a national TVET legal framework to develop their own state laws.

The TVET Act will determine which tasks go to which government level. Defining governance principles within the framework of the TVET Policy also determines how the TVET Sector will be financed, including spending power (see next chapter).

5. Financial Flows of TVET Sector in Nepal: its challenges and way forward

In the literature review (Chapter 2), we discussed the current state of knowledge around financing TVET. It goes without saying that the federalisation process adds a layer of complexity to this issue in Nepal. Therefore, we need to update and augment existing knowledge on TVET financing through an analysis of future revenue and spending powers. This is not an easy project due to Nepal's complex transition phase, so we break it into a scheduled set of work packages.

5.1 Current situation and challenges to calculate financial flows

In this section, we describe the challenges of comprehensively analysing financial flows in Nepal's past, present and future TVET sectors. As we have already seen in the literature review, there is no complete overview of Nepali TVET financing before federalisation. Furthermore, much of the information that would steer calculation of future financial flows is not yet clear, including normative questions and concrete regulation in the TVET Act. Nepal's TVET sector is currently in transition mode, so new revenue powers under the new constitution remain undefined. However, the states have already been established and will need to collect and spend TVET-related funds. This demands an evidence-based analysis of current and future financing as quickly as possible.

Revenue sources

Before the new constitution, the main sources of funding were the national government and donor partners and—to a very small extent—local governments. In the future, when power is federalised and the Inter-Governmental Fiscal Bill is in place, three government levels will have revenue power and donor partner funding will continue. Funding will be coordinated by the Inter-Governmental Fiscal Council (Inter-Governmental Fiscal Bill, Part 9—miscellaneous, Art. 33), and all donors will be expected to coordinate funds at the national level (Part 5).

Budgeting and oversight

There were no states under the previous budgeting model, so budget applications were submitted directly to the central government by local units via District Development Committees (DDE), Municipalities, and Village Development Committees (VDCs). At the central level some 17 ministries plus the semi-autonomous CTEVT were active in one form or another in the TVET sector.

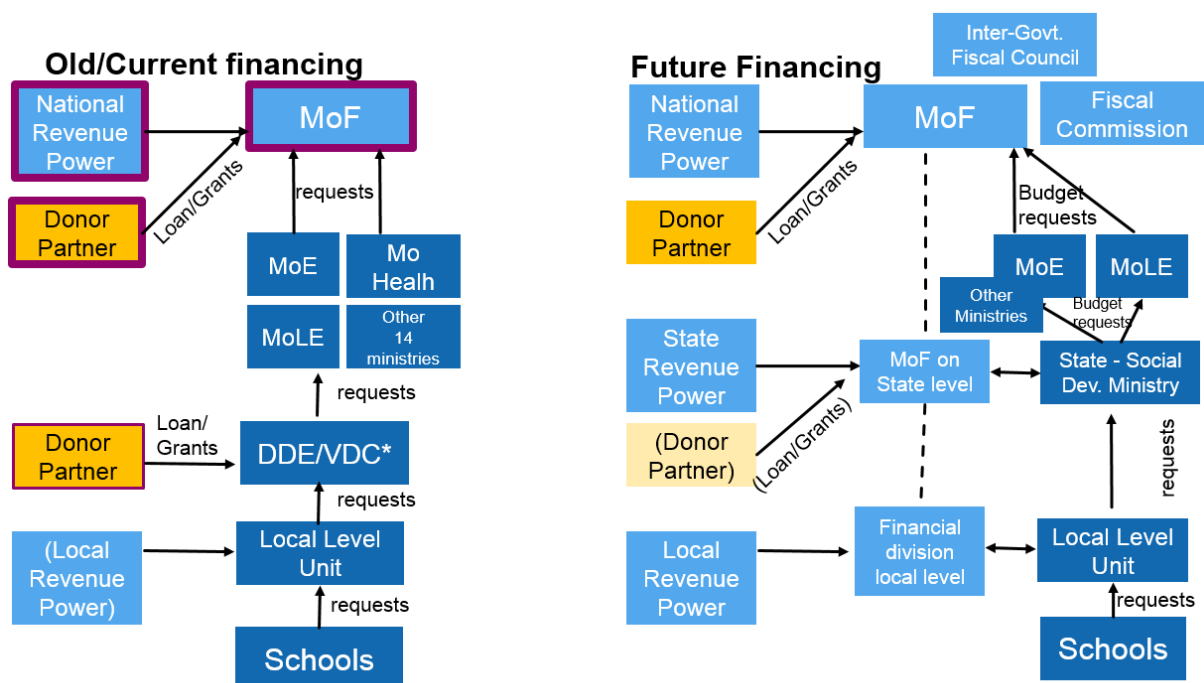
In the future, local education units, state-level Social Development Ministries, MoEST, and the Ministry of Employment will submit annual budget applications to financial authorities, who will prepare the overall budget. The GoN has already agreed to reduce education competences to

two ministries (MoEST and the Ministry of Labor, Employment and Social Security, MoLESS)⁵, which is an essential prerequisite simplifying the budget process and improving fiscal transparency.

Reading Guide for Figures 6 and 7

Figures 6 and 7 show models of the old/current and future TVET financial flows. Since there is little reliable and publicly available information, these figures should be taken as approximations.

Figure 6: TVET financing in Nepal: Current and future models

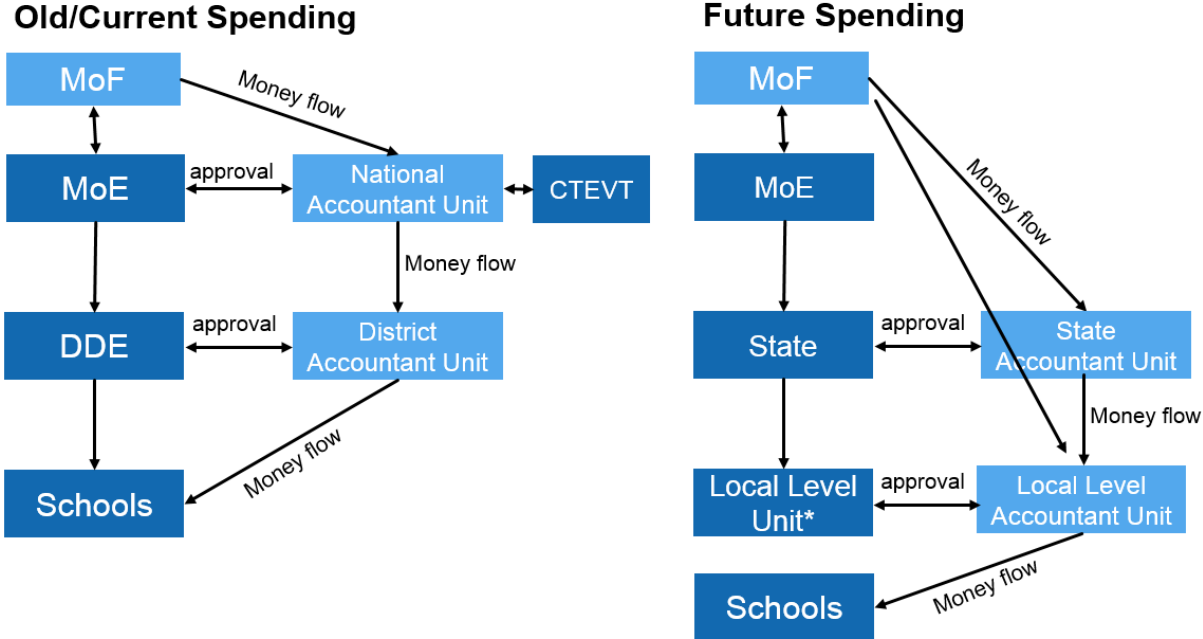


* DDE/VDC stands for District Development Committees DDCs, Municipalities, Village Development committees (VDCs).

(Source: own depiction of the authors)

⁵ The MoLESS is only responsible for “Employment oriented skill development and vocational training policy” (see Nepal Gazette. Part 67, Nepal). This is basically the non-formal part, which prepares adults to enter or re-enter the labour market.

Figure 7: TVET spending power in Nepal: Current and future models



* Local Level Unit = Metropolitan cities, Municipalities, Palikas

(Source: own depiction of the authors)

Spending

On the expenditure side, the change is not very complex. The only thing to note is that DDEs and VDCs will no longer play a role because of the introduction of states. Expenditures on education go directly from the national Ministries to states and/or local units. In addition, all three levels will have each expenditures at their own levels, depending on how the competence structure in the TVET is organised.

5.2 Financing the TVET Sector

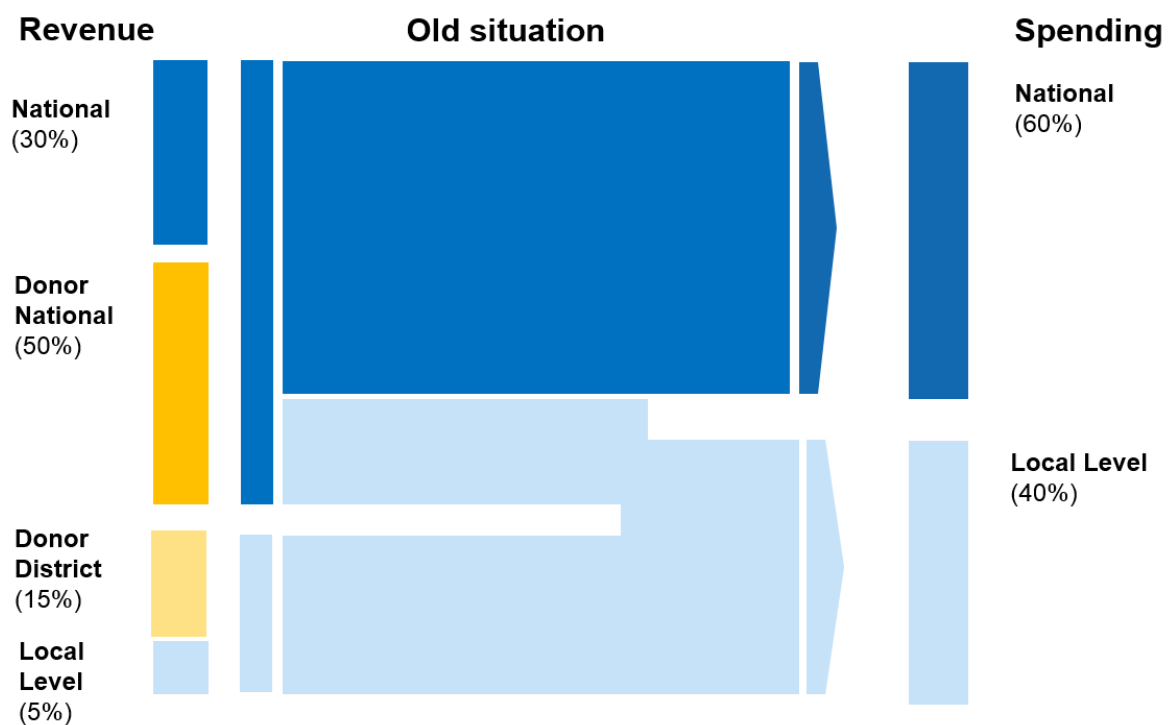
To create comprehensive financial transparency about the TVET sector, the GoN will have to show and make transparent the dynamic development from current to future revenue and spending powers. To illustrate this, the following three figures illustrate the symbolic differences between the three stages of development.

Reading Guide for Figures 8, 9 and 10

All information is based on estimates by the authors. They were checked for plausibility at meetings with various stakeholders in April 2018. Without additional studies it is not possible to provide a better data overview at the moment.

The left side of each figure displays the revenue sources of different government levels and of donors who provide finances on different levels. The right side displays the spending powers of each level. Arrows connecting revenue sources and spending powers illustrate the financial flows balancing the two sides.

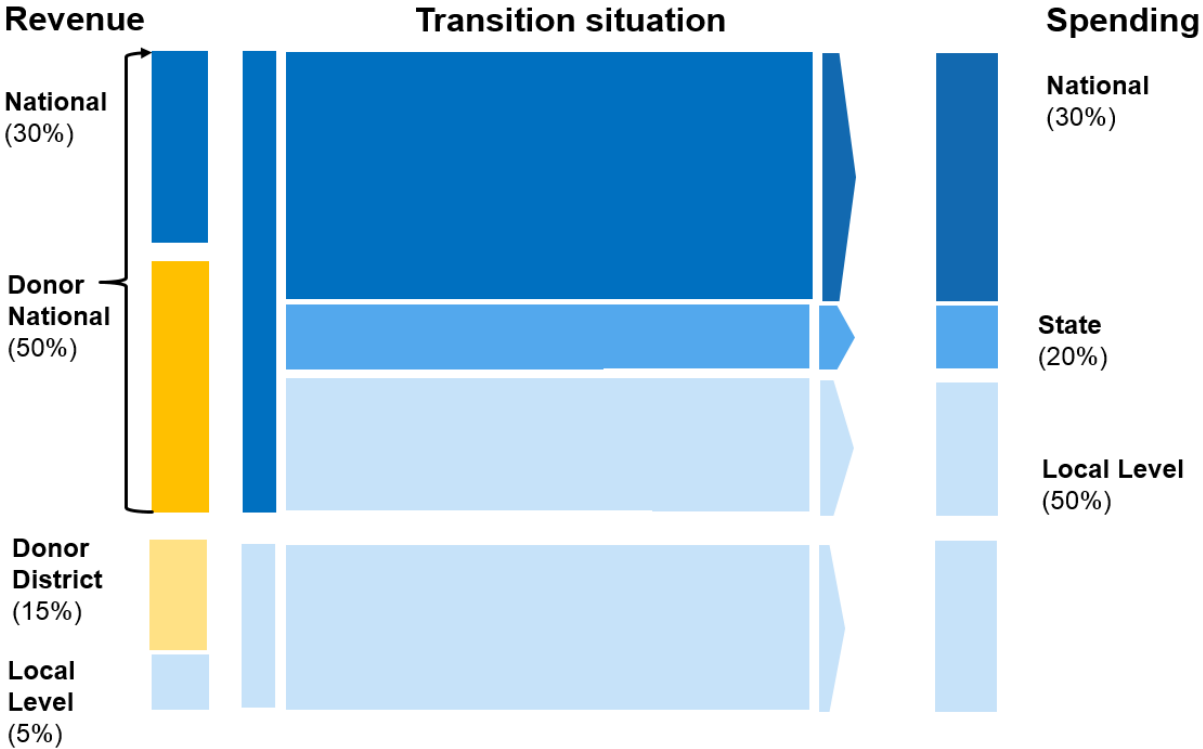
Figure 8: TVET revenue and spending powers in Nepal before federalisation



(Source: own depiction of the authors)

Figure 8 shows the situation before the introduction of the new constitution. The figure shows that the national government and donor partners are the funding sources for the TVET sector. A very small part (difficult to calculate, Parajuli 2013) was probably financed by the local units themselves. On the expenditure side, most of the funds were spent by the CTEVT and approximately 17 national ministries. An estimated 40% of all expenditure went directly to the local units via DDEs and VDCs.

Figure 9: TVET revenue and spending powers in Nepal during federalisation

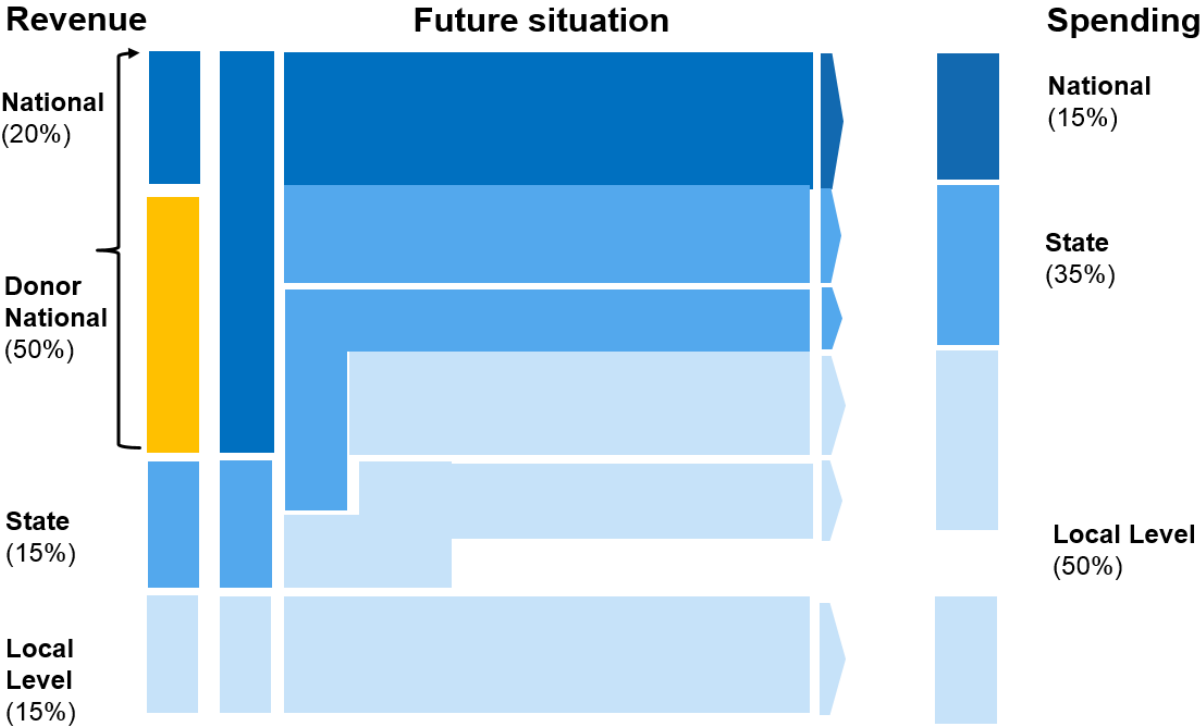


(Source: own depiction of the authors)

After the elections, and since the new governments were appointed at the national, state, and local levels, Nepal is in transition mode. The left side of Figure 9 shows that the funds issued in 2018 are based on the old revenue model. However, now all three levels of government exist and are already spending money. Due to the lack of a clear legal basis, we cannot determine the principles by which money is allocated and spent. The Inter-Governmental Fiscal Bill provides a clue, stating that the “Government of Nepal may collect tax revenue, non-tax revenue and penalty within the jurisdiction of the state until and unless the provisions and operation of State Consolidated Fund as per this Act. The Local Level may collect tax revenue, non-tax revenue and penalty within its jurisdiction as per the prevailing law until and unless the law is not enacted form Rural Municipal Assembly or Municipal Assembly” (p. 15, Art. 37).

The information on the right side in the transition phase diagram is hypothesized rather than observed. Expenditures are expected to shift to the state and local levels as they come into being. We discussed this approximated information at stakeholder meetings, where it was considered plausible. The 2018 financial statements (Red Book) will show how much each level has actually spent.

Figure 10: TVET revenue and spending powers in Nepal after federalisation



(Source: own depiction of the authors)

In the future, both the revenue and the spending side will change. In a few years, we will know how much money each level of government can raise. Figure 10 assumes that the national government raises 20% of TVET funding, while the state and local levels each raise 15%, respectively.

Given Nepal's stage of economic development, we assume that donor partners will also continue to make significant financial contributions. However, the flow of donor money might change. Under the Inter-Governmental Fiscal Bill, all donor funding for the TVET sector will have to be approved by the national government. Part 5 of the Inter-Governmental Fiscal Bill adds:

“The Government of Nepal shall have power to obtain foreign grant or borrow loans. Foreign grant and loans shall be obtained or borrowed by the Government of Nepal as to have macro-economic stability of the country. The Government of Nepal may raise the foreign grants and assistance for the projects and programmes implemented by the state and local level. The state and local level may not raise any type of foreign grants and assistance or may not implement and cause to be implemented any projects and programmes on foreign grants and assistance without pre-approval of the Government of Nepal” (p. 6, art. 12).

Hence, Figure 10 assumes that all donor money enters the TVET system on the national level.

If federalisation is carried out in accordance with the new Constitution, much of the expenditure should be at local level in future. In the TVET sector, however, the national and state levels will continue to play important roles, so we assume a virtual distribution of expenditures with 15% national, 35% state, and 50% local. To accurately understand and calculate future

expenditures we would need to know all TVET regulations, most likely from national and state TVET acts.

In addition to missing information about real TVET regulations, we also face many open questions about administrative staff, including human resource departments and curriculum development staff. Should these costs be included in the TVET budget or not? In countries like Switzerland, administrative costs at all levels are part of personnel budgets, not sector-specific budgets. This is another normative question for the GoN to address.

5.3 Conclusion and recommendations

TVET funding sources and expenditures must be reconciled. This can only be done if one knows which government level carries out which tasks, and knows TVET development goals including how many people will be trained every year. We recommend carrying out a comprehensive financial flow analysis, to be carried out in three steps.

Recommendation

Carry out a comprehensive TVET financial flows analysis in three steps.

Step 1: Update and extend the data published in Tables 1 and 2 in Parajuli and Shakya (2012), if possible until 2018. Record data from the local units and any local donor partner support to improve the transparency of existing TVET funding.

Step 2: Calculate annual TVET revenues and spending to make it transparent. Include the development of both revenue and spending over time. This helps create a robust calculation scheme parallel to the development and implementation of legislation, which can also be transitioned into a financial management system (FIMS).

Step 3: Carry out a full cost survey to generate a complete picture of financing conditions at the local and state levels. As part of a pilot study in one state, include a representative number of vocational schools, other educational institutions, and education administration. The pilot study should improve knowledge of cost types and factors, contributing to the FIMS.

6. Federalising ongoing donor projects in the TVET sector

The last challenge we discuss in this report is how donor partners can adapt their current projects to the new circumstances. Here it is necessary to distinguish between the content of the projects and their financial flows. For content, the important question is whether the project fits into the system. For example, whether a project works with sector-level control and coordination, whether it affects part or all of the TVET system, and how projects relate to TVET institutions.

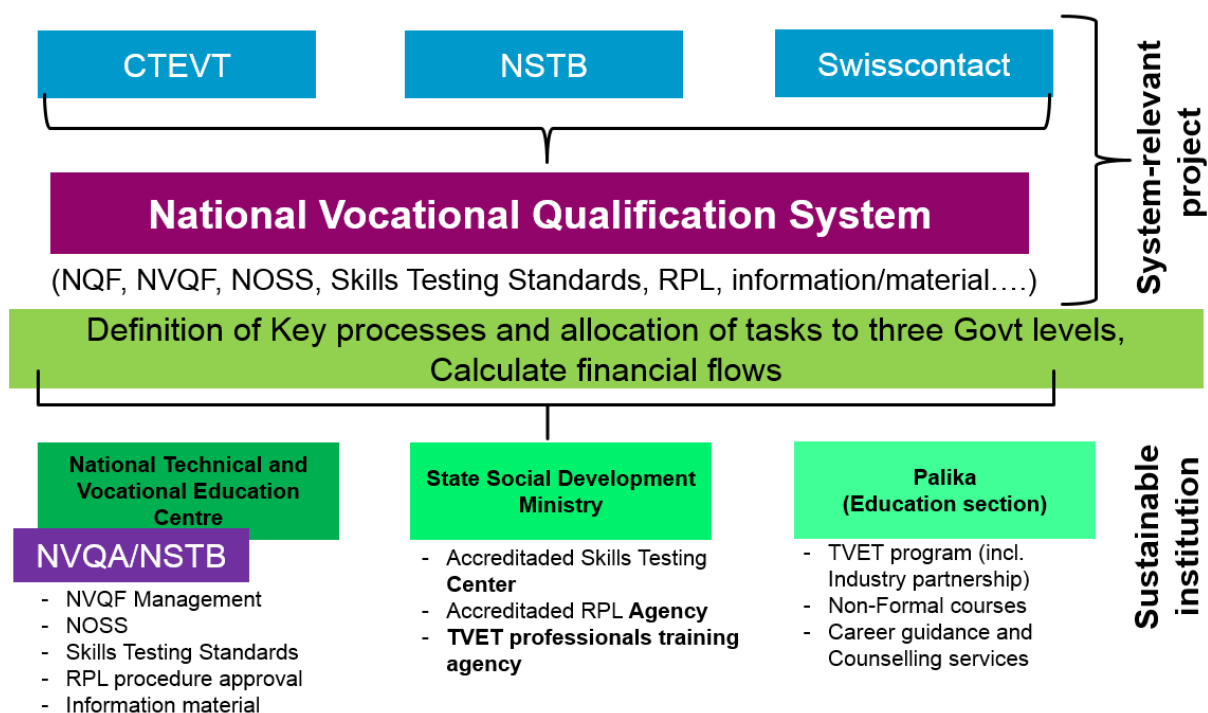
We discuss possible solutions and conditions for existing donor projects by using two SDC projects as examples. These are the National Vocational Qualification System (NVQS) and ENSSURE, both initiated and funded by the SDC.

6.1 National Vocational Qualification System

Our first case is the NVQS. This project will support the future TVET system by creating a framework for qualifications. Once its sub-processes have been developed and tested, they can be transferred to a sustainable institution and made part of the full TVET system.

This project is preparatory work that will eventually be taken over by the appropriate GoN authority. It faces a double challenge. Its first big task is documenting and calculating the costs of all sub-processes during normal sector operations. Second is an analysis of whether and how these tasks should be federalised so that they are in line with the new constitution and the associated laws that define the future TVET sector.

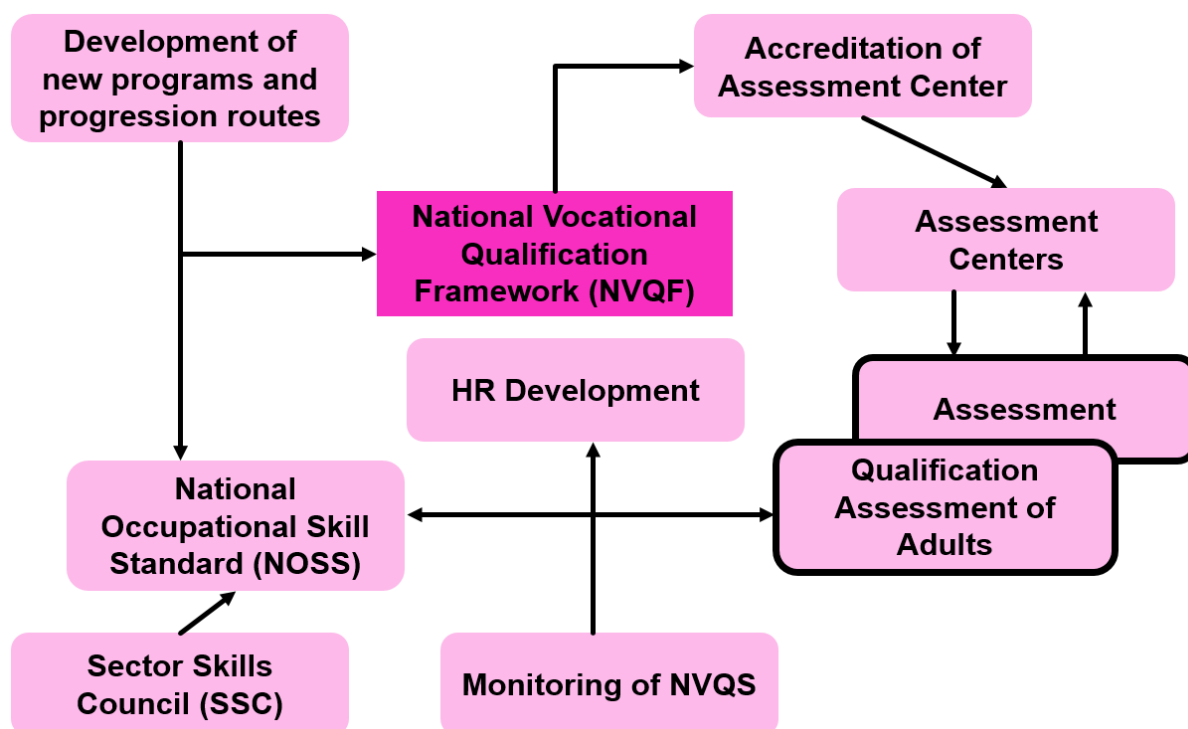
Figure 11: Federalisation of the NVQS project



(Source: own depiction of the authors)

Figure 11 illustrates the NVQS' transition from project mode to a permanent and sustainable institution. The first step is to prepare for the transition process by describing all key processes and sub-processes. Next is allocating TVET tasks from the list of key- and sub-processes to the national, state or local levels according to each level's TVET powers. Finally, the project concludes by clarifying the operating costs incurred at each level of government when the system is permanently established.

Figure 12: Prototypical key processes of an NVQS

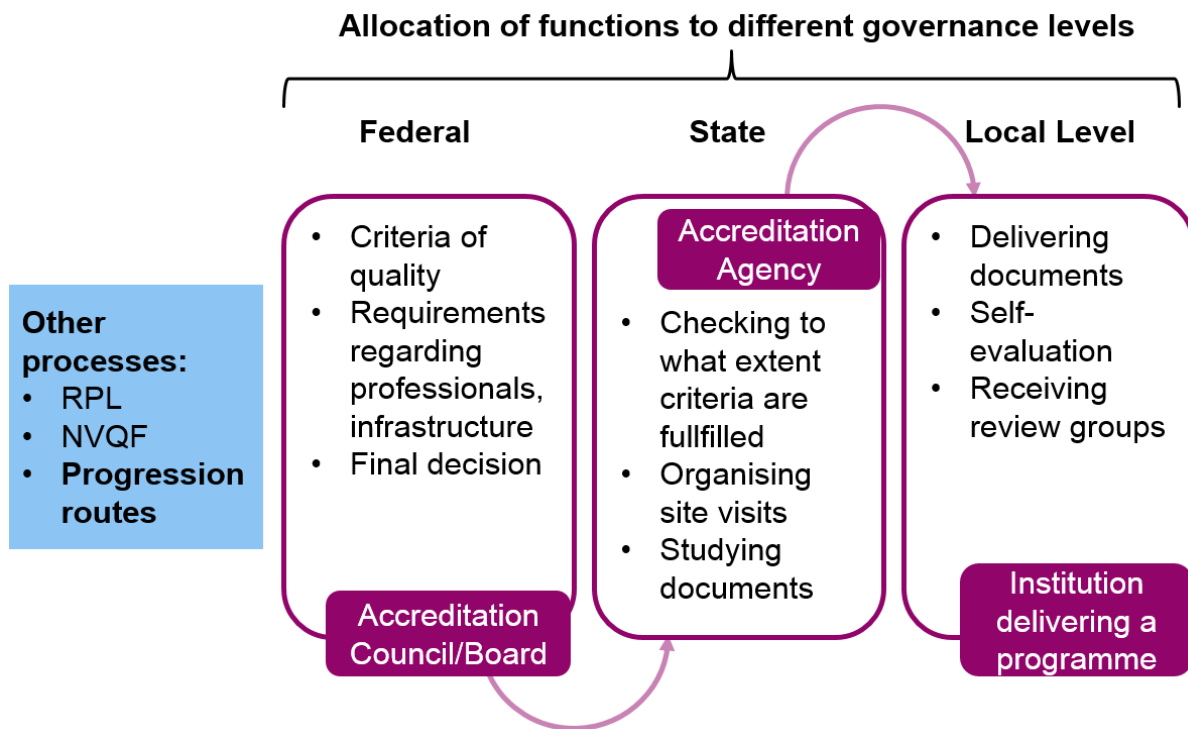


(Source: own depiction of the authors)

At the heart of the NVQS is the [National Vocational Qualification Framework \(NVQF\)](#), which classifies all educational programmes into levels and differentiates them by pathway, making them transparently comparable to international educational qualifications. The [classification of formal educational programmes](#) is based on descriptors.

In order for the NVQF to be professionalised, maintained and developed over time, it has to include defined sub-processes of system functioning. Figure 12 shows some possible examples of these processes. A central process is the development of the [National Occupational Skill Standards \(NOSS\)](#) for every program and level. Another key process is the accreditation of assessment centres.

Figure 13: Prototypical accreditation processes



(Source: own depiction of the authors)

Figure 13 illustrates a typical accreditation process as an example of the federalisation process for one key process. First, describe the accreditation process and the tasks involved. Next, assign the tasks and phases of the accreditation process to their corresponding government levels. Typically, the criteria and standards for accreditation are defined at the beginning of an accreditation process, usually by the highest relevant authority like a national-level accreditation council or board.

A specialized institution or agency carries out an operational audit, which reviews the specifications or criteria of the accreditation process. The auditing institution is itself accredited or otherwise quality tested. The audit should determine how well each programme meets the criteria and requirements of accreditation. Auditors usually organise site visits with experts who conduct interviews and study documents.

The subject of the audit is an educational programme or assessment procedure carried out by any institution seeking accreditation. If the program or procedure meets all criteria and requirements, state-level auditors apply to the national accreditation council for its accreditation. If it does not meet all criteria, auditors can set conditions to be met by a certain date. Once a program or procedure is accredited, everyone involved knows that it is consistent with all NVQS and NOSS requirements and is a high-quality programme.

Accreditation processes are usually linked to other processes in the education system. This is symbolized by the blue box on the left of Figure 13. Accreditation processes can also be related to the Recognition of Prior Learning (RPL) processes or, as another example, to progression routes.

6.2 ENSSURE 24-Month Apprenticeship

Our second example of a pre-existing donor project in the TVET sector is the new [24-Month Apprenticeship](#), which is being jointly developed by ENSSURE, NSTP, and the CTEVT. This programme will become part of the future TVET system if it is successfully established nationwide. However, there will still be other similar programmes that are already part of the TVET sector.

Because the ENSSURE apprenticeship pilot projects are already implemented and delivered at the local level, there is no urgent need for action. However, the question of federalisation will arise when the CTEVT is no longer responsible for implementing such programmes and the financial flows have changed. Donor partner projects, which are developed in close cooperation with the CTEVT, must be federalised in parallel with the CTEVT's federalisation. At the time of publication, it is not yet clear how the CTEVT will be federalised, so its programmes currently have no short-term need for action.

6.3 Conclusion and recommendations

Recommendations

Plan out NVQS federalisation

As with other federalisation processes, describe the main tasks associated with the NVQS and assign them to the appropriate government level. Then the project is ready to be federalised and its tasks are ready to be transferred to their future institutions and agencies.

Continue ENSSURE and update its financial flows once CTEVT federalises

The ENSSURE 24-Month Apprenticeship should continue as planned for the time being. Once the CTEVT is federalised, the project's financial flows will change along with that process. Most likely, funding will go directly to local implementation units instead of through CTEVT. Until then, existing procedures should not be changed.

7. Final Remarks

7.1 Overview

Nepal is already on track for a massive positive change in the TVET sector and its governance. The process will take time, but it is already underway and making progress. Today's leaders can improve the future of the country by continuing to embrace change, take on challenging projects, and clarify difficult issues. A stronger TVET sector gives Nepal a better chance at developing economically, gives young people more access to opportunity, and creates a stronger skills base for continued economic development.

The recommendations in this report will support the continued development and federalisation of Nepal's TVET sector. The key projects are creating an [Inter-Governmental TVET Council](#), developing a [TVET Master Plan](#), writing a [TVET Policy for 2030](#) with goals and a vision for the sector, legislating a [TVET Act](#) that identifies and allocates tasks to government levels, and carrying out a [financial flows study](#) that can inform the process of allocating funding according to task functions. These are all big tasks, but with the current momentum for federalisation they can be accomplished.

The priorities for action in this report (see Executive Summary) should be addressed in the coming months. An Inter-Governmental TVET Council or a comparable high-level institution must be established as soon as possible so that the relevant actors can act in concert at national, state and local level. The moment is ripe for action, but TVET leadership must act swiftly to capitalize on that opportunity.

7.2 Capacity building among high-level reform leader – CEMETS

A complex reform like this one that affects a whole country is unique. This has the disadvantage that there are very few experts with experience in similar complex sectoral reforms. Accordingly, high-level leaders need support to succeed. The [Center on the Economics and Management of Education and Training Systems CEMETS](#) (www.cemets.ethz.ch) exists to support countries from all over the world in their complex TVET reforms. Thanks to the R4D research project (<http://www.r4d.tvet4income.ethz.ch>), people from Nepal can participate in the CEMETS Summer Institute every year until 2022. This makes it possible to provide the necessary support.

In connection with the R4D research project mentioned above, a [Master's programme in TVET Management \(MTVET\)](#) is being developed at Kathmandu University in cooperation with ETH Zurich and will start in August 2018. This should contribute to capacity-building for TVET professionals throughout Nepal.

If in the medium term, MTEVT graduates who understand the management of TVET systems will be critical in all states and in larger municipalities. One important module in the Master's programme is about understanding of how entrepreneurship can be developed. This will be especially important as Nepal develops to help young people create their own companies.

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Appendix 1: Fact finding missions – Programmes of meetings with stakeholders

Mission program

Dr. Ursula Renold, 13-16 December 2017

Date	Time	Activities	Remarks
December 13 th , 2017	09:30	Arrival with AI 213 from Delhi	Hotel
	13:00	Meeting with CTEVT/MOE (Follow up on a CEMETs report? what is their plan? where contradicting? what are the obstacles?)	Facilitation by Prof. M.N. Parajuli
	16:00	Meeting with KU	
Dec. 14 th	Morning	Inputs for the federalisation of ENSSURE and NVQS projects	Facilitation by SDC
	Afternoon	Meeting with DPs	
December 15 th , 2017	9:00	Inputs for the federalisation of ENSSURE and NVQS projects	Facilitation by SDC
	12:00	Meeting with Think Tank (clarify their role and expected inputs from Ursula)	
	15:00	Discussion and preparation for the next visit (CTEVT, MOE and SDC)	Facilitation by Prof. M.N. Parajuli
	19:00	Dinner with high-level officials and politicians about necessity of TVET Act	Basnat, CTEVT
Dec. 16 th	Morning	Debriefing with SDC and finalizing next steps Discussion with Chairman of the Law Commission, Parliament Nepal	Hari Lamsal, MoE
	16:00	Departure to Delhi with 9W259	

Mission Programme

Dr. Ursula Renold & Dr. Thomas Bolli, 9-20 April, 2018

Date	Time	Activities	Remarks				
April 8 th , 2018	09:25	Arrival with AI 213	Hotel Summit				
	13:00	Meeting with SDC and projects (ENSSURE and NVQS): Discussion: <ul style="list-style-type: none"> ENSSURE and NVQS in the federal context Possible RCT for ENSSURE Apprenticeship 	Hotel Summit				
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #0070c0; color: white;">Time</th> <th style="background-color: #0070c0; color: white;">Activities</th> </tr> </thead> <tbody> <tr> <td>1:00-2:00</td> <td>Sharing of the current context of TVET sector including ongoing discussions, possible challenges etc.</td> </tr> </tbody> </table>	Time	Activities	1:00-2:00	Sharing of the current context of TVET sector including ongoing discussions, possible challenges etc.	Usha, SDC
	Time	Activities					
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		<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>2:00-2:30</td> <td> Updates from NVQS: <ul style="list-style-type: none"> Project information and brief updates Reflections on the role of palikas, private sector etc. What/how much we know about the future directions? What is the status/possibilities of moving further in the current context? </td> </tr> </tbody> </table>	2:00-2:30	Updates from NVQS: <ul style="list-style-type: none"> Project information and brief updates Reflections on the role of palikas, private sector etc. What/how much we know about the future directions? What is the status/possibilities of moving further in the current context? 	NVQS		
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	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>2:30-3:00</td> <td> Updates from ENSSURE: <ul style="list-style-type: none"> Project information and brief updates Reflections on the role of palikas, private sector, what do they think about the federalisation and its implications? What/how much we know about the future directions? What is the status/possibilities of moving further in the current context? </td> </tr> </tbody> </table>	2:30-3:00	Updates from ENSSURE: <ul style="list-style-type: none"> Project information and brief updates Reflections on the role of palikas, private sector, what do they think about the federalisation and its implications? What/how much we know about the future directions? What is the status/possibilities of moving further in the current context? 	ENSSURE			
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	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>3:00-3:30</td> <td> Feedback/inputs from Ursula for next steps <ul style="list-style-type: none"> Potential and possibly gaps of the present projects and how ENSSURE and NVQS fit into the overall reform of the sector What are the next steps for the project </td> </tr> </tbody> </table>	3:00-3:30	Feedback/inputs from Ursula for next steps <ul style="list-style-type: none"> Potential and possibly gaps of the present projects and how ENSSURE and NVQS fit into the overall reform of the sector What are the next steps for the project 	Ursula			
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	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>3:30-4:00</td> <td>Tea Break</td> </tr> <tr> <td>4:00-4:45</td> <td> Discussion on RCT: Updates on Apprenticeship Further discussion </td> </tr> </tbody> </table>	3:30-4:00	Tea Break	4:00-4:45	Discussion on RCT: Updates on Apprenticeship Further discussion	Thomas Bolli/Subas	
3:30-4:00	Tea Break						
4:00-4:45	Discussion on RCT: Updates on Apprenticeship Further discussion						

18:30

Dinner at Ambassadors' residence

April 9 th , 2018	9:00	Meeting with Prof. Mahesh Parajuli_ KU master	Hotel Summit
	11:00	Discussion on the TVET federalisation issues and prospects Position of GON (MOE, CTEVT) Position of Development partners Further planning and strategies	SDC
	17:30 followed by dinner	TVET federalisation issues and prospects; updates and input in TVET act, plus further suggestions Dr. Kul Bahadur Basnet, Baikuntha Aryal, Dr. Hari Lamsal, Dr. Mukunda Mani Khanal, Mahesh Parajuli	Airport Hotel

April 10 th , 2018	7:30	Breakfast meeting with Baikuntha Aryal, JS/MoE	Summit
	9:30	Meeting with WorldBank Discussion regarding RCT in Apprenticeship	Thomas and Maya/Sangita from WB
	10:30	Meeting with Mr. Baikuntha Aryal (Fiscal Commission: inputs on the financial flow in TVET sector) → This meeting was cancelled	Accompany by Dr. Hari Lamsal and Dr. Kul Bahadur Basnet
	Afternoon	Meeting with Kathmandu University, VC Master TVET Management, RCTs collaboration ETH-KU, other topics	Hotel Yak & Yeti
April 11 th -13 th	Field visit to State 1 <ul style="list-style-type: none"> Biratnagar, Bhim Parajuli, SD Minister & CEO Baldev Chaudhar, Mayor, Triyunga Municipality, Gaighat, Udayapur Mayor of Morang Manmohan Memorial Polytechnic, Morang 	Buddha air and ENSSURE car	
April 14 th , 2018		Return to KTM and free Saturday	
April 15 th , 2018	Morning	Consultants preparation and reflection of the meetings	
	Afternoon	Meeting with MOE and CTEVT: Sharing of reflection from the field and meeting with fiscal commission and Sharing on the scope of financial flow study	Airport Hotel
April 16 th		Symposium: normative and operational challenges of TVET sector in Nepal	Thomas Bolli departs 17:15
17 th	All day	Inputs on the readjustment of ENSSURE and NVQS	Airport Hotel
	5:30	Meeting with Think Tank plus	NVQS to organize
18 th	10:00	Inputs on the readjustment of ENSSURE and NVQS	Airport Hotel
	16:00	Planning of CEMETS case and people to participate	
April 19 th , 2018	10:00	Meeting with Donor group <ul style="list-style-type: none"> Discussion on SDC plan to readjust its projects in line with Federalisation Discussion on possible joint strategies 	SDC
	13:30	Further discussion with Usha and Barbara Decide on next steps	
	17:00	Discussion with Hari Thapa, Film producer and education activist	Hotel Summit
20 th	Morning	Presentation to SDC team Debriefing and next step	
	Afternoon	Departure to Delhi with 9W259	

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