



Ministry of Science and Higher Education



**Ethiopian
Technical and
Vocational Education
and Training Policy
and Strategy**

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Abbreviation

HEI	Higher Education Institution
MoSHE	Ministry of Science and Higher Education
MoLSA	Ministry of Labor and Social Affairs
JCC	Job Creation Commission
TVET	Technical and Vocational Education and Training
LMS	Learning Management System
SDG	Sustainable Development Goal
ESDP-V	Education Sector Development Plan – V
CoC	Certificate of Competence
ICT	Information Communication Technology
KPI	Key Performance Indicator
STEM	Science, Technology, Engineering and Mathematics
HEIs	Higher Education Institutions

Table of Contents

Contents	Page
Foreword.....	4
1. Introduction	6
1.1 Background.....	6
1.2 Definition of Key Terms.....	8
1.3 The Philosophy of TVET in Ethiopia	15
1.4 Pressing Need for the TVET Policy and Strategy.....	15
1.5 TVET Vision, Mission, Principles and Objectives.....	17
1.5.1 Vision	17
1.5.2 Mission.....	17
1.5.3 Guiding Principles	17
1.5.4 Policy Objective.....	18
2. Core Policy Issues and Implementation Strategies.....	18
2.1. Ethiopian TVET Relevance, Quality, Equity and Access	19
2.1.1. TVET Relevance and Quality.....	19
2.1.1.1. Ethiopian TVET Qualification Framework (ETQF).....	19
2.1.1.2. Occupational Standard Development	20
2.1.1.3. Medium of Instruction	22
2.1.1.4. Curriculum and TTLM	22
2.1.1.5. Alternative models of Cooperative Training.....	24
2.1.1.6. Competency Assessment	26
2.1.1.7. Entrepreneurship and employability in TVET.....	27
2.1.1.8. TVET Relevance and Quality Assurance System	29
2.1.1.9. Greening TVET (GTVET).....	31
2.1.2. Access and Equity in TVET.....	32
2.1.2.1. Access to TVET	32
2.1.2.2. Equity in TVET.....	34
2.1.2.3. Private Sector participation in TVET	36

2.2.	Ethiopian TVET Research, Innovation and Technology Transfer	37
2.2.1.	Research and Innovation in TVET	37
2.2.2.	Technology Transfer	39
2.2.3.	Higher Education, TVET, Research Institute and Industry Linkage	41
2.2.4.	Talent in TVET	43
2.3.	Ethiopian Science Culture Development and Community Engagement	45
2.3.1.	Indigenous knowledge and skills Management in TVET System	45
2.3.2.	Science Culture Enhancement in TVET System	47
2.3.3.	Community Engagement in TVET	48
2.3.4.	Voluntarism and National Service	50
2.3.5.	TVET in Emergency.....	51
2.4.	Ethiopian TVET Infrastructure and Facility Development	53
2.4.1	TVET Digitization	53
2.5.	TVET Institutional Capacity Development	54
2.5.1.	TVET Governance and Leadership	54
2.5.2.	TVET Internationalization and Partnership	56
2.5.3.	TVET Image Building.....	57
2.5.4.	Human Resource Development in TVET	58
2.5.4.1.	Institutional Leadership Development.....	58
2.5.4.2.	TVET Trainers and Assessors Development	60
2.5.4.3.	TVET Expert’s Development.....	62
2.5.5.	TVET Financing	63
2.5.6.	TVET Legal and Regulatory Framework	65
2.6.	Monitoring and Evaluation Mechanisms	66

Foreword

The Ministry of Science and Higher Education, based on the mandate given to it by proclamation 1097/2018, prepares and develops policy proposals to train the workforce to meet national and international standards for skilled labour along with other objectives. Until these days, the Ethiopian Education and Training was led by the Education and Training policy of 1994, which has served for about three decades. However, given the global dynamics of education and training, the former education and training policy couldn't respond to the current needs in the sector which, in turn, required policy review.

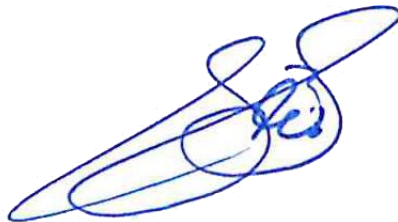
Following the recommendations given in the Ethiopian Education Road Map, different initiatives have been taken. One of the initiatives taken to respond to the existing needs in the education and training is the development of a new TVET Policy and Strategy by the Ministry of Science and Higher Education.

A technical working group was established to prepare the TVET Policy and strategy with close supervision by the top Management of the Ministry of Science and Higher Education. The working group has fulfilled its remit and has presented the draft policy and strategy for validation and consultative meetings with key stakeholders. I would like to pay tribute to the working group for the work that has been completed. I welcome the analysis and the recommendations that have been made. The working group has worked quickly and efficiently and

completed its deliberations in few months. This publication is a step forward for its implementation.

The Ministry of Science and Higher Education is committed to the implementation of the TVET Policy and Strategy. This requires the introduction of new activities and structures, the adoption of a fresh way of working, based on collaboration and the creation of partnerships and the identification of additional human and financial resources. The next step is that implementation of the policy and strategy will proceed as quickly as possible and that every effort will be made to achieve the milestones that are defined in the Policy and strategy. Successful implementation of the policy and strategy demands diligent effort by Federal and Regional Governments and their agencies and other stakeholders. I hope, too, that international donors will continue their support and technical assistance for the implementation of the new TVET policy and strategy.

Finally, I commend this TVET policy and Strategy to all stakeholders in the TVET sub-sector, including the private sector, to contribute their part for its successful implementation.



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1. Introduction

1.1 Background

Technical and Vocational Education and Training (TVET) is a world of education and training that prepares citizens to flexibly respond to changing technology and the labor market by bringing knowledge, attitudes and skills across different occupations and technologies. Global experience has shown that the mere expansion of TVET does not solve the problems of unemployment and low productivity of the economy. TVET must respond to the competence needs of the labor market and create a competent, motivated, and adaptable workforce capable of driving economic growth and development. Realization of the aforementioned national development requires clear and strong TVET policy and strategy.

The 1994 Education and Training Policy of Ethiopia is a big milestone in recognizing TVET. The main aim of TVET in Ethiopia is to produce a lower- and middle-level, competent, motivated, adaptable, and innovative workforce. Through the supply of demand-driven, quality TVET, this workforce can transfer demanded technologies and contribute to National prosperity, social and economic development. In support of the sector, TVET strategy in 2002/2003 and TVET law 2003/2004 were introduced. TVET proclamation number 954/2016 prevail the sector to independent and significant sector for the

country's development. The strategy introduced occupational standards and outcome-based curriculum to ensure quality and relevance. Although TVET strategy was developed, its effectiveness and challenges has not been properly determined. Even if interventions have been made, slight significant achievements have been recorded. The GTP-II goal of the sector is not yet achieved as expected, especially in expanding TVET institutions. Employers complain that TVET graduates are not practically as competent as the need of the labor market. In addition to other pertinent studies, the newly developed education and training roadmap suggests to critically analyze the existing TVET strategy and its implementation.

Even if the sector has its own significant contribution, the following are considered as the critical challenges of the TVET system.

- The quality of the TVET system does not respond to labor market demands due to: (i) lack of adequate quality assurance system, (ii) inadequate and outdated equipment, (iii) TVET trainers' lack of industry experience, and (iv) poor training infrastructure.
- There is still lack of value attributed to TVET and poor perception which resulted in low enrolment in TVET. Parents and young people still view TVET as a second option, or as education meant for school dropouts and trainees who cannot join higher education.

- There is lack of sustainable and innovative TVET financing system.
- There is still limited acceptance of TVET qualifications across other education streams. Despite the existence of a TVET Qualifications Framework, linkages (pathways) are still limited between the TVET system and general education and higher education
- Graduates tend to lack foundation skills in such areas as reading, writing, mathematics, computing, communication, teamwork, problem solving, customer relations, and foreign languages.

Therefore, to scale up the best experiences learned so far and solve the above listed challenges and problems so that the sector can contribute its share to the national prosperity, clear policy directions and implementation strategies to the TVET sector have a paramount importance.

1.2 Definition of Key Terms

- 1. Apprenticeship** shall mean a system for training a new generation of practitioners of a trade or profession with on-the-job training and often some accompanying study (classroom work and reading).
- 2. Career Guidance** shall mean a guidance provided by TVET institutions to their trainees to assist them to think clearly about

where they want to go in their carrier and it includes help with carrier choice, job search, and carrier advancement.

3. **Community Engagement** shall mean the collaboration between institutions of TVET and their larger communities (local, regional/state, national and global) for the mutually beneficial exchange of knowledge and resources, in a context of partnership and reciprocity.
4. **Community** shall mean individuals, groups, and organizations external to TVET institutions that use collaborative processes for the purpose of contributing to the public good.
5. **Competence** shall mean the knowledge, skills, and attitude that can be demonstrated to perform a given task.
6. **Cooperative Training** shall mean a mode of training delivered by the cooperation of industry/enterprises and training institutions.
7. **Digital Literacy** shall mean the ability to use information and communication technologies to find, understand, evaluate, create, and communicate digital information, an ability that requires both cognitive and technical skills.
8. **Flexibility** shall mean the ability of the TVET system to respond to the changing occupational requirements and to accommodate the different demand of the various target groups.

- 9. General Education** shall mean the sector of education which encompasses the pre-primary, primary, middle, and secondary levels of education as well as adult and non-formal education.
- 10. Higher Education** shall mean the sector of education which comes after secondary education and embraces undergrad and graduate programs that enable the acquiring of advanced academic and professional knowledge skills, ethics, and competencies.
- 11. Inclusiveness** shall mean providing equal opportunity for all irrespective of their sex, disability, geographical and socio-economic background.
- 12. Industry Extension Service** shall mean a modality of service provision to micro, small and medium enterprise after identifying and compiling their basic shortcomings, through training and consultancy, technological development and market linkage and includes adaptation and transfer of basic practice.
- 13. Innovation** shall mean a process of creating value by applying novel solutions to meaningful problems.
- 15. Internship** shall mean a mode of training whereby trainees acquire practical experience offered by an organization and facilitated by training institutions for a limited period of time.

- 16. Life-long learning** shall mean a form of self-initiated education and training that is focused on continuous personal development.
- 17. Medium Enterprise** shall mean an enterprise having a total capital of, excluding building, from Birr 1,500,000 (One Million Five Hundred Thousand) up to 20,000,000 (Twenty Million) in the case of manufacturing sector engages from 31 up to 100 workers including the owner, his family members and other employees.
- 18. Micro Enterprise** shall mean an enterprise having a total capital, excluding building, not exceeding Birr 50,000 (Fifty Thousand) in the service sector or not exceeding Birr 100,000 (One Hundred Thousand) in the manufacturing industrial sector and engages five workers, including the owner, his family member and other employees.
- 19. Institutional Competency Assessment** refers to the level to level or/and competency to competency assessment (s) of trainees administered by the TVET institutions.
- 20. National Occupational Competency Assessment** refers to the mode of assessment administered by the industry to ensure whether the trainees are fit to the world of work.
- 21. Occupational Standard** shall mean a standard defined by experts from the world of work indicating the competencies

that a person shall possess to be able to productively perform in the world of work.

- 22. Pathways** shall mean vertical and horizontal mobility of learners between TVET occupations or among TVET and other educational streams.
- 23. Policy** shall mean a deliberate system of principles to guide decisions and achieve rational outcomes in TVET sector. A policy is a statement of intent and is implemented as a procedure or protocol in TVET system.
- 24. Principle** shall mean the basic guideline used to implement the TVET Policy and Strategy.
- 25. Quality** shall mean fitness to the intended purpose
- 26. Relevance** shall mean the degree to which the training provided is aligned with all stakeholders needs and labor market demands.
- 27. Science Culture** comprises the material conditions of and the performance of science and innovations in terms of inputs, process, and outputs.
- 28. Short Term Training** shall mean a training provided by TVET institutions for a period less than six months to help the trainees qualify for a job, get a promotion or earn more money in specific occupations.
- 29. Small Enterprise** shall mean an enterprise having a total capital, excluding building, from Birr 50,001 (Fifty Thousand

and One) to Birr 500,000 (Fifty Hundred Thousand) in the case of service sector or from Birr 100,000 (One Hundred Thousand) to Birr 1,500,000 (One million and Fifty Thousand) in case of urban agriculture, artisanal mining and construction sector engages from six to thirty workers including the owner, his family member and other employees.

30. Strategy shall mean the mechanism employed to implement the goals and policies stipulated in this TVET Policy and strategy.

31. Technology Transfer (TT) shall mean the process of conveying results stemming from scientific and technological research to the marketplace and to wider society, along with associated skills and procedures, and is as such an intrinsic part of the technological innovation process.

33. Traineeship is a training program designed to prepare trainees in TVET institutions for the world of work by giving them a leg to the industry after finishing a portion of a course in the institutions so that they gain direct experience under the supervision of experienced industry workers.

34. TVET Leadership shall mean the body providing leadership at different levels for enabling the training structure organized to implement the TVET policy and Strategy to integrate inputs and processes so as to achieve desired ends

- 35. TVET** shall mean the sector in which education and training in different occupations are delivered employing formal and non-formal modalities to prepare trainees for the world of work and higher education by equipping them with knowledge, skills, and professional ethics and ensuring competence through occupational assessment.
- 36. Vocational career** shall mean fields of work in which employees apply hands-on trade school experience in a professional setting.
- 37. Vocational Counseling** shall mean a set of services designed by TVET institutions to develop the skills and abilities of their trainees to the point they can perform a specific vocation in a productive way.

1.3 The Philosophy of TVET in Ethiopia

The Education and training sector in Ethiopia is a major instrument for raising the level of development by reviewing the situation on the ground in the light of learning and cultivating citizens mentally, physically, socially and spiritually. In Ethiopia, technical and vocational education and training is conceived as a life to be lived and a way of preparing the youth for future living. It is an instrument of cultivating the individual holistically, including one's moral, cognitive, social, spiritual, physical, psychological, and vocational attributes. It is also understood as a public good based on indigenous and global skills and knowledge, which serves as a means of social harmony and development. TVET is also perceived as a tool in producing self-reliant citizen who can contribute to socio-economic and political transformation of the country.

1.4 Pressing Need for the TVET Policy and Strategy

The technical and vocational training has not been designed in ways that could modernize agriculture and other remaining sectors, and given due emphasis, it has not been able to contribute its level best to the economic development of the country. The skills those hailing from farming and other communities were not properly integrated with agriculture, industry, and other sectors of the economy. And such a situation made it difficult for graduates to get employed or become creators of jobs. The situation not only led to the rise in the rate of

unemployment of graduated individuals but also not considered the objective reality of the country. The intentions of the sector were not as expected to transform the economy to much better levels. The existed TVET strategy must be revised due to certain conditions that should be addressed in the strategy. Therefore, it is necessary to revise already available training policy and strategy addressing identified gaps and including emerging findings in the way it can bring about the progress and development in the country. The following are the pressing reasons that initiates to revise the existing TVET Policy and Strategy.

- TVET is expanded rapidly and its contribution to the economy is becoming very significant. Therefore, it is necessary and timely to design its own national policy that can resolve the existing constraints of the system.
- The existing policy and strategy have served longtime and do not fit with the current education and labor market contexts. Therefore, it needs to design a new strategy that can incorporate the newly contexts of the system.
- There is strong desire to align the strategy with the newly developed education and training roadmap and prosperity plan.
- There is no clear pathway from and to general education, TVET and higher education

- Through the way, realize the national and sectorial ten years development plan.

1.5 TVET Vision, Mission, Principles and Objectives

1.5.1 Vision

Aspires to create competent and self-reliant citizens and improve the livelihoods of all Ethiopians by 2030.

1.5.2 Mission

- Producing productive, self-reliant, competent and innovative workforce with employable skills to meet labor market demand in terms of both quality and quantity so as to contribute to the prosperity of Ethiopia
- Engaging in research-based knowledge and technology transfer endeavors to transform the economy and solve societal problems through community engagement.

1.5.3 Guiding Principles

The guiding principles of TVET:

- a) Labor Market Orientation
- b) Relevance and Quality
- c) Access and Equity
- d) Outcome-based system of education and training.
- e) Decentralization
- f) Innovativeness

- g) Transparency and responsiveness
- h) Collaboration and linkage
- i) Efficiency and effectiveness
- j) Inclusiveness
- k) Lifelong Learning
- l) Flexibility
- m) Greening TVET
- n) Pathways

1.5.4 Policy Objective

The objective of Ethiopian TVET policy and strategy is to provide demand driven, high quality, relevant technical and vocational education and training; to all citizens to create competent, motivated, adaptable and innovative work force which can contribute to the prosperity of the country.

2. Core Policy Issues and Implementation Strategies

Although the government of Ethiopia has shown commitment to education in general and has made substantial progress, challenges still remain in most of the TVET system of the country. These calls for holistic revision of the existing TVET policy and strategy to enhance the sector effectively play its role in the development of the nation. In order to achieve this proposition, 6 core agendas, namely:

1. Ethiopian TVET Relevance, Quality, Equity, and Access,

2. Ethiopian TVET Research, Innovation and Technology Transfer,
3. Ethiopian Science Culture Development and Community engagement,
4. Ethiopian TVET Infrastructure and Facility Development,
5. TVET Institutional Capacity Development,
6. Monitoring and Evaluation Mechanisms are identified and discussed with specific policy issues that help to ease their implementation. Following that, each policy issue is explained by strategies needed to achieve the policies.

2.1. Ethiopian TVET Relevance, Quality, Equity and Access

2.1.1. TVET Relevance and Quality

2.1.1.1. Ethiopian TVET Qualification Framework (ETQF) Goal

Ensure qualifications earned in different education and training sectors, levels, and work experiences through ETQF.

Policy

The Competence and level-based certification earned in different training sectors and work experience shall be accorded ETQF.

Strategies

1. Revise the ETQF in line with the National Qualification Framework

2. Revise the competencies required at each level within the ETQF recognizing the trainees' prior learning.
3. Periodically revise ETQF in accordance with the labor market dynamism.
4. Ensure horizontal and vertical permeability within TVET, and between TVET and other training sub-sectors.
5. Revise ETQF to introduce eight qualification levels ranging from level I-VIII.
6. Deliver formal TVET training for those who completed grade 12.
7. Deliver nonformal TVET training for school leavers, drop out, job seekers, rural societies, and others.

2.1.1.2. Occupational Standard Development

The occupational standards reflect the competence requirements of the world of work of each programs. Stakeholders from the industry, particularly employers are the major actors in the development of the standards. Though so many occupational standards were developed so far, the practice and management has not been demand-driven and based on the needs and rigorous engagement of the industry. Therefore, occupational standards need to be set, revised, and integrated into the training system with full engagement of the industry.

Goal

Ensure occupational standards development and revision based on international and national experiences through organized leadership and involvement of occupational associations, sector professionals, industry practitioners, private sectors and other important stakeholders.]

Policy

Occupational Standards shall be developed based on internationally recognized experiences, market demand and local realities by leadership and active engagement of occupational/professional associations, sector professionals, industry practitioners, private sectors, and other important stakeholders.

Strategies

1. Develop new occupational standards through identifying labor market demand based on labor market analysis.
2. Develop national and local needs based occupational standards engaging occupational/ professional associations, sectors, industry practitioners, and other important stakeholders.
3. Periodically review occupational standards based on international and local experience regarding quantity, quality, and relevance to the needs of the industry.
4. Review and consolidate the existing and over stretched OS

2.1.1.3. Medium of Instruction

The type of language that can serve as a medium of instruction can be taken as a crucial topic in education and training system. Currently, English language is serving as a medium of instruction in formal TVET training at all levels. Besides, it is better to align the language of training with local and international labor market demand.

Goal

Establish a system that enhances the delivery of TVET in a language that can prepare the trainees for local and international labor market.

Policy

A system shall be established to enhance the delivery of TVET in a language that can prepare the trainees for local and international labor market.

Strategy,

1. Use English language as a medium of instruction in all formal TVET program (Level 1 to level 8).
2. Provide short-term/non-formal training by local and foreign languages based on demand.

2.1.1.4. Curriculum and TTLM

TVET curricula and TTLMs are prepared comprising the knowledge, skills, and attitudes set in occupational standards. However, the existing curricula and TTLMs have not led to the achievement of intended outcomes adequately, lacked compatibility among regions

and institutions, and exhibited different outcomes. Therefore, by addressing these constraints, it is necessary to strengthen and revise the curriculum and TTLM following the revised OS and market demand.

Goal

Develop an outcome-based quality TVET curriculum and TTLM that would enable to acquire the knowledge, skills and attitudes set in the occupational standards.

Policy

Model curriculum and TTLM shall be designed centrally and adopted to situations in regions/administrations for implementation.

Strategies

1. Create a system to prepare model TVET curriculum and TTLM at national level and customize with regions and TVET institutions.
2. Develop curricula and TTLM that aligns with the occupational standards.
3. Align TVET trainer's curriculum with the TVET trainee's curriculum.
4. Prepare curriculum and TTLM integrating appropriate technologies.
5. Develop curriculum for level 6 to 8 at national level based on international experience.
6. Design the TVET curriculum in a manner that would lead to the development of the 21st century skills.

7. Assist regional authorities to ensure that new curricula are properly employed in both public and private TVET institutions.
8. Incorporate generic competencies such as English Language, Mathematics, Physical Education, Civic and Ethical Education etc. into the curriculum to enhance trainees' mental, physical, emotional, technical and communication skills.

2.1.1.5. Alternative models of Cooperative Training

Cooperative training is a model of training by the cooperation of enterprises/industries and TVET institutions whereby trainees spend much of their time in the enterprises/industries to acquire industrial knowledge, skills, experiences, and attitudes of the industrial environment and the remaining time in TVET institutions to acquire basic skills and theoretical concepts.

Even though several trainees have gone through the cooperative training system and joined the world of work, the implementation has encountered various challenges including loss of trust by the industry. Therefore, it is necessary to make the TVET sector more effective by strengthening a system of cooperative training accepted by the industry.

Goal

Develop and implement alternative models of cooperative training based on realities of the industry, nature of the occupation, location of the TVET institution, and other factors to ensure that trainees acquire practical and workplace experience.

Policy

Alternative models of cooperative training shall be developed and implemented based on realities of the industry, nature of the occupation, location of the TVET institution, and other factors to ensure that trainees acquire practical and workplace experience.

Strategies

1. Formulate legally binding regulation to realize the mutual benefits and responsibilities of trainees, the industry and TVET institutions while engaging in cooperative training.
2. Devise incentive mechanisms for those industries who actively engage in cooperative training.
3. Establish a mechanism for preparation and development of qualified industry trainers to implement cooperative training.
4. Establish production and service centers/learning factories in TVET institutions located in the areas where industry is not sufficiently available.
5. Employ different alternatives of cooperative training such as apprenticeships, internship and traineeship based on the nature of the occupation, location of the TVET institutions, and interest of the industry.
6. Ensure that a practice- theory ratio of 70:30 is implemented in TVET delivery.

2.1.1.6. Competency Assessment

A competency assessment system is used to ascertain whether trainees have developed the knowledge, attitudes and skills stipulated in the occupational standards of the areas in which they have been trained. Although the existing assessment system has been implemented extensively, it has not been satisfactorily implemented when viewed against expected results. Therefore, it is appropriate to strengthen the occupational competency assessment system to improve the expected outcomes of TVET.

Goal

Ensure a valid and reliable occupational assessment system that is supported by technology and based on industry participation, to improve the efficiency and effectiveness of TVET system.

Policy

Valid, reliable, and technology supported occupational assessment which is implemented through industry participation shall be in place.

Strategies

1. Establish an institutional assessment system to ensure promotion from one level of training to the others based on valid and reliable competency assessment tools.
2. Ensure that any TVET trainees take national occupational assessment before they join the world of work.
3. Ensure national occupational competency assessment and preparation of the assessment tools is carried out consistently with

the participation of professionals, associations, sector councils, the industry and other relevant stakeholders, which enables the assesses ‘fits the world of work.

4. Employ appropriate technology to support occupational competency assessment based on the nature of competence assessed.
5. Introduce a nation-wide standardized occupational competency assessment system.
6. Establish a system of assessment through standardized assessment tools, competent assessors, and appropriate assessment processes.
7. Certify competencies acquired through formal, nonformal and informal training through competency assessment.
8. Establish autonomous national and regional TVET center of competence (COC) certification bodies/agencies to certify competencies.

2.1.1.7. Entrepreneurship and employability in TVET

It is very important to review the already incorporated entrepreneurial and business management training into all relevant TVET programs. The existing TVET system is not yet in a position to produce trainee entrepreneurs with self-confidence, creativity, a realistic assessment of the market, basic business management skills and openness to risks. To this end, appropriate entrepreneurship and employability training packages must be developed, drawing on the magnitude of international experience and local scenario in this field. It is crucial

also for TVET institutions to consider the work environment in the local and international markets when designing their training programs. Hence, it is necessary to incorporate and provide training that can develop trainees' entrepreneurship and employability skills in the formal education and training programs.

Goal

Enhance trainees' entrepreneurship and employability skills, knowledge, and attitudes to realize the goal of no unemployed TVET graduates.

Policy

A system shall be established to enhance trainees' entrepreneurship and employability skills, knowledge, and attitudes to realize the goal of -no unemployed TVET graduates.

Strategies

1. Deliver Entrepreneurship and Employability skills training as a course to all TVET trainees.
2. Provide all resources needed for the delivery of Entrepreneurship and Employability training.
3. Deliver Entrepreneurship and employability skills training as a course by qualified trainers in the area.
4. Deliver motivational speech related to entrepreneurship and employability by successful entrepreneurs and intrapreneurs to all trainees.

5. Encourage the experience of governmental and non-governmental organizations in collaboration in providing entrepreneurship training.
6. Design and put into practice of the scheme seed money and start-up for competent TVET trainees.

2.1.1.8. TVET Relevance and Quality Assurance System

It is important to establish an autonomous quality assurance system/agency and strong internal quality assurance system for TVET. The context of the TVET quality assurance system was lacked and autonomous external and internal quality assurance were not in placed. Therefore, this requires appropriate policy intervention.

Goal

Assure the relevance and quality of TVET on the basis of assessing its inputs, processes, output, outcome, and impact.

Policy

Quality of TVET shall be assured on the basis of assessing its inputs, processes, output, outcome, and impact.

Strategies

1. Establish strong internal and external quality assurance system, to conduct quality audit in TVET institutions to realize the quality of input, process, output, outcome, and impact of the training.
2. Develop and implement a continuous quality assurance system for TVET.

3. Develop a system to communicate quality assurance result to all stakeholders.
4. Develop quality standards and criteria for TVET institutions, trainers, leaders, graduates, programs, and assessors.
5. Conduct tracer study to assess the outcome and impact of TVET graduates.
6. Use results obtained from competency assessment to improve trainee's competence.
7. Standardize and harmonize TVET trainee's competency assessments with the national occupational standard.
8. Ensure that assessment has fulfilled the needs of trainees requiring special support.
9. Inspect and audit training programs, institutions, trainers, leaders, and assessors against standards and criteria.
10. Use institutional assessment result to rank TVET institutions.
11. Participate employers and labor association on quality assurance of TVET institutions.
12. Ensure that any institution that delivers TVET program gets accreditation from concerned TVET authority.
13. Establish a system through which TVET institutions, programs, and competence assessment centers are internationally certified.
14. Establish autonomous national and regional TVET quality assurance agencies to conduct the external quality assurance activities.

2.1.1.9. Greening TVET (GTVET)

Green skills are those skills needed to reduce environmental impacts and support economic restructuring with the purpose of attaining cleaner, more climate resilient and efficient economies that preserve environmental sustainability and provide decent work conditions. The main aspects of greening TVET (GTVET) include transition to greater use of energy from renewable sources, transition to greater use of products and services that increase energy efficiency transition to greater use of processes that reduce/remove pollution and green-house gas emission and transition to recycling and reuse, transition to greater use of products and services that conserve natural resources, and transition to greater use of products and services that comply with environmental regulations and standards. Serious concerns about climate change, environmental degradation and scarcity of resources place great pressure on TVET to develop skills and competencies that pave the way towards a green economy and society. This calls for the development of a policy intervention for greening TVET.

Goal:

Ensure greening TVET for sustainable development.

Policy:

Greening TVET shall be ensured for sustainable development.

Strategies:

1. Establish system for awareness creation on the roles and benefits of GTVET

2. Develop occupational standard for GTVET
3. Incorporate GTVET in TVET Trainer program
4. Review and revise TVET curricula to incorporate green courses and programs
5. Develop a comprehensive green skill standards and certification system in TVET.
6. Launch regulations to offer incentive for TVET system to support the greening process at the national and regional level.
7. Strengthen green values, ethical standards, attitudes, and behaviors that respect green lifestyles.
8. Develop a system encouraging TVET campus greening and its surrounding areas.

2.1.2. Access and Equity in TVET

2.1.2.1. Access to TVET

In this context, access refers to the extent TVET is made available to all segments of the society. TVET is, thus, considered accessible when the opportunity is available for citizens who meet its requirements. So far, TVET has not been accessible to citizens as expected. In this regard, the efforts exerted to ensure access to TVET have not been achieved to the desired extent. Therefore, it is necessary to avail better quality technical and vocational education and training for citizens who meet requirements.

Goal

Ensure access to outcome based TVET for all citizens of the country.

Policy

Access to outcome based TVET shall be ensured for all citizens of the country.

Strategies

1. Expand TVET institutions considering their Distinctive Area of Competence (DAC).
2. Encourage the participation and support of the community in TVET expansion.
3. Introduce different mechanisms to provide proper readiness for TVET entrants before they join the sector.
4. Encourage nongovernmental and private sector to play leading role in providing TVET to citizens.
5. Collaborate with Ministry of Education on the vocationalization of general education.
6. Establish boarding and mobile TVET institutions to provide access to pastoralists and semi-pastoralists based on their mobility pattern and economic activities.
7. Provide TVET for those who, for various reasons, quit their jobs or got trained and remained unemployed to join the world of work.
8. Provide short-term training for those who have specific training needs to join world of work and for those already employed in the industry.

9. Develop diverse mechanisms to encourage public-private partnership (PPP) in TVET Provision.
10. Upgrade selected polytechnic colleges to technical universities.
11. Diversify modes of TVET delivery through face to face, blended, online learning and others supported by relevant digital system.

2.1.2.2. Equity in TVET

In this context, equity in TVET relates to the magnitude opportunities are provided for all those meeting requirements regardless of sex, disability, financial background, place of living and others. In this regard, the efforts exerted to ensure equity in TVET system have not been achieved to the desired extent. Therefore, it is necessary to equitably avail better quality TVET.

Goal

Ensure the provision of outcome based TVET for all citizens of the country irrespective of their socio-cultural, economic, political, and geographical background.

Policy

The provision of outcome based TVET shall be ensured for all citizens of the country irrespective of their socio-cultural, economic, political, and geographical background.

Strategies

1. Create conducive environment for persons with special needs to enhance their participation in TVET system.

2. Strengthen a mechanism of providing TVET for rural communities in collaboration with concerned government agencies.
3. Develop diverse mechanisms that can enable promote equitable TVET provision for women, emerging regions, and other marginalized social groups.
4. Use assistive technology to avail TVET for trainees with special training needs.
5. Create a conducive learning environment for females and people with special training needs.
6. Design and implement a special support system to encourage females to become trainers and leaders in TVET system.
7. Design and implement a special support system to encourage female graduates to become entrepreneurs in the male dominated occupations.
8. Develop multiculturally responsive curriculum and other training materials in the TVET system.
9. Design and implement inclusive TVET programs for vulnerable, disadvantaged, and disabled trainees.
10. Develop a mechanism to allocate special budget by TVET institutions to procure equipment, machines and tools required for vulnerable, disadvantaged, and disabled TVET community.
11. Set entry criteria as per severity of the disadvantage, vulnerability, and disability status of trainees.

12. Institute a mechanism to conduct continuous awareness creation programs regarding inclusive TVET to the TVET community, industry/labor market, and other stakeholders.
13. Establish resource centers for trainees with special needs in all TVET institutions.

2.1.2.3. Private Sector participation in TVET

The private sector in TVET system includes sole proprietors, incorporated companies including chambers, private partners, NGOs assisted by local and overseas charities and donors. It is evident that private sector has been increasingly taking part in delivery of TVET in all parts of the country. Enrolment statistics shows that private TVET institutions (including NGOs and religious institutions) share is nearly quarter of total enrolments in TVET. Private sector participation in TVET must be recognized and facilitated in a legalized quality assurance framework by the government.

Goal

Ensure enabling environment for the private sector to participate in TVET system.

Policy

Enabling environment shall be ensured for the private sector to participate in TVET system.

Strategies

1. Implement fair and sensible licensing, accreditation, and training quality assurance system to recognize delivery of TVET by private sector.
2. Implement a system to share public sector TVET resources with private sector to increase equitable access to a quality TVET.
3. Institute a system to facilitate tax concessions to import high value equipment and machinery for training by private TVET institutions.
4. Develop tax related incentive mechanisms to increase private sector participation in TVET.
4. Establish a special loan scheme for the private sector to encourage them participate in TVET system.
5. Strengthen training opportunities for trainers of private TVET institutions.
6. Implement transparent system to provide technical and financial grants to selected private TVET providers for provision of demand-driven programs.

2.2. Ethiopian TVET Research, Innovation and Technology Transfer

2.2.1. Research and Innovation in TVET

TVET research activities are still weak and not systematically planned. The Federal TVET Agency, though lacking an appropriate structure,

has been conducting minor research in the areas of Occupational Standards (OS), assessment, curriculum development and quality management with support of expatriate experts. The setting up of a research agenda and the design of selected research projects are two aspects which need serious consideration in the future. Research at the TVET level will focus on the links and relations between the TVET system and the labor market and contribute to the analysis, improvement and further development of vocational education and training in the country. Furthermore, innovation in TVET is aimed at enhancing capability to create, learn, adapt, and utilize technologies, which is still at a very low stage. Hence, appropriate support must be given to enhance capabilities which enable to create, search, select, adapt, and utilize effective technologies that support development needs.

Goal

Establish a system to enhance research and innovation in TVET so as to solve problems of the community.

Policy

A system shall be established to enhance research and innovation in TVET so as to solve problems of the community.

Strategy

1. Encourage, strengthen, and recognize innovators up on their achievements.
2. Enable the establishment of workforce in to learn, adapt and utilize technology.
3. Create a conducive environment for TVET trainees and trainers to engage in applied research.
4. Improve the quality of research and innovation at individual, group and institutional levels.
5. Strengthen and implement copyright protection in such a way to encourage and promote creative works.
6. Ensure research work in TVET in line with the technological needs of national development programs.

2.2.2. Technology Transfer

The potential role of MSMEs in economic development, employment generation and realization of prosperity has been increasingly recognized in the national development framework. Although no direct support was, strategies were developed to assist MSEs to emerge and grow. One of these is the industry extension service delivered by TVET trainers, which was established in August 2011. This service has four linked packages, designed to support MSEs in improving their product quality and productivity: technology capability development,

technical skills development, entrepreneurship capacity development and Kaizen capacity development.

Goal

Establish a system to enhance technology transfer in TVET so as to increase competitiveness and productivity of micro, small, and medium level enterprises/industries.

Policy

A system shall be established to enhance technology transfer in TVET so as to increase competitiveness and productivity of micro, small, and medium level enterprises/industries.

Strategy

1. Encourage, strengthen and recognize those who have transferred problem solving technologies up on their performance achievements.
2. Strengthen technology transfer within TVET and among partners.
3. Establish a system that enables TVET institutions to provide an advisory role to industry/enterprises in relation to technology transfer.
4. Support TVET institutions to develop their capacity to transfer innovated, adopted, and adapted technologies.
5. Create a conducive environment for TVET trainees and trainers to engage in technology transfer.

2.2.3. Higher Education, TVET, Research Institute and Industry Linkage

HETRIL is a system of work in which research institutions, higher educations and TVET collaborate with the industry to strengthen the training system and technology transfer. Thus, sectorial research institutions, institutions of higher education and TVET institutions as well as the industry need to be integrated to support one another. Although achievements have been registered in the areas of technology transfer, industry extension service, and value chain analysis, a much stronger work has not been done to translate and expand the intentions into practice. Therefore, in order to solve these problems, it is necessary to strengthen the linkage among and between TVET, higher education institutions, Research Institutions, and the industry.

Goal

Improve linkage among and between TVET, higher education institutions, research institutes, and the industry.

Policy

Linkage among and between TVET, higher education institutions, research institutes, and the industry shall be strengthened.

Strategies

1. Establish a legal framework to strengthen the linkage among and between TVET, higher education institutions, research institutes, and the industry.
2. Establish a unit at all levels in the TVET system to coordinate the linkage among and between TVET, higher education institutions, research institutes, and the industry.
3. Devise system of integration which enables TVET sectors to work together with research institutes, higher education institutions, and the industry on technology transfer and industry extension services.
4. Encourage joint research in collaboration with industry, higher education institutions and research institutes
5. Develop a system that enables TVET institutions to be sources for creation of micro, small and medium enterprises.
6. Ensure the provision of industry extension services based on enterprise needs by competent trainers.
7. Develop and accordingly implement a mechanism to motivate technology adopters, adapters, and innovators in line with their technology transfer results
8. Develop and accordingly implement a mechanism to motivate trainers in line with industry extension service results.
9. Organize technology capacity and incubation centers in TVET institutions.

10. Establish Technical Advisory Panel/ TAP/ and Technical Expert Panel/ TEP/ in each line ministries and Enterprises/ Industries.
11. Create conducive environment which enables the HETRIL to work together on value chain analysis.
12. Support applied joint research activities among TVET, universities, research institutes and industries.

2.2.4. Talent in TVET

Talent is associated with how well an individual performs in relation to a specific job or something exemplary possessed by individuals or a natural ability that someone is born with. Individuals with high ability or talented in one domain may not perform the same in other domains. Some less-academically inclined individuals may be vocationally talented but unable to demonstrate excellent results in academic. However, very few of these vocationally talented individuals are identified in education and training institutions. As a result, these vocationally talented individuals are kept hidden although they are the “treasure” for the country. The existing TVET system does not have any mechanism to identify and nurture such talented citizens. Therefore, it has become a necessity to have policy intervention to identify and nurture these vocationally talented trainees.

Goal:

Identify and nurture vocationally talented citizens through TVET system.

Policy:

Vocationally talented citizens shall be identified and nurtured through TVET system.

Strategy

1. Develop a system to identify vocational talents and assign trainees according to their talents.
2. Establish a system to nurture vocationally talented citizens.
3. Create conducive environment to unearth the potential of vocationally talented citizens.
4. Establish awareness creation mechanism concerning vocationally talented citizens.
5. Establish an incentive mechanism to encourage vocationally talented citizens.
6. Ensure the provision of appropriate training for teachers, trainers and leaders engaged in the education and training of vocationally talented citizens.
7. Create a system of budget support to enable vocationally talented citizens acquire appropriate training.

2.3. Ethiopian Science Culture Development and Community Eengagement

2.3.1. Indigenous knowledge and skills Management in TVET System

Indigenous knowledge and skills refer to the knowledge and skills that people in a given community have developed over time and have made positive contributions towards sustainable development. Indigenous communities around the world face ongoing threats to the survival of their indigenous knowledge and skills in view of their tacit nature. It is therefore important to formulate a policy to preserve and manage indigenous knowledge and skills, integrate them with TVET, and make use of them for development.

Goals

Institute a system in TVET to preserve, manage, and integrate indigenous knowledge and skills with TVET to use them for development.

Policy

A system shall be instituted in TVET to preserve, manage, and integrate indigenous knowledge and skills with TVET to use them for development.

Strategies

1. Develop occupational standards and curricula for indigenous skills and knowledge to deliver through formal and nonformal TVET system.
2. Publicize the value, contribution, and importance of indigenous knowledge and skills to both nonindigenous and indigenous peoples.
3. Devise strategies for making indigenous knowledge and skills accessible for the whole community.
4. Devise strategy in TVET to support individuals with special indigenous knowledge.
5. Establish center of excellence to promote and use indigenous knowledge and skills in at strategic areas.
6. Work with concerned government agencies to prepare inventories and registers of indigenous skills and knowledge systems, considering the intellectual property implications of such inventories and registries.
7. Encourage indigenous skills and knowledge providers to work in collaboration with modern scientific experience.
8. Involve senior community members in the production of resources and delivering training to trainees to understand and appreciate the indigenous skills and knowledge.

2.3.2. Science Culture Enhancement in TVET System

It is agreed by scholars that the integration of Science, Technology, Engineering and Mathematics (STEM) education into TVET helps build trainees' interest and deepens their understanding of STEM career pathways by making mathematics and science more relevant in what they are doing in TVET. The integration also helps trainees grow the TVET-STEM workforce pipeline as it encourages and promotes invention and innovation through using the 21st Century learning skills including communication, collaboration, critical and creative thinking. However, TVET as it is currently delivered in Ethiopia lacks academic grounding in areas such as mathematics and science. This calls for policy intervention to integrate STEM in TVET.

Goal:

Build science culture in TVET by integrating STEM in the TVET system

Policy:

Science culture shall be built in TVET by integrating STEM in the TVET system

Strategies

1. Incorporate STEM in TVET programs.
2. Establish a STEM center in TVET.
3. Establish a system that helps to avoid phobia of STEM.

4. Build trainees' interest and deepen their understanding of STEM career pathways by making mathematics and science more relevant in what they are doing in TVET.
5. Establish a system that integrates and synergizes science culture in TVET system.
6. Establish a system that enables TVET institutions to provide an advisory role to industry in relation to scientific culture.
7. Enable the establishment of workforce in to learn, adapt and utilize scientific culture and technology.
8. Create a conducive environment for TVET trainees and trainers to engage in problem solving research and building science culture;

2.3.3. Community Engagement in TVET

Community engagement is one the core missions of TVET institutions through which community transformation will be realized. Moreover, community help the institutions themselves to identify problem within the community and modify their training system. In addition, those who participate in community engagement get practical experience. TVET institutions in Ethiopia have been working on industry extension as their core business. However, TVET community engagement has not achieved its mission as intended, which calls for clear and strong policy intervention.

Goal

Maximize community engagement in TVET system by creating conducive legal and regulatory framework.

Policy

Community engagement shall be maximized in TVET system by creating conducive legal and regulatory framework.

Strategies

1. Strengthen need-based industry extension services which may include but not limited to technology transfer, entrepreneurship training, Kaizen, and skill training by competent trainers in the area.
2. Establish a legal and regulatory framework to facilitate TVET community engagement.
3. Introduce voucher system to incentivize the trainers who engage in industry extension service.
4. develop a system which employs diverse means to increase community engagement and awareness about the importance of TVET.
5. Ensure community engagement to enhance peaceful training environment.
6. Identify local community problems and solve the problems by engaging the community.

7. Ensure active engagement of TVET institutions in community development activities that transform the life the community.
8. Create a mechanism to ensure engagement of the private sector in industry extension services.
9. Ensure that TVET contributes to fight against the spread of HIV/AIDs in Ethiopia through awareness creation mechanism and by supporting HIV/AIDs victims.

2.3.4. Voluntarism and National Service

Voluntarism and national service are acts of an individual/citizen to freely give time and labor for the public. Voluntarism and national service in TVET sector can be used to produce citizens with holistic competence, love their country and realize unity in diversity. So far voluntarism and national service have not been common practices in the TVET system. It is therefore, important to have policy direction to introduce voluntarism and national service in the system.

Goal

Design a system which enables the TVET community to engage in voluntarism and national service.

Policy

A system shall be designed to enable the TVET community to engage in voluntarism and national services.

Strategies

1. Establish structure and implementation system which enables the TVET community to participate in voluntary and national services
2. Create conducive atmosphere and allocate appropriate budget to introduce voluntarism and national services in TVET system.
3. Ensure engagement of stakeholders in TVET voluntary and national services.
4. Integrate voluntarism and national services in TVET programs.

2.3.5. TVET in Emergency

The TVET is an emerging giant which occupies big share in education and training sectors of the country. This huge and fast-growing sector with serious need for the development of the country requires to establish resilient system that may withstand any emergency that may face the country in general and the sector in particular. Basically, one of the reasons for Ethiopian TVET system suffering from such challenges is to large extent because of not having clear policy direction and strategy on how to respond to emergency and mitigate its effects.

Goal

Reform the entire TVET system to enable it to respond to all types of emergencies and mitigate their effects proactively and effectively.

Policy

The entire TVET system shall be reformed to enable it to respond to all types of emergencies and mitigate their effects proactively and effectively.

Strategy

1. Design and implement early warning system on emergencies that affect the TVET system.
2. Design a framework to engage TVET the whole TVET community in provision of skills for the emergency response.
3. Build a platform to implement digitally supported education and training solutions in TVET sector in the event of emergency.
4. Put in place minimum infrastructure for different emergency cases.
5. Establish an effective communication channel to communicate with concerned bodies during emergency.
6. Design and implement a special incentive package for trainers and trainees who use emergencies as opportunity to express their creativity and mitigate the problems.
7. Devise a strategy to create access to quality, safe, and relevant TVET for people affected by emergency crisis.
8. Involve donors to commit the necessary financial resources to ensure that education in emergency activities are prioritized and supported over the long-term.

2.4. Ethiopian TVET Infrastructure and Facility Development

2.4.1 TVET Digitization

The digitization of TVET system is an important intervention for enhancing access, equity, quality, and relevance.

Even though there were efforts at integration of technology in TVET institutions, the expected level of technology support has not been met due to less focus, budget shortage, lack of the infrastructure at the institutional vicinity, and others. Hence, it is important to digitize the TVET system.

Goal

Digitize the TVET system.

Policy

The TVET system shall be digitized.

Strategies

1. Establish basic digital infrastructure at all levels of TVET system in the country.
2. Enable all TVET community with relevant digital skills.
3. Use digital technologies in training, administration, and technology transfer across TVET system.

4. Ensure sustainable technology utilization by creating structured maintenance services.
4. Support special need trainees with assistive technology.
5. Ensure all TVET institutions develop internal digital guideline and standards.

2.5. TVET Institutional Capacity Development

2.5.1. TVET Governance and Leadership

Governance and leadership in TVET system plays significant role in the realization of the sectoral goal. Governance, leadership, and structural arrangement in Ethiopian TVET system have been taken as a constraint that challenges the system in different aspects. TVET governance and leadership at all levels has not been empowered. There is also overlap of roles and responsibilities among different structures in the TVET governance. Therefore, Governance and leadership of the TVET system needs further revision and empowerment to bring a workable arrangement.

Goal

Revise the existing TVET governance and leadership system to bring a more effective and workable arrangement.

Policy

The existing TVET governance and leadership system shall be revised to bring a more effective and workable arrangement.

Strategy

1. Develop a system of TVET zoning to realize relevance of programs and employability.
2. Establish organizational link and synergy among different TVET structures at all level.
3. Establish autonomous organs to formulate standards and strategies; implement those standards; and accredit the implementation against standards at federal, regional, and local level. Hence, those organs shall set legal and regulatory frameworks, empowered to undertake the implementation of TVET, and establish TVET Quality Assurance aspects.
4. Establish TVET Research and Curriculum Institute.
5. Strengthen decentralized system of leadership with responsibility and accountability at all level of TVET structure.
6. Establish a system through which certain polytechnic colleges are governed under the federal government to equip them with state of the art technology to enable them produce highly specialized technicians for local and international markets based on their potential and economic corridor.
7. Differentiate the TVET institutions with the support of the federal government, regional TVET organs whereby the best ones shall become centers of excellence in their distinct area of competence.

8. Establish TVET councils comprised of all relevant public and non-public stakeholders at all level.
9. Strengthen TVET board at institutional level, which is comprised of professionals, sectoral associations, and community representatives to enhance its managerial role.

2.5.2. TVET Internationalization and Partnership

Development partners are government and non-government organizations participating in different sectors at different levels in the effort to bring about the development of the country. Although there has been some degree of participation of development partners, it has had limitations in providing support in an integrated way for the enhancement of the quality and effectiveness of the TVET provided in the country. Therefore, it is important to establish a system in which development partners support the quality and effectiveness of TVET in an integrated manner.

Goal

Enhance and strengthen an integrated participation of development partners for TVET development through internationalization.

Policy

Integrated participation of development partners shall be enhanced to strengthen the TVET system through internationalization.

Strategies

1. Integrate the participation of development partners in TVET system of the country.

2. Internationalize the TVET system to enhance global competitiveness and partnership.
3. Develop a system which enables development partners to strengthen the support they provide to the expansion and enhancement of the quality of TVET.

2.5.3. TVET Image Building

Even though there is improvement, the misperception of thinking TVET as a second choice open for only those who failed to join higher education still persists. TVET community and trainees are considered as low-quality professionals. Therefore, it is important to have policy intervention to build TVET image.

Goal

Develop a mechanism that enables build positive societal image towards TVET

Policy

A mechanism shall be developed to build positive societal image towards TVET

Strategies

1. Improve Public Awareness through different media.
2. Organize symposiums, skill competition, exhibitions and other events that help promote TVET
3. Develop a system to provide career guidance and vocational counselling service at all levels

4. Promote the participation TVET community in international skills competition/skills Olympic

2.5.4. Human Resource Development in TVET

The competence of TVET leaders, experts and trainers refers to the human resources that have ability to achieve the desired result of the system of education and training through planning, implementing, monitoring, evaluating, and making improvements. Thus, required outcomes can only be achieved in the system of education and training when leaders and professionals are transparently recruited, deployed, and made to undergo continuous training which enhances their competence and value to others.

However, leaders, experts and trainers working at every level lacked the relevant knowledge, skills and capability required by the whole breadth and complexity of the sector. The system of capacity development and deployment has also lacked effectiveness. Therefore, leaders and professionals of the sector need to be competent to make the education and training system effective.

2.5.4.1. Institutional Leadership Development

In an ever-changing world faced with social, environmental, and economic disruptions, modern TVET systems need to adapt to the scale and speed of change. The transition to a green economy, the implementation of digital technologies in the labor market and the emergence of new forms of employment are having an impact on the

way we live and work. To remain relevant TVET institutions need to be proactive and address the challenges and opportunities of the 21st century. Moreover, to cope with these disruptions successfully, good leadership is needed to effect such change in institutions and TVET systems. To have such institutional leaders in Ethiopian TVET system, rigorous policy and strategy are mandatory.

Goal

Recruit, deploy, develop, and retain competent institutional leaders who would lead the institution achieve its mission effectively and efficiently.

Policy

A system shall be established to recruit, deploy, develop, and retain competent institutional leaders who would lead the institution achieve its mission effectively and efficiently.

Strategies

1. Ensure a system which realizes merit-based recruitment and deployment of TVET institutional leaders.
2. Develop a clear incentive mechanism to attract and retain TVET institutional leaders.
3. Ensure need based continuous professional development program in an integrated manner.
4. Develop a continuous performance assessment system of TVET institutional leaders based on national standard.

5. Link the evaluation and effectiveness of leaders with the overall accomplishment of the institutional performance and accomplishment.
6. Develop a system which enhances the capacity of TVET leaders through experience sharing, short term training and other mechanisms.
7. Provide induction training program to TVET leaders at all levels.
8. Introduce and implement a term based TVET institutional leadership assignment system.

2.5.4.2. TVET Trainers and Assessors Development

The main objective of TVET in Ethiopia is to produce lower-level, middle-level competent and motivated, adaptable and innovative workforce that can contribute strongly to the country's economy development. Having competent trainers and assessors is among the vital factors influencing the production of competent TVET graduates. Hence, it is important to have a clear policy directions and strategies that helps produce and retain competent trainers and assessors.

Goal

Recruit, deploy, develop, and retain competent TVET trainers at different levels with a full range of professional knowledge, skills, attitudes, and industry experience.

Policy

A system shall be developed to recruit, deploy, develop, and retain competent TVET trainers and assessors at different levels with a full range of professional knowledge, skills, attitudes, and industry experience

Strategies

1. Establish a system through which TVET trainers be qualified in a bachelor's degree and above to train Level I up to II, master's degree and above for level III up to V in addition to industry experience and certificate of competence assessment in relevant occupation.
2. Establish a system through which TVET trainers be qualified in a master's degree and above for training Level VI and PhD/assistant professor and above for training level VII, Associate professor and above for training level VIII in addition to industry experience and certificate of competence assessment in relevant occupation.
3. Establish TVET teacher education institutions in which TVET trainers are trained to develop the required competence.
4. Establish a system whereby industry trainers and assessors at all levels participating in cooperative training shall be trained, assessed, and certified in relevant occupations.
5. Establish institutions that provide further training for TVET trainers and assessors at regional strategic centers.

6. Establish a system for licensing and relicensing TVET trainers and assessors.
7. Develop a clear incentive mechanism to attract and retain TVET trainers and assessors.
8. Design a mechanism to create opportunity for existing and newly employed TVET trainers to get exposure to industry experience.
9. Introduce dual employment system that allows institutional TVET trainers to work in industries and vice versa to solve the shortage of trainers with industry experience.
10. Revise and strengthen career development structure for TVET trainers.

2.5.4.3. TVET Expert's Development

TVET system, in addition to having competent trainers and leaders, competent experts are also very important to successfully implement the policies, strategies, and intents of the sector.

Goal

Recruit, deploy, develop, and retain competent TVET experts at different levels with a full range of professional knowledge, skills, attitudes, and industry experience.

Policy

A system shall be developed to recruit, deploy, develop, and retain competent TVET experts at different levels with a full range of professional knowledge, skills, attitudes and industry experience.

Strategies

1. Strengthen merit-based criteria to recruit and deploy TVET experts.
2. Provide induction training to TVET experts to get them acquainted with the occupational area they are engaged in.
3. Design incentive mechanism to attract and retain TVET experts at all levels.

2.5.5. TVET Financing

TVET is a resource intensive sector. However, the context implies there is acute shortage of finance which has led to absence of adequate facilities and resources. This requires policy intervention to diversify TVET financing and improve its utilization.

Goal

Establish an effective, diversified, accountable, balanced, and decentralized system of TVET financing and expenditure.

Policy

An effective, diversified, accountable, balanced, and decentralized TVET financing and expenditure system shall be established.

Strategies

1. Design and implement decentralized system of TVET finance which encourages full responsibility, accountability, competitiveness, and effectiveness.

2. Diversify sources and intensify financial partnerships with government and non-government sectors.
3. Fully enact and strengthen cost sharing scheme which ensures that the expenditure in TVET delivery and assessment is covered by both the trainee and the public.
4. Develop special budget support scheme by the federal government for the TVET institutions which demand special attention due to shortage of resources and having trainees with special needs.
5. Provide special support by federal government for TVET institutions producing specialized technicians for local and international market.
6. Establish national TVET fund.
7. Strengthen public-private partnership in TVET.
8. Strengthen the income generating capacity of TVET institutions through value adding engagements such as rental activities, consultancy services, establishing enterprises/production centers, and others.
9. Develop a system which enables the local community, NGOs, and civic associations to engage in TVET financing.
10. Develop a mechanism to encourage the private sector in TVET financing.
11. Institute directive for the generation and execution of internal revenue of TVET institutions.

2.5.6. TVET Legal and Regulatory Framework

The existing TVET proclamation and other relevant legal documents do not address the existing dynamism and it should be revised to incorporate all the reform agendas and policy directions indicated in this document.

Goal

Revise the existing TVET proclamation and other relevant legal documents to incorporate all the reform agendas and policy directions indicated in this document.

Policy

The TVET proclamation and other relevant legal documents shall be revised to incorporate all the reform agendas and policy directions indicated in this document.

Strategies

1. Revise TVET proclamation which indicates rights, duties and responsibilities of all TVET actors.
2. Revise TVET regulations in line with the revised TVET proclamation.
3. Develop different implementation guidelines and apply to execute the TVET proclamation and the regulations.
4. Facilitate the condition which enables all stakeholders to have the necessary understanding and implementation of TVET proclamation, regulations, and other relevant legal documents.

2.6. Monitoring and Evaluation Mechanisms

Monitoring and evaluation mechanisms are essential to have an effective approach to monitor progress and assess the challenges within the TVET system. It will help to assess the progress made and challenges encountered in relation to TVET governance, quality and relevance, access and equity, , entrepreneurship and employability, innovation and technology transfer, and perception and attractiveness of TVET. Establishing appropriate monitoring and evaluation mechanism is crucial to gauge and scale up the success registered in the TVET system and provide required intervention where the objectives are not achieved as intended.

Goal

Establish and implement robust monitoring and evaluation system to track changes and make proactive interventions in the process of implementation of TVET policy, strategy, and the intents.

Policy

Robust monitoring and evaluation system shall be instituted to track changes and make proactive interventions in the process of implementation of TVET policy, strategy, and the intents.

Strategies

1. Establish a comprehensive TVET Management Information System (TMIS) and data base used to manage different types of data in the system.
2. Translate the objectives of this policy and strategy into key performance indicators (KPIs) and identify means of verification for the indicators.
3. Harmonize the TVET sector KPIs with the national development indicators.
4. Develop and implement standardized tools for monitoring and evaluation of the TVET system.
5. Prepare and implement monitoring and evaluation guideline and make aware all concerned parties
6. Establish a monitoring and evaluation mechanism at all levels to trace implementation issues and take corrective actions.

