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# TTI-CHUMEY STRATEGIC PLAN, 2022-2029

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

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# 1.0 Background

The Technical Training Institute—Chumey was established in 2006 by splitting off from the erstwhile Royal Technical Institute (RTI), which was located in Rinchhending, Phuentsholing, under Chukha Dzongkhag. The essence of establishing the institute was to maintain the regional balance of TVET institutions in the country while realizing the importance of the socio-economic development contributed by TVET institutions. The institute is under the administration of the Department of Workforce Planning and Skills Development, MoESD.

The institute is located at Domkhar village under Chumig gewog, Bumthang Dzongkhag. Initially, it functioned with seven instructors and 232 trainees from six different occupations (Carpentry, Electrical, Masonry, Plumbing, Tailoring, and Welding), who had been transferred from the Construction Training Centre in Thimphu. The total area then was 5.49 acres, and Mr. Kinley Wangdi, the previous Director of the Department of Human Resources, headed the institute. The institute was then known as Chumey Institute for Civil Engineering.

However, from 2009 to 2015, the institute was retitled Vocational Training Institute—Chumey. In 2010, it was further reformed into the Central of Excellence, offering courses in the construction sector only. The total area of the institute widened to 30.672 acres.

Furthermore, the institute was renamed the Technical Training Institute—Chumey in 2015, and currently, there are approximately 31 staff members, comprising management, administrative, and support personnel. The Institute has also introduced higher-level regular courses based on the National Competency Standards (NCS) and nonformal training. The Institute provides NC-II, NC-III, Modular, and Skill Development Courses in Masonry, Carpentry, Welding, and Plumbing.

Over the years, the institute has also had several notable success stories, including winning 2nd and 1st prizes in the first and second National Quality Excellence Award Competitions, respectively. Similarly, in the years 2016 and 2017, the institute received 3rd and 2nd Prizes, respectively, in the National Innovation Competition. Further, the institute was also the Gold Medalist in 2018 for the National Quality Excellence Award Competition and received an appreciation letter from His Majesty the 5<sup>th</sup> Druk Gyalpo.

The institute has approximately 9 significant buildings, including an Administrative block, an ICT block, 3 hostel blocks, a MPH block, and three classroom and workshop blocks. Mr. Sangay Tshewang currently heads the institute.

## 1.1 Situational Analysis

A technical training institute, Chumey, is established on a total area of 30.672 acres and currently offers various training programs under the Skill Development Plan (SDP), including short courses on furniture and tile laying, as well as modular courses on plumbing, masonry, welding, and carpentry. The institute is managed by a principal who is assisted by ten supporting staff members and twenty-two trainers. The Institute has three main academic buildings, an administration building, a multipurpose room, three hostel buildings, and a principal's quarters. The buildings' heating systems and electrical wiring desperately require maintenance and improvement. The two hostel blocks are undergoing significant maintenance and retrofitting operations, which will equip the buildings with efficient room heating systems. This is a source of great relief. Given the

potential of TVET and the available space, the institute will eventually require various new infrastructure. The new buildings must be equipped with heating systems because Bumthang's winters can be extremely chilly. About 30.672 acres of land are currently available. However, there is still room for growth.

With the TVET reform plans and initiatives aligning with the development of the institute's infrastructure, institutions are working on remodelling and refurbishing the current infrastructure. Several projects are in the pipeline for implementation, including the construction of various undeveloped structures necessary for an institution to function smoothly, such as organized workshops, smart classrooms, and recreational facilities. As market dynamics evolve, digitalization is another significant step that institutions seek to incorporate into their training delivery methods. We have also considered the current course offerings and any new ones that an institution plans to introduce, taking into account market research.

For 60.12% of TVET graduates, finding a meaningful job is still challenging, showing that there is still a gap between skills and employment (TVET Graduate Study, MoLHR, 2020). Similarly, despite the high frequency of youthful unemployment, 36% of commercial enterprises reported that it is challenging to hire people with the necessary qualifications (TVET Blueprint, MoLHR, 2016).

The diversity of TVET programs now available is limited and unresponsive to the evolving needs of the labour market. Established economic sectors continue to influence the majority of courses and do not meet the requirements of Industry 4.0 or the competency standards of the 21st-century economy. The poor quality of TVET delivery is attributed mainly to the lack of national competency standards and curricula that have not kept pace with shifting global trends. Because their credentials are not benchmarked to international norms, TVET graduates' earning potential in regional and international markets is limited.

During curriculum development, technical skills have been prioritized over other talents, such as soft and transferable skills. The relevance of TVET courses has not risen due to the lack of industry input in establishing standards and curricula. Due to the poor implementation mechanism of OJT, work-based learning programs, including on-the-job training, attachments, and apprenticeships, have largely failed to become a significant part of the TVET program, primarily because of the training requirements and the company's needs. The brief learning period is exacerbated by poor monitoring and evaluation, incorrect participation, and difficulties for both the company and the employee.

Every organization must have an effective system in place to ensure that things run smoothly and in a systematic, responsive manner, with everything in its proper place and organized. The TTI-Chumig suffers from an unstructured system, as evidenced by the fact that some people are unaware that Chumig technical institutes offer training and that it even exists due to a lack of advocacy and branding. The existing system for how an institute operates should be reviewed and improved. In general, the current system in all institutions is quite disorganized, rendering them unattractive in all areas. Due to the current system's lack of autonomy and the requirement that everything be processed through a ministry, it is challenging to have the audacity to modify the system or improve it.

## 1.2 SWOT analysis

<b>Strength</b> <ul style="list-style-type: none"> <li>Centrally located (Accessibility)</li> <li>Adequate space for expansion</li> <li>Experienced and competent trainers</li> <li>Easy availability of resources (wood and timber) for carpentry</li> <li>Strong linkages with the industries</li> <li>Favourable employability ratio.</li> <li>The only institute to produce major graduates for the construction sector.</li> <li>Equal gender representation in the teaching section</li> </ul>	<b>Weakness</b> <ul style="list-style-type: none"> <li>Unfavourable weather for training</li> <li>Limited industry partners within the locality.</li> <li>Lack of proper recreational facilities</li> <li>Lack of heating facilities in classrooms/workshops/hostels</li> <li>Poor ICT facilities and Internet connectivity</li> <li>No conducive teaching-learning environment, cohesive or unorganized workshops regarding practical training delivery (Initially constructed as a theory classroom, not as a practical workshop) - included the description</li> <li>Inadequate reference materials (CBLM, course-related guide &amp; handbooks)</li> <li>Lack of qualification up-gradation opportunities</li> <li>No 3R mechanism for used training materials</li> <li>Infrastructures not maintained properly</li> <li>Poor water supply system</li> </ul>
<b>Opportunities</b> <ul style="list-style-type: none"> <li>To become a mega campus institute</li> <li>Industrialization and growing construction</li> <li>Growing demand for skilled workers in the construction sector.</li> <li>The prospect is to increase the linkages with additional aspiring companies and industries.</li> <li>Leading institute for fostering Innovation in the construction sector.</li> <li>Training cum production</li> <li>Introduction of advanced courses (Short/long)</li> </ul>	<b>Threats</b> <ul style="list-style-type: none"> <li>Growing private construction institutes (standards &amp; facilities)</li> <li>Similar courses offered by the institutes</li> <li>Preference for foreign workers over TVET graduates</li> <li>The government is offering scholarships till class XII, hampering admission to the institute</li> </ul>

### 1.2.1 Strength of the institute:

The institute's central location makes it an ideal destination for trainees from across the nation to receive training. Due to its sizable territory, the Institute also has the potential to develop more infrastructure and facilities, as well as launch new courses, particularly in the field of wood-related training.

Additionally, it is the only Institute that offers training in construction-based skills required by the construction industry to operate effectively. In some cases, trainees are already pre-selected for the job during the OJT because the institute has a strong partnership and linkage with the construction industry, which enables trainees to integrate into the job market upon completing their training.

### **1.2.2 Weakness of the institute:**

The institution has numerous benefits, but it also has some drawbacks. The unfavourable weather sometimes makes it challenging to give training. Since there are few local business partners, we have fewer opportunities to gain real-world experience while still in training. The institutes' recreational amenities and disorganized workshops, originally intended to serve as theoretical classrooms, are severely underdeveloped. Even in terms of training and its materials, we fall short when it comes to implementing systematic practice. We also lack reference resources, which ultimately undermines the creation of a supportive atmosphere for teaching and learning.

### **1.2.3 Opportunity for the institute:**

Given the availability of more than 30.672 acres of land, the institute has the potential to develop into a big institution with extensive infrastructure and facilities. Additionally, because the institute is located in the central region, it has the option to consider developing magnificent facilities for entertainment, recreation, and sports and hosting yearly sporting events for technical institutes and Institutes of Zorig Chusum.

Given the nature of the courses the institute offers in the construction sector and the nation's expanding industrial growth and construction, graduates have numerous options for finding employment or establishing their enterprises.

### **1.2.4 Threat to the institute:**

Trainees are less motivated to participate in the program due to outdated procedures and traditional training delivery techniques. Additionally, the institute risks losing more trainees to the private sector as growing commercial organizations develop more and better facilities. Due to the notion that foreign employees are superior to them, even after they have graduated and been hired by private enterprises, trainees are ultimately discouraged from pursuing TVET training.

One significant factor may be the government's decision to provide scholarships to students up to the 12th grade, which may be impeding their ability to participate in training programs.

## **1.3 Vision:**

To provide world-class wood technology education and training, empowering students with skills and knowledge to succeed in the industry and pursue their passion.

## **1.4 Mission:**

To produce a highly competitive and skilled workforce that is versatile, competent and prepared for modern technology.

## **1.5 Objectives of the institute**

1. Provide young people with the skills to make them employable, enhance their livelihoods, and create wealth.
2. Ensure skills and TVET are the drivers of development across the country.
3. Enhance the TVET graduates to make them globally competitive.
4. Foster a healthy attitude among trainers, trainees, and graduates towards work and life.
5. Uplift the image of blue-collar jobs.

## **1.6 Mandates:**

1. Implement plans and programs as per the policy and direction of the Department and Ministry;
2. Supply a skilled workforce into the Bhutanese economy based on the Labour market needs;
3. Foster innovation and entrepreneurship and nurture creativity in youth to generate diverse opportunities for socio-economic development;
4. To provide theoretical and practical knowledge and skills in the trades that are in the Institute.

## **1.7 Core Values:**

### **WE SHINE**

**W-** Work Ethics

**E-** Excellence

**S-** Self-respect and respect of others

**H-** Honesty and integrity

**I-** Innovation

**N-** Nation first

**E-** Empowerment

## **2.0 Theory of change**

The five-year strategic development plan includes a provision that permits the institution to enhance the TVET Reform plan. This plan is envisioned to bring about a fundamental shift in how Bhutan's TVET system is managed. The goal is to establish Bhutan's TVET system as a regional

leader in career-based technical and vocational education and training by establishing a flexible and reliable mechanism that creates a workforce that is work-ready, world-ready, and future-ready. The four core strategies are pursued as themes for developing the institute's strategic development plan, in line with the TVET reform plan. The four major strategic areas are being focused on, popularly referred to as the "4 Ps" - Place, Product, People, and Process. It essentially focuses on building a TTI, Chumey, where it provides students with an appealing, authentic, and holistic learning environment, delivering TVET programmes to equip students and graduates for future challenges adequately; and nurturing a pool of committed, motivated, inspiring, and qualified TVET leaders and professionals willing to trail blaze Bhutan's TVET.

Product transformation should emphasize a fresh approach to education that aims to improve students' abilities. Through hands-on training, students must acquire knowledge and skills applicable to both local and global workplace settings. Students must be prepared to think independently through education, which is essential for fostering innovation, creativity, and the ability to adapt to change.

The people transformation entails developing the TVET staff's leadership and professional capacity, as well as their passion, commitment, and integrity, to improve the quality of teaching, learning, and management practices in their institutions and deliver the core result, quality TVET programmes. It all boils down to guaranteeing the ongoing growth of TVET staff talent and professionalism. Principals, managers, and trainers should be prepared with the skills necessary to become change agents and achieve TVET transformation.

The main goal of place transformation is to improve TVET's poor reputation in society. Efforts should begin with basic standard amenities and progress to facilities comparable to those found in top-tier TVET institutions. The transformation should include high-quality training facilities that develop both the mind and body.

The process transformation establishes a precise functional framework, segregating roles and responsibilities among different levels of the governance system and its stakeholders. The ultimate aim of process transformation should be to develop a system to implement all policies and plans. The adoption of the 4Ps in the institute's strategic development plan enshrined in the TVET Reform plan will guide and facilitate the transformation of TVET into an attractive learning and career pathway to produce a competent workforce that is confident, well-rounded, productive, resilient and innovative by bringing about the major transformation in four strategic areas of TVET and creating enabling policy, sustained financing and collaborative approach. Accordingly, the strategic plan is intended to:

- Diversify TVET programs responsive to the emerging local and trans-local 21st-century economy.
- Uplift the image of TVET to attract high performers
- Strengthen the TVET governance and management system
- Collaborative approach to TVET delivery
- Create innovative learning spaces by integrating information and communication technology (ICT) and digital infrastructure.
- Create a real work experience through a coherent system and active engagement of local and trans-local industries.
- Promote TVET as a mainstream learning and career choice.



Rest			
Outcome	Key Performance Indicator (KPI)	Baseline	Target
1. Diversified TVET programs responsive to the emerging local and trans-local 21 <sup>st</sup> -century economy.	Introduce New Course aligned to 21st Century and IR 4.0(ND,NC & IC)	4 (2022)	07
	Graduates finding employment within six to 12 months after the graduation.	68.9% (2022)	70%
	Graduates receiving job offers at the campus	NA	50%
2. Built TVET institutions that provide appealing, authentic, holistic and ICT-enabled learning environments.	Annual enrolment capacity	288 (2024)	893 (2029)
	Established effective Innovation and entrepreneurship laboratories in the institutes	NA	2027
	Capacity building of faculty through re-skilling and up-skilling.	NA	23
	Student satisfaction with overall training delivery	NA	80%
4. Established a responsive, robust, agile, sustainable, resilient and high-performing TVET System.	The percentage of post-training support to TVET graduates was facilitated (NC2, NC3 and ND)	NA	50%
	Establish collaboration and linkages with TVET stakeholders at the National level (numbers)	NA	15
	Establish collaboration and linkages with TVET stakeholders at the Regional and International levels(numbers).	NA	02
	Initiate research and development culture in the TVET system (publication).	NA	5 (2029)

## 2.1 Strategic Area 1: Product transformation

Aspiration:

Diversify TVET programs responsive to the emerging local and trans-local 21<sup>st</sup>-century economy.

**Output:** Develop specialized and high-end courses focused on the local economy

Strategies:

- ❖ Introduce New Course aligned to 21st Century and IR 4.0.
- ❖ Graduates finding employment within six months after course completion
- ❖ Develop specialized and high-end courses focused on the local economy.
- ❖ Graduates receiving job offers on campus

**Note:** As it becomes increasingly difficult by the day to secure employment in the private or public sectors, trainees should be provided with 15 days of a basic entrepreneurship course, regardless of the training course or modality they choose. This would enhance their capacity for business ideas and, hence, make them more independent individuals.

Output	Key Performance Indicator (KPI)	Baseline/Year	Target
Product transformation			
1. Revamp the TVET program design and development system	1. Timeline by which the institute becomes fully functional as CoE in Engineering and Construction Technology(wood technology).	NA	2029
2 Develop and introduce a demand-driven course attuned to the current and emerging needs of the economy.	Number of National Diploma-level courses introduced	0	4
	Number of NC-level courses introduced	7	3
	Number of female-friendly short courses (IC) developed and introduced	0	2
3. Provide flexible learning opportunities to capture informal and non-formal modes of training	Number of short courses (IC) introduced as per the market dynamics	1	6
	Timeline by which an entrepreneurship and innovation centre is established	NA	2027

## 2.2 Strategic Area 2: Place transformation

Aspiration:

Built TVET institutions that provide appealing, authentic, holistic and ICT-enabled learning environments.

Output:

Build functionally authentic, engaging and multi-use teaching and learning facilities.

Strategies:

Existing classrooms and workshops are remodelled and refurbished with a heating system.

3R mechanism is established to reuse waste from the training field  
Learning Management System in all trades has been initiated

Place transformation	Key Performance Indicator (KPI)	Baseline/Year	Target
1. Build functionally authentic, engaging and multi-use teaching and learning facilities.	1. No of staff and trainees on the inclusive and gender advocated	NA	800
	2. Timeline by which 3R mechanism is established	NA	2023
	3. No of trainers trained in the Learning Management System	5	23
	4. Timeline by which the first-class sports and recreational facilities to foster wellness, teamwork, leadership and self-confidence are built	NA	2027
	5. Number of trainers trained on OHS	07	16

## 2.3 Strategic Area 3: People transformation

Aspiration:

Develop and nurture a pool of committed, motivated, inspiring and qualified TVET leaders and professionals willing to trailblaze Bhutan's TVET System to global standards.

Output:

Capacity-building programs were implemented for trainers and faculty.

Strategies:

- The capacity of several TVET trainers is built to deliver PWD-friendly courses.
- Number of trainers provided with ICT literacy and digital skills to manage online Learning Management Systems and Digital content.
- Number of trainers trained in innovative teaching methodologies.
- Number of the faculty trained in entrepreneurship

People transformation	Key Performance Indicator (KPI)	Baseline/Year	Target
1. Built capacity of the TVET trainers on soft, transversal skills and 21st-century skills.	1. Number of TVET trainers' capacity is built to deliver PWD-friendly courses.	NA	23
	2 No of trainers provided with ICT literacy and digital skills to manage online Learning Management System and Digital content.	0	23
	4 No of the faculty trained in entrepreneurship	04	23

2. Implement a "Total System Capability" program for TVET professionals.	1. No of the trainers' qualifications upgraded through reskilling and upskilling	NA	23
3. Promote research and development and innovation culture in TVET system.	1. No. of tracer studies, evaluation, perception studies and impact assessment for evidence-based TVET system conducted.	1	5

## 2.4 Strategic Area 4: Process Transformation

Aspiration:

Established responsive, robust, agile, sustainable, resilient and a high performing TVET System.

Output:

Established a dedicated unit in institutes to provide post-training services to the graduates.

Strategies:

- Number of TVET trainers' capacity is built to deliver PWD-friendly courses.
- Number of trainers provided with ICT literacy and digital skills to manage online Learning Management Systems and Digital content.
- No of trainers trained on innovative teaching methodologies.
- No of the faculties are trained in entrepreneurship.
- No of the trainers' qualifications upgraded through reskilling and upskilling
- No of existing trainers certified with NC level through RPL

Process transformation	Key Performance Indicator (KPI)	Baseline/Year	Target
1. Post-training support to TVET graduates instituted and facilitated	1. Percent of post-training support to TVET graduates was facilitated (NC2, NC3 and ND)	NA	50%
	2 Timeline by which the establishment of alumni associations at the Institute level through a functional Alumni Association is instituted.	NA	2026
	3. Conduct an institute-level skill competition	NA	Zorig Day
2. Functional institute-industry partnership instituted.	1. Number of industry-institute partnerships established at the national level.	0	15

	Number of industry-institute partnerships at the regional or international level established	0	2
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## 3.0 Financing

8.2.1 BUDGET ALLOCATION				
FINANCIAL YEAR	CURRENT (Nu. In million)	CAPITAL (Nu. in million)	TOTAL	REMARKS
2018-2019	16.34	4.953	21.293	
2019-2020	21.034	11.97	33.004	
2020-2021	19.675	9.45	29.125	
2021-2022	19.399	4.43	23.769	
2022-2023	18.713	6.077	24.79	

8.2.2 BUDGET REQUIREMENT					
FINANCIAL YEAR	NAME OF THE ACTIVITY	UNIT	CURRENT (Nu. In million)	CAPITAL (Nu. in million)	TOTAL
2023	Training (Tools, materials & Equipment)			9.3675	9.3675
	Construction of the indoor stadium			12.51	12.51
	Construction of additional Workshops	4		42.25	42.25
2024	Training (Tools, materials & Equipment			5.58	5.58
	Mini theatre			15.31	15.31
	Construction of the Guest house			6.9	6.9
	Institute cafeteria			2.8	2.8
	Lecture hall with all accessories			27.05	27.05
	Staff Office			9.2	9.2
	Virtual Simulator Hall			3.4	3.4

2025	Training (Tools, materials & Equipment			8.88	8.88
	Construction of MPH			15.03	15.03
	Construction of Staff quarter	2		87.49	87.49
2026	Training (Tools, materials & Equipment			5.58	5.58
2027	Training (Tools, materials & Equipment			8.445	8.445

## 4.0 Promotion and advocacy

Due to inadequate TVET promotion and advertising, TVET has a poor reputation in the marketplace and fewer people have shown up for training. Therefore, the following are the solutions for advocacy and promotion:

- Every school's student must watch a video about TVET (the courses it offers and its benefits) as part of the orientation program.
- Advocate for TVET with local authorities and employers
- Participate in social or community services
- Video visuals on websites, social media platforms, and BBS
- Trainees should have access to the best training facilities, leisure activities, dormitories, and campus from the institute. These facilities will promote and advocate, whether directly or indirectly.
- Participate in skill and innovation competitions at the National & International level
- Through the TVET symposium
- Systematically establishing employment options for TVET graduates both inside and outside of Bhutan through analysis of the domestic and international labour markets and dissemination of pertinent information to the entire industry
- Establishment of a stable career path for upgradation for TVET trainers and trainees through clear directions and policies

## 5.0 Monitoring and Evaluation

To ensure the successful implementation of this strategic development plan, the HR committee of the institute will monitor progress in undertaking strategic activities on a quarterly basis. The principal will lead and ensure that the planned activities are implemented, and will report to the Department of Workforce Planning and Skills Development (DWPSD). The strategic plan will be reviewed and evaluated at the end of each fiscal year by DWPSD.

The HR committee of the institute will review the status of strategic actions being undertaken quarterly to ensure the successful execution of the plan. The vice principal will organize the

activities and see to their execution. Additionally, they will update the principal on the plan's progress. The strategic plan will be looked at, reviewed, and assessed at each fiscal year's conclusion. The monitoring and evaluation are in Annexure V.

## 6.0 Annexures

### 6.1 Annexure 1: List of existing and future courses

5.1 a. LIST OF EXISTING REGULAR COURSES		
SL. NO	NAME OF THE COURSE	QUALIFICATION LEVEL*
1	Plumbing	NC II
2	Masonry	NC II
3	Welding	NC II
4	Carpentry	NC II
5	Furniture Making	NC II
6	Masonry	NC III
7	Welding	NCIII
8	Carpentry	NCIII
9	Construction Supervisor	ND

5.1. b LIST OF EXISTING SHORT COURSES		
SL. NO	NAME OF THE COURSE	CERTIFICATION LEVEL
1	Plumbing	Institute Certificate
2	Tile laying	Institute Certificate



3	Furniture Making	Institute Certificate
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5.1 c LIST OF FUTURE REGULAR COURSES		
SL. NO	NAME OF THE COURSE	QUALIFICATION LEVEL
1	Plumbing	NC III
2	Plumbing and heating engineering	NC II, NC II & ND
3	Timber frame technology and building insulation	NC II, NC III & ND
4	Bridge construction technology	ND
5	Interior Design	NC III
7	Wood Processing Technology	Diploma
8	Painting and Decoration	NC2

5.1 d LIST OF FUTURE SHORT COURSES		
SL. NO	NAME OF THE COURSE	CERTIFICATION LEVEL
1	Solar water heating & Heat pump course	IC
2	Install a household treatment plant (Water filter and UV purifier)	IC
3	Repair and maintenance of the plumbing system	IC
4	Tailor-made course on a pump system	IC

5	Upholstery Furniture	IC
6	Melamine polishing	IC
7	Marble laying	IC
8	Advance plastering	IC
9	False ceiling	IC

## 6.2 Annexure II: Details of existing and future requirements of infrastructure and equipment for TTIC

6.1 LIST OF EXISTING INFRASTRUCTURE			
SL. NO	TYPES OF INFRASTRUCTURE	NUMBER	REMARKS
1	PRINCIPALS QUARTER	1	
2	HOSTEL	3	
3	MPH	1	
4	ACADEMIC BLOCK	5	Including 1 administration block
5	WORKSHOP	3	Attached are the Academic blocks
6	KITCHEN	1	Attached to MPH
6.2 LIST OF INFRASTRUCTURE REQUIREMENTS			
SL. NO	TYPES OF INFRASTRUCTURE	NUMBER	REMARKS
1	Multi-Purpose Hall	1	2025
2	Indoor Stadium	1	2025
3	Workshops	4	2025

4	Staff Quarter	3	2025
5	Mini Theatre	1	2025
6	Guest House	1	2025
7	Institute cafeteria	1	2025
8	Lecture hall with all accessories	4	2025
9	Staff Office	1	2025
10	Virtual Simulator Hall	1	2025
11	Water supply system (Treatment plant)	1	2024

### 6.3 Annexure III: Details of existing human resources, future HR projection and qualification upgradation requirement

7.1.1 DETAILS OF EXISTING HUMAN RESOURCES										
Sl.No	NAME	POSITION TITLE	NAME OF TRADE	HIGHEST EDUCATIONAL QUALIFICATION	SKILLS QUALIFICATION LEVEL, IF ANY	YEARS OF EXPERIENCE IN TVET	TOT CERTIFIED			
							TEACHING PEDAGOGY (ALL FOUR MODULES ) -Mark Yes or No	ENTREPRENEURSHIP	OH S	21st Century

1	Sangay Tshewan g	Principal	Management	M.Ed		8	Yes	Yes	No	No
2	Ghana Shyam Chimoria	Asst. Instructor I	Plumbing	Diploma		5	Yes	No	No	Yes
3	Leki Dorji	Asst. Instructor I	Masonry	Diploma	NC II masonry	7	Yes	No	Yes	Yes
4	Sajaindra Rai	Associate Lecturer-I	English	Bachelors		6	Yes	Yes	Yes	Yes
5	Choki Wangmo	Associate Lecturer-I	Mathematics	Bachelors		6	Yes	Yes	No	Yes
6	Phub Lhamo	Associate Lecturer-I	Dzongkha	Bachelors		6	Yes	Yes	No	No
7	Bibika Rai	Associate Lecturer	Plumbing	Bachelors		6	Yes	No	No	No
8	Jigme Thinley	Associate Lecturer	Carpentry	Bachelors		6	Yes	No	No	No
9	Tshering Jatsho	Asst. Instructor	Welding	Diploma	NC II	8	Yes	No	Yes	Yes
10	Sonam Dorji	Associate Lecturer	Welding	Bachelors		7	Yes	No	No	No
11	Purna Maya Sanyasi	Instructor	Plumbing	Diploma		11	Yes	No	Yes	Yes

12	Deki Choden	Asst.Instruct or I	Masonry	Diploma	NC II in Masonry	4	Yes	No	No	Yes
13	Ganga Ram Drajee	Instructor	Masonry	Diploma		19	Yes	No	No	Yes
14	Ramesh Gurung	Sr. Instructor	Mosonry	Diploma		26	Yes	No	No	Yes
15	Sonam Penjor	Sr. Instructor	Carpentry	Diploma		35	Yes	No	No	yes
16	Lekey Dhendup	Instructor	Carpentry	Diploma		20	Yes	No	No	yes
17	Sonam Choden	Instuctor	plumbing	Diploma		19	Yes	No	No	yes
18	Sangay Wangchuk	Asst. Instructor II	Carpentry	Diploma		1	Yes	No	No	no
19	Nima Dendup	Asst. Instructor II	Carpentry	Diploma		1	Yes	No	No	no
20	Sonam Dendup	Asst. Instructor II	Plumbing	Diploma		1	Yes	No	No	no
21	Dechen Choden	Asst. Instructor II	Plumbing	Bachelors		1	Yes	No	No	no
22	Purna Bdr. Ghalley	Asst. Instructor II	Welding	Diploma		1	Yes	no	yes	no

23	Dorji Wangchuk	Asst. Instructor II	Welding	Diploma		1	yes	No	No	No
24	Norbu Chogyel	Admin. Asst. I	Administration	Class XII	No	16	No	No	No	No
25	Karma Dema	Library Asst. I	Administration	Class XII		12	No	No	No	No
26	Meenu Maya Mongar	Procurement Asst. II	Administration	Class XII		1	No	No	Yes	No
27	Tenzin Yoezer	Driver	Support staff		No	16	No	No	No	No
28	Ugyen Dorji	Driver	Support staff	X	No	20	No	No	No	No

7.1.2 DETAILS OF HUMAN RESOURCES REQUIREMENT					
SL. No	NAME OF TRADE	EDUCATIONAL QUALIFICATION	SPECIFIC SKILLS QUALIFICATION LEVEL, IF ANY	NUMBER	EMPLOYMENT TYPE
1	Welding	Bachelors	NC III	2	REGULAR
2	Carpentry	Bachelors	NC III	5	REGULAR
3	Masonry	Bachelors	NC III	4	REGULAR
4	Plumbing	Bachelors	NC III	4	REGULAR
5	Academic Skills	Bachelors		4	REGULAR

7.1.3 DETAILS OF QUALIFICATION UPGRADATION PLAN						
SL. No	NAME	CURRENT EDUCATIONAL QUALIFICATION	CURRENT SKILLS QUALIFICATION LEVEL	PROPOSED LEVEL/QUALIFICATION UPGRADATION	PROPOSED OCCUPATIONAL SKILLS UPGRADATION	REMARKS
1	Sangay Tshewang	Masters		Doctorate		
2	Ghana Shyam Chimoria	Diploma		Bachelors	NC III	
3	Leki Dorji	Diploma		Bachelors	NC III	

4	Sajaindra Rai	Bachelors		Masters	Entrepreneurship (ToT)	Soft skills
6	Choki Wangmo	Bachelors		Masters	Entrepreneurship (ToT)	Soft skills
7	Phub Lhamo	Bachelors		Masters	Entrepreneurship (ToT)	Soft skills
9	Bibika Rai	Bachelors		Masters	NC III	
10	Jigme Thinley	Bachelors		Masters	NC III	
11	Tshering Jatsho	Diploma	NC II	Bachelors	NC III	
12	Sonam Dorji	Bachelors		Masters	NC III	
13	Purna Maya Sanyasi	Diploma		Bachelors	NC III	
14	Deki Choden	Diploma		Bachelors	NC III	
15	Pema Lhaden	Diploma		Bachelors	NC III	
16	Ganga Ram Drajee	Diploma		Bachelors	NC III	
17	Ramesh Gurung	Diploma		Bachelors	NC III	
18	Sonam Penjor	Diploma		Bachelors	NC III	
19	Lekey Dhendup	Diploma		Bachelors	NC III	
20	Sonam Choden	Diploma		Bachelors	NC III	
21	Sangay Wangchuk	Diploma		Bachelors	NC III	
22	Nima Dendup	Diploma		Bachelors	NC III	
23	Sonam Dendup	Diploma		Bachelors	NC III	
24	Dechen Choden	Diploma		Bachelors	NC III	
25	Purna Bdr. Ghalley	Diploma		Bachelors	NC III	
26	Dorji Wangchuk	Diploma		Bachelors	NC III	
27	Norbu Chogyel	Class XII		Diploma		
28	Karma Dema	Class XII		Diploma in Library Management		



29	Meenu Maya Mongar	Class XII		Diploma in Store Management		
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## 6.4 Annexure IV: Details of existing institutional linkages and future plans for the institutional linkages

8.1 DETAILS OF INSTITUTIONAL LINKAGES				
SL. No	NAME OF THE INDUSTRY	LOCATION OF THE INDUSTRY	WHEN WAS THE LINKAGE ESTABLISHED/SIGNED	REMARKS
1	Menjong WoodWork Industries	Thimphu	2021	Construction carpentry & Furniture
2	Ongdi Timber/Alpine	Thimphu	2021	Construction carpentry
3	U.DEE Construction	Bumthang	2021	Construction carpentry
4	Jatu Wood Work	Phuentsholing, Chhukha	2021	Furniture
5	Zhendrup Construction Company	Thimphu	2021	Masonry

6	Construction Development Corporation Limited (CDCL)	Thimphu	2021	Masonry
7	Ms. Vajra Builder	Thimphu	2021	Welding
8	Druk Chapcha Company	Thimphu	2021	Welding
9	Agro Mechanical Workshop	Bumthang	2021	Welding
<b>8.2 DETAILS OF FUTURE INSTITUTIONAL LINKAGES</b>				
SL. No	PROPOSED YEAR OF ESTABLISHING LINKAGE	NUMBER OF INSTITUTIONAL LINKAGES TO BE ESTABLISHED	REMARKS	
1	2023	2	Design & Build Bhutan,	
			Pelbar Lokchey Pvt. Lt.	
2	2024	2	Nika Chu Project,	
			Woezer Builder	
3	2025	2	NHDCL,	
			Wangthang Const. Pvt Ltd	
4	2026	2	D.Lhen Construction Pvt. Ltd.	
			Vajra Builder	

5	2027	2	Agricultural Machineries Center (AMC),
			WALO Company

## 6.5 Annexure V: Monitoring and Evaluation Plan

OUTCOME								
SL.No	KPI	KPI Description	Baseline	Target	Data source	Frequency (How often will it be measured)	Responsible (Who will measure it?)	Reporting (Where will it be reported?)
1	Introduce New Course aligned to 21st Century and IR 4.0(ND,NC & IC)	The KPI measures the number of ND, NC and IC level courses introduced, aligning with the 21st-century and IR4.0 as specified against TTI Chumey in the TVET reform plan.	4 (2022)	13	ND, NC and IC curricula apart from the students' enrollment figures.	Quarterly	BQPCA, DWPSD & Institute	BQPCA and DWPSD
2	Graduates finding employment within six to 12 months after the graduation.	The indicator describes the percentage of graduates who are employed within six months to 12 months after graduation.	68.09% (2022)	70%	Employment record, survey report and appointment order	Quarterly	Institute and DWPSD	DWPSD

3	Graduates receiving job offer at the campus	The KPI describes the percentage by which the graduates received employment through on-campus recruitment initiated by the institute including short courses.	NA	50%	Employment record	Quarterly	Institute and DWPSD	DWPSD
4	Annual enrolment capacity	The KPI measures the increased enrolment in TTIC after the execution of expansion works	288(2024)	893 (2029)	Enrolment record	Quarterly	Institute and DWPSD	DWPSD
5	Established effective Innovation and entrepreneurship laboratory in the institute	The KPI indicates the timeline for establishing an effective innovation and entrepreneurship lab within the institute to conduct R&D.	NA	2027	Pictures and administrative records	Quarterly	Institute and DWPSD/AD B	DWPSD/AD B
6	Capacity building of faculty through re-skilling and upskilling.	The KPI measures the number of faculty skills upgraded through re-	NA	23	Administrative records	Quarterly	Institute and DWPSD/AD B	DWPSD/AD B

		skilling and upskilling.						
7	Student satisfaction of overall training delivery	The KPI measures the overall satisfaction level of trainees on training delivery gathered through survey.	NA	80%	Survey report	Quarterly	Institute and DWPSD/TT TRC	DWPSD/TT TRC
8	Post-training support to TVET graduates facilitated.	It describes the % of post-training opportunities started or initiated.	NA	50%	Certificates and another administrative records	Quarterly	Institute and DWPSD	DWPSD
9	Number of collaborations and linkages with TVET stakeholders	The indicator measures no. of national linkages established.	NA	07	Signed MoU	Quarterly	Institute and DWPSD	DWPSD
10	at the National, Regional and International levels established	The indicator measures the number of international linkages established.	NA	02	Signed MoU	Quarterly	Institute and DWPSD	DWPSD
	OUTPUT							
SL.No	KPI	KPI Description	Baseline	Target	Data source	Frequency (How often	Responsible (Who will measure it?)	Reporting (Where will

						will it be measured)		it be reported?)
1	1. Timeline by which the institute becomes fully functional as CoE in Engineering and Construction Technology(wood technology).	The KPI measures the timeline by which centre of excellence in Engineering and construction technology is established fully.	NA	2029	CoE trades and course certificate	Quarterly	Institute, DoS, TTTRC and DWPSD	DWPSD
2	No. of National Diploma level course introduced	The indicator describes 2 numbers of national diploma courses is introduced as per the TVET reform plan.	0	4	Courses, curriculum and enrolment	Quarterly	Institute, DoS, TTTRC and DWPSD	DWPSD
3	No. of NC-level courses introduced	The indicator indicates numbers of NC level courses are introduced as per the TVET reform plan	5	3	Courses curriculum and enrolment	Quarterly	Institute, DoS, TTTRC and DWPSD	DWPSD
4	No of short courses (IC) introduced as per the market dynamic	It describes 5 numbers of short courses (IC) initiated as per the market demand.	4	6	Courses curriculum and enrolment	Quarterly	Institute, TTTRC and DWPSD	DWPSD

Sl#	Place transformation	Key Performance Indicator (KPI)	Baseline/Year	Target	Data source	Frequency (How often will it be measured)	Responsible (Who will measure it?)	Reporting (Where will it be reported?)
5	1. Incorporate inclusive and gender-sensitive features in all infrastructures and facilities.	The KPI describes the deadline by which the existing classrooms and workshops are refurbished with a heating system to make a smart learning environment.	NA	2027	Pictural evidence and administrative records	Quarterly	Institute, ADB and DWPSD	DWPSD/AD B
6	2. Timeline by which 3R mechanism is established	The KPI describes the timeline by which 3R (Reuse, Reduce, Recycle) mechanism is established to combat waste.	NA	2023	Pictural evidence and administrative records	Quarterly	Institute, ADB and DWPSD	DWPSD/AD B
7	3. Timeline by which the Learning Management System in all trades initiated	The KPI describes the number of trainers trained in LMS.	NA	23	Pictural evidence and administrative records	Quarterly	Institute and DWPSD	DWPSD/AD B



Sl#	People transformation	Key Performance Indicator (KPI)	Baseline/Year	Target	Data source	Frequency (How often will it be measured)	Responsible (Who will measure it?)	Reporting (Where will it be reported?)
8	1. Number of TVET trainers' capacity is built to deliver PWD-friendly courses.	The KPI describes the number of trainers trained to deliver PWD - friendly courses.	NA	23	Certificate and other administrative records	Quarterly	Institute, MoE, Wangsel, TTTRC, ADB & DWPSD	WDPSD/AD B
9	2 No of trainers provided with ICT literacy and digital skills to manage online Learning Management System and Digital content.	The KPI describes the number of capacity development programs initiated to achieve organisational excellence.	0	23	Report and Administrative Records	Quarterly	Institute, Helvetas, ADB and DWPSD	DWPSD/AD B/Helvetas
10	3 No of trainers trained on innovation teaching methodologies.	The KPI describes the number of trainers trained in ICT literacy and digital to manage LMS and digital content.	0	23	Training certificate, reports and administrative records	Quarterly	Institute, Helvetas, ADB and DWPSD	DWPSD/AD B/Helvetas

11	4 No of the faculties trained in entrepreneurship	The KPI describes the number of faculties trained in entrepreneurship.	04	23	Training certificate, reports and administrative records	Quarterly	Institute, TTTRC and DWPSD	DWPSD/TT TRC
Sl#	Process transformation	Key Performance Indicator (KPI)	Baseline/Year	Target	Data source	Frequency (How often will it be measured)	Responsible (Who will measure it?)	Reporting (Where will it be reported?)
12	1 Percent in which post-training support services to the graduates is facilitated (NC2, NC3 and ND).	The KPI describes the timeline by which a dedicated unit is established to provide post-training support services to the graduates.	NA	50%	Training record and curriculum	Quarterly	Institute, Dos, TTTRC and DWPSD	DWPSD/TT TRC
13	2 Timeline by which the establishment of alumni associations at the Institute level through a functional Alumni Association is instituted.	The KPI measures the deadline by which alumni associations at the institute level are established with guidelines/SOP	NA	2026	SOP or guidelines	Quarterly	Institute, DoS, TTTRC and DWPSD	DWPSD/TT TRC

14	3 Timeline by which the institute-level skill competition is conducted	The KPI describes the deadline by which the institute-level skill competition is organized and conducted.	NA	Zorig day every year	Competition guidelines, results and reports.	Quarterly	Institute, TTTRC and DWPSD	DWPSD/TT TRC
15	1. Number of industry-institute partnerships established at the regional or international level.	The KPI measures the number of partnerships or linkages at the regional or international level is established.	0	2	Number of MoU signed and other administrative records	Quarterly	Institute, TTTRC and DWPSD	DWPSD/TT TRC
16	2 Number of industry-institute partnerships at the local or national level strengthens.	The KPI describes the number of industry-institute partnerships at the local level that are strengthened or signed.	7	15	Number of MoU signed and other administrative records	Quarterly	Institute, Industries and Department/ TTTRC	DWPSD/TT TRC

## 6.6 Annexure VI: Operational Plan

Product Transformation – Activities	ACTIVITIES	Timeline						
KPI		2023	2024	2025	2026	2027	2028	2029
1. Timeline by which the institute becomes fully functional as CoE in Engineering and Construction Technology(wood technology).	Develop guidelines for the CoE and become a fully functional CoE.						July	
No. of NC-level courses introduced	Introduce ND course in bridge construction technology				Aug			
	Introduce ND course for construction management			Feb				
No. of NC-level courses introduced	Introduce NC course in interior design			July				
	Introduce NC course in Timber frame and building insulation technology				Jan			
	Introduce bakery course	April						
	Introduce tiles		April					
	Introduce stone masonry			June				
	Introduce brick laying			June				
	Introduce advanced plastering			Au				
	Introduce solar water heating system					July		
	Introduce SMAW & Gas			June				
Timeline in which an entrepreneurship and innovation centre established	Established fully functional innovation and entrepreneurship unit					Feb		

Place Transformation – Activities	Activities	Timeline						
Key Performance Indicator (KPI)		2023	2024	2025	2026	2027	2028	2029
Build functionally authentic, engaging and multi-use teaching and learning facilities.	Timeline by which the existing classrooms and workshops are remodelled and refurbish with the heating system					Jan		
Provide adequate amenities for holistic development	Develop SOP	Jan						
	Construction waste segregation shed	Dec						
	Sign an MoU with a waste dealer	Feb						
Build functionally authentic, engaging and multi-use teaching and learning facilities incorporating CMF.	Construct MPH			Jan				
	Construct 4 additional workshops					Jan		
	Construct 2 units of staff quarters					Dec		
	Construct indoor stadium and artificial tuff ground				June			
	Refurbish warden and matron quarter				Dec			
	Construct water filtration system			June				
	Construct 1 unit cafeteria and guest house						Dec	
	Construct 3 unit hostels				Jan			
Build smart and integrated learning spaces and facilities for flexibility and space optimisation.	Install interactive smart board		June					
	Install a 100 Mbps internet service networking					Nov		
	Implement paperless documentation	Jan						
	Develop LMS curriculum for all the trades						Jan	

People Transformation – Activities	Activities	Timeline						
Key Performance Indicator (KPI)		2023	2024	2025	2026	2027	2028	2029

Capacity development program to TVET leaders and managers for achieving organizational excellence is initiated	Establish online and flexible career upgradation avenue for trainers.			3	5	5	5	5
	Capacity building as per the HR Master Plan and Training Needs Assessment (Re-skilling and qualification upgradation) including for cooks and support staff.			3	5	5	5	5
Trainers provided with ICT literacy and digital skills to manage online Learning Management System and Digital content.	Equip TVET trainers on LMS and digital literacy			2	4	4	4	4
Embrace innovative and latest teaching-learning methodologies	Build research and development capabilities, as well as trainer capacity.			5	5	5	4	4
	Carry out research			1	1	1	1	1

Process Transformation - Activities	Activities	Timeline						
Key Performance Indicator (KPI)		2023	2024	2025	2026	2027	2028	2029

1 Timeline by which a dedicated unit to provide post-training support services to the graduates established	Create a dedicated unit in the institute to provide post-training services to graduates					March		
	Established and conducted institute-level skills competition			Zorig day	Zorig day	Zorig day	Zorig day	Zorig day
2 Timeline by which establishment of alumni associations at Institute levels through functional Alumni Association instituted.	Developed Alumni Association SOPs and guidelines				March			
	Implement fully functional Alumni Association							
1 Number of industry-institute partnerships at the regional or international level established.	Established training partnership with an international level			1	1			
	Established training partnership with National industries			3	3	3	3	3

**Reviewed and endorsed on 09/05/2025**

**Thank you!**