Bhutan TVET Sector Assessment

Blueprint Working Papers-I

TVET PROFILE AND SECTOR ASSESSMENT

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Abbreviations

ATP	—	Apprenticeship Training Programme
BQF	—	Bhutan Qualifications Framework
BVQF	—	Bhutan Vocational Qualifications Framework
CBT	—	Competency Based Training
DHR	—	Department of Human Resources
DOS	—	Department of Occupational Standards
FDI	—	Foreign Direct Investment
FYP	—	Five Year Plan
IZC	—	Institute for *Zorig Chusum*
MoLHR	—	Ministry of Labour and Human Resources
NCS	—	National Competency Standards
NTTA	—	National Technical Training Authority
QMS	—	Quality Management System
RBP	—	Royal Bhutan Polytechnic
RPL	—	Recognition of Prior Learning
RTI	—	Royal Technical Institute
SEED	—	Skills for Employment and Entrepreneur Development
STP	—	Skills Training Programme
ToT	—	Training of Trainers
TTI	—	Technical Training Institutes
TVET	—	Technical and Vocational Education and Training
VTI	—	Vocational Training Institutes
YES	—	Youth Employment Skills

Bhutan TVET Profile

Brief history of TVET

Bhutan adheres to the definition of Technical and Vocational Education and Training (TVET) from the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and International Labour Organisation (ILO) recommendations for the Twenty–first Century, adopted by UNESCO's General Conference in 2001, which is inclusive and broad: TVET is used "as a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupants in various sectors of economic and social life."

TVET is provided through formal TVET and alternate modes of TVET. Formal TVET is provided as part of the Bhutan Vocational Qualification Framework (BVQF) system by registered TVET providers including the Technical Training Institutes (TTIs) and the Institute of *Zorig Chusum* (IZC) under the purview of the Ministry of Labour and Human Resources (MoLHR). Alternative modes of TVET are provided outside the formal BVQF system.

The Royal Government realised the importance of TVET early on with the commencement of the First Five Year Plan in 1961. The first TVET institute, Kharbandi Technical School, later renamed as the Royal Technical Institute (RTI) was established in 1964, The main objective of the institute was to train Bhutanese youth at certificate level in automobile, general mechanic, building construction and civil draughting and electrical engineering.

A decade later, in 1974, the Royal Bhutan Polytechnic (RBP) was established in Dewathang, Samdrup Jongkhar with the aim to train mid–level technician in civil engineering, electrical engineering and surveying. While the first two programmes were offered at diploma level, the third was offered at certificate level. In 1987, another diploma programme in mechanical engineering was introduced.

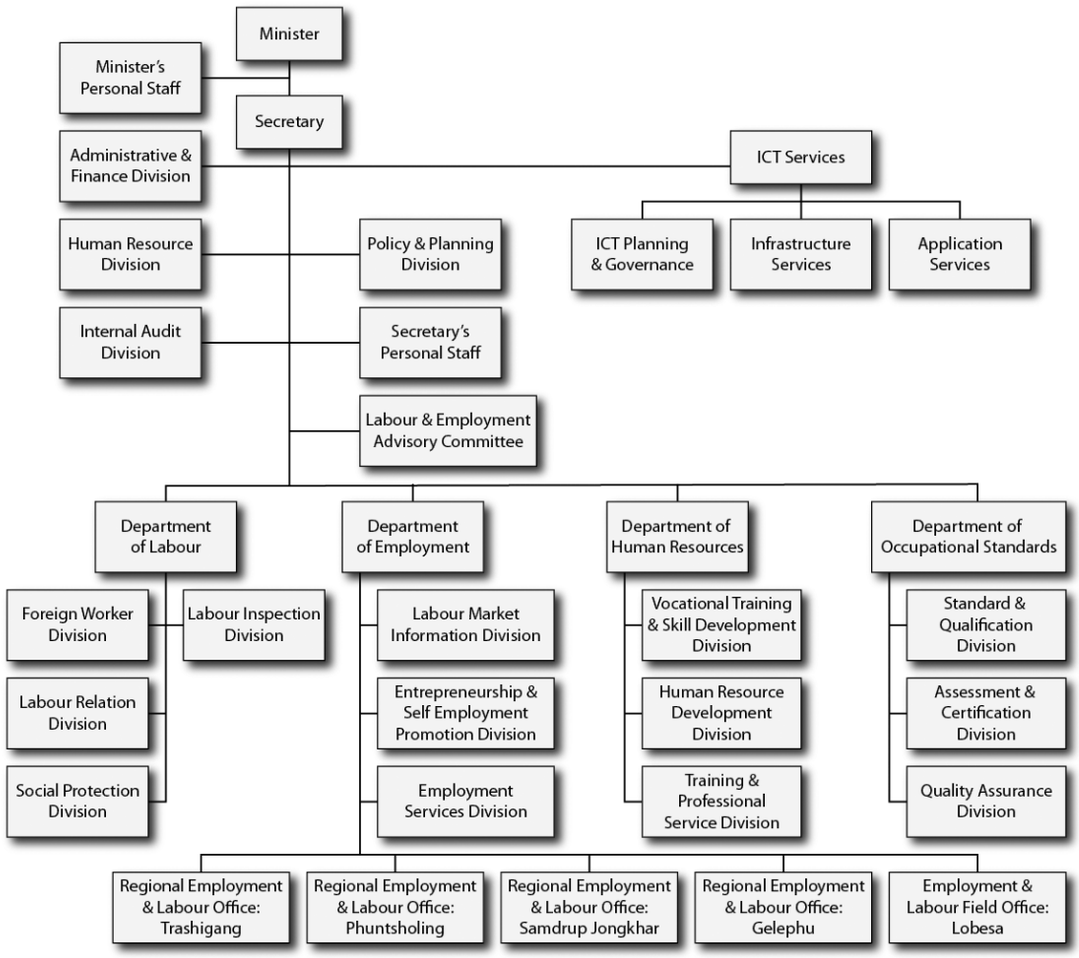
At the outset, TVET was implemented under the administration of an office called Technical Cell till 1990, which was later upgraded to TVET Division under the Ministry of Social Services. The RTI and the RBP then came under the direct administration of this Division.

Realising the importance of technical human resources in the socio economic development , the Royal Government established the National Technical Training Authority (NTTA) in May 1999. The NTTA under the NTTA board was mandated to plan, implement and monitor TVET initiatives and programmes and to assume the regulatory role to ensure quality in TVET. The administrative domain of the RBP and RTI was also transferred to the newly established NTTA.. Further, in 2002, the current Queen Mother, Her Majesty Ashi Tshering Yangdon Wangchuck became the patron of the NTTA bringing in greater attention and emphasis to TVET.

In March 2000, the RBP was temporarily relocated to RTI campus in Phuentsholing due to security disturbances in Dewathang. However, in 2003, it was shifted back to its original location and renamed as the Jigme Namgyal Polytechnic. The institute offered two years diploma in civil, electrical and mechanical engineering for class XII science students. In the same year, RTI was relocated and extended with the establishment of vocational training institutes at Khuruthang, Ranjgung and Samthang. Further, RBP and RTI campus was handed over to the Royal University of Bhutan.

In 2003, TVET received national importance and came under the direct administration of the newly established Ministry of Labour and Human Resources (MoLHR). The role of NTTA was bifurcated into two Departments, the Department of Human Resources (DHR) and the Department of Occupational Standards (DOS). While DHR was responsible for ensuring quality TVET delivery, DOS was responsible for the regulatory functions of TVET. Since then, six TTIs, earlier known as Vocational Training Institutes (VTI), were established in addition to the two Institutes of Zorig Chusum (IZC), which also came under the administration of DHR.

Figure 1 — Organisational structure of the MoLHR



Reforms in TVET

Having achieved significant improvement in the country's basic education system, the Royal Government's emphasis gradually shifted to preparing youth for the world of work during the 9th plan. The acute shortage of locally trained workers at all skill levels and heavy reliance on foreign workers amidst increasing youth unemployment has been major concern of the Royal Government. Hence, concerted efforts to strengthen and improve the quality and relevance of TVET were made by the MoLHR. Some of the notable reforms in TVET were:

TVET Policy developed

- VET Policy was developed in 2005 to set a qualification framework, improve the quality of TVET training and provide guidance and direction in development and implementation of TVET programmes.
- TVET Policy revised in 2014 and awaiting policy screening by Gross National Happiness Commission (GNHC) and final approval by the government.

Bhutan Vocational Qualifications Framework (BVQF) developed and implemented

- Bhutan Vocational Qualifications Framework (BVQF) was launched in 2013, one year after the launch of Bhutan Qualification Framework (BQF) in 2012.
- Started development of National Competency Standards in each occupation from 2009.
- National Qualifications levels were set (National Certificate level 1 to 3 and National Diploma level 1 & 2) through the BVQF.
- Developed National Assessment and Certification System.
- Implemented Recognition of Prior Learning (RPL), which allows skilled workers to be assessed and certify their competencies acquired through work experience or other modes of learning.

Quality Assurance in TVET introduced

- Developed Quality Assurance Framework.
- Developed Regulations for Registration of Training Providers in 2010.
- Developed Guidelines for Accreditation of Training courses in 2010.
- Developed Quality Management Manuals for TVET Providers.

TVET Programmes enhanced

- Carried out expansion of existing institutes and established a new institute.
- Diversification of TVET courses was carried to meet the aspiration of youth and the labour market needs.

- Introduced Competency Based Training (CBT) in 2010.
- Focus was also drawn on capacity development of TVET providers in Curriculum development, Training of Trainers (ToT) and CBT.
- Quality Management System (QMS) implemented in the TTIs/IZCs to improve internal efficiency of the Institutes.
- Qualifications up gradation of trainers were carried out with the objective to improve the quality of training delivery.
- Introduced entrepreneurship courses in the TTIs and IZCs.
- Introduced green skills programme in the TTIs.
- Initiated reform in delivering alternate mode of training.
- Decentralised recruitment process in the TTIs and IZCs.

Alternative modes to TVET delivery strengthened

- Alternative modes to TVET delivery through Apprenticeship Training Programme (ATP), Skills Training Programme (STP) and Special Skills Development Programme (SSDP) strengthened and expanded in 9th FYP.
- Rebranding of STP through 'Get skilled for work and life' slogan in the 11th FYP. Youth Employment Skills (YES), Graduate Skills Programme (GSP) and Skills for Employment and Entrepreneur Development (SEED) were designed under the slogan with emphasis on employment.

Private participation in TVET delivery strengthened

- The first Establishment Regulation and the Registration Regulation for training providers developed in 2009 and launched in 2010 to usher in private participation in TVET delivery.
- External participation framework developed and incorporated in the Establishment Regulation to encourage foreign direct investment in TVET delivery.
- A separate guideline for establishment of Nursing Institute developed in partnership with Bhutan Medical and Health Council (BMDC) and launched in 2012.

Collaboration with industries strengthened

- Instituted TVET Advisory Body and Industry Liaison and Publicity Units (ILPU).
- Industries participated in various activities like development of National Competency Standards (NCS), Curriculum, Assessment, On the Job Training (OJT), Accreditation and auditing of QMS.
- Constituted Technical Advisory Committees in 11 sectors to validate NCS.
- Trained industry skilled supervisors to guide and monitor trainees while on OJT in industries.
- Initiated on–campus recruitment by inviting employers to the institutes.

Advocacy of TVET strengthened

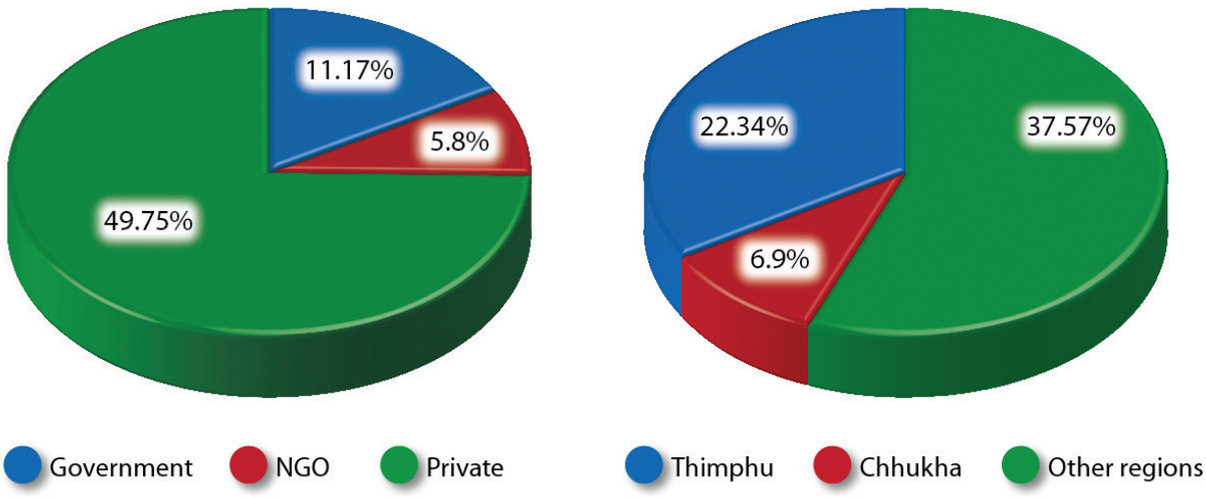
- Zorig Day identified and celebrated at National level since 2002.
- Introduced TVET Convocation in 2012.
- Branding TVET using the slogan 'Be Somebody!' and 'One–One–Zero'.
- Implemented Skills Competition since 2002.
- Career counselling of TVET initiated at secondary level school and communities in 2011.
- Introduced TVET Innovation competition in 2014.
- Initiated TVET Winter Camp in 2015.

Profile of TVET institutions[1]

TVET institutions in Bhutan consist of public and private training providers offering training at certificate or diploma level. Currently, Bhutan has 88 training providers[2] registered as per the registration regulation of DOS. This includes the six TTIs and the two IZCs under DHR, MoLHR. In total there are 11 public, 7 NGO and 70 private training providers in the country.

The TVET institution survey[3] was carried out in 2013–2014 as part of development of 3rd National HRD Advisory, in which a total of 66 TVET providers participated in the survey. The survey shows that 17% of the TVET providers are government owned, 8% are NGO owned and the remaining 75% are private owned. Most training providers are in Thimphu (57%) followed by Chhukha (9%) and the rest in the other regions. Figure 2 shows the profile of TVET providers by ownership and location.

Figure 2 — Profile of TVET providers by ownership and location

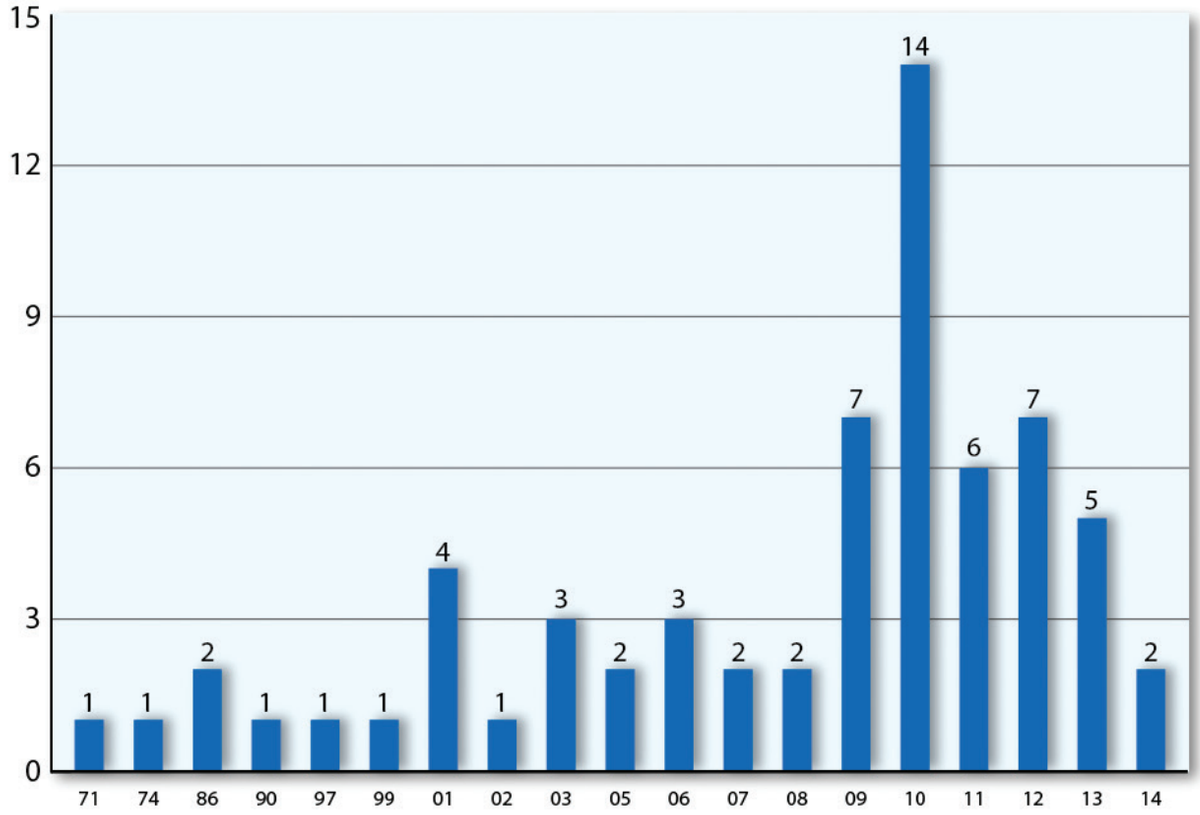


Source: *MoLHR, National HRD Advisory 2015– a focus on TVET and Labour Market Dynamics, 2015*

The first establishment regulation for training providers was developed in 2009 and launched in 2010. The regulation was developed with the objective to foster establishment of TVET institutes by private promoter. The regulation also provided directives and procedures on processing establishment and licensing of TVET institutes, thus opening private participation in TVET delivery. As shown in Figure 3, more than 60% of the training providers were established post 2010 and 21 training providers were established in 2009–2010.

Eleven training providers established before 2010 are government owned, 3 are NGO owned and 17 are private owned. Post 2010, 32 of the TVET establishment are private owned and 2 are NGO owned. The registration regulation was also developed and launched in the same year, which made registration of the training providers with the MoLHR mandatory.

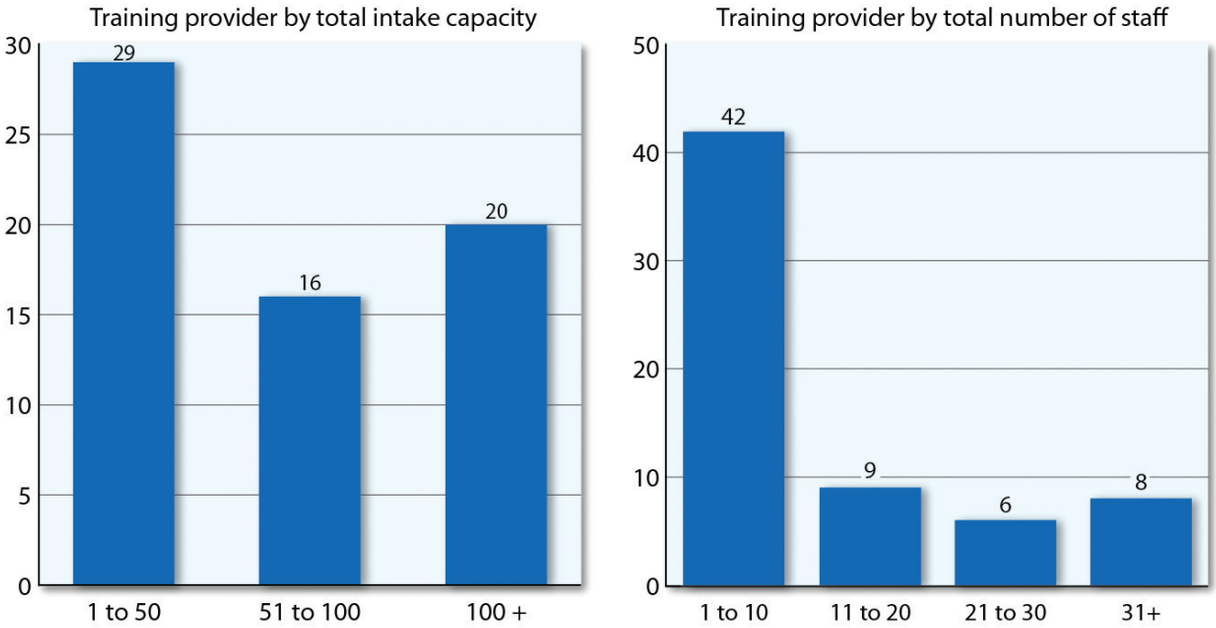
Figure 3 — TVET Provider by year of establishment



Source: *MoLHR, National HRD Advisory 2015– a focus on TVET and Labour Market Dynamics, 2015*

Looking at the intake capacity of the training providers, 29 providers can accommodate 1 to 50 students, 16 providers can accommodate 51 to 100 students and 20 providers can accommodate more than 100 students. Therefore, there are different ranges of training providers catering to smaller to larger number of students. Considering the total number of employees/staff, 42 training providers have 1 to 10 employees, 9 providers have 11 to 20 employees, 6 providers have 21 to 30 employees and 8 providers have more than 31 employees, thus indicating different range and scale of training providers in the country. (See Figure 4.)

Figure 4 — TVET Providers by total intake capacity and total number of staff



Source: *MoLHR, National HRD Advisory 2015– a focus on TVET and Labour Market Dynamics, 2015*

Profile of TVET trainers[4]

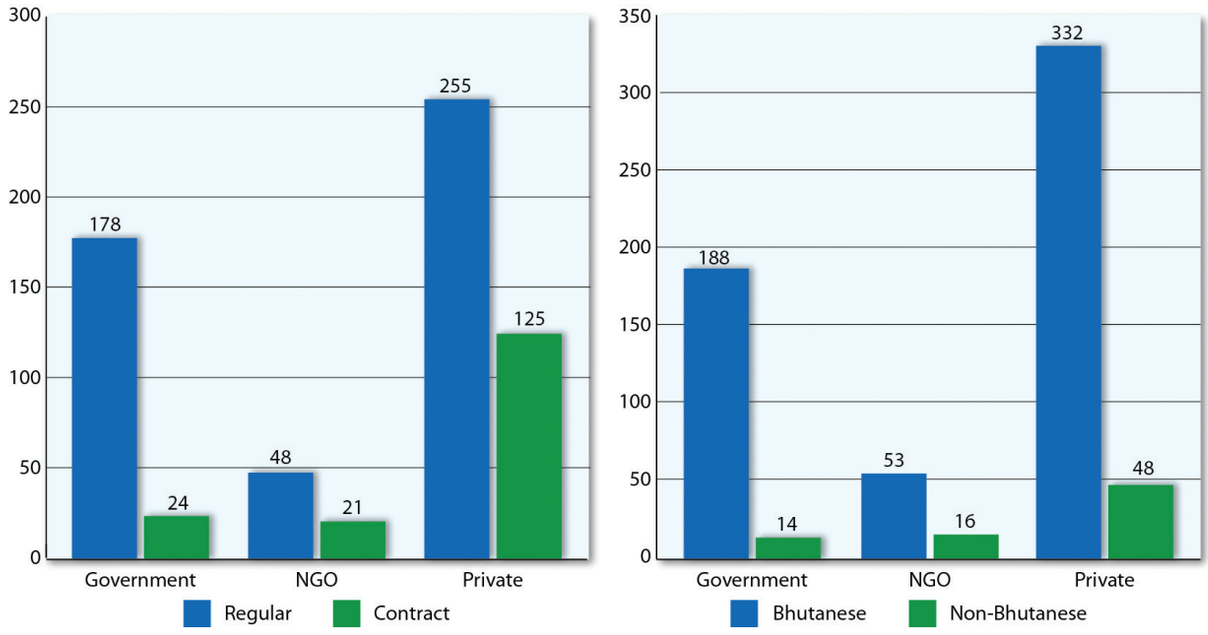
Trainers form the core of any TVET institutions. The role of a trainer is very complex and diverse. They are responsible not only for course planning, process, delivery, monitoring and evaluation but are also expected to take the role of a career counsellor, labour market expert, mentor, project manager, advocator and skills expert. Although many variables affect the success of TVET programme, it is the nature of the interaction between trainer and students that has the greatest impact on the learning. Therefore, the quality of TVET trainers is crucial in determining the skills of future workers.

Professional development of the TVET trainers is seen as one of the most plausible strategies to improve quality and delivery of TVET. Since its establishment, the DHR has provided professional and technical support to public and private TVET providers through implementation of Training of Trainers (TOT) in pedagogy. The DHR also provides support in curriculum development and instructional material support.

The survey data collected from 66 TVET providers shows that there are 202 trainers engaged in government TVET institutions (which includes both the TTIs/IZCs and vocational institutes with other line Ministries), 69 in NGOs and 380 in the private TVET institutions. (See Figure 5.)

There are more contract trainers in the private institutes compared to the government and NGO institutes. Also, there is comparatively higher number of foreign trainers in the private institutes.

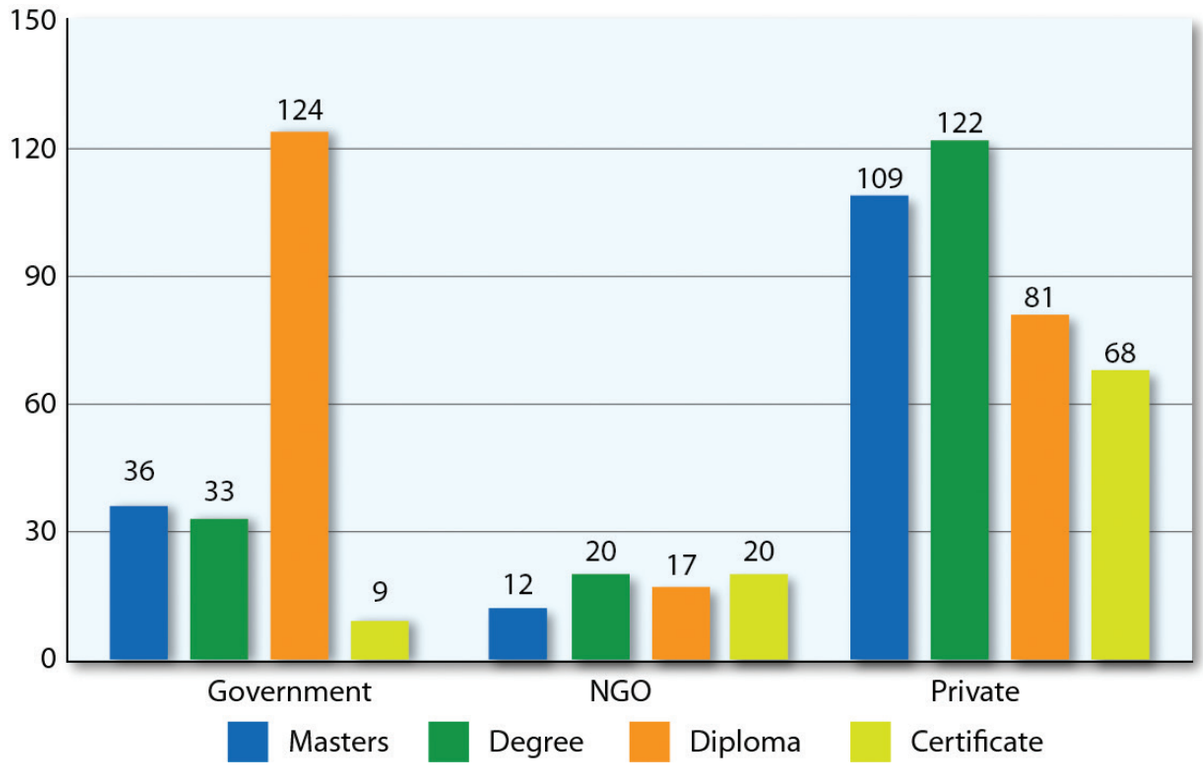
Figure 5 — Profile of trainers (Regular/Contract and Bhutanese/non–Bhutanese)



***Source**: MoLHR, National HRD Advisory 2015– a focus on TVET and Labour Market Dynamics, 2015*

As indicated in Figure 6, government institutes have more diploma level trainers, whereas private institute have more masters and degree level trainers. In recent years, the DHR implemented a qualification upgradation programme resulting in more diploma level trainers in the MoLHR Institutes. The courses currently offered in the TTIs/IZC are at certificate level and as per the BVQF, trainers must have one level higher qualification to offer any skills training.

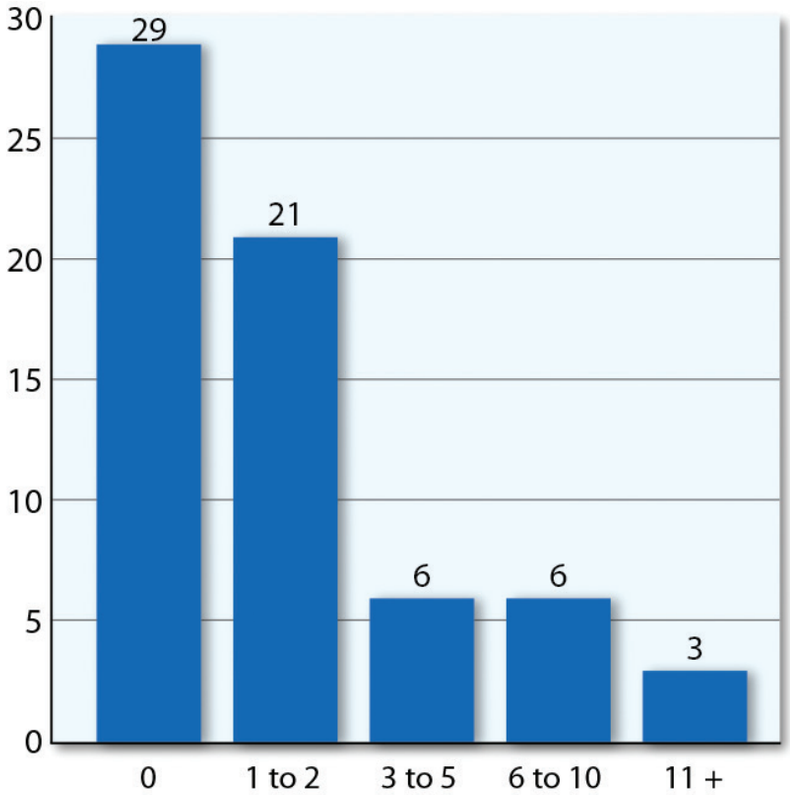
Figure 6 — Profile of Trainer by level of qualification and ownership type



Source: *MoLHR, National HRD Advisory 2015– a focus on TVET and Labour Market Dynamics, 2015*

MoLHR provides ToT support to trainers to perform better in training delivery. As indicated in Figure 7, only 3 institutes have more than 11 trainers who have undergone TOT programme. 6 institutes have 6 to 10 instructors who have undergone TOT and another 6 have 3 to 5 instructors who have undergone TOT. However 21 training providers have only 1 to 2 trainers who have undergone TOT and 29 providers have not availed TOT support. Most training providers who have not availed TOT support are private institutes. This is due to the fact that TOT support to the private institute was very recently initiated in 2012. Further, the DOS mandates all TVET trainers to have TOT pedagogy certificates as per trainer's registration guideline. Therefore, the number of trainers who have availed TOT is expected to increase in the future.

Figure 7 — Number of training providers with TOT trained trainers



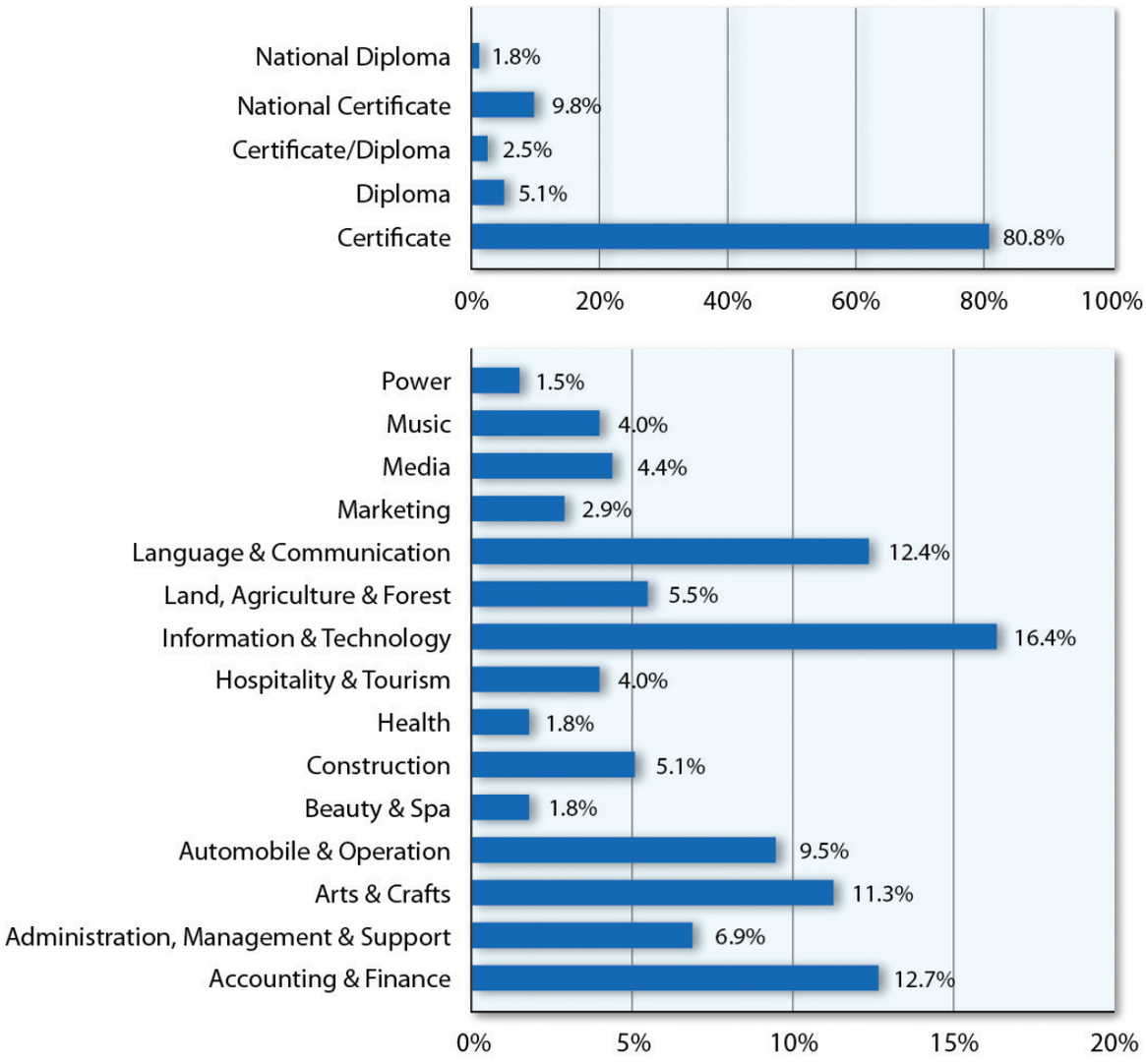
Profile of TVET programmes[5]

DoS administers national accreditation of TVET programmes or courses. Accreditation is expected to support development of internationally competitive workforce at the craftsmen and technician levels. DOS provides accreditation at National Certificates (NC Levels 1, 2, and 3) and National Diploma (ND Levels 1 and 2) as per the BVQF. All registered training providers are eligible to apply for accreditation of their courses. However, accreditation is not mandatory. DoS is setting up a strong quality assurance system and course accreditation is an important component of it. Accreditation, being both a process and a status, focuses on the continual improvement of training quality. The current Guideline for Accreditation of TVET course was launched in June 2011.

As shown in Figure 8, most TVET programmes offered in Bhutan are at certificate level. From the profile of 276 courses collected through the TVET institution survey, 80.8% are certificate level programme, 5.1% are diploma level programme and 2.5% are certificate/diploma programme. These programmes are not aligned with the BVQF. Currently DoS has accredits only 9.8% of the national certificate courses. All health diploma programmes (which is 1.8% of the TVET programmes) are accredited at the national diploma level by the BMDC. Therefore, more TVET programmes in the country must be aligned to the BVQF.

Figure 8 shows that most programmes are offered in the generic field of information & technology, language & communication and finance & accounting. Only few TVET programmes are offered in specialised field such as power and health.

Figure 8 — Profile of TVET programmes by level of certification and broad field



Source: *MoLHR, National HRD Advisory 2015– a focus on TVET and Labour Market Dynamics, 2015*

Programmes offered by the MoLHR

Formal TVET programmes

Formal TVET programmes are offered by six TTIs and the two IZCs. The TTIs and IZCs combined enrol about 700 to 800 middle secondary (Class X) students annually. The TTIs are offering 2 years courses in construction related trades, carpentry, automobile repairs, electrical and electronics and driving. The IZCs offer courses in traditional arts and crafts for courses ranging from 3–6 years.

Table 1 — TVET programmes offered by TTIs/IZCs

TTIs/IZCs	Programmes offered
TTIs	Electrical, Welding, Mechanical, computer, furniture, automobile, carpentry, masonry, plumbing, upholstery and design, Driving, tailoring
IZCs	Tshemzo (Tailoring), Tshemdru (Embroidery), Jimzo (Sculpture), Shazo (wood turning & lacquering), Lhadri (Painting), Troezo (Silver/goldsmith), Thazo (weaving/silk screaming), Patra (wood carving), Slate casting, New crafts (jewellery making, ceramics, etc.)

As indicated in table 2, the number graduates from the TTIs/IZCs was 321 in 2004. This number has increased to 652 in 2014. The 11th FYP HRD Masterplan for the Economic Sector estimates that the intake into TTIs and IZCs will be expanded from 850 in 2012 to 1882 by 2017–18[6], through course diversification and continual social marketing of these courses. The concentration of the TTI courses will continue to remain in the construction industry, which continues to grow. Even at a modest growth rate of 10%, industry will require at least an additional 3000 skilled and semi–skilled personnel. In addition, electricians, automobile technicians, tailoring and the traditional arts and crafts needs expansion. Further, IZCs need to introduce other arts and craft courses like pottery and jewellery making, and make more use ICT for conceptual designs.

The following table gives an indication of the number of students who have graduated from the TTIs/IZCs over the last ten years. In 2014, 652 trainees graduated from the TTIs and 201 from the IZCs.

Table 2 — Number of graduates from TTIs/IZCs from 2004 to 2014

Institute	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	TOTAL
TTI Khuruthang	44	27	43	67	70	95	72	108	87	104	185	**902**
TTI Rangjung	82	24	57	25	75	85	97	95	117	78	135	**870**
TTI Chumey					237	20	30	46	101	65	79	**578**
TTI Sherzhong					85	46	46	40	40	60	72	**389**
TTI Thimphu					0	0	21	17	19	19	29	**105**
TTI Samthang	110	106	115	120	117	172	125	80	165	66	152	**1,328**
CSC	85	38	78	266								**467**
Subtotal of TTI	***321***	***195***	***293***	***478***	***584***	***418***	***391***	***386***	***529***	***392***	***652***	**4639**

IZC – Thimphu	19	29	22	27	60	40	48	43	33	29	151	**501**
IZC – Tashiyangtse	5	14	10	19	16	27	22	23	23	47	50	**256**
Subtotal of IZC	***24***	***43***	***32***	***46***	***76***	***67***	***70***	***66***	***56***	***76***	***201***	**757**
TOTAL	***345***	***238***	***325***	***524***	***660***	***485***	***461***	***386***	***585***	***468***	***853***	**5,330**

Source: *Information provided by DHR, MoLHR July 2015*

Alternative modes of TVET programmes

Alternative TVET programmes are offered through STP, SSDP, VSDP and ATP programmes of the MoLHR.

Skills Training Programme (STP)

STP is an intervention to address the immediate human resource requirement in the labour market. The objective of the programme is to provide employable skills to youth in the private sector thereby contributing to private sector development.

The STP was initiated in the 9th plan. STP is flexible in implementation and its mode of training delivery. While the earlier STP was more training based, the programme in the 11thplan are employment oriented. STP is also effective in addressing immediate short–term gap in the labour market, which otherwise cannot be met from other institute based programmes.

Some of the STP initiatives in the 11th FYP are YES, Graduate Skills Programme (GSP) and SEED. These programmes are offered to a wide range of job seekers with different qualification background. The focus of STP has shifted to university graduates during the plan. The Labour Force Survey (LFS) 2013 indicated that 32% of the unemployed are with university degrees.

As indicated in the following table, a total of 3667 individuals have been trained under STP since the 10th FYP till date. STP is mostly focused on skilling in the critical sectors.

Table 3 — Number trained under the STP by sector from 2008 till date

Sector	In–country	Ex–country	Total
Trading & Services	178	30	**208**
Construction	295	80	**375**
Tourism & Hospitality	616	160	**776**
Health	5	267	**272**
ICT & Media	1523	272	**1795**
Arts and Craft	28	20	**48**
Production and Mining	0	3	**3**
Finance	190	0	**190**
TOTAL	**2,835**	**832**	**3,667**

Source: *Information provided by DHR, MoLHR July 2015*

Apprenticeship Training Programme (ATP)

ATP was first introduced in the country in 2000. ATP is implemented through a contract between the apprentice who wants to acquire competency in a particular skill and an employer who can provide the skills. Apprentices are attached to the enterprises/industries for 6 to 12 months duration to gain skills. The programme covers wide range of skills as well as enterprises/industries. Annual enrolment in ATP has grown from less than 20 in the early years of its operation to well over 300 during the 10th Plan and 500 in the 11th FYP. MoLHR provides a stipend of Nu 1,800 per month and the employers pay a matching amount.

1,428 youth were placed for this programme during the 10th Plan, which is 71% of the planned target. The programme covered almost all the sectors, but mostly concentrated in the service and hospitality sector. The biggest advantage of ATP is that it provides access to wide range of job seekers with different levels of qualification and it also engages industry.

Special Skills Development Programme (SSDP)

The SSDP was started under the Royal Command in 1996. The programme objective is skilling armed forces in vocational skills for income generation upon retirement. The programme was expanded to other special groups including differently–abled, juvenile, delinquents, monks/nuns, prisoners, and disbanded gang members. While the focus in the 9th FYP was on juvenile delinquents), the focus shifted to training of monks and nuns in the 10th FYP.

While trainings are coordinated with support from organizations identified for a target group, MoLHR provides trainers, tools and equipment. Some collaborating organizations are the monastic body, the Royal Bhutan Police, Draktsho, RENEW and the Royal Bhutan Army.

In the 11th Plan, the SSDP will be integrated and decentralized in the region. Plans are being made to pilot this initiative in four Dzongkhag in 2015.

Village Skills Development Programme (VSDP)

In 1984, the Forth Druk Gyalpo commanded establishment of a separate programme called the Village Skills Development Programme (VSDP) to provide skills development training specifically targeting the rural population. A training institute was established in Gelephu (Village Skills Centre) to provide skills training for villagers. This institute however functioned only for 4 years during which 656 villagers were trained. In 1988, the training institute and the programme were closed and the function of the centre was later transferred to the NTTA.

In 1997, the programme was reinstated under a different approach. Under the new the training was taken to the villages and communities. The NTTA as well as MoLHR supported in fielding instructors and providing basic tools and training material while administrative and logistics support was given by the Dzongkhag(districts) and Gewog (block) offices.

The objective of the programme is to increase the quality of life in the rural community, provide skills for income generation activities, enhance community participation in development activity, promote lifelong learning and sustainable development in the rural community, create greater independence of the community by enabling them to carryout construction and repair and maintenance of community property, build capabilities of the villagers and reduce dependency on skilled expatriate workers, and to promote community vitality. Thus far, programmes like modern construction skills, traditional arts and crafts skills, service–oriented skills have been provided through the programme.

In the 11th plan, VSDP will be integrated and decentralized in the region. Plans are being made to pilot this initiative in four Dzongkhags.

Table 4 — Number trained under SSDP and VSDP[7]

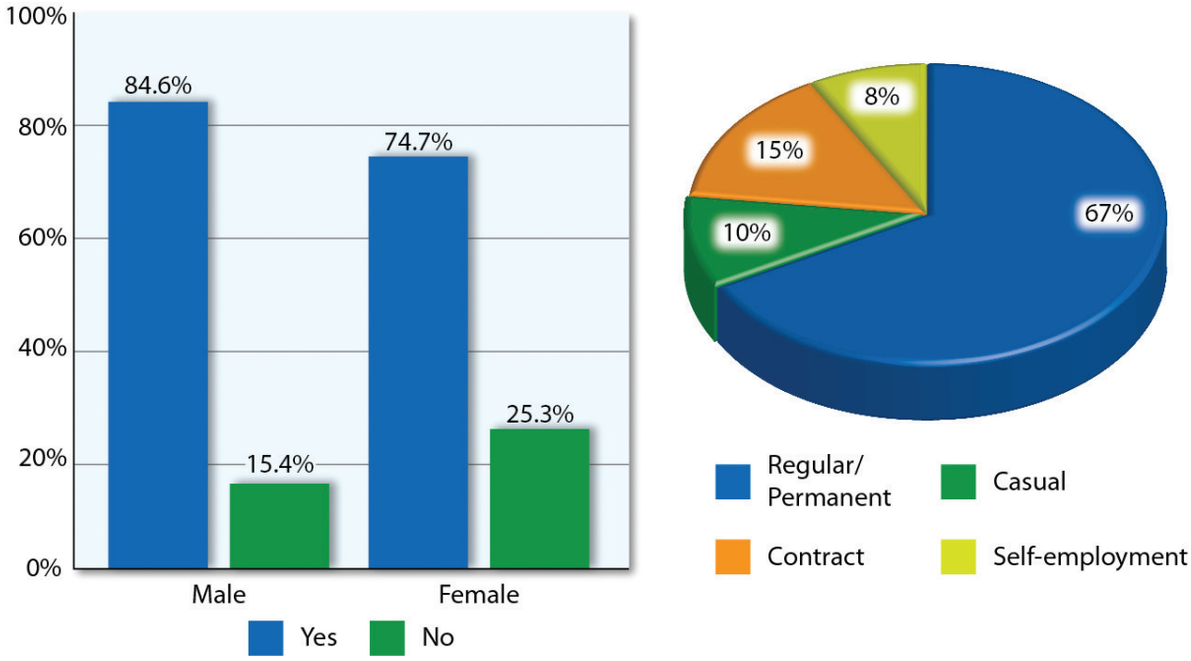
Year	Total Trained under SSDP	Total trained under VSDP
2008–2009	90	590
2009–2010	476	227
2010–2011	358	164
2011–2012	146	62
2012–2013	157	–

TVET graduate destination[8]

Employment

A tracer study was conducted during the TVET graduate convocation 2012. A total of 856 graduates from the TTIs and the IZCs (2004 to 2010) participated in the survey. As indicated in the Figure 9, nearly 85 % of males and 75% of females said they were employed. The majority were employed as regular worker, whereas 25% are working either as casual or contract workers and 8% are self–employed.

Figure 9 — Percentage of Employed post–graduation and nature of employment



Source: *MoLHR, TVET Graduates Tracer Study 2014*

Performance

A total of 1,029 industries participated in the Industry outlook survey carried out as part of the 3rd National HRD Advisory. Industries were asked to rate TVET graduates in their organization on teamwork and initiative, commitment to organization, analytical & critical skills, communication skills, attitude towards work, relevancy of skills/knowledge from the training to the organization, work knowledge and adaptability/preparedness to the work environment.

As indicated in the following table, most industries have made positive assessment of TVET graduates (seven of the eight characteristics). A higher level of assessment is made on teamwork and initiative, commitment to organization, attitude towards work and work knowledge.

Table 5 — Employers' assessment of TVET graduate performance

Particulars	Good/Excellent
Adaptability/Preparedness to the work environment	59.7%
Work Knowledge	65.3%
Relevancy of skills/knowledge from their training to the company/organisation	52.0%
Attitude towards work	61.6%
Communication skills	61.3
Analytical & Critical Skills	48.8%
Commitment to organisation	62.9%
Team work and initiative	67.8%

Source: *MoLHR, National HRD Advisory 2015– a focus on TVET and Labour Market Dynamics, 2015*

TVET Funding

National Budget Allocation for TVET

As indicated in the table 6, , there has been a significant increase in the budget allocation for the TVET programme and initiatives since 2002. The MoLHR was set up with the commencement of the 9th plan. Therefore budget allocated under the NTTA and the Department of Employment and Labour (DEL) were pulled together to form the budget for the newly established MoLHR.

The main areas of concern in TVET during the 9th plan were shortage of skilled and unskilled workforce in the labour market. The NTTA conducted vocational skills training in different parts of the country and skills certification was also introduced to ensure closer alignment between the skills of the workers and the needs of the employers. The objective in the 9th plan was to improve partnership with TVET stakeholders, improving and expanding the training capacity and improving the internal process in TVET delivery. To carry out the activities, a capital budget of Nu. 500 million was allocated, which was about 0.7% of the total Government budget outlay.

Table 6 — Capital Budget allocation for TVET in 9th, 10th and 11th FYP Document[9]

Budget in million	9th FYP (2002–08)	10th FYP (2008–13)	11th FYP (2013–18)
Total Government Budget	70,000.00	73,611.76	92,000.00
MoLHR budget outlay	691.524	1438.467	1914.85
TVET Budget (DHR + DOS+ 6 TTIs + 2IZcs)	500.00	1113.632	1025.2
% of TVET budget against total Government Budget	0.714%	1.513%	1.111%

Source: *Information provided by MoLHR July 2015*

The budget for TVET modestly improved in the 10th plan. By then the MoLHR was well established with four functional departments. The budget for TVET was Nu. 1113.632 million. The focus of the 10th plan was to increase access of youth to TVET with high quality and market oriented skills development.

Attention was also given to alternative modes of TVET programmes such as VSDP and STP, which are implemented in partnership with local community and private training providers. However, major portion of the budget was allocated to the construction of new Institutes. A budget of Nu. 193.491 million was allocated for construction of one new Vocational Training Institute (VTI) and one new Institute of Zorig Chusum (IZC). Further, a budget of Nu. 762.046 million was allocated for expansion of existing VTI structures to increase enrolment.

Budget was also allocated for the development of National Human Resources Development (NHRD) Policy, which was the first national initiative for a coordinated and collaborative effort towards HRD in the country.

In the current five year plan, the budget allocation for TVET is Nu. 1025.2 million, which is 1.11% of overall Government budget allocation. The current plan places, a greater emphasis on improving quality and relevancy of TVET through implementation of employment based skills training programme, diversifying and innovating TVET programme, introducing diploma level programme and building capacity of the TVET instructors. Efforts will also be made in developing green skills, entrepreneurship skills, e–learning, improving industry linkages, and strengthening monitoring and evaluation system.

TTIs and IZCs budget outlay in the 11th FYP

As indicated in the following table, a budget of about Nu. 151 million was allocated in the FY 2013–14 and in FY 2014–15 for the 6 TTIs and the 2 IZCs. This amount includes both current and capacity budget. There has been a slight increase in the budget in the FY 2015–16 by about Nu. 4 million.

Table 7 — Budget allocation in the TTIS and IZCs in the 11th FYP

Financial year	Budget (in million Nu.)
2013–14	151.563
2014–15	151.374
2015–16	155.602

Source: *Information provided by MoHLR, 11th FYP, 2013*

Donor support in TVET

The MoLHR has also received significant support from the Asian Development Bank (ADB), World Bank, Danida, HELVETAS, Government of India and others in carrying forward reforms in the TVET sector. In the 10th plan, the ABD supported in establishing 5 new VTIs and expansion of existing institutes through the Loan 1830: Basic Skills Development Project. The project also supported establishment of the current MoLHR office.

The Government of India (GOI) has been one of the main donors for STP and human resource development in the private sector. In the 10th plan, the budget support from GOI was Nu. 194 million but this figure has significantly increased to about Nu. 850 million in the 11th plan. The project supports short–term skilling and employment engagement programmes of the MoLHR.

One of the significant achievements of the Danida supported project was qualification up gradation of the instructors to diploma level.

Some projects in the 11th FYP are the Helvetas, GOI and ADB funded projects. The Helvetas supported Occupational Skills Development For Construction Sector (OSD4CS) will provide technical support to the two construction institute (Chumey and Dekiling). The GOI is supporting skilling and employment in various critical sectors and the ADB TA 8712(BHU): Institutional Strengthening or Skills Development will improve capacity of MOLHR to guide skills development initiatives.

Table 8 — Details of funding received from Donors (project specific) in TVET

Project title	Plan period	Fund (in million Nu.)	Areas of support
Basic Skills Development Project (ADB soft loan, GTZ, RGoB)	9th FYP	611.00	Capacity development and access to TVET
Sustainable Development Agreement (SDA) Project	9th FYP	3.0	HRD for private sector
GOI Project	9th FYP	30.0	HRD for private sector
Support to Vocational Education and Training (Danida)	10th FYP	120.00	Capacity development in TVET
GOI – HRD	10th FYP	194.00	HRD for private sector, Skills Training Programme
World Bank – Generic Skills Development for IT/ITES sector	10th FYP	55.00	Skills development in the IT/ITES sector
World Bank – IDF	10th FYP	16.50	Skills development in construction, arts & craft and hospitality sector
UNDP	10th FYP	0.90	Skills development inhospitality sector
Strengthening quality of TVET in Bhutan – JICA	10th FYP	Technical assistance	Improve quality and relevance of electrical programmes
GOI – HRD for critical sector	11th FYP	300.00	Skills development in the critical (economic) sector
Guaranteed Employment Scheme (GOI)	11th FYP	550.00	Skilling and employment
OSD4CS (HELVETAS)	11th FYP	141.05	Skills development in the construction sector
Institutional Strengthening for skills Development	ADB	38.40	Improve relevance of TVET

Source: *Information provided by DHR, MoLHR July 2015*

TVET Assessment

Key Strategic Issues

Bhutan has experienced rapid socio–economic growth and development since the start of planned economic development in 1961. Some of the development challenges facing Bhutan are increasing youth unemployment and human resources shortages in critical sectors. There has been a prolonged problem of skills gap between demand and supply of human resources. One of the main hindrances in the private sector development has been the shortage of skilled human resources. Developing indigenous human resources has become a priority development objective. Further, the institutional arrangements and capacity to address the emerging problems have lagged behind development aspirations and must now catch up if they are to make their expected contribution to economic and social progress.

Table 9 — Bhutan unemployment trend

Indicators	2009	2010	2011	2012	2013
Labour Force Participation Rate (%)	68.5	68.6	67.4	64.4	65.3
Male	72.8	73.6	72.3	65.7	72.1
Female	64.6	63.9	67.4	63.2	58.9
Unemployment Rate (%)	4.0	3.3	3.1	2.1	2.9
Male	2.6	2.7	1.8	1.9	2.2
Female	5.3	4	4.5	2.2	3.7
Youth Unemployment Rate (%)	12.9	9.2	9.2	7.3	9.6
Male	10.7	7.1	6.8	7.3	9.2
Female	14.7	11	10.9	7.2	9.9

Source: *MoLHR: Labour Force Surveys, 2013*

Therefore, TVET is seen as one of the main strategies for gainful employment. Aligning TVET towards needs of the economy and meeting aspirations of the people, especially the youth, have become vital to take the TVET agenda forward.

Following are some of the key issues that need to be addressed to revitalise TVET, which is based on the Problem Tree Analysis (refer Annex I), SWOT Analysis (refer Annex II) and the Systems Approach for Better Education Results (SABER) workforce development (WfD) country report for Bhutan (Annex III).

Low Economic Relevance

The Economic Development Policy (EDP) 2010 has identified priority economic sectors and the NHRD Policy 2010 was developed to complement the EDP. However, skills development is implemented by TVET agencies in isolation through ad hoc consultation with stakeholders. There is no proper mechanism in place to align skills development to economic priorities of the country. Aligning skills development to economic priorities would be greatly enhanced by the establishment of a national HRD council as outlined in the NHRD Policy 2010.

The MoLHR has is the apex agency for national human resources planning and development. MoLHR also plans, coordinates and implements TVET programmes. However, there is limited participation of employers in setting TVET priorities. One of the major constraints has been the capacity of the employers in developing their own strategic plans. MoLHR is also implementing programmes to strengthen the employers through the HRD support in training and development needs. Establishment of sector skills councils consisting of key TVET and HRD stakeholders will enhance the coherence of key strategic TVET priorities.

Low Social Relevance (access, equity and social values)

Skills development in the country is limited in programmes and the capacity to absorb increasing numbers of school leavers. In addition, skill development programmes that are prioritised do not meet the aspirations of the youth. This has led to some programmes being undersubscribed and TVET graduates not taking up related employment. This has exacerbated the poor social acceptance of TVET, which has been affected by several factors such as poor working conditions and low wages of TVET occupations.

Ineffective Training delivery

Training delivery of the TVET institutes has been criticised by employers for not being effective, as they do not prepare jobseekers in the skills and attitudes needed for employment. Employers expect higher competency in core skills as well as soft skills of the TVET graduates. This can be attributed to weak linkages between the industry and the institutes in on the job (OJT), and setting facilities and equipment standards.

Further, the training delivery capacity of the TVET institutions is weak and the programme design does not provide holistic development of TVET trainees.

Ineffective Management and administration of training delivery

There are several agencies that oversee TVET provision, such as the Ministry of Education, Ministry of Economic Affairs, Ministry of Agriculture and Forests, Royal University of Bhutan, Ministry of Health and Tourism Council of Bhutan. These agencies have their institutions and they also administer skills development in their sectors, whereas the MoLHR is the apex and nodal agency to coordinate TVET in the country. However, there has been weak national level coordination to bring cohesion and collaboration to TVET efforts and delivery, resulting in duplication of skills development and inefficiencies.

One of the major issues is the weak institutional arrangement for education progression and permeability for TVET graduates. Despite having the BQF and BVQF, smooth transition from vocational education to academic and vocational colleges as vocational programmes do not prepare TVET graduates for the pursuit of academic higher education. One possible remedy is closer cooperation between secondary vocational training programmes and universities in programme curricula design to facilitate students' transition to higher education. Also, there is a need to set up accredited assessment centres to facilitate recognition of prior learning.

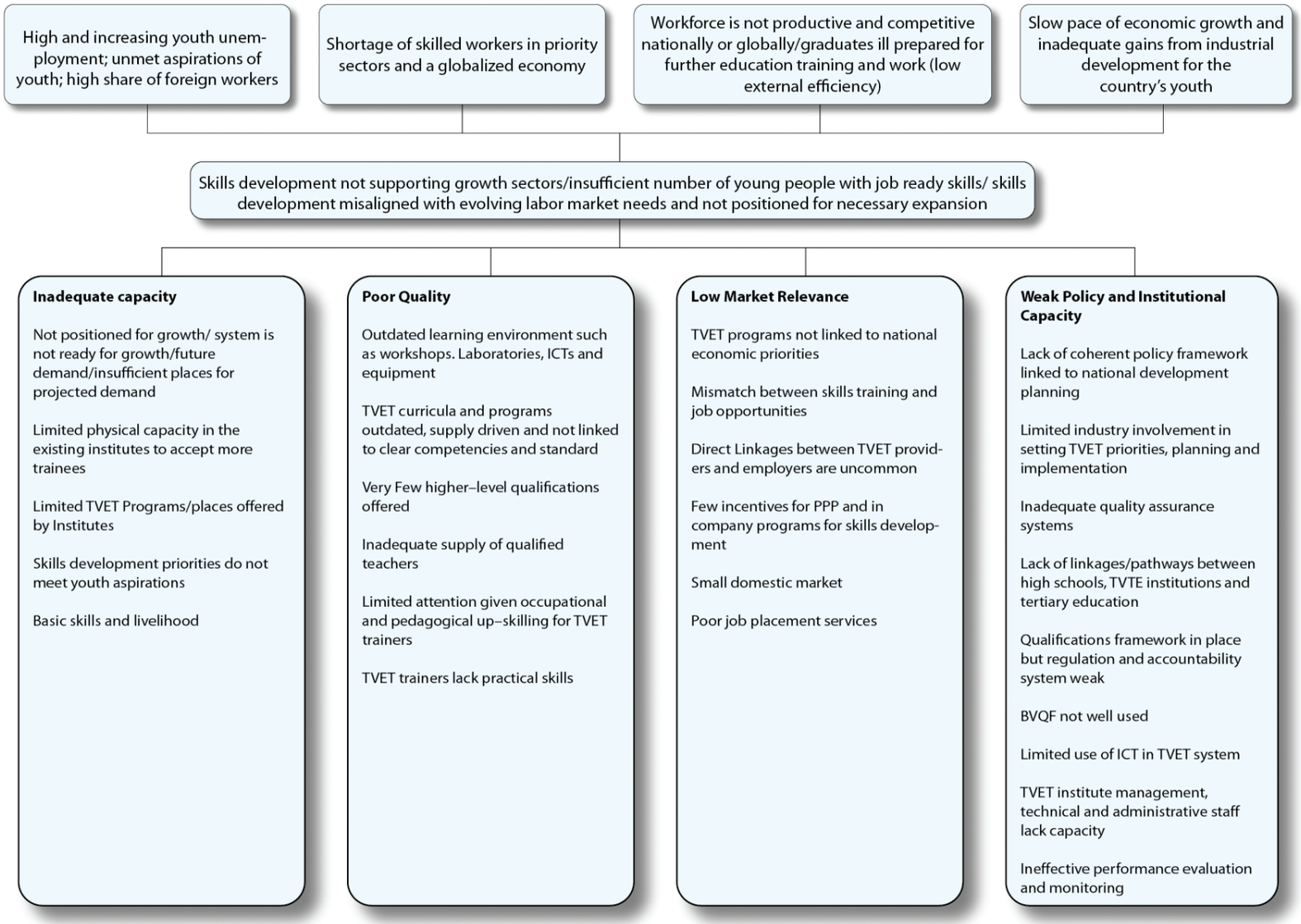
Further, quality of training delivery in the country is affected by the reluctance of training providers to adopt national competency standards. There are no incentives for the training providers to accredit their programmes and establish QMS. Furthermore, the weak management capacities and the inflexible recruitment and career progression policies for public TVET providers administered by the MoLHR have weakened the capacities of these institutes to meet TVET needs.

Weak internal efficiency and sustainability

Although TVET is recognised as the backbone of a country's economy and strategy for employment generation, the MoLHR is the only visible champion of TVET. There is weak and adhoc advocacy for TVET by top level leadership and non–government agencies. There is no widespread awareness of TVET reforms and initiatives. This has led to insufficient funding of TVET over the years. There is no mechanism to ensure equity and sustainability in TVET funding.

Further, the use of data to monitor, evaluate and improve TVET performance is limited. No significant improvements have recently been made based on data. There is a need to streamline and harmonise TVET database management systems and also establish a more holistic approach to TVET research.

Appendix 1 — Problem Tree Analysis



Appendix 2 — SWOT Analysis adapted for TVET sector

Strengths	Weaknesses
● Strategic focus of MOLHR on TVET ● Clearly defined roles of private TVET providers ● BVQF is established and competency standards for major occupation defined ● Strong protocol for assuring credibility of skills assessment and certification ● Accreditation standards for training quality are well established ● Effective RPL system in place ● Institutionalised support services for skills acquisition. ● Adequate system to regulate and monitor private training provision	● Weak and ad–hoc TVET advocacy programmes at the top leadership level ● Lower social acceptance of TVET ● Lack of established system for aligning skills development interventions to economic priorities and meeting youth aspirations ● Mismatch between level of competencies of TVET graduates and employers' expectations ● Employers' participation in setting TVET priorities and skill up gradation programmes is limited to few areas ● WFD/ TVET is fragmented and coordination between governing agencies is weak ● Insufficient OJT Period ● Government does not seek participation of Industry in setting facilities/equipment standards ● Insufficient fund ● Limited TVET programmes offered by the public TVET institutions ● No mechanism to ensure equity in TVET funding ● Lack of holistic development of TVET trainees ● Adoption of competency standards by training providers is weak ● Lack of widespread awareness of National Certificates ● Educational progression and permeability is not supported by existing institutional arrangement ● No accredited assessment centres ● Limited autonomy (only operational autonomy) and weak management of TTIs ● No research institutions for TVET ● Weak training delivery capacity in the public training institutes ● Lack of career progression for TVET instructors ● Limited use of data to monitor and improve programme and system performance ● Existing wage rates don't encourage TVET graduates to seek wage employment

Endnotes

[1] Extracted from the 3rd National HRD Advisory Series.

[2] As per registration directory of DOS.

[3] The survey was conducted targeting all registered training providers in the country. A total of 65 TVET providers participated in the TVET Institutions survey.

[4] Extracted from the 3rd National HRD Advisory Series

[5] Extracted from the 3rd National HRD Advisory Series

[6] 11th FYP HRD Masterplan for the Economic sectors (2013–18)

[7] Source: VETD, DHR

[8] Extracted from the 3rd National HRD Advisory Series and Tracer Study Report of MoLHR

[9] Source: 9th, 10th and 11thFYP Document. However, actual allocation of funds may differ from the planned allocation

Bhutan TVET Sector Assessment

Blueprint Working Papers-II

WORKFORCE DEVELOPMENT: SABER COUNTRY REPORT

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Acronyms

ALMP	—	Active Labour Market Programs
ATP	—	Apprentice Training Program
BQF	—	Bhutan Qualification Framework
BVQF	—	Bhutan Vocational Qualification Framework
CBT	—	Competency Base Curriculum
CBT	—	Competency Based Training
CVET	—	Continuing Vocational Education and Training
DHR	—	Department of Human Resources
DOS	—	Department of Occupational Standards
GEP	—	Guaranteed Employment Program
HRD	—	Human Resource Development
IVET	—	Initial Vocational Education and Training
IZC	—	Institute of Zorig Chusum
MoLHR	—	Ministry of Labour and Human Resources
OJT	—	On–the–job Training
QMS	—	Quality Management System
QMS	—	Quality Management System
RCSC	—	Royal Civil Service Commission
RGoB	—	Royal Government of Bhutan
RPL	—	Recognition of Prior Learning
RUB	—	Royal University of Bhutan
SSDP	—	Special Skills Development Program
STP	—	Skills Training Program
TTI	—	Technical Training Institute
TVET	—	Technical and Vocational Education and Training
VSDP	—	Village Skills Development Program
WfD	—	Workforce Development

The SABER TVET Assessment

	Status
Strategic Framework	
Strategic framework is assessed at a high "emerging" level. The Ministry of Labour and Human Resources (MoLHR) is committed to enhancing skills as part of its strategy for employment and human resources development. The government recognizes the challenges of aligning the Technical and Vocational Education and Training (TVET) system to the needs of a rapidly growing economy and will be articulating an explicit set of policies and strategies, with specific targets and operational plans, to strengthen the system.	**Emerging** 
System Oversight	
System oversight is assessed at the "emerging" level, reflecting the fact that while articulation mechanisms enable training institutions to create diverse learning pathways, public perception of these opportunities is low; that funding for TVET is not adequate or based on explicit criteria with performance indicators; that partnerships between TVET authorities and other stakeholders are ad–hoc; that training providers lack incentives to seek and retain accreditation; and that occupational standards required for competency–based testing and certification are available for only selected occupations	**Emerging** 
Service Delivery	
Service delivery is assessed at the high "emerging" level, consistent with the fact that while the government's policy of encouraging private provision of vocational training has stimulated an impressive expansion in the number and diversity of private vocational training institutions, the quality of service provision remains inadequate. In addition, the monitoring and evaluation system has been developed for non–state training providers, but not enforced effectively.	**Emerging** 

Introduction

Over the last decade, Bhutan has worked to strengthen the Technical and Vocational Education and Training (TVET). TVET reforms such as the establishment of Bhutan Vocational Qualifications Framework (BVQF), Competency Based Training (CBT), quality assurance standards and systems have been institutionalized. Another major focus of the country in the TVET sector was to increase access and enhance training delivery. Hence new TVET institutes were constructed and TVET programs were diversified to achieve these two objectives. Further, training providers are supported in trainer capacity building through Training of Trainers (ToT) and DACUM facilitation workshops (45%[1] of the surveyed training providers have availed of these services). Also, private sector participation in TVET was encouraged to improve access to TVET.

SABER WfD: A New Diagnostic Tool[2]

To inform policy dialogue on these important issues, this report presents a comprehensive diagnostic of the country's Workforce Development (WfD) policies and institutions. The results are based on a new World Bank tool designed for this purpose. Known as SABER–WfD, the tool is part of the World Bank's initiative on Systems Approach for Better Education Results (SABER)[3] whose aim is to provide systematic documentation and assessment of the policy and institutional factors that influence the performance of education and training systems. The SABER–WfD tool encompasses initial, continuing and targeted vocational education and training that are offered through multiple channels, and focuses largely on programs at the secondary and post–secondary levels.

Analytical Framework

The SABER tool is based on an analytical framework[4] that identifies three functional dimensions of WfD policies and institutions:

Strategic Framework, which refers to the praxis of high–level advocacy, partnership, and coordination, typically across traditional sectorial boundaries, in relation to the objective of aligning WfD in critical areas to priorities for national development;

System Oversight, which refers to the arrangements governing funding, quality assurance and learning pathways that shape the incentives and information signals affecting the choices of individuals, employers, training providers and other stakeholders; and

Service Delivery, which refers to the diversity, organization and management of training provision, both state and non–state, that deliver results on the ground by enabling individuals to acquire market– and job–relevant skills.

Taken together, these three dimensions allow for systematic analysis of the functioning of a WfD system as a whole. The focus in the SABER–WfD framework is on the institutional structures and practices of public policy making and what they reveal about capacity in the system to conceptualize, design, coordinate and implement policies in order to achieve results on the ground.

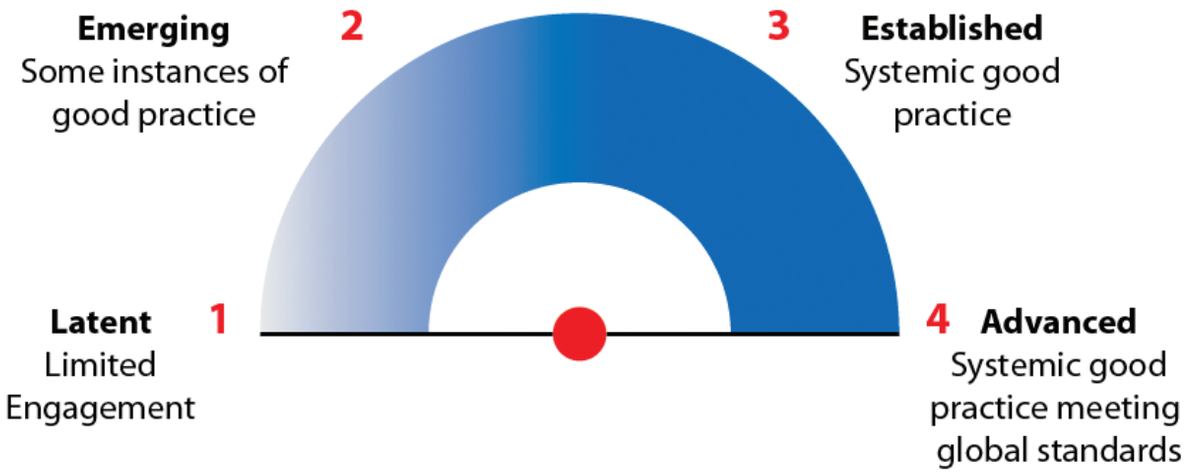
Each dimension is composed of three Policy Goals that correspond to important functional aspects of WfD systems (see Figure 1). Policy Goals are further broken down into discrete Policy Actions and Topics that reveal more detail about the system.[5]

Figure 1 — Functional Dimensions and Policy Goals in the SABER–WfD Framework

Implementing the Analysis

Information for the analysis is gathered using a structured SABER–WfD Data Collection Instrument (DCI). The instrument is designed to collect, to the extent possible, facts rather than opinions about WfD policies and institutions. For each Topic, the DCI poses a set of multiple–choice questions, which are answered based on documentary evidence and interviews with knowledgeable informants. The answers allow each Topic to be scored on a four–point scale against standardized rubrics based on available knowledge on global good practice (See Figure 2).[6] Topic scores are averaged to produce Policy Goal scores, which are then aggregated into Dimension scores.[7] The results are finalized following validation by the relevant national counterparts, including the informants themselves.

Figure 2 — SABER–WfD Scoring Rubrics



The rest of this report summarizes the key findings of the SABER–WfD assessment and also presents the detailed results for each of the three functional dimensions.

Overview of Findings and Implications

The SABER TVET benchmarking results reveal that Bhutan is on the right track with its policies and institutions for TVET. However, critical gaps remain between the demand for and supply of skilled and qualified workforce. The analysis reveals issues in specific aspects of policies and institutions pertaining to the TVET system's strategy, oversight and service delivery.

Overview of Results

Bhutan's overall scores for each of the three functional dimensions in the SABER–WfD framework appear in Figure 3. Simple aggregation of the scores that feed into each functional dimension point to the following results: the scores for Strategic Framework (2.5), System Oversight (2.1) and Service Delivery (2.5) are at the emerging level. As elaborated in the introduction, the score for each functional dimension is an aggregation of the scores for the underlying Policy Goals associated with it (see Figure 4).

Figure 3 — Overview of findings and implications

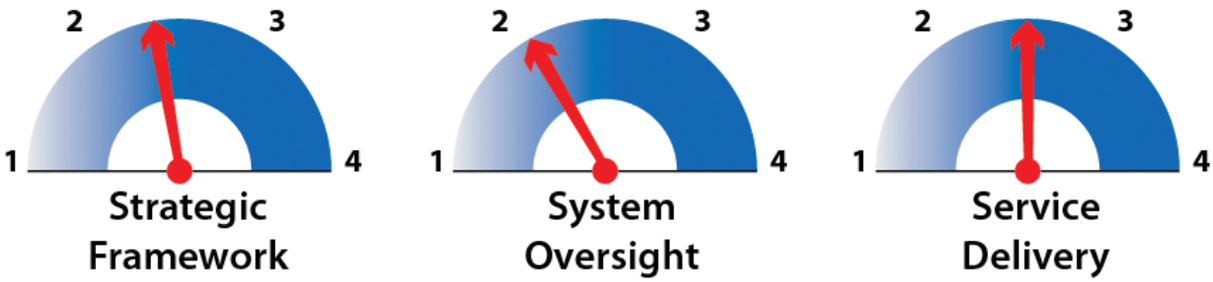
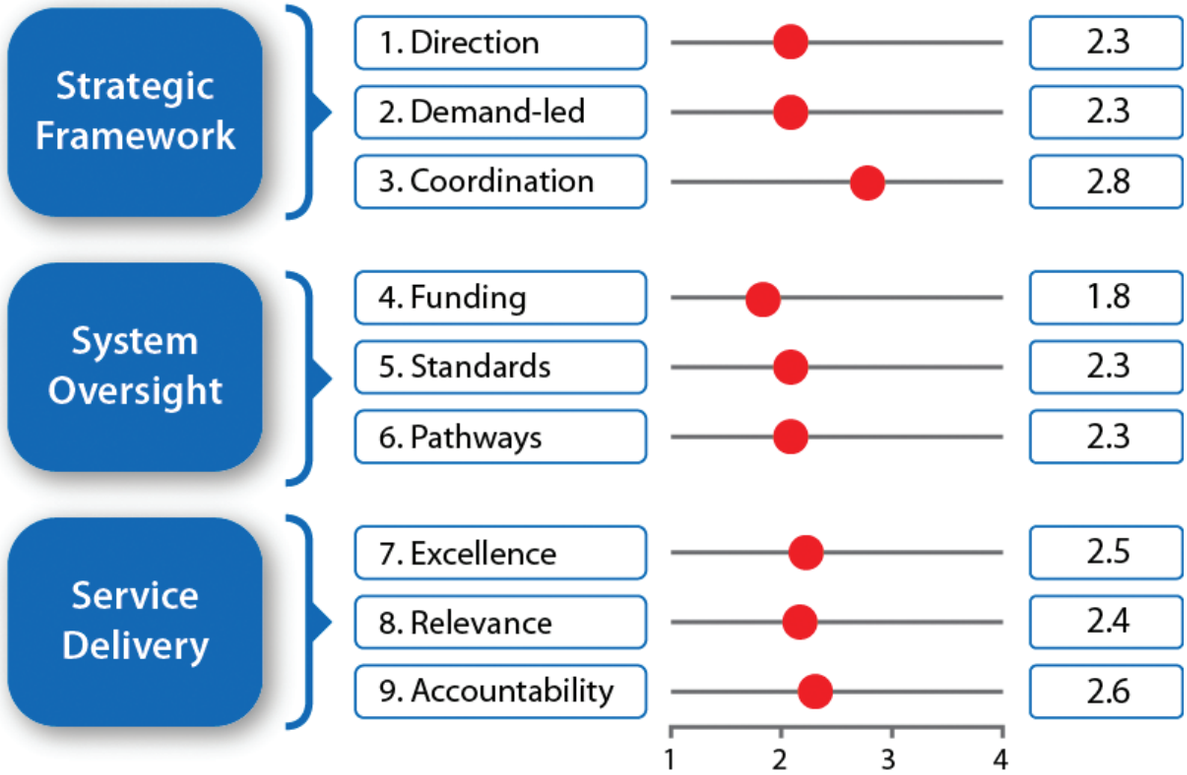
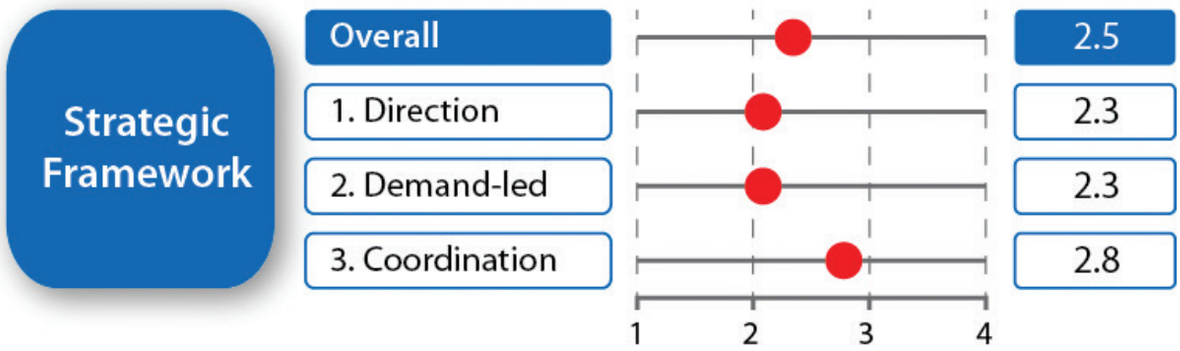


Figure 4 — Bhutan Benchmarking Results, 2015



On Strategic Framework:

Figure 5 — Aligning TVET to Key Economic and Social Priorities

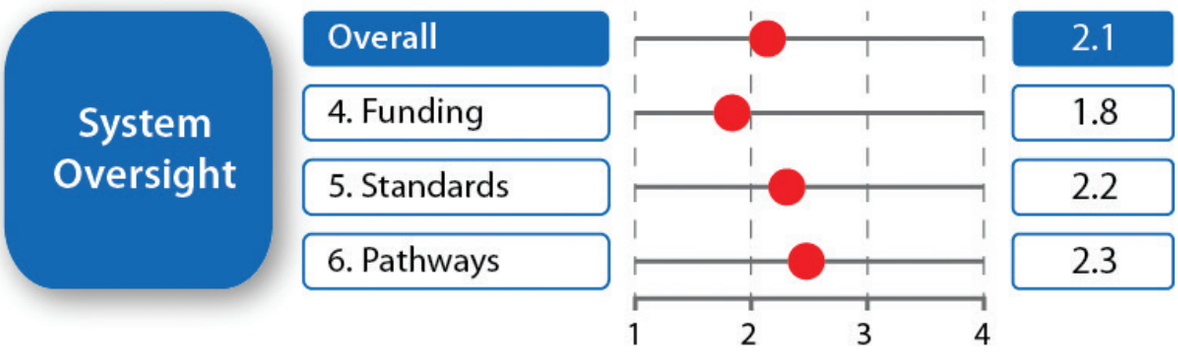


- Though TVET involves multiple stakeholders and beneficiaries, the Ministry of Labour and Human Resources (MoLHR) is the only visible champion for TVET in Bhutan. Roles of TVET stakeholders require greater clarity and coordination to reduce fragmentation and overlap of initiatives to improve workforce skills development.
- TVET advocacy needs to be further strengthened and mainstreamed.
- There are no systematic formal assessments of the country's economic prospects and their implication for skills requirements. Regular assessments on skills demand and economic prospects are not conducted to tie skills development programs to skills demand of the economy. The MoLHR has initiated work on the National Workforce Development Plan (NWDP).
- The Economic Development Policy 2010 is also currently being reviewed to consider integration of economic development, employment and human resource requirements among others.
- The voice and the participation of business and industry in establishing and implementing TVET priorities is passive, ad–hoc and quite limited. Their participation is limited due to the capacity constraints within the industries and lack of financial and non–financial (tax subsidies, government procurement preference and others) incentives for them.
- The MoLHR is identified as the apex body for human resource development of the nation as well as the nodal coordinating body for the national HRD. However, coherence of key strategic TVET priorities is still an issue as different government agencies provide their sector specific TVET trainings.
- The MoLHR assessment shows a need for mandatory industry representation in every governing board for all training providers. Further, mechanisms such as the sector skills council, as recommended in the National Employment Policy, 2013 is desired to facilitate industry participation in TVET.

- The division of responsibilities for management information systems, monitoring and evaluation and other functions for workforce development are scattered over many agencies and tend to overlap.

On System Oversight:

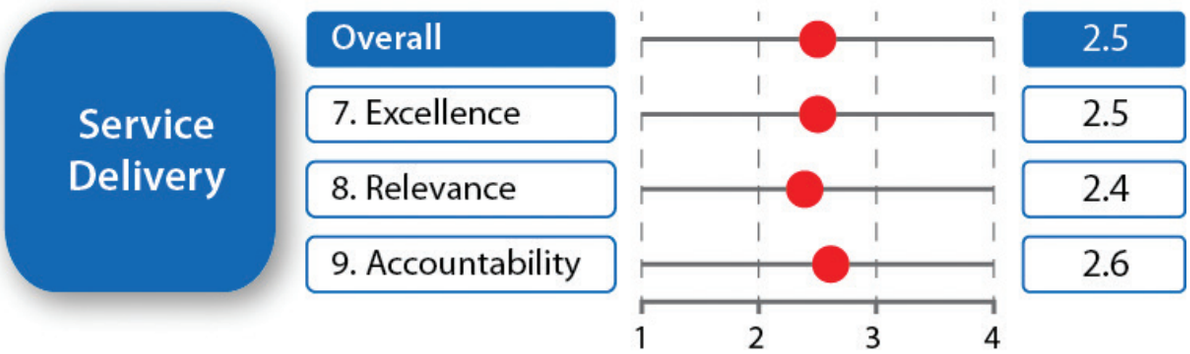
Figure 6 — Governing the System for Workforce Development



- Funding for initial, continuing and targeted vocational education and training is mostly government supported and sourced from taxation and donor support. There are no alternate funding strategies to ensure committed and regular support to TVET. Furthermore, there is no system to ensure effective fund allocation to TVET implementers based on performance. However, the recent Youth Employment Scheme (YES) and Graduates Skills Program (GSP) are good examples of performance based (meaning job placement rate) fund disbursment.
- Accreditation would help ensure the quality of training programs; however, there are no tangible incentives except acquiring national certification for the training providers. Accredited courses are recognized by the Government and eligible for national certification. Currently, only 60 occupations have standards, out of which only 10 are being used for skills testing.
- There is a lack of legislation and/or regulations backing implementation arrangements to promote educational progression and permeability through multiple pathways for TVET students. Recognition of Prior Learning (RPL) for skills exists; however, the capacity to conduct RPL is weak. Skills up–gradation programs for workers, jobseekers and the disadvantaged are limited by funding constraints and weak in–country training and assessment capacity.

On Service Delivery

Figure 7 — Managing Service Delivery



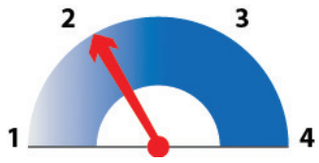
- Registration Regulation policies for training providers are strong and monitoring is institutionalized to ensure compliance. These training providers are rated based on their fulfillment of the registration standards.
- Since funding mechanisms do not reward better performance, public institutes are not incentivised to perform better. The annual performance agreement (APA) provides a general progress monitoring but do not reveal the effectiveness and efficiency of the institutes in quality of TVET.
- There is some industry participation in curricula development to ensure market relevance of training programs. However, the industry involvement to enhance institute facility standards is non–existent and there are no TVET research institutes in Bhutan.
- Public training institutes are for most part autonomous in enrolment, planning, procurement and budgeting of activities in line with Human Resource Development (HRD) priorities. However, recruitment of trainers and staff are not up to the discretion of the institute management but are dependent on the Royal Civil Service Commission (RCSC). Capacity building programs of the institutes are constrained by limited funding.
- Overall, use of data to monitor and evaluate programs and system performance is limited, and no significant improvements have been made based on data. Further, database management systems are not streamlined and harmonized under one agency to provide useful consolidated data for effective planning, monitoring and evaluation of HRD programs including TVET programs.

Detailed Results: Dimension 1

Strategic Framework

Policy Goal 1 | Articulating a Strategic Direction for TVET

Policy Goal 1 examines detailed results for the underlying Policy Actions as shown below and highlights the degree to which the country prioritizes TVET, whether its priorities are based on assessments of future economic prospects, and whether existing policies take such analyses into account. Overall the score for this Policy Goal is at the **emerging** level (score = 2.3).



- **Provide sustained advocacy for TVET at the top leadership level**

The MoLHR is the only visible champion for TVET in Bhutan. However, the advocacy for TVET is not based on social researches of the TVET takers and their parents, policy makers and public at large. . Though there are no visible champions from the non–government agencies, some have been partnering with the MoLHR in various TVET related activities and initiatives. Government has not emphasized the importance of TVET in the country firmly and consistently. Turning this attention or emphasis to action has been the purview of the MoLHR. Until now, the MoLHR has focused its advocacy strategy towards youth and young job seekers through programs such as skills competition, TVET Winter camp, career counselling and by branding TVET with the 'Get skilled. Be somebody!' slogan and 'one–one–zero's phrase. In recent years, there has been some constricted collaboration between MoLHR and industries/industry bodies in construction, tourism and hydropower and with industry associations like Construction Development Board for TVET advocacy, standards, curricula, training delivery and assessment.

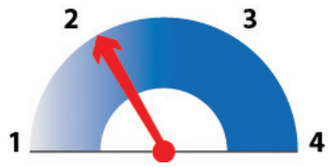
While the Ministry of Education (MoE) and the MoLHR play key roles in policy development in workforce development, there is no clear roles and coordination between the two ministries to reduce fragmentation and overlap of initiatives to improve workforce skills development. This pertains to defining roles of MoE in preparing students till the secondary level for the world of work and MoLHR imparting the technical skills for employment. The Education Blueprint stipulates a clear education pathway, which is expected to bring greater clarity in the overall work force development initiatives of the government.

The broad area of workforce development that the MoLHR has emphasized as a priority is the TVET sector. The MoLHR has programs such as integration of TVET orientation in schools and enhancing access to TVET through establishment of additional facilities. Skills trainings are also offered through alternative mode of programs, such as, Village Skills Development Program (VSDP), Skills Training Program (STP) and Apprenticeship Training Program (ATP). The STP for priority economic

sectors is currently being offered through Youth Employment Skills (YES), Graduate Skills Program (GSP), and Skills for Employment and Entrepreneur Development (SEED). Further, MoLHR provides HRD support to the workforce engaged in the critical sectors. Most of these programs have evolved over the years in accordance to the requirement of the industry and priorities of the Government. Private participation in TVET delivery has also been enhanced and strengthened in the last five years through development of the Establishment Regulation.

Policy Goal 2 | Prioritizing a Demand–led Approach

Policy Goal 2 examines the important role users of skills play in influencing TVET outcomes. The Policy Actions under this Goal focus on the following: establish clarity on the demand for skills and areas of critical constraint and engage employer in setting TVET priorities and in enhancing skills upgrading for workers. Overall the score for this Policy Goal is at the **emerging** level (score = 2.3).



- **Establish clarity on the demand for skills and areas of critical constraint**

There are no systematic formal assessments of the country's economic prospects and their implication for skills requirement. However, some assessments are carried out by various agencies on an ad–hoc basis that generally cover only a few economic sectors. Regular assessments on skills demand and economic prospects need to be conducted to narrow down the gap between skills development efforts and skills demand of the economy. In additional to the HRD Advisory generated on annual basis, the MoLHR has initiated work on the National Workforce Development Plan (NWDP) with the aim to identify skills requirements in the economic sectors.

The Economic Development Policy (EDP) 2010 has identified priority economic sectors such as construction, agriculture, tourism, ICT and others. However, critical skills constraints in these sectors are identified through ad–hoc or informal assessments. The MoLHR carries out stakeholder consultative meetings (one example is the employment creation taskforce meeting held in March 2015) with industries and employers to assess skills need in different sectors. Further, the 3rd National HRD Advisory also highlights areas of skills development based on the EDP 2010 but these areas needs to be further validated by the industry.

The EDP is currently being reviewed by the Ministry of Economic Affairs (MoEA) to consider integration of economic development, employment and human resource requirements among others.

The National HRD Policy, 2010 under clause 10.1 also clearly states "Vocational education shall be planned and developed in line with the labour market demands".

- **Engage employers in setting TVET priorities and in enhancing skills–upgrading for workers**

The Royal Government of Bhutan acknowledges the role of industries and employers in defining strategic TVET priorities in the country especially with regard to TVET. However, TVET has been Government driven and participation from the industries and the private sector is weak and limited.

The Bhutan Vision 2020 highlights the importance of the private sector as the 'engine of growth'– meaning main sector for tax revenue and employment generation. The industry provides input through consultative meetings, which are carried out as and when needed. Some of the best examples of programs, which have taken into consideration employers' participation, are the Guaranteed Employment Program (GEP) and the employment based approach to skills training like YES and GSP. Further, there is employers/industry participation in defining occupational standards. Few training programs like heavy vehicle driving have been introduced in TTI–Samthang to specifically meet industry's requirement. The GEP provides avenue for employers to get skilled individuals or individuals with financial allowance from the Government for a limited period.

Employers and industry associations are involved in three major areas of TVET implementation; (i) Work placements such as ATP, On–the–job Training (OJT), industry attachments/tours for instructors and trainees; (ii) Industry experts are involved in curriculum development for all courses offered at the TVET providers under the MoLHR; and (iii) Industry experts are a part of the Technical Advisory Committees (TAC) for the setting of National Competency Standards (NCS). However, participation in these areas has been weak and limited and for most part, employers and industry associations do not prioritize involvement in TVET at any level. This may be attributed to fact that foreign workers who are cheaper than national workers are meeting most of skills requirements in major economic sectors like construction.

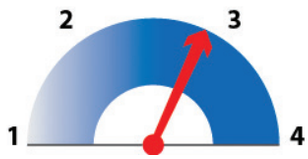
The Government provides HRD support to the private sector to develop and upgrade skills through HRD programs that are either fully funded by the Government or thorugh bilateral/ multilateral donor offers. The MoLHR since its inception has been implementing HRD for private sector wherein HRD programs at different level ranging from short–term training to masters level training (both ex–country as well as in–country). Further, the HRD Masterplan addresses the needs of the private sector and requirements for skills upgrading to ensure private sector growth and generate employment. This support has now expanded to all non–civil service sectors (meaning all agencies which are not under the purview of the RCSC). In addition to this, the Government also provides skilled supervisor training to senior employees for effective TVET delivery during OJT and industry attachments. The Government also provides skill up grading for the informal sector through entrepreneurship training and other soft skills development programs.

These programs are largely donor funded and Bhutan does not as yet have a funding scheme put in place for upskilling of the workforce such as a levy grant scheme. Those programs funded by the Government are appropriated through regular annual budgeting.

Regular Impact assessments for skills training efforts have not been carried by MoLHR. Also, strategies to address critical challenges in the future supply of skills such as relevancy and quality of TVET programs, capacity of the TVET providers to meet the skills demand in terms of numbers, making TVET a mainstream choice for Bhutanese have been not been cohesive or harmonized. Assessments that have resulted in recommendations have had significant delays in implementation. For example, the BVQF strategy document was formulated in 2002 and the VET policy in 2005. However, actual implementation and reforms to the TVET system were effected only by late 2009 – early 2010. There is no implementation framework and committed funds in place to conduct routine and timely assessments to inform policy reforms, and promptly implement subsequent recommendations. An excpetion is the consistent implementation review of STP program. The program has evolved and lessons learned have been incorporated in the subsequent program implementation.

Policy Goal 3 | Strengthening Critical Coordination

Policy Goal 3 examines the strength of critical coordination among key stakeholders to ensure effective TVET. The Policy Action associated with this goal is concerned with the formalization of key TVET roles for coordinated action on strategic priority. Bhutan scores at the **established** level of development for this Policy Goal (score = 2.8).

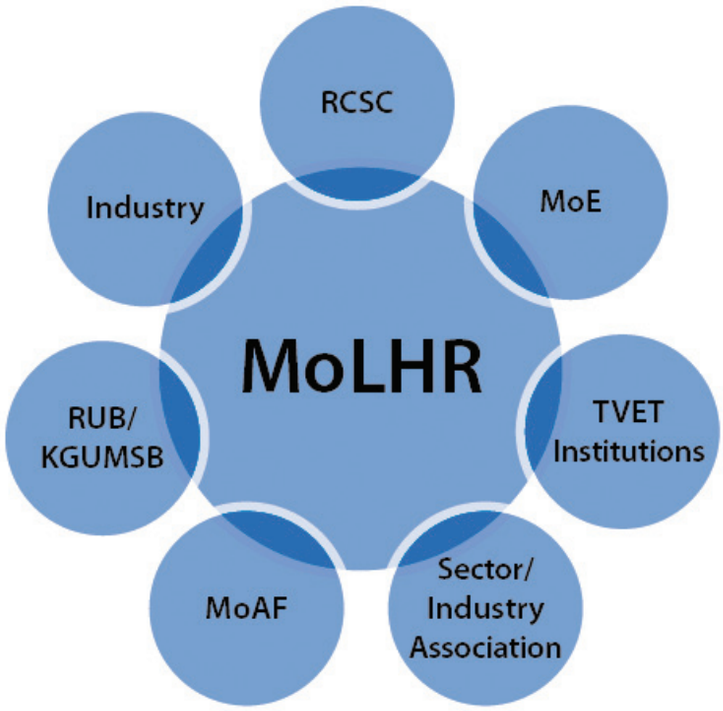


- **Formalize key TVET roles for coordinated action on strategic priorities**

There are different agencies responsible for TVET in the country. Some of these agencies are the MoLHR, MoE, Royal University of Bhutan (RUB), Royal Civil Service Commission (RCSC) and Khesar Gyalpo Univerisuty of Medical Sciences of Bhutan(KGUMSB) among others. There are few areas of overlap, such as, entrepreneurship program which is being provided by both government and non–government institutions. Further, skills training are offered by different agencies and institutions (eg: MoAF, CSOs, Corporate bodies, MoEA, private training providers and others). Currently, there are no formal mechanisms put in place to ensure coordination of TVET strategies and programs across ministries and agencies as the MoLHR has not taken a proactive approach to develop and implement a mechanisem to coordinate different agencies invloved in TVET delievery eventhough it is mandated to do so. The NHRD policy 2010 was the first initiative towards bringing colloborative and coordinated effort to HRD at the national level. The NHRD policy also highlights the importance of national level coordination body to resolve program overlap and coordination & cooperation among different HRD agencies. There is absence of a national HRD council consisitng of key TVET and HRD stakeholders (eventhough it was recommended by the Employment Policy), which can otherwise ensure coherence of key strategic TVET priorities

With the formulation of the NHRD policy 2010, the Royal Government mandates the MoLHR to be an apex agency for developing HRD frameworks, facilitating coordination among different HRD agencies and monitoring and integrating HRD plans, services and activities. This was to ensure that the MoLHR bought a coordinated effort among different implementing agencies to meet the human resource requirements of the country. However, efforts to facilitate coordination have been lukewarm till now.

Figure 8 — Schematic showing the relationships of the MoLHR with other agencies[8]



Non government bodies such as employer/industry group, civil society organization and training providers have an important role to play in the TVET delivery and are guided by the Establishment Regulations and the Registration Regulations launched in 2010. The Establishment Regulation fostered establishment of TVET delivery by non government providers. Since its launch, there has been increasing number of providers in TVET delivery. As per the Registration Regulation, as long as the training providers are registered, they can provide TVET programs. There has also been increased coordination between government and non–government stakeholders for training delivery, skills demand and structuring TVET reforms. However, there is no clear division of responsibilities for management information systems, monitoring and evaluation and other functions thereby leading to overlapping and duplication of activities.

Two of the main TVET programs with MoLHR are the formal training offered through the TTIs/IZCs and the STP. Both programs are guided by the 11th FYP and the HRD Masterplan of the MoLHR which are accompanied by the budget requirement for the programs. The high rating for this policy goal comes from the fact that these programs are well established.

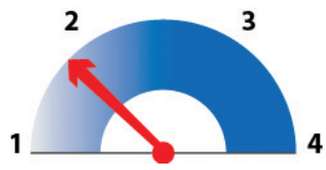
Most TVET programs offered by the MoLHR have detailed implementation plans and are budgeted annually as well as in the multi year plans. These programs are also monitored systematically and coordination among the implementing agenices are institutionalized. However, programs offered by non–government agencies apart from the Government sponsored training (which are based on labor market demands) in private institutes are still not coordinated with the labour market requirement and the TVET stakeholders.

Detailed Results: Dimension 2

System Oversight

Policy Goal 4 | Ensuring Efficiency and Equity in Funding

Policy Goal 4 focuses on the government's role in providing stable funding for effective programs in initial, continuing and targeted vocational education and training; monitoring and enhancing equity in funding for training and facilitating sustained partnerships between training institutions and employers. The score for this Policy Goal is barely at the **emerging** level of development (score = 1.77).



- **Provide stable funding for effective programs in initial, continuing and targeted vocational education and training**

The government mobilizes funds through general taxation and donor funding. Student fees are a source of funding only for the private training providers and only in certain vocational fields such as tourist guide and ICT. The majority of TVET providers are dependent on the Government for funding, either through annual budgeting for publicly–owned institutes or through public funding for programs that are delivered through private providers. Expenses for Initial Vocational Education and Training (IVET), Continuing Vocational Education and Training (CVET) (e.g. on-the-job training, career development) and Training-related Active Labour Market Programs (ALMPs) offered by public training providers (TTIs and IZCs) are supported from the Government fund.

The MoLHR is the responsible for prioritizing capital investment in TVET and other HRD programs. Hiring of manpower is decided by the RCSC and the concerned agency. Ministry of Finance appropriates non-salary operational spending to deliver training services. The main mechanism used by the government to provide recurrent funding for training is through budget allocation to public training providers and implementers.

The MoLHR's fund for IVET institutions and programs is allocated through routine annual budgeting. The previous year's budget, introduction of new programs and enrolment status is used for subsequent budget to IVET institutions and programs. The annual budgeting is guided by the Five Year Plan (FYP) overall allocation of the Government.

MoLHR and the RUB are responsible for recurrent funding for CVET, which is decided through ad-hoc processes. One such program is the OJT and ATP. However, these programs have not been reviewed for impact assessment. The higher–level courses at National Certificate level III have been introduced to support individual career or professional development. The impact study of this program has not been carried out.

The MoLHR and the RUB are further responsible for recurrent funding for ALMPs and the beneficiaries are unemployed individuals. STP and VSDP are the two major training-related ALMPs supported by the government. The above two programs are decided by taking into consideration the employers' and community's needs. The implementing agencies are involved in the planning and budgeting process. Training provision is implemented in partnership with training providers and communities. Programs are formally reviewed for their impact. However this has not led to change in program funding from the Government due to austerity measures taken by the government in the face of reduced government expenditure.

Bhutan has allocated less than 1.5%[9] of the total planned Government budget over the past decade to TVET. Government needs to match funding priorities to realize full employment – a major National Key Result Area identified in the 11th FYP, through skills development.

Table 1 — Capital Budget allocation for TVET in 9th, 10th and 11th FYP Document[10]

Budget in million	9th FYP (2002–08)	10th FYP (2008–13)	11th FYP (2013–18)
Total Government Budget	70,000.00	73,611.76	92,000.00
MoLHR budget outlay	691.524	1438.467	1914.85
TVET Budget (DHR + DOS+ 6 TTIs + 2IZcs)	500.00	1113.632	1025.2
% of TVET budget against total Government Budget	0.714%	1.513%	1.111%

- **Monitor and enhance equity in funding for training**

There are formal processes put in place to allocate funds, but no explicit criteria to review the effectiveness or efficiency of budget allocations.

Further, there are no explicit criteria to encourage performance or efficiency in spending. The current system promotes inefficiencies in allocation and inequalities among training providers. Funding principles are not tied to enrolment and outcomes such as the number of graduates, and the placement of graduates in internships and jobs.

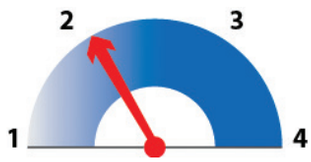
However, under STP programs such as YES and GSP, there are mechanisms to provide funding support to the partnering training provider based on job placements of graduates.

- **Facilitate sustained partnerships between training institutions and employers**

The MoLHR has partnerships with Training Providers and Employers. This partnership also exists within the TTIs/IZCs wherein industries provide access to their facilities and personnel. They also participate in deciding the content of training and contribute in development of standards and curricula. A good example would be the partnership between MoLHR and the Construction Development Corporation Limited (CDCL) and the TTI–Samthang and Central Machinery Unit (CMU). Mechanisms are put in place to coordinate resource sharing, sharing of technical knowhow, influence over content of training and personnel. The employers also provide employment opportunities to the graduates. However, these partnerships have been limited to only few sectors and are government led.

Policy Goal 5 | Assuring Relevant and Reliable Standards

Policy Goal 5 examines how the system can assure the quality of both the services offered by training providers and of the skills acquired by individuals through reliable procedures for accreditation and skills certification. The score for this Policy Goal is at the **emerging** level (score = 2.3).



- **Broaden the scope of competency standards as a basis for developing qualifications frameworks**

The MoLHR has oversight responsibility for competency standards development. Competency standards have been developed for 60 different occupations have been developed thus far. The MoLHR through the Department of Occupational Standards (DOS) has BVQF in place. However, competency standards cover limited range of skills areas. Training providers, employers or industry associations, national professional bodies and government ministries or specialized agencies are involved in policy dialogue on competency standards on a routine and institutionalized basis. All key stakeholders are engaged in setting competency standards for major occupations. However, few training providers offer accredited programs utilizing competency–based curricula aligned to the agreed standards.

- **Establish protocols for assuring the credibility of skills testing and certification**

Few occupations are certified in skilled and semi-skilled occupations whereby testing protocols are standardized and publicized. The DOS under the MoLHR is responsible for competency-based testing. Only a few types of tests and assessments are administered. The MoLHR has not taken measures in the last three years to manage the cost of skills testing and certification. Skills testing is a balance measure of both theory and practice and the National Certificate is awarded upon successful completion of the tests. In most of the cases the certificate is not required for practitioners of this occupation. However, government policy and recent trend has shown that the national certificate is gaining recognition among employers. For example, Bhutan Power Corporation (BPC) recognizes national certification issued by DOS for career progression and commensurable remuneration.

- **Develop and enforce accreditation standards for maintaining the quality of training provision**

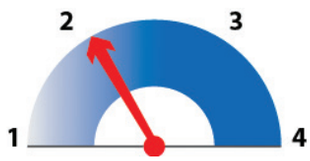
Bhutan so far has no system in place to accredit training providers. However, a system is in place to accredit training programs, which is executed by the DOS under the MoLHR. In absence of institute accreditation, the Registration Regulation has been put in place to establish and enforce minimum quality standards in the country. Registration is also tied with the licensing system and training providers are required to renew registration on a timely basis.

Accreditation is not mandatory for training providers but is encouraged to obtain certification that is nationally recognized. The MoLHR established the accreditation standards for training providers through internal consultations only. The accreditation standards have not been reviewed since they were only developed in 2010. Currently there is no incentive mechanism put in place to encourage program accreditation. However, getting a program accredited results in national level certification which allows indirect benefits to the training providers since it attracts trainees. The BVQF allows for learning pathways, which encourages training seekers to take up national level certification courses rather than those that are merely institute certified.

However, for public vocational institutes under the purview of the MoLHR, accreditation of courses are tied with performance mandates and therefore, these institutes are required to meet accreditation standards.

Policy Goal 6 | Diversifying Pathways for Skills Acquisition

Policy Goal 6 examines the diversity of programs and ease of movement between them, whether or not the system facilitates skills upgrading by providing information on emerging trends and recognition of prior learning, and how well the system is able to adapt to changing skills demand. The score for this Policy Goal is at **emerging** level (score = 2.30).



- **Promote educational progression and permeability through multiple pathways for TVET students**

The Bhutan Qualifications Framework (BQF) and the BVQF are the salient documents that highlight the educational progression and permeability through multiple pathways for TVET students. No separate academic and vocational/technical streams are offered at the secondary level in the schools. However, students have options to pursue TVET programs after secondary education in the registered institutions or RUB polytechnics/college.

Graduates from vocational secondary institutions (Technical Training Institutes –TTIs) are allowed to apply to both vocational and academic colleges. However, smooth transition from vocational education to academic and vocational colleges is hindered by the fact that vocational programs do not prepare TVET graduates for the pursuit of academic higher education. One possible remedy is closer cooperation between secondary vocational training programs and universities in program curricula design to facilitate students' transition to higher education.

The general public has little to no knowledge of the pathways to skills acquisition. Most of the knowledge is through word of mouth and from friends and family. There is no single institution with legislative authority to enforce the BQF, which does not provide suitable implementation arrangements to promote educational progression and permeability through multiple pathways for TVET students.

It is to be noted that those that have taken up vocational programs not in line with the BVQF are not eligible for these pathways.

Table 2 — The Bhutan Qualifications Framework developed by Bhutan Accreditation Council[11]

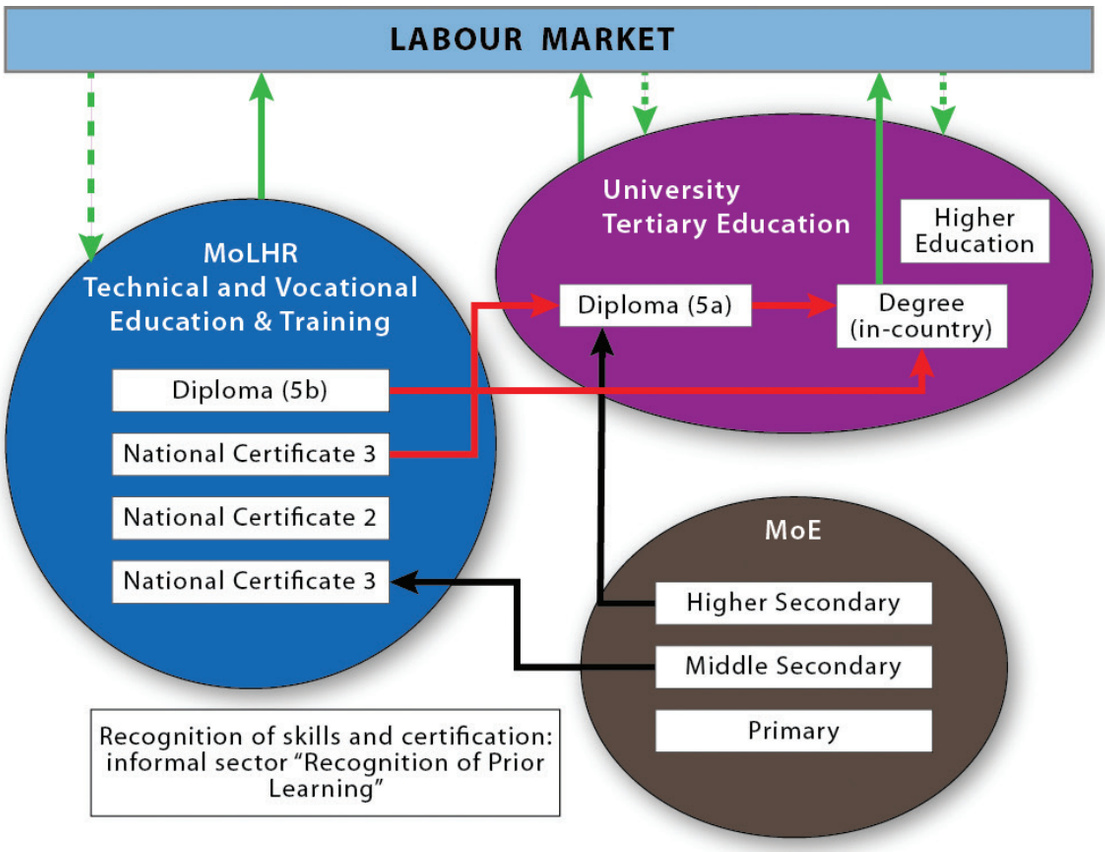
Level	School Education	Vocational Education	University Education
8			Doctorial
7			Masters
6			Bachelor
5		ND1 & ND2	Diploma
4	BHSEC	NC2 & NC3	
3	BCSE	NC1	
2	LSE		
1	PE		

- **Facilitate life–long learning through articulation of skills certification and recognition of prior learning**

Lifelong learning is not a new concept in Bhutan. The MoE initiated the Adult literacy and non–formal education (NFE) programs in 1992.[12] Further, the MoE started the continuing education program in 2006 in Thimphu[13] and also offers distance education programs. Recently, the Government is looking at strengthening career education and counselling into the education system, which is a joint effort between the MoE and the MoLHR.

The MoLHR is still in the process of putting in place the Recognition of Prior Learning (RPL) to recognize skills of those who have not undergone any formal training but the progress has been very slow and concrete procedures are yet to be seen. The DOS, MoLHR is the responsible agency to implement RPL. About 200 individuals have been certified under RPL till date. RPL is also integrated into the BVQF and advocacy activities have been carried out to inform people and employers about RPL.

Figure 9 — Schematic illustration of the three major stakeholders and the linkages between each as well as labour market[14]



- **Provide support services for skills acquisition by workers, job–seekers and the disadvantaged**

MoLHR provides in–service human resource development of those engaged in the workforce. These programs are implemented based on the HRD Master Plan of the MoLHR, which is developed in alignment with the FYP of the Government. The programs range from short–term to long–term, with the programs being implemented both within the country and outside the country. The implementation of the Master Plan is reviewed on its conclusion to assess outcomes and impact of the program. The current plan (11th FYP HRD Master Plan for the Economic Sector) for eight economic sectors aligned with the EDP of the Government are currently under implementation. Further, the NHRD policy mandates employers to provide at least 48 hours of training in a year for each of its employees.

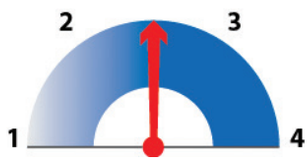
Both the formal and alternate modes of TVET programs offered by the MoLHR are accessible to all sections of society, which also includes the disadvantaged. The program is budgeted annually. These programs are monitored as part of an institutionalized and routine practice of the Department of Human Resources (DHR). However, there has been little to no reforms of program delivery as an impact assessment has not been carried out.

Detailed Results: Dimension 3

Service Delivery

Policy Goal 7 | Enabling Diversity and Excellence in Training Provision

Policy Goal 7 examines the diversity in training provision and the incentives to encourage private providers to meet TVET standards and to motivate public institutions to respond to the evolving demand for skills. The score for this Policy Goal is at the **emerging** level of development (score = 2.5)



- **Encourage and regulate private provision of training**

A wide range of private providers offers training and all of them are registered and licensed. The Registration Regulation mandates all training provider to be registered with the MoLHR. Further, tertiary institutions and programs are either affiliated with KGUMSB or RUB. Health related programs are registered with the Bhutan Medical and Health Council (BMDC). Currently there are 88 registered training providers with MoLHR offering various courses. Most of the registered private providers are operated on commercial basis. Some of the private training providers are associated with the Bhutan Information and Communication and Training Association (BICTA), the only training provider's association in the country. A President heads the Association and the registered private providers are must renew their registration certificate depending on the class they fall in: "A" every three years; "B" every two years and "C" annually.

The large diversity of training providers stems mainly from the ease of entry into the training market rather than from an established incentive system for training provision. Under current arrangements, very few private providers benefit from government training grants. The system of incentives has not been reviewed for effectiveness.

The MoLHR recommends the private providers to obtain a business license upon fulfilling the establishment regulation. The MoLHR encourages and promotes private training providers through outsourcing to provide providers pre–service and in–service training programs. The MoLHR encourages program accreditation and the implementation of a Quality Management System (QMS). Registration is subject to renewal as stated earlier and there are arrangements to ensure continued adherence to registration regulations. The MoLHR conducts random audit of the training providers to ensure quality of the training programs. Based on the audit findings, the institutes are given written notice for improvement in the lagging areas within a certain timeframe.

The government has reviewed its policies on private training provision through the review of the registration and establishment regulation in 2014. The whole process of setting up a TVET institute has been further simplified by merging the establishment procedure as part of the registration regulation.

- **Combine incentives and autonomy in the management of public training institutions**

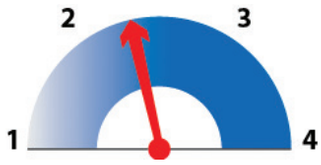
The Public training providers within the purview of the MoLHR are expected to attain certain enrolment target based on the 11th FYP and the HRD Master Plan of the MoLHR. The institutes are also bound by the Annual Performance Agreement (APA) signed between the institute and the MoLHR to deliver expected outcomes. The institutes are also expected to meet the QMS and deliver quality and relevant training to gain confidence of the employers. The institutes facilitate in–campus recruitment in collaboration with the employers.

The public training providers have autonomy in the planning, operation and management of the institute with the submission of monthly progress and other reports as required by the parent agency from time to time. The income generated through training and production activities are administered directly by the institute as a part of the Institute Development Fund (IDF) for the institutes under the purview of the MoLHR.

New courses are introduced on ad–hoc basis based on the labour market demand. The MoLHR has guidelines to decide on systematic program introduction to ensure relevancy and availability of resources. The phasing out of programs from public training providers is based on the capacity of private training providers to take up these programs and whether they are profit generating (e.g.: light vehicle driving). Decisions for adjusting or closing programs have consistent standards and procedures as per the Registration Regulation.

Policy Goal 8 | Fostering Relevance in Training Programs

Policy Goal 8 is concerned with the strengthening of linkages with industry and research institutions, the integration of industry inputs into the design of training programs, and provision for enhancing the competence of administrators and instructors in training institutions. Bhutan's score for this policy goal is at the **emerging** level of development (score = 2.4).



- **Integrate industry and expert input into the design and delivery of public training programs**

Formal links exist between some training institutions and industry, leading to significant collaboration in several areas. The MoLHR and the institutes have established collaboration with

the industries in the areas of assessment of trainees, OJT, and industrial attachment. The MoLHR has also established the Institute Advisory Body (IAB) for the Electrical Sector in 2012 and has plans to establish IABs for 3 more sectors[15] in the fiscal year 2015–16. There are no links existing between training and research institutions due to the lack of TVET related research institutions within the country.

Although the industries provide inputs through formal processes into the design of program curricula for publicly funded training programs in some institutions, they have a limited or no role in the specification of facility standards. In curricula development, the industry is involved right from the formulation of the national competency standards to the development of curricula. Although a formal engagement process is defined, obtaining relevant experts for these consultations are discouraged by inadequate incentives.

- **Recruit and support administrators and instructors for enhancing the market–relevance of public training programs**

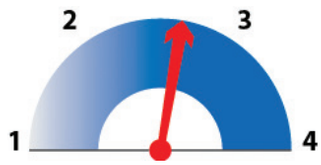
Heads of the training institutes are recruited based on the criteria set by RCSC, which is the apex agency for human resource management in the civil service sector. Emphasises is made on academic qualification, teaching experience and administrative experience. The heads of the institutes have opportunities for qualification up–gradation and capacity building based on the HR plan of the RCSC and are eligible to attend relevant seminars, workshops and conferences both at in–country, regional and international levels. The frequency of such opportunities is on average twice a year.

Instructors are recruited based on the approved instructor trainee ratio and the criteria set by the MoLHR, which emphasises on academic qualification (RCSC requirement) and teaching experience to some extent. The instructors have opportunities for qualification up–gradation and capacity building based on the HR plan of the RCSC for every five year plan. The instructors are also eligible to attend relevant workshops and in–country training programs on a periodic basis.

Trainer capacity assessment was carried out by the DHR in 2010–11, which recommended a comprehensive assessment for the instructors and heads of institutes be carried out to ensure relevant training opportunities and enhance training delivery and management at the institutes. However, the MoLHR has not been able to implement the recommendations for want of funds from the Government and lack of in–house capacity in the MoLHR.

Policy Goal 9 | Enhancing Accountability for Results

Policy Goal 9 is concerned with systemic monitoring and evaluation of the demand for skills; procedures for data collection and management; and level of attention to outcomes, efficiency and innovation in service delivery. The score for this Policy Goal is Just at the **established** level of development (score = 2.6).



- **Expand the availability and use of policy–relevant data for focusing providers' attention on training outcomes, efficiency and innovation**

The MoLHR conducts several data collection surveys periodically (mostly annual) e.g., Labour Force Survey, NHRD Advisory Series (Industry outlook survey, beyond graduation survey), LMID bulletin, youth perception survey, job prospecting survey, establishment survey and others. However, collection of data needs to be streamlined and made available through the use of ICT to ease collection and maintenance.

The public training providers within the purview of the MoLHR are required to submit quarterly progress reports, which include financial progress and activities carried out by the institutes. The public training providers maintain databases on enrolment figures, graduate statistics and instructor profiles at their institutes and accessibility to this information is publicly available vide their websites. The tertiary level course information is maintained with the RUB, the KGUMS and the MoE depending on the training provider offering the courses.

There is a monitoring and evaluation system in place for the MoLHR institutes, which is in addition to the quarterly progress reports and annual institute reports that the institutes submit for internal consumption. These reports are not available publicly, but are used to review effectiveness of training programs and efficiency of training delivery and management.

The data collected through various surveys are used by the MoLHR for monitoring and assessment of the TVET institutes. This information is also used for policy decisions to improve system efficiency in the management and implementation of various programs. The information on the details of the programs offered and other training opportunities are posted on the MoLHR's web site and through publications for general public information.

Overall, use of data to monitor and improve program and system performance is limited, and no significant improvements in training delivery for ensuring quality and relevance have been made based on data. Further, database management systems are not streamlined and harmonized under one agency. Within MoLHR, data on HRD and TVET activities are maintained by different implementing departments and/or divisions which impedes in getting consolidated data from one source. Further, there is inter agency coordination among different agencies involved in education and training programs thereby leading to duplication of activities and sometimes leading to unequal benefits for beneficiaries.

Annex 1: The SABER–WfD Analytical Framework

		Policy Goal		Policy Action	Topic	
Dimension 1	Strategic Framework	G1	Setting a Strategic Direction	Provide sustained advocacy for WfD at the top leadership level	G1_T1	Advocacy for WfD to Support Economic Development
					G1_T2	Strategic Focus and Decisions by the WfD Champions
		G2	Fostering a Demand–Led Approach	Establish clarity on the demand for skills and areas of critical constraint	G2_T1	Overall Assessment of Economic Prospects and Skills Implications
					G2_T2	Critical Skills Constraints in Priority Economic Sectors
				Engage employers in setting WfD priorities and in enhancing skills–upgrading for workers	G2_T3	Role of Employers and Industry
					G2_T4	Skills–Upgrading Incentives for Employers
					G2_T5	Monitoring of the Incentive Programs
		G3	Strengthening Critical Coordination	Formalize key WfD roles for coordinated action on strategic priorities	G3_T1	Roles of Government Ministries and Agencies
					G3_T2	Roles of Non–Government WfD Stakeholders
					G3_T3	Coordination for the Implementation of Strategic WfD Measures
Dimension 2	System Oversight	G4	Ensuring Efficiency and Equity in Funding	Provide stable funding for effective programs in initial, continuing and targeted vocational education and training	G4_T1	Overview of Funding for WfD
					G4_T2	Recurrent Funding for Initial Vocational Education and Training (IVET)
					G4_T3	Recurrent Funding for Continuing Vocational Education and Training Programs (CVET)
					G4_T4	Recurrent Funding for Training–related Active Labour Market Programs (ALMPs)
				Monitor and enhance equity in funding for training	G4_T5	Equity in Funding for Training Programs
				Facilitate sustained partnerships between training institutions and employers	G4_T6	Partnerships between Training Providers and Employers
		G5	Assuring Relevant and Reliable Standards	Broaden the scope of competency standards as a basis for developing qualifications frameworks	G5_T1	Competency Standards and National Qualifications Frameworks
					G5_T2	Competency Standards for Major Occupations
				Establish protocols for assuring the credibility of skills testing and certification	G5_T3	Occupational Skills Testing
					G5_T4	Skills Testing and Certification
					G5_T5	Skills Testing for Major Occupations
				Develop and enforce accreditation standards for maintaining the quality of training provision	G5_T6	Government Oversight of Accreditation
					G5_T7	Establishment of Accreditation Standards
					G5_T8	Accreditation Requirements and Enforcement of Accreditation Standards
					G5_T9	Incentives and Support for Accreditation

		Policy Goal		Policy Action	Topic	
		G6	Diversifying Pathways for Skills Acquisition	Promote educational progression and permeability through multiple pathways, including for TVET students	G6_T1	Learning Pathways
					G6_T2	Public Perception of Pathways for TVET
				Facilitate life–long learning through articulation of skills certification and recognition of prior learning	G6_T3	Articulation of Skills Certification
					G6_T4	Recognition of Prior Learning
				Provide support services for skills acquisition by workers, job–seekers and the disadvantaged	G6_T5	Support for Further Occupational and Career Development
					G6_T6	Training–related Provision of Services for the Disadvantaged
Dimension 3	Service Delivery	G7	Enabling Diversity and Excellence in Training Provision	Encourage and regulate non–state provision of training	G7_T1	Scope and Formality of Non–State Training Provision
					G7_T2	Incentives for Non–State Providers
					G7_T3	Quality Assurance of Non–State Training Provision
					G7_T4	Review of Policies towards Non–State Training Provision
				Combine incentives and autonomy in the management of public training institutions	G7_T5	Targets and Incentives for Public Training Institutions
					G7_T6	Autonomy and Accountability of Public Training Institutions
					G7_T7	Introduction and Closure of Public Training Programs
		G8	Fostering Relevance in Public Training Programs	Integrate industry and expert input into the design and delivery of public training programs	G8_T1	Links between Training Institutions and Industry
					G8_T2	Industry Role in the Design of Program Curricula
					G8_T3	Industry Role in the Specification of Facility Standards
					G8_T4	Links between Training and Research Institutions
				Recruit and support administrators and instructors for enhancing the market–relevance of public training programs	G8_T5	Recruitment and In–Service Training of Heads of Public Training Institutions
					G8_T6	Recruitment and In–Service Training of Instructors of Public Training Institutions
		G9	Enhancing Evidence–based Accountability for Results	Expand the availability and use of policy–relevant data for focusing providers' attention on training outcomes, efficiency and innovation	G9_T1	Administrative Data from Training Providers
					G9_T2	Survey and Other Data
					G9_T3	Use of Data to Monitor and Improve Program and System Performance

Annex 2: Rubrics for Scoring the SABER–WfD Data

Functional Dimension 1: Strategic Framework				
Policy Goal	**Level of Development**			
	Latent	**Emerging**	**Established**	**Advanced**
G1: Setting a Strategic Direction for WfD	Visible champions for WfD are either **absent** or take **no specific action** to advance strategic WfD priorities.	**Some** visible champions provide ***ad–hoc a***dvocacy for WfD and have acted on **few** interventions to advance strategic WfD priorities; **no arrangements** exist to monitor and review implementation progress.	**Government leaders** exercise **sustained** advocacy for WfD with **occasional, *ad–hoc*** participation from **non–government leaders;** their advocacy focuses on **selected** industries or economic sectors and manifests itself through **a range** of specific interventions**;** implementation progress is monitored, albeit through ***ad–hoc*** reviews**.**	**Both government and non–government leaders** exercise **sustained** advocacy for WfD, and rely on **routine, institutionalized** processes to collaborate on **well–integrated** interventions to advance a **strategic, economy–wide** WfD policy agenda; implementation progress is monitored and reviewed through **routine, institutionalized** processes**.**

Functional Dimension 1: Strategic Framework				
Policy Goal	**Level of Development**			
	Latent	**Emerging**	**Established**	**Advanced**
G2: Fostering a Demand–Led Approach to WfD	There is **no assessment** of the country's economic prospects and their implications for skills; industry and employers have a **limited or no role** in defining strategic WfD priorities and receive **limited** support from the government for skills upgrading.	**Some *ad–hoc*** assessments exist on the country's economic prospects and their implications for skills; **some** measures are taken to address critical skills constraints (e.g., incentives for skills upgrading by employers); the government makes **limited** efforts to engage employers as strategic partners in WfD.	**Routine** assessments based on **multiple data sources** exist on the country's economic prospects and their implications for skills; a **wide range** of measures with **broad** coverage are taken to address critical skills constraints; the government recognizes employers as strategic partners in WfD, **formalizes** their role, and **provides support** for skills upgrading through incentive schemes that are **reviewed and adjusted**.	A rich array of **routine and robust** assessments by **multiple stakeholders** exists on the country's economic prospects and their implications for skills; the information provides a basis for a **wide range** of measures with **broad** coverage that address critical skills constraints; the government recognizes employers as strategic partners in WfD, **formalizes** their role, and **provides support** for skills upgrading through incentives, including some form of a **levy–grant scheme**, that are **systematically reviewed** for impact and **adjusted** accordingly.

Functional Dimension 1: Strategic Framework				
Policy Goal	Level of Development			
	Latent	Emerging	Established	Advanced
G3: Strengthening Critical Coordination for Implementation	Industry/employers have a **limited or no role** in defining strategic WfD priorities; the government either provides **no incentives** to encourage skills upgrading by employers or conducts **no reviews** of such incentive programs.	Industry/employers help define WfD priorities on an ***ad–hoc*** basis and make **limited** contributions to address skills implications of major policy/investment decisions; the government provides **some** incentives for skills upgrading for formal and informal sector employers; if a levy–grant scheme exists its coverage is **limited**; incentive programs are **not systematically** reviewed for impact.	Industry/employers help define WfD priorities on a **routine** basis and make **some** contributions in **selected** areas to address the skills implications of major policy/investment decisions; the government provides **a range** of incentives for skills upgrading for all employers; a levy–grant scheme with **broad** coverage of formal sector employers exists; incentive programs are **systematically** reviewed and **adjusted;** an annual report on the levy–grant scheme is published with **a time lag**.	Industry/employers help define WfD priorities on a **routine** basis and make **significant** contributions in **multiple** areas to address the skills implications of major policy/investment decisions; the government provides **a range** of incentives for skills upgrading for all employers; a levy–grant scheme with **comprehensive** coverage of formal sector employers exists; incentive programs to encourage skills upgrading are **systematically** reviewed for **impact on skills and productivity** and are **adjusted** accordingly; an annual report on the levy–grant scheme is published in **a timely fashion**.

Functional Dimension 2: System Oversight				
Policy Goal	Level of Development			
	Latent	Emerging	Established	Advanced
G4: Ensuring Efficiency and Equity in Funding	The government funds IVET, CVET and ALMPs (but not OJT in SMEs) based on ***ad–hoc*** budgeting processes, but takes **no action** to facilitate formal partnerships between training providers and employers; the impact of funding on the beneficiaries of training programs has **not been recently reviewed**.	The government funds IVET, CVET (including OJT in SMEs) and ALMPs; funding for IVET and CVET follows **routine** budgeting processes involving **only government officials** with allocations determined largely by the **previous year's budget**; funding for ALMPs is decided by government officials on an ***ad–hoc*** basis and targets **select** population groups through various channels; the government takes **some** action to facilitate **formal** partnerships between individual training providers and employers; recent reviews considered the impact of funding on **only training–related indicators** (e.g. enrolment, completion), which stimulated dialogue among **some** WfD stakeholders.	The government funds IVET, CVET (including OJT in SMEs) and ALMPs; funding for IVET is **routine** and based on **multiple** criteria, including evidence of program effectiveness; recurrent funding for CVET relies on **formal** processes with **input** from key stakeholders and annual reporting **with a lag**; funding for ALMPs is determined through a **systematic** process with **input** from key stakeholders**;** ALMPs target **diverse** population groups through various channels and are reviewed for impact but follow–up is **limited**; the government takes action to facilitate **formal** partnerships between training providers and employers at **multiple** levels (institutional and systemic); recent reviews considered the impact of funding **on both** training–related indicators and labour market outcomes; the reviews stimulated dialogue among WfD stakeholders and **some** recommendations were implemented.	The government funds IVET, CVET (including OJT in SMEs) and ALMPs; funding for IVET is **routine** and based on **comprehensive** criteria, including evidence of program effectiveness, that are **routinely reviewed and adjusted**; recurrent funding for CVET relies on **formal** processes with **input** from key stakeholders and **timely annual reporting**; funding for ALMPs is determined through a **systematic** process with **input** from key stakeholders; ALMPs target **diverse** population groups through various channels and are reviewed for impact and **adjusted** accordingly; the government takes action to facilitate **formal** partnerships between training providers and employers at **all levels** (institutional and systemic); recent reviews considered the impact of funding on a **full range** of training–related indicators and labour market outcomes; the reviews stimulated **broad–based** dialogue among WfD stakeholders and **key** recommendations were implemented.

Functional Dimension 2: System Oversight				
Policy Goal	**Level of Development**			
	Latent	**Emerging**	**Established**	**Advanced**
G5: Assuring Relevant and Reliable Standards	Policy dialogue on competency standards and/or the NQF occurs on an ***ad–hoc*** basis with **limited** engagement of key stakeholders; competency standards have **not been defined**; skills testing for major occupations is **mainly theory–based** and certificates awarded are recognized by **public sector employers only** and have **little** impact on employment and earnings; **no system** is in place to establish accreditation standards.	**A few** stakeholders engage in ***ad–hoc*** policy dialogue on competency standards and/or the NQF; competency standards exist for a **few** occupations and are used by **some** training providers in their programs; skills testing is competency–based for a **few** occupations but for the most part is **mainly theory–based**; certificates are recognized by **public and some private sector employers** but have **little impact** on employment and earnings; the accreditation of training providers is supervised by a **dedicated office** in the relevant ministry; private providers are required to be accredited, however accreditation standards are **not consistently publicized or enforced**; providers are offered **some** incentives to seek and retain accreditation.	**Numerous** stakeholders engage in policy dialogue on competency standards and/or the NQF through **institutionalized** processes; competency standards exist for **most** occupations and are used by **some** training providers in their programs; the NQF, if in place, covers **some** occupations and **a range** of skill levels; skills testing for **most** occupations follows standard procedures, is competency–based and assesses **both theoretical knowledge and practical skills**; certificates are recognized by **both public and private sector employers** and **may impact** employment and earnings; the accreditation of training providers is supervised by a **dedicated agency** in the relevant ministry; the agency is responsible for defining accreditation standards with **stakeholder input**; standards are reviewed on an ***ad–hoc*** basis and are publicized or enforced to **some** extent; all providers receiving public funding must be accredited; providers are offered **incentives** and **limited support** to seek and retain accreditation.	**All key** stakeholders engage in policy dialogue on competency standards and/or the NQF through **institutionalized** processes; competency standards exist for **most** occupations and are used by training providers in their programs; the NQF, if in place, covers **most** occupations and a **wide range** of skill levels; skills testing for **most** occupations follows standard procedures, is competency–based and assesses **both theoretical knowledge and practical skills**; **robust protocols**, including **random audits**, ensure the credibility of certification; certificates are **valued by most employers** and **consistently improve** employment prospects and earnings; the accreditation of training providers is supervised by a **dedicated agency** in the relevant ministry; the agency is responsible for defining accreditation standards **in consultation with stakeholders**; standards are reviewed following **established protocols** and are publicized and **routinely** enforced; all training providers are required as well as offered **incentives and support** to seek and retain accreditation.

Functional Dimension 2: System Oversight				
Policy Goal	**Level of Development**			
	Latent	**Emerging**	**Established**	**Advanced**
G6: Diversifying Pathways for Skills Acquisition	Students in technical and vocational education have **few or no options** for further formal skills acquisition beyond the secondary level and the government takes **no action** to improve public perception of TVET; certificates for technical and vocational programs are **not recognized** in the NQF; qualifications certified by non–Education ministries are **not recognized** by formal programs under the Ministry of Education; recognition of prior learning receives **limited** attention; the government provides **practically no support** for further occupational and career development, or training programs for disadvantaged populations.	Students in technical and vocational education can only progress to **vocationally–oriented, non–university programs**; the government takes **limited** action to improve public perception of TVET (e.g. diversifying learning pathways); **some** certificates for technical and vocational programs are recognized in the NQF; **few** qualifications certified by non–Education ministries are recognized by formal programs under the Ministry of Education; policymakers pay **some** attention to the recognition of prior learning and provide the public with **some** information on the subject; the government offers **limited** services for further occupational and career development through **stand–alone local service centres** that are **not integrated** into a system; training programs for disadvantaged populations receive ***ad–hoc*** support.	Students in technical and vocational education can progress to **vocationally–oriented programs, including at the university level**; the government takes **some** action to improve public perception of TVET (e.g. diversifying learning pathways and improving program quality) and reviews the impact of such efforts on an ***ad–hoc*** basis; **most** certificates for technical and vocational programs are recognized in the NQF; a **large number** of qualifications certified by non–Education ministries are recognized by formal programs under the Ministry of Education, albeit **without the granting of credits**; policymakers give **some** attention to the recognition of prior learning and provide the public with **some** information on the subject; a **formal association** of stakeholders provides **dedicated** attention to adult learning issues; the government offers **limited** services for further occupational and career development, which are available through an **integrated network of centres**; training programs for disadvantaged populations receive **systematic** support and are reviewed for impact on an ***ad–hoc*** basis.	Students in technical and vocational education can progress to **academically or vocationally–oriented programs**, **including at the university level**; the government takes **coherent** action on **multiple fronts** to improve public perception of TVET (e.g. diversifying learning pathways and improving program quality and relevance, with the support of a media campaign) and **routinely** reviews and **adjusts** such efforts to maximize their impact; **most** certificates for technical and vocational programs are recognized in the NQF; a **large number** of qualifications certified by non–Education ministries are recognized and **granted credits** by formal programs under the Ministry of Education; policymakers give **sustained** attention to the recognition of prior learning and provide the public with **comprehensive** information on the subject; a **national organization** of stakeholders provides **dedicated** attention to adult learning issues; the government offers a **comprehensive menu** of services for further occupational and career development, **including online resources**, which are available through an **integrated network of centres**; training programs for disadvantaged populations receive **systematic** support with **multi–year budgets** and are **routinely** reviewed for impact and **adjusted** accordingly.

Functional Dimension 3: Service Delivery				
Policy Goal	Level of Development			
	Latent	Emerging	Established	Advanced
G7: Enabling Diversity and Excellence in Training Provision	There is **no diversity** of training provision as the system is largely comprised of **public providers** with **limited or no autonomy**; training provision is **not informed** by formal assessment, stakeholder input or performance targets.	There is **some** diversity in training provision; non–state providers operate with **limited** government incentives and **governance** over registration, licensing and quality assurance; public training is provided by institutions with **some** autonomy and informed by **some** assessment of implementation constraints, stakeholder input and basic targets.	There is **diversity** in training provision; non–state training providers, **some** registered and licensed, operate within **a range** of government incentives, **systematic** quality assurance measures and **routine** reviews of government policies toward non–state training providers; public providers, mostly governed by management boards, have **some** autonomy; training provision is informed by **formal analysis** of implementation constraints, stakeholder input and basic targets; lagging providers receive **support** and exemplary institutions are **rewarded**.	There is **broad** diversity in training provision; non–state training providers, **most** registered and licensed, operate with **comprehensive** government incentives, **systematic** quality assurance measures and **routine** review and **adjustment** of government policies toward non–state training providers; public providers, mostly governed by management boards, have **significant** autonomy; decisions about training provision are **time–bound** and informed by **formal assessment** of implementation constraints; stakeholder input and use of a **variety of measures** to incentivize performance include support, rewards and performance–based funding.

Functional Dimension 3: Service Delivery				
Policy Goal	Level of Development			
	Latent	Emerging	Established	Advanced
G8: Fostering Relevance in Public Training Programs	There are **few or no attempts** to foster relevance in public training programs through encouraging links between training institutions, industry and research institutions or through setting standards for the recruitment and training of heads and instructors in training institutions.	Relevance of public training is enhanced through **informal** links between **some** training institutions, industry and research institutions, including **input** into the design of curricula and facility standards; heads and instructors are recruited on the basis of **minimum academic standards** and have **limited** opportunities for professional development.	Relevance of public training is enhanced through **formal** links between **some** training institutions, industry and research institutions, leading to collaboration in **several** areas including but not limited to the design of curricula and facility standards; heads and instructors are recruited on the basis of **minimum academic and professional standards** and have **regular** access to opportunities for professional development.	Relevance of public training is enhanced through **formal** links between **most** training institutions, industry and research institutions, leading to **significant** collaboration in a **wide range** of areas; heads and instructors are recruited on the basis of **minimum academic and professional standards** and have **regular** access to **diverse** opportunities for professional development, including **industry attachments** for instructors.

Functional Dimension 3: Service Delivery				
Policy Goal	**Level of Development**			
	Latent	**Emerging**	**Established**	**Advanced**
G9: Enhancing Evidence–based Accountability for Results	There are **no specific** data collection and reporting requirements, but training providers maintain their **own databases;** the government **does not conductor sponsor** skills–related surveys or impact evaluations and **rarely** uses data to monitor and improve system performance.	Training providers collect and report **administrative** data and there are **significant** gaps in reporting by non–state providers; **some** public providers issue annual reports and the government **occasionally** sponsors or conducts skills–related surveys; the government **does not consolidate data** in a system–wide database and uses **mostly administrative data** to monitor and improve system performance; the government publishes information on graduate labour market outcomes for **some** training programs.	Training providers collect and report **administrative and other** data (e.g., job placement statistics, earnings of graduates) and there are **some** gaps in reporting by non–state providers; **most** public providers issue internal annual reports and the government **routinely** sponsors skills–related surveys; the government consolidates data in a **system–wide database** and uses **administrative data** and information from **surveys** to monitor and improve system performance; the government publishes information on graduate labour market outcomes for **numerous** training programs.	Training providers collect and report **administrative and other** data(e.g., job placement statistics, earnings of graduates)and there are **few** gaps in reporting by non–state providers; **most** public providers issue **publicly available** annual reports and the government **routinely** sponsors or conducts skills–related surveys and impact evaluations; the government consolidates data in a **system–wide, up to date database** and uses **administrative data**, information from **surveys and impact evaluations** to monitor and improve system performance; the government publishes information on graduate labour market outcomes for **most** training programs **online**.

Annex 3: SABER–WfD Scores

Policy Goal		Topic		Score
G1	Setting a Strategic Direction for WfD	G1_T1	Advocacy for WfD to Support Economic Development	2.00
		G1_T2	Strategic Focus and Decisions by the WfD Champions	2.60
G2	Fostering a Demand–Driven Approach	G2_T1	Overall Assessment of Economic Prospects and Skills Implications	2.40
		G2_T2	Critical Skills Constraints in Priority Economic Sectors	2.00
		G2_T3	Role of Employers and Industry	3.00
		G2_T4	Skills–Upgrading Incentives for Employers	2.25
		G2_T5	Monitoring of the Incentive Programs	2.00
G3	Strengthening Critical Coordination	G3_T1	Roles of Government Ministries and Agencies	2.50
		G3_T2	Roles of Non–Government WfD Stakeholders	3.00
		G3_T3	Coordination for the Implementation of Strategic WfD Measures	3.00
G4	Ensuring Efficiency and Equity in Funding	G4_T1	Overview of Funding for WfD	0.00
		G4_T2	Recurrent Funding for Initial Vocational Education and Training (IVET)	1.75
		G4_T3	Recurrent Funding for Continuing Vocational Education and Training Programs (CVET)	2.00
		G4_T4	Recurrent Funding for Training–related Active Labour Market Programs (ALMPs)	2.86
		G4_T5	Equity in Funding for Training Programs	1.00
		G4_T6	Partnerships between Training Providers and Employers	2.80
G5	Assuring Relevant and Reliable Standards	G5_T1	Competency Standards and National Qualifications Frameworks	3.17
		G5_T2	Competency Standards for Major Occupations	3.50
		G5_T3	Occupational Skills Testing	2.00
		G5_T4	Skills Testing and Certification	3.00
		G5_T5	Skills Testing for Major Occupations	3.00
		G5_T6	Government Oversight of Accreditation	1.00
		G5_T7	Establishment of Accreditation Standards	2.00
		G5_T8	Accreditation Requirements and Enforcement of Accreditation Standards	1.00
		G5_T9	Incentives and Support for Accreditation	1.00
G6	Diversifying Pathways for Skills Acquisition	G6_T1	Learning Pathways	2.20
		G6_T2	Public Perception of Pathways for TVET	1.00
		G6_T3	Articulation of Skills Certification	1.20
		G6_T4	Recognition of Prior Learning	2.00
		G6_T5	Support for Further Occupational and Career Development	3.60
		G6_T6	Training–related Provision of Services for the Disadvantaged	3.57

Policy Goal		Topic		Score
G7	Enabling Diversity and Excellence in Training Provision	G7_T1	Scope and Formality of Non–State Training Provision	3.83
		G7_T2	Incentives for Non–State Providers	2.50
		G7_T3	Quality Assurance of Non–State Training Provision	3.00
		G7_T4	Review of Policies towards Non–State Training Provision	1.00
		G7_T5	Targets and Incentives for Public Training Institutions	1.83
		G7_T6	Autonomy and Accountability of Public Training Institutions	2.75
		G7_T7	Introduction and Closure of Public Training Programs	2.33
G8	Fostering Relevance in Public Training Programs	G8_T1	Links between Training Institutions and Industry	3.00
		G8_T2	Industry Role in the Design of Program Curricula	3.00
		G8_T3	Industry Role in the Specification of Facility Standards	1.00
		G8_T4	Links between Training and Research Institutions	1.00
		G8_T5	Recruitment and In–Service Training of Heads of Public Training Institutions	4.00
		G8_T6	Recruitment and In–Service Training of Instructors of Public Training Institutions	2.50
G9	Enhancing Evidence–based Accountability for Results	G9_T1	Administrative Data from Training Providers	2.33
		G9_T2	Survey and Other Data	2.25
		G9_T3	Use of Data to Monitor and Improve Program and System Performance	3.25

Endnotes

[1] Ministry of Labour and Human Resources, The 3rd National HRD Advisory, 2015.

[2] Extracted from the World Bank SABER TVET country report for Vietnam.

[3] For details on SABER see http://www.worldbank.org/education/saber; for acronyms used in this report, see Annex 1.

[4] For an explanation of the SABER–WfD framework see Tan et al 2013.

[5] See Annex 2 for an overview of the structure of the framework.

[6] See Annex 3 for the rubrics used to score the data. See Annex 5 for the detailed scores

[7] Since the composite scores are averages of the underlying scores, they are rarely whole numbers. For a given composite score, X, the conversion to the categorical rating shown on the cover is based on the following rule: $1.00 \le X \le 1.75$ converts to "Latent"; $1.75 < X \le 2.50$, to "Emerging;" $2.50 < X \le 3.25$, to "Established;" and $3.25 < X \le 4.00$, to "Advanced."

[8] National HRD Policy 2010

[9] GNHC plan documents 9th FYP, 10th FYP, 11th FYP

[10] Source: 9th, 10th and 11th FYP Document. However, actual allocation of funds may differ from the planned allocation

[11] Bhutan Qualification Framework 2012

[12] Country Report on CLCs, UNESCO. http://www.unescobkk.org/fileadmin/user_upload/appeal/CLC/Reports_and_publications/Bhutan.pdf

[13] Education for all: mid–decade assessment for Bhutan, UNESCO. http://planipolis.iiep.unesco.org/upload/Bhutan/Bhutan_EFA_MDA.pdf

[14] Bhutan Vocational Qualification Framework 2013

[15] For the construction sector, the arts and crafts sector and the automobile sector, draft performance agree-ment targets 2015–16, MoLHR.

Bhutan TVET Sector Assessment

Blueprint Working Papers-III

BHUTAN TVET SYSTEM
PROSPECTS & CHALLENGES

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Acronyms & Abbreviations

ADB	—	Asian Development Bank
ATP	—	Apprenticeship Training Program
BPT	—	Blue Print for TVET
BQF	—	Bhutan Qualifications Framework
BVQF	—	Bhutan Vocational Qualifications Framework
CBT	—	Competency Based Training
DOL	—	Department of Labour
DRIC	—	Dodhter–Rigtsel Info–Research Centre
FGD	—	Focus Group Discussions
GDP	—	Gross Domestic Product
GEP	—	Guaranteed Employment Program
HDI	—	Human Development Index
HRD	—	Human Resource Development
IZC	—	Institute of Zorig Chusum
LDC	—	Least Developed Country
LFS	—	Labour Force Survey
MOLHR	—	Ministry of Labour and Human Resources
NCL	—	National Certificate Level
NCS	—	National Competency Standards
NGO	—	Non–Governmental Organization
NSDP	—	National Skills Development Plan
NTTA	—	National Technical Training Authority
OECD	—	Organization for Economic Cooperation and Development
OSS	—	Occupational Skills Standards
PPP	—	Public Private Partnership
PRSP	—	Poverty Reduction Strategy Paper
PTI	—	Private Training Institute
RGOB	—	Royal Government of Bhutan
RTP	—	Registered Training Providers
RUB	—	Royal University of Bhutan
TA	—	Technical Assistance
TOR	—	Terms of Reference
TOT	—	Training of Trainers
TTI	—	Technical Training Institute
TVET	—	Technical and Vocational Education and Training
VTI	—	Vocational Training Institute
VQF	—	Vocational Qualifications Framework
YES	—	Youth Employment Skills

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It forms part of the Technical and Vocational Education and Training (TVET) Blueprint for Bhutan. The TVET Blueprint is intended to articulate a long–term strategic vision that will guide and influence Bhutan's reforms and development in TVET over the next 15 years (2016–2030).

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Executive Summary

The positive intent of technical and vocational education and training in Bhutan is enshrined in its Constitutional pledge to "provide education for the purpose of improving and increasing knowledge, values and skills of the entire population with education being directed towards the full development of the human personality".[1] The more practical intent though, is to address: growing issues of unemployment (especially among the youth, even the educated); mismatch between labour skills and market demand; relatively sluggish rate of job creation in the private sector; shortage of "employable"[2] labour and consequent reliance on foreigners; employers' insistence on a well–developed set of "generic" skills[3] (experience or education) for potential employees; all within a key objective of improving the health of the overall economy.

Bhutan's TVET challenge is not unlike anywhere else. Even as it receives increasing focus as an alternative to general education for gainful employment and livelihood, it continues to face a number of challenges — some constant, others changing. An inherent negative social attitude toward technical vocations and blue–collar jobs is perhaps its biggest challenge. A number of developing countries also voice the same concerns. There is much literature out there offering a number of solutions. One of the most persuasive and, which draws from the experiences of technical vocations in developed countries, is that pecuniary incentives or returns from technical jobs must be at least equal to white–collar pay. This makes sense for a country like Bhutan, which is fairly skilled–labour–scarce. However, there are no silver bullets for changing social perceptions, especially in a society and culture that demonstrates high power distances and concepts like dignity of labour are relatively new.

Then there are challenges that change from time to time and from government to government. TVET is not an indispensable budget item, as health or general education is, on the national accounts. Its lofty purpose to shore–up many of the issues highlighted here is not matched with equally lofty resources. The annual budget for TVET in any given year since 2003 has been just around 1 percent of total government spending. This is not helped by the fact that TVET education is widely considered to be much more expensive than general education. For a country like Bhutan where public spending makes up a disproportionately large share of the Gross Domestic Product (GDP), the only practical solution seems to be persuading policymakers towards allocating more resources towards technical and vocational education. In more developed economies, there are complex and innovative funding mechanisms, often in partnership with the private sector, to finance TVET. Here, the options are limited with the market highly hedged in capital–intensive hydropower and a sluggish private sector that does not create as much employment as many would like it to. A close funding alternative then, is to rely on development partners who are cognizant of the long–term implications and willing to assist in fostering alternative avenues of education and skills development. The ADB, with its commitment to "continue to provide support for enhancement of TVET"[4] in Bhutan is one such partnership.

One of the purposes of surveys and studies such as this is to persuade both national policymakers and international partners of the value in developing technical and vocational education, particularly as a medium and short–term solution to latent unemployment and economic issues. This study in particular, finds that the conditions of unemployment in Bhutan are not as aggravated as in other developing nations. Quantitatively, the unemployment rate is quite low even though youth unemployment rates are rising. Qualitatively, there is a sense of contentment amongst all groups surveyed in this study (trainees, graduates and trainers) as evidenced in their "Above Average" ratings of TVET curriculum, trainers and the facilities of their respective (public or private sector) Registered Training Providers (RTPs).[5] The respondents' are also generally positive about their medium–term social–economic prospects and well–being for at least another 5 years.

This does not mean that significant investments are not needed in all aspects of the TVET system in Bhutan. On the contrary, while ratings and assessments by trainees, graduates and trainers are mostly above average in this survey, their stated income and employment expectations are very subdued. A number of reasons for such outcomes were discussed (amongst the firm's team and with the experts from relevant agencies). First, for trainees and graduates, their backgrounds from largely modest agricultural and low–income families means that their expectation thresholds are already quite low. Two, many (including trainers) do not factor in future external (and internal) shocks in their expectations of employment and income. In a sense, they are content living 'hand to mouth'. And last, many of the respondents expect social and macro–economic conditions in the country to remain the same. There is little room for volatilities in income and job security. The role of the government therefore, is even more pronounced. Where people are unaware or inadequately informed (and maybe even indifferent) to changing social and economic conditions, it must take on an added responsibility to strengthen institutions, mainstream viable avenues of productivity, income and employment, and introduce timely measures and reforms to sustain both its own and its constituents' futures. Increasing investments in TVET is certainly one way to do so, as exhibited by the growing body of evidence and experiences of other developing countries.

1. Country Background

Bhutan has grown steadily since planned development activities began in 1961. Notwithstanding the challenges associated with being landlocked, its economy has transformed from largely agrarian to one where manufacturing and services now contribute 83.8 percent to GDP.[6] Fewer people live in poverty at about 12 percent of total population[7] (2012). Bhutan ranks 132 out of 188 countries with a Human Development Index (HDI) of 0.605 (2014).[8] It is also expected to graduate from a Least Developed Country (LDC) to 'middle income' status by 2021.[9] Along with economic and social progress, political reforms such as a Constitution and democratic elections have recently been introduced.

A crucial divergence has emerged however. Bhutan's rapid progress has not translated into labour market growth. Even as the primary sector (Agriculture and Forestry) has declined markedly in recent decades, it continues to employ 56.7 percent of the total labour force.[10] Qualitatively, this inability to modernize and mainstream a large section of the workforce into the growing 'value' sectors has given rise to a number of issues. Low labour productivity, mismatch in labour skills with market demands, employability, dependence on foreign workers and social attitudes towards technical work have been exacerbated by a rapidly growing and job–seeking young population. The National Statistics Bureau (NSB) estimates that 49.6 percent (2014) of total population is under the age of 24.

As a result, there has been increasing recognition of the need to harmonize the government's human resource and labour market policies, plans and programs with the country's progress. Bhutan has a good track record in investing in human resources, mainly in long–term general education. It has also, in recent years, revived the impetus to supplement these efforts with increased focus on short and medium–term technical and vocational education and training to address not only immediate unemployment and economic issues, but also to create a skilled workforce to enhance the competitiveness, productivity and entrepreneurial ethos in the economy. The TVET system in Bhutan is guided by a set of principals. These are to: be demand–oriented; provide high quality labour force; be inclusive and accessible to all; provide a way for integration into the overall system of human resource development; create avenues for career progression; be flexible to the changing needs of occupations; provide and encourage lifelong learning; be gender neutral; be adaptable and responsive to the labour market; and, create a pool of knowledge workers who effectively drive the nation's economy.[11] A number of Technical Training Institutes (TTI) and Institute for *Zorig Chusums* (IZC) have been established to meet these goals.

2. Sector Background

The role of TVET is crucial in increasing the competitiveness of the economy and supporting economic transformation. Recognizing its importance, Bhutan's government established the first TVET institute in the early 1960s to provide industry skills needs when the country also embarked on its first five–year socio–economic development plan. Since then, the TVET sector has grown in size and presently, there are about 88 training providers (of which 13 are government operated) registered with the Department of Occupational Standards, Ministry of Labour and Human Resources (MOLHR). They offer a wide range of courses from civil to electrical engineering, automobile, language, arts and music, health sciences, media and communication, information technology, tourism and hospitality, and so forth. Nearly 81 percent of the courses offered are at the certificate level[12] and only a handful of courses are accredited at the National Certificate Levels 1 and 2.

Despite its long transformation, the TVET system is still constrained by the lack of relevance of skills and training to actual labour market requirements, limited availability of qualified instructors, assessors, and weak industry–institute linkages. Small government spending further aggravates this situation. For instance, the TVET share of total government capital budget allocation was about 0.71 percent in the 9th plan (2003–08), 1.5 percent in the 10th plan (2008–13) and 1.1 percent in the 11th plan (2013–18). Moreover, in the absence of a unified national skills development strategy and plan, the TVET sector is confronted with numerous challenges such as skills mismatch, weak coordination, duplication and fragmentation in provision of courses by different agencies, and overt negative social attitudes. As the country's[13] economy is driven largely by the development of hydropower projects and construction activities, Bhutan employs a little over 50,000 foreign workers. This accounts for a ratio of roughly 1:7 foreign workers to total domestic labour force.

Although the overall unemployment rate of 2.6 percent in 2014 is relatively low, youth unemployment rate of 9.4 percent is a serious national concern. As admissions into secondary and tertiary education become increasingly competitive, TVET is expected to provide valuable alternative opportunities to equip the youth with appropriate skills and enhance their prospects for gainful employment. However, due to public perception and many other challenges faced at the moment, TVET is still not a credible alternative to mainstream education. In order to improve the relevance, quality and recognition of vocational education and training, the government has initiated a number of reforms. Amongst others, a few notable include drafting of the TVET policy, implementation of Bhutan Vocational Qualification Framework, introduction of quality assurance, diversification of courses, up–gradation of instructors' qualification and encouraging private sector participation.

3. Study

Provision of TVET is viewed as a key intervention to ensure a steady supply of trained, competent and employable workforce to not just meet the needs of Bhutan's changing labour market but also, to enable a growing number of people find gainful or self–employment in various sectors of the economy. This study is a small part of the efforts made by the Royal Government[14] and supported by the Asian Development Bank to plan for higher quality TVET in Bhutan's public, private and community sectors. The findings will be used to provide critical inputs for developing a national Blue Print for TVET (BPT) as well as the basis for a TVET communications and advocacy program.

3.a. Objectives

The first objective is to study the aspirations of TVET trainees who are in the final year (2015) of both public and private RTPs. This survey will assess demographic, socio–economic and academic backgrounds of the trainees; gauge their views on TVET curriculum, facilities and trainers in Bhutan; acquire a sense of their expectations or aspirations (in terms of income, employment and overall well–being) as well as other opinions on important macro–economic and social issues.

The second objective is to assess the experiences of TVET graduates, mainly their employment experiences post–graduation. This part of the report is designed as a 'tracer study' to not just verify demographic, socio–economic and academic indicators but importantly, employment outcomes (type of jobs, duration, location, job–seeking experiences, adaptation to world of work, suitability of training to current job, etc.) and income outcomes (level of pay, sufficiency of pay, etc.). It also surveys graduates' (post–facto) views on TVET curriculum, facilities and trainers, and seeks recommendations based on their personal experiences.

The third and final objective is to assess the skills, knowledge and attitudes of TVET trainers by administering self–assessment questions. This study will build on the TVET Trainers' Survey 2015 conducted as part of MOLHR's 3rd National HRD Advisory. The aim is to identify specific training and development needs of TVET trainers based on competency gaps established from this survey.

3.b. Scope

The survey for this study covers 27 RTPs in Bhutan who are either affiliated with, or whose programs are accredited with the MOLHR, RGOB. A total of 9 public, 17 private[15] and 1 corporate technical and vocational training institutes are included. Every effort was made to incorporate institutes and vocations that were similar across both public and private sectors in order to yield comparable assessments and results. In terms of the number of technical and vocational programs or courses

— hotel and tourism, mechanics, electrical, handicrafts, woodwork, plumbing, metalwork, accounting, I.T and languages are some that are covered in this study. 1380 respondents including trainees, graduates and TVET trainers were surveyed. The survey was conducted over a period of 2 months from October to November in 2015.

4. Methodology

4.a. Study

This study of TVET in Bhutan is based on data collected through a nationwide survey of public (government) and private TVET institutes in 2015.

Study Population

A list of TVET institutes — both public and private — was first compiled to ensure comprehensiveness in study design. Representative samples were drawn from each target group to meet specific objectives of the study. Royal Government TTIs and private sector RTPs whose programs were registered with the MOLHR were included. The target groups were:

- TVET Trainees in the final year of their studies at the RTPs;
- TVET Graduates from the past 3 years i.e. 2012, 2013, and 2014;
- TVET Trainers (Instructors) currently at public and private institutes.

Units of Study

The units of analysis in this report are the 3 groups of TVET trainees, graduates and trainers identified above. This study attempts to include a comprehensive sample size that is representative of gender, vocation, region, public and/or private sector units, etc. ... without altering the randomness of samples.

4.b. Sample

The sample size was based on a 95 percent confidence level in the estimation of key variables that are listed in the objectives of this study. Separate survey sampling plans were developed for each of the population groups i.e. trainees, graduates and trainers. The sample size required for each of these 3 groups were determined using the following formula:

n = Z2 (PQ/d2); where n is the sample size

N = Total population in each group

Z = Distance from 0 at 5 percent allowable error, under the normal curve corresponding to 1.96 for 5%

P = Characteristics of interest (Q = 1 – P)

d = Design effect (taken as 2)

The total populations in each of the groups differed widely. There were 1151 trainees (current year only at time of survey), 3649 graduates (cumulative over the past 3 years preceding survey), and 188 trainers (total in both public and private institutes at the time of survey). The consulting firm conducted enumerations of 992 trainees (86.2 percent), 1353 graduates (37.1 percent), and 172 trainers (91.5 percent) in keeping with the objectives of this study. Post–facto, this was prudent since Non–Response Rates (NRR) in mainly the aspirations (trainees) and tracer (graduates) studies were very high. The non–response rate across all 3 study groups averaged 33 percent. Conversely, the response rate for the entire survey averaged 67 percent. This was skewed significantly by the very high rate of non–responses from TVET graduates who were dispersed throughout the country unlike trainees and trainers who were mostly 'institute–bound' and therefore, easier to contact. The population, sample sizes, and response rates for each of the 3 surveys are given below:

Table 1 — Survey Population, Sample & Response Rates

	Trainees Survey			Graduates Survey			Trainers Survey		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Population	620.0	531.0	1151.0	2166.0	1483.0	3649.0	112.0	76.0	188.0
Sample	620.0	372.0	992.0	788.0	565.0	1353.0	107.0	65.0	172.0
Total Surveyed	620.0	372.0	992.0	788.0	565.0	1353.0	107.0	65.0	172.0
Response	578.0	230.0	808.0	258.0	162.0	420.0	103.0	49.0	152.0
Non–Response	42.0	142.0	184.0	530.0	403.0	933.0	4.0	16.0	20.0
NR Rate	6.8	38.2	18.5	67.3	71.3	69.0	3.7	24.6	11.6

4.c. Questionnaires[16]

Three sets of structured questionnaires were designed and distributed to the RTPs included in this survey. The questions were designed by the firm, in close consultation with officials at the ADB and MOLHR. Apart from questions soliciting data on normal demographic and socio–economic characteristics, assessments of TVET curriculum, facilities and/or trainers were standardized across the questionnaires. A survey of relative well–being is another notable crosscutting theme in the surveys. There are 30 questions in the trainees' "aspirations" survey, 50 questions in the graduates' "tracer" survey, and 48 questions in the trainers' survey. The total number of questions does not include sub–parts. A mix of question types including "Yes/No", "Single Choice/Options", rating scales from "Very Poor to Very Good" and "Highly Dissatisfied to Highly Satisfied", and subjective

queries such as "What are your suggestions?" etc. are included. The design of questionnaires is, to the best of our knowledge, in line with international best practices, influenced only by feedback from officials and, in keeping with the general TOR for this project.

4.d. Survey

The survey of trainees, graduates and trainers was conducted over a period of 2 months from October to November of 2015. It covered 27 RTPs — 9 public, 1 corporate, and 17 private institutes — throughout Bhutan. The experts from the consulting firm supervised the survey. Upon completion of the design of 3 sets of questionnaires, a weeklong Enumerators Training Workshop was conducted at the end of September of 2015. 17 Enumerators, 2 Supervisors and 1 Logistics Coordinator was trained in procedures, field and survey methods during this workshop. The workshop was also used to pre–test and fine–tune the 3 sets of questionnaires before the actual survey. At the end of the survey in November, the consulting firm engaged 10 statisticians to input data and code them into SPSS Statistics for analysis and reporting.

4.e. Literature Review

This study is based largely on the Royal Government's TVET policy documents, ADB publications, and other noteworthy international TVET studies. TVET has been around since Bhutan's Five–Year Plans started in 1961. Even so, a survey of literature shows that there is a notable absence of research and analysis into the issues and development of this sector in Bhutan. What little literature exists is few and far between. Even so, they were illuminating for the purposes of this study. They are relied on heavily here to provide information on areas that are beyond the scope of the study, but were directly or indirectly relevant to the assumptions and interpretations of the results herein. Some of the noteworthy reference documents are the Royal Government of Bhutan's Five Year Plan documents, survey reports, legislative acts and policies, etc.

4.f. Consultations

The lack of a reasonably analytical and informative body of literature (or data) on TVET in Bhutan meant desk reviews were supplemented with consultative dialogues with key officials at ADB and MOLHR. Their feedback and opinion were sought throughout both the survey and report compilation processes. The team also met regularly with the primary stakeholders of Bhutan's TVET system including the Principals of public TTIs, Executives of private RTPs, trainees, (some) graduates, and trainers at both public and private institutes during many field visits.

4.g. Limitations

Data limitations — coverage, response rates, and comparability — are quite significant in this report. Most of the data used in the report is collected from public–sector TTIs where respondents (trainees and trainers) were readily available and easily accessible. Coverage in public institutes extended as far as Rangjung in Eastern Bhutan. As a result, public sector response rates are comparatively higher than private institutes in all 3 target groups as shown in Table 1. Communication and 'reach issues' hindered the collection of data from private trainees, trainers and especially graduates. Even then, enumerators from the firm reached out to most of the private RTPs in the Western regions of Thimphu, Paro and Chukha in order to preserve sampling and representation.

Non–response rates of graduates are significantly high. While trainees and trainers were generally 'institute–bound', TVET graduates had since moved on to various places for employment where enumerators faced a number of geographic and communication challenges via personal mobile phones let alone fixed lines, e–mails or regular posts. The rigid time period of the survey and budget for the project also did not allow for a more extensive (and probably more expensive) survey.

Even though this survey provides a good basis for demographic and socio–economic analysis, inferences relating to not only inter–group (i.e. across all 3 target groups) but also intra–group comparisons must be considered carefully given the differences in vocations offered in public and private institutes that are covered in this survey. More importantly, there are also notable differences in the levels of training. Public institutes offer well–defined certificate courses with specified timeframes, while most private institutes do not have uniform certificate levels or durations attached to their training programs.

In addition to primary data limitations, secondary sources such as data and studies from past surveys, as well as the body of literature on TVET in Bhutan is relatively scarce. This report relies, to a large degree, on feedback, opinions, and consultations with various key officials at the ADB and MOLHR in addition to literature in the international sphere.

5. Current Status

5.a. Economy

Bhutan's rapid economic growth, as noted earlier, has been fuelled mainly by investments in hydropower. While growth rate has averaged 7.9 percent in the last two decades, it has been highly unstable with the economy susceptible to volatilities and external shocks. Sustaining a stable growth path has been a major challenge. Another challenge has been to channel the revenue generated from hydropower to other viable avenues of growth. So far, there have been conscious efforts to diversify the economic base by investing and creating enabling environments in sectors that exhibit potential for growth. These interventions are listed as priority growth areas or the 'five jewels', namely hydropower, tourism, agriculture, small and medium enterprises (SMEs) and mining.[17] In addition to growth and wealth creation, these areas have also been identified to create gainful employment. The government, in keeping with its objective of sustainable socio–economic development within the framework of Gross National Happiness (GNH) is dedicated to supporting these key areas. The National Human Resource Development Policy (2010) based on the Economic Development Policy (2010) recognizes that — despite the small size of local labour pool and limitations in terms of productivity, efficiency and management skills — human resource and labour skills development including TVET must be aligned with the national priorities areas identified above.

5.b. Labour Market

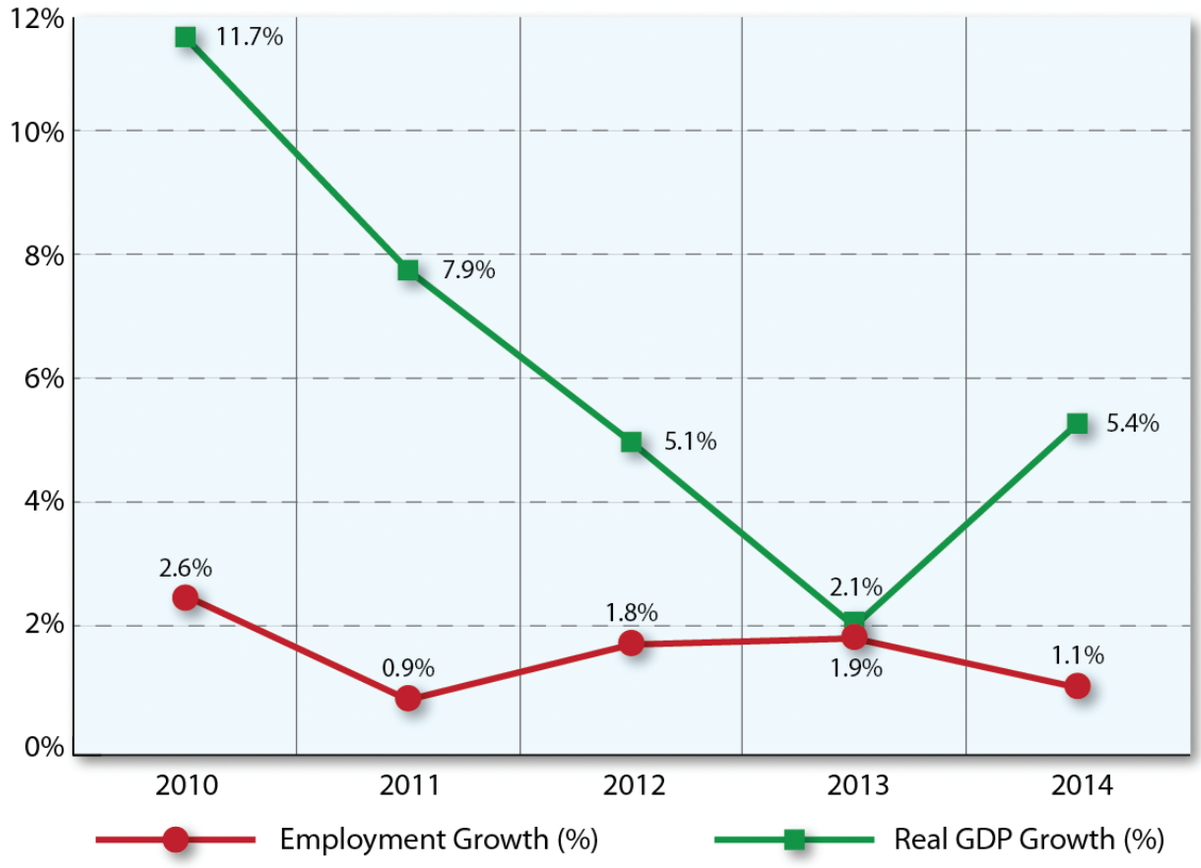
Bhutan is witnessing a gradual decline in overall labour force participation rates (LFPRs). It fell by nearly 9 percent from 68.6 percent in 2010 to 62.6 percent in 2014. In terms of gender, LFPRs for females are not only lower than males, but they are also declining at a faster rate. Male LFPRs declined from 73.6 percent in 2010 to 71 percent in 2014, where female LFPRs declined from 63.9 percent to 54.8 percent over the same period. Similarly, LFPRs of young people (between the ages of 15–24) decreased sharply by 13.4 percent from 40.4 percent in 2010 to 26.9 percent in 2014. Participation rates for young females were relatively higher than their male counterparts even though both sexes participated less in the labour force over the years. LFPRs for young males declined from 40.6 percent to 25.3 percent compared with a decline for young females from 40.2 percent to 28.4 percent from 2010 to 2014.

Youth unemployment continues to pose challenges despite concerted efforts to accelerate growth and enhance employment opportunities. Although the overall unemployment rate is low at 2.6 percent (2014), youth unemployment is comparably high at 9.4 percent. The unemployment rate for young females is also steadily higher than for young males. In 2014, female youth unemployment rate was 10 percent and 8.6 percent for male youths.[18] Unemployment among the educated is also

becoming a concern. As per the Labour Force Survey 2014, unemployment rate was higher among job seekers with secondary and tertiary education compared with job seekers with primary and non–formal education. Jobseekers with tertiary level and secondary level education accounted for 31 percent and 31.6 percent respectively of the total unemployed.

In addition to labour market indicators such as unemployment rates and labour force participation rates, Bhutan's 'employment intensity of growth' or elasticity of employment with respect to output[19] (GDP) between 2010–2014 indicates that every 1 percentage GDP growth is associated with just 0.26 percent point of employment growth. This is lower than the average 0.70 percent growth in employment associated with a 1 percentage growth in GDP in other developing economies.[20] A number of reasons underlie this fact. First, productivity and output in Bhutan's economy is primarily driven by capital–intensive hydropower, not labour. Second, most of the labour force (56.7 percent) is employed in the least productive sector i.e. Agriculture (and Forestry). As of 2014, this sector, despite being the highest employer, made up 16.8 percent whereas Industry and Services made up 40.5 percent and 42.7 percent respectively, of GDP. The latter two sectors accounted for just 43.3 percent of overall employment.

Figure 1 — Real Gross Domestic Product & Employment Growth Rates



6. Survey Outcomes

Table 2 indicates the survey outcome by type, gender and sector. A total of 1380 respondents from 9 public sector, 1 corporate (grouped with public), and 17 private sector institutes are represented. 58.8 percent or 811 of the total are males with 41.3 or 569 females. By sector, this study surveyed 68.1 percent public and 38.9 percent private sector–affiliated trainees, graduates or trainers.

Table 2 — Respondents by Type, Gender & Sector

Respondent Type	Male		Female		Sub–total		Total	
	Public	Private	Public	Private	Public	Private	No.	%
Trainees	324	140	254	90	578	230	808	58.6
Graduates	142	90	116	72	258	162	420	30.4
Trainers	79	36	24	13	103	49	152	11.0
Total	**545**	**266**	**394**	**175**	**939**	**441**	**1380**	**100.0**

In terms of composition, trainees make up the largest portion of the survey with 58.6 percent of the total, followed by 30.4 percent graduates, and 11 percent TVET trainers. The target groups were trainees completing their training in 2015, graduates from TVET programs in the last 3 years (i.e. 2013 to 2015), and trainers currently affiliated with any public or private sector RTP.

TVET training and vocations in Mechanical, Handicraft, Electrical, and Tourism are the most popular with 21.4 percent, 15.5 percent, 10.8 percent, and 7.3 percent of trainees respectively specializing in one of these trades. Accounting, Information Technology, Woodworks, Driving (Machines Operations), and Food and Beverage are also popular with around 5 percent, on average, of trainees. For TVET graduates, the choices were significantly different. Electrical, Mechanical, Carpentry and Accounting trainings were popular with 18.6 percent, 14.5 percent, 6.9 percent, and 6.4 percent of graduates having been trained in that particular area. Cooking, Tailoring, Painting, and Security Services were some notable choices with about 5 percent, on average, of graduates learning these skills. Table 3 is an aggregation of TVET trainees and graduates by vocation and gender.

Table 3 — Trainees & Graduates by Vocation & Gender

Vocation	TVET Trainees						TVET Graduates					
	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%
Accounting	19	4	31	9	50	6	8	3	19	10	27	6
Beautician	1	0	1	0	2	0	0	0	8	4	8	2
Carpentry	0*	0	0	0	0	0	11	5	18	9	29	7
Carving	30	6	0	0	30	4	16	7	1	1	17	4
Computers	0	0	0	0	0	0	5	2	8	4	13	3
Cooking	17	4	5	1	22	3	14	6	8	4	22	5
Machine Operation	40	9	0	0	40	5	0	0	0	0	0	0
Electrical	54	12	33	10	87	11	48	21	30	16	78	19
Embroidery	0	0	0	0	0	0	2	1	15	8	17	4
Engineering	0	0	0	0	0	0	7	3	2	1	9	2
Entrepreneurship	0	0	0	0	0	0	3	1	1	1	4	1
Food & Beverage	13	3	21	6	34	4	0	0	0	0	0	0
Handicrafts	17	4	108	31	125	15	0	0	0	0	0	0
Hotel Services	0	0	0	0	0	0	6	3	11	6	17	4
Housekeeping	2	0	13	4	15	2	0	0	0	0	0	0
Information Tech.	19	4	24	7	43	5	3	1	2	1	5	1
Language	5	1	1	0	6	1	0	0	0	0	0	0
Management	0	0	0	0	0	0	0	0	1	1	1	0
Masonry	4	1	4	1	8	1	0	0	0	0	0	0
Mechanical	127	27	46	13	173	21	46	20	15	8	61	15
Metal–work	0	0	0	0	0	0	3	1	0	0	3	1
Painting	28	6	3	1	31	4	19	8	1	1	20	5
Plumbing	12	3	17	5	29	4	2	1	3	2	5	1
Receptionist	0	0	0	0	0	0	3	1	10	5	13	3
Sales	0	0	0	0	0	0	10	4	7	4	17	4
Security	3	1	0	0	3	0	15	7	5	3	20	5
Tailoring	0	0	0	0	0	0	1	0	21	11	22	5
Tourism	52	11	7	2	59	7	7	3	5	3	12	3
Welding	3	1	6	2	9	1	0	0	0	0	0	0
Woodwork	19	4	23	7	42	5	0	0	0	0	0	0
Total	**465**	**100**	**343**	**100**	**808**	**100**	**229**	**100**	**191**	**100**	**420**	**100**

* Entry values in 0 (zeroes) denote “No Respondents” for that particular vocation or survey group.

Trainers in Automobiles, Carpentry, Electrical and Embroidery at 15.1 percent, 12.5 percent, 9.9 percent, and 9.8 percent comprised a major portion of the total TVET trainers surveyed for this study.

6.a. TVET Trainees Study

This survey of TVET Trainees or "aspirations" is intended to provide an insight into the socio–economic backgrounds, attitudes, perceptions and long–term goals of people who have opted–in (or are considering to opt–in) to technical and vocational training as a means for gainful (or self) employment. This understanding is essential, for two equally important but distinct reasons. One, if TVET is to complement general education in producing a workforce that is skilled, employable and productive to sustain national development, equitable focus and resources must be allocated to not only building such workers, but also to create a sustainable and enabling condition for them. This is possible only with a deeper understanding of current TVET trainees. Two, trainees are already beset with a number of challenges. Mainly, a negative social perception that TVET education only lead to blue–collar jobs, which are far less prestigious in Bhutan. Real and concerted efforts must be made to mainstream the TVET system and not to dismiss it as a distant option. This is only possible if policy–makers understand the numbers and issues presented in surveys and studies such as this, and move to designing better pecuniary and non–pecuniary incentives and policies that not only dispel traditional notions of parallelism, social, and academic classes associated with TVET, but also provide tangible and substantial gains to its stakeholders i.e. trainees and trainers, consistently over the long–term. It has often been noted that the vocalization of education has been successful in developed countries mainly as a result of "weighting it in economic terms"[21] rather than using it for developing human characteristics or as a means to alleviate social problems such as rural–urban migration and unemployment, as many developing countries do.

Profile of TVET Trainees

A total of 808 respondents from 27 Registered Training Providers (RTPs) were covered for this trainee "aspirations study". 465 or 57.5 percent males and 343 or 42.5 percent females from 19 training programs in public and private sectors were surveyed. Mechanical (21.4 percent), Handicrafts (15.2 percent) and Electrical (10.8 percent) were popular choices for both men and women. Most women preferred training in Handicrafts (107 or 31.2 percent of total) and Mechanical (46) while men were inclined towards Mechanical (126 or 27.3 percent of total men), Electrical (54), Tourism (51), and Driving or Machines Operations (40) as shown in Table 4. 71.5 percent of trainees are studying at public institutes with 28.5 percent in private. This does not indicate a preference for public institutes. They were simply accessible (for this survey) and, more public TVET programs were government–certified compared with just a handful for private programs. By gender, private institutes had 61 percent male trainees and 39 percent females. The proportions for public institutes were similar with 56.1 percent males and 43.9 percent females at the time of the survey.

Table 4 — Distribution of TVET Trainees by Gender & Course

Course	Male		Female		Total	
	Number	%	Number	%	Number	%
Accounting	19	4.1	31	9	50	6.2
Beautician	1	0.2	1	0.3	2	0.2
Carving	30	6.5	0	0	30	3.7
Cooking	17	3.7	5	1.5	22	2.7
Handicrafts	17	3.4	108	31.2	123	15.2
Driving/Machine Operations	40	8.6	0	0	40	5
Electrical	54	11.6	33	9.6	87	10.8
Food	13	2.6	21	6.1	33	4.1
Housekeeping	2	0.4	13	3.2	13	1.6
Information Technology	19	4.1	24	7	43	5.3
Language Learning	5	1.1	1	0.3	6	0.7
Mechanical	127	27.3	46	13.4	173	21.4
Masonry	4	0.9	4	1.2	8	1
Painting	28	5.8	3	0.9	30	3.7
Plumbing	12	2.6	17	5	29	3.6
Security Guard	3	0.6	0	0	3	0.4
Tourism	52	11	7	1.7	57	7.1
Welding	3	0.4	6	1.7	8	1
Woodwork	19	4.1	23	6.4	41	5.1
Total	**465**	**100.0**	**343**	**100.0**	**808**	**100.0**

Motivations and Background

Respondents indicated that they opted–in to TVET programs for a number of reasons. Of the survey choices provided, better employment opportunities after graduation was a main reason for 34 percent of all respondents. 25.2 percent stated that they were personally interested in TVET; 18.8 joined since they failed to qualify for higher studies; and, 12.1 percent could not afford to study any further. A very small percentage of trainees (8.4) indicated that they were advised to do so by their parent or guardian. In terms of the highest level of education that respondents possessed before entering TVET programs, a significantly high number (723 or 89.5 percent) were educated up to a level of Secondary (Class 10) or Higher Secondary (Class 12). Table 5 shows the pre–training educational qualifications of trainees by the type of courses.

Table 5 — Distribution of TVET Trainees by Course & Education Level

Course	Community	Primary	Lower Secondary	Secondary	Higher Secondary	Diploma	Bachelors	Others	Total
	Up to 3	Up to 6	Up to 8	Up to 10	Up to 12	12+	12+ 3/4		
Accounting	0	0	0	10	38	0	2	0	50
Beautician	0	0	2	0	0	0	0	0	2
Carving	2	6	5	13	2	0	0	3	31
Cooking	0	0	0	2	20	0	0	0	22
Handicrafts	4	5	4	103	6	0	0	2	124
Driving/Machine Operation	1	1	0	19	18	0	1	0	40
Electrical	0	0	2	47	39	0	0	0	88
Food	0	1	0	7	26	0	0	0	34
Housekeeping	0	0	0	2	11	0	0	0	13
Information Technology	0	1	0	21	20	1	1	0	44
Language Learning	0	0	0	0	5	1	0	0	6
Mechanical	2	0	2	132	35	1	1	0	173
Masonry	0	1	0	5	1	1	0	0	8
Painting	1	2	2	23	1	0	1	4	34
Plumbing	0	0	0	23	6	0	0	0	29
Security Guard	0	1	0	0	0	1	0	1	3
Tourism	1	1	0	1	40	4	11	0	58
Welding	0	0	0	7	1	0	0	0	8
Woodwork	0	0	1	30	9	1	0	0	41
Total	**11**	**19**	**18**	**445**	**278**	**10**	**17**	**10**	**808**

An overwhelming number of TVET trainees come from households that are largely involved in agriculture or farming. In this survey, 52.7 percent of all respondents' head of household's primary occupation was agri–farming, followed closely by government service (14.4 percent) and unpaid family work (9.7 percent). Trainees were also highly likely to come from households whose heads have very little to no education. 64 percent of the trainees responded that their head of households had no education whatsoever; with 17.1 percent reporting that they had either a community–level (up to Class 3) or primary–level education (up to Class 6). There are very few trainees (1.7 percent) who come from households with a head whose educational qualification is a Bachelor's degree or higher. These statistics show that households from agricultural (rural) backgrounds with low

levels of education are more likely to contribute trainees to the TVET system. Perhaps this is one reason why negative social attitudes towards blue–collared technical and vocational occupations continue to this day.

Table 6 — Distribution of TVET Trainees by Head of Household's Level of Education & Primary Occupation

Course	No Education	Community	Primary	Lower Secondary	Secondary	Higher Secondary	Diploma	Bachelors	Master	Total
		Up to 3	Up to 6	Up to 8	Up to 10	Up to 12	12+	12+ 3/4	15+	
Government	3.4	2.2	2.4	1.5	2.2	2.0	0.2	0.2	0.2	14.4
Public Corporations	0.4	0.2	0.5	0.2	0.1	0.0	0.1	0.1	0.0	1.7
Private Corporations	1.4	1.0	0.2	0.2	0.5	1.0	0.5	0.1	0.2	5.2
Armed Forces	2.0	0.7	0.4	0.2	0.1	0.2	0.0	0.0	0.0	3.7
Private Business	3.0	0.6	0.6	0.2	0.9	1.1	0.1	0.4	0.1	7.1
Agri–Farming	43.2	3.2	2.6	1.9	0.9	0.7	0.1	0.0	0.0	52.7
International Org.	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Unpaid Family Work	7.7	0.7	0.7	0.4	0.1	0.0	0.0	0.0	0.0	9.7
Retired	2.6	0.1	0.7	0.7	0.2	0.4	0.0	0.0	0.2	5.1
Others	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total	**64.0**	**8.9**	**8.2**	**5.5**	**5.1**	**5.5**	**1.1**	**0.9**	**0.9**	**100.0**

Given that most respondents' heads of household were involved in agri–farming and had very little to no education, it can be reasonably assumed that the head of households have very little income. This is true in the case of this survey. 69.7 percent of all trainees are from households whose heads earn an average annual income of less than 50,000 Ngultrums (Nu.). This is just Nu. 4,166 per month or Nu. 138.89 per day. The comparable U.S Dollar figure is US$ 2.25 per day going by an exchange rate of US$1 = Nu. 61.8 (March 25, 2014) used in the Bhutan Poverty Assessment 2014.[22] The US$ 2.25 appears relatively good when compared with the international consumption poverty line of US$ 1.25 per day in purchasing power parity terms. However, it must be noted that this US$2.25 is the income of the head of household only whereas the international consumption poverty line is for per person per day. When one factors in the number of dependents in each household, the head's US$ 2.25 income is considerably insufficient. Furthermore, 19.6 percent of all trainees are from households whose heads earn between Nu. 50,000 to Nu. 100,000 on average per year. Using the same calculations, the corresponding dollar figure is an income of US$ 3.37 per household per day. Even this seems insufficient when one considers the number of dependents in poor families, cost of goods, etc. In terms of gender, an equal number of men and women come from families in these lower–income quintiles.

Table 7 — Current Average Annual Income (in Ngultrums) of Head of Households by Respondents' Gender

Annual Income	Male	Female	Total
	%	%	%
Less Than Nu. 50,000	69.0	70.7	69.7
Nu. 50,000 to Nu. 100,000	19.7	19.4	19.6
Nu. 100,000 to Nu. 150,000	5.5	4.8	5.2
Nu. 150,000 to Nu. 200,000	3.1	2.1	2.7
More Than Nu. 200,000	2.7	3.0	2.8
Total	**100.0**	**100.0**	**100.0**

Ratings: Curriculum, Trainers & Facilities

There is a general sense of satisfaction with curriculum, trainers and facilities of RTPs among trainees. Table 8 aggregates the ratings of public and private sector trainees on 5 aspects of curriculum, 9 aspects of trainers, and 7 aspects of their respective RTP facilities. In terms of curriculum, 83.9 percent of public trainees and 88.5 percent of private trainees, on average, were either Satisfied or Very Satisfied with their overall curriculum. A small number of 13.8 percent across both sectors felt Indifferently, were Dissatisfied, or Very Dissatisfied. Trainees were similarly happy with their trainers. 84.1 percent of public trainees and 87.8 percent of private institute trainees, on average, were either Satisfied or Very Satisfied. Again, just an average of 14.2 percent across both sectors were Indifferent, Dissatisfied or Very Dissatisfied with their trainers. The satisfaction rating for facilities was comparatively lower than for curriculum and trainers, even if they remained positive. 67.1 and 65.3 percent of all trainees in public and private institutes respectively were generally Satisfied or Very Satisfied with the facilities at their respective RTPs. A notably higher number, at 32.9 percent of trainees at public institutes and 34.7 percent of trainees in private institutes were Indifferent, Dissatisfied or Very Dissatisfied with the facilities. Table 8 shows that most of this indifference or dissatisfaction arose on account of living facilities and classrooms for public institute trainees; and because of living, transportation and computer laboratory facilities for private institute trainees. Despite the fact that all 3 aspects of TVET training received very favourable ratings from trainees, improvement in facilities may be reasonably assumed to be first in order of priority for any improvements or interventions, based strictly on its lowest satisfaction scores.

Table 8 — TVET Trainees' Ratings of Curriculum, Trainers & Facilities At Respective RTPs (by Sector in %)

Curriculum Ratings	Public Trainees					Private Trainees				
	Very Dissatisfied	Dissatisfied	Indifferent	Satisfied	Very Satisfied	Very Dissatisfied	Dissatisfied	Indifferent	Satisfied	Very Satisfied
Overall Training Program	1.9	2.8	6.9	67.4	21.1	0.4	5.2	5.6	62.2	26.6
Theoretical Components	1.4	3.3	12.8	67.0	15.6	1.3	1.3	8.5	62.4	26.5
Practical Components	1.4	6.1	6.4	61.8	24.3	0.0	2.1	4.7	55.3	37.9
On–The–Job Training	2.2	3.7	12.2	57.0	24.8	2.5	4.5	9.6	54.0	29.3
Soft Skills Development	2.8	5.0	11.6	59.1	21.5	1.3	2.6	7.8	53.0	35.2
Trainers Ratings	**Public Trainees**					**Private Trainees**				
	Very Dissatisfied	Dissatisfied	Indifferent	Satisfied	Very Satisfied	Very Dissatisfied	Dissatisfied	Indifferent	Satisfied	Very Satisfied
Knowledge & Comprehension of Subject	1.2	3.1	9.0	75.4	11.2	0.9	2.1	7.7	63.1	26.2
Practical (In–the–Field/Lab) Knowledge	0.9	2.9	4.8	61.6	29.8	0.0	1.7	7.7	54.5	36.2
Effectiveness in Communication	0.7	4.3	11.2	68.0	15.7	1.3	1.7	9.8	56.6	30.6
Interaction with the Trainees	1.0	3.8	7.8	57.4	29.9	0.4	3.0	6.8	51.5	38.3
Creativity in (Class and Non–Class) Instructions	1.2	5.4	11.9	61.1	20.4	0.9	2.1	8.5	59.1	29.4
Use of Instructional Materials & Aide	1.0	4.8	16.1	61.4	16.6	0.0	3.4	12.4	60.3	23.9
Availability for Consulting & Assistance	0.7	4.3	10.9	63.0	21.1	0.0	2.6	8.9	59.6	28.9
Assessment & Feedback on Performance	0.9	5.0	15.2	62.1	16.8	0.9	3.8	10.7	62.4	22.2
Demonstrates Ethical Behaviour	0.9	5.0	8.9	68.1	17.2	0.9	3.0	8.9	54.5	32.8

Facilities Ratings	Public Trainees					Private Trainees				
	Very Dissatisfied	Dissatisfied	Indifferent	Satisfied	Very Satisfied	Very Dissatisfied	Dissatisfied	Indifferent	Satisfied	Very Satisfied
Quality of RTP Classrooms	3.3	16.7	13.8	46.2	20.0	1.3	9.4	7.7	56.2	25.3
Quality of RTP Training Areas	1.2	13.8	13.4	52.9	18.6	0.4	8.9	10.2	52.8	27.7
Training Tools & Equipment	3.3	15.5	17.8	48.7	14.7	1.7	10.3	15.0	55.1	17.9
Computer Stations & Laboratories	1.7	10.7	15.7	54.1	17.8	7.8	16.0	23.8	39.4	13.0
Libraries & Resource Centre	4.8	13.1	16.2	54.1	11.7	7.8	14.2	22.0	44.4	11.6
Living, Dining & Recreation Facilities	3.8	18.1	14.1	50.5	13.4	6.1	17.1	17.5	42.1	17.1
Communications Facilities	3.6	12.2	14.1	55.5	14.5	3.8	13.2	14.5	47.7	20.9
Transportation & Medical Facilities	6.1	12.8	17.0	49.0	15.2	13.3	18.0	17.2	37.8	13.7

Employment Aspirations

TVET trainees, male and female, remain very confident about their employment prospects after graduation. On a scale of 1 to 5, 1 being 'Not Very Confident' and 5 being 'Very Confident', 80 percent of all male trainees and 76.6 percent of all female trainees (both public and private) responded that they were either Confident or Very Confident in securing gainful employment after graduation. Sector–wise, the numbers are similar. 80 percent of trainees in public institutes and 74.7 percent of trainees in private institutes are either Confident or Very Confident about finding paid jobs. Men would most like to work in jobs that are located in the urban centres of Bhutan e.g. Thimphu, Paro, Phuentsholing, etc. This figure is about 40.7 percent. And an equal number (29.7 percent each) also stated that they would either like to work in jobs that are located in rural Bhutan or Overseas (outside Bhutan). The preference of job locations for females is different. 51.3 percent of all female trainees prefer jobs located in urban Bhutan, 30.6 percent prefer jobs in rural Bhutan, and just 18.1 percent stated that they would like to work Overseas. Security, family considerations (reproductive and elderly care), lower risk–taking behaviour, etc. may be some reasons for this difference between male and female workplace preferences.

The preferred choice of employer for TVET trainees is the Government. This is similar to employment preferences of general education graduates as well. On an average, 44.4 percent of male and female trainees would like to work for the government. While 56.7 percent of women wanted to work for the government, only 35.3 percent of men did. Men were also more likely to want to join Private Corporations (12.1 percent) or go Overseas (10.1 percent). It is interesting to

note that 21.6 percent of men and women aspire to start their own business, which indicates a generally high interest and confidence in self–employment.

Table 9 — Enterprises Trainees Would Most Like to Work For (by Gender)

Enterprise	Male	Female	Total
	%	%	%
Government	35.3	56.7	**44.4**
Public Corporation	8.6	4.7	**6.9**
Private Corporation	12.1	7.3	**10.0**
Armed Forces	1.9	0.0	**1.1**
Own Business	22.4	20.5	**21.6**
Private Business	3.9	2.3	**3.2**
NGO	1.1	0.9	**1.0**
International Organisation	3.2	2.3	**2.9**
Overseas Jobs	10.1	4.7	**7.8**
Others	0.9	0.6	**0.7**

Almost all respondents found many of the factors that affect their employment choices either Important or Very Important. For example, 90 percent or more of men and women found income, nature of employment, job security, career advancement opportunities, working conditions, job satisfaction and enterprise reputation important to where they choose to work as shown in Table 10. Perhaps a better survey would entail ranking the factors (prioritization) of choice of employment, rather than just gauging the importance of all factors.

Table 10 — Importance of Factors Affecting Employment Choices by Gender (%)

Factors Affecting Employment Choices	Males					Females				
	Not Very Important	Not Important	Indifferent	Important	Very Important	Not Very Important	Not Important	Indifferent	Important	Very Important
Income	0.4	2.2	4.1	30.0	63.4	0.6	0.9	2.0	31.7	64.8
Workplace Location	3.2	6.0	5.8	40.3	44.6	2.3	5.8	4.1	40.1	47.7
Type of Job	3.0	3.9	5.8	36.4	50.9	1.7	5.5	3.5	34.0	55.2
Nature of Employment	1.8	0.4	4.4	48.2	45.2	0.8	1.5	0.8	43.2	53.8
Job Security	0.9	1.1	4.3	37.1	56.7	0.6	3.2	2.0	46.8	47.4
Career Opportunities	0.2	0.0	1.5	42.2	56.0	0.6	0.6	0.6	44.5	53.8
Working Conditions	0.6	4.7	3.4	36.9	54.3	1.5	4.4	3.2	37.2	53.8
Job Satisfaction	1.1	1.3	3.7	39.9	54.1	0.6	1.7	2.6	43.6	51.5
Enterprise Reputation	1.1	1.9	4.5	48.3	44.2	0.9	3.2	4.1	53.2	38.7
Others	0.0	40.0	0.0	20.0	40.0	0.0	0.0	0.0	33.3	66.7

Nearly 60 percent of trainees planned to undertake further training programs if they did not find suitable employment after graduation. 12.2 percent stated that they would go for further studies, 7 percent would stay at home and help with housework, and 6.5 percent said they were willing to take unpaid internships. There are little gender differences in 'plans if unemployed after training'.

Income Aspirations

While employment aspirations or confidence in securing gainful employment after graduation is high, trainees' aspirations for income was largely tempered. One reason could be trainees' pre–knowledge of remunerations in both the public and private sectors of Bhutan, which factored into their more realistic expectations of income. At any rate, just 22.3 percent of TVET trainees expected to earn Nu. 15,000 or more immediately after graduation. More men than women expected to earn higher. 43.3 percent of the total expected to earn between Nu. 10,000 to Nu. 15,000 and 31.5 expected Nu. 5,000 to Nu. 10,000. The bulk of the respondents (74.8 percent) saw themselves earning between Nu. 5,000 to Nu. 15,000. In dollar terms, this is just US$ 121.4 per month or US$ 4 per day per person, a little more than double the national poverty line.

Table 11 — Expected Level of Monthly Income by Trainees' Gender

Enterprise	Male		Female		Total	
	Number	%	Number	%	Number	%
Less Than Nu. 5,000	11	2.4	12	3.5	**23**	**2.9**
Nu. 5,000 – Nu. 10,000	111	24.0	143	41.7	**254**	**31.5**
Nu. 10,000 – Nu. 15,000	207	44.7	142	41.4	**349**	**43.3**
Nu. 15,000 – Nu. 20,000	90	19.4	31	9.0	**121**	**15.0**
More Than Nu. 20,000	44	9.5	15	4.4	**59**	**7.3**
Total	**463**	**100.0**	**343**	**100.0**	**806**	**100.0**

Self–Assessment

A survey of trainees' general knowledge on topics such as Bhutan's economy, job market, trainees' personal prospects in the market, government plans and policies for creating more jobs, employment opportunities abroad, trainees' prospects as an entrepreneur, and earnings potential in their trade areas was carried out. 57.7 percent of male trainees responded they were knowledgeable in these matters. 52.6 percent of female trainees answered likewise. Over a third of both men and women (34.9 percent) said that they were indifferent to the issues presented before them. And, 8 to 10 percent of men and women answered that they are not at all knowledgeable.

Over 33 percent of female and 31 percent of male trainees use their (mobile) phones more than 6 hours every day. 59.3 percent and 58.4 percent of men also watched between 1 to 6 hours of television and movies daily. Reading books and newspapers was the third most popular activity for both males and females. This was followed closely by browsing the Internet. It may be noted here that, even though 'browsing the Internet' is fourth in the list of activities, most trainees would be using their smart–phones (with data) to browse the net, or that this activity is simply limited by the speed and bandwidth of Internet that their RTPs provide. Trainers almost never listened to the radio with 72 percent of both men and women reporting that they listen to the radio for less than 1 hour per day, and 26.3 of men and 29.4 percent of women responding that they never listen to the radio.

Finally, while trainees remained upbeat about their employment prospects and relatively modest in their expectations of income after graduation, they were also very mild about their own perceptions of well–being in the near future. When asked to gauge how well–off they will be in 5 years' time on scale of 1 to 5, where 1 is 'Poor' and 5 is 'Rich' as shown in Table 12 below; 72.6 percent of male and 77.9 percent of female trainees responded that their status quo will not change and that they will remain Average. 19 percent of all respondents, on average, said they perceive themselves to be Moderately Rich or Rich. It can be underlined here that given the poor economic backgrounds of most trainees and subsequent low expectations of income and relatively average perception of well–being in the near future, policy interventions that include improvements in trainees' income and overall economic well–being can have the most direct and durable impact.

Table 12 — Trainees' Perception of Well–Being 5 Years Later (%)

Time Period	Male					Female				
	Poor	Moderately Poor	Average	Moderately Rich	Rich	Poor	Moderately Poor	Average	Moderately Rich	Rich
5 Years Later	2.2	4.3	72.6	17.7	3.2	1.2	4.1	77.9	14.0	2.9

6.b. TVET Graduates (Tracer) Study

This "tracer study" aims to determine outcomes for TVET graduates. Whereas employment, job security, job satisfaction, job location, career opportunities, working conditions, etc., are important indicators for TVET assessment, employment and income outcomes in particular are emphasized here since they are readily (self) reported and verifiable. The objective is to not only assess demographic and socio–economic backgrounds of graduates and their training experiences at respective institutes, but also to assess their income and employment status, relevance of their training to work, obtain feedback on certain aspects of their training, current employment–related experiences and expectations of socio–economic progress and well–being, etc.

Profile of TVET Graduates

This study had a total of 420 respondents. 54.5 percent were male (229) and 45.5 percent female (191). Prior to joining the RTP, 56 percent had an educational qualification up to class 10 (secondary) and 32 percent studied up to class 12 (higher secondary). Only 4 percent possessed a bachelor's degree and 1.4 percent had diplomas. Amongst males, 55.2 percent had a secondary and 28.8 percent higher secondary education, compared with 56.5 percent secondary and 35.5 percent higher secondary education for all females.

In terms of choice of RTPs, 57.7 percent graduated from 7 public[23] institutes and 42.3 percent from 14 private institutes. Table 13 shows Electrical courses were the most popular with 18.6 percent of graduates, followed by Auto–mechanics (14.5 percent) and Hotel & Reception (7.1). The rest were graduates from Carpentry, Carving, Painting, Security, Commercial Accounting, Sales and Tailoring, etc. A larger proportion of men undertook courses related to Electricals, Auto–Mechanical and Painting; while courses related to Electricals, Hotel & Reception and Tailoring were favoured by more women. The popularity of Electrical courses (with both men and women) may be due to the sheer volume of construction activities, both hydropower and private, in the economy. Public TVET institutes in particular were geared towards the more technical and investment–heavy civil, mechanical, automobile, electrical, woodwork and traditional arts and craft industries.

Table 13 — Percentage Distribution of TVET Graduates by Gender & Course

Course	Male		Female		Total	
	Number	%	Number	%	Number	%
Accounting	8	3.5	19	9.9	27	6.4
Auto–mechanic	46	20.1	15	7.9	61	14.5
Engineering	7	3.1	2	1.0	9	2.1
Cooking	14	6.1	8	4.2	22	5.2
Beautician	0	0.0	8	4.2	8	1.9
Carpentry	11	4.8	18	9.4	29	6.9
Carving	16	7.0	1	0.5	17	4.0
Computer science	5	2.2	8	4.2	13	3.1
Tourism	7	3.1	5	2.6	12	2.9
Electrical	48	21.0	30	15.7	78	18.6
Embroidery	2	0.9	15	7.9	17	4.0
Entrepreneurship	3	1.3	1	0.5	4	1.0
Hotel and Reception	9	3.9	21	11.0	30	7.1
Information Technology	3	1.3	2	1.0	5	1.2
Management	0	0.0	1	0.5	1	0.2
Painting	19	8.3	1	0.5	20	4.8
Plumbing	2	0.9	3	1.6	5	1.2
Sales	10	4.4	7	3.7	17	4.0
Security	15	6.6	5	2.6	20	4.8
Tailoring	1	0.4	21	11.0	22	5.2
Metal work	3	1.3	0	0.0	3	0.7
Total	**229.0**	**100.0**	**191.0**	**100.0**	**420.0**	**100.0**

There are a number of reasons why this group of graduates undertook TVET programs. 35 percent stated better employment opportunities after graduation as their main reason; 30 percent joined because of personal interests; 15.7 percent said that they did not quality for higher studies; and 12 percent because they could not afford to study any further. A small percentage of respondents (roughly 5 percent) also stated that they joined TVET programs on the advice of their parents or guardians.

Family Background of Graduates

A majority of the respondents' head of households were involved in agri–farming as their primary occupation. Table 14 below shows that this is true for nearly 48 percent of all survey respondents. The head of households of 11.3 percent of respondents were in government service, 11 percent in unpaid family work, and 9.6 percent and 8 percent of respondents whose head of households were involved in either private business or private corporations respectively. The rest were retired, in the armed forces, worked in public corporations or were generally not gainfully employed or self–employed.

In terms of the educational attainment of respondents' head of households, Table 15 shows that nearly 64 percent were from households where the head had no education; about 8 percent had a secondary education (up to class 10) and 16.7 percent only had less than a primary education (up to class 6). The education variable in this survey does not take into consideration non–formal traditional education (e.g. monastic education), which is still prevalent in Bhutan. The indication from these two tables however, is that a majority of the graduates that underwent TVET programs came from agriculture–based families with very little or no education whatsoever.

Table 14 — Primary Occupation of Respondents' Head of Household

Primary Occupation	%
Government	11.2
Public corporation	1.6
Private corporation	8.0
Armed forces	3.2
Private business	9.6
Agri–farming	47.8
Unpaid family work	11.0
Retired	6.6
Others	0.9
Total	**100.0**

Table 15 — Highest Level of Education of Respondents' Head of Household

Level of Education	%
No Education	63.5
Community (Up to 3)	10.3
Primary (Up to 6)	6.4
Lower secondary (Up to 8)	4.1
Secondary (Up to 10)	7.6
Higher Secondary (Up to 12)	5.7
Diploma (Class 12+)	1.4
Bachelors	0.5
Masters +	0.5
Total	**100.0**

Employment Outcomes

The employment outcome for TVET graduates is highly positive, for both males and females. 87.1 percent of all respondents are currently gainfully employed. This is a total of 366 men and women. 55 percent (201) of those employed are male and the rest that are gainfully employed are females (165). Moreover, 268 graduates (142 males and 126 females) representing 73.2 percent of the total employed indicated that their current job is the first job that they secured after graduation. 51 percent of TVET graduates secured their first job in less than 1 month, 21 percent between 1–3 months and just about 6 percent took more than a year to secure employment. There is no gender discrimination in finding work, with 51 percent of both males and females securing their first job in less than a month.

The reasonable deduction from these statistics is that employment outcomes for TVET graduates are far better than general education graduates, even if TVET programs are not a very attractive prospect or even alternative for many people. In comparison, those with secondary and tertiary education accounted for 31 percent and 31.6 percent of the total unemployed respectively[24] in 2014. As the employment rates of technical and vocational education and training graduates have improved, unemployment among the educated workforce has increased significantly. TVET graduates found family and peer networks to be highly useful in finding gainful employment. For instance, 26.5 percent found employment through family and friends, while 22.4 percent were employed via more formal channels of advertisement like T.V, radio and newspapers. A further 21.6 percent were employed through direct contact with employers.

In terms of association between a selected vocation and employment potential, graduates of technical and professional courses such as Automobile, Auto–mechanics and Accounting were all employed as regulars at the time of the survey. Of the total employed, 17 percent were Electrical graduates, 9.3 in Mechanical, 5.5 percent each in Painting, Carpentry and Carving, 5.2 percent were Security Guards, 4.4 percent were Embroiders, and 4.1 percent had a technical vocation in Automobiles maintenance.

Observed by the types of jobs that TVET graduates were currently employed to carry out, almost 22 percent (or 79 graduates) performed deskwork whereas 78 percent (287) were employed as non–desk workers. A higher proportion of female TVET graduates (26.2 percent) were also employed for deskwork compared to just 18 percent for males.

The nature of TVET–based employment favours men slightly more than women. 53 percent of TVET graduates were employed as regulars and 33.6 percent were on contracts. 6.6 percent were casual workers and 6 percent self–employed as yielded by the survey. Men however, were slightly more likely to be employed as regulars at around 53.2 percent of all the men employed as compared to 52 percent of females employed as regulars. An equal proportion of men and women (at 33.3 percent) were employed as contractual workers. Women were more likely to be self–employed at 8.5 percent of total employed versus only 4 percent of men who were self–employed.

Table 16 — Importance of (Select) Factors in Trainers' Employment Choices (%)

Factor	Not Very Important	Not Important	Indifferent	Important	Very Important
Income	1.6	3.6	5.3	41	48.5
Workplace Location	1.6	6.4	9.4	49	33.6
Type of Job	1.1	7.2	9.6	45.9	36.2
Nature of Employment	1.6	5.7	5.7	49.1	37.9
Job Security	0.9	4.4	5.3	5.3	46.1
Career Advancement Opportunities	0.9	2.3	5.1	49.3	42.4
Working Conditions	1.6	3	4.6	46.1	44.7
Job Satisfaction	0.9	2.3	6.2	49.1	41.5
Enterprise Reputation	1.4	3.4	7.3	50.0	37.9
Others	20.0	0.0	20.0	20.0	40.0

Among the factors influencing employment choices shown in Table 16, career advancement opportunities, job satisfaction, working conditions and income are very important to TVET graduates. Both men and women accord a high level of importance to career advancement, working conditions and job satisfaction. Females however, indicated that income and job security were more important (at 91 percent) compared to male counterparts (88 percent). The preliminary notion that most TVET graduates are employed in the main urban centres was proven to be true. The survey revealed that 56 percent were employed in Thimphu (the capital city), 16 percent in Chukha (the Dzongkhag with the main border–trade town of Phuentsholing) and 15.3 percent in Paro (with the only international airport in Bhutan). Finally, more males than females remain unemployed with 53.5 percent of the total unemployed being males as compared with 46.5 females who did not have a job at the time of the survey. The main reason most graduates cited for their unemployment (about 65 percent) was the lack of work opportunities.

Current Job Perceptions

Table 17 — True or False Statements Relating to Current Jobs by Gender

Statements	Male		Female		Total	
	True	False	True	False	True	False
	%	%	%	%	%	%
My performance is appreciated at my current job.	96.0	4.0	95.2	4.8	95.6	4.4
My job gives me a sense of pride and satisfaction.	89.5	10.5	85.5	14.5	87.7	12.3
I perform better at tasks than my colleagues with no training.	84.6	15.4	79.4	20.6	82.2	17.8
My skills and knowledge are under–utilized in my current job.	44.8	55.2	42.4	57.6	43.7	56.3
I don't have the skills/knowledge to do current job.	15.4	84.6	17.0	83.0	16.1	83.9
I see myself in the same job after 10 years.	51.2	48.8	35.8	64.2	44.3	55.7
I have chosen the wrong career path.	18.4	81.6	20.4	79.6	17.8	82.2

In addition to a positive employment outcome overall, TVET graduates were also generally upbeat about their current jobs. In a basic 'True or False' survey of respondents' sentiments to certain prescribed statements shown in Table 17, 95.6 percent thought that their performances were appreciated at their current work with nearly 88 percent deriving a sense of pride and satisfaction from the work they did presently. Observed by gender, both males and females (96 and 95 percent respectively) thought that their performances were appreciated at work. Males were more likely to agree (at 84.6 percent) than females (at 79.4 percent) that they performed better at tasks than those colleagues who did not possess TVET training. There was consensus that TVET graduates had the skills and knowledge to carry out the tasks assigned in their current job. However, just under half of all respondents (43.7 percent) also felt that their skills and knowledge were underutilized at their current job.

As a viable long–term occupation, more than 55 percent of TVET graduates did not see themselves in the same job after 10 years. A majority of females (64.2 percent) were more likely to opt–out of the jobs that they were presently working in, compared to 49 percent of males. There are a number of possible factors that discourage TVET graduates from continuing in the occupation that they opted–in, namely inadequate remuneration, lack of enabling and enriching working environments, lack of career (and socio–economic) progression, and limited life–long learning opportunities, etc.

Income Outcomes

Table 18 — Current Average Monthly Income (in Ngultrums) by Gender

Monthly Income	Male		Female		Total	
	Number	%	Number	%	Number	%
Less Than Nu. 5,000	21	10.4	22	13.3	43	11.7
Nu. 5,000 to Nu. 10,000	104	51.7	106	64.2	210	57.4
Nu. 10,000 to Nu. 15,000	51	25.4	31	18.8	82	22.4
Nu. 15,000 to Nu. 20,000	21	10.4	2	1.2	23	6.3
More Than Nu. 20,000	4	2.0	4	2.4	8	2.2
Total	**201**	**100.0**	**165**	**100.0**	**366**	**100.0**

The income outcome for TVET graduates is fairly poor, especially when one considers the standard of living in the 3 main urban centres where a majority of them work. Table 18 shows that a large population of employed graduates (at 57.4 percent) earned between Nu. 5,000 to Nu. 10,000 per month. Likewise, it can be stated that 69.1 percent earned less than (or equal to) only Nu. 10,000 per month. Women in particular, are more likely to fall in this low–income group with 64.2 percent earning between Nu. 5,000 to Nu. 10,000 per month as compared with 51.7 percent for men. The survey also shows that 77.5 percent of female TVET graduates earn less than (or equal to) Nu. 10,000 per month as compared to 62.1 percent for males. Among those earning less than Nu. 5,000 per month, nearly 35 percent work in government and 65 percent in the private sector. Only 8.5 percent of the total technical and vocational education and training graduates reported an average monthly income of more than (or equal to) Nu. 15,000. The nearly 70/30 split between those graduates who earn less than Nu. 10,000 per month versus those who earn more than Nu. 10,000 respectively is perhaps a compelling reason why TVET is still not considered a good economic prospect, let alone an attractive alternative to general education for many people. A similar assessment of TVET as an avenue of employment and livelihood included a question of monthly income sufficiency. 8 percent of all respondents surveyed reported that their current monthly income was 'Very Insufficient', 36 percent just 'Insufficient', 26 percent reported it was 'Adequate', while 30.3 percent in total reported it was 'Sufficient' or 'Very Sufficient'. In terms of income sufficiency, women were more likely to report their income as 'Insufficient' with 41 percent of all females reporting as such, compared to just 32 percent of males.

A 2–part question measuring respondents' perceptions of well–being or socio–economic status was included in the survey. In the first part, respondents were asked to rank their status on a 5–step ladder where, on the first step are 'Poor' and on the fifth step, 'Rich'. Over 79 percent ranked themselves as 'Average', 14.5 percent as 'Moderately Poor' and 5 percent ranked themselves as 'Poor'. In the second phase, on the same 5–step ladder, they were asked where they saw themselves in 5 years. Only 1 percent anticipated being 'Poor', 58.6 percent saw no change in their

'Average' status, while 35.7 percent anticipated becoming 'Moderately Rich'. The perception of TVET graduates is that their professions are low–paid and does not make them better off than other professions, in the near or medium–term. Most Bhutanese also have very palpable negative social attitudes towards low–end technical professions.

Assessments of Training Delivery

Table 19 — Rating of Aspects in Training Delivery (%)

Aspect	Very Dissatisfied	Dissatisfied	Indifferent	Satisfied	Very Satisfied
A. Curriculum					
Overall Training Program	1.4	2.5	7.6	64	24.5
Theoretical Component	0.2	5.3	9.4	66.4	18.6
Practical Component	0.9	4.6	7.8	54.6	32.1
On–the–Job Training	3.2	6.8	10.3	49.3	30.4
Development of Soft–skills	1.1	3.2	8.3	58.0	29.4
B. Trainers					
Knowledge of Subject Matter	0.9	2.7	7.1	69.8	19.5
Practical Knowledge	0.0	2.3	5.9	60.6	31.2
Effectiveness in Communication	0.2	2.0	9.2	64.8	23.8
Interaction with Trainees	0.0	2.1	5.7	57.4	34.8
Creativity in Instruction	0.0	3.7	9.6	64.5	22.2
Use of Instructional Materials & Aid	0.6	5.5	10.8	60.9	22.2
Availability for Consultation & Help	0.7	3.9	9.6	62.5	23.3
Assessment & Feedback	0.7	5.0	9.1	61.8	23.6
Demonstrates Ethical Behaviour	0.7	3.0	8.7	64.0	23.6
C. Facilities					
Quality of Classroom	1.6	9.1	9.6	56.1	23.6
Quality of Practical Training Area	2.2	11	11	51.5	24.3
Training Tools & Equipment	1.1	10.8	14.2	52.2	21.7
Computer Laboratories	6.0	13.1	15.4	47.2	18.3
Library and/or Resource Centre	5.5	14.4	15.9	47.9	16.3
Living, Recreational & Other Facilities	5.1	11.1	18.2	48.4	17.2
Communication Facilities	1.4	7.1	14.2	58.7	18.6
Transportation Facilities	5.8	8.3	14.5	51.5	19.9

A key method for obtaining first–hand feedback on aspects of training delivery was to ask past graduates to rate their own experiences in terms of curriculum, trainers and facilities at their former RTPs (public or private). Table 19 indicates that a high percentage of respondents were satisfied with various aspects of their curriculum and trainers. A sizeable number of respondents reported to be dissatisfied with institutional facilities such as libraries, computer laboratories, tools and equipment, accommodation and other recreational facilities. The poor state of institutional facilities may be one reason why 39 percent of the same TVET graduates indicated that they would not go back and undertake the same training course at the same RTP, if given the option.

The need to make TVET training courses more relevant to changing market and industry needs was also highlighted by the respondents. 34 percent were of the opinion that the inclusion of more practical programs in TVET training would help achieve this objective, while 28.3 percent felt better facilities were more important, and 24.4 percent suggested extended training durations. Another 11 to 12 percent also suggested the diversification of training courses and improvement in trainers' teaching skills and soft skills (e.g. interaction, access for help, constructive feedback, etc.). The argument for more practical and field–based programs in TVET training to improve its relevancy to the job market is supported by the fact that more than 88.5 percent of TVET graduates surveyed indicated that their On–The–Job (OTJ) training was very useful, with a further 81 percent indicating that it is helping them with their current job. 22.6 percent however, indicated that the duration of OTJ was inadequate, perhaps calling for an increase in OTJ training period. Concerning the quality of TVET trainers, nearly 17 percent of the graduates were of the opinion that they must engage in more practical programs with 15 percent suggestion that their professionalism and ability to interact with trainees must be improved. For TVET institutes (overall) 26 percent of graduates surveyed identified the need for more tools and equipment in both theoretical and practical sessions, along with the need for better learning areas and facilities.

6.c. TVET Trainers Survey

The diversity in TVET programs (and orientation) in Bhutan means that the application of standardized (international) definitions of the terminology 'TVET Trainers' is often confusing and misleading. The Organization for Economic Cooperation and Development (OECD) refers to vocational trainers as those who are "primarily responsible for imparting practical vocational skills, whereas vocational teachers are primarily responsible for theoretical skills instruction".[25] Similarly, other definitions distinguish 'trainers' and 'teachers' by stating that the former undertake their workplace–based trainings in enterprises governed by largely economic and profit–making concerns whereas the latter serve in largely not–for–profit public schools.[26]

A review of the literature on different TVET systems around the world offer a variety of definitions depending on the scope of TVET in that country. A number of countries (like Bhutan) require a combination of theoretical and practical proficiencies as well as the ability to impart general

knowledge (e.g. languages, soft skills, etc.) and technical/vocational skills. For the purposes of this report, TVET trainers are understood as any staff in the TVET system or RTPs who are responsible for the instruction of learners, in whichever medium e.g. classroom theory or in–the–field practical or whatever mode of instruction e.g. theoretical lectures or practical demonstrations, so long as it leads to the award of a certificate under Bhutan Vocational Qualifications Framework (BVQF). The qualifications thresh–hold for TVET trainers in Bhutan is reasonably low, with Bhutan TVET Policy 2016 mandating only a 'minimum qualification of one level higher than the course offered' to be qualified as a TVET trainer.

TVET Trainers in Bhutan

There are a total of 651 TVET trainers in Bhutan. 202 trainers are affiliated with public RTPs, 69 with Non–Governmental Organizations (NGOs) and the rest (380) with private RTPs. A (separate) survey carried out as part of MOLHR's 3rd National Human Resource Development Advisory Series[27] for 202 trainers in 66 RTPs shows that private sector trainers outnumber public (and NGO) sector trainers with 53.4 percent of the total. Most trainers are regular employees across all sectors at 73.9 percent. 88 percent of trainers are Bhutanese with 12 percent being non–Bhutanese. Most non–Bhutanese trainers are engaged in the private sector. A notable difference between public and private sector trainers is their educational qualifications — with more Diploma–level trainers in public institutes whereas private sector institutes had more Degree and Masters–level trainers. Remuneration levels, public sector intake capacity or ease of employment formalities in the private sector, etc. could be some of the reasons for this difference.

Table 20 — TVET Trainers by Sector, Employment Type & Nationality

Sector	Institutes	Regular	Contract	Bhutanese	Non-Bhutanese	Total
Public	11	178	24	188	14	**202**
NGO	5	48	21	53	16	**69**
Private	49	255	125	332	48	**380**
Total		**481**	**170**	**573**	**78**	**651**

Source: *MOLHR, 3rd National HRD Advisory Series 2015*

Profile of TVET Trainers

This tracer survey, bearing in mind MOLHR's previous efforts, reached out to more than 150 TVET trainers across all sectors to yield not just important socio–economic and academic characteristics, but also to gauge their skills and knowledge; self–assessment of own competencies; gather feedback on aspects of TVET training delivery in Bhutan; and, review other important outcomes — particularly income and employment of trainers. A total of 152 TVET trainers or 115 males and 37 females responded to this survey. The average age of the group is 35 years old. They have, on average, 13 years of education and 9 years of teaching or training experience. Table 21 sums up the key statistical indicators.

Table 21 — TVET Trainers Characteristics

Variable	Mean	Standard Deviation	Min.	Max.
Age	35.0	9.5	17.0	65.0
Years of Education	13.0	1.3	0.0	26.0
Teaching Experience (Years)	9.6	8.6	0.0	41.0

67.7 percent of trainers were employed in the public sector and 32.3 percent in private sector jobs. Female trainers were as educated and as qualified as their male counterparts. In terms of education, 73 percent of female trainers had a Higher–Secondary schooling or more compared to 70 percent of male trainers. 97.3 percent of females also had a Certificate, Diploma or Bachelor's Degree while 93.1 percent of men did. However in terms of experience, men had proportionately more experience with over 46 percent of men with 10 years plus of teaching compared to just 16 percent for women. 87 percent of men and 81 percent of women were regular employees, and the rest on contracts, self–employed or otherwise.

Table 22 — Highest Education Level by Gender

Education Level	Percent	
	Male	Female
No Education	1.8	5.4
Primary	12.4	2.7
Lower Secondary	8.8	13.5
Higher Secondary	44.2	48.6
Degree	20.4	24.3
Masters	5.3	0.0
Others	7.1	5.4
Total	**100.0**	**100.0**

Table 23 — Teaching Experience in Years by Gender

Experience (In Years)	Percent	
	Male	Female
Less Than 4	18.3	40.5
4–8	29.6	40.5
9–12	23.5	10.8
13–16	12.2	2.7
17–24	6.1	2.7
25–33	8.7	0.0
More Than 33	1.7	2.7
Total	**100.0**	**100.0**

Motivation

Where motivation to opt–in as TVET trainers and incentives in the occupation are concerned, again men and women respond nearly identically. While there aren't any existing studies to assess changes in motivational factors over time, this study tries to gauge respondents' reasons (ex–post) for opting–into teaching and training TVET as a career; as well as what — in their opinions — are considered incentives. Tables 24 and 25 indicate that 93.9 percent males and 86.4 percent females were initially inspired to become TVET trainers out of sheer personal interest in (general) teaching or specifically, in TVET. Very few reported otherwise. Career advancement and professional development opportunities were the main incentives for men (75 percent) and women (75.6 percent) with financial remunerations a very distant inducement in both cases. Family considerations in fact, played a bigger role than financial remuneration as incentives for both males and females engaged in TVET training.

Table 24 — Motivation by Gender

Motivation	Percent	
	Male	Female
Interest in TVET	45.2	37.8
Interest in Teaching	48.7	48.6
Family Reasons	4.3	5.4
Other Reasons	1.7	8.1
Total	**100.0**	**100.0**

Table 25 — Incentive Types in TVET Training by Gender

Incentive Type	Percent	
	Male	Female
Financial	2.6	5.4
Career Advancement	39.7	32.4
Dev. Opportunities	35.3	43.2
Recognition/Prestige	9.5	2.7
Family Consideration	12.1	16.2
Other Consideration	0.9	0.0
Total	**100.0**	**100.0**

Education & Employment Status

For analysis, differences in this survey group were sharper across sectors of employment than traditional gender comparisons. The first difference (as noted earlier) is the level of qualifications of public and private TVET trainers. 86.4 percent of public and 55.1 percent of private sector trainers had a Certificate or Diploma. A larger proportion of private trainers though (39 percent) had either a Bachelor's or Master's Degree, where only 13.6 percent of public trainers did. Trainers in both sectors were unanimous (94 percent) in expressing an interest to upgrade their qualifications if presented with realistic opportunities. Trainers in the public sector were more likely to be employed as regulars (or permanent) staff at 95.1 percent versus just 64.6 percent in the private sector. Nearly 30 percent in the private sector were either Casual, Contract or Self–

Employed trainers. Given the notable differences in public and private sector respondents in this survey, it may be bold to think that difference in public and private sector policies of hiring–and–firing, job security, job mobility etc. in addition to the more traditional reasons of remuneration, career advancement, etc. may explain why this is so. It is also commonplace for TVET trainers in private RTPs to shoulder more responsibilities. Perhaps, profit–driven employers in the private sector are more likely to seek individuals who can multi–task and therefore give them more 'bang for the buck', or trainers themselves take on these additional tasks to increase their value to private institutions. In regular public jobs in Bhutan, this pressure is negligible to non–existent. Whatever the reason, 76.2 percent of private trainers took–on additional responsibilities with the most popular choice being an Administrator, while trainers in public RTPs mostly (64.2 percent) took on extra–curricular responsibilities. These numbers corroborate a similar finding in the survey undertaken for the MOLHR's 3rd HRD Advisory.

Remuneration

Table 26 — Income by Gender

Income (Nu.)	Percent		
	Male	Female	Total
< 10,000	5.2	5.4	5.2
10,000–15,000	25.9	32.4	27.5
15,000–20,000	36.2	51.4	39.9
20,000–25,000	19.8	8.1	17.0
> 25,000	12.9	2.7	10.5
Total	**100.0**	**100.0**	**100.0**

Table 27 — Income by Sector

Income (Nu.)	Percent		
	Public	Private	Total
< 10,000	1.9	12.2	5.3
10,000–15,000	23.3	36.7	27.6
15,000–20,000	47.6	22.4	39.5
20,000–25,000	17.5	16.3	17.1
> 25,000	9.7	12.2	10.5
Total	**100.0**	**100.0**	**100.0**

The monthly income of TVET trainers by gender averages between Nu. 10,000 and Nu. 20,000 as shown in Tables 26 and 27. 67.4 percent of men and women across both public and private sectors earn within this range. However, more male trainers (32.7 percent) earn average monthly incomes of Nu. 20,000 or more than female TVET trainers (10.8 percent). It is unclear from this dataset why this is the case. Nearly 73 percent of female trainers had an education level of Higher Secondary, Bachelor's or Master's degree compared to just 69.9 percent for male TVET trainers. 97.3 percent of females also possessed qualifications of Certificate, Diploma, Bachelor or Master's level and only 93.1 percent of males did. Therefore, in terms of only education and qualification (and assuming a gender–neutral remuneration system), female income should at least equal their male counterparts'. The difference in incomes at the highest two quintiles then, must arise from other

factors. In this dataset, the difference in experience (in number of years) of men and women may partly explain why more men earn at the highest levels than women. 83.8 percent of female TVET trainers had an average teaching experience of 9 years or less, while only 53.9 percent of the men did. Conversely more men (46.1 percent) had more than 10 years of teaching experience where only 16.2 percent of the women did. Given the generally positive correlation between experience and remuneration, this may explain why male trainers earn more than female trainers in this survey. Why women have relatively low experience (in number of years) than men may require another independent study. Family considerations, reproductive roles, change in occupations from more physical work to relatively less–physical administrative and managerial jobs, etc. may be some reasons.

Trainers' Self–Assessment of Skills and Competencies

"A set of some criteria for excellence — what some might term "good trainers" — as a pre–requisite for defining the necessary training and qualification system that responds to"[28] meet the ever–changing challenges of the TVET system must be established. However, "bearing in mind that such a criteria must not be overly prescriptive nor considered exclusive in view of the great diversity of country systems and the complexity of needs, "good" teachers and trainers may be understood as those who meet a certain number of professional criteria such as: extensive knowledge in one or more subjects or fields of learning; high degree of functionality in ICT or technological progress ... ability to communicate and empathize with students; and, capacity to innovate and impart innovation in learning".[29] This study attempts to gauge trainer's skills, competencies and "excellence" via questions designed to encourage self–assessment on how proficient TVET trainers perceive themselves to be in terms of both training delivery and other soft skills, as in Tables 28 and 29.

Table 28 — TVET Trainers' Self–Assessment of Training Delivery Skills (by Sector)

Training Delivery Skills Self–Assessment	Public Trainers					Private Trainers				
	Highly Incompetent	Incompetent	Average	Competent	Highly Competent	Highly Incompetent	Incompetent	Average	Competent	Highly Competent
Subject Knowledge	0.0	0.0	6.8	61.2	32.0	0.0	0.0	14.3	65.3	20.4
Practical Training	0.0	0.9	14.6	51.5	33.0	0.0	0.0	14.3	53.1	32.6
Delivery Methods	0.0	0.0	11.6	70.9	17.5	0.0	2.0	26.5	42.8	83.7
Lesson Plan Preparation	0.0	0.9	11.7	61.2	26.2	0.0	2.0	14.3	63.3	20.4
Instruction Content Design	0.0	1.0	16.5	68.0	14.5	0.0	4.1	18.3	63.3	14.3

Training Delivery Skills Self–Assessment	Public Trainers					Private Trainers				
	Highly Incompetent	Incompetent	Average	Competent	Highly Competent	Highly Incompetent	Incompetent	Average	Competent	Highly Competent
Instruction Material Design	0.0	0.0	22.3	61.2	16.5	0.0	0.0	20.4	61.2	18.4
Instruction Layout Design	0.0	0.0	32.0	52.5	16.5	0.0	4.1	20.4	55.1	20.4
Identify Assessment Criteria	0.0	2.9	16.5	60.2	20.4	0.0	2.0	18.4	59.2	20.4
Define Assessment Queries	0.0	0.0	14.6	65.0	20.4	0.0	4.1	16.3	53.1	26.5
Feedback to Trainees	0.0	0.0	11.6	64.1	24.3	0.0	2.1	22.4	38.8	36.7

Table 29 — TVET Trainers' Self–Assessment of Their Soft Skills (by Sector)

Soft Skills Self–Assessment	Public Trainers					Private Trainers				
	Very Poor	Poor	Average	Good	Very Good	Very Poor	Poor	Average	Good	Very Good
Creativity	0.0	0.0	18.5	67.0	15.5	0.0	2.0	24.5	55.1	18.4
Innovativeness	0.0	0.0	19.4	68.0	12.6	0.0	2.0	24.5	59.2	14.3
Interpersonal Relationship	0.0	0.0	3.9	48.5	47.6	0.0	2.0	12.2	59.2	36.6
Communication Skill	0.0	0.0	5.8	64.1	30.1	0.0	2.0	12.3	51.0	34.7
Leadership Skill	0.0	0.0	11.6	61.2	27.2	2.0	2.0	18.4	47.0	30.6
Problem–Solving Skill	0.0	0.0	6.8	70.0	23.2	0.0	4.1	18.4	44.9	32.6
Team Building	0.0	0.0	8.7	62.2	29.1	0.0	2.0	20.4	53.1	24.5
Analytical Skill	0.0	0.0	12.6	66.0	21.4	0.0	4.1	20.4	55.1	20.4
Commitment	0.0	0.0	2.9	56.3	40.8	4.1	2.0	8.2	49.0	36.7
Attitude	0.0	0.0	1.0	42.7	56.3	0.0	2.0	6.2	55.1	36.7

Evidently, TVET trainers' self–assessment of their training delivery abilities and soft skills is greatly skewed with "Above–Average Effects".[30] Trainers across both public and private sectors on average, believe themselves to be better than Average in both training delivery and personal soft skills. 84.3 percent on average of all trainers surveyed rate their training delivery skills as Competent or Very Competent. 86.2 percent also believed that their soft skills are Good or Very Good. This problem is not exclusive to TVET or Bhutan. Self–assessments are biased according to studies in other countries. As per Dunning et.al (2004) "People overestimate themselves. They hold over–inflated views of their own expertise, skills, and character. That is, when one compares what people say about themselves against objective markers, or even against what might be possible, one finds that the claims people make about themselves are too good to be true. This bias towards undue optimism, self–aggrandizement, and overconfidence is exhibited in many ways".

Amongst a number of factors why this is so, two (in literature) are most notable: one, people lack information on the standards, benchmarks, measures, etc. when comparing themselves to other people; and two, people ignore valuable information they possess or could seek out. The survey for this study attempted to correct this flaw through a trainees' and graduates' review of trainers. Their assessments are presented in the respective sections above. In addition to reviews of peers, students, superiors, etc., the literature used for this study implies that for self–assessment surveys to be useful, they must be iterative, respondents must have as full and comprehensive information as possible, and surveys must be calibrated through numerous repetitions. The ability of trainers to correctly self–assess their own strength and weaknesses is crucial if they are to impart education that are long–term livelihoods for many people.

Despite the exceptionally positive self–assessments in training delivery and soft skills, TVET trainers responded that professional development programs e.g. Training of Trainers (TOT), industrial attachments and technology updating will greatly improve their capacities as trainers. Whether these statements are post–facto, where development programs made them the highly competent trainers as they rates themselves to be, therefore the faith in such programs; or, if they are simply making such statements in order to benefit from trainings and development opportunities, is unclear. What is clear is that more than 91 percent of trainers from public and 52.1 percent of trainers from private institutes attended at least 1 training program during their tenures as trainers. The programs were mostly conducted in–country with an average duration of 2 weeks. Tables 30 and 31 illustrate how useful trainers find professional development and TOT programs on a scale of 'Very Poor' to 'Very Good'.

Table 30 — Usefulness of Professional Development Programs (%)

Professional Development Programs	Very Poor	Poor	Average	Good	Very Good
In Improving Teaching Ability	1.0	0.0	8.0	38.0	53.0
In Improving Practical Class Management	3.0	0.0	8.0	52.0	37.0
In Exposure to International Best Practices	1.0	4.0	13.0	44.0	38.0
In Improving Assessment of Trainees	1.0	3.0	7.0	47.0	42.0
In Overall Personal Development	1.0	2.0	5.0	53.0	39.0

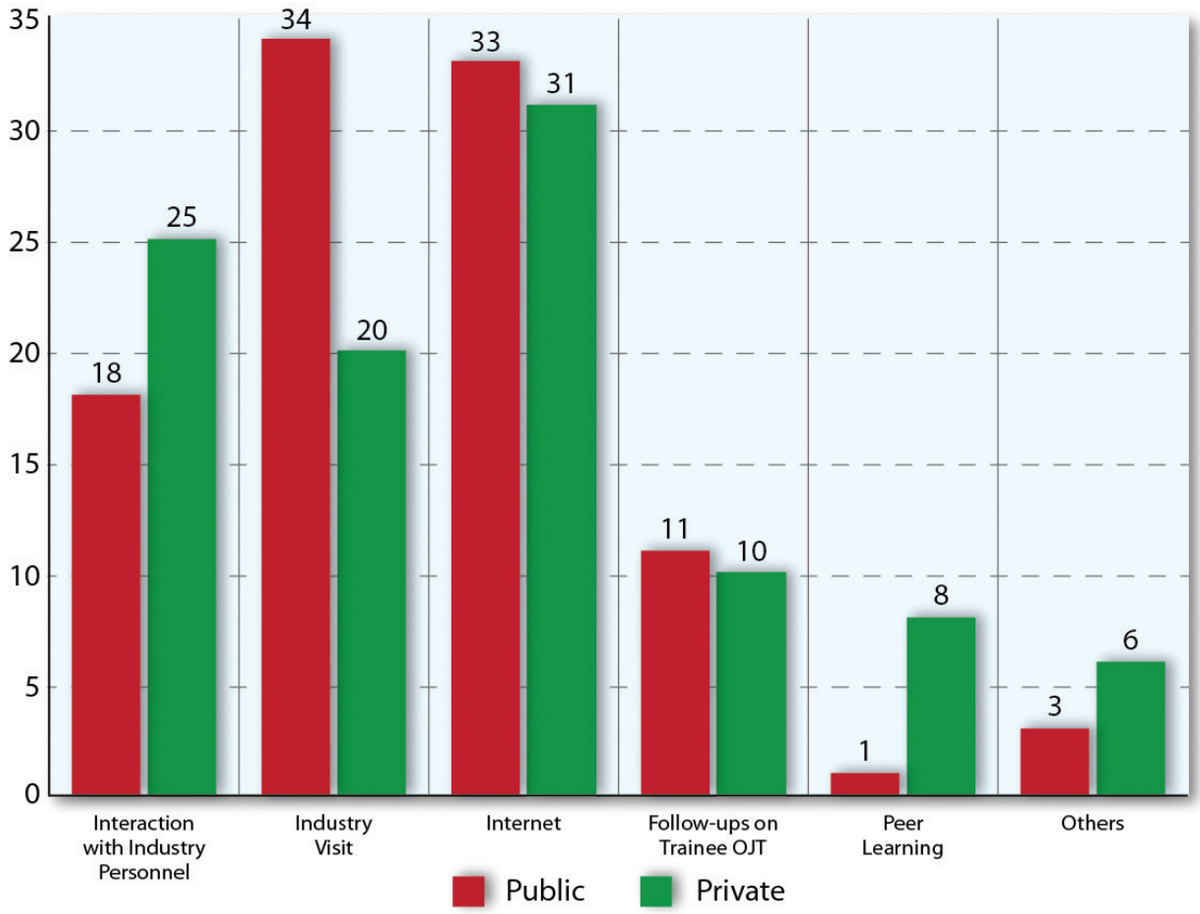
Table 31 — Usefulness of Training of Trainers (TOT) Programs (%)

Training of Trainers Program	Very Poor	Poor	Average	Good	Very Good
Improves Demonstration Skills	0.0	0.0	1.0	35.0	64.0
Improved Knowledge	0.0	0.0	4.0	44.7	51.3
Improves Visualization Skills	0.0	0.0	4.0	46.4	49.6
Improves Evaluation Skills	0.0	0.0	5.0	42.1	52.9
Improves Supervision of Instruction	0.9	0.0	5.0	48.3	45.8
Improves Assessment Skills	0.0	0.6	5.0	43.0	51.4

As highlighted, trainers view professional development and TOT programs very favourably. 88.6 percent of respondents, on average, rated the usefulness of all aspects of development programs as Good or Very Good. An even greater number (95.8 percent) stated that TOT programs were Good or Very Good in improving all aspects of their personal demonstration, knowledge, visualization, evaluation, supervision, and assessment skills.

Industrial attachments and constant technology updating is an important aspect of learning for trainers. Industrial attachment is a "work program providing real–life organizational context to develop specific and generic skills, valuable to any professional development". Figure 2 indicates some of the ways in which TVET trainers keep up–to–date with the demands and changes in Bhutan's technical and vocational industry. In order of preference, Industry Visits, the Internet and Interaction with Industry Personnel were the most popular with both public and private sector trainers as a means to keep abreast of changes and technology updates in their industry. 85 percent of trainers in the public and 76 percent of trainers in the private sector used one of these means to do so.

Figure 2 — Keeping Abreast of Industry Demands & Technology Changes by Sector



Trainers' Assessment of TVET Curriculum and Facilities

In addition to self–assessment exercises, trainers were also asked to evaluate curriculum and facilities of their RTP institutes. For curriculum, most trainers in both the public and private sectors were of the opinion that it was either Good or Very Good. Very few trainers (less than 5 percent for public and 2.5 percent for private sectors) responded that Curriculum was Very Poor or Poor. More private institute trainers (34.7 percent) however, rate their curriculum as Very Good compared to public institute trainers (17.5 percent). Both public and private trainers also stated that their institute's facilities were Good or Very Good. 57.8 percent and 73.5 percent of trainers in public and private sectors respectively rated their institutional facilities as Good or Very Good. A notable difference however, is the number of trainers who rate their RTP's facilities as Average. A significant number of public trainers (31.7 percent) responded that their institute's facilities were Average as compared to just 15.5 percent private trainers who responded likewise.

Table 32 — Trainers' Assessment of TVET Curriculum in Bhutan (%)

Curriculum	Public Trainers					Private Trainers				
	Very Poor	Poor	Average	Good	Very Good	Very Poor	Poor	Average	Good	Very Good
Relevance to Trainee's Learning & Growth	0.0	1.0	11.7	59.2	28.1	0.0	2.0	10.4	43.8	43.8
Relevance to Market Trends & Demands	0.0	2.9	12.6	61.2	23.3	0.0	0.0	16.7	54.1	29.2
Comprehensiveness & Diversity of Subjects	0.0	1.0	24.5	52.9	21.6	0.0	0.0	16.7	56.2	27.1
Sufficiency of Academic and Training Tools	2.0	3.0	41.6	46.5	6.9	0.0	2.1	25.0	39.6	33.3
Balance Between Theory & Practical	0.0	4.8	15.5	70.0	10.7	0.0	0.0	14.6	45.8	39.6
Sufficiency of Time to Cover All Areas	0.0	3.9	25.2	56.3	14.6	2.1	2.1	12.5	47.9	35.4

Table 33 — Trainers' Assessment of RTP Institutes (%)

RTP Institute	Public Trainers					Private Trainers				
	Very Poor	Poor	Average	Good	Very Good	Very Poor	Poor	Average	Good	Very Good
Quality of Classrooms	1.9	6.8	34.0	37.9	19.4	0.0	4.1	18.4	44.9	32.6
Quality of Practical Training Areas	1.0	9.7	30.1	45.6	13.6	0.0	6.1	6.1	38.8	49.0
Training Tools & Equipment	1.0	6.8	34.9	46.5	10.8	0.0	2.0	16.3	42.8	39.0
Computer Laboratories	0.0	10.7	25.3	48.5	15.5	8.2	8.2	18.3	44.9	20.4
Library & Resources	1.9	12.6	34.1	42.7	8.7	8.2	14.2	18.4	38.8	20.4

Outlook

This study of TVET Trainers in Bhutan is one of the most comprehensive so far. There are significant opportunities yet, to build on this effort in future studies. We have reviewed so far: trainers' backgrounds; income and employment status; educational and professional qualifications; experience in teaching; motivations and incentives for opting–in as TVET trainers; self–assessments of competencies in training delivery and personal soft skills; trainers' ratings of TVET curriculum and the facilities of RTPs that they are associated with; and, the many ways in which trainers keep themselves abreast of changing market demands and technology updates.

A final exercise was for public and private sector TVET trainers to gauge their relative well–being compared with their peers on an imaginary 5–step ladder. This is a 3 phase question that asks trainers, on a scale from 'Worst' to 'Best', how they viewed themselves 5 years ago, how they view themselves at present, and how they view themselves 5 years on. Five Years ago, 89.3 percent of all public and 89.8 percent of all private trainers viewed themselves as Average or better than other trainers. At present, the numbers become even more significant. Currently, 99.9 percent of public and 97.9 percent of private trainers view themselves as Average or better than other colleagues. And 5 years on, 100 percent of all TVET trainers (public and private alike) view themselves to be better than their peers. Perhaps the same Above Average Effects affecting the self–assessment abilities of trainers noted before, may also be affecting their abilities to gauge their relative well–being compared to their colleagues. Despite this shortcoming, this survey shows that the contentment or satisfaction levels of TVET trainers are very positive not on at present, but also indicative that it will remain so in the next few years.

Table 34 — TVET Trainers' Perception of Relative Well–Being (%)

Time Period	Public Trainers					Private Trainers				
	Worst	Inferior	Average	Superior	Best	Worst	Inferior	Average	Superior	Best
5 Years Ago	0.0	10.7	55.3	23.3	10.7	0.0	10.2	51.0	20.4	18.4
Present	0.0	0.0	26.2	55.3	18.4	0.0	2.1	36.7	42.8	18.4
5 Years Later	0.0	0.0	9.7	27.1	63.2	0.0	0.0	8.3	29.2	62.5

7. Conclusion

The 3 surveys (and studies) included in this report represent a small part of the efforts to evaluate and reform Bhutan's TVET system. Technical and vocational education and training is increasingly seen as a means to address social and economic challenges for a sustainable future by both national and international policymakers. This report then, is not only meant to reinforce the imperatives of policymakers in all spheres and at all levels towards actions that improve labour market outcomes for the young and unemployed, but also to provide critical inputs into the development of a Blue Print for TVET that will guide reforms in Bhutan's TVET sector over the next 10 years. Despite the intent of the report and the consulting firm's concerted efforts toward a comprehensive and robust set of quantitative results, the evidence base on which to build the arguments for interventions is not as strong or as conclusive as desired. This is one reason why this report's recommendations in the following section are differentiated as 'specific' or 'general' — the specific are mainly based on analytical interpretations of data yielded by the survey carried out for this report; and, the general or more holistic recommendations are based on supplemental sources of knowledge such as existing studies, research and importantly, the feedback, opinions and close consultations with experts (both international and national), officials, and primary stakeholders in Bhutan's TVET system. The lack of a robust evidence base is mainly on account of a few reasons.

First, there is a general scarcity of studies and research on TVET in Bhutan, let alone empirical datasets or rigorous analyses for reference in posterity. Most of the literature is government policies, guidelines, etc. whose use is limited. The more useful resources are publications of international agencies (such as the ADB), research on experiences in TVET implementation in other countries, and sporadic scholastic works (thesis, publications, etc.) by a few Bhutanese. The MOLHR also conducts surveys to supplement its annual HRD Advisory. This study draws on these publications even if their survey data (raw or otherwise) were not readily accessible for proof and comparative analysis.

Second, although this study is relatively broad and covers the entire country, it includes just 27 of 88 RTPs (public and private). A number of factors, namely the time–frame of project, financial considerations, negligible to no respondents at some institutes, etc. affected coverage and sampling. A minor caveat to generalizing the inferences made from the sample in this study to the total population must be highlighted. Even then, given the skewed outcomes in the responses to most of the questions administered in the survey, it is fairly safe to assume that the conditions, expectations, experiences, attitudes, and opinions shared by the 3 TVET groups is fairly representative of the rest of population. For example, one finding was that well over 60 percent of TVET trainees and graduates were from poor, agri–farming families. These respondents were also extremely likely to report that their head of households had no education. They rate the TVET curriculum and facilities (as well as trainers where applicable) highly favourably. And, both the trainee and graduate groups are confident about their employment prospects while seeing themselves to be 'better–off' in comparison to their peers on a survey of well–being. These are generally not strong basis for TVET interventions.

Nevertheless, a number of counter or alternate arguments can be made from the findings in this study. One, it can be argued that government and private sector RTPs are generally 'good', thereby warranting these positive responses. Two, given the modest backgrounds of the respondents, their expectations and perceptions of relative well–being are also quite low. These may need to be re–assessed over a longer period of time as socio–economic conditions in the country change. And lastly, a lack of information on standards and benchmarks against which to measure themselves meant trainees and graduates were largely gauging themselves at random. This has led to some generous ratings of curriculum, facilities and trainers. In all, despite many of the issues related to TVET emphasized throughout this report, existing evidence shows that the internal stakeholders at least, are quite content with the curriculum, facilities and trainers in the system. Now whether this is used as an indication that the status quo is desirable; or utilized as a constructive platform to enhance technical and vocational education and training in Bhutan, where the people are evidently quite receptive of and conducive to TVET, remains a decision for key policymakers and leaders.

If the intention is to identify a strong basis for enhancing investments in TVET, micro–level surveys or studies such as this offer little. Especially when data arise from self–completed (and self–reported) questionnaires as in this survey. The answers then, must lie in more holistic approaches that are inclusive of general literature, expertise in the field of technical training and education, and an appreciation of the overall socio–economic and macro–conditions in the country. Again, this is why the recommendations in this report are separated into specific and general, with the latter offering more persuasive reasons for increasing investments in TVET in Bhutan.

8. Recommendations

This section is divided into general and specific recommendations. Where the specific are based on survey findings (both quantitative and qualitative), the general recommendations take into account a more holistic view of Bhutan's TVET system including, but not limited to, supplemental sources of knowledge such as existing research and studies as well as feedback, views and opinions of many experts, officials and key stakeholders. The specific recommendations are presented in order — trainees, graduates and trainers, as addressed in the report. These recommendations form part of the project's TOR to provide key inputs into the development of a national Blueprint for TVET.

8.a. General Recommendations

A wage structure for skilled national workers must be developed. The development and formalization of 'minimum wage slabs' for national workers with different levels of technical and vocational skill–sets and national certificates could be a favourable policy intervention. It not only enables a decent standard of living for TVET takers, but also recognizes the importance of their hard–earned skills. Low wage expectations and consequently low levels of confidence in their (relative) well–being in the near future are evident in both trainees and graduates studies. Where 77.7 percent of trainees expect to earn Nu. 15,000 or less per month, 69.5 percent of graduates currently earn Nu. 10,000 or less per month. This is less than US$ 5 per person per day.[31] Given the level of prices and cost of living in urban areas where most of the employers (including the public sector) are located, wages are barely sufficient, as indicated again in the survey. A minimum wage slab, in addition to being a means for gainful employment and a system of reward/recognition for specialization, also serves as an indicator of stability and useful guide for career planning, much like the civil service or the corporate sector.

Realistic planning of skills supply is important. Most skills–development programs (in public and private institutes) are driven by manpower requirement forecasts that do not take into account the unique and changing nature of market forces. This very often leads to difficulties in job placements. The planning of skills supply thus, must be aligned with labour market conditions and skills requirements projections made by the relevant sectors (like hydropower) and other occupations. These projections (of requirements) must be made publicly available in a timely manner so that outcomes for all stakeholders — trainees, trainers (institutes) and employers (public and private) — are as effective and as efficient as possible.

The role of the private sector cannot be ignored. Even though the government remains the biggest producer and employer (of choice) for TVET takers, private sector participation, particularly in vocations that require low levels of capital (and technical) investments e.g. tourism, accounting, management, I.T, hospitality, etc. cannot be discounted. At present there are about 75[32] registered

private institutes (and many more un–registered) offering a number of programs and courses. There is clearly a capacity and willingness to do so. The government must foster any such interest from the private sector, with not just financial incentives and programs such as the guaranteed employment scheme, but also in terms of comprehensive frameworks, a regulatory authority, accreditation systems (for trainees and trainers), policies (including fiscal incentives) and laws. The National Council of Bhutan's recent recommendation[33] for a TVET Act is one such initiative. Furthermore, it is also recommended that future TVET studies may consider the inclusion of a study of employers in order to provide a comprehensive or 360–degree assessment of the TVET sector in Bhutan.

Capital (and recurring) investments in TVET must increase. There are 2 notable features of government spending on TVET in Bhutan: a. it is very low compared to other sectors, namely general education; and b. current spending on general education is abetting mismatches in skills and know–how of the unemployed with the kind of jobs that are available in the market. If national objective is to address issues of unemployment while increasing productivity in a fast–changing economy, the allocation of resources for TVET must increase substantially. This suggestion is made with a caveat that any increase in spending on TVET must not crowd out spending on general education. It was noted previously that in more developed economies, there are complex funding mechanisms, often in partnership with the private sector, to support such programs. Bhutan's government however, in the face of a sluggish private sector, must continue to look towards international development agencies (and external partners) to do so.

The consolidation of public training institutes will benefit long–term quality training delivery goals. There is a clear need for improvement in TVET facilities (both public and private) as indicated by all 3 groups in this survey. This report recommends that institutes, particularly public or government–owned, be consolidated into a few specialized institutes that are aligned with and responsive to market demands and the general economic conditions. At present, public institutes are located all over the country. The thinking seems to be that this will not only stimulate that locality's economy, but also in order to address issues of 'reach' and 'access' for TVET takers who primarily originate from these areas. This has however stretched public resources often leading to duplication of training, and facilities, which in many instances, are critically under–utilized. A consolidation of institutions into a few large ones, located in strategic regional centres, would not only ensure economies of scale, sufficient funding for facilities and services, and enhance effectiveness and efficiency through between planning, coordination, accountability, focused curricula, etc.; but also will not exacerbate accessibility issues much in today's modern and well–connected economy.

There is clearly a need for further research in this area. In addition to a comprehensive study of the TVET system to include employers and even public policy stakeholders, more research on TVET issues like regular tracer studies must be undertaken in order to assist in policy–making and designing targeted interventions. This study has highlighted the scarcity of both primary and secondary sources of information on not just TVET but also the labour market generally. The standard so far, has been to rely on the experiences and empirical evidences from other countries and attempt to

adopt the very same strategies, programs and methods here. While the fundamentals may remain the same, Bhutan's economy, labour market, work and social culture, knowledge base, laws, etc. are unique, which is why Bhutan–specific labour market and TVET system studies can offer a great deal in the development of technical and vocational education and training in Bhutan

8.b. Specific Recommendations

Trainees

TVET base and intake must be broadened to include many socio–economic backgrounds. Despite prevailing negative social attitudes, concerted efforts must be made to enhance the appeal of TVET beyond just a blue–collar occupation or an alternative to general education. This survey found that (at present) nearly 53 percent of trainees are from agri–farming households, 64 percent report their heads of households have no education, and 70 percent report that their head of household earns less than Nu. 50,000 per year. The notion that TVET is only for the rural, uneducated and poor must be dispelled.

Institutional facilities (public and private) require improvement. The current batch of TVET trainees in this survey rated curriculum, facilities and trainers at their respective institutes positively. More than 84 percent of trainees were satisfied or very satisfied with the curriculum and trainers. However, their ratings of institutional facilities such as classrooms, training areas, computer laboratories, tools and equipment, resource centres, living, communication and transportation facilities was comparatively low, with only around 66 percent of trainees (at public and private institutes) satisfied with the facilities overall.

Demand–side employment options and incentives need to improve. In order to enhance the aspirations of trainees, both financial benefits and options for employment must be broadened. Many trainees (44.4 percent) still see the government as the employer of choice; a smaller portion (21.7 percent) see themselves as business owners; and the rest feel that they will work for the private sector, international organisations, in overseas jobs, NGOs, etc. A number of factors, namely job prestige, security, advancement opportunities, supplementary benefits such as pension, etc. affect their decisions regarding employer choice. In terms of earnings 77.7 percent of trainees expect to earn less than Nu. 15,000 per month after graduation. Policies that aim to close the gap between the income and employment aspirations of technical graduates with those of the general education system graduates must be instituted.

TVET courses must cater to gender (strengths and weaknesses) to facilitate life–long engagement and employment. This survey found that while females opting–in to TVET generally have higher qualification levels (at entry) than males, the income outcome (from the graduates study) are better for males than for females in the long run. A principal reason being males remain engaged

longer and therefore, have more experience than females in their selected occupations. Experience is the most important determinant of income for TVET in Bhutan. Efforts must be made to provide gender–specific programs that enable women to remain engaged and employed longer despite their productivity roles, as caregivers, homemakers, etc. Females enter the TVET system in almost equal numbers (42.5 percent) as do males (57.5 percent). This survey also found that females mostly gravitate towards training in trades that require greater dexterity and skills e.g. handicrafts; while men mostly opt for training in trades that are physically demanding like mechanical and machine operations.

TVET institutes must also focus on 'generic employability' skills. Technical institutes (public and private) focus on producing a technically sound workforce. However, more employers today want employees with generic employability skills or behavioural skills such as communications, teamwork, and problem–solving abilities that give them a "high degree of flexibility, adaptability and ability to work in a range of jobs, and gain and retain employability" (Khandu, 2014). It is safe to assume that many TVET takers coming from poor, rural and uneducated families would not possess the skills highlighted here, which is why it is even more important for regulatory authorities and technical institutes to establish certain curriculum and programs to instil such skills.

Graduates

Institutional facilities must be upgraded regularly. TVET graduates reported more dissatisfaction with facilities as compared with other aspects of training delivery such as curriculum or trainers. This includes academic facilities like computer laboratories, resource libraries, tools and equipment, practice material for workshops; and living facilities such as dining, recreation, communication and transportation services.

On–the–job training (OTJ) program needs to be enhanced. More than 88.5 percent of all graduates surveyed found OTJs to be very useful and relevant to their current jobs. In addition, 23 percent also pointed to the need for longer OTJ training period. OTJs provide opportunities to apply theoretical and practical knowledge in real–life work scenarios, acquire (and hone) new skills, increase competencies, and build networks for potential employment. Public and private institutes must conduct a careful review of OTJ in close consultation with industry partners.

Skills–job mismatch and professional development programs must be continuously managed. 44 percent of graduates reported that their skills and knowledge are under–utilized in their current jobs, indicating a lack of right mix of training or choice of job. Career counselling and advisement programs at institutes can alleviate some of these problems. In addition, 16 percent also reported that they lack necessary ongoing skills and knowledge to carry out their current work functions. The TVET system must be cognizant of the dynamic and fast–changing nature of today's economy, technology and occupational requirements. It must ensure that TVET participants are responsive to such changes through regular and continuous programs for skills and knowledge upgradation.

Income outcomes for TVET graduates, especially females, must improve. While 56 percent of graduates report their income to be either adequate or sufficient, 44 percent report it to be insufficient or very insufficient. It must be noted that 69.5 percent of all respondents earn less than Nu. 10,000 per month. Females are more likely to fall in this low–earning group despite having slightly better qualifications levels than males upon undertaking TVET programs. They are however, less likely to continue in TVET vocations in the long–term, which determines the differences in remuneration levels between men and women. Policies and action plans to enhance remunerations levels for both men and women (such as MOLHR's Guaranteed Employment Program) must be instituted, with particular focus on the longevity of female employment.

TVET courses need to be diversified. In a fast–paced economy where market demands, technology and even labour requirements are changing rapidly; TVET courses must be fluid and diversified with a strong focus on the fundamentals. This will not only broaden the scope of TVET participants' employability, but also enhance their competence and productivity in the marketplace. At a policy level, strong linkages must be created between training institutes and employers so that both sides remain in tune with the needs of the other.

Self–employment aspirations (of trainees and graduates) must be promoted. On average, 21.6 percent of male and female trainees aspire to open their own businesses after graduation. The government must institute policies that encourage such aspirations. The advantage of doing so is twofold: one, given the limited number of job opportunities in the government, more graduates need to willingly join the private sector or set up their own businesses; and two, the MOLHR and related agencies can promote skills–based and entrepreneurship programs to capitalize on the self–employment aspirations of TVET takers. This can be mainly achieved through coordinated and proactive initiatives such as career guidance and job counselling right at the training institute levels. If public expenditure limits and there is capacity, programs can also include support for start–up initiatives in the form of credit, up–skilling, and such others.

Trainers

A TVET Trainers development framework is needed. The framework must address required professional qualifications, standards for trainers (pre–service or in–service), training of trainers, and evaluation of trainers in order to meet the objectives of a quality TVET system in Bhutan. This survey finds that only a small number of trainers rated their own training delivery skills, including soft skills like creativity, communication, team–building, leadership and analytical skills, as competent. Most reported that their skills were average. A professional development program thus, would not only lead to better TVET trainers who are knowledgeable and skilled, but who can be described as "good trainers". Additionally, the adoption of a vocational pedagogy can enhance the quality of trainers' instructions and training delivery methods.

Industry (or sector) experience for trainers must be a requisite. For vocational education to be "high–status and valued, we need high quality teaching".[34] A high quality teacher is not only one who is knowledgeable and skilled, but also one who has industry experience. This survey found that only 13 percent of trainers in TVET institutes held a job prior to becoming a trainer. Most are recruited straight out of the training programs and have little industry or sector experience. The need for 'good trainers', who are experienced, knowledgeable and up–to–date with the needs of their relevant sector therefore, cannot be overstated. One way to ensure quality trainers is to develop necessary industry linkages during the initial training of trainers. Lipsmeier (2013) emphasized the importance of industrial experience for TVET trainers by suggesting the following options: a. 2–3 years full traineeship before becoming a teacher; b. 6–9 months internship before becoming a teacher; c. internship in the industry while working as a teacher; d. internship in production school; e. internship in research institutions; or, f. internship in industry with sophisticated labour organisations. A right mix (or one) of the above options can be implemented in Bhutan.

Institutional facilities and support for trainers must be improved. Like trainees and graduates, trainers rated the condition of institutional facilities, particularly practical training areas, as average or poor. They also indicated that their abilities to keep up with the fast changing nature of their respective sectors and the economy as a whole, was hindered by the lack (or average state) of facilities provided by the institutes. This finding reinforces the need to improve overall TVET infrastructure.

Incentives (financial and otherwise) for TVET trainers need to be enhanced. The ability to attract and retain qualified and 'good' people in any sector is determined largely by the incentives structure on offer. The TVET system is no different. The findings in the Trainers' Survey show that many of the vocational trainers in Bhutan are recent graduates who have little to no experience in the sectors for which they train others. Even these trainers find the current monthly remuneration levels to be inadequate, with 72.5 percent stating that it is either insufficient or just adequate. If the objective is to attract highly qualified (with degrees) and experienced trainers (with significant industry experience), the incentive levels must also be significantly escalated to meet expectations.

Annexure 1: TVET Trainees Survey

TECHNICAL AND VOCATIONAL EDUCATION TRAINING (TVET) BHUTAN

TRAINEES SURVEY 2015

Conducted by:
Dodhter–Rigtsel Info–Research Centre (DRIC)

For the:
Asian Development Bank (ADB)
&
Ministry of Labour and Human Resources (MOLHR)
Royal Government of Bhutan (RGOB)

This survey is part of the project: Proposal 120260–01: TA–8712 BHU: Institutional Strengthening for Skills Development — Social Research and Communications Firm (46175–001) funded by the Asian Development Bank (Manila, Philippines) and implemented by the Ministry of Labour & Human Resources, Royal Government of Bhutan (Thimphu, Bhutan). The objective of the survey is to assess the: 1) aspirations of current TVET trainees; 2) experiences of TVET graduates; and 3) the attitudes of TVET trainers and teachers in Bhutan's public and private Technical Training Institutes (TTI). The findings, analysis and recommendations form part of a national–level TVET Blueprint and a TVET advocacy and promotion campaign (also funded by the ADB) for Bhutan.

INSTRUCTIONS
Welcome to the Technical Vocational and Education Training (TVET) Survey 2015.
Please complete the attached survey clearly, concisely and to the best of your knowledge.
Your responses must be factual in order to produce correct statistics.
Your responses are voluntary; however we encourage you to complete this survey fully.
Use capital letters in your responses where applicable.
Read each questions thoroughly and respond to them carefully.
Avoid erasing, scratching, writing over and responding more than once to each question.
There is no right or wrong answers, therefore kindly complete your survey independently.
The enumerators will assist you throughout this survey.

CONFIDENTIALITY
This survey will be used specifically by the ADB and MOLHR to plan for higher quality TVET training in Bhutan's public, private and community sectors.
The ADB, MOLHR and consulting firm DRIC, regard the confidentiality of survey data to be of utmost importance.
Your responses are completely anonymous.
Your personal and contact information offered voluntarily in this survey are combined with others and summarized so that no personally identifiable information is revealed.
The dataset compiled from this survey will not be publicized or shared, in part or as a whole, with third parties.

INQUIRIES
If you have any questions about the survey, please contact: Dodhter–Rigtsel Info–Research Centre, Post Box No. 1717, Chang Lam, Thimphu, Bhutan; or direct any inquiries to e–mail: dhoterrigtsel2015@gmail.com

SURVEY FOR TRAINEES

This survey is to be completed by TVET trainees

Full name:

Date of birth (DD/MM/YY):

I.D number (Citizenship/Resident Permit):

Gender (Tick One)

Male ☐ Female ☐

Phone/mobile number:

E–mail:

Head of household's (father/mother) primary occupation area (Tick One)

1. Government ☐ 2. Public Corporation ☐ 3. Private Corporation ☐ 4. Armed Forces ☐
5. Private Business ☐ 6. Agri–Farming ☐ 7. NGO ☐ 8. International Org. ☐
9. Unpaid Family Work ☐ 10. Retired ☐ 10. Others ☐ please specify:

Head of household's (father/mother) highest level of education (Tick One)

1. Community (up to Class 3) ☐ 2. Primary (up to Class 6) ☐
3. Lower Secondary (up to Class 8) ☐ 4. Secondary (up to Class 10) ☐
5. Higher Secondary (up to Class 12) ☐ 6. Diploma (Class 12+) ☐
7. Bachelors (Class 12+3/4) ☐ 8. Masters + ☐

What is your household's estimated annual income? (Tick One)

1. Less Than Nu. 50,000 ☐ 2. Nu. 50,000–Nu. 100,000 ☐ 3. Nu. 100,000–Nu. 150,000 ☐
4. Nu. 150,000–Nu. 200,000 ☐ 5. More Than Nu. 200,000 ☐

Date of joining Registered Training Provider (DD/MM/YY)

What course are you enrolled in?

What was your highest level of education before joining the RTP? (Tick One)

1. Community (up to Class 3) ☐ 2. Primary (up to Class 6) ☐

3. Lower Secondary (up to Class 8) ☐ 4. Secondary (up to Class 10) ☐

5. Higher Secondary (up to Class 12) ☐ 6. Diploma (Class 12+) ☐

7. Bachelors (Class 12+3/4) ☐ 8. Others ☐ please specify:

What is your main reason for undertaking TVET training? (Tick Maximum of 2 Options)

1. Interest in Field of Study ☐ 2. Better Employment Opportunities After Graduation ☐

3. Advice of Parents and/or Guardians ☐ 4. Did Not Qualify for Higher Studies ☐

5. Could Not Afford Higher Studies ☐ 6.Peer Influence ☐

7. Others ☐ please specify:

How did you first hear about the TVET program? (Tick One)

1. MOLHR Regional Office ☐ 2. TVET Winter Camp ☐ 3. Skills Competition ☐

4. Job Fairs ☐ 5. MOLHR Advocacy Prog. ☐ 6. School Vocation Clubs ☐

7. Family/Friends/Relatives ☐ 8. Media ☐ 9. Others ☐ please specify:

Rate your curriculum (Tick One for Each Aspect)

	1 Very Dissatisfied	2 Dissatisfied	3 Satisfied	4 Indifferent	5 Very Satisfied
1. Overall training program	☐	☐	☐	☐	☐
2. Theoretical component	☐	☐	☐	☐	☐
3. Practical component	☐	☐	☐	☐	☐
4. On–the–job training	☐	☐	☐	☐	☐
5. Development of soft–skills (teamwork, leadership, etc.)	☐	☐	☐	☐	☐

List some suggestions to improve the quality of your training curriculum:

1.....

.....

2.....

.....

3.....

.....

Rate your course SPECIFIC trainers (Tick One for Each Aspect)

	1 Very Dissatisfied	2 Dissatisfied	3 Satisfied	4 Indifferent	5 Very Satisfied
1. Knowledge and comprehension of subject matter	☐	☐	☐	☐	☐
2. Practical knowledge	☐	☐	☐	☐	☐
3. Effectiveness in communications	☐	☐	☐	☐	☐
4. Interaction with trainees	☐	☐	☐	☐	☐
5. Creativity in instructions	☐	☐	☐	☐	☐
6. Use of instruction materials & aid	☐	☐	☐	☐	☐
7. Availability for consultation & help	☐	☐	☐	☐	☐
8. Assessment and feedback	☐	☐	☐	☐	☐
9. Demonstrates ethical behaviour	☐	☐	☐	☐	☐

List some suggestions to improve the quality of your Trainers:

1.....

.....

2.....

.....

3.....

.....

Rate the facilities of your RTP (Tick One for Each Aspect)

	1 Very Dissatisfied	2 Dissatisfied	3 Satisfied	4 Indifferent	5 Very Satisfied
1. Quality of Classrooms	☐	☐	☐	☐	☐
2. Quality of Practical Training Areas	☐	☐	☐	☐	☐
3. Training Tools & Equipment	☐	☐	☐	☐	☐
4. Computer Laboratories	☐	☐	☐	☐	☐
5. Library & Resource Centre	☐	☐	☐	☐	☐
6. Accommodations, Living & Recreation Facilities	☐	☐	☐	☐	☐
7. Communications Facilities	☐	☐	☐	☐	☐
8. Transportation Facilities	☐	☐	☐	☐	☐

List some suggestions to improve the quality of your Facilities:

1.....

.....

.....

2.....

.....

.....

3.....

.....

.....

How confident are you in securing gainful employment after graduation? (Tick One)

Very Unconfident ☐ Unconfident ☐ Indifferent ☐ Confident ☐ Very Confident ☐

If given an option to choose your place of employment, where would you most like to work?

1. Urban Centres (in Bhutan) ☐ 2. Rural Areas (in Bhutan) ☐ 3. Overseas☐

What type of enterprise would you most like to work for? (Tick One)

1. Government ☐ 2. Public Corporation ☐ 3. Private Corp. ☐ 4. Armed Force ☐

5. Own Business ☐ 6. Private Business (Other) ☐ 7. NGO ☐ 8. International Org. ☐

9. Overseas ☐ 10. Others ☐ please specify:

What is your (alternate) plan if you don't find employment post–graduation? (Tick One)

1. Further training ☐ 2. Further studies ☐ 3. Internships (Unpaid) ☐

4. Help with Housework ☐ 5. Stay Unemployed for a time ☐ 6. Others ☐ please specify:

How important are the following to your choice of employment? (Tick One for Each)

	1 Not Very Important	2 Not Important	3 Indifferent	4 Important	5 Very Important
1. Income	☐	☐	☐	☐	☐
2. Workplace Location	☐	☐	☐	☐	☐
3. Type of job	☐	☐	☐	☐	☐
4. Nature of Employment	☐	☐	☐	☐	☐
5. Job security	☐	☐	☐	☐	☐
6. Career Opportunities	☐	☐	☐	☐	☐
7. Working conditions	☐	☐	☐	☐	☐
8. Job satisfaction	☐	☐	☐	☐	☐
9. Enterprise's reputation	☐	☐	☐	☐	☐

10. Others ☐ please specify:

What is your expected level of monthly income after graduation? (Tick One)

1. Less Than Nu. 5,000 ☐
2. Nu. 5,000 – Nu. 10,000 ☐
3. Nu. 10,000 – Nu. 15,000 ☐
4. Nu. 15,000 – Nu. 20,000 ☐
5. More Than Nu. 20,000 ☐

On a scale of 1 – 5 where 1 = Not Very Knowledgeable and 5 = Very Knowledgeable, how knowledgeable are you about the following? (Tick One for Each)

	1 Not	2 Not Very	3 Average	4 Quite	5 Very
1. Bhutan's economy	☐	☐	☐	☐	☐
2. Bhutan's job market	☐	☐	☐	☐	☐
3. Your prospects in job market	☐	☐	☐	☐	☐
4. Government plans for employment	☐	☐	☐	☐	☐
5. Employment opportunities abroad	☐	☐	☐	☐	☐
6. Your prospects as an entrepreneur	☐	☐	☐	☐	☐
7. The Earning potential in your skills/trade	☐	☐	☐	☐	☐

Imagine a five–step ladder where, on the first step are 'Poor' people and, on the fifth step are 'Rich' people. On which step do you see yourself in 5 years time? (Tick One)

1	2	3	4	5
Poor ☐	Moderately Poor ☐	Average ☐	Moderately Rich ☐	Rich ☐

How often do you do the following? (Tick One for Each)

	1 Never	2 Less Than 1 Hour/Day	3 –3 Hours/Day	4 3–6 Hours/Day	5 More Than 6 Hours/Day
1. Listen to the Radio	☐	☐	☐	☐	☐
2. Watch television, movies, etc.	☐	☐	☐	☐	☐
3. Read newspapers, books, etc.	☐	☐	☐	☐	☐
4. Browse the internet	☐	☐	☐	☐	☐
5. Use your phone, mobiles, etc.	☐	☐	☐	☐	☐

Are you differently–abled i.e. mentally or physically (Tick One)

Yes ☐ No ☐

Annexure 2: TVET Graduates (Tracer) Survey

TECHNICAL AND VOCATIONAL EDUCATION TRAINING (TVET) BHUTAN

TRACER SURVEY 2015

Conducted by:
Dodhter–Rigtsel Info–Research Centre (DRIC)

For the:
Asian Development Bank (ADB)
&
Ministry of Labour and Human Resources (MOLHR)
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Please complete the attached survey clearly, concisely and to the best of your knowledge.
Your responses must be factual in order to produce correct statistics.
Your responses are voluntary; however we encourage you to complete this survey fully.
Use capital letters in your responses where applicable.
Read each questions thoroughly and respond to them carefully.
Avoid erasing, scratching, writing over and responding more than once to each question.
There is no right or wrong answers, therefore kindly complete your survey independently.
The enumerators will assist you throughout this survey.

CONFIDENTIALITY
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Your responses are completely anonymous.
Your personal and contact information offered voluntarily in this survey are combined with others and summarized so that no personally identifiable information is revealed.
The dataset compiled from this survey will not be publicized or shared, in part or as a whole, with third parties.

INQUIRIES
If you have any questions about the survey, please contact: Dodhter–Rigtsel Info–Research Centre, Post Box No. 1717, Chang Lam, Thimphu, Bhutan; or direct any inquiries to e–mail: dhoterrigtsel2015@gmail.com

SURVEY FOR GRADUATES

This survey is to be completed by TVET graduates

Full name:

Date of birth (DD/MM/YY):

I.D number (Citizenship/Resident Permit):

Gender (Tick One)

Male ☐ Female ☐

Phone/mobile number:

E–mail:

Head of household's (father/mother) primary occupation area (Tick One)

1. Government ☐ 2. Public Corporation ☐ 3. Private Corporation ☐ 4. Armed Forces ☐
5. Private Business ☐ 6. Agri–Farming ☐ 7. NGO ☐ 8. International Org. ☐
9. Unpaid Family Work ☐ 10. Retired ☐ 10. Others ☐ please specify:

Head of household's (father/mother) highest level of education (Tick One)

1. No Education ☐ 2. Community (up to Class 3) ☐ 3. Primary (up to Class 6) ☐
4. Lower Secondary (up to Class 8) ☐ 5. Secondary (up to Class 10) ☐
6. Higher Secondary (up to Class 12) ☐ 7. Diploma (Class 12+) ☐
8. Bachelors (Class 12+3/4) ☐ 9. Masters + (Post–graduate) ☐

Name of Registered Training Provider

Date of joining Registered Training Provider (DD/MM/YY)

Date of graduation from the Registered Training Provider (DD/MM/YY)

Date of graduation from the Registered Training Provider (DD/MM/YY)

What was your highest level of education before joining the RTP? (Tick One)

1. Community (up to Class 3) ☐
2. Primary (up to Class 6) ☐
3. Lower Secondary (up to Class 8) ☐
4. Secondary (up to Class 10) ☐
5. Higher Secondary (up to Class 12) ☐
6. Diploma (Class 12+) ☐
7. Bachelors (Class 12+3/4) ☐
8. Community (Bachelors + 1/2) ☐
9. Others ☐ please specify:

What is your main reason for undertaking TVET training? (Tick Maximum of 2 Options)

1. Interest in Field of Study ☐
2. Better Employment Opportunities After Graduation ☐
3. Advice of Parents and/or Guardians ☐
4. Did Not Qualify for Higher Studies ☐
5. Could Not Afford Higher Studies ☐
6. Peer Influence ☐ please specify:
7. Others ☐ please specify:

How did you first hear about the TVET program? (Tick One)

1. MOLHR Regional Office ☐
2. TVET Winter Camp ☐
3. Skills Competition ☐
4. Job Fairs ☐
5. MOLHR Advocacy Prog. ☐
6. School Vocation Clubs ☐
7. Family/Friends/Relatives ☐
8. Media ☐
9. Others ☐ please specify:

Rate the curriculum at your former RTP (Tick One for Each Aspect)

	1 Very Dissatisfied	2 Dissatisfied	3 Satisfied	4 Indifferent	5 Very Satisfied
1. Overall training program	☐	☐	☐	☐	☐
2. Theoretical component	☐	☐	☐	☐	☐
3. Practical component	☐	☐	☐	☐	☐
4. On–the–job training	☐	☐	☐	☐	☐
5. Development of soft–skills (teamwork, leadership, etc.)	☐	☐	☐	☐	☐

What are some new aspects you would like to see in your course to make it more relevant to the needs of your industry? (List)

1.....

.....

2.....

.....

3.....

.....

Rate the trainers at your former RTP (Tick One for Each Aspect)

	1 Very Dissatisfied	2 Dissatisfied	3 Satisfied	4 Indifferent	5 Very Satisfied
1. Knowledge and comprehension of subject matter	☐	☐	☐	☐	☐
2. Practical knowledge	☐	☐	☐	☐	☐
3. Effectiveness in communications	☐	☐	☐	☐	☐
4. Interaction with trainees	☐	☐	☐	☐	☐
5. Creativity in instructions	☐	☐	☐	☐	☐
6. Use of instruction materials & aid	☐	☐	☐	☐	☐
7. Availability for consultation & help	☐	☐	☐	☐	☐
8. Assessment and feedback	☐	☐	☐	☐	☐
9. Demonstrates ethical behaviour	☐	☐	☐	☐	☐

List some suggestions to improve the quality of your Trainers:

1.....

.....

2.....

.....

3.....

.....

Rate the facilities at your former RTP (Tick One for Each Aspect)

	1 Very Dissatisfied	2 Dissatisfied	3 Satisfied	4 Indifferent	5 Very Satisfied
1. Quality of Classrooms	☐	☐	☐	☐	☐
2. Quality of Practical Training Areas	☐	☐	☐	☐	☐
3. Training Tools & Equipment	☐	☐	☐	☐	☐
4. Computer Laboratories	☐	☐	☐	☐	☐
5. Library & Resource Centre	☐	☐	☐	☐	☐
6. Accommodations, Living & Recreation Facilities	☐	☐	☐	☐	☐
7. Communications Facilities	☐	☐	☐	☐	☐
8. Transportation Facilities	☐	☐	☐	☐	☐

List some suggestions to improve the quality of your Facilities:

1.....

.....

.....

2.....

.....

.....

3.....

.....

.....

Agree or disagree with the following statements regarding On–The–Job trainings. (Tick One)

	1 Strongly Disagree	2 Disagree	3 No Opinion	4 Agree	5 Strongly Agree
1. OTJ Training helps me with my current work	☐	☐	☐	☐	☐
2. The duration of OTJ Training was adequate	☐	☐	☐	☐	☐
3. The mentoring during OTJ Training was good	☐	☐	☐	☐	☐
4. Industry Attachment during OTJ was useful	☐	☐	☐	☐	☐
5. My overall experience with OTJ is good	☐	☐	☐	☐	☐

How important were the following to your choice of employment? (Tick One for Each)

	1 Not Very Important	2 Not Important	3 Indifferent	4 Important	5 Very Important
1. Income	☐	☐	☐	☐	☐
2. Workplace Location	☐	☐	☐	☐	☐
3. Type of Job	☐	☐	☐	☐	☐
4. Nature of Employment	☐	☐	☐	☐	☐
5. Job Security	☐	☐	☐	☐	☐
6. Career Adv. Opportunities	☐	☐	☐	☐	☐
7. Working Conditions	☐	☐	☐	☐	☐
8. Job Satisfaction	☐	☐	☐	☐	☐
9. Enterprise Reputation	☐	☐	☐	☐	☐

10. Others ☐ Please Specify:

Are you currently employed? (Tick One)

Yes ☐ No ☐ go to Question 39

Type of Job? (Tick One)

Desk ☐ Non–desk (Manual) ☐

Specify the type of employment. (Tick One)

1. Regular/Permanent ☐ 2. Casual ☐ 3. Contractual ☐

4. Self–employed ☐ 5. Others ☐ please specify:

What is the status of your employment? (Tick One)

1. Full–time ☐ 2. Part–time ☐ 3. Seasonal ☐

4. Others ☐ please specify:

Where (Dzongkhag) do you work?

If you are currently 'employed' which of the following methods did you use to find employment? (Tick One)

1. Directly Contacting Employers ☐ 2. Advertisements (T.V. Radio, Newspapers) ☐

3. Online Job Searches ☐ 4. Family/Friends and Acquaintances ☐ 5. Job Fairs ☐

6. Government Employment Programs ☐ 7. Private Employment Agencies ☐

8. Others ☐ please specify:

Is this your first job after graduation? (Tick One)

Yes ☐ No ☐

If this is not your first job, how many jobs have you held after graduation? (Tick One)

1. Two ☐ 2. Three ☐ 3. Four ☐

4. Five ☐ 5. More Than Five ☐

If you have/had one or more than one job(s) after graduation, how many months (approximately) did you spend in each job?

First Job	Second Job	Third Job	Fourth Job	Fifth Job
.....months	.....months	.....months	.....months	.....months

How long did it take for you to find your first job? (Tick One)

1. Less Than 1 Month ☐ 2. 1–3 Months ☐ 3. 3–6 Months ☐
4. 6–12 Months ☐ 5. More Than 12 Months ☐

Did you feel that your TVET certificate gave you an advantage in finding gainful employment compared with other school dropouts? (Tick One)

Yes ☐ No ☐

If 'Yes' to Question 34 above, how helpful were the following aspects of your training in performing your day–to–day tasks at your current job? (Tick One for Each Aspect)

	1 Not Very Helpful	2 Not Helpful	3 Average	4 Helpful	5 Very Helpful
1. Theoretical Component	☐	☐	☐	☐	☐
2. Practical Component	☐	☐	☐	☐	☐
3. On–The–Job Training	☐	☐	☐	☐	☐
4. Development of Soft Skills (e.g. teamwork, leadership, etc.)	☐	☐	☐	☐	☐

Please state whether the following statement related to your current job is True or False.

	1 True	2 False
1. My performance and contribution at my current job is valued and appreciated by my employer/manager.	☐	☐
2. My job is giving me a sense of pride and satisfaction.	☐	☐
3. I perform better at tasks than colleagues who did not receive training.	☐	☐
4. My skills and knowledge is under–utilized at my current job.	☐	☐
5. I don't have the necessary skills and knowledge to do my current job.	☐	☐
6. I see myself in the same occupation after ten years.	☐	☐
7. I feel that I have chosen the wrong career path.	☐	☐

What is your current average monthly income? (Tick One)

1. Less Than Nu. 5,000 ☐ 2. Nu. 5,000 – Nu. 10,000 ☐ 3. Nu. 10,000 – Nu. 15,000 ☐
4. Nu. 15,000 – Nu. 20,000 ☐ 5. More Than Nu. 20,000 ☐

How sufficient is your current average monthly income? (Tick One)

1	2	3	4	5
Very Insufficient	Insufficient	Adequate	Sufficient	Very sufficient
☐	☐	☐	☐	☐

If 'Unemployed', how long have your remained unemployed? (In Months)

Number of Months: .....

What is your main reason for remaining unemployed? (Tick One)

1. Further Studies ☐ 2. Lack of Job Opportunities ☐ 3. Health–related Reasons ☐

4. Marriage/Reproductive Roles ☐ 5. Dependents/Elderly Care ☐ 5. Could not get Preferred Job ☐

6. Others ☐ please specify:

Looking back, if you were given an option to go back and re–do your training, would you choose to undertake the same course that you graduated from? (Tick One)

Yes ☐ No ☐

State your reasons why?

1.....

.....

2.....

.....

3.....

.....

Would you recommend your course to your friends and family? (Tick One)

Yes ☐ No ☐

Looking back, if you were given an option to go back and re–do your training, would you choose the same RTP? (Tick One)

Yes ☐ No ☐

State your reasons why?

1.....

.....

2.....

.....

3.....

.....

Would you recommend your RTP to your friends and family? (Tick One)

Yes ☐ No ☐

How often do you do the following? (Tick One for Each)

	1 **Never**	**2** **Less Than 1 Hour/Day**	**3** **1–3 Hours/ Day**	**4** **3–6 Hours/ Day**	**5** **More Than 6 Hours/Day**
1. Listen to the Radio	☐	☐	☐	☐	☐
2. Watch television, movies, etc.	☐	☐	☐	☐	☐
3. Read newspapers, books, etc.	☐	☐	☐	☐	☐
4. Browse the internet	☐	☐	☐	☐	☐
5. Use your phone, mobiles, etc.	☐	☐	☐	☐	☐

Imagine a five–step ladder where, on the first step are 'Poor' people and, on the fifth step are 'Rich' people. On which step do you see yourself at present? (Tick One)

1	2	3	4	5
Poor	Moderately Poor	Average	Moderately Rich	Rich
☐	☐	☐	☐	☐

Imagine the same five–step ladder as above where, on the first step are 'Poor' people and, on the fifth step are 'Rich' people. On which step do you see yourself in 5 years time? (Tick One)

1	2	3	4	5
Poor	Moderately Poor	Average	Moderately Rich	Rich
☐	☐	☐	☐	☐

Are you differently–abled i.e. mentally or physically (Tick One)

Yes ☐ No ☐

Annexure 3: TVET Trainers Survey

TECHNICAL AND VOCATIONAL EDUCATION TRAINING (TVET) BHUTAN

TRAINERS SURVEY 2015

Conducted by:
Dodhter–Rigtsel Info–Research Centre (DRIC)

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Ministry of Labour and Human Resources (MOLHR)
Royal Government of Bhutan (RGOB)

This survey is part of the project: Proposal 120260–01: TA–8712 BHU: Institutional Strengthening for Skills Development–Social Research and Communications Firm (46175–001) funded by the Asian Development Bank (Manila, Philippines) and implemented by the Ministry of Labour & Human Resources, Royal Government of Bhutan (Thimphu, Bhutan). The objective of the survey is to assess the: 1) aspirations of current TVET trainees; 2) experiences of TVET graduates; and 3) the attitudes of TVET trainers and teachers in Bhutan's public and private Technical Training Institutes (TTI). The findings, analysis and recommendations form part of a national–level TVET Blueprint and a TVET advocacy and promotion campaign (also funded by the ADB) for Bhutan.

INSTRUCTIONS
Welcome to the Technical Vocational and Education Training (TVET) Survey 2015.
Please complete the attached survey clearly, concisely and to the best of your knowledge.
Your responses must be factual in order to produce correct statistics.
Your responses are voluntary; however we encourage you to complete this survey fully.
Use capital letters in your responses where applicable.
Read each questions thoroughly and respond to them carefully.
Avoid erasing, scratching, writing over and responding more than once to each question.
There is no right or wrong answers, therefore kindly complete your survey independently.
The enumerators will assist you throughout this survey.

CONFIDENTIALITY
This survey will be used specifically by the ADB and MOLHR to plan for higher quality TVET training in Bhutan's public, private and community sectors.
The ADB, MOLHR and consulting firm DRIC, regard the confidentiality of survey data to be of utmost importance.
Your responses are completely anonymous.
Your personal and contact information offered voluntarily in this survey are combined with others and summarized so that no personally identifiable information is revealed.
The dataset compiled from this survey will not be publicized or shared, in part or as a whole, with third parties.

INQUIRIES
If you have any questions about the survey, please contact: Dodhter–Rigtsel Info–Research Centre, Post Box No. 1717, Chang Lam, Thimphu, Bhutan; or direct any inquiries to e–mail: dhoterrigtsel2015@gmail.com

SURVEY FOR TRAINERS
This survey is to be completed by TVET trainers

Full name:

Date of birth (DD/MM/YY):

I.D number (Citizenship/Resident Permit):

Gender (Tick One)

Male ☐ Female ☐

Nationality (Tick One)

Bhutanese ☐ Non–Bhutanese ☐ (Specify Country)

Phone/mobile number:

E–mail:

Name of Registered Training Provider (employer)

Date of joining Registered Training Provider (DD/MM/YY)

Nature of employment. (Tick One)

1. Regular/Permanent ☐ 2. Casual ☐ 3. Contractual ☐
4. Self–employed ☐ 5. Others ☐ please specify:

What is your highest level of academic qualification? (Tick One)

1. No Formal Education ☐ 2. Primary ☐ 3. Lower Secondary ☐
4. Higher Secondary ☐ 5. Degree ☐ 6. Masters + ☐
7. Others ☐ Please Specify:

What is your highest level of professional qualification? (Tick One)

1. Certificate ☐ 2. Diploma ☐ 3. Bachelors ☐
4. Masters ☐ 5. Doctorate ☐ 6. Others ☐

If given a realistic opportunity, would you be willing to upgrade your qualifications? (Tick One)

Yes ☐ No ☐

Which one of the following was your main motivation for becoming a TVET trainer? (Tick One)

1. Interest in the Field ☐ 2. Interest in Teaching Profession ☐

3. Family Reasons ☐ 4. Other reasons ☐ please specify:

Teaching/training experience (in number of years)

.....years

Is this your first teaching job? (Tick One)

Yes ☐ No ☐

If this is not your first job, how many jobs have you held before? (Tick One)

1. Two ☐ 2. Three ☐ 3. Four ☐

4. Five ☐ 5. More Than Five ☐

Were these jobs all teaching/training related? (Tick One)

Yes ☐ No ☐

If 'no' to question 18, what other kinds of jobs have you undertaken?

1.....

2.....

3.....

What is your current position at the RTP?

.....

What course/training do you teach/train primarily?

.....

List a few other courses that you teach. If this is not applicable to you, skip to question 16.

1.....

2.....

3.....

If you have been assigned some other roles by the RTP please choose the following:

1. Games/Cultural In–charge ☐ 2. Hostel Warden ☐ 3. Library In–charge ☐

4. Store–keeper ☐ 5. Administrator ☐ 6. Others ☐ Please Specify:

After becoming a trainer/teacher, have you attended other training and professional development programs? (Tick One)

Yes ☐ No ☐

If 'yes' to Question 16 above, list 2–3 of these programs with their estimated duration (in weeks) and the country of training.

1.....

Duration Location

.....Weeks In–country ☐ Ex–country ☐

2.....

Duration Location

.....Weeks In–country ☐ Ex–country ☐

1.....

Duration Location

..... Weeks In–country ☐ Ex–country ☐

If you have attended further training and professional development programs, please specify how helpful these were in terms of the following.

	1 Not Very Helpful	2 Not Helpful	3 Partially Helpful	4 Helpful	5 Very Helpful
1. Improving Teaching Ability	☐	☐	☐	☐	☐
2. Improving Practical Class Management	☐	☐	☐	☐	☐
3. Exposure to International Best Practices	☐	☐	☐	☐	☐
4. Improving Assessment of Trainees	☐	☐	☐	☐	☐
5. Overall Personal Development	☐	☐	☐	☐	☐

If you have not attended any training or professional development programs, do you think that this lack of opportunity has hindered your development and capacity as a trainer/teacher? (Tick One)

Yes ☐ No ☐

Indicate the number of Training–of–Trainers (TOT) programs conducted by Training and Professional Services Division (TPSD) that you have attended. (Tick One)

0	1	2	3	4+
☐	☐	☐	☐	☐

If you have attended one or more of the TOT programs, how helpful were the following TOT programs in enhancing your capacity and ability as a Trainer? Rate the ones that you have attended only. (Tick One for Each)

	1 Not Very Helpful	2 Not Helpful	3 Partially Helpful	4 Helpful	5 Very Helpful
1. Skills Demonstration	☐	☐	☐	☐	☐
2. Knowledge	☐	☐	☐	☐	☐
3. Visualization	☐	☐	☐	☐	☐
4. Evaluation	☐	☐	☐	☐	☐
5. Supervision of Instruction	☐	☐	☐	☐	☐
6. Assessment	☐	☐	☐	☐	☐

Do you think that an initiative like 'industrial attachment for trainers' will improve your capacity in terms of skills and knowledge? (Tick One)

Yes ☐ No ☐

How do you keep yourself abreast of the technological and competency changes in your industry? (Tick One)

1. Interaction with Industry Personnel ☐ 2. Industry Visits ☐ 3. Internet ☐

4. Follow–ups on On–The–Job Trainings ☐ 5. Peer Learning ☐ 6. Others ☐ Please Specify:

Assess your own competency in the following skills and areas. (Tick One for Each)

	1 Highly Incompetent	2 Incompetent	3 Average	4 Competent	5 Highly Competent
1. Subject knowledge	☐	☐	☐	☐	☐
2. Practical training	☐	☐	☐	☐	☐
3. Delivery methods	☐	☐	☐	☐	☐
4. Preparation of lesson plans	☐	☐	☐	☐	☐
5. Designing instructional content	☐	☐	☐	☐	☐
6. Designing instructional materials	☐	☐	☐	☐	☐
7. Designing instructional layout	☐	☐	☐	☐	☐
8. Identifying assessment criteria	☐	☐	☐	☐	☐
9. Defining assessment questions	☐	☐	☐	☐	☐
10. Providing feedback to trainees	☐	☐	☐	☐	☐

Assess some of your own soft skills in the following areas. (Tick One for Each)

	1 Very Poor	2 Poor	3 Average	4 Good	5 Very Good
1. Creativity	☐	☐	☐	☐	☐
2. Innovativeness	☐	☐	☐	☐	☐
3. Interpersonal relationships	☐	☐	☐	☐	☐
4. Communication skills	☐	☐	☐	☐	☐
5. Leadership skills	☐	☐	☐	☐	☐
6. Problem–solving skills	☐	☐	☐	☐	☐
7. Team–building	☐	☐	☐	☐	☐
8. Analytical skills	☐	☐	☐	☐	☐
9. Commitment	☐	☐	☐	☐	☐
10. Attitude	☐	☐	☐	☐	☐

List some training and development programs that you think are required, and will help improve your capacity and skills as a trainer/teacher (Mention them in the order of priority).

1.....

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2.....

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3.....

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Rate the curriculum that you teach/train at the RTP (Tick One for Each)

	1 Very Poor	2 Poor	3 Average	4 Good	5 Very Good
1. Relevance to trainees' learning and growth	☐	☐	☐	☐	☐
2. Relevance to market trends and demands	☐	☐	☐	☐	☐
3. Comprehensiveness and diversity of subjects	☐	☐	☐	☐	☐
4. Sufficiency of academic and training tools	☐	☐	☐	☐	☐
5. Balance between theory and practical	☐	☐	☐	☐	☐
6. Sufficiency of time to cover all areas	☐	☐	☐	☐	☐

Rate the facilities at the RTP where you train/teach (Tick One for Each)

	1 Very Poor	2 Poor	3 Average	4 Good	5 Very Good
1. Quality of classrooms	☐	☐	☐	☐	☐
2. Quality of practical training areas	☐	☐	☐	☐	☐
3. Training tools and equipment	☐	☐	☐	☐	☐
4. Computer laboratories	☐	☐	☐	☐	☐
5. Library	☐	☐	☐	☐	☐
6. Accommodation, living and dining facilities	☐	☐	☐	☐	☐
7. Recreational facilities	☐	☐	☐	☐	☐
8. Transport facilities	☐	☐	☐	☐	☐

If you have any suggestions to improve the delivery of training and other aspects of your RTP (those that not included in Question 33, 34, 35 and 36 above) please list below:

1.....

.....

.....

2.....

.....

.....

3.....

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In your opinion, what are some of the changes that you would propose to further improve the management of your RTP? (List in order of priority).

1.....

.....

.....

2.....

.....

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3.....

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Which of the following best motivates you as a TVET trainer/teacher? (Tick One)

1. Financial Incentives ☐ 2. Career Advancement ☐ 3. Development Opportunities ☐

4. Recognition/Prestige ☐ 5. Family Considerations ☐ 5. Others ☐ please specify:

On a scale of 1 to 5 where 1 = Very Unsatisfied to 5 = Very Satisfied, how satisfied are you in your current position as a TVET trainer/teacher? (Tick One for Each)

1	2	3	4	5
Very Unsatisfied	Unsatisfied	Average	Satisfied	Very Satisfied
☐	☐	☐	☐	☐

List 2–3 of the biggest challenges that TVET trainers/teachers face.

1.....

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2.....

.....

3.....

.....

What is your current average monthly income? (Tick One)

1. Less Than Nu. 10,000 ☐ 2. Nu. 10,000 – Nu. 15,000 ☐ 3. Nu. 15,000 – Nu. 20,000 ☐

4. Nu. 20,000 – Nu. 25,000 ☐ 5. More Than Nu. 25,000 ☐

How sufficient is your current average monthly income? (Tick One)

1	2	3	4	5
Very Insufficient	Insufficient	Adequate	Sufficient	Very sufficient
☐	☐	☐	☐	☐

How often do you do the following? (Tick One for Each)

	1 Never	2 Less Than 1 Hour /Day	3 1–3 Hours/Day	4 3–6 Hours/Day	5 More Than 6 Hours/Day
1. Listen to the Radio	☐	☐	☐	☐	☐
2. Watch television, movies, etc.	☐	☐	☐	☐	☐
3. Read newspapers, books, etc.	☐	☐	☐	☐	☐
4. Browse the internet	☐	☐	☐	☐	☐
5. Use your phone, mobiles, etc.	☐	☐	☐	☐	☐

Imagine a five–step ladder where, on the first step are the 'Worst' trainers and, on the fifth step are the 'Best' trainers. On which step did you see yourself 5 years ago? (Tick One)

1	2	3	4	5
Worst	Inferior	Average	Superior	Best
☐	☐	☐	☐	☐

Imagine the same five–step ladder as above where, on the first step are the 'Worst' trainers and, on the fifth step are the 'Best' trainers. On which step do you see yourself at present? (Tick One)

1	2	3	4	5
Worst	Inferior	Average	Superior	Best
☐	☐	☐	☐	☐

Imagine the same five–step ladder as above where, on the first step are the 'Worst' trainers and, on the fifth step are the 'Best' trainers. On which step do you see yourself in 5 years time? (Tick One)

1	2	3	4	5
Worst	Inferior	Average	Superior	Best
☐	☐	☐	☐	☐

Are you differently–abled i.e. mentally or physically (Tick One)

Yes ☐ No ☐

Annexure 4: Survey List of Public and Private Registered Training Providers (RTP)

No.	Registered Training Provider[35]	Location	Sector
1	Bhutan International School for Hospitality & Tourism	Thimphu	Private
2	Bhutan Institute for Information Technology & Management	Paro	Private
3	Bhutan Institute for Training and Development	Thimphu	Private
4	Bongde Institute of Hospitality and Tourism	Paro	Private
5	Central Management & Training Division (Bhutan Power Corporation)	Thimphu	Corporate
6	Choki Traditional Arts School	Thimphu	Private
7	Chumey Technical Training Institute	Bumthang	Public
8	Computer & Management Institute	Thimphu	Private
9	Druk Tshemzo Training Institute	Thimphu	Private
10	Dzongkha Development Training Institute	Thimphu	Private
11	Himalaya Institute for Information Technology	Sarpang	Private
12	Institute for Management Studies	Thimphu	Private
13	Jachung Security Services	Thimphu	Private
14	Kawajangsa National Institute for Zorig Chusum	Thimphu	Public
15	Kheyrig Institute of Accounts & Management	Thimphu	Private
16	Khuruthang Institute of Electrical Engineering	Punakha	Public
17	Kuenjung Technical Training Institute	Thimphu	Private
18	Manju Shiri Institute of International Language & Cultural Studies	Thimphu	Private
19	Rangjung Technical Training Institute	Trashigang	Public
20	Rigsum Institute for Technical Education & Management Studies	Thimphu	Private
21	Royal Institute for Tourism & Hospitality	Thimphu	Public
22	Samthang Technical Training Institute	Wangdue	Public
23	Serzhong Technical Training Institute	Sarpang	Public
24	Tenzin Hair & Beauty Academy	Thimphu	Private
25	Trashiyangtze Technical Training Institute	Trashi Yangtse	Public
26	Wood Craft Centre Limited	Thimphu	Public
27	Yarab Institute for Tourism and Hospitality Management	Thimphu	Private

Endnotes

[1] Constitution of The Kingdom of Bhutan 2008.

[2] World Bank 2010.

[3] NCVER 2003.

[4] Three Decades of Development Partnership: RGOB and ADB 2014.

[5] Unless specified, the terms Technical Training Institutes (TTIs), Registered Training Providers (RTPs), and institutes are used synonymously and interchangeably in this report.

[6] Statistical Year Book 2015.

[7] Poverty Analysis Report 2012.

[8] Human Development Report, 2015.

[9] The World Bank Classification.

[10] Labor Force Survey 2014.

[11] TVET Policy 2013.

[12] National HRD Advisory 2015.

[13] Profile of TVET in Bhutan (Draft), p. 16.

[14] Royal Government refers to the Royal Government of Bhutan. Unless specified, this term is used synonymously and interchangeably with the terms "RGOB" or "government" in this report.

[15] Annexure 4

[16] Annexures 1–3.

[17] State of the Nation Address by the Prime Minister of Bhutan 2014.

[18] Labor Force Survey 2014.

[19] Kapsos, S. 2005/12.

[20] Khan, A. 2001.

[21] Essel, Q.O. et al. 2014.

[22] Bhutan Poverty Assessment 2014.

[23] Public Technical Training Institutes include Rangjung, Chumi, Samthang, Khuruthang, Serzhong and 2 institutes of Zorig Chusum under MOLHR and Wood Craft Center.

[24] Labor Force Survey 2014.

[25] Centre for Educational Research and Innovation (CERI) 2009.

[26] European Center for Development of Vocational Training (Cedefop) 2009.

[27] 3rd HRD Advisory Series 2015.

[28] Axmann, M. et al. 2015.

[29] ILO 2010.

[30] Dunning, D. et al. 2004.

[31] Calculated at 2015 US$/Ngultrum exchange rate of US$ 1 = Nu. 69.

[32] 88 registered technical training institutes less the 13 public institutes.

[33] National Council Review of National Employment Policy, Program and Strategies 2015.

[34] http://feweek.co.uk/2013/01/04/why–its–time–for–a–vocational–pedagogy/

[35] TVET Management Information System, <http://202.144.155.104/statistics/viewinstitute>

Annexure 5: References

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