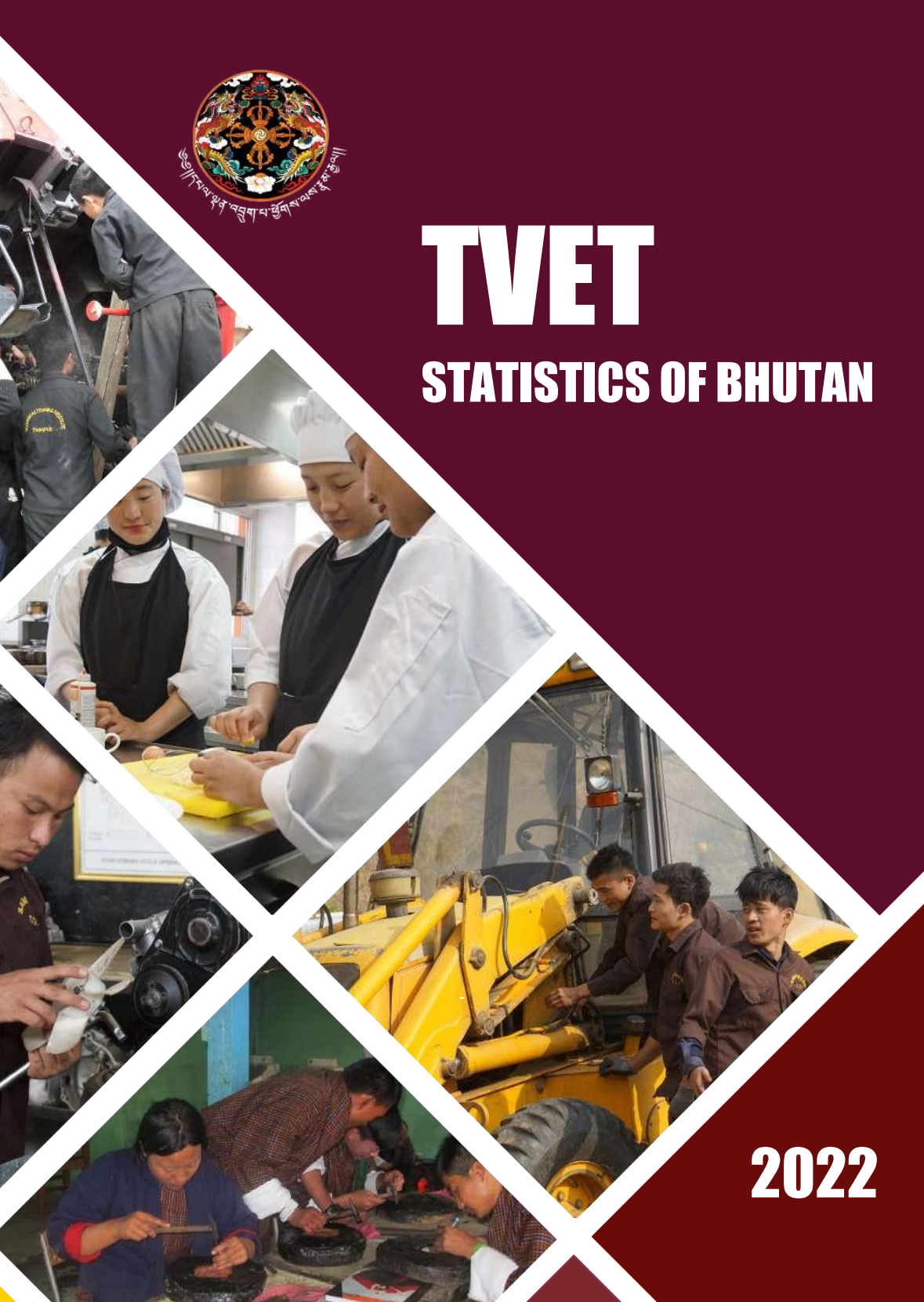




# TVET

## STATISTICS OF BHUTAN



2022



"We must realize that knowledge and skills if not reviewed, will soon become obsolete. We must inculcate in us a culture of lifelong learning... We need to be prepared for the future so that every one of us is equipped with the skills, competencies and experience to succeed and compete in the world. We must give utmost priority to skill, up-skill, and re-skill our people to make them world-ready."

**His Majesty's National Day address 2021**





# **TVET Statistics of Bhutan 2022**

**Workforce Planning and Information Division  
Department of Workforce Planning and Skills Development  
Ministry of Education and Skills Development**

**[www.education.gov.bt/dwpsd](http://www.education.gov.bt/dwpsd)  
[www.blmis.gov.bt/tvet](http://www.blmis.gov.bt/tvet)**

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## Acronym

BQPCA	Bhutan Qualification & Professional Certification Authority
BQF	Bhutan Qualification Framework
BVQF	Bhutan Vocational Qualification Framework
CBT	Competency Based Training
CCD	Critical Capability Development
CST	Critical Skills Training
CZC	College of Zorig Chusum
DWPSD	Department of Workforce Planning and Skills Development
DOL	Department of Labour
DOS	Department of Occupational Standards
DTP	Dual Training Program
ECPF	Education Consultancy and Placement Firm
FY	Financial Year
FYP	Five-Year Plan
HE	Higher Education
HRD	Human Resources Development
IZC	Institute of Zorig Chusum
JWPTI	Jigme Wangchuck Power Training Institute
LFS	Labour Force Survey
MIS	Management Information System
MoESD	Ministry of Education and Skills Development
NC	National Certificate
ND	National Diploma
NIZC	National Institute for Zorig Chusum
Nu.	Ngultrum
OJT	On-the-Job-Training
QMS	Quality Management System
RDTC	Rural Development Training Centre
RGoB	Royal Government of Bhutan
RPL	Recognition of Prior Learning
SDP	Skills Development Program
SSDP	Special Skills Development Program
STEP-UP	Skills Training and Education Up-gradation Project
STP	Skills Training Program
TCPF	Training Consultancy and Placement Firm
TOT	Training of Trainer
TTI	Technical Training Institute
TTI-C	Technical Training Institute -Chumey
TTI-K	Technical Training Institute -Khuruthang
TTI-R	Technical Training Institute -Rangjung
TTI-S	Technical Training Institute -Samthang
TTI-T	Technical Training Institute -Thimphu
TTTRC	Technical Trainers Training and Resources Center
TVET	Technical and Vocational Education and Training
TVET QC	TVET Quality Council
VSDP	Village Skills Development Program

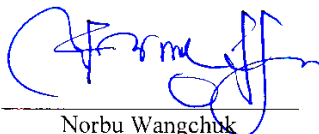
# FOREWORD

It gives me great pleasure to present the TVET Statistics of Bhutan 2022. Technical and Vocational Education and Training (TVET) is an important pillar of Bhutan's education system, and it plays a crucial role in providing skills and knowledge to our youth to prepare them for the job market and to enhance the productivity of workforce engaged in different economic areas.

The TVET Statistics of Bhutan 2022 report provides a comprehensive overview of the TVET sector in Bhutan, including key data on TVET providers, enrollment, employment outcomes, and other related indicators. The report highlights data and intelligence of the different TVET programs and interventions made in the year 2022. It also sheds light on the progress of the TVET reform plan in terms of people, place, process, and product transformation.

I would like to extend my sincere gratitude to all Institutions under the administration of our Department and all the stakeholders involved in the TVET sector for their unwavering support and commitment towards promoting TVET in Bhutan. I hope that this report will serve as a valuable resource for policymakers, researchers, and other stakeholders to understand the TVET landscape in Bhutan and make informed decisions to further improve the sector.

I encourage everyone to read this report and join us in our efforts to build a skilled and productive workforce in Bhutan.



---

Norbu Wangchuk  
Director

# INTRODUCTION

## TVET Statistics 2022

The collection and analysis of data on Technical and Vocational Education and Training (TVET) is a critical component of the TVET reform process led by the Department of Workforce Planning and Skills Development (DWPSD). The Annual TVET statistical reporting process was initiated by the then Department of Technical Education (DTE) in 2020 as a means of improving data management and governance within the TVET sector and to adopt a data-driven approach in any TVET reform processes. Since then, two statistical reports have been issued. The report is used as a means to monitor the performance and effectiveness of TVET programs and to identify areas for improvement. The development of TVET statistical reports reflects a growing recognition of the importance of data-driven decision-making in the field of TVET and a commitment to improving the quality and relevance of the TVET system in the country.

Over the years, there has been a growing demand for reliable and comprehensive data on TVET. To this end, during the 12th FYP period, under the ADB-funded STEP-UP project and with technical assistance from the World Bank, work was initiated to develop the TVET Management Information System (TVET-MIS). The TVET-MIS aims to collect, store, analyse, and disseminate data and information on various aspects of TVET within the country. The TVET-MIS also aims to provide accurate and timely data on TVET program performance and outcomes, allowing key players within the TVET system, government policymakers, administrators, and other TVET stakeholders to monitor progress and evaluate the effectiveness of different interventions. A well-functioning TVET-MIS can help promote transparency and accountability in the TVET system by providing stakeholders with access to accurate and reliable data. Furthermore, the TVET-MIS can play an important role in improving the quality and relevance of TVET programs and ensuring that they are effective in creating an impact.

The TVET-MIS is one of the key sources of data reflected in this report. A TVET Tracer for the 2021 graduate cohort from all the institutions under the direct administration of the DWPSD was carried out in March 2023, the results of which are reflected in this report, especially in the quality and relevancy section.

## Purpose of the Report

The purpose of the TVET statistical report is to provide relevant data and information for TVET planning, efficient and transparent coordination and management, appropriate investment decisions, and effective monitoring and evaluation of programs and projects. It serves as a source of comprehensive, up-to-date, and usable TVET statistics that can be used by key players within the TVET system, including government policymakers, administrators, and other TVET stakeholders to monitor progress and evaluate the effectiveness of different interventions. The report reflects a growing recognition of the importance of data-driven decision-making in the field of TVET and a commitment to improving the quality and relevance of the TVET system in the country.

This report particularly provides TVET data and information for all program and activities implemented in the year 2022

## Report Structure

The report has been kept consistent with the TVET Statistics of Bhutan, Issue 2020 and Issue 2021. This report includes TVET statistics organized into five sections: 1. TVET Context indicators; 2. TVET Access Indicators; 3. TVET Quality Indicators; 4. TVET Relevance Indicators; and 5. TVET Governance Indicators.

The **TVET Context Indicators** comprise data on labour market indicators primarily from the 2022 Labour Force Survey, with a specific focus on individuals with TVET qualifications. It also includes information on the youth population and projections of Class XII graduates, as well as information on the import of foreign workers into the country.

The **TVET Access Indicators** provide statistics on the characteristics of TVET institutions and programs, as well as access to and participation in TVET institutions under the direct administration of DWPSD. To ensure gender inclusion, there is a focus on sex-disaggregated enrollment statistics. This section also covers access to and participation in other skills development programs provided through the Skills Training Program (STP), Critical Skills Training (CST) program, Critical Capability Development (CCD) program, and Community Skills Development programs, such as

Village Skills Development Program and Special Skills Development Program. By providing data on access and participation in these programs, the TVET Access Indicator helps to ensure that policymakers and stakeholders have a comprehensive understanding of the skills development landscape in the country. This can help identify areas where additional investment may be necessary and ensure that skills development programs meet the needs of the economy and the labour market.

The **TVET Quality Indicators** provide statistics on registered trainers, QMS, graduate feedback on training and infrastructure, and national certification. Additionally, it includes simple profiling of training staff and statistics from other programs relevant to improving TVET quality. By providing this information, the TVET Quality Indicators help policymakers and stakeholders understand the capacity and qualifications of TVET personnel and the effectiveness of quality assurance mechanisms. This data can inform decisions related to the recruitment and training of trainers and assessors, the accreditation of TVET institutions, and the development of certification standards. Ultimately, the TVET Quality Indicators aim to ensure that the TVET system produces graduates with the skills and knowledge required by the economy and the labour market.

The **TVET Relevance Indicators** provide detailed information on the tracer outcomes of the survey conducted in March 2023 for the 2021 graduate cohort from DWPSD-administered institutes. The survey aims to assess the relevance of TVET programs by tracking the employment status and earnings of graduates. By providing data on graduates' employment outcomes, the TVET Relevance Indicators help to evaluate the alignment between TVET programs and labour market needs. Policymakers and stakeholders can use this information to identify areas where program curricula may need to be revised or where new programs may need to be developed to meet changing labour market demands. Ultimately, the TVET Relevance Indicators aim to ensure that TVET programs prepare graduates with the skills and knowledge needed to succeed in the workforce.

The **TVET Governance Indicators** are concerned with TVET governance, management, and financing. Governance indicators should ideally indicate progress in implementing TVET policies, planning, coordination, and outcomes, while financing indicators should provide a clear picture of financial and other resources available for TVET as well as the per-capita cost of TVET courses. Unfortunately, the data needed to create all of these indicators was not readily available. As a result, the section's scope was

limited to management staff profiling and reporting of some information on training and TVET financing.

### Sources of data

Some of the key sources of data for the development of this report are:

1. TVET-MIS,
2. TVET Tracer Survey 2023 for the graduate 2021 cohort,
3. Administrative data from the DWPSD,
4. Administrative data from the DWPSD administered institutes,
5. Administrative data from the TVET Quality Council,
6. Labour Force Survey PUF data 2021 and 2022,
7. HR data from the HR Division, and
8. Budget data from the Finance Section.

### Limitations of the Report

The focus of this report is to provide data and statistical information on TVET plans, programs, and interventions for the year 2022. The report aims to provide a comprehensive overview of the current state of TVET and the progress that has been made towards achieving key goals and objectives. However, the report does not provide any specific recommendations on the course of action that needs to be taken.

Instead, it is up to the respective TVET implementing agencies and stakeholders to draw inferences from the results of the report and use the information to guide their decision-making processes. The report provides valuable insights into the state of TVET and the effectiveness of current programs and interventions, which can help inform future planning and resource allocation. By presenting accurate and reliable data on TVET, this report can support evidence-based decision making and help ensure that TVET programs are effective, efficient, and responsive to the needs of learners and the labour market.

Some of the key limitations of the report are:

- On the TVET Access and Governance Indicators, while the report provides comprehensive statistics on the DWPSD administered institutes, it does not do so for other public and private institutions.

Although the TVET-MIS has been put in place, not all registered training providers in the country make use it to announce training available through them. Therefore, there may be issues of data leakage, underreporting, or missing information. Furthermore, data errors such as duplication, data entry errors, and missing data were issues with the data generated from the TVET-MIS.

- The report seeks to provide data and statistics pertaining to the year 2022. Therefore, this report specifically provides statistics from January to December 2022. However, in some cases, administrative data is managed on a financial year basis, which posed a difficulty in the generation of relevant data and results. Furthermore, the latest data at the time of drafting this report has been used for data pertaining to human resources (staff and trainers).
- The foreign workers' data is available only from June 2022 due to the revamp of the LabourNet system. As a result, foreign workers' data, under the new system, was not available from January to May 2022 on the system. Therefore, the report provides data from June 2022 till April 2023.
- On the TVET Relevancy Indicator, the main source of information was the TVET Tracer Survey conducted in 2023 for the 2021 graduate cohort. While detailed information is provided on the employment outcome from the trainees' point of view, the report fails to provide any feedback from the employers' side. In the future, this section can be strengthened by providing employers' feedback on the TVET graduates working with them. In addition, the feedback provided by graduates on the institute's facilities and infrastructure will be based on the time they were in the institute. Between 2021 and 2023, many augmentation, infrastructure renovation, and remodeling works would have been carried out.
- The report also provides information on TVET studies facilitated by the TCPFs outside the country. However, there are those who pursue TVET studies on their own without the use of the TCPF. Therefore, the ex-country TVET study may not provide exact information on the number of those undertaking TVET studies outside the country.

## TVET-MIS System

[www.blmis.gov.bt/tvet](http://www.blmis.gov.bt/tvet)

As part of the Bhutan Labour Market Information System (BLMIS), the TVET-MIS has been in place since 2021 with support from ADB and the World Bank. The system is designed to collect, store, and disseminate data and information about various aspects of TVET in a country. The TVET-MIS seeks to provide accurate and timely data on TVET program performance and outcomes to key players within the TVET system, including government policymakers, administrators, and other TVET stakeholders. A well-functioning TVET-MIS can help promote transparency and accountability in the TVET system by providing stakeholders with access to accurate and reliable data. This can play an important role in improving the quality and relevance of TVET programs and ensuring that they are effective in creating an impact.

The development of TVET-MIS is an important step towards improving the TVET system in a country. It can provide decision-makers with the data they need to make informed decisions about TVET policies and programs. TVET-MIS can also help to identify gaps in the system and areas that need improvement. By collecting data on TVET program performance and outcomes, TVET-MIS can help to ensure that TVET programs are meeting the needs of the labour market and are relevant to the needs of the economy.

TVET-MIS can also play an important role in improving the quality and relevance of TVET programs. By collecting data on TVET program performance and outcomes, TVET-MIS can help identify areas where programs are not meeting their objectives or are not producing the desired outcomes. This information can then be used to make adjustments to TVET programs and ensure that they are effective in creating an impact. The development of TVET-MIS is a crucial step in promoting evidence-based decision-making in the TVET sector and in ensuring that TVET programs are meeting the needs of the economy and the labour market. As such, the data and information on the TVET-MIS were crucial for the development of the TVET Statistics 2022.

The DWPSD is currently working on the enhancement of the TVET-MIS with support from the World Bank. While the system has been put in place to provide accurate and real-time data and information, it does have its issues. Some of the issues are related to data inconsistency, incorrect entries, and missing information, which impact the quality of the data. The data generated from the system has been cleaned to generate the information that has been used for this report.



## Background on DWPSD

Skills and craftsmanship have been the foundation of Bhutan's socio-economic development for many centuries. After the arrival of Zhabdrung Ngawang Namgyal in Bhutan, traditional skills development was given more impetus and importance, and provided through on-the-job training and apprenticeships. All the traditional arts and crafts were formalized through the institution of Zorig Chusum and flourished during that time. The dzongs, monasteries, and many artefacts seen today are manifestations of the strong skills and workmanship handed down from generation to generation in the country.

However, with the advent of modernization, the importance of contemporary TVET in the country was realized much earlier. With the commencement of the first Five-Year planning process in the 1960s, the first TVET institute, Kharbandi Technical School, was established in 1964, which was later renamed as the Royal Technical Institute (RTI). The main objective of the institute was to train Bhutanese youth at the certificate level in four trades: automobile, general mechanic, building construction, and electrical engineering. A decade later, in 1974, the Royal Bhutan Polytechnic (RBP) was established in Dewathang, Samdrup Jongkhar with the aim of higher-level technical training in trades such as civil engineering, electrical engineering, and surveying. Until the late 1990s, TVET was managed by a unit/cell under the Ministry of Social Services (later the Ministry of Education).

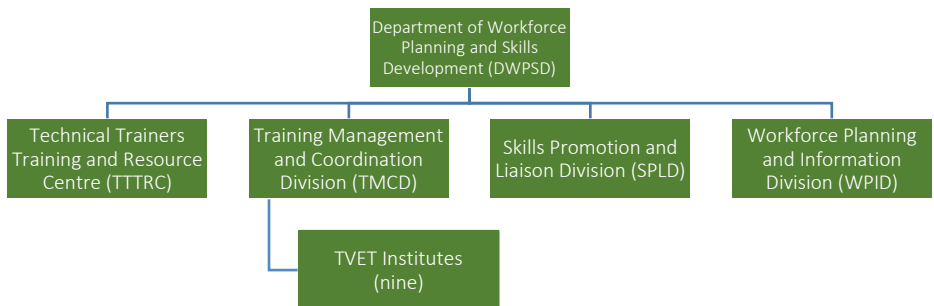
In May 1999, the TVET function was delinked from the Ministry of Education, and the National Technical Training Authority (NTTA) was established with a mandate to plan, coordinate, and implement TVET plans and programs, and to assume the regulatory role to ensure quality in TVET. Under NTTA, the plans for the construction of the existing six TTIs commenced under the ADB-funded Basic Skills Development Project. In 2003, the erstwhile Ministry of Labour and Human Resources (MoLHR) was established with the objective of tackling the issue of growing unemployment among youth. As such, the NTTA was subsumed under the new Ministry, and the roles and functions of the NTTA were bifurcated into two Departments - the Department of Human Resources (DHR) and the Bhutan Vocational Qualification Authority (BVQA), later renamed the Department of Occupational Standards (DOS).

In April 2017, understanding the larger role of TVET as a driver of economic growth and enhancing employment opportunities, and in keeping with the OD recommendation, the Department of Technical Education was formed

with three divisions, namely the TVET Professional Support Division, the TVET Institute Support Division, and the TVET Promotion Division. The human resource planning and the in-service HRD functions were then transferred to the Department of Employment and Human Resources, which was later bifurcated into the Department of National HRD and the Department of Employment and Entrepreneurship in October 2021.

In November 2022, keeping in line with Civil Service Reform initiatives, the Department of Workforce Planning and Skills Development (DWPSD) was established, subsuming the Department of Technical Education and the Department of National Human Resource Development under it, with the national HRD planning and coordination functions being taken over by the Cabinet. The community skilling function under the Non-Formal Education has also been subsumed under the new Department. The Department is administratively placed under the Ministry of Education and Skills Development (MoESD).

The Department is supported by the following four divisions:



While the DWPSD works with all the private and public TVET establishments in the country, the Department is directly responsible for overseeing the growth and development of the following nine institutions:

1. Technical Training Institute, Chumey, Bumthang (TTI-C)
2. Technical Training Institute, Khuruthang, Punakha (TTI-K)
3. Technical Training Institute, Rangjung, Trashigang (TTI-R)
4. Technical Training Institute, Thimphu (TTI-T)
5. Technical Training Institute, Samthang, Wangdue (TTI-S)
6. National Institute for Zorig Chusum, Thimphu (NIZC)
7. College of Zorig Chusum, Trashiyangtse (CZC)

8. Jigme Wangchuck Power Training Institute, Dekiling, Sarpang (JWPTI)
9. Rural Development Training Centre, Zhemgang (RDTC)

Bhutan's labour market is characterized by a persistent disconnect between the demands of the economy and the skills supplied through the education and training system, resulting in a perpetual skills mismatch and unemployment problems. The Establishment Survey Report of 2017 indicates that 32.8 percent of the establishments were not able to fill the job openings over the past year while 49.7 percent of the establishments expressed difficulty in finding people with the right skills. Employers not only expressed dissatisfaction with deficiencies in relevant experience and technical skills but also with soft skills such as personality traits, social graces, interpersonal skills, language, and personal habits. Likewise, the Bhutan Trade Integration Strategy Update 2020, reported Bhutan as a labour poor and unskilled country, and identified the lack of a skilled workforce as the biggest inhibitor of the country's growth and economic competitiveness.

The DWPSD will work on developing and implementing policies, programs, and initiatives related to workforce development and skills training. This may include developing strategies for improving quality and relevant skills and preparing the young workforce for gainful employment, as well as providing training and development opportunities to the workforce to help them stay relevant and productive in the labour force. The department will also be responsible for the implementation of TVET reform and transformation plans and for gathering labour market intelligence to inform workforce development policies and programs.

The DWPSD will work to address the needs of the labour market by ensuring that the workforce has the quality and relevant skills and knowledge to meet the needs of the economy. It will promote economic development by investing in the skills and training of the workforce, reduce unemployment by providing quality skills and training to individuals, address social issues by investing in the skills and training that can help meet the needs of special groups, and respond to technological changes by providing appropriate interventions in the necessary skills and knowledge to adapt and remain competitive. The DWPSD will be responsible for ensuring that the Bhutanese workforce has the skills and competencies needed to thrive in a changing world.

### Vision

A nation with competent and adequate skilled workforce for a cohesive and vibrant economy.

### Mission

- To build and sustain a TVET system that produces a work-ready, world-ready, and future-ready workforce, and
- To plan and coordinate the development of a skilled workforce catering to the current and future needs of the economy.

### Mandates

- To provide strategic leadership and direction for the development of a dynamic, responsive, and agile TVET system.
- To contribute to the development of a skilled workforce through the provision of high-quality and relevant lifelong learning and training.
- To guide workforce planning and development aligned to the needs of the economy.
- To provide timely and reliable TVET data and information.

# TVET CONTEXT INDICATORS

## Labour Market Information

In the last two years, the labour force participation rate has declined from 69.1 percent in 2021 to 63.1 percent in 2022. While the male labour force participation rate increased from 73.1 percent in 2021 to 73.4 percent in 2022, the female labour force participation rate significantly decreased from 65.3 percent in 2021 to 53.5 percent in 2022. Despite the fact that Bhutan has a higher female population and working-age population, the female labour force participation rate in 2022 is one of the lowest in the decade. A closer look at the 2022 data indicates that a higher proportion of adult females who are married (74.2 percent) and a high proportion of adult females with no education (34.7 percent) are not in the labour force. A total of 6,150 females with higher education are not in the labour force, out of which 5,512 are those who are 60 years and younger. A total of 1,053 working-age population (582 males and 470 females) with TVET qualifications are not in the labour force, out of which 151 individuals are youth.

While the overall labour force participation rate has declined over the two periods, youth labour force participation has increased from 27.3 percent in 2021 to 29.3 percent in 2022. The male youth labour force participation rate has increased by 4.2 percent over the two periods, and the female youth labour force participation rate has decreased by 0.1 percent in the two periods.

In 2022, the unemployment rate increased to 5.9 percent from 4.8 percent in 2021. The unemployment rate increased for both genders in the two periods. The youth unemployment rate also significantly increased, from 20.9 percent in 2021 to 28.6 percent in 2022. In particular, the female unemployment rate significantly increased from 24.6 percent to 32.8 percent between the two periods.

Table 1.1: Labour Force Indicators in 2021 and 2022

Indicators	2021			2022		
	Male	Female	Total	Male	Female	Total
Population	322,521	335,860	658,381	316,506	333,611	650,118
Working Age Population	238,310	251,422	489,732	233,437	251,529	484,965
Labour Force	174,202	164,173	338,376	171,456	134,527	305,983
<b>Labour Force Participation Rate (LFPR)</b>	<b>73.1</b>	<b>65.3</b>	<b>69.1</b>	<b>73.4</b>	<b>53.5</b>	<b>63.1</b>
Youth Working Age Population	56,356	57,100	113,456	48,196	52,974	101,170
Youth Labour Force	14,841	16,174	31,016	14,738	14,944	29,682
<b>Youth LFPR</b>	<b>26.3</b>	<b>28.3</b>	<b>27.3</b>	<b>30.6</b>	<b>28.2</b>	<b>29.3</b>
Employed	167,899	154,223	322,122	163,941	123,843	287,784
<b>Employment rate</b>	<b>96.4</b>	<b>93.9</b>	<b>95.2</b>	<b>95.6</b>	<b>92.1</b>	<b>94.1</b>
Unemployment	6,304	9,950	16,254	7,515	10,684	18,199
<b>Unemployment rate</b>	<b>3.6</b>	<b>6.1</b>	<b>4.8</b>	<b>4.4</b>	<b>7.9</b>	<b>5.9</b>
Youth Unemployment	2,507	3,985	6,492	3,589	4,908	8,497
<b>Youth unemployment rate</b>	<b>16.9</b>	<b>24.6</b>	<b>20.9</b>	<b>24.4</b>	<b>32.8</b>	<b>28.6</b>

## TVET in Labour Force

TVET plays a vital role in preparing individuals for the labour market. TVET programs equip individuals with practical skills, knowledge, and competencies that are essential for meeting the demands of the labour market. TVET programs can be customized to meet the specific needs of industries and employers, ensuring that individuals are trained in the skills that are most in demand.

In the context of the labour market, TVET programs can help reduce the skills gap between the demand for labour and the supply of skilled workers. This can help improve the overall efficiency and productivity of industries, leading to increased economic growth and development. TVET programs can also help reduce unemployment by providing individuals with the skills and knowledge needed to secure employment in high-demand industries. Furthermore, TVET can help individuals develop career pathways that align with their interests, skills, and goals. This can lead to more fulfilling and sustainable careers, as well as increased job satisfaction and engagement.

By bridging the gap between education and the labour market, TVET programs play a critical role in supporting economic growth and development, as well as improving the livelihoods of individuals and communities.

The Labour Force Survey provides information on the education and training qualifications of individuals in the labour force. In this report, individuals who have completed either a certificate or a diploma level training or course from an education or training institute are considered to have TVET qualifications.

As indicated in the following table, the number of employed with TVET qualifications was 10,457 in 2021, which decreased to 7,085 in 2022. The overall employment rate, which is calculated for those employed over the total labour force with TVET qualification, is about 93 percent in both periods. However, the proportion of those with TVET qualifications is significantly lower, especially in the employed labour force. The percentage of those with TVET qualifications in proportion to the total employed is only 3.2 percent in 2021 and 2.5 percent in 2022.

**Table 1.2: Labour force with TVET qualifications by gender**

Indicators	2021			2022		
	Male	Female	Total	Male	Female	Total
Employed (TVET)	6,887	3,570	10,457	4,108	2,977	7,085
Unemployed (TVET)	385	374	759	305	232	537
Total TVET Labour Force	7,273	3,944	11,217	4,414	3,208	7,622
Employment rate (TVET)	94.7	90.5	93.2	93.1	92.8	93.0
Percent of TVET employed over overall employed labour force	4.1	2.3	3.2	2.5	2.4	2.5
Percent of TVET unemployed over overall unemployed labour force	6.1	3.8	4.7	4.1	2.2	3.0

In the 13<sup>th</sup> FYP period, the Ministry of Education and Skills Development (MoESD) is mandated to increase the proportion of the workforce certified in vocational and technical skills to 80 percent by the year 2029. Considering the workforce, meaning employed labour force, with TVET qualification (and not accounting for the workforce with higher education), this figure is 3.2 percent in 2021 and 2.5 percent in 2022. Accounting for higher education, the figure is 11.8 percent in 2021 and 12.8 percent in 2022. Meeting the target set would entail the MoESD working on providing TVET and HE access to more than 200,000 individuals in the 13<sup>th</sup> FYP period.

Table 1.3: Workforce with TVET and Higher Education qualifications

Particulars	2021			2022		
	Male	Female	Total	Male	Female	Total
Workforce with TVET qualification	6,887	3,570	10,457	4,108	2,977	7,085
Workforce with TVET+HE qualification	23,886	14,056	37,941	23,100	13,818	36,918
Total Workforce	167,899	154,223	322,122	163,941	123,844	287,785
Percent of workforce with TVET qualification	4.1	2.3	3.2	2.5	2.4	2.5
Percent of workforce with TVET+HE qualification	14.2	9.1	11.8	14.1	11.2	12.8

## Education and Training background of Labour Force

A high proportion of the Bhutanese labour force does not have any education or has a low level of education. As shown in the following table, 36.8 percent of the labour force does not have any education. Only 11.2 percent of the labour force has a bachelor's degree qualification. The percentage of those with a TVET diploma or certificate is only 2.5 percent.

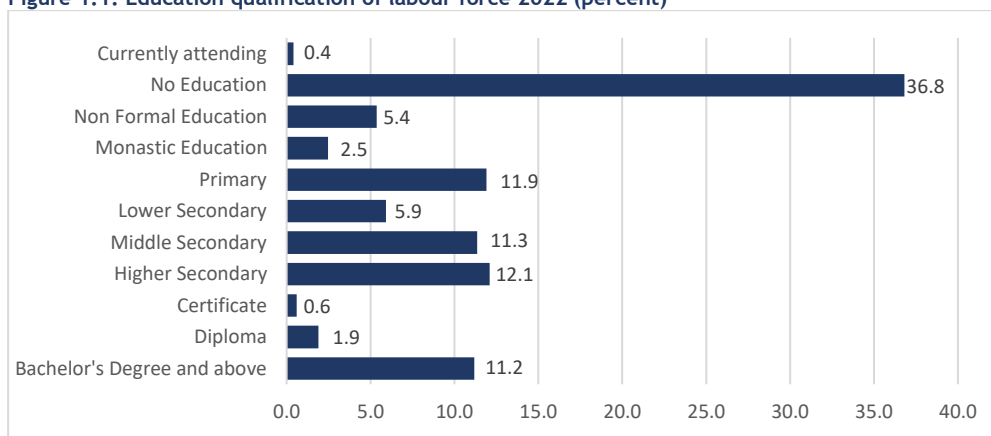
A high proportion of the workforce with no education means that a high proportion of the workforce may not possess the necessary skills and knowledge required for many jobs that require formal education or training. In practical terms, this could result in several challenges for the workforce, such as: lack of skilled workers for certain jobs; lower overall level of productivity and efficiency; higher rates of workplace accidents and injuries; limited opportunities for career advancement for workers with no education; and lower wages and earning potentials for workers with no education. On the other hand, having a well-educated and skilled workforce can lead to higher levels of income and better job opportunities, as employers tend to place a higher value on workers with advanced skills and education. This can lead to greater economic growth, as individuals with higher incomes tend to spend more money, creating a ripple effect throughout the economy.



Table 1.4: Profile of Labour force by education qualification in 2022

Qualification	Employed		Unemployed		Labour Force	
	Number	%	Number	%	Number	%
Bachelor's Degree	29,833	10.4	4,369	24.0	34,202	11.2
Diploma	5,357	1.9	416	2.3	5,773	1.9
Certificate	1,728	0.6	121	0.7	1,849	0.6
Higher Secondary	30,461	10.6	6,567	36.1	37,028	12.1
Middle Secondary	31,862	11.1	2,861	15.7	34,723	11.3
Lower Secondary	17,296	6.0	806	4.4	18,102	5.9
Primary	35,481	12.3	944	5.2	36,424	11.9
Monastic Education	7,408	2.6	139	0.8	7,547	2.5
Non Formal Education	16,226	5.6	201	1.1	16,426	5.4
No Education	111,080	38.6	1,580	8.7	112,661	36.8
Currently attending	1,052	0.4	193	1.1	1,246	0.4
<b>Total</b>	<b>287,785</b>	<b>100</b>	<b>18,198</b>	<b>100</b>	<b>305,982</b>	<b>100</b>

Figure 1.1: Education qualification of labour force 2022 (percent)



As shown in the following table, 4.8 percent of the youth labour force does not have any education. While this number is significantly lower in comparison to the overall labour force, it is a matter of concern since access to education is free in the country. Only 11.9 percent of the youth labour force has a bachelor's degree, which is significantly low.

Having a high proportion of the youth workforce with a low level of education means that they may not possess the necessary skills and knowledge required for many jobs that require formal education. This could translate to other impeding factors, such as limiting opportunities for the

youth labour force in the job market, and they may be limited to jobs that require lower education. This could also translate to low-earning jobs, lower productivity at the workplace since they have limited knowledge or skills required to perform certain tasks efficiently and effectively, limited career advancement opportunities, and put them at higher risk as they may not have the skills and knowledge required to secure stable and well-paying employment.

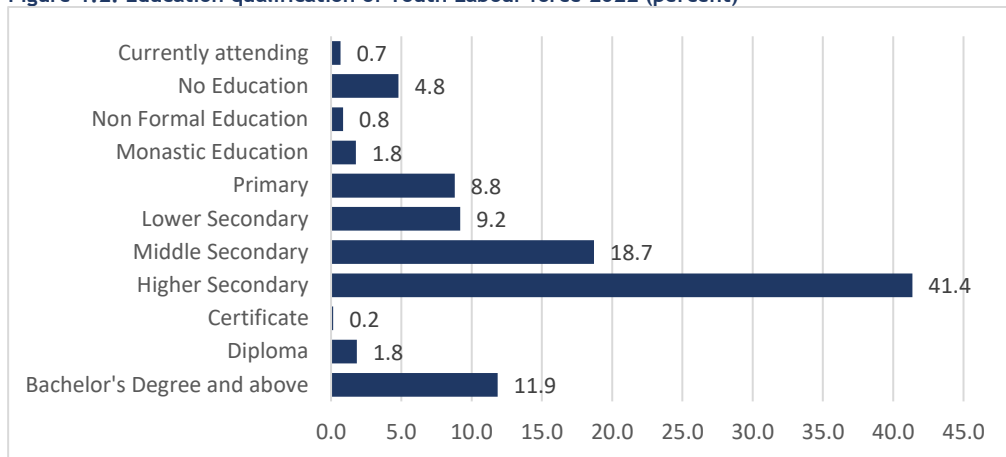
Therefore, access to quality and relevant education and training for all sections of the population is a critical foundation for building a high-performing and productive society. When individuals have access to education and training that is tailored to their needs and the needs of the labour market, they are more likely to acquire the skills and knowledge required to succeed in the workforce.

TVET, in particular, is a valuable component of education and training systems, as it can provide individuals with practical skills and knowledge that are directly relevant to the workplace. This can lead to improved job readiness, employability, and productivity, as well as increased opportunities for career advancement and higher wages over time. However, TVET is most effective when it is complemented by access to quality education at all levels, including primary, secondary, and tertiary education. A strong foundation in general education can help ensure that individuals have the literacy, numeracy, and critical thinking skills required to succeed in both work and life.

**Table 1.5: Profile of the youth labour force by education qualification in 2022**

Qualification	Employed		Unemployed		Labour Force	
	Number	%	Number	%	Number	%
Bachelor's Degree and above	1,653	7.8	1,867	22.0	3,520	11.9
Diploma	371	1.7	175	2.1	545	1.8
Certificate	29	0.1	17	0.2	45	0.2
Higher Secondary	7,844	37.0	4,431	52.2	12,275	41.4
Middle Secondary	4,342	20.5	1,213	14.3	5,555	18.7
Lower Secondary	2,560	12.1	166	2.0	2,726	9.2
Primary	2,399	11.3	213	2.5	2,612	8.8
Monastic Education	459	2.2	66	0.8	525	1.8
Non-Formal Education	252	1.2			252	0.8
No Education	1,211	5.7	214	2.5	1,426	4.8
Currently attending	66	0.3	135	1.6	200	0.7
<b>Total</b>	<b>21,185</b>	<b>100</b>	<b>8,496</b>	<b>100</b>	<b>29,682</b>	<b>100</b>

Figure 1.2: Education qualification of Youth Labour force 2022 (percent)



## Employment profile of workforce with TVET background

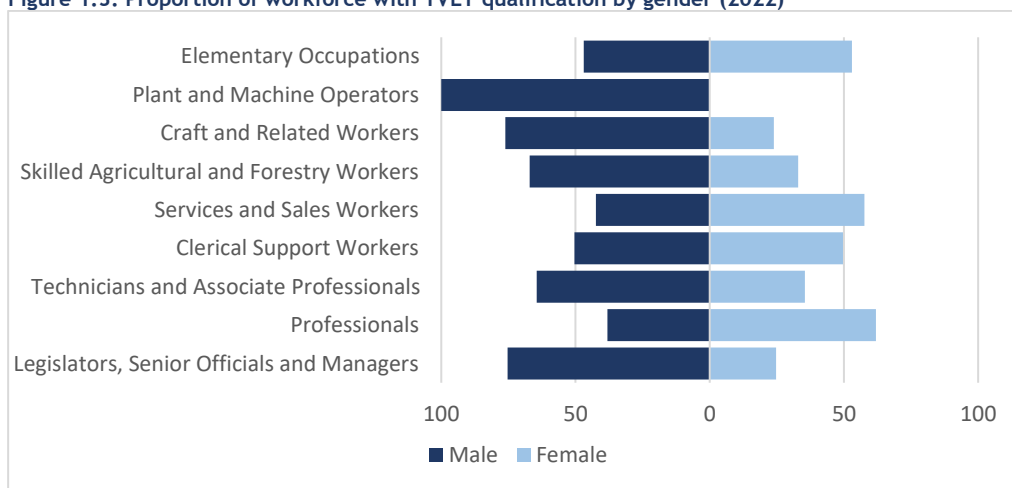
As indicated in Table 1.2, in the year 2022, a total of 7085 employed workforce has TVET qualification. A closer look at the data shows that more than half of these workforce are working in the major occupation category of technicians and associate professionals (52 percent). 19.7 percent are working as professionals, 8.8 percent are working as services and sales workers, and 6.6 percent are working as craft and related workers.

A comparison between the two genders, for those with TVET qualifications, show that higher proportion of females are working in the major occupation categories of professionals, service and sales workers, and clerical support workers. Whereas, the proportion of male employment is higher in technical and associate professional and managerial categories. The number of those working in elementary occupations and as plant and machine operators is not very significant, as indicated in Table 1.6.

**Table 1.6: Major Occupation of workforce with TVET qualification (2022)**

SN	Major Occupation	Male		Female		Total	
		N	%	N	%	N	%
1	Legislators, Senior Officials and Managers	285	6.9	94	3.1	378	5.3
2	Professionals	530	12.9	863	29.0	1,394	19.7
3	Technicians and Associate Professionals	2,376	57.8	1,308	43.9	3,684	52.0
4	Clerical Support Workers	173	4.2	170	5.7	343	4.8
5	Services and Sales Workers	264	6.4	359	12.1	623	8.8
6	Skilled Agricultural and Forestry Workers	69	1.7	34	1.1	102	1.4
7	Craft and Related Workers	357	8.7	112	3.8	469	6.6
8	Plant and Machine Operators	21	0.5	0	0.0	21	0.3
9	Elementary Occupations	33	0.8	37	1.3	70	1.0
	<b>Total</b>	<b>4,108</b>	<b>100.0</b>	<b>2,977</b>	<b>100.0</b>	<b>7,085</b>	<b>100.0</b>

**Figure 1.3: Proportion of workforce with TVET qualification by gender (2022)**



Employed labour force with TVET qualifications are working in different economic activities, as indicated in the following table. The economic activities range from public administration and defence, health and social work activities, wholesale and retail trade, repair of motor vehicles, electricity and gas supply, education, and financial and insurance activities. However, majority of those with TVET qualifications, both male and female, are working in public administration and defence (22.5 percent) or in health and social work activities (20.3 percent).

Table 1.7: Economic Activity of workforce with TVET qualification (2022)

SN	Economic Activity	Male		Female		Total	
		N	%	N	%	N	%
1	Agriculture and Forestry	69	1.7	50	1.7	119	1.7
2	Mining and Quarrying	15	0.4	0	0.0	15	0.2
3	Manufacturing	230	5.6	114	3.8	344	4.9
4	Electricity and Gas Supply	426	10.4	263	8.8	690	9.7
5	Water Supply, Sewerage and Waste Management	8	0.2	0	0.0	8	0.1
6	Construction	382	9.3	117	3.9	499	7.0
7	Wholesale & Retail Trade; Repair of Motor Vehicles	330	8.0	377	12.7	708	10.0
8	Transportation and Storage	27	0.7	39	1.3	66	0.9
9	Accommodation and Food Service Activities	69	1.7	36	1.2	105	1.5
10	Information and Communication	159	3.9	164	5.5	324	4.6
11	Financial and Insurance Activities	300	7.3	54	1.8	354	5.0
12	Real Estate Activities	32	0.8	0	0.0	32	0.5
13	Professional, Scientific and Technical Activities	0	0.0	31	1.0	31	0.4
14	Administrative and Support Service Activities	38	0.9	0	0.0	38	0.5
15	Public Administration and Defence	946	23.0	649	21.8	1595	22.5
16	Education	371	9.0	192	6.5	563	8.0
17	Health and Social Work Activities	551	13.4	889	29.9	1441	20.3
18	Arts, Entertainment and Recreation	116	2.8	0	0.0	116	1.6
19	Other Service Activities	37	0.9	0	0.0	37	0.5
	<b>Total</b>	<b>4108</b>	<b>100</b>	<b>2977</b>	<b>100</b>	<b>7085</b>	<b>100</b>

Figure 1.4: Workforce with TVET qualification by major economic activities (% , 2022)



## Unemployed Labour Force with TVET background

The labour Force Survey report also provides information on reasons for unemployment. Among those with TVET qualifications, 537 are unemployed. 36.4 percent of those unemployed said that they recently completed their studies, which they cited as a reason for their current unemployment. 28.9 percent of those with TVET qualifications indicated voluntary resignation from their previous job as their reason for current unemployment. This figure is significantly higher for the male counterparts.

The key reasons among males are voluntary resignation from previous jobs, recently completed studies, and business/job affected due to the pandemic. Whereas the female counterpart had a wider range of reasons, which included lack of experience, lack of skills, and lack of adequate qualification.

**Table 1.8: Reasons for unemployment stated by those with TVET qualification (2022)**

SN	Reasons for unemployment	Number			%		
		Male	Female	Total	Male	Female	Total
1	Recently completed studies	111	84	196	36.4	36.5	36.4
2	Qualification mismatch	17		17	5.5	0.0	3.1
3	Voluntarily resigned from earlier job	111	44	155	36.4	19.0	28.9
4	Term based job ended	9		9	2.8		1.6
5	Illness/Injury		12	12		5.1	2.2
6	Lack of experience		22	22		9.6	4.1
7	Lack of skills		20	20		8.8	3.8
8	Lack of adequate qualification		11	11		4.6	2.0
9	Closure of Business due to Pandemic/ Waiting for the pandemic to improve	37		37	12.3	0.0	7.0
10	Other reasons	20	38	58	6.6	16.3	10.8
	<b>Total</b>	<b>305</b>	<b>232</b>	<b>537</b>	<b>100</b>	<b>100</b>	<b>100</b>

## Forecast of Class XII graduates in 13<sup>th</sup> FYP

The population projection, more specifically, the youth population is important for concerted TVET planning and the design of appropriate interventions. In the 13<sup>th</sup> FYP, the MoESD is mandated to provide TVET access to about 40 percent of class XII graduates post National Gyalsung Program. As indicated in the following table, the youth population between 2024 and 2029 is expected to decline. This could be the result of a decline in the number of newborns born after the 1990s and an increase in the number of youths pursuing education and employment outside the country.

**Table 1.9: Projection of youth population from 2023 to 2030**

Age	2024	2025	2026	2027	2028	2029
15	12,728	12,445	12,236	12,071	11,913	11,715
16	13,056	12,717	12,435	12,226	12,062	11,905
17	13,412	13,044	12,705	12,425	12,216	12,052
18	13,699	13,402	13,033	12,695	12,415	12,206
19	13,868	13,687	13,391	13,023	12,685	12,405
20	13,838	13,850	13,671	13,375	13,009	12,673
21	13,692	13,817	13,830	13,652	13,357	12,991
22	13,477	13,671	13,796	13,810	13,633	13,338
23	13,330	13,456	13,651	13,776	13,790	13,615
24	13,329	13,310	13,436	13,631	13,757	13,772
<b>Total</b>	<b>134,429</b>	<b>133,399</b>	<b>132,184</b>	<b>130,684</b>	<b>128,837</b>	<b>126,672</b>

Source: National Population Projection Report 2019, NSB

A total of about 168,324 students were enrolled in the education system in 2021, out of which a huge number were those in the primary education. Between 2012 and 2021, the total number of students decreased by about 10,000. The effect can be seen while looking at the enrollment over the last ten years from class PP to class XII.

**Table 1.10: Student enrollment in education system from 2012 to 2021**

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Primary	110,617	104,323	101,667	99,291	96,654	94,184	92,298	89,719	94,165	92,621
Lower Secondary	27,887	28,018	28,929	28,992	29,353	29,296	28,989	27,200	25,299	24,210
Middle Secondary	22,941	23,581	24,400	24,686	25,382	25,682	26,338	26,767	26,813	25,892
Higher Secondary	16,914	16,469	17,397	18,433	18,171	18,930	19,483	22,671	24,529	25,601
<b>Total</b>	<b>178,359</b>	<b>172,391</b>	<b>172,393</b>	<b>171,402</b>	<b>169,560</b>	<b>168,092</b>	<b>167,108</b>	<b>166,357</b>	<b>170,806</b>	<b>168,324</b>

In assessing the number of Class XII graduates in the 13<sup>th</sup> FYP period, education data and information on the actual number of students from classes PP to Class XII from 2012 to 2021 were used. The forecast was made using the following assumptions:

- Regression result of male and female student enrollment and student movement to higher grades in the subsequent year from 2012 to 2021 for all grades (class PP to class XII).
- The regression result takes into account that the current practise of no cut-off policy for class X will be continued in the 13<sup>th</sup> plan period, considering the National Gyalsung Program which will be initiated in the 13<sup>th</sup> plan period benefiting all class XII graduates.
- The one-year National Gyalsung Program for class XII graduates may commence in 2024, benefiting the 2023 class XII graduate cohort.

Taking the above into consideration, a total of about 12,500 to 13,500 class XII students post National Gyalsung Program are expected to annually graduate by 2025. There will be no graduates in 2024 since the 2023 class XII graduate cohort will be attending the National Gyalsung Program. The number of Class XII graduates post-National Gyalsung Program is important for the TVET program

**Table 1.11: Forecast of higher secondary graduates from 2024 to 2029**

	2024	2025	2026	2027	2028	2029
Enrollment in Class XII	12938	12,462	12,241	12,667	12,535	12,316
Class XII graduates post National Gyalsung Program	0	13,478	12938	12,462	12,241	12,667

Source: Labour Market Report 2023, DWPSD

## Foreign Workers

The paradox of youth unemployment complemented by the import of foreign workers is a complex issue that affects many countries around the world, and Bhutan is no exception. On the one hand, youth unemployment rates are on the rise due to a lack of experience, skills, and opportunities. On the other hand, employers in certain industries struggle to find qualified workers and turn to foreign workers to fill these job roles.

As shown in Table 1.13, Bhutan imports a high number of foreign workers. Between June 2022 and April 2023, the Department of Labour (DoL) approved foreign worker applications for 118,266 individuals. The majority



of these foreign workers were engaged in two major economic activities: construction and manufacturing. What is also important to note is the change in foreign worker approval policy within the government in 2022.

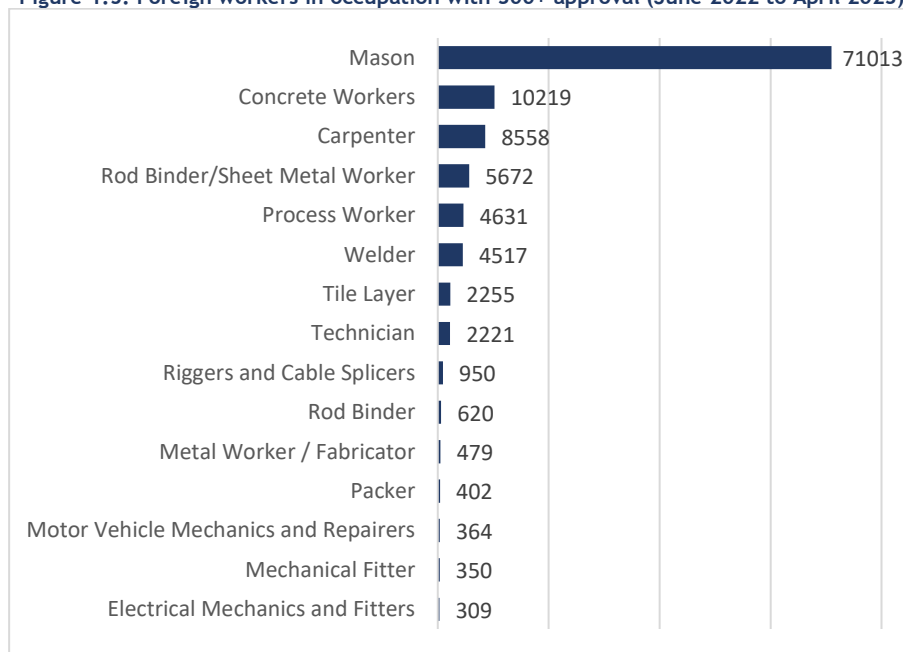
In many cases, employers in these sectors require a large number of workers with specific skills or experience, and are unable to find qualified candidates among the local population. However, easy access to foreign workers can create a number of challenges for those looking for jobs and those entering the labour market. For one, it can lead to a preference for employers to hire foreign workers in place of hiring local jobseekers, which can lead young workers with valuable skills and qualifications to seek better job opportunities abroad. Additionally, the reliance on foreign workers can create issues around worker rights and exploitation, as foreign workers may be more vulnerable to abuse and mistreatment.

**Table 1.12: Foreign workers by economic activities (June 2022 to April 2023)**

SN	Economic Activities	Percent
1	Construction	77.56
2	Manufacturing	13.62
3	Accommodation and Food service activities	2.36
4	Electricity, gas, steam and air conditioning supply	1.86
5	Wholesale and retail trade	1.16
6	Transportation and storage	0.74
7	Other Services	0.52
8	Mining and quarrying	0.51
9	Financial services and insurance	0.45
10	Professional, scientific and technical services	0.31
11	Information and communication services	0.29
12	Real estate	0.19
13	Arts, entertainment and recreation	0.15
14	Education	0.09
15	Administrative and support services	0.07
16	Human health and social work	0.04
17	Activities of households as employers	0.03
18	Agriculture, forestry and fishing	0.03
19	Public administration and defense	0.01
		100.0

As highlighted in the following figure, the highest number of foreign worker approvals was in the category of masons and concrete workers. Most of the occupations highlighted are those working in the construction sector. In the period mentioned above, Bhutan sourced foreign workers from 73 different countries. 99.1 percent of the foreign workers were sourced from neighbouring India. The other countries in sequence, where more than 40 foreign workers were sourced are: Japan, Bangladesh, Thailand, the USA, Iceland, Nepal, Singapore, and China.

Figure 1.5: Foreign workers in occupation with 300+ approval (June 2022 to April 2023)



## TVET ACCESS INDICATORS

### Profile of TVET Institutions in the country

The Establishment Regulation and the Registration Regulation of private training providers were initiated in 2010 with the objective of creating an enabling environment for the establishment and registration of TVET providers by both private and public individual and entity in the country. It was envisioned that instituting such a mechanism would increase access to and choice of TVET opportunities for skills development in the country and help reduce the mismatch between demand and supply of skills. The regulation has been reviewed on a periodic basis to make the establishment process more streamlined, effective, and efficient. The two regulations have now been subsumed under the Registration Regulation for the Training Provider.

Since 2010, an increasing number of private promoters have set up TVET institutes in the country. In 2022, a total of 136 training providers were registered in the country, out of which 79.4 percent were under private ownership. A total of 11 training providers under NGO ownership were registered in 2022.

However, the number of training providers under government ownership was only 14 in 2022, which accounts for 10.3 percent of the overall training institutes in the country. From the 14 government-owned institutions, nine TVET institutes are under the direct administration of the DWPSD.

**Table 2.1: Number of TVET Institutions by ownership type in 2021 and 2022**

SN	Ownership Type	2021		2022	
		Number	Percent	Number	Percent
1	Government	14	11.7	14	10.3
2	Corporate	6	5.0	3	2.2
3	NGO	3	2.5	11	8.1
4	Private (Partnership)	21	17.5	28	20.6
5	Private (Sole Proprietorship)	76	63.3	80	58.8
	<b>Total</b>	<b>120</b>	<b>100.0</b>	<b>136</b>	<b>100.0</b>

The registration process also has a grading mechanism in place that is assessed based on points for different components. During the registration process, a training provider must provide details on governance and location; physical resources; human resources; teaching, learning, and assessment system; student welfare and support services; and internal quality management system. These components are inspected physically to assess points in different areas. The registration certificate is directly tied to the licencing process. A certificate issued for Grade A is valid for three years; a certificate issued for Grade B is valid for two years; and a certificate issued for Grade C is valid only for one year.

A Grade A institute is expected to have a higher level of quality in terms of infrastructure, quality management mechanisms, and other aspects of TVET delivery. As indicated in the following table, the majority of training providers in the country are registered at Grade C (77.9 percent). In 2022, there were total of 20 Grade B institutes and 7 Grade A institutes in the country.

**Table 2.2: Number of TVET Institutions by registration grade in 2021 and 2022**

SN	Institute Grade	2021		2022	
		Number	Percent	Number	Percent
1	Grade A	4	3.3	7	5.1
2	Grade B	31	25.8	20	14.7
3	Grade C	85	70.8	106	77.9
4	None	-	-	3	2.2
	<b>Total</b>	<b>120</b>	<b>100.0</b>	<b>136</b>	<b>100.0</b>

The location of an institute can be driven by a number of factors, which may include: availability of skilled trainers; number of youth population or potential trainees; cost of business operation, which can include rental and cost of running the business; and economic opportunities created by different sectors and industries within the location. As indicated by the following table, 58.8 percent of the training providers are located in the capital, which has a higher population base and more diverse economic activities. A total of 13 training providers are registered in Chukha and 10 in Paro. However, there are very few training providers registered in the central and eastern parts of the country, which can limit the choices and access to skills development opportunities for the population in these locations.

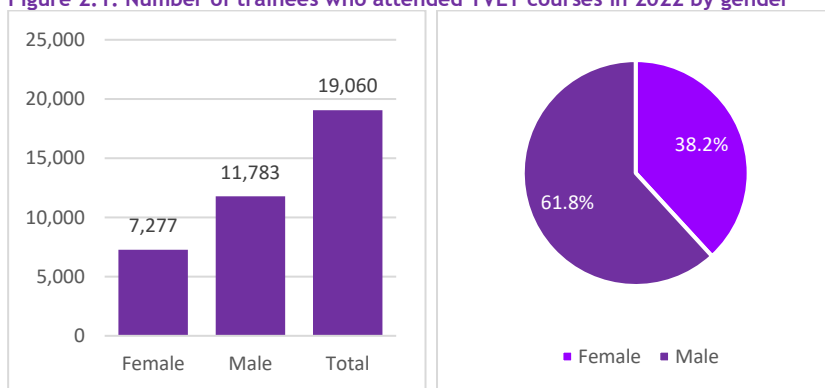
Table 2.3: Number of TVET Institutions by location in 2021 and 2022

SN	Dzongkhags	2021		2022	
		Number	Percent	Number	Percent
1	Bumthang	3	2.5	4	2.9
2	Chukha	11	9.2	13	9.6
3	Dagana	1	0.8	1	0.7
4	Haa	2	1.7		
5	Mongar	1	0.8	1	0.7
6	Paro	9	7.5	10	7.4
7	Pemagatshel	1	0.8	1	0.7
8	Punakha	2	1.7	2	1.5
9	Samdrup Jongkhar	3	2.5	3	2.2
10	Samtse	2	1.7	2	1.5
11	Sarpang	4	3.3	7	5.1
12	Thimphu	70	58.3	80	58.8
13	Trashigang	3	2.5	3	2.2
14	Trashiyangtse	1	0.8	1	0.7
15	Tsirang	1	0.8	1	0.7
16	Wangdue Phodrang	5	4.2	5	3.7
17	Zhemgang	1	0.8	2	1.5
	<b>Total</b>	<b>120</b>	<b>100.0</b>	<b>136</b>	<b>100.0</b>

## TVET enrollment in the country

As per the TVET-MIS, a total of 65 TVET courses were implemented by different TVET providers, both public and private, in 2022. A total of 19,060 individuals attended these different TVET courses. A total of 7,277 females attended the TVET training, which accounts for 38.18 percent of the total who attended TVET courses in 2022.

Figure 2.1: Number of trainees who attended TVET courses in 2022 by gender



List of TVET courses provided in 2022

1	3 D printing	21	earth moving equipment mechanic	41	metal art design and fabrication	61	tshem-zop
2	Bakery	22	excavator operator	42	mobile application development	62	tshemdrup
3	auto electrician	23	farm machineries	43	mushroom production	63	vegetable production
4	auto mechanic	24	food and beverage service	44	nature guide	64	visual effect
5	automobile painter	25	food production	45	panel beater	65	welding
6	backhoe loader operator	26	furniture making	46	passenger bus driving		
7	basic driving course	27	hair & beauty	47	patrap		
8	basic floriculture	28	heavy vehicle driving	48	plumbing		
9	basic internet of things (IOT)	29	heavy vehicle mechanic	49	poultry production		
10	building painter	30	home appliances repair	50	professional development		
11	CCTV system	31	insurance	51	professional driving		
12	commercial accounting	32	introductory driving course	52	quantitative methods		
13	computer application assistant	33	it and networking	53	refrigeration & air-conditioning		
14	computer hardware & networking	34	jim-zop	54	shag-zop		
15	construction carpentry	35	korean cuisine	55	shielded metal arc welding		
16	cultural tour guide	36	landscape design	56	solar power technology		
17	dairy production	37	lhadrip	57	tile laying		
18	digital marketing	38	light vehicle driving	58	traditional weaving		
19	domestic electrician	39	masonry	59	transmission & distribution line		
20	domestic wiring	40	mechanical fitter	60	troe-zop		

Table 2.4: TVET courses implemented by DWPSD administered Institutes in 2022

SN	Certification Level	Female	Male	Total	Female %
1	Certificate	564	1,075	1,639	34.4
2	NC2	250	577	827	30.2
3	NC3	35	85	120	29.2
4	ND2	0	6	6	0.0
	<b>Total</b>	<b>849</b>	<b>1743</b>	<b>2592</b>	<b>32.8</b>

TVET enrollment in DWPSD administered institutes

A total of nine institutes are under the direct management and administration of the DWPSD. A total of 2592 trainees were trained in 2022. 63.2 percent of the courses are at the certificate level, and 36.5 percent of the courses are at the NC2 and NC3 levels. Only one ND-level course for six candidates was implemented in 2022, mainly in the College of Zorig Chusum (CZC).

The following tables provide detailed information on the TVET courses implemented by the DWPSD administered institutes by level of certification in 2022.

Table 2.5: TVET enrollment by certification in DWPSD administered Institutes, 2022

SN	Institute	Certificate	NC2	NC3	ND2	Total	%
1	CZC	0	105	26	6	137	5.3
2	NIZC	68	96	53	0	217	8.4
3	JWPTI	291	106	0	0	397	15.3
4	RDTTC	692	0	0	0	692	26.7
5	TTI-C	104	127	0	0	231	8.9
6	TTI-K	275	0	0	0	275	10.6
7	TTI-R	96	188	0	0	284	11.0
8	TTI-S	113	113	16	0	242	9.3
9	TTI-T	0	92	25	0	117	4.5
	<b>Total</b>	<b>1639</b>	<b>827</b>	<b>120</b>	<b>6</b>	<b>2592</b>	<b>100</b>
	<b>%</b>	<b>63.2</b>	<b>31.9</b>	<b>4.6</b>	<b>0.2</b>	<b>100</b>	

Table 2.6: TVET enrollment in CZC by level of certification in 2022

SN	Courses	Certificate	NC2	NC3	ND2	Total	%
1	jim-zop		11	6		17	12.4
2	lhadrip		20			20	14.6
3	patrap		11			11	8.0
4	shag-zop		7			7	5.1
5	troe-zop		2		6	8	5.8
6	tshem-zop		38	16		54	39.4
7	tshemdrup		16	4		20	14.6
	<b>Total</b>	<b>0</b>	<b>105</b>	<b>26</b>	<b>6</b>	<b>137</b>	<b>100</b>

Table 2.7: TVET enrollment in NIZC by level of certification in 2022

SN	Courses	Certificate	NC2	NC3	ND2	Total	%
1	jim-zop			4		4	1.8
2	lhadrip	10	40	30		80	36.9
3	patrap	1	11	6		18	8.3
4	traditional weaving	1				1	0.5
5	troe-zop		4			4	1.8
6	tshem-zop	56	28	13		97	44.7
7	tshemdrup		13			13	6.0
	<b>Total</b>	<b>68</b>	<b>96</b>	<b>53</b>	<b>0</b>	<b>217</b>	<b>100</b>

Table 2.8: TVET enrollment in JWPTI by level of certification in 2022

SN	Courses	Certificate	NC2	NC3	ND2	Total	%
1	3D printing	29				29	7.3
2	construction carpentry	15	11			26	6.5
3	domestic wiring	76				76	19.1
4	furniture making	35	31			66	16.6
5	Korean cuisine	10				10	2.5
6	masonry		53			53	13.4
7	mechanical fitter	18				18	4.5
8	plumbing	20				20	5.0
9	solar power technology	31				31	7.8
10	tile laying	22				22	5.5
11	Transmission & distribution lineman	15				15	3.8
12	welding	20	11			31	7.8
	<b>Total</b>	<b>291</b>	<b>106</b>	<b>0</b>	<b>0</b>	<b>397</b>	<b>100</b>

Table 2.9: TVET enrollment in RDTC by level of certification in 2022

SN	Courses	Certificate	NC2	NC3	ND2	Total	%
1	basic floriculture	77				77	11.1
2	dairy production	122				122	17.6
3	mushroom production	299				299	43.2
4	poultry production	42				42	6.1
5	vegetable production	152				152	22.0
	<b>Total</b>	<b>692</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>692</b>	<b>100</b>

Table 2.10: TVET enrollment in TTI-C by level of certification in 2022

SN	Courses	Certificate	NC2	NC3	ND2	Total	%
1	building painter		10			10	4.3
2	construction carpentry	7	23			30	13.0
3	furniture making	39				39	16.9
4	landscape design	2				2	0.9
5	masonry	14	25			39	16.9
6	metal art design and fabrication	7				7	3.0
7	plumbing	15	40			55	23.8
8	shielded metal arc welding	1				1	0.4



9	tile laying	19				19	8.2
10	welding		29			29	12.6
	<b>Total</b>	<b>104</b>	<b>127</b>	<b>0</b>	<b>0</b>	<b>231</b>	<b>100</b>

**Table 2.11: TVET enrollment in TTI-K by level of certification in 2022**

SN	Courses	Certificate	NC2	NC3	ND2	Total	%
1	basic IOT	17				17	6.2
2	CCTV system	59				59	21.5
3	domestic wiring	77				77	28.0
4	home appliances repair	30				30	10.9
5	mechanical fitter	32				32	11.6
6	metal art design and fabrication	33				33	12.0
7	welding	27				27	9.8
	<b>Total</b>	<b>275</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>275</b>	<b>100</b>

**Table 2.12: TVET enrollment in TTI-R by level of certification in 2022**

SN	Courses	Certificate	NC2	NC3	ND2	Total	%
1	auto mechanic		29			29	10.2
2	computer hardware & networking		14			14	4.9
3	domestic electrician		125			125	44.0
4	furniture making	27	20			47	16.5
5	hair & beauty	25				25	8.8
6	home appliances repair	24				24	8.5
7	IT and networking	20				20	7.0
	<b>Total</b>	<b>96</b>	<b>188</b>	<b>0</b>	<b>0</b>	<b>284</b>	<b>100</b>

**Table 2.13: TVET enrollment in TTI-S by level of certification in 2022**

SN	Courses	Certificate	NC2	NC3	ND2	Total	%
1	auto electrician		30	6		36	14.9
2	auto mechanic		18	10		28	11.6
3	backhoe loader operator	2				2	0.8
	digital marketing	16				16	6.6
	earth moving equipment mechanic		12			12	5.0
4	excavator operator		42			42	17.4

5	heavy vehicle driving	63	11			74	30.6
6	heavy vehicle mechanic	18				18	7.4
7	passenger bus driving	14				14	5.8
	<b>Total</b>	<b>113</b>	<b>113</b>	<b>16</b>	<b>0</b>	<b>242</b>	<b>100</b>

**Table 2.14: TVET enrollment in TTI-T by level of certification in 2022**

SN	Courses	Certificate	NC2	NC3	ND2	Total	%
1	auto mechanic		25	25		50	42.7
2	automobile painter		14			14	12.0
3	panel beater		10			10	8.5
4	refrigeration & air conditioning		43			43	36.8
	<b>Total</b>	<b>0</b>	<b>92</b>	<b>25</b>	<b>0</b>	<b>117</b>	<b>100</b>

## Female Enrollment

According to UNESCO's data from 2021, the global enrollment rate of women in TVET was 41.2 percent, which is an increase from 35.4 percent in 2008. This indicates that while progress has been made in recent years to increase female enrollment in TVET, there is still a significant gender gap in participation. In many countries, women remain underrepresented in technical and vocational education and training programs, particularly in fields such as engineering, technology, and construction.

Increasing female enrollment in TVET is important for promoting gender equality and empowering women to access better economic opportunities. It can also help to address skills shortages in certain sectors and promote the development of a more diverse and inclusive workforce. To achieve this goal, it is important to address the barriers that prevent girls and women from pursuing TVET. Some of the strategies adopted by the DWPSD over the years have been to introduce more female-friendly TVET courses and to construct and augment infrastructure catering to female trainees within the DWPSD administered institutes.

In 2022, female enrollment in the DWPSD administered institutes was 32.8 percent. The female enrollment for the zorig chusum course, as indicated by the enrollment of female trainees in the CZC and NIZC, is much higher

in comparison to the other institutes. The female enrollment in RDTC courses was 41.2 percent. However, enrollment in the TTI courses is lower in comparison. In fact, there is only 11.1 percent enrollment in the automobile program provided by the TTI-T.

Courses where there was 50 percent or higher female enrollment are: traditional weaving, tshemzop, tshemdrup, computer hardware and networking, basic floriculture, building painting, hair and beauty, IT and networking, basic IOT, 3D printing, dairy production, digital marketing, Korean cuisine, landscape design, and passenger bus driving.

Courses where there was 20 percent or lower female enrollment are: troezop, shielded metal arc welding, shagzop, panel beating, jimzop, excavator operator, backhoe loader operator, heavy vehicle mechanic, welding, patrap, lhadrip, auto mechanic, heavy vehicle diving, mechanical fitter, refrigeration & air conditioning, automobile painter, furniture making, tile laying, and metal art design & fabrication.

**Table 2.15: Female enrollment by institutes under the DWPSD in 2022**

SN	Institute	Female	Male	Total	Female %
1	CZC	65	72	137	47.4
2	NIZC	107	110	217	49.3
3	JWPTI	109	288	397	27.5
4	RDTC	285	407	692	41.2
5	TTI-C	60	171	231	26.0
6	TTI-K	77	198	275	28.0
7	TTI-R	96	188	284	33.8
8	TTI-S	37	205	242	15.3
9	TTI-T	13	104	117	11.1
	<b>Total</b>	<b>849</b>	<b>1743</b>	<b>2592</b>	<b>32.8</b>

**Table 2.16: Female enrollment by level of certification in 2022**

SN	Certification Level	Female	Male	Total	Female %
1	Certificate	564	1,075	1,639	34.4
2	NC2	250	577	827	30.2
3	NC3	35	85	120	29.2
4	ND2	0	6	6	0.0
	<b>Total</b>	<b>849</b>	<b>1743</b>	<b>2592</b>	<b>32.8</b>

## PWD Enrollment

TVET for persons with disabilities (PWD) is essential for promoting their employment, self-reliance, and overall well-being. TVET can be a means to equip PWDs with the skills and knowledge required to enter the labour market and contribute to the economic development of their communities. It can also enable PWDs to participate fully in society, lead independent lives, and exercise their rights to education and work.

However, PWDs often face various barriers to accessing TVET, including physical and attitudinal barriers, a lack of appropriate teaching and learning materials, and insufficient support services. To overcome these barriers, TVET for PWDs must be designed to be inclusive, flexible, and responsive to their needs. This includes providing reasonable accommodations, such as accessible learning environments, assistive technologies, and specialised support services, to ensure that PWDs can participate fully and effectively in all aspects of TVET. Additionally, partnerships between TVET providers, employers, and disability organisations can help create pathways to employment and entrepreneurship for PWDs. By ensuring that TVET is accessible and inclusive for PWDs, society can benefit from the contributions of a diverse and talented workforce.

Currently, TVET-MIS does not provide information on PWD. Nevertheless, under the TVET-MIS enhancement plan funded through the World Bank, the trainee profiling will include information on the PWD. Under the ADB funded STEP-UP Project, the DWPSD was able to initiate critical skills training specifically for the PWD in 2020 (for 45 candidates in tailoring, baking, and spa) and in 2023 (for an additional 30 candidates in tailoring and ICT).

During the TVET Tracer conducted in 2023 for the 2021 graduate cohort, 2.3 percent, which totals 17 individuals, indicated that they are PWD. The disability ranges from seeing (25 percent) to hearing (16.7 percent), speaking (25 percent), mobility (25 percent), and intellectual (8.3 percent).

From the 17 graduates, 5 PWD graduated from CZC, 3 from JWPTI, 1 from NIZC, 6 from TTI-C, and 2 from TTI-S. With the construction of the new TTI in Thimphu, which incorporates PWD-friendly design and infrastructure, higher enrollment of PWD can be expected in the future.

**Table 2.17: PWD enrollment in institutes under the DWPSD (2021 graduate cohort)**

	Female	Male	Total
PWD	7	10	17
<b>Percent</b>	<b>3.3</b>	<b>1.9</b>	<b>2.3</b>

## Skills Development Program

The DWPSD provides different skills training under various programs, in addition to the regular training offered through the DWPSD-administered institutions. Some of these programs include the Skills Development Plan (SDP), Critical Skills Training (CST), Critical Capability Development (CCD), Village Skills Development Program (VSDP), and Special Skills Development Program (SSDP).

The SDP is a program that was initiated in 2021 to mitigate the socio-economic impact caused by the COVID-19 pandemic and to ensure inclusive and sustainable recovery through effective intervention in skills training and development. The program targets jobseekers and those affected by the pandemic, and its objectives are to provide relevant and quality skills training geared towards enhancing the skills and competencies of beneficiaries, provide diverse and easy access to skills training to promote economic activities and entrepreneurship in the immediate time, and address the aspirations and potential of the target group to tap current and emerging economic opportunities.

A total of 108 skilling areas in the nine priority sectors were identified for implementation, including Agriculture, Business and Services, Computing and IT, Construction, Creative Art and Design, Electrical, Electronic and Mechanical, Manufacturing, Power and Renewable Energy, and Tourism and Hospitality. The skill areas were identified based on skills needs identified in the 12th FYP HRD Master plan, the National Workforce Plan, and the TVET Curriculum Framework-2019, as well as current labour market needs based on local and global labour market dynamics, the interest of jobseekers, and the prospect of self-employment opportunities.

All courses under the SDP are complemented by two weeks of entrepreneurship learning to foster self-employment and entrepreneurship post-skilling. Additional skilling opportunities are also provided to encourage multi-skilling. According to the TVET-MIS, a total of 1881 beneficiaries were trained in the SDP program in 2022, of which 1692 were trained at the

certificate level, 144 at NC2 level, and 45 at NC3 level. Only 35.4 percent of the beneficiaries were female.

**Table 2.18: Skills Development Program (SDP) implemented in 2022**

SN	Institute	Certificate	NC2	NC3	Total	Female	Female %
1	JWPTI	242	0	0	242	59	24.4
2	NIZC	67	0	0	67	54	80.6
3	RDTC	692	0	0	692	285	41.2
4	TTI-K	151	0	0	151	48	31.8
5	TTI-S	111	47	0	158	27	17.1
6	TTI-C	97	0	0	97	15	15.5
7	TTI-R	96	48	0	144	51	35.4
8	TTI-T	0	49	25	74	10	13.5
9	AMC	117	0	0	117	25	21.4
10	RITH	35	0	20	55	34	61.8
11	RTA	65	0	0	65	57	87.7
12	UWICER	19	0	0	19	0	0.0
	<b>Total</b>	<b>1,692</b>	<b>144</b>	<b>45</b>	<b>1,881</b>	<b>665</b>	<b>35.4</b>

## Critical Skills Training

Critical Skills Training is a need-based HRD intervention geared towards addressing the immediate HR requirements in the labour market. The main objective of the program is to provide employable skills to youth seeking employment in the private sector and to facilitate private sector development through the supply of a skilled workforce.

The skills training was initiated in the 9th FYP. The program is flexible in its implementation and its mode of training delivery. Furthermore, making changes based on learning from each experience is faster and easier. While the earlier modality of delivery focused only on training aspects, the ones implemented in the 11th FYP period focused on employment. Skills training has been effective in addressing the immediate short-term gap in the labour market, which cannot be addressed through formal skills training.

The program is implemented in partnership with different registered training providers in the country (both private and public). The training areas are aligned with the needs identified in the 12th FYP HRD Masterplan for the Economic Sectors (2018-23). Furthermore, validation is carried out through the HRD Committee, where there is member representation for all private sector associations in the country. The key target group for this program is jobseekers and the unemployed. The program seeks to provide skills as a means to employment and livelihood. The program is also

complemented with an entrepreneurship component to enable a person to explore self-employment options.

However, with the initiation of the SDP program in 2021, CST was discontinued in the same year. The programs implemented, as highlighted in the following table, are those planned in the previous financial year. With the initiation of SDP, the budget available under the GOI-PTA Project for the CST program was reallocated for the implementation of the SDP program. However, this was not possible for the CST activities planned under the ADB STEP-UP project. Therefore, CST activities planned under the ADB-funded project continued to be implemented through the CST modality.

As indicated in the following table, a total of 506 individuals were trained under different CST programs. While most of these trainings commenced towards the end of 2021, the implementation was carried out in 2022 (details in the annexure section of this report). Most trainings were offered at the NC2 and NC3 levels, and in some cases, a combination of both. All this training was implemented in partnership with registered private training providers in the country. 58.5 percent of the beneficiaries were female candidates.

**Table 2.19: Critical Skills Training (CST) implemented in 2022**

SN	Training Title	Certification	Male	Female	Total	Female %
1	ICT and Online Freelancing	Certificate	33	27	60	45.0
2	Digital Cable TV Technician	NC2	16	9	25	36.0
3	Hair & Beauty Therapist	NC2	6	24	30	80.0
4	Mobile Repair Maintenance	NC2	22	8	30	26.7
5	Sales Person	NC2	3	17	20	85.0
6	ECCD Facilitator	NC3	1	29	30	96.7
7	Fashion Designer	NC3	2	28	30	93.3
8	Mobile Application Developer	NC3	22	8	30	26.7
9	Visual Effects Artist	NC3	24	6	30	20.0
10	Bakery	NC2 + NC3	10	40	50	80.0
11	Bhutanese Food Production	NC2 + NC3	32	43	75	57.3
12	Commercial Accountant	NC2 + NC3	6	19	25	76.0
13	Food Production	NC2 + NC3	20	21	41	51.2
14	Food Production Associate	NC2 + NC3	13	17	30	56.7
	<b>Total</b>		<b>210</b>	<b>296</b>	<b>506</b>	<b>58.5</b>

## Critical Capability Development

Human Resource Development (HRD) is a critical concern for improving the performance and productivity of the workforce in the country, as Bhutanese firms are particularly in need of upskilling and reskilling their employees. Therefore, the Critical Capability Development (CCD) program is a training and development intervention aimed at enhancing the performance and productivity of the workforce in different economic sectors. The CCD program is provided in the form of long-term and short-term training, both within and outside the country, with the intention to support continuous learning and enhance the skills and knowledge of individuals in response to changing environments and new developments.

The main objective of the program is to enhance the productivity and performance of the workforce engaged in different priority sectors through effective and relevant reskilling and upskilling opportunities. The main target for this program is the workforce engaged in different economic sectors outside the civil service sector.

As indicated in the following table, a total of 990 in-service candidates were trained in different CCD programs. 62.1 percent of the beneficiaries are female candidates. The training was implemented for tourism and hospitality, production, services, and other cross-sectorial areas. The details of the programs are further provided in the annexure section of this report.

**Table 2.20: Critical Capability Development (CCD) program implemented in 2022**

SN	Training title	Male	Female	Total	Female %
1	Accounting with Tally	93	147	240	61.3
2	Advance Cooking (Continental and Indian Cuisine)	27	33	60	55.0
3	Advance Tailoring training on Modern Souvenir Products	2	18	20	90.0
4	Advance Tailoring Training on Religious Costumes & Traditional Ceremonial Items	1	19	20	95.0
5	Bakery and Confectionery	4	36	40	90.0
6	Bookkeeping using Tally	18	22	40	55.0
7	e-Commerce	49	56	105	53.3
8	Entrepreneurship TOT	20	14	34	41.2
9	Master's in Business Administration	6	2	8	25.0
10	Packaging and Labelling	24	35	59	59.3
11	Poultry Feed Formulation	14	12	26	46.2



12	Proposal Writing for PWD	4	6	10	60.0
13	Small Business Management	86	104	190	54.7
14	Tailoring (Gho)	4	34	38	89.5
15	Tailoring (Tracksuits)	3	17	20	85.0
16	Tailoring (Western Garment)	20	60	80	75.0
	<b>Total</b>	<b>375</b>	<b>615</b>	<b>990</b>	<b>62.1</b>

## Community Skills Training

The Special Skills Development Program (SSDP) and Village Skills Development Program (VSDP) are two regular alternative skills programs implemented by the DWPSD. The SSDP was initiated under the Royal Command in 1996 with the objective of skilling the armed forces in vocational skills so that they can generate income upon retirement from their service. The program later expanded to other special groups such as differently-abled individuals, juveniles, delinquents, monks and nuns, prisoners, disbanded gang members, and village youths. While the focus in the 9th FYP was on juvenile and delinquent groups with support provided to the Draktsho Vocational Institute (which was under the administration of the Youth Development Fund at that time), the focus shifted to the training of monks and nuns in the 10th FYP. The importance of skills training to improve the lives of villagers was recognised earlier on, with a Royal Command received in 1984 to establish a separate program called the Village Skills Development Program (VSDP) to provide skills development training for the villagers. The objective of the VSDP is to enhance community participation in local development activities through the provision of relevant skills. The program also provides avenues for villagers to participate in income-generating activities once they are skilled. Both SSDP and VSDP are implemented as part of the community skills development initiative.

In 2022, a total of 24 trainings, including baking, tailoring, carpentry, house wiring, hair dressing, and others, were implemented for 938 beneficiaries, out of whom 71.9 percent were female candidates. SSDP and VSDP were implemented in 11 different dzongkhags, as indicated in the following table.

Table 2.21: SSDP and VSDP programs implemented in 2022

SN	Training Title	Dzongkhag	Program	Total	Female %
1	Bakery and Confectionery	Chhukha	SSDP	41	100.0
2	Beautician	Chhukha	SSDP	20	100.0
3	Tailoring	Chhukha	SSDP	40	100.0
4	Tailoring	Pemagatshel	SSDP	37	45.9
5	Bakery and Confectionery	Pemagatshel	VSDP	43	93.0
6	Bakery and Confectionery	Thimphu	VSDP	20	100.0
7	Bakery and Confectionery	Zhemgang	VSDP	20	100.0
8	Construction Carpentry	Trashigang	VSDP	24	12.5
9	Construction Carpentry	Trongsa	VSDP	20	0.0
10	Cooking	Pemagatshel	VSDP	49	93.9
11	Domestic House Wiring	Mongar	VSDP	20	15.0
12	Domestic House Wiring	Paro	VSDP	48	18.8
13	Domestic House Wiring	Samdrup Jongkhar	VSDP	25	44.0
14	Hair Dressing	Pemagatshel	VSDP	35	85.7
15	Hair Dressing	Samdrup Jongkhar	VSDP	82	70.7
16	Home Appliances Repair and Maintenance	Pemagatshel	VSDP	30	13.3
17	Home Appliances Repair and Maintenance	Trongsa	VSDP	18	38.9
18	Masonry	Trongsa	VSDP	12	0.0
19	Plumbing	Tsirang	VSDP	25	20.0
20	Tailoring	Pemagatshel	VSDP	172	94.8
21	Tailoring	Samdrup Jongkhar	VSDP	20	85.0
22	Tailoring	Sarpang	VSDP	19	89.5
23	Tailoring	Trashigang	VSDP	98	84.7
24	Tailoring	Zhemgang	VSDP	20	100.0
<b>Total</b>				<b>938</b>	<b>71.9</b>

## TVET Studies outside Bhutan

In recent years, an increasing number of Bhutanese have started to pursue TVET studies outside the country. There had been cases of unregulated activities by private individuals/entities catering to these groups, putting individuals at risk of getting scammed. Therefore, a need was felt to put in place a mechanism to register Training Consultancy and Placement Firms (TCPFs). These TCPFs in turn would provide a means through which Bhutanese can avail TVET studies outside the country in a safe and transparent means.

The Regulation for the TCPF came into effect in February 2022. The Regulation was mainly concerned with the promotion and establishment of TCPFs within the country and regulating Bhutanese pursuing TVET studies outside Bhutan. In particular, the Regulation aimed to:

- Provide clarity on the mechanism of registration and establishment of TCPFs in the country;
- Provide a means through which students can avail ex-country TVET studies in recognized institutions through TCPFs; and
- Enhance public-private partnerships in TVET delivery.

The Regulation would apply to any ex-country TVET studies implemented by any individual(s)/entity(ies) in the country. TVET studies may be offered either at Certification or Diploma Level. Furthermore, any ex-country consultants or institutions interested in offering TVET studies to Bhutanese would be required to partner with any of the registered TCPFs.

However, in beginning of 2023, with the establishment of the Bhutan Qualification and Professional Certification Authority (BCQPA) under the MoESD, the regulation function was integrated under the TVET QC. Further, the Guideline for Education Consultancy and Placement Firms (ECPF) and this Regulation will be amalgamated under one regulation for ease of public service delivery.

In 2022, a total of 21 TCPF proposals were received. A total of 13 TCPFs were successfully approved and licenced. However, only ten TCPFs were operational. In 2022, a total of 67 individuals pursued TVET studies outside Bhutan through the TCPFs the details of which are provided in the following table. 79 percent of these students are currently studying in Australia and 21 percent are studying in Singapore.

Table 2.22: Number of individuals who pursued TVET studies through TCPFs in 2022

SN	TCPFs	Male	Female	Total
1	IPMS TCPF	16	28	44
2	Kunjung TCPF	0	0	0
3	Takin TCPF	0	0	0
4	Yarab Global Technical TCPF	2	1	3
5	Ewam TCPF	6	4	10
6	EverGreen TCPF	2	2	4
7	RG Global TCPF	0	0	0
8	EduVision Happyness TCPF	4	2	6
9	Tenzin TCPF	0	0	0
10	Retna TCPF	0	0	0
	<b>Total</b>	<b>30</b>	<b>37</b>	<b>67</b>

# TVET QUALITY INDICATORS

## Infrastructure development

Infrastructure development is one of the means for enhancing the quality of TVET programs. Under the TVET reform plan, efforts are being made ‘to transform TVET into an attractive learning and career pathway’. Place transformation is an important component of the TVET reform process. The overall aspiration underpinning the transformation is to "build TVET institutions that provide appealing, authentic, holistic, and ICT-enabled learning environments." Therefore, DWPSD is currently carrying out various construction and augmentation works within the DWPSD administered institutions to increase enrollment capacity at any given point in time from 1768 to 4150 trainees. To this end, during the 12th FYP period, budgets under the GOI-PTA Project and ADB were secured to carry out augmentation and infrastructure development works within the DWPSD administered institutes.

Under the Gol PTA Project, the following works have been carried out:

- Construction of river protection walls at TTI-Khuruthang (200m)
- Construction of river protection walls at TTI-Samthang (514.3m)
- Construction of river protection walls at TTI-Rangjung (500m long)
- Renovation and remodelling of existing infrastructure in TTI-Khuruthang, TTI-Thimphu and TTI-Samthang.
- Renovation and remodelling of existing structures in TTI-Chumey, TTI-Rangjung, IZC-Thimphu and CZC-Trashiyangtse
- Phase I: Design and Drawing of Facility Technology Workshop in TTI-Khuruthang
- Phase II: Construction of Facility Technology workshop in TTI-Khuruthang
- Hostel rectification work in TTI-Khuruthang
- Centralised solar hot water system and floor heating system in TTI-Chumey

Under the ADB funded STEP UP Project, the following works have been carried out:

- Construction of a new TVET institute in Serbithang, Thimphu
- Infrastructure development expansion at TTI Samthang (Contract amount: Nu. 131 million)
- Procurement and furnishing of TTIs with automobile and mechanical courses
- Procurement and furnishing of an ICT lab with modern equipment.

The different construction and development works are part of developing an aesthetically appealing infrastructure and physical environment with sustainable and green features, building functionally authentic, engaging, and multi-use teaching and learning facilities, and creating smart learning spaces through the integration of ICT digital infrastructure. Place transformation is one of the key strategies to enhance the quality and attractiveness of TVET programs in the country.

### Accredited TVET courses

The Bhutan Vocational Qualification Framework (BVQF) is a national framework under the Bhutan Qualification Framework (BQF) for the development, recognition, and award of vocational qualifications in Bhutan. The framework was developed by the then Department of Occupational Standards under the Ministry of Labour and Human Resources (currently the TVET QC under the MoESD) in collaboration with stakeholders in education and training.

The BVQF is designed to promote and facilitate lifelong learning and skills development by providing a clear and structured pathway for individuals to acquire and develop vocational skills and qualifications. The framework comprises a set of levels and descriptors that define the knowledge, skills, and competencies required for each level of qualification. The levels of the BVQF are as follows:

- NC1: Basic skills and knowledge for entry-level jobs
- NC2: Technical skills and knowledge for semi-skilled jobs
- NC3: Specialized skills and knowledge for skilled jobs
- ND1 and ND2: Advanced skills and knowledge for supervisory and management positions

Each level of the BVQF is further divided into three domains: knowledge, skills, and attitude. The framework also includes guidelines for the

development of vocational qualifications, assessment and certification procedures, and quality assurance mechanisms. The BVQF is intended to promote the recognition and portability of vocational qualifications within Bhutan and internationally. It is also designed to support the development of a skilled workforce that can contribute to the economic growth and development of Bhutan.

The implications of national certification are significant. For individuals, TVET national certification provides formal recognition of their skills and competencies, which can lead to better employment opportunities, increased job security, and higher wages. It also helps individuals identify areas where they need to improve their skills and competencies.

For employers, TVET national certification provides a standardised measure of the skills and competencies of job candidates, which can help them make informed hiring decisions. It also provides a way for employers to identify the training needs of their employees and design training programs that address specific skill gaps.

For the TVET system as a whole, national certification helps to improve the quality and relevance of TVET programs, by setting standards for the competencies and skills that should be acquired through such programs. It also provides a way to monitor and evaluate the effectiveness of TVET programs, by tracking the progress of individuals who have completed them. Therefore, fostering BVQF-aligned TVET courses in the country is one of the mechanisms for developing a skilled workforce and improving the quality of TVET programs.

As indicated below, in 2022, a total of 32 BVQF-aligned TVET courses were implemented, mostly at the NC2 and NC3 levels. Only one ND level course was implemented in 2022.

SN	Course Name	BVQF level
1	Bakery	NC3
2	auto electrician	NC2 + NC3
3	auto mechanic	NC2 + NC3
4	automobile painter	NC2
5	building painter	NC2
6	commercial accounting	NC2
7	computer application assistant	NC2
8	computer hardware & networking tech	NC2
9	construction carpentry	NC2
10	cultural tour guide	NC2
11	domestic electrician	NC2

12	earth moving equipment mechanic	NC2
13	excavator operator	NC2
14	food production	NC2 + NC3
15	furniture making	NC2
16	hair & beauty	NC2
17	heavy vehicle driving	NC2
18	jim-zop	NC2
19	lhadrip	NC2 + NC3
20	masonry	NC2
21	mobile application development	NC3
22	panel beater	NC2
23	patrap	NC2 + NC3
24	plumbing	NC2
25	professional driving	NC2
26	refrigeration & air conditioning	NC2
27	shag-zop	NC2
28	troe-zop	ND2
29	tshem-zop	NC2 + NC3
30	tshemdrup	NC2 + NC3
31	visual effect	NC3
32	welding	NC2

As indicated in the following table, a total of 114 TVET courses are being offered by the DWPSD administered institutions. While 53 have institute level certification, the others are accredited at the NC or ND level. The details of these courses are provided in the annexure section of the report.

**Table 3.1: List of accredited courses provided by DWPSD administered institutes**

Institute	Not accredited	Accredited			Total
	Institute Certificate	NC 2	NC 3	National Diploma	
CZC	0	7	6	3	16
JWPTI	15	1	0	0	16
NIZC	6	6	6	0	18
TTI-C	14	6	0	0	20
TTI-K	9	2	3	0	14
TTI-R	6	4	2	0	12
TTI-S	3	7	3	0	13
TTI-T	0	4	1	0	5
<b>Total</b>	<b>53</b>	<b>37</b>	<b>21</b>	<b>3</b>	<b>114</b>



## Quality Management System (QMS)

TVET Quality Management System (QMS) is implemented by the TVET QC. The QMS is designed to ensure that TVET programs and services in Bhutan meet national quality standards and are responsive to the needs of the labour market. The TVET QMS in Bhutan includes the following components:

- Program Development, Delivery and Evaluation, which includes: Procedure of curriculum development, Procedure for curriculum review, Procedure for curriculum endorsement, Procedure for preparing training delivery plans, Procedure for conducting theory class, Procedure for conducting practical class, Procedure for assigning project work and assignment, Procedure for On-the-Job Training, Procedure for field visit, Collecting feedback from trainees, Collecting feedback from Industry/Employer, and Collecting feedback from Trainers.
- Process of Resource Management, which includes: Finance & Administration, and HR Management and Development.
- Work Environment Management, which includes: Occupational Health and Safety and housekeeping.
- Institute estate management, which includes: Repair and maintenance of Infrastructure and facilities, and Inventory Management of Pool Vehicle.
- Management of Tools, Equipment and Materials, which includes: Inventory Management, Procedure for obtaining tools & equipment for training, Repair and Maintenance of tools & equipment, and Management of training tools and materials.
- Process of trainees' support services: Guidance, Counselling and Placement Services, and Procedure for Industrial Liaison, Publicity and Placement Service, Extra Curricular, Social activities and Staff & Trainees welfare.
- Process of trainees' Registration and selection.
- Process of handling complaints and non-compliances.
- Process Internal Quality Auditing and Management Review.
- Process of internal and external communication.

Therefore, the TVET QMS in Bhutan is a comprehensive system that is designed to ensure that TVET providers have clear guidelines and implementation processes on different aspects of successfully implementing a TVET program in the country.

As per the revised Registration Regulation, QMS is not mandatory at Grade C level. However, for an institute to be certified at Grade B or Grade A, QMS is mandatory. The following nine institutions have QMS certification, which accounts of only 6.6 percent of the overall TVET institutes in the country.

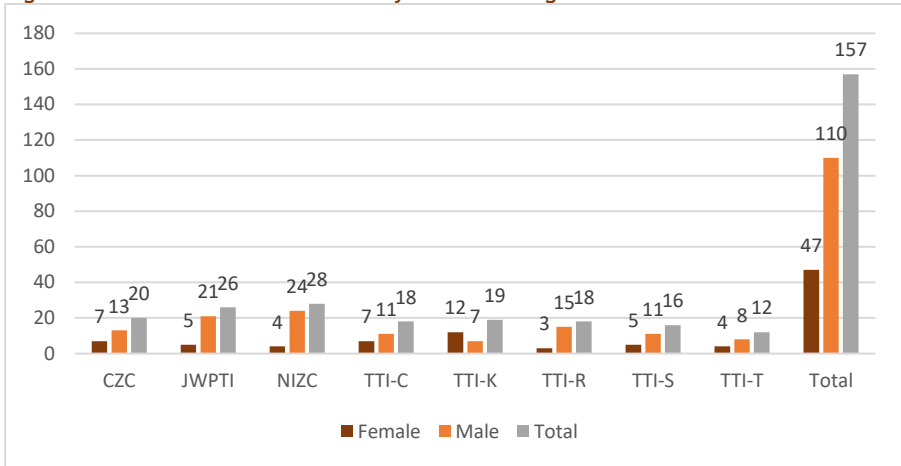
1.	TTI-C	QMS Certified
2.	JWPTI	QMS Certified
3.	TTIR	QMS Certified
4.	CZC	QMS Certified
5.	TTI-T	QMS Certified
6.	NIZC	QMS Certified
7.	TTI-S	QMS Certified
8.	TTI K	QMS Certified
9.	RITH	QMS Certified

## TVET Trainers

Understanding the profile of TVET trainers is important to assess TVET quality because trainers play a critical role in delivering effective TVET programs. Trainers are responsible for designing and delivering training programs, creating instructional materials, and assessing trainees' progress, among other things. Therefore, the quality of trainers has a direct impact on the quality of TVET programs.

Some of the key reasons why understanding the profile of TVET trainers is important include, relevant skills and experience, which can bring valuable practical knowledge and skills to their teaching; and pedagogical skills to create engaging and effective learning experiences for the trainees. As indicated in the following figure, under the DWPSD administered institutions, there are a total of 157 TVET trainers, 110 males and 47 females.

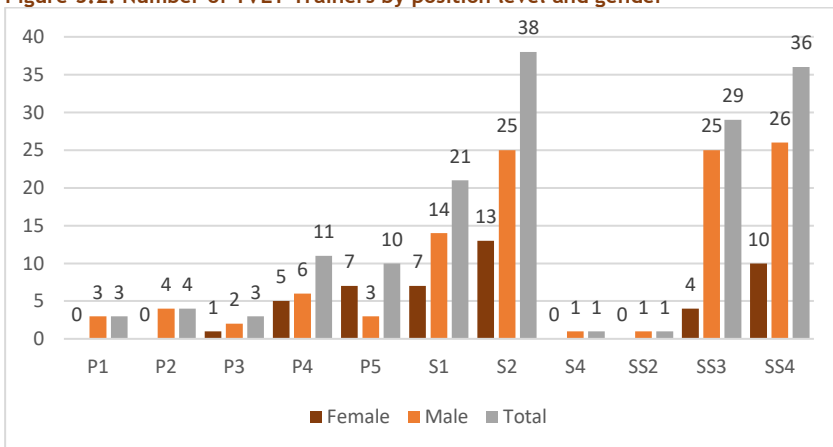
Figure 3.1: Number of TVET Trainers by Institute and gender



Most of the TVET trainers under the DWPSD administered institutes are recruited at the S level, as indicated in the following figure. This is mainly because the majority of TVET courses are offered at the NC level, requiring a trainer with a diploma level qualification. However, with the introduction of more ND level courses in the future, the institutes will require those with higher levels of education and qualifications.

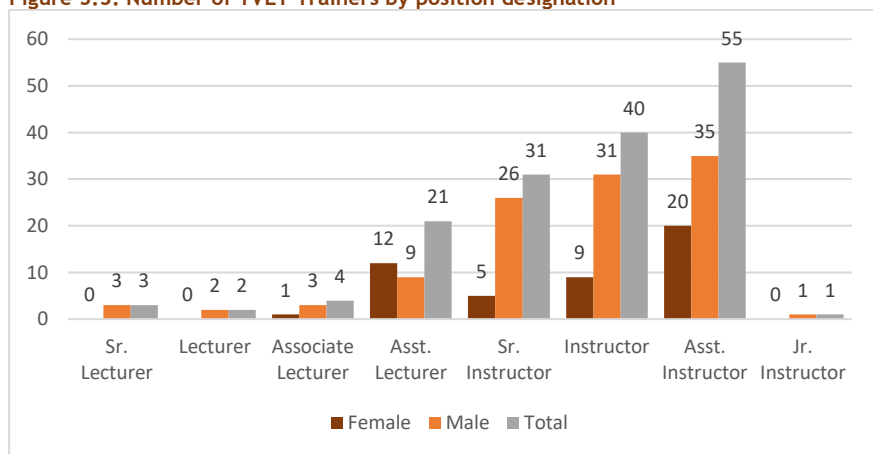
Currently, the DWPSD administered institutes have 13 P-level female trainers and 18 P level male trainers.

Figure 3.2: Number of TVET Trainers by position level and gender



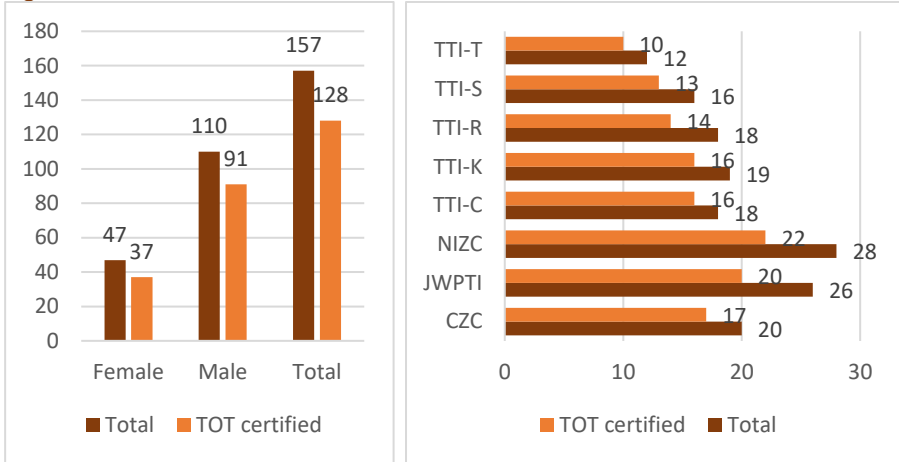
TVET trainers with diploma level qualifications are recruited under ‘instructor’ category, and those with higher education are recruited under ‘lecturer’ category. The majority of the TVET instructors working within the DWPSD administered institutes fall either under the assistant instructor or instructor categories.

**Figure 3.3: Number of TVET Trainers by position designation**



Training of Trainers (TOT) pedagogy is a mandatory qualification requirement for all TVET trainers, especially for those working in the DWPSD administered institutions. The TTTRC established under the DWPSD is mandated for the skills and qualification upgradation of all TVET trainers, especially those under the DWPSD administered institutions. The TOT pedagogy is now being provided as TOT andragogy program. All TOT programs are now being conducted in the TTTRC facility. As indicated in the following two figures, most of the TVET trainers in the DWPSD administered institutions are TOT certified. Out of 157 TVET trainers, 128 are TOT certified.

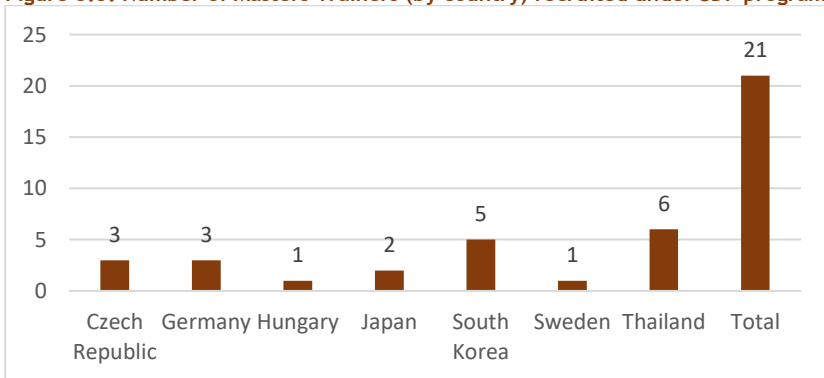
Figure 3.4: Number of TVET Trainers with TOT certification



### International Master Trainers

In recent years, since the initiation of the Skills Development Program (SDP) in 2021, the DWPSD has increasingly engaged international master trainers for the implementation of training in different areas. Such engagement can be beneficial not only in terms of quality training delivery but also in terms of access to global best practises in TVET teaching and learning and enhancing the capacity development of local trainers through knowledge sharing and learning.

Figure 3.5: Number of Masters Trainers (by country) recruited under SDP program



**Figure 3.6: Number of Masters Trainers (by occupation) recruited under SDP program**

## TVET Curriculum review and development

As the job market evolves, there is a growing need to develop new TVET programs and curricula that meet the changing demands of the labour market. This means that TVET institutions must adapt to these changes by creating new programs that reflect the latest industry trends, technologies, and practices. Additionally, it is important to review existing TVET curricula regularly to ensure that they remain relevant and up-to-date. As industries evolve, the skills and knowledge required by workers also change. This means that existing TVET programs may no longer be sufficient to meet the needs of the labour market. By reviewing and updating these programs, TVET institutions can ensure that graduates are equipped with the skills and knowledge required by employers.

Developing new TVET curricula and reviewing existing programs is one of the means for enhancing the quality of training provided by TVET institutions. As new technologies and practices emerge, TVET institutions must adapt their curricula to reflect these changes. This ensures that trainees receive skills and training that is of high quality and meets industry standards. In turn, this leads to a better-prepared workforce that is equipped to meet the demands of the labour market and contribute to the growth and development of the economy.

In 2022, the DWPSD developed 37 new curricula and revised 11 existing curricula as detailed in the following tables.

Table 3.2: List of new TVET curriculum developed in 2022

Curriculum	Certification Level	Status	Category
1. 2D Animation	Institute Certificate	New	Short Course
2. 3D Animation	Institute Certificate	New	Short Course
3. 3D Printing	Institute Certificate	New	Short Course
4. Backhoe Loader Operator	Institute Certificate	New	Short Course
5. Barista	Institute Certificate	New	Short Course
6. Basic Landscape Design	Institute Certificate	New	Short Course
7. Cloud computing	Institute Certificate	New	Short Course
8. Digital Marketing	Institute Certificate	New	Short Course
9. Drone Technology	Institute Certificate	New	Short Course
10. Electric Vehicle Servicing	Institute Certificate	New	Short Course
11. Floriculture	Institute Certificate	New	Short Course
12. Interior Design	Institute Certificate	New	Short Course
13. Internet of Things (IOT)	Institute Certificate	New	Short Course
14. Korean Cuisine	Institute Certificate	New	Short Course
15. Motor rewinding	Institute Certificate	New	Short Course
16. Motor winding (DTP)	Institute Certificate	New	Short Course
17. Repair and Maintenance of Home Appliances	Institute Certificate	New	Short Course
18. Repair and Maintenance of Mobile Phones	Institute Certificate	New	Short Course
19. Software development	Institute Certificate	New	Short Course
20. Trek Guiding	Institute Certificate	New	Short Course
21. Upholstery	Institute Certificate	New	Short Course
22. Auto Panel Beating (DTP)	NC 2	New	CBT
23. Automobile (DTP)	NC 2	New	CBT
24. Digital and Precision Engineering	NC 2	New	CBT
25. Earth Moving Equipment Technician (DTP)	NC 2	New	CBT
26. Mechanical Fitting (DTP)	NC 2	New	CBT
27. RAC (DTP)	NC 2	New	CBT
28. Auto Electrical (DTP)	NC 3	New	CBT
29. Automobile (DTP)	NC 3	New	CBT
30. HVAC (DTP)	NC 3	New	CBT
31. Industrial Electrical	NC 3	New	CBT
32. Masonry (DTP)	NC 3	New	CBT
33. Mechanical Fitter (DTP)	NC 3	New	CBT
34. Plumbing (DTP)	NC 3	New	CBT
35. Welding (DTP)	NC 3	New	CBT
36. Construction Supervisor	National Diploma	New	CBT
37. Tshemzo (Tailoring)	National Diploma	New	CBT

**Table 3.3: List of existing TVET curriculum revised in 2022**

Curriculum	Certification Level	Status	Category
1. Entrepreneurship	Institute Certificate	Revised	Short Course
2. Auto Panel Beating (Regular Course)	NC 2	Revised	CBT
3. Earth Moving Equipment Technician (Regular Course)	NC 2	Revised	CBT
4. Parzo	NC 2	Revised	CBT
5. Trezo	NC 2	Revised	CBT
6. Tshemdru	NC 2	Revised	CBT
7. Tshemzo (Tailoring)	NC 2	Revised	CBT
8. Parzo	NC 3	Revised	CBT
9. Trezo	NC 3	Revised	CBT
10. Tshemdru	NC 3	Revised	CBT
11. Tshemzo (Tailoring)	NC 3	Revised	CBT

## National Competency Standards review and development

National competency standards are a set of guidelines that outline the knowledge, skills, and competencies required for a specific job or occupation. These standards are developed by industry experts and stakeholders, in collaboration with educational and training institutions, to ensure that graduates of TVET programs have the necessary skills to perform their job effectively. The standards cover a wide range of occupations, from traditional trades such as plumbing and carpentry, to emerging industries such as renewable energy and digital technology.

The TVET occupational standards provide a framework for designing and delivering effective training programs that meet the needs of both employers and learners. By aligning the curriculum with the standards, training providers can ensure that their graduates are equipped with the skills and knowledge required by the industry. This, in turn, improves the employability of graduates and supports the development of a skilled workforce. The standards also provide a basis for assessing the performance of individuals in a particular job or occupation, allowing for the recognition of prior learning and the establishment of clear career pathways.

As industries evolve and new technologies emerge, the skills and knowledge required by workers in those industries also change. To ensure that TVET graduates are equipped with the most relevant and up-to-date skills, the occupational standards are periodically reviewed and updated. And with the



growing development of the economy and the emergence of new jobs and opportunities, new occupational standards are developed. As such, occupational standards are the foundation for the design of any TVET course.

As indicated in the following table, in 2022, a total of 20 new standards were developed and a total of 23 standards were reviewed. New standards were developed for metal art fabrication, sound technicians, cyber security, IOT, and other occupations listed in table 3.4. Whereas standards were reviewed for transmission and distribution linemen, commercial accountants, auto electricians, and other occupations listed in Table 3.5.

**Table 3.4: List of new competency standards developed in 2022**

NCS	Certification Level	Status	Year
1. Metal Art Design and Fabrication	NC	new	2021-22
2. Motor Grader Operator	NC	new	2021-22
3. Paver Operator	NC	new	2021-22
4. Road Roller Operator	NC	new	2021-22
5. Security Guard	NC	new	2021-22
6. Stone Crusher Plant Operator	NC	new	2021-22
7. Information Technologist	ND	new	2021-22
8. Tshemzo	ND	new	2021-22
9. CNC Machinist	NC	new	2022-23
10. Food Processing Technician	NC	new	2022-23
11. IOT Technician	NC	new	2022-23
12. Light Technician	NC	new	2022-23
13. Machine Learning Technician	NC	new	2022-23
14. Mechanical Products Designer	NC	new	2022-23
15. Multimedia Technician	NC	new	2022-23
16. SCADA Technician	NC	new	2022-23
17. Seed Production Technician	NC	new	2022-23
18. Sound Technician	NC	new	2022-23
19. Automotive Technologist	ND	new	2022-23
20. Cyber security Technologist	ND	new	2022-23

**Table 3.5: List of existing competency standards revised in 2022**

NCS	Certification Level	Status	FY
1. Asphalt Plant Operator	NC	revised	2021-22
2. Bhutanese Food Production Associate	NC	revised	2021-22
3. Commercial Accountant	NC	revised	2021-22
4. Food Production Associate	NC	revised	2021-22
5. Home Appliance Technician	NC	revised	2021-22
6. Motor Grader Operator	NC	revised	2021-22
7. Power Tiller Technician	NC	revised	2021-22
8. Transmission and Distribution Lineman	NC	revised	2021-22
9. Construction Supervisor	ND	revised	2021-22
10. Auto Electrician	NC	revised	2022-23

11. Backhoe Operator	NC	revised	2022-23
12. Earth Moving Equipment Mechanic	NC	revised	2022-23
13. Heavy Auto Mechanic	NC	revised	2022-23
14. Jimzop	NC	revised	2022-23
15. Lhadrip	NC	revised	2022-23
16. Mechanical Fitter	NC	revised	2022-23
17. Shingtshenpa	NC	revised	2022-23
18. Tshemdrup	NC	revised	2022-23
19. Welder	NC	revised	2022-23
20. Hotel Operations Supervisor	ND	revised	2022-23
21. Jimzop	ND	revised	2022-23
22. Lhadrip	ND	revised	2022-23
23. Tour Operations Supervisor	ND	revised	2022-23

## Trainee Feedback on TVET training and facilities

A TVET Tracer was conducted in March 2023 for the 2021 graduate cohort to collect data and information on graduate feedback on the quality of training delivery, trainers, and facilities, in addition to the employment outcome. While the employment outcome results are reflected in the ‘relevancy’ section, the graduate feedback on the quality of course content, trainer, and infrastructure is reflected in the ‘quality’ section.

Through the tracer survey, graduates were asked to provide their feedback on the overall course content, which includes the quality of theoretical learning, the quality of practical learning, and on-the-job learning. Further, graduates were also asked to assess the quality of entrepreneurship and self-employment training, which has now been successfully integrated in all institutions under the direct administration of DWPSD, and also the career counselling services, which are provided at the institute with the aim of enhancing trainees’ knowledge of jobs and the labour market upon graduation.

As indicated in the following table, the graduate feedback on the theoretical, practical, and on-the-job learning components is fairly high, with more than 85 percent stating that it was either good or very good. Considering the average feedback on some aspects of the course content, there is a need to improve the quality of these components.

**Table 3.6: TVET Graduate assessment on the overall course content (percent)**

Course content	Very Poor	Poor	Average	Good	Very Good
Theoretical component	0.1	1.1	21.9	44.8	32.1
Practical component	0.3	1.7	16.3	45.0	36.7
On-the-job-training	0.9	1.9	18.0	45.0	34.2
Entrepreneurship and self-employment training	0.5	2.3	27.2	50.1	19.9
Career Counselling services	0.5	2.8	26.4	49.1	21.1

Graduates feedback was collected on the TVET trainers, more specifically on the quality of training delivery in the theoretical and practical components, the use of instructional materials and aids, and the availability of the trainer for any course-related consultation and feedback. As indicated in the following table, the graduate feedback on the quality of the trainer is very positive, with more than 80 percent assessing the trainer as either good or very good in all four parameters.

**Table 3.7: TVET Graduate feedback on the trainer in training delivery (percent)**

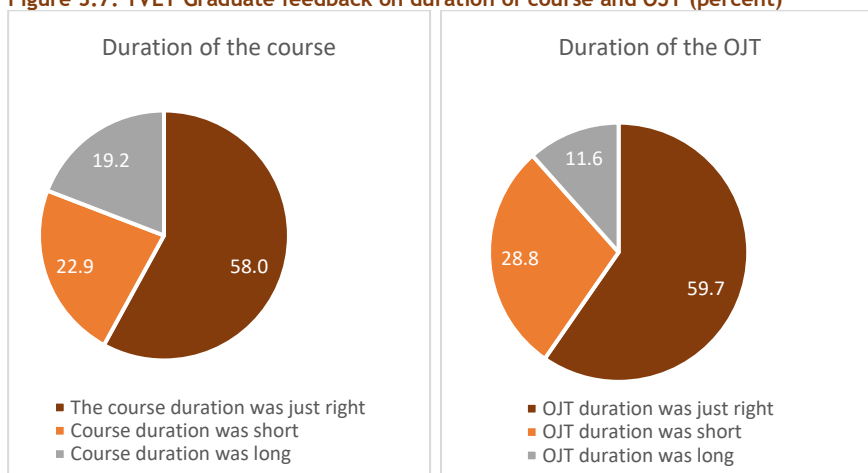
Trainer	Very Poor	Poor	Average	Good	Very Good
Quality of training in Theoretical Component	0.4	1.5	16.0	48.1	34.0
Quality of training in Practical Component	0.1	1.6	13.4	45.3	39.5
Use of Instructional Materials and Aids	0.3	2.7	17.5	47.5	32.1
Availability for course related consultation and feedback	0.5	1.5	18.3	54.3	25.4

Through the TVET tracer, graduate feedback was collected on the physical space and infrastructure within the institutes. Graduates were asked to assess the quality of the classroom, the quality of practical training areas, training tools and equipment, computer lab facilities, library and resource centres, accommodation and hotel facilities, dining and mess facilities, and internet connectivity, among other parameters highlighted in the following table.

**Table 3.8: TVET Graduate assessment in the training facilities (percent)**

Facilities and Infrastructure	Very Poor	Poor	Average	Good	Very Good
Quality of Classroom	1.6	5.7	23.1	45.4	24.2
Quality of Practical training areas	1.6	4.6	25.2	43.4	25.2
Training tools and equipment	2.1	6.5	24.6	45.4	21.3
Computer laboratories	4.0	10.3	29.3	42.4	14.0
Library and/or resource centre	1.6	7.8	28.2	46.4	16.0
Accommodation/Hostels	2.8	8.5	24.2	45.6	18.9
Dining/Mess	4.5	12.8	28.7	39.5	14.5
Internet Connectivity	8.8	16.7	26.9	35.3	12.3
Transportation facilities	2.7	12.1	30.8	41.8	12.6
Sports and recreational facilities	6.0	12.8	28.1	40.7	12.5
Occupational Health and Safety (OHS)	1.2	4.1	25.0	47.7	22.0

Graduates were asked to provide their assessment of the adequacy of duration for the overall course and the OJT component, for which they are attached to the employer or industry. More than 58 percent of the graduates said that both the duration of the course and the OJT were adequate and just right. However, more than 22 percent said that the duration was not adequate, and others said it was long.

**Figure 3.7: TVET Graduate feedback on duration of course and OJT (percent)**


## TVET RELEVANCE INDICATORS

A TVET Tracer Survey was conducted in March 2023 for the graduate cohort of 2021 from all eight institutions, with the exception of RDTC, under the direct administration of the DWPSD. From a total of 1063 graduates, a total of 764 responded to the survey, which accounts for a 71.9 percent response rate. The response rate from the eight institutions ranges from 63 percent to 89.9 percent. The female response rate is 5 percent higher than the male response rate. Considering the high response rate, the results presented should have higher statistical significance.

**Table 4.1: TVET Tracer 2023 response by institute for 2021 graduate cohort**

Institute	Graduates			Response			Response rate		
	F	M	Total	F	M	Total	F	M	Total
CZC	35	63	98	30	58	88	85.7	92.1	89.8
JWPTI	33	79	112	22	52	74	66.7	65.8	66.1
NIZC	48	76	124	42	49	91	87.5	64.5	73.4
TTI-Chumey	98	251	349	61	159	220	62.2	63.3	63.0
TTI-Khuruthang	37	83	120	32	67	99	86.5	80.7	82.5
TTI-Rangjung	23	63	86	21	50	71	91.3	79.4	82.6
TTI-Samthang	8	102	110	5	73	78	62.5	71.6	70.9
TTI-Thimphu	8	56	64	6	37	43	75.0	66.1	67.2
<b>Total</b>	<b>290</b>	<b>773</b>	<b>1063</b>	<b>219</b>	<b>545</b>	<b>764</b>	<b>75.5</b>	<b>70.5</b>	<b>71.9</b>

Looking at the background of the parents or guardians of the TVET beneficiaries, the TVET Tracer 2023 shows that the majority (48.5 percent) are those coming from agricultural backgrounds. 20.9 percent of the parents and guardians are engaged in unpaid family work, and 5.9 percent are retired. Only about 25 percent of the parents or guardians are working either in private or public firms. The subsequent figure provides information on the educational qualifications of the parents or guardians of the graduates, and it shows that 64.5 percent of the parents or guardians do not have any education and 4.9 percent have non-formal education. Only 2.9 percent of the TVET beneficiaries have parents or guardians with higher education, and about 13 percent have basic education.

Figure 4.1: Parents/Guardian's employment background of TVET beneficiaries (percent)

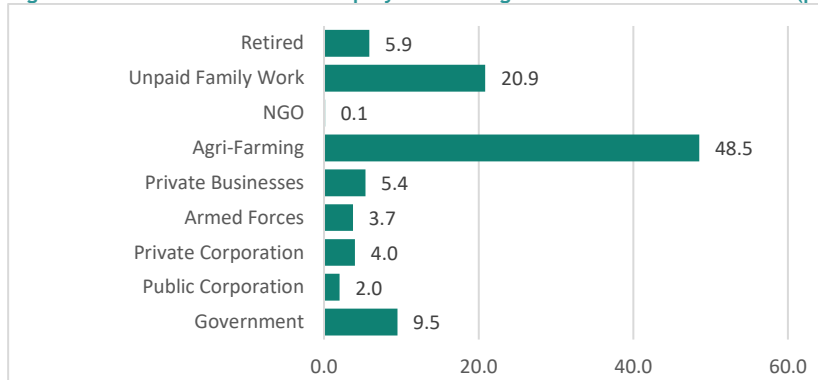
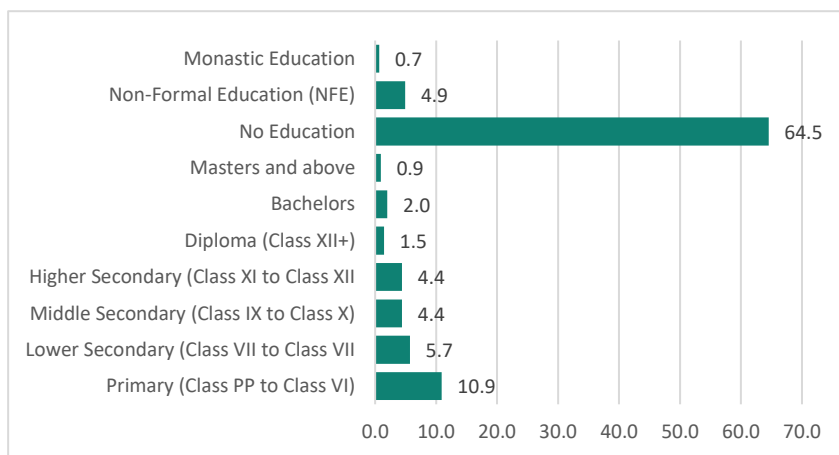
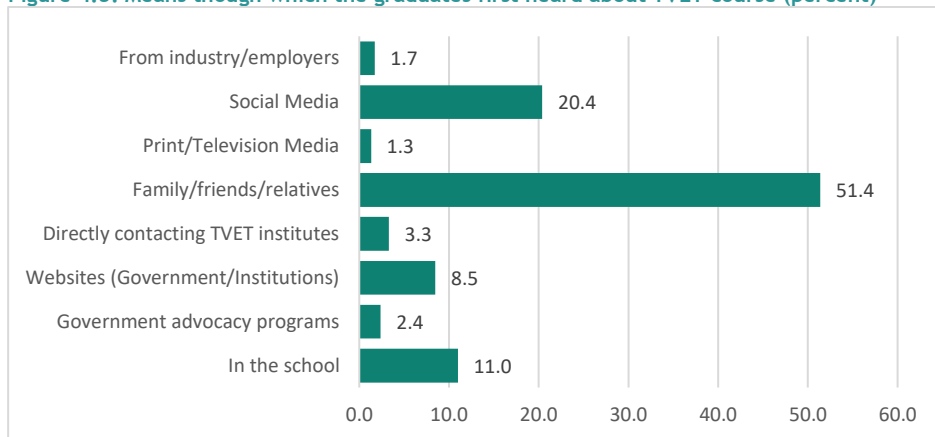


Figure 4.2: Parents/Guardian's qualification background of TVET beneficiaries (percent)



Graduates were asked to provide details on how they first heard about the TVET course they were enrolled in. As shown in the following figure, 51.4 percent said that they received the information first from their family, friends, or relatives. 20.4 percent said they first heard about the program through social media platforms.

Figure 4.3: Means through which the graduates first heard about TVET course (percent)



## Employment Outcome

The employment outcomes for TVET graduates can vary depending on factors such as the quality of training, the relevance of skills to the labour market, and the overall economic conditions. However, there are several factors that suggest TVET graduates have favourable employment outcomes.

TVET programs are designed to equip students with practical skills that are in demand by employers. As a result, TVET graduates are generally viewed as more job-ready than those with purely academic qualifications. This can translate to a higher likelihood of finding employment upon graduation. Furthermore, many TVET programs have partnerships with industry and employers, which can lead to better job placement rates and higher starting salaries for graduates.

TVET graduates are often in demand in sectors that are key drivers of economic growth, such as manufacturing, construction, and technology. These industries require a workforce with specific technical skills, which TVET graduates are well-positioned to provide. This means that TVET graduates can often find employment in high-growth sectors, with opportunities for career advancement and long-term job stability.

TVET graduates are often able to start their own businesses or become self-employed. The practical skills and competencies gained through TVET programs can be applied to a wide range of entrepreneurial ventures, from starting a small business to becoming a freelance contractor. This can provide greater flexibility and autonomy for TVET graduates, as well as the potential for higher earnings and job satisfaction.

While the employment outcomes for TVET graduates can vary, there are several factors that suggest favourable outcomes. TVET programs are designed to provide practical skills that are in demand by employers, and many have partnerships with industry and employers that can lead to better job placement rates and higher salaries. Additionally, TVET graduates are often in demand in key growth sectors and have the potential to start their own businesses or become self-employed. Overall, TVET can be a valuable pathway for those seeking employment and career opportunities.

Through the TVET Tracer 2023 for the 2021 graduate cohort, employment within one year of graduation was assessed to provide insight into the effectiveness of the training provided. If a high percentage of graduates are not finding employment within a year of graduation, it may indicate that the training provided did not adequately prepare them for the workforce or that the labour market demand for their skills is low. This information can be used to improve the quality and relevance of education and training programs, ensuring that graduates have the skills and competencies that are in demand by employers.

As indicated in the following table, 66.7 percent of the 2021 graduate cohort was able to find employment within one year of graduation. A significant percentage of graduates were not able to find employment after graduation.

Within the different institutes, employment within one year is the highest for TTI-R (84.3 percent) and the lowest for CZC (60.3 percent). A good percentage of employment within one year of graduation for TVET courses can vary depending on several factors, including the type of course, the level of qualification, and the state of the labour market. However, in general, a high percentage of employment within one year of graduation is considered a positive indicator of the quality and relevance of the TVET course.

Some studies suggest that a benchmark of 80% employment within one year of graduation is a good target for TVET courses. However, this figure can vary depending on the industry or occupation that the course is preparing students for. For example, some high-demand industries may have a higher



employment rate for TVET graduates than others. It is also important to consider the quality of employment when looking at employment outcomes for TVET graduates. Factors such as job security, wages, and opportunities for career advancement should be taken into account alongside the overall employment rate.

**Table 4.2: Duration taken to secure first job after graduation by gender (percent)**

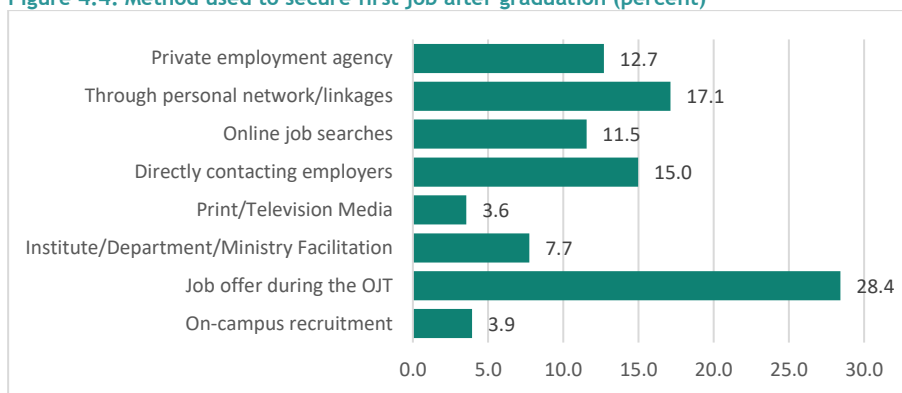
How long did it take to secure your first job?	Percent		
	Female	Male	Total
Less than 3 months	41.9	47.8	46.1
3-6 months	15.7	15.1	15.3
7-12 months	6.2	4.9	5.3
More than 1 year	5.7	4.7	5.0
I have not been employed since graduation	30.5	27.4	28.3
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Employment within one year of graduation</b>	<b>63.8</b>	<b>67.9</b>	<b>66.7</b>

**Table 4.3: Duration taken to secure first job after graduation by institute (percent)**

How long did it take to secure your first job?	Percent								Total
	CZC	JWPTI	NIZC	TTI-C	TTI-K	TTI-R	TTI-S	TTI-T	
Less than 3 months	53.8	32.4	62.4	40.3	26.5	57.1	61.0	53.7	46.1
3-6 months	3.8	27.0	4.7	16.7	26.5	15.7	11.7	9.8	15.3
7-12 months	2.6	1.4	2.4	4.6	9.2	11.4	5.2	7.3	5.3
More than 1 year	3.8	2.7	8.2	1.9	11.2	7.1	6.5	0.0	5.0
I have not been employed since graduation	35.9	36.5	22.4	36.6	26.5	8.6	15.6	29.3	28.3
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Employment within one year of graduation</b>	<b>60.3</b>	<b>60.8</b>	<b>69.4</b>	<b>61.6</b>	<b>62.2</b>	<b>84.3</b>	<b>77.9</b>	<b>70.7</b>	<b>66.7</b>

Graduates were asked to provide information on the method used to secure their first job after graduation. There are several methods, which include the use of private employment agencies within the country, personal networks and linkages, online job searches, and directly contacting employers, among others. As indicated in the following figure, job offers during the OJT were the most effective method for securing a first job (28.4 percent). However, only 3.9 percent said that they got their first job offer through an on-campus recruitment initiative.

Figure 4.4: Method used to secure first job after graduation (percent)



## Current Employment

While 66.7 percent of the graduates were able to secure a job at some point after graduation, only 54.7 percent said that they are currently employed. 46.6 percent are employed by other firms, and 8.1 percent are self-employed. The current unemployment rate among female counterparts is higher than that of male counterparts, with 49.5 percent of females saying that they are not employed.

The subsequent table provides details on the current employment status of different institutes. The current employment rate is the highest for TTI-R, with 81.2 percent employed and 1.4 percent in self-employment. The percentage of self-employment is higher for zorig program graduates in comparison to TTI program graduates. The current unemployment rate is more than 45 percent for CZC, TTI-C, JWPTI, and TTI-T.

Table 4.4: Current employment status by gender (percent)

Current employment status	Female	Male	Total
Employed	44.8	47.3	46.6
Self-employed/ freelance/ own-business	5.7	9.0	8.1
Unemployed	49.5	43.7	45.4
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

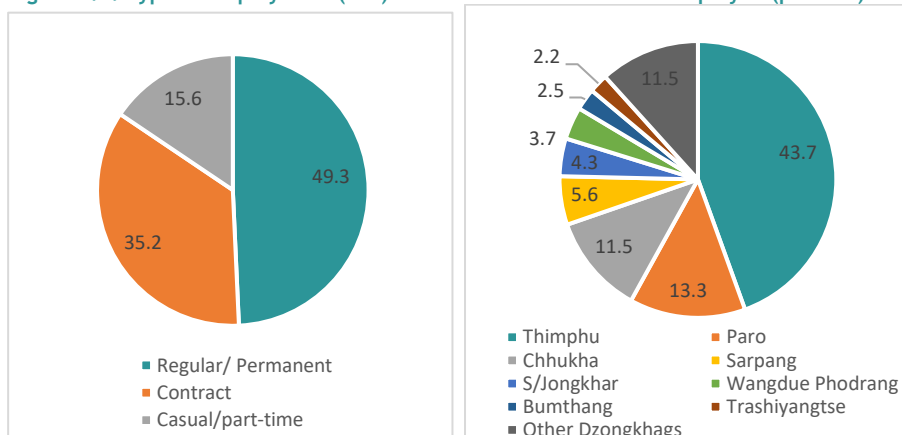
Table 4.5: Current employment status by institute (percent)

Current employment status	CZC	JWPTI	NIZC	TTI-C	TTI-K	TTI-R	TTI-S	TTI-T	Total
Employed	36.7	44.6	43.7	32.6	51.0	81.2	66.2	44.2	46.6
Self-employed/ freelance/ own-business	11.4	5.4	12.6	10.6	6.1	1.4	2.6	9.3	8.1
Unemployed	51.9	50.0	43.7	56.9	42.9	17.4	31.2	46.5	45.4
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The graduates were asked to provide information on the type of employment and location of their current job, especially for those working with other firms. As indicated in the following two figures, 49.3 percent of the employed are in regular/permanent jobs, whereas more than half are in contract, casual, or part-time jobs.

The majority of those employed are working in the capital (43.7 percent), followed by Paro and Chhukha dzongkhag, which is expected since most of the economic activities are located in these locations.

Figure 4.5: Type of employment (left) and work location of those employed (percent)



## Use of skills and competencies at work

Graduates who said that they are currently working were asked to provide their assessment of the use of skills and competencies gained from the TVET course in their current workplace. On a scale of ‘strongly disagree’ to ‘strongly agree’, they were asked if they were able to apply the skills learned from the course to their current area of work, if it was easy for them to get a job with the skills they acquired from the course, and if there were enough work opportunities after graduation. The results are presented in the following table. While the percent of current employment is quite low, a very high percent of those who are employed are able to use the skills to find employment and apply them in their workplace.

**Table 4.6: Assessment on benefit of skills/training by those employed (percent)**

Statements (employed)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
I am able to use the skills I learned from my course to my current area of work	4.1	2.0	15.5	41.1	37.3	100
It was easy to get a job from the skills I acquired from the course	2.9	2.3	22.1	48.5	24.1	100
There were enough work opportunities after graduation	4.1	7.5	32.2	39.7	16.5	100

Similarly, graduates who said that they are currently self-employed were asked to provide their assessment of the use of skills and competencies gained from the TVET course in their current business. On a scale of ‘strongly disagree’ to ‘strongly agree’, they were asked if they were able to apply the skills learned from the course to their current business, if it was easy for them to set up their own business after graduation, and if there were enough business opportunities after graduation. The results show that while many agree that they are able to apply the skills gained from the TVET course to their business, setting up their own business was a challenge for many. However, more than 60 percent of the self-employed agree or strongly agree that there are enough business opportunities after graduation.

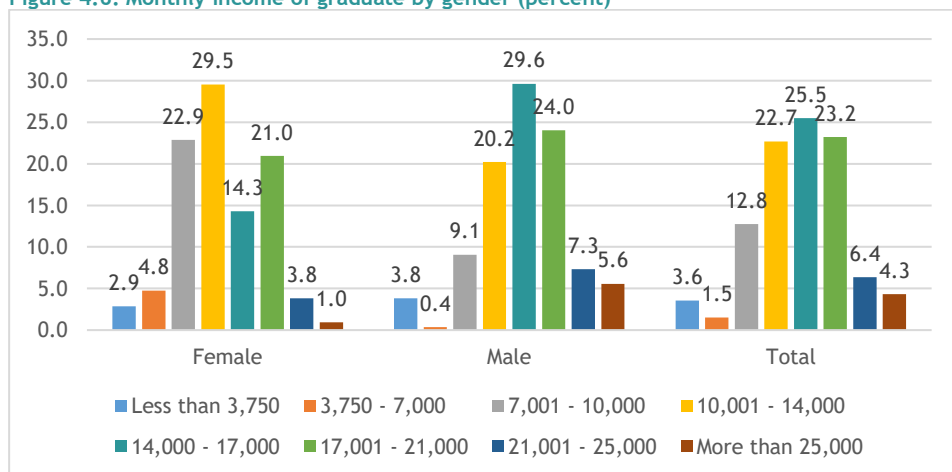
**Table 4.7: Assessment on benefit of skills/training by those self-employed (percent)**

Statements (self-employed)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
I am able to use the skills I learned from my course to my current business	1.8	7.0	10.5	40.4	40.4	100
It was easy to setup my own business/work after graduation	10.5	14.0	24.6	33.3	17.5	100
There were enough business opportunities after graduation	5.2	6.9	27.6	50.0	10.3	100

## Monthly income of graduates

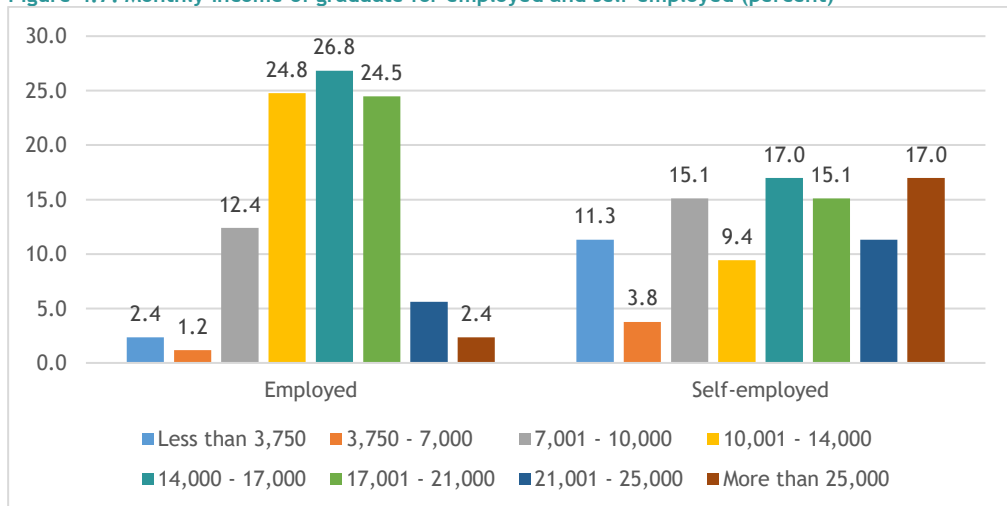
Those who are currently employed were asked to provide details on their average monthly income. While overall graduates have a monthly average income of about Nu. 16,950, female graduates are earning less in comparison to male graduates. On average, a female graduate has a monthly income of about Nu. 13,600, and a male graduate has a monthly income of about Nu. 18,200. The figure below provides more details on the income bracket for both genders and overall graduates. While most male graduates have an average monthly earning between Nu. 14,000 and Nu. 17,000, female graduates have an average monthly earning between Nu. 10,000 and Nu. 14,000.

Figure 4.6: Monthly income of graduate by gender (percent)



The average monthly income for a graduate who is self-employed is higher than that of those who are employed with other firms. A self-employed graduate is able to secure a monthly earning of about Nu. 18,900 in comparison to a graduate employed with other firms, which amounts to about Nu. 16,600. The following graph provides the monthly income brackets for the two groups. A higher proportion of the self-employed falls either in the lowest or the highest income bracket in comparison to those who are employed by other firms.

Figure 4.7: Monthly income of graduate for employed and self-employed (percent)



## Profile of unemployed

A high proportion of the 2021 graduate cohort is unemployed (45.4 percent), as indicated in Table 4.4. 49.9 percent of the female and 43.7 percent of the male graduates said they are currently unemployed. These individuals were asked to provide further details on the duration of unemployment, the reasons for their current unemployment status, and if they require any support to help them secure employment.

As indicated in the following table, almost 45.3 percent said that they had been unemployed for more than 12 months.

**Table 4.8: Duration of unemployment (percent)**

Duration of unemployment	Female	Male	Total
Less than three months	21.4	22.5	22.2
3 to 6 months	22.4	19.3	20.3
7 to 11 months	15.3	11.0	12.3
More than 12 months	40.8	47.2	45.3
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

30.7 percent said that there is a lack of job opportunities in the labour market, 12.5 percent said that they could not find a job of their preference, and 4.7 percent had recently left or lost a job. On a positive note, 6.7 percent are exploring setting up their own business, and 16.1 percent are taking up further studies. There are also those whose unemployment situation is circumstantial, since more than 10 percent indicated that they are unemployed because of health, family, or other personal reasons. 4.1 percent said that they are not interested in working, and there are also those who are exploring training and employment opportunities overseas.

**Table 4.9: Reasons for current unemployment (percent)**

SN	Reason for current unemployment	Female	Male	Total
1	Lack of Job opportunities	30.2	30.9	30.7
2	Could not get the job of my preference	14.6	11.7	12.5
3	Recently left/lost job	5.2	4.5	4.7
4	Exploring to set up my own business	4.2	6.7	6.0
5	Interested to take up further studies	7.3	16.1	13.5
6	Exploring/opting for overseas training/employment	8.3	12.6	11.3
7	Health-related reasons	4.2	2.7	3.1
8	Family issues/taking care of my family	13.5	9.0	10.3
9	Marriage/reproductive roles	11.5	0.4	3.8
10	I am currently not interested in working	1.0	5.4	4.1
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Those who were unemployed but actively seeking employment within the country were asked if they required any further support to help them secure employment. As indicated in the following table, the majority said they require employment facilitation support. Others highlighted the need for additional skills training and entrepreneurial knowledge and information for exploring self-employment opportunities and avenues.

**Table 4.10: Support needed by those actively seeking employment (percent)**

What support do you think will help you to get employment?	Number	Percent
Additional skills training	60	35.5
Employment facilitation support	82	48.52
Entrepreneurship knowledge/information	25	14.79
No help needed	2	1.18
<b>Total</b>	<b>169</b>	<b>100</b>

## Industry linkage and partnership

TVET institutions as well as the industry can mutually benefit from TVET partnerships and linkages. For TVET institutions, these collaborations can help provide relevant skills training, increase student employability, contribute to the development of the economy, and stay up-to-date with industry trends. For industry partners, these partnerships can help them access a pool of skilled workers, build relationships with institutions, and influence TVET programs geared towards the needs of the industry. Therefore, the development of strong industry linkages and partnerships is crucial for the success of TVET institutions and the growth of industries.

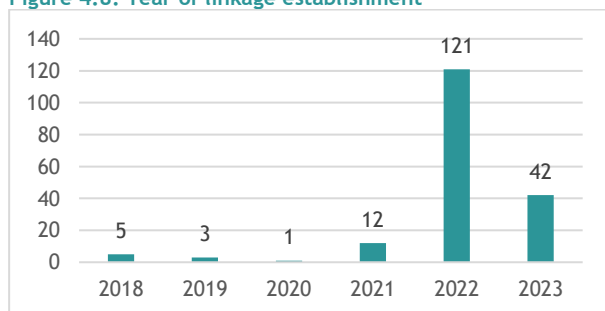
The institution's management uses different ways to establish these connections, both formal and informal means. TVET institutions often consult with industry representatives, organise industry visits and guest lectures, hold on campus recruitment drives, and implement OJT components in partnership with these industries. The institutions under the direct administration of the DWPSD have partnerships and linkages with 184 industries, a summary of which is provided in the following table, with details provided in the annexure section of this report.

Currently, industry partnerships and linkages are used solely for OJT and industrial visits, which are key components of TVET course delivery. In a few cases, the linkages are also used for job placement. Therefore, there is scope for the institutes not only to increase the number of industry partnerships but also to expand and diversify areas of linkages in the form of stronger job placement initiatives, on-campus recruitment, industry feedback on the performance of TVET graduates, collecting skills needs, and other areas important to keeping the TVET program relevant to industry needs.



**Table 4.11: Number of industry linkage and year of linkage establishment**

Institute	Number of Industries
CZC	11
JWPTI	17
NIZC	11
TTI-C	14
TTI-K	2
TTI-R	41
TTI-S	53
TTI-T	24
RDTC	11
<b>Total</b>	<b>184</b>

**Figure 4.8: Year of linkage establishment**

## TVET GOVERNANCE INDICATORS

Effective and efficient governance is crucial for ensuring that TVET institutions are able to provide high-quality education and training to learners. TVET governance refers to the structures, policies, and processes that are in place to support the effective delivery of TVET programs. At the macro level, TVET governance includes policies and legal provisions that guide the development and implementation of TVET programs at the national level. It also includes the establishment of national institutions responsible for overseeing TVET, such as TVET councils and accreditation bodies, and the availability of national resources for TVET, such as funding and training materials.

At the institutional level, TVET governance includes aspects such as institutional autonomy, resource utilization, leadership, administration, decision-making processes, strategic management, TVET advocacy and image building, data management, research and innovation, trainee welfare, capacity building, project management, infrastructure development, and many other areas. Effective TVET governance at the institutional level is necessary for ensuring that TVET institutions have the resources and support needed to deliver high-quality programs and meet the needs of learners and the labour market.

While this section is limited to reporting statistics on TVET management staff, staff turnover, and TVET financing, it is important to recognize the critical role that effective TVET governance plays in supporting the success of TVET institutions. By investing in governance and financing, policymakers can create an environment that supports the development of skilled workers, promotes innovation, and contributes to sustainable economic growth. This can help to ensure that TVET programs are responsive to the changing needs of learners and employers, and that they continue to provide high-quality education and training over the long term.

## Human Resources

Human resources in the TVET sector are a crucial component in delivering quality training programs. Trainers, instructors, curriculum developers, program coordinators, administrators and different support staff all play vital roles in ensuring that the training provided meets the needs of students and the industry. The staff within the Department and the institutes work together to design, develop, and deliver training programs that equip learners with the practical skills and knowledge they need to succeed in the workforce.

In the TVET sector, trainers and instructors are expected to have a deep understanding of the industry they are teaching. They must be able to communicate effectively with learners, motivate them to learn, and adapt their teaching methods to the needs of individual learners. Additionally, curriculum developers are responsible for designing training materials and programs that are relevant and up-to-date. They must have an in-depth understanding of industry needs to ensure that learners are well-prepared for the workforce.

Administrators and managers in the TVET sector are responsible for managing the day-to-day operations of the training center. They ensure that facilities are well-maintained, equipment is up-to-date, and programs are running smoothly. Additionally, they manage budgets and ensure that the institute is financially sustainable. Therefore, human resources within the different categories together play an essential role in effective and efficient delivery of TVET plans, programs and activities.

Within the MoESD, as indicated in the following figure, there are a total of 315 staff in different categories working in the DWPSD, TVET QC, and DWPSD administered institutes. While a total of 306 staff are active, others are either on secondment, Study Leave or Extraordinary Leave.

The subsequent tables provide data on the human resources within the two Departments and the institutes by position level and job categories. Majority of the staff falls either in the TVET instructors/lecturers or program officer category. Program coordinators within the two Departments typically look after program coordination and management, curriculum development, standard development, assessment and certification, TVET regulation and other aspects of TVET planning, coordination, and implementation.

Figure 5.1: Number of human resources in the departments and institutes

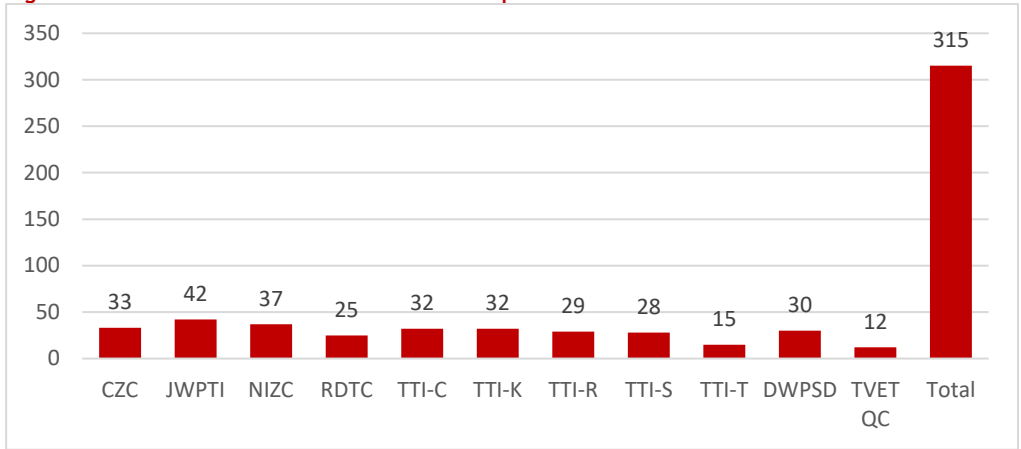


Figure 5.2: Number of human resources by current status

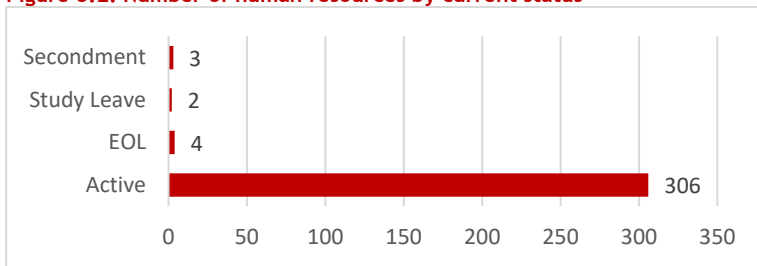


Table 5.1: Human Resources by position category in the departments and institutes

SN	Institute/ Department	Trainer	Management and Professional	Support Staff	Total
1	CZC	20	1	12	33
2	JWPTI	25	2	15	42
3	NIZC	27	1	9	37
4	RDTC	7	1	17	25
5	TTI-C	20	1	11	32
6	TTI-K	21	1	10	32
7	TTI-R	17	1	11	29
8	TTI-S	19	0	9	28
9	TTI-T	12	1	2	15
10	DWPSD	0	27	3	30
11	TVET QC	0	10	2	12
	Total	168	46	101	315

**Table 5.2: Human Resources by position level in the departments and institutes**

level	CZC	DWPSD	JWPTI	NIZC	RDTC	TTI-C	TTI-K	TTI-R	TTI-S	TTI-T	TVET-QC	Total
ES	2	0	3	1	9	1	1	1	1	0	0	19
EX	0	1	0	0	0	0	0	0	0	0	1	2
GSP	4	0	3	3	2	5	4	3	3	0	0	27
O1-O4	2	1	4	2	3	1	2	2	1	1	1	20
P1-P5	2	24	8	2	2	9	6	7	3	4	7	74
S1-S5	12	2	16	9	4	12	9	10	11	5	3	93
SS	11	2	8	20	5	4	10	6	9	5	0	80
<b>Total</b>	<b>33</b>	<b>30</b>	<b>42</b>	<b>37</b>	<b>25</b>	<b>32</b>	<b>32</b>	<b>29</b>	<b>28</b>	<b>15</b>	<b>12</b>	<b>315</b>

## Staff Turnover

Staff turnover refers to the rate at which employees leave an organization and are replaced by new hires. In the context of TVET institutions, staff turnover can have a significant impact on the quality and continuity of training programs. When experienced and knowledgeable staff members leave, it can disrupt the delivery of programs, reduce institutional knowledge, and lead to increased costs associated with recruitment and training. High staff turnover can also have a negative impact on the morale of remaining staff members, leading to reduced productivity and job satisfaction.

Reducing staff turnover in TVET institutions is therefore a key concern for the DWPSD and its institutes. Efforts are made to create a supportive work environment and ensuring good management practices within the institutes. However, it is important for TVET institutions to manage staff turnover effectively and to ensure that it does not have a negative impact on the delivery of training programs.

As per the HR recorded data, a total of 73 individuals were separated from the DWPSD, TVET QC and DWPSD administered institutes from 2018 to 2022. The majority of these separations were voluntary in nature. Very few falls under the category of early retirement or superannuation.

**Table 5.3: Staff separation in the departments and institutes (2018 to 2022)**

Department/ Institutes	2018	2019	2020	2021	2022	Total
TVET QC	0	1	0	0	3	4
DWPSD	2	3	2	0	4	11
JWPTI	1	1	0	1	2	5
NIZC	8	2	0	3	1	14
RDTC	1	4	2	1	2	10
TTIC	2	1	0	0	3	6
TTIK	2	1	2	0	3	8
TTIR	1	0	0	1	3	5
TTIS	0	0	0	2	3	5
TTIT	1	2	0	0	2	5
<b>Total</b>	<b>18</b>	<b>15</b>	<b>6</b>	<b>8</b>	<b>26</b>	<b>73</b>

**Table 5.4: Staff separation by separation types (2018 to 2022)**

Separation type	2018	2019	2020	2021	2022	Total
Early Retirement Scheme	1	1	0	0	0	2
Expired	0	0	0	1	0	1
Superannuation	2	0	0	0	0	2
Voluntary	14	14	5	6	26	65

## Training and Development of TVET Professional

TVET professionals play a crucial role in preparing students for the workforce. The training and development of TVET professionals is essential to ensure that they possess the necessary knowledge, skills, and competencies to deliver high-quality vocational education. The Technical Trainers Training and Resources Centre (TTTRC) located in JWPTI is the lead agency mandated with the training and development of TVET professionals in the country. Currently, professional development opportunities for TVET professionals can include short-term and long-term learning, in-house, in-country, ex-country, or online. The development opportunities also include industry attachments. These opportunities not only enhance the skills of TVET professionals but also enable them to stay up-to-date with the latest trends and advancements in their field.

To ensure the continuous growth and development of TVET professionals, the TTTRC carries out regular training needs assessments and plans out development activities from different funding sources. The training and development activities are mainly categorised into four different areas: Training of Trainers (TOT); Occupational Skills Development in specific trades of the instructors; Skills Supervisor Training for the industry partner supporting the institutes in OJT programs; and Online Learning. These training and development activities are not only confined to DWPSD administered institutes but also to private training providers and industry partners.

As indicated in the following figure, in 2022, a total of 207 TVET professionals from DWPSD-administered institutes, private training institutes, other public training institutes, industries, and even DSP instructors were provided with different training and development supports pertaining to TVET training delivery. Out of the 207 trained, 19 of the trainings were conducted ex-country, and 168 were conducted in-country. During the pandemic, online learning avenues were also explored. Therefore, 21 of the trainings were conducted through the use of different online platforms providing MOOC courses.

Figure 5.3: Training and development of TVET professionals in 2022

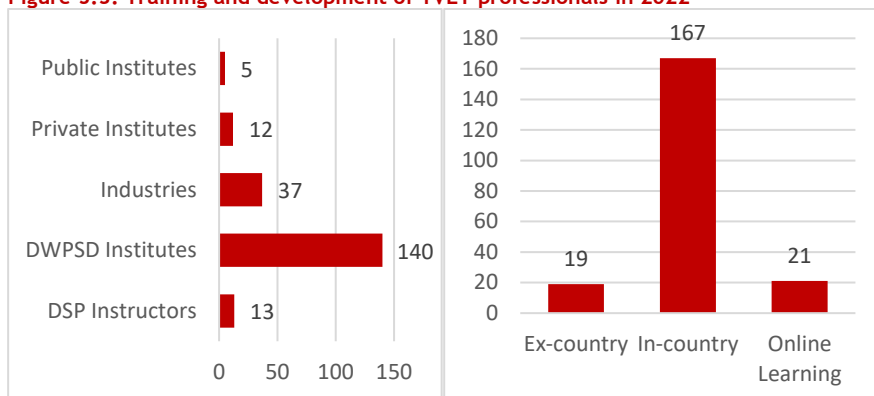


Table 5.5: Training and development of TVET professionals in 2022

SN	Training and Development Program	Number
1	Occupational Skills Development	1
2	Occupational Skills Development: CNC Programming and Operation	9
3	Occupational Skills Development: Modern vehicle technology	16
4	Occupational Skills Development: Motors Service	3
5	Occupational Skills Development: Welding	10
6	Occupational Skills Development: Welding Simulator	6
7	Occupational Skills Development: Metal Art and Fabrication	9
8	Online learning: Automotive Technology	3
9	Online learning: Career Counseling	1
10	Online learning: Design Thinking	1
11	Online Learning: Google Classroom	2
12	Online Learning: Labour Market Need Assessment	1
13	Online learning: Planning and Management	1
14	Online Learning: TOT	6
15	Online learning: TOT Automotive Technology	5
16	Online learning: Vocational Excellence	1
17	Skills Supervisor Training - Construction	8
18	Skills Supervisor Training - False Ceiling and Plaster of Paris	11
19	Skills Supervisor Training - Timber Frame Technology	7
20	Skills Supervisor Training - Wooden Floor Heating system	2
21	TOT- Basic 3D printing	14
22	TOT on 21st Century Training Delivery	32
23	TOT on Skilled Supervisor Training Module II	9
24	TOT-Basic Training Delivery (DSP)	13
25	TOT-Technical Instruction & Pedagogy	36
	<b>Total</b>	<b>207</b>



## Budget Allocation and utilization

TVET financing is an essential aspect of the development of a skilled workforce. It can come from different sources, including government and non-government funds. Currently, there are two main key sources of funding for TVET. Government funding is a major source of financing for TVET in the country, allocated through a five-year planning and annual budgeting process. Donor-funded projects are another key source of TVET financing. Bhutan has received funding support for TVET from international development partners such as the World Bank, Asian Development Bank, Government of India, HELVETAS, GTZ, and other bilateral and multilateral agencies.

However, when it comes to TVET expenditure, there are five main areas:

- Funding all programs and activities implemented in the Public TVET institutions, specifically those under the direct administration of the DWPSD.
- Skills development programs and training implemented in partnership with registered Private Training Institutes. Skills training such as Critical Skills Training (CST) and Critical Capability Development (CCD) are currently implemented in partnership with private training institutions.
- Community Skills Activities through programs such as the Village Skills Development Program (VSDP) and Special Skills Development Program (SSDP).
- Training and development activities implemented for the specific sector or industry in partnership with Sector Bodies such as the Bhutan Chamber of Commerce and Industry (BCCI), Agency for Promotion of Indigenous Arts and Craft (APIC), Tourism Council of Bhutan (TCB), private sector association bodies, and government sector bodies.

During the 10th FYP period, the annual TVET budget, which includes budget for the DWPSD, DWPSD administered institutes and TVET QC, was Nu. 380 million, which increased to Nu. 413 million in the 11th FYP period and Nu. 660 million in the 12th FYP period. Similarly, the annual average budget expenditure increased from Nu. 305 million in the 10th FYP period to Nu. 360 million in the 11th FYP period and to 420 million in the 12th FYP period.

The TVET budget and expenditure in table 5.1 includes the budget and expenditure by the DWPSD, TVET QC, and the institutes under the direct

administration of the DPWSD. The details of which are provided in the subsequent tables.

**Table 5.6: Overall TVET budget and expenditure (2010 to 2022)**

Year	Budget (in million Nu.)			Expenditure (in million Nu.)			Utilization rate (%)
	Current	Capital	Total	Current	Capital	Total	
2010-2011	141.846	230.026	<b>371.872</b>	116.965	130.238	<b>247.203</b>	<b>66.5</b>
2011-2012	143.299	291.184	<b>434.483</b>	115.994	244.715	<b>360.709</b>	<b>83.0</b>
2012-2013	133.172	200.848	<b>334.02</b>	119.955	188.998	<b>308.953</b>	<b>92.5</b>
2013-2014	130.562	259.822	<b>390.384</b>	119.119	195.482	<b>314.601</b>	<b>80.6</b>
2014-2015	151.268	187.149	<b>338.417</b>	141.503	160.463	<b>301.966</b>	<b>89.2</b>
2015-2016	152.608	195.95	<b>348.558</b>	146.738	182.038	<b>328.776</b>	<b>94.3</b>
2016-2017	154.805	351.928	<b>506.733</b>	151.522	277.584	<b>429.106</b>	<b>84.7</b>
2017-2018	158.521	321.554	<b>480.075</b>	154.819	282.298	<b>437.117</b>	<b>91.1</b>
2018-2019	161.945	160.54	<b>322.485</b>	159.689	129.499	<b>289.188</b>	<b>89.7</b>
2019-2020	203.982	370.687	<b>574.669</b>	194.272	213.006	<b>407.278</b>	<b>70.9</b>
2020-2021	180.702	409.86	<b>590.562</b>	178.075	253.558	<b>431.633</b>	<b>73.1</b>
2021-2022	183.079	571.987	<b>755.066</b>	180.329	416.31	<b>596.639</b>	<b>79.0</b>

**Table 5.7: DWPSD budget and expenditure (2010 to 2022)**

Year	Budget (in million Nu.)			Expenditure (in million Nu.)			Utilization rate (%)
	Current	Capital	Total	Current	Capital	Total	
2010-2011	24.567	137.554	<b>162.121</b>	17.02	60.251	<b>77.271</b>	<b>47.7</b>
2011-2012	18.4	206.078	<b>224.478</b>	14.443	166.392	<b>180.835</b>	<b>80.6</b>
2012-2013	18.431	175.374	<b>193.805</b>	15.71	163.956	<b>179.666</b>	<b>92.7</b>
2013-2014	14.528	223.887	<b>238.415</b>	12.76	161.178	<b>173.938</b>	<b>73</b>
2014-2015	19.393	148.959	<b>168.352</b>	17.946	129.456	<b>147.402</b>	<b>87.6</b>
2015-2016	18.32	148.756	<b>167.076</b>	17.152	135.793	<b>152.945</b>	<b>91.5</b>
2016-2017	16.563	300.433	<b>316.996</b>	16.105	227.755	<b>243.86</b>	<b>76.9</b>
2017-2018	10.683	248.709	<b>259.392</b>	10.497	210.499	<b>220.996</b>	<b>85.2</b>
2018-2019	15.56	107.18	<b>122.74</b>	15.083	76.728	<b>91.811</b>	<b>74.8</b>
2019-2020	14.44	284.43	<b>298.87</b>	14.115	139.537	<b>153.652</b>	<b>51.4</b>
2020-2021	12.322	323.796	<b>336.118</b>	12.223	173.847	<b>186.07</b>	<b>55.4</b>
2021-2022	12.552	507.792	<b>520.344</b>	12.502	355.499	<b>368.001</b>	<b>70.7</b>

**Table 5.8: TVET QC/DOS budget and expenditure (2010 to 2022)**

Year	Budget (in million Nu.)			Expenditure (in million Nu.)			Utilization rate (%)
	Current	Capital	Total	Current	Capital	Total	
2010-2011	5.897	13.408	19.305	5.405	6.89	12.295	63.7
2011-2012	6.55	15.118	21.668	5.951	13.727	19.678	90.8
2012-2013	6.268	10.617	16.885	6.214	10.608	16.822	99.6
2013-2014	6.524	8.65	15.174	6.164	8.595	14.759	97.3
2014-2015	7.557	13.168	20.725	7.44	7.999	15.439	74.5
2015-2016	7.538	12.32	19.858	7.529	12.313	19.842	99.9
2016-2017	8.109	13.148	21.257	8.058	13.038	21.096	99.2
2017-2018	8.809	15.879	24.688	8.637	15.833	24.47	99.1
2018-2019	8.137	10.925	19.062	7.997	10.688	18.685	98
2019-2020	9.359	11.042	20.401	9.316	8.536	17.852	87.5
2020-2021	8.943	9.625	18.568	8.89	8.875	17.765	95.7
2021-2022	11.895	7.498	19.393	11.76	7.389	19.149	98.7

**Table 5.9: DWPSD Administered institutes budget and expenditure (2010 to 2022)**

Year	Budget (in million Nu.)			Expenditure (in million Nu.)			Utilization rate (%)
	Current	Capital	Total	Current	Capital	Total	
2010-2011	111.382	79.064	190.446	94.54	63.097	157.637	82.8
2011-2012	118.349	69.988	188.337	95.6	64.596	160.196	85.1
2012-2013	108.473	14.857	123.33	98.031	14.434	112.465	91.2
2013-2014	109.51	27.285	136.795	100.195	25.709	125.904	92
2014-2015	124.318	25.022	149.34	116.117	23.008	139.125	93.2
2015-2016	126.75	34.874	161.624	122.057	33.932	155.989	96.5
2016-2017	130.133	38.347	168.48	127.359	36.791	164.15	97.4
2017-2018	139.029	56.966	195.995	135.685	55.966	191.651	97.8
2018-2019	138.248	42.435	180.683	136.609	42.083	178.692	98.9
2019-2020	180.183	75.215	255.398	170.841	64.933	235.774	92.3
2020-2021	159.437	76.439	235.876	156.962	70.836	227.798	96.6
2021-2022	158.632	56.697	215.329	156.067	53.422	209.489	97.3

## ANNEXURES

**Table 6.1: List of courses offered by CZC by certification level**

Course	Certification Level	Accreditation	Program
Gold and Silver Smith (Trezo)	NC 2	Accredited	Regular
Wood Carving (Patra)	NC 2	Accredited	Regular
Wood Turning (Shagzo)	NC 2	Accredited	Regular
Embroidery (tshemdru)	NC 2	Accredited	Regular
Sculpture (Jimzo)	NC 2	Accredited	Regular
Tailoring (Tshemzo)	NC 2	Accredited	Regular
Painting (Lhadri)	NC 2	Accredited	Regular
Wood Carving (Patra)	NC 3	Accredited	Regular
Gold and Silver Smith (Trezo)	NC 3	Accredited	Regular
Sculpture (Jimzo)	NC 3	Accredited	Regular
Embroidery (Tshemdru)	NC 3	Accredited	Regular
Painting (Lhadri)	NC 3	Accredited	Regular
Tailoring (Tshemzo)	NC 3	Accredited	Regular
Gold and Silver Smith (Trezo)	National Diploma	Accredited	Regular
Wood Carving (Patra)	National Diploma	Accredited	Regular
Painting (Lhadri)	National Diploma	Accredited	Regular

**Table 6.2: List of courses offered by JWPTI by certification level**

Course	Certification Level	Accreditation	Program
Furniture (DTP)	NC 2	Not Accredited	DTP regular
3D Printing	Institute Certificate	Not Accredited	SDP
3D Printing (Advance)	Institute Certificate	Not Accredited	SDP
Fitting	Institute Certificate	Not Accredited	SDP
Furniture	Institute Certificate	Not Accredited	SDP
House Wiring	Institute Certificate	Not Accredited	SDP
Korean Cuisine	Institute Certificate	Not Accredited	SDP
Plumbing	Institute Certificate	Not Accredited	SDP
Solar	Institute Certificate	Not Accredited	SDP
Tile Laying	Institute Certificate	Not Accredited	SDP
Transmission & Distribution Lineman	Institute Certificate	Not Accredited	SDP
Welding	Institute Certificate	Not Accredited	SDP

Carpentry	Institute Certificate	Not Accredited	VSDP
Masonry	Institute Certificate	Not Accredited	VSDP
Plumbing	Institute Certificate	Not Accredited	VSDP
Welding	Institute Certificate	Not Accredited	VSDP

**Table 6.3: List of courses offered by NIZC by certification level**

Course	Certification Level	Accreditation	Program
Thagzo	Institute Certificate	Not Accredited	Short course
Tailoring (Tshemzo)	Institute Certificate	Not Accredited	Short course
Gold and Silver Smith (Trezo)	Institute Certificate	Not Accredited	Short course
Tailoring (Tshemzo)	Institute Certificate	Not Accredited	Short course (Skills for Life)
Painting (Lhadri)	Institute Certificate	Not Accredited	Short course
Wood Carving (Patra)	Institute Certificate	Not Accredited	Short course
Embroidery (Tshemdru)	NC 2	Accredited	Regular
Painting (Lhadri)	NC 2	Accredited	Regular
Gold and Silver Smith (Trezo)	NC 2	Accredited	Regular
Tailoring (Tshemzo)	NC 2	Accredited	Regular
Wood Carving (Patra)	NC 2	Accredited	Regular
Sculpture (Jimzo)	NC 2	Accredited	Regular
Sculpture (Jimzo)	NC 3	Accredited	Regular
Painting (Lhadri)	NC 3	Accredited	Regular
Tailoring (Tshemzo)	NC 3	Accredited	Regular
Wood Carving (Patra)	NC 3	Accredited	Regular
Embroidery (Tshemdru)	NC 3	Accredited	Regular
Gold and Silver Smith (Trezo)	NC 3	Accredited	Regular

Table 6.4: List of courses offered by TTI-C by certification level

Course	Certification Level	Accreditation	Program
3D Printing	Institute Certificate	Not Accredited	SDP
Carpentry Upskilling	Institute Certificate	Not Accredited	SDP
Cloud Computing	Institute Certificate	Not Accredited	SDP
Digital Marketing	Institute Certificate	Not Accredited	SDP
Furniture Making	Institute Certificate	Not Accredited	SDP
Interior Design	Institute Certificate	Not Accredited	SDP
Landscape Design	Institute Certificate	Not Accredited	SDP
Masonry Upskilling	Institute Certificate	Not Accredited	SDP
Tile Laying	Institute Certificate	Not Accredited	SDP
Carpentry	NC 2	Accredited	BBP
Masonry	NC 2	Accredited	BBP
Plumbing	NC 2	Accredited	BBP
Welding	NC 2	Accredited	BBP
Plumbing	NC 2	Accredited	DTP
Welding	NC 2	Accredited	DTP
Carpentry	Institute Certificate	Accredited	Modular
Construction Carpentry	Institute Certificate	Accredited	Modular
Masonry	Institute Certificate	Accredited	Modular
Plumbing	Institute Certificate	Accredited	Modular
Welding	Institute Certificate	Accredited	Modular

**Table 6.5: List of courses offered by TTI-K by certification level**

Course	Certification Level	Accreditation	Institute	Program
Domestic Wiring	Institute Certificate	Not Accredited	TTI-K	SDP
CCTV	Institute Certificate	Not Accredited	TTI-K	SDP
Repair Home Appliances	Institute Certificate	Not Accredited	TTI-K	SDP
Metal Art Design and Fabrication	Institute Certificate	Not Accredited	TTI-K	SDP
Basic PLC	Institute Certificate	Not Accredited	TTI-K	SDP
Cloud Computing	Institute Certificate	Not Accredited	TTI-K	SDP
Welding	Institute Certificate	Not Accredited	TTI-K	SDP
Mechanical Fitting	Institute Certificate	Not Accredited	TTI-K	SDP
Basic IoT	Institute Certificate	Not Accredited	TTI-K	SDP
Mechanical Fitting	NC 2	Accredited	TTI-K	Regular
Domestic Wiring	NC 2	Not Accredited	TTI-K	BBP
Welding	NC 3	Accredited	TTI-K	Regular
Mechanical Fitting	NC 3	Accredited	TTI-K	Regular
Industrial Electrical	NC 3	Accredited	TTI-K	Regular

**Table 6.6: List of courses offered by TTI-R by certification level**

Course	Certification Level	Accreditation	Institute	Program
Hair and Beauty Therapy	Institute Certificate	Not Accredited	TTI-R	SDP
Cloud Computing	Institute Certificate	Not Accredited	TTI-R	SDP
Wooden Furniture Making	Institute Certificate	Not Accredited	TTI-R	SDP
IT and Networking	Institute Certificate	Not Accredited	TTI-R	SDP
Repair and Maintenance of Mobile Phone	Institute Certificate	Not Accredited	TTI-R	SDP
Repair Home Appliances	Institute Certificate	Not Accredited	TTI-R	SDP
Auto Mechanic	NC 2	Accredited	TTI-R	Regular & SDP
Domestic Wiring	NC 2	Accredited	TTI-R	Regular & SDP
Computer Hardware and Networking	NC 2	Accredited	TTI-R	Regular & SDP
Wooden Furniture Making	NC 2	Accredited	TTI-R	Regular & SDP
Industrial Wiring	NC 3	Accredited	TTI-R	Regular
Wooden Furniture Making	NC 3	Accredited	TTI-R	Regular

**Table 6.7: List of courses offered by TTI-S by certification level**

Course	Certification Level	Accreditation	Institute	Program
Backhoe Operator	Institute Certificate	Not Accredited	TTI-S	
Digital Marketing	Institute Certificate	Not Accredited	TTI-S	SDP
Bakery & Confectionary	Institute Certificate	Not Accredited	TTI-S	SDP
Heavy Earthmoving Mechanic	NC 2	Accredited	TTI-S	SDP
Heavy Vehicle Mechanic	NC 2	Accredited	TTI-S	SDP
Auto Mechanic	NC 2	Accredited	TTI-S	SDP
Auto Electrical	NC 2	Accredited	TTI-S	Regular
Heavy Vehicle Driving	NC 2	Accredited	TTI-S	SDP
Auto Mechanic	NC 2	Accredited	TTI-S	Regular
Auto Electrical	NC 2	Accredited	TTI-S	SDP
Auto Electrical	NC 3	Accredited	TTI-S	SDP
Excavator Operator NC 2 & NC 3	NC 3	Accredited	TTI-S	SDP
Auto Mechanic	NC 3	Accredited	TTI-S	SDP

**Table 6.8: List of courses offered by TTI-T by certification level**

Course	Certification Level	Accreditation	Institute	Program
Refrigeration and Air Conditioning (RAC)	NC 2	Accredited	TTI-T	SDP
Panel Beating	NC 2	Accredited	TTI-T	SDP
Auto Painting	NC 2	Accredited	TTI-T	SDP
Auto Mechanic	NC 2	Accredited	TTI-T	Regular and SDP
Auto Mechanic	NC 3	Accredited	TTI-T	SDP



Table 6.9: List of CCD training implemented in 2022 by dzongkhags and gender

Training Title	Dzongkhag	Male	Female	Total	Female %
Accounting with Tally	Chhukha	12	23	35	65.7
Accounting with Tally	Dagana	11	4	15	26.7
Accounting with Tally	Haa	8	7	15	46.7
Accounting with Tally	Mongar	8	27	35	77.1
Accounting with Tally	Paro	7	13	20	65.0
Accounting with Tally	Samdrup Jongkhar	8	7	15	46.7
Accounting with Tally	Samtse	5	10	15	66.7
Accounting with Tally	Sarpang	15	20	35	57.1
Accounting with Tally	Thimphu	8	17	25	68.0
Accounting with Tally	Trashigang	3	12	15	80.0
Accounting with Tally	Trashiyangtse	8	7	15	46.7
Advance Cooking (Continental and Indian Cuisine)	Paro	14	6	20	30.0
Advance Cooking (Continental and Indian Cuisine)	Punakha	4	16	20	80.0
Advance Cooking (Continental and Indian Cuisine)	Trongsa	9	11	20	55.0
Advance Tailoring training on Modern Souvenir Products	Thimphu	2	18	20	90.0
Advance Tailoring Training on Religious Costumes & Traditional Ceremonial Items	Thimphu	1	19	20	95.0
Bakery and Confectionery	Paro	4	16	20	80.0
Bakery and Confectionery	Sarpang	0	20	20	100.0
Bookkeeping using Tally	Bumthang	8	12	20	60.0
Bookkeeping using Tally	Tsirang	10	10	20	50.0
e-Commerce	Bumthang	11	9	20	45.0
e-Commerce	Chhukha	7	13	20	65.0
e-Commerce	Paro	6	14	20	70.0
e-Commerce	Sarpang	9	11	20	55.0
e-Commerce	Thimphu	16	9	25	36.0
Entrepreneurship TOT	Sarpang	20	14	34	41.2
Masters in Business Administration	Thimphu	6	2	8	25.0
Packaging and Labelling	Zhemgang	17	12	29	41.4
Packaging and Labelling, Gelephu	Sarpang	7	23	30	76.7
Poultry Feed Formulation with Locally Available Feed Materials	Zhemgang	14	12	26	46.2
Proposal Writing for PWD	Paro	4	6	10	60.0
Small Business Management	Chhukha	16	14	30	46.7
Small Business Management	Dagana	8	7	15	46.7
Small Business Management	Lhuentse	12	18	30	60.0
Small Business Management	Pemagatshel	11	19	30	63.3
Small Business Management	Punakha	7	8	15	53.3
Small Business Management	Samdrup Jongkhar	6	14	20	70.0
Small Business Management	Trashigang	6	9	15	60.0
Small Business Management	Tsirang	8	7	15	46.7
Small Business Management	Wangdue	12	8	20	40.0

Tailoring (Gho)	Chhukha	2	18	20	90.0
Tailoring (Gho)	Mongar	2	16	18	88.9
Tailoring (Tracksuits)	Bumthang	3	17	20	85.0
Tailoring (Western Garment)	Chhukha	6	14	20	70.0
Tailoring (Western Garment)	Sarpang	4	16	20	80.0
Tailoring (Western Garment)	Trashigang	5	15	20	75.0
Tailoring (Western Garment)	Wangdue	5	15	20	75.0
<b>Total</b>		<b>375</b>	<b>615</b>	<b>990</b>	<b>62.1</b>

Table 6.10: List of CST training implemented in 2022 by dzongkhags

Training Title	Certification Level	Dzongkhag	Start Date	Duration in Months	Total	Female %
ICT and Online Freelancing	Certificate	Sarpang	10/12/2021	6	20	50.0
ICT and Online Freelancing	Certificate	Thimphu	9/6/2021	6	20	50.0
ICT and Online Freelancing	Certificate	Thimphu	9/8/2021	6	20	35.0
Digital Cable TV Technician	NC2	Thimphu	6/28/2021	6	25	36.0
Hair & Beauty Therapist	NC2	Thimphu	12/6/2021	6	30	80.0
Mobile Repair Maintenance	NC2	Thimphu	12/1/2021	6	30	26.7
Sales Person	NC2	Chhukha	9/2/2021	6	20	85.0
ECCD Facilitator	NC3	Thimphu	12/9/2021	6	30	96.7
Fashion Designer	NC3	Thimphu	12/15/2021	12	30	93.3
Mobile Application Developer	NC3	Thimphu	5/3/2022	6	30	26.7
Visual Effects Artist	NC3	Thimphu	2/14/2022	6	30	20.0
Bakery	NC2 + NC3	Thimphu	12/13/2021	12	30	86.7
Bakery	NC2 + NC3	Thimphu	5/24/2021	12	20	70.0
Bhutanese Food Production	NC2 + NC3	Dagana	5/22/2021	12	20	55.0
Bhutanese Food Production	NC2 + NC3	Paro	5/24/2021	12	25	56.0
Bhutanese Food Production Associate	NC2 + NC3	Thimphu	12/15/2021	12	30	60.0
Commercial Accountant	NC2 + NC3	Thimphu	5/22/2021	12	25	76.0
Food Production	NC2 + NC3	Thimphu	2/15/2021	12	20	40.0
Food Production	NC2 + NC3	Thimphu	11/8/2021	12	21	61.9
Food Production Associate	NC2 + NC3	Thimphu	12/1/2021	12	30	56.7
<b>Total</b>					<b>506</b>	<b>58.5</b>

Table 6.11: List of staff by position category in Department and institutes

position	CZC	DWPSD	JWPTI	NIZC	RDTC	TTI-C	TTI-K	TTI-R	TTI-S	TTI-T	TVET-QC	Total
Accounts	1	0	1	0	0	1	1	1	1	0	0	6
Administration	1	2	1	2	1	1	1	1	1	1	2	14
Attendant	0	0	0	0	8	0	0	0	0	0	0	8
Cook	3	0	2	2	1	4	3	2	3	0	0	20
Director	0	1	0	0	1	0	0	0	0	0	1	3
Driver	2	1	4	1	3	1	2	2	1	1	1	19
Engineer	0	1	0	0	0	0	0	0	0	0	1	2
Instructor	20	0	25	27	7	19	19	17	19	12	0	165
Lab Assistant	1	0	0	0	0	0	1	1	1	0	0	4
Librarian	1	0	1	1	0	1	1	1	0	0	0	6
Principal	1	0	1	1	0	1	1	1	0	1	0	7
Program Officer	0	23	0	0	0	1	0	0	0	0	6	30
Security Guard	1	0	2	1	1	0	1	1	0	0	0	7
Specialist	0	1	1	0	0	0	0	0	0	0	1	3
Statistician	0	1	0	0	0	0	0	0	0	0	0	1
Store	1	0	1	1	1	1	1	1	1	0	0	8
Sweeper	1	0	2	1	1	1	1	1	1	0	0	9
Technician	0	0	1	0	1	0	0	0	0	0	0	2
caretaker	0	0	0	0	0	1	0	0	0	0	0	1
<b>Total</b>	<b>33</b>	<b>30</b>	<b>42</b>	<b>37</b>	<b>25</b>	<b>32</b>	<b>32</b>	<b>29</b>	<b>28</b>	<b>15</b>	<b>12</b>	<b>315</b>

Table 6.12: TTI-T, feedback from graduates on course, trainer &amp; facilities (percent)

Course Content	Very Poor	Poor	Average	Good	Very Good
Theoretical component	0.0	4.7	32.6	30.2	32.6
Practical Component	0.0	4.8	23.8	38.1	33.3
On-the-job-training	2.4	0.0	23.8	38.1	35.7
Entrepreneurship and self-employment training	2.4	2.4	33.3	40.5	21.4
Career Counselling service	2.4	2.4	35.7	38.1	21.4

Trainer	Very Poor	Poor	Average	Good	Very Good
Quality of training in Theoretical Component	0.0	2.3	27.9	44.2	25.6
Quality of training in Practical Component	0.0	4.7	23.3	46.5	25.6
Use of Instructional Materials and Aids	2.3	4.7	27.9	37.2	27.9
Availability for course related consultation and feedback	0.0	7.1	28.6	42.9	21.4

Facilities and Infrastructure	Very Poor	Poor	Average	Good	Very Good
Quality of Classroom	7.0	11.6	32.6	39.5	9.3
Quality of Practical training areas	4.7	11.6	37.2	32.6	14.0
Training tools and equipment	2.4	9.5	33.3	40.5	14.3
Computer laboratories	0.0	4.7	37.2	32.6	25.6
Library and/or resource center	2.3	11.6	32.6	37.2	16.3
Accommodation/Hostels	14.3	19.1	33.3	28.6	4.8
Dining/Mess	12.2	22.0	34.1	24.4	7.3
Internet Connectivity	16.3	14.0	34.9	23.3	11.6
Transportation facilities	9.5	21.4	33.3	23.8	11.9
Sports and recreational facilities	35.7	11.9	33.3	9.5	9.5
Occupational Health and Safety (OHS)	2.3	4.7	32.6	44.2	16.3

**Table 6.13: TTI-R, feedback from graduates on course, trainer & facilities (percent)**

Course Content	Very Poor	Poor	Average	Good	Very Good
Theoretical component	0.0	1.4	12.9	45.7	40.0
Practical Component	1.5	1.5	8.8	36.8	51.5
On-the-job-training	0.0	0.0	10.1	47.8	42.0
Entrepreneurship and self-employment training	0.0	2.9	21.7	59.4	15.9
Career Counselling service	0.0	1.4	31.4	51.4	15.7

Trainer	Very Poor	Poor	Average	Good	Very Good
Quality of training in Theoretical Component	0.0	1.4	15.7	57.1	25.7
Quality of training in Practical Component	0.0	4.4	7.3	53.6	34.8
Use of Instructional Materials and Aids	0.0	5.7	25.7	51.4	17.1
Availability for course related consultation and feedback	2.9	0.0	17.7	66.2	13.2

Facilities and Infrastructure	Very Poor	Poor	Average	Good	Very Good
Quality of Classroom	4.4	10.1	46.4	34.8	4.4
Quality of Practical training areas	2.9	11.4	35.7	42.9	7.1
Training tools and equipment	8.6	10.0	44.3	31.4	5.7
Computer laboratories	2.9	7.1	40.0	42.9	7.1
Library and/or resource centre	2.9	5.7	34.3	45.7	11.4
Accommodation/Hostels	4.4	4.4	34.8	40.6	15.9
Dining/Mess	8.6	15.7	38.6	30.0	7.1
Internet Connectivity	8.7	15.9	39.1	31.9	4.4
Transportation facilities	7.1	14.3	31.4	38.6	8.6
Sports and recreational facilities	5.7	15.7	34.3	40.0	4.3
Occupational Health and Safety (OHS)	5.7	4.3	30.0	50.0	10.0

Table 6.14: TTI-S, feedback from graduates on course, trainer &amp; facilities (percent)

Course Content	Very Poor	Poor	Average	Good	Very Good
Theoretical component	0.0	0.0	12.8	35.9	51.3
Practical Component	0.0	1.3	15.4	38.5	44.9
On-the-job-training	0.0	1.3	15.4	32.1	51.3
Entrepreneurship and self-employment training	0.0	2.6	22.1	40.3	35.1
Career Counselling service	1.3	0.0	22.1	40.3	36.4

Trainer	Very Poor	Poor	Average	Good	Very Good
Quality of training in Theoretical Component	0.0	0.0	14.1	42.3	43.6
Quality of training in Practical Component	0.0	0.0	14.3	39.0	46.8
Use of Instructional Materials and Aids	0.0	1.3	11.5	41.0	46.2
Availability for course related consultation and feedback	0.0	0.0	15.4	51.3	33.3

Facilities and Infrastructure	Very Poor	Poor	Average	Good	Very Good
Quality of Classroom	1.3	7.7	21.8	46.2	23.1
Quality of Practical training areas	1.3	6.4	19.2	43.6	29.5
Training tools and equipment	1.3	7.7	18.0	51.3	21.8
Computer laboratories	3.9	6.5	20.8	45.5	23.4
Library and/or resource centre	0.0	7.7	24.4	47.4	20.5
Accommodation/Hostels	2.6	3.9	24.4	43.6	25.6
Dining/Mess	6.6	11.8	25.0	36.8	19.7
Internet Connectivity	6.4	16.7	25.6	35.9	15.4
Transportation facilities	0.0	3.9	26.9	43.6	25.6
Sports and recreational facilities	2.6	3.9	15.4	46.2	32.1
Occupational Health and Safety (OHS)	0.0	3.9	22.1	44.2	29.9

Table 6.15: TTI-K, feedback from graduates on course, trainer &amp; facilities (percent)

Course Content	Very Poor	Poor	Average	Good	Very Good
Theoretical component	0.0	2.0	16.3	54.1	27.6
Practical Component	0.0	2.0	12.2	46.9	38.8
On-the-job-training	0.0	1.0	18.6	44.3	36.1
Entrepreneurship and self-employment training	0.0	3.1	26.5	49.0	21.4
Career Counselling service	1.0	4.1	23.5	46.9	24.5

Trainer	Very Poor	Poor	Average	Good	Very Good
Quality of training in Theoretical Component	0.0	1.0	13.3	48.0	37.8
Quality of training in Practical Component	0.0	1.0	11.2	48.0	39.8
Use of Instructional Materials and Aids	1.0	1.0	13.3	48.0	36.7
Availability for course related consultation and feedback	1.0	3.1	13.5	59.4	22.9

Facilities and Infrastructure	Very Poor	Poor	Average	Good	Very Good
Quality of Classroom	1.0	5.1	28.6	48.0	17.4
Quality of Practical training areas	1.0	2.0	29.6	44.9	22.5
Training tools and equipment	2.0	7.1	24.5	40.8	25.5
Computer laboratories	3.1	7.3	21.9	52.1	15.6
Library and/or resource centre	3.1	7.1	30.6	48.0	11.2
Accommodation/Hostels	3.1	6.1	26.5	42.9	21.4
Dining/Mess	3.1	18.4	35.7	32.7	10.2
Internet Connectivity	10.2	24.5	29.6	30.6	5.1
Transportation facilities	1.0	12.2	31.6	46.9	8.2
Sports and recreational facilities	9.2	19.4	34.7	34.7	2.0
Occupational Health and Safety (OHS)	1.0	8.2	26.5	48.0	16.3

**Table 6.16: TTI-C, feedback from graduates on course, trainer & facilities (percent)**

Course Content	Very Poor	Poor	Average	Good	Very Good
Theoretical component	0.5	1.4	22.1	45.2	30.9
Practical Component	0.5	1.9	17.7	47.0	33.0
On-the-job-training	2.3	3.2	20.8	46.8	26.9
Entrepreneurship and self-employment training	1.4	2.8	29.4	51.4	15.0
Career Counselling service	0.5	5.6	25.8	47.4	20.7

Trainer	Very Poor	Poor	Average	Good	Very Good
Quality of training in Theoretical Component	1.4	0.5	11.1	48.4	38.7
Quality of training in Practical Component	0.5	1.4	11.6	42.6	44.0
Use of Instructional Materials and Aids	0.0	1.9	13.4	47.2	37.5
Availability for course related consultation and feedback	0.5	0.5	13.4	53.7	31.9

Facilities and Infrastructure	Very Poor	Poor	Average	Good	Very Good
Quality of Classroom	0.5	2.3	15.3	48.6	33.3
Quality of Practical training areas	0.9	2.3	19.0	47.2	30.6
Training tools and equipment	1.4	4.6	20.7	44.2	29.0
Computer laboratories	3.7	9.3	29.3	44.2	13.5
Library and/or resource centre	1.4	9.6	26.6	48.6	13.8
Accommodation/Hostels	0.9	7.8	19.3	52.7	19.3
Dining/Mess	5.1	11.9	22.9	45.4	14.7
Internet Connectivity	8.8	18.1	23.2	36.6	13.4
Transportation facilities	4.2	12.9	30.4	41.5	11.1
Sports and recreational facilities	1.8	9.7	27.2	50.2	11.1
Occupational Health and Safety (OHS)	0.9	2.8	16.1	49.1	31.2



Table 6.17: JWPTI, feedback from graduates on course, trainer &amp; facilities (percent)

Course Content	Very Poor	Poor	Average	Good	Very Good
Theoretical component	0.0	0.0	28.8	46.6	24.7
Practical Component	0.0	4.1	19.2	46.6	30.1
On-the-job-training	1.4	4.1	20.6	47.9	26.0
Entrepreneurship and self-employment training	0.0	0.0	27.0	51.4	21.6
Career Counselling service	0.0	2.7	23.3	58.9	15.1

Trainer	Very Poor	Poor	Average	Good	Very Good
Quality of training in Theoretical Component	0.0	1.4	20.6	46.6	31.5
Quality of training in Practical Component	0.0	4.1	16.4	45.2	34.3
Use of Instructional Materials and Aids	0.0	2.7	26.0	50.7	20.6
Availability for course related consultation and feedback	0.0	2.7	27.0	48.7	21.6

Facilities and Infrastructure	Very Poor	Poor	Average	Good	Very Good
Quality of Classroom	0.0	4.1	20.3	36.5	39.2
Quality of Practical training areas	1.4	6.9	27.4	35.6	28.8
Training tools and equipment	1.4	9.5	20.3	52.7	16.2
Computer laboratories	4.1	13.7	27.4	43.8	11.0
Library and/or resource centre	0.0	5.5	26.0	39.7	28.8
Accommodation/Hostels	0.0	2.7	25.7	48.7	23.0
Dining/Mess	1.4	9.5	28.4	40.5	20.3
Internet Connectivity	9.5	21.6	27.0	35.1	6.8
Transportation facilities	0.0	16.7	29.2	47.2	6.9
Sports and recreational facilities	2.7	9.5	21.6	41.9	24.3
Occupational Health and Safety (OHS)	0.0	1.4	27.4	48.0	23.3

Table 6.18: NIZC, feedback from graduates on course, trainer &amp; facilities (percent)

Course Content	Very Poor	Poor	Average	Good	Very Good
Theoretical component	0.0	0.0	28.4	45.5	26.1
Practical Component	0.0	0.0	19.3	50.0	30.7
On-the-job-training	0.0	0.0	15.7	51.7	32.6
Entrepreneurship and self-employment training	0.0	3.4	29.2	48.3	19.1
Career Counselling service	0.0	1.1	29.2	53.9	15.7

Trainer	Very Poor	Poor	Average	Good	Very Good
Quality of training in Theoretical Component	0.0	3.4	21.6	52.3	22.7
Quality of training in Practical Component	0.0	0.0	14.6	51.7	33.7
Use of Instructional Materials and Aids	0.0	3.4	19.1	51.7	25.8
Availability for course related consultation and feedback	0.0	1.1	23.6	56.2	19.1

Facilities and Infrastructure	Very Poor	Poor	Average	Good	Very Good
Quality of Classroom	0.0	6.8	14.8	51.1	27.3
Quality of Practical training areas	2.3	2.3	23.6	43.8	28.1
Training tools and equipment	0.0	4.5	21.4	53.9	20.2
Computer laboratories	0.0	6.7	40.5	40.5	12.4
Library and/or resource centre	0.0	2.3	25.8	50.6	21.4
Accommodation/Hostels	1.1	7.9	23.6	46.1	21.4
Dining/Mess	0.0	10.2	29.5	43.2	17.1
Internet Connectivity	9.0	13.5	22.5	38.2	16.9
Transportation facilities	1.1	11.2	37.1	36.0	14.6
Sports and recreational facilities	5.6	23.6	29.2	33.7	7.9
Occupational Health and Safety (OHS)	1.1	3.4	36.0	46.1	13.5

Table 6.19: CZC, feedback from graduates on course, trainer &amp; facilities (percent)

Course Content	Very Poor	Poor	Average	Good	Very Good
Theoretical component	0.0	0.0	25.3	46.0	28.7
Practical Component	0.0	0.0	14.9	47.1	37.9
On-the-job-training	0.0	2.3	16.1	44.8	36.8
Entrepreneurship and self-employment training	0.0	0.0	26.4	55.2	18.4
Career Counselling service	0.0	0.0	26.4	54.0	19.5

Trainer	Very Poor	Poor	Average	Good	Very Good
Quality of training in Theoretical Component	0.0	3.4	18.4	44.8	33.3
Quality of training in Practical Component	0.0	0.0	16.1	41.4	42.5
Use of Instructional Materials and Aids	0.0	3.4	17.2	48.3	31.0
Availability for course related consultation and feedback	0.0	1.2	20.9	52.3	25.6

Facilities and Infrastructure	Very Poor	Poor	Average	Good	Very Good
Quality of Classroom	3.4	6.9	25.3	47.1	17.2
Quality of Practical training areas	1.1	3.4	26.4	43.7	25.3
Training tools and equipment	2.3	4.6	27.6	47.1	18.4
Computer laboratories	12.6	25.3	23.0	29.9	9.2
Library and/or resource centre	3.4	11.5	29.9	44.8	10.3
Accommodation/Hostels	4.6	20.7	20.7	41.4	12.6
Dining/Mess	3.4	8.0	27.6	44.8	16.1
Internet Connectivity	4.6	5.7	25.3	42.5	21.8
Transportation facilities	0.0	8.0	27.6	48.3	16.1
Sports and recreational facilities	4.6	11.5	31.0	40.2	12.6
Occupational Health and Safety (OHS)	0.0	5.7	27.6	48.3	18.4

## List of Industry partnership and linkages

## Industry partners: CZC

1. Dorji Chholing Goenpa, Samdrupchhoilng, S/Jongkhar
2. Cheten Tailoring shop, Dagana
3. Phuntsho Tashi Doejung, Thimphu
4. Kee Cee Tailoring shop, Kheney
5. Jurmey Thinley Tailoring shop, T/yangtse
6. KWT Tailoring shop, Thimphu
7. Sernya Tailoring shop, Thimphu
8. Tshendrup Tailoring shop, Gyelposhing
9. Kado Tailoring shop, Paro
10. Namsey Tashi Tailoring shop, Thimphu
11. Dorji Pelzom Tailoring shop, Paro

## Industry partners: JWPTI

1. Youngchab Fabrication Unit
2. Gyeltshen Furniture House
3. Druk Chapchab Construction
4. BIEBS
5. Ongdi Timber Industries
6. CDCL
7. Vergo Furniture Unit
8. Dzong Construction Project
9. Gyelcon Infra Pvt Ltd
10. Kuenphen Wood Industries
11. NHDCL
12. Druk Menjong Wood Industries
13. Rindrel Construction
14. Jattu furniture
15. Wangchuk Wood Tech Unit
16. Bhutan Ply Unit
17. Phuntsho Timber Industries

## Industry partners: NIZC

1. Radak Puensum Traditional Wood Work
2. Dharma Arts and Crafts
3. Dorji Phuntsho Tailoring Shop
4. Jangchuk Traditional Painting
5. Gaa-Tyen Lhadri Builders
6. Druk Maha Dewa Furniture
7. Rada Punsum
8. Cheten Dubjur, Freelence, sculptruing
9. Traditional Boot House
10. Cheten Tailoring Shop
11. Kezang C Wangchuk Sculpture Work

## Industry partners: TTI-C

1. Lingkhim Woods
2. CDCL
3. Chharee Builders
4. Ongdi Timber/Alpine
5. Tashi Norbu Furniture

6. Menjong WoodWork Industries
7. U.DEE Construction
8. Ngawang Wood work
9. Jatu Wood Work
10. Agro Mechanical Workshop
11. Druk Chapcha Company
12. Green Bhutan Waste Managemnt
13. Ms. Vajra Builder
14. Zhendrup Construction Company

Industry partners: TTI-K

1. Druk Trading Equipment
2. Bhutan Ferro Alloys Limited (BFAL)

Industry partners: TTI-R

1. Unique & Special Furniture House, Wangdue
2. Autga Auto Cares, Thimphu
3. Bhutan Power Corporation
4. Vision Tech, Thimphu
5. Drukcom Pvt. Ltd. Thimphu
6. Yeshi Engineering W/Shop, Lobesa
7. Udee Wood Manufacturing & Furnituring Unit, Bumthang
8. Khamsaang Engineering W/Shop, Paro
9. PHPA II, Wangdue
10. Karma Automobile Workshop, Paro
11. BCCL, Pasakha
12. PCAL, Gomtu
13. Lamla sales & service
14. STCBL, P/ling
15. Zimdra Automobile W/Shop, P/ling
16. Bhutan Kubera Furniture and Wood work, Paro
17. Rabzang Furniture, Kanglung
18. BBS
19. BFAL, Pasakha
20. Kunjung Institute of Technology & Innovation, Gelephu
21. SAT Enterprise, P/Ling
22. Druk WangAlloys
23. Gyelyong Enterprise, Thimphu
24. Bhutan Informatic, P/ling
25. GPY Computer Training Institute, P/ling
26. Bhutan Telecom
27. Taagshing Gard Network Cable, Thimphu
28. KHP (DGPC)
29. THP(DGPC)
30. Druk Institute of Management & Technology, P/ling
31. Rigsum Institute of Technical Educcation & Management Studies
32. DCCL, Nganglam
33. Trashi Beverge Ltd. Pasakha
34. Webtech, P/ling
35. Thinley Automobile W/shop, Haa
36. Tshendhen Soft Pvt. Ltd. Thimphu
37. Computer Palace, Thimphu
38. Wood Craft Center, Thimphu

39. Urban Furniture House, Paro
40. DW workshop, Lobesa
41. CMI, P/Ling

## Industry partners: TTI-S

1. Rajesh Automobile,
2. Phuntsho Automobile workshop
3. Khamsa Engineering workshop, Paro
4. Absolute Trading
5. Dagap Automobile workshop,
6. Brothers workshop, Paro
7. Yargyel
8. Sunny Automobile workshop, Gelephu
9. Chimi RD construction Pvt. Nanglam
10. Drukgyel Automobiles,
11. Samden Vehicle pvt ltd
12. Rajesh Automobile,
13. Karmatenzin Automobile
14. DL Workshop, Gelephu
15. R.K Auto Electrical
16. Sonam Yoe Dhen Automobile,
17. BB Rai workshop
18. Olakha Thimphu
19. Chhundu Agency, Thimphu
20. Karsam Automobile, Gelephu
21. PT workshop, Gelephu
22. Tenzin Tenzin Automobiles
23. Shirya automobile
24. Yangchenma Pvt.Ltd, Gelephu
25. Karma workshop, Paro
26. Yoeber Pvt Limited
27. Drugyel workshop Thimphu
28. Umesh Automobile
29. Sonam AutomobileGelephu
30. Jigme Automobiles
31. SP Automobile, Paro
32. Pelyang Automobile workshop (Tara), Bondey,Paro
33. Ugyen earthmover
34. Phuntsho Automobile workshop, Tsirang
35. TATA motors
36. Lhawang Enng. Workshop, Gelephu
37. Kantsa Automobile,
38. TCD PVT Ltd, Thimphu
39. Lungten Automobiles
40. KD company, Tashiyangtse
41. Yangchenma Pvt.Ltd, Gelephu
42. Wangchuk auto electricals
43. Druk Rinchenling Yarphe Construction, Thimphu
44. Zhamla Automobile
45. GD Sharanam Automobiles
46. Zhamla Automobile, Tsirang
47. Gawa crashing unit, Paro
48. Kuenga Automobile

49. Karma Yuden, Thimphu
50. Zindra automobile
51. Parlad Automobile
52. Riwang HES
53. GD Sharanam Automobiles, Gelephu

## Industry partners: TTI-T

1. STCBL
2. Ugyen Auto Service Centre
3. Rohit Autoworkshop
4. Thinley Auto workshop
5. Dhejung Honda
6. Zindra Automobile Workshop
7. Brothers Workshop
8. Eden Electronics
9. STCBL
10. GD sharaa Naam Automobile workshop
11. GP Electronics
12. RDP Auto workshop
13. Champa Electronic
14. Zamlha Auto workshop
15. Karma Automobile Workshop
16. Automobile Sector association of Bhutan (ASAB)
17. D. W Engineering Workshop
18. Zindra Automobile Workshop
19. Pelyaag Automobile Workhsop
20. AL Electronical and Electronics
21. Zindra Automobile Workshop
22. TCD Private Limited
23. 2Q Automobile Works
24. Brothers Electronic

## Industry partners: RDTc

- 1 ARDC, Samtenling
- 2 ARDC, Wengkhar
- 3 NCOA, Yusipang
- 4 NMC, Wangchuk-tabā
- 5 NSC, Paro
- 5 NPHC, Paro
- 6 NRCAN, Bumthang
- 7 FALC, Dechencholing
- 8 NPDRc, Gelephu
- 9 NiPDRC, Gelephu
- 10 NHRDC, Bumthang
- 11 AMC, Paro

Table 6.20: Profile of DWPSD administered institutes

## Technical Training Institute, Chumey

1	Sector:	Construction
2	Year of Establishment:	2006
3	Total Land Area:	30.66 Acre (Allowable 12.26 Acre)
4	Built Up Area:	2.58 Acre
5	Intake Capacity:	288
6	Proposed Intake Capacity:	850 (subject to review)
7	Location	
	Dzongkhag:	Bumthang
	Gewog:	Chumey
	Place:	Domkhar
8	Contact Details	
	Contact Number:	975-3-641300
	Email Address:	tti.chumey@gmail.com
	Website:	<a href="http://www.ttichumey.bt/">http://www.ttichumey.bt/</a>

## Technical Training Institute, Khuruthang

1	Sector:	Mechanical and Electrical
2	Year of Establishment:	2003
3	Total Land Area:	4.45 Acre (Allowable 1.78 Acre)
4	Built Up Area:	1.2 Acre
5	Intake Capacity:	216
6	Proposed Intake Capacity:	200 (subject to review)
7	Location	
	Dzongkhag:	Punakha
	Gewog:	Guma
	Place:	Khuruthang
8	Contact Details	
	Contact Number:	975 02 584514/ 584515 /584634
	Email Address:	tti.khuruthang@gmail.com
	Website:	<a href="http://www.ttikhuruthang.bt">www.ttikhuruthang.bt</a>



**Technical Training Institute, Rangjung**

1	Sector:	Electrical, CHN, Furniture and Automobile
2	Year of Establishment:	2003
3	Total Land Area:	10.82 Acre (Allowable 4.13 Acre)
4	Built Up Area:	1.2 Acre
5	Intake Capacity:	384
6	Proposed Intake Capacity:	500 (subject to review)
7	Location	
	Dzongkhag:	Trashigang
	Gewog:	Shongphu
	Place:	Buna
8	Contact Details	
	Contact Number:	04 561198
	Email Address:	tti.rangjung@gmail.com
	Website:	<a href="http://www.ttirangjung.bt">http://www.ttirangjung.bt</a>

**Technical Training Institute, Samthang**

1	Sector:	Automobile
2	Year of Establishment:	26.06.2003
3	Total Land Area:	31.58 Acres
4	Built Up Area:	2.76 Acre
5	Intake Capacity:	324 (Hostel)
6	Proposed Intake Capacity:	700 (subject to review)
7	Location	
	Dzongkhag:	Wangduephodrang
	Gewog:	Theedtsho
	Place:	Samthang
8	Contact Details	
	Contact Number:	975 77105319 / 77104982 ttisamthang@tti.gov.bt / tti.samthang@gmail.com
	Email Address:	
	Website:	<a href="http://ttisamthang.bt">http://ttisamthang.bt</a>

**Technical Training Institute, Thimphu**

1	Sector:	Automobile
2	Year of Establishment:	2008
3	Total Land Area:	6.77 Acre (Allowable 2.03 Acre)
4	Built Up Area:	1.89 Acre
5	Intake Capacity:	80
6	Proposed Intake Capacity:	500 (subject to review)
7	Location	
	Dzongkhag:	Thimphu
	Gewog:	Chang
	Place:	Serbithang (New), Changzamtok (Old)
8	Contact Details	
	Contact Number:	975-77109945 / +975-2- 336348
	Email Address:	ttithimphu@tti.gov.bt
	Website:	<a href="http://www.ttithimphu.bt">http://www.ttithimphu.bt</a>

**Jigme Wangchuck Power Training Institute, Sarpang**

1	Sector:	Construction and Renewal Energy
2	Year of Establishment:	2014
3	Total Land Area:	26.75 acres (Allowable 8.03 Acre)
4	Built Up Area:	5.23 acres
5	Intake Capacity:	384
6	Proposed Intake Capacity:	700 (subject to review)
7	Location	
	Dzongkhag:	Sarpang
	Gewog:	Dekiling
	Place:	Dolungang
8	Contact Details	
	Contact Number:	77673105 / 77109569/ 77109568
	Email Address:	jwpti@tti.gov.bt
	Website:	<a href="http://www.jwpti.bt">www.jwpti.bt</a>

**Rural Development Training Centre, Zhemgang**

1	Sector:	Agriculture
2	Year of Establishment:	2008
3	Total Land Area:	51.44 acres
4	Built Up Area:	5 acres
5	Intake Capacity:	70
6	Proposed Intake Capacity:	200 (subject to review)
7	Location	
	Dzongkhag:	Zhemgang
	Gewog:	Trong
	Place:	Zhemgang town
8	Contact Details	
	Contact Number:	975-03-741350
	Email Address:	rdtczhemgang@gmail.com
	Website:	www.rdtc.gov.bt

**College of Zorig Chusum, Trashiyangtse**

1	Sector:	Traditional Arts and Crafts
2	Year of Establishment:	1997
3	Total Land Area:	8.50 Acre (Allowable 3.54 Acre)
4	Built Up Area:	0.75 Acre
5	Intake Capacity:	152
6	Proposed Intake Capacity:	250 (subject to review)
7	Location	
	Dzongkhag:	Trashiyangtse
	Gewog:	Yangtse
	Place:	Trashiyangtse
8	Contact Details	
	Contact Number:	975 04 781141
	Email Address:	izc.tashiyangtse@gmail.com
	Website:	www.tizc.bt

**National Institute for Zorig Chusum, Thimphu**

1	Sector:	Traditional Arts and Crafts
2	Year of Establishment:	1971
3	Total Land Area:	1.17 Acre (Allowable 0.35 Acre)
4	Built Up Area:	0.45 Acre
5	Intake Capacity:	261
6	Proposed Intake Capacity:	261 (subject to review)
7	Location	
	Dzongkhag:	Thimphu
	Gewog:	Thimphu Thromde
	Place:	Kawajangsa
8	Contact Details	
	Contact Number:	975 02 322302
	Email Address:	izc.thimphu@gmail.com
	Website:	<a href="http://www.nizc.gov.bt">www.nizc.gov.bt</a>



## Contact us

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**Workforce Planning and Information Division  
Department of Workforce Planning and Skills Development  
Ministry of Education and Skills Development**

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