



**College of Development Studies**  
**Center for Environment and Development**  
**Tourism Development and Management Program**

**Assessment of TVET – Industry Linkage: The Case of Tourism  
Sector in Addis Ababa City**

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**ID. No: GSE/9635/12**

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**June, 2022**

**Addis Ababa, Ethiopia**



**ADDIS ABABA UNIVERSITY**  
**College of Development  
Studies**

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**A Thesis Submitted in Partial Fulfillment of the Requirements for the  
Award of a Master's Degree in Tourism Development and  
Management**

**June, 2022**

**Addis Ababa, Ethiopia**

***Declaration***

I, Temesgen Mamo Hailemariam, ID. Number GSE/9635/12; do hereby declare that this thesis entitled — “Assessment of TVET – Industry Linkage: The Case of Tourism Sector in Addis Ababa City” is my original work and that it has not been submitted partially, or in full, by any other person for an award of a degree in any other university/institution.

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## *Approvals*

This is certify that the thesis prepared by Temesgen Mamo Hailemariam entitled with “Assessment of TVET – Industry Linkage: The Case of Tourism Sector in Addis Ababa City” in partial fulfillment of the requirements for the degree of master of Arts (Tourism Management and development) complies with the regulation of the University and meets the accepted standards with respect to originality and quality.

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## List of Acronyms

AA	Addis Ababa
AATA	Addis Ababa Technical vocational education training Agency
AAU	Addis Ababa University
ATs	Assessment Tools
CTTI	Catering and Tourism Training Center
CoC	Center of Competence
CBT	Contract Based Training
CT	Cooperative Training
ESDP	Education Sector Development Program
ETS	Employment Tracking System
FTA	Federal Technical vocational education training Agency
GTP	Growth and Transformation Plan
ICT	Information Communication Technology
ILO	International Labor Organization
MoE	Ministry of Education
MoFED	Ministry of Finance and Economic Development
MoT	Ministry of Tourism
MoSHE	Ministry of Science and Higher Education
MoU	Memorandum of Understanding
NGOs	Non-governmental Organizations
OBT	Outcome Based Training
OECD	Organization for Economic Co-operation and Development
Oss	Occupational Standards
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
SPSS	Statistical Package for the Social Sciences
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNEVOC	International Center for Technical and Vocational Education and Training
VE	Vocational Education
VTE	Vocational Training and Education
WTO	World Trade Organization

## **Abstract**

*The main purpose of the study was to Assessment Technical vocational education training – Industry Linkage in the case of Tourism sector in Addis Ababa City. To meet the research objectives, mixed research approach and descriptive design were applied. Data were mainly gathered through questionnaire, interview and observation check list and official document review. The population from which the sample drawn had a size of 211 Out of this, data was gathered from 184 questioner respondents from hotels, tour operators and Technical vocational education training trainers using stratified sampling technique. Quantitative data gathered via structured questionnaire were processed through SPSS version 25 and analyzed by using descriptive statistics (frequency, percentile and mean and standard deviation), and 27 interview respondents for qualitative data through descriptive narration and written thematically for the purpose of triangulation. The findings of the study indicated that the major challenges affecting the linkage between Technical vocational education training and Tourism industry were Technical and Vocational Education and Training Agency has not been legally empowered; there is lack of awareness on the linkage; labor market studies were unsuccessful; occupational/training standards were not set by real practitioner industries and some training delivered is not standard driven; cooperative training and practical occupational assessment were not undertaken in workplace setting/industry; assessment tools are leaked out unofficially and became base for short cut trainings; and the employment opportunities of Technical and Vocational graduates are low. Moreover, trainers and higher officials lack awareness on occupational standards and real practitioner industries are not leading to training standardization and cooperative training which the latter is now declining. Colleges' graduates have skill gaps and low employment opportunities. Based on the findings, it is recommended that Technical vocational education training should be empowered to mobilize stakeholders and its proclamation has to incorporate linkage issues that give ways to the policy and strategy improvement accordingly. Furthermore, Technical vocational education training strategy should be harmonized with tourism policy, and linkage has to be industry driven. The awareness on occupational standards should be enhanced and real practitioner industries should lead the training standardization by which cooperative training and occupational assessment be improved. Data management of assessment tools has to be*

*too confidential and as sort of legal frame work has to be in place regarding assessment implementation.*

***Key Words: Technical vocational education training, Industry and Technical vocational education training -Tourism Industry Linkage***

## **CHAPTER ONE: INTRODUCTION**

This chapter includes the background to the study, statement of the problem, basic research questions, objectives of the study, theoretical framework, conceptual framework, significance of the study, delimitation of the study, limitation of the study, operational definitions of key terms and the organization of the study.

### **1.1. Background to the Study**

Education and training sector is a huge sector that is expected to fulfill the skilled man power of others sectors and industries with different policy based approaches from time to time. Based on the 1994 Educational and Training Policy of Ethiopia, the previous Technical and Vocational Education and Training system of input- based (supply-driven) was determined by how much resources allocated matters the success of the system by the sole effort of education and training sector alone. Accordingly, the sector prescribes the skilled man power demand of employing industries without strategic labor market study undertaken. That had created gaps between the supply of skilled man power with the requirements of employing industries in this frequently updating technological advancement time of service delivery and production. Accordingly, it failed to appropriately address the ever-changing demands of the labor market as it had been the one side effort of Technical vocational education training Sector.

This has resulted in the establishment of an outcome based Technical vocational education training system based on the already available policy of 1994 to link the labor market demand of industries with the supply of skilled man power of education sector. The system has been supplemented with Technical vocational education training strategy of 2008 to increase graduates employability with the intention to contribute to the economic and social growth of The country thereby improving the livelihoods of all Ethiopians and reducing poverty in a sustainable way. Even, the strategy has been supported by new proclamation 954/2016 for a consistent growth of the sector and its contribution to the overall economic development of the nation. It was also aligned with key policies and proclamation including Education Sector Development Program (ESDP) and In addition to the strategy, proclamation number 954/2016 prevail the sector to independent and significant sector for the country's development. With these, the labor market demand and supply of skilled man power are expected to align.

According to Technical vocational education training strategy (2008), the Supply Side of Education and Training sector of Ethiopia has many endeavors. These include the Supply Side has been expected to supply skilled man power; technology copying and innovation to industry demand and nearby community; developing system documents like manuals, guidelines, directives, etc.; and preparing implementation documents like curriculum. Even at regional and sub cities level, harmonization of occupations; institutional assessment; training provision particularly at institution level through formal, informal and non-formal; monitoring and evaluation of training and award of certification.

However, the input-based practices that had given the education and training sector to prescribe the skilled man power requirements of almost all sectors. This might have created mismatch between the frequent updating technology-based requirements of industries' man power demand with institutionalized training delivery and certification that might have created gaps in the labor market being unproductive and incompatibility of Technical vocational education training graduates with the tourism industry requirements. These unwelcomed training outcomes pressured Technical vocational education training to reform older version of input based system (GTP I report).

On the other hand, the strategy pin pointed that the demand side of industry has also been required to accomplish activities of benchmarking international best practices, study national and international labor market/world of work leading role in the development of training Occupational Standards (OSs)/Training Standards, approval of the developed OSs, preparation of Assessment Tools, in company (cooperative) training and assessment of experts to identify skill gaps and then fill gaps accordingly if competent recruit them (MoE, 2008).

According to contemporary literature, contrary to “supply-driven” training, demand-driven training ensures that training responds to labor market needs as its foremost objective is placement in employment. Without the involvement of industries in Technical vocational education training, the world's experiences realized that it can't solve the problems of unemployment and low productivity of economy. The national Technical vocational education training has had its own ways afterwards with new outcome-based strategy in the year 2008 by focusing on the practical implementation of industry demanded requirements. Evidence shows that demand-driven training can be effective in improving youth employment, especially among women to which training implies that jobs and the employers

that use the skills play a leading role in shaping the training process by definition of occupational content, standards and certification of results (Lessons and Programs, 2020).

As positive achievements of outcome-based Technical vocational education training system, it mobilizes different priority economic sectors comprises of Agriculture, Industry Development, Economic Infrastructure, Health, Culture and Tourism, Mining, Trade and Labor Welfare and Social Affairs efforts to lead strategic endeavors efforts to initiate real industries to overtake the required leading roles. With these, they somehow tried to fill gap between the supply and demand of labor market though challenges in making the real industries strategic owner to lead not yet ensured. More particularly, the meaning of real industries means that “the industry development sector” the real industries sub-sectors with practical implementations involve hotel operation, travel operation tour guiding and others. Which have been expected to overtake labor market study and engage in strategic issues to express their labor requirements based on current labor market demands?

## **1.2.Statement of the Problem**

Though there are good accomplishments in some areas of Technical vocational education training, the following gaps are still visible in my experience in it. More particularly, benchmarking international best practices, national and international labor market study, development of training program in the form of Oss (Occupational Standards) that has to be followed by the preparation of Assessment Tools, implementation in company setting by considering current technology associated with innovation.

These all most of the time have been done by leading role Technical vocational education training like that of the previous input-based Technical vocational education training system which against the notion of the strategy that may create challenges to ensure quality training and proper linkage. These may be caused by the awareness gaps of its importance and resulted in the inactive involvement of relevant real industries in the endeavors.

The magnitude of the training standards/programs which have been developed with more engagement of Education Sector (Supply-Side) without the relevant real industries’ direct involvement is relatively high. These training program standard outputs have been strategically used a bases for curriculum designing, TTLM, national occupational assessment, in company training implementation and technological endeavors. Even evidence showed that there were gaps, meaning that the strategy stated that 70% of the training would be practical and 30% theoretical, but that this was not implemented on the ground. The future

consequences of the gaps may extend beyond the responsibility of the Education sector, resulting in limited job options for Technical vocational education training graduates.

However, among the critical challenges of the Technical vocational education training system, the quality system does not respond to labor market demands due to lack of adequate quality assurance system, inadequate and outdated systems, trainer assistances' lack of industry experience and poor training infrastructure. (Technical vocational education training road map 2018) But failure mentioned as “*Technical vocational education training system not meet the labor market demands*” is one sided focus only supply side skilled man power of Technical vocational education training. But, it has also to specify the status of industry strategically expected leading role on labor market study in setting Training Standards that hasn't yet achieved till now by what so ever reasons.

Moreover, as stated in GTP-II, the goal of the sector is not yet achieved as employers complain that Technical vocational education training graduates are not practically as competent as the need of the labor market requirements. So, this explanation is directly related to what it has been discussed about the expected roles of real practitioners in Tourism industries in training programs standards development through their direct involvement in which the incorporate their workplace requirements

The reason to choose the title emanates from the researcher's own experience in Technical vocational education training since 2014 to check in gaps in the Technical vocational education training - Tourism industry linkage from federal to selected Tourism Technical vocational education training institutes in Addis Ababa. The labor market study has been undertaken at national level in the form of occupational standards development with Priority Ministry of Tourism /bureaucratic wing of government which is bases every sort of implementation in any settings. That is against the strategy that insists the real/employing industries to lead the labor market study based on frequently updating technological advancement of their respective industries.

Moreover, a study conducted by Hailemariam (2018) assessed the linkage between polytechnic colleges and industries in Addis Ababa: challenges and prospects. The results of the study indicate that graduates had low level skill and lack confidence in carrying out their duties and responsibilities and industries had weak linkage only in workshop practices. Here, the researcher confined to weak linkage at workshop level only without really locating its

relation with *National Training Program Standards* that has been developed as a bases for any sort of training implementation to which this study focuses on.

Furthermore, Singh and Tolessa (2019) have conducted a study on Technical vocational education training -Industry Linkage and Collaboration in Ethiopia to improve employability skill. The study emphasized on the concept of Technical vocational education training, present status of Technical vocational education training, the widening gap between knowledge generated of Technical vocational education training and the skills demanded in Ethiopia. Thus, recommended that the industry should provide contemporary skills by training and establish networks with Technical vocational education training institutions to minimize the gaps.

According to the researcher, the Technical vocational education training industrial link suffers a wide range of challenges depending on their theme area, with the exception of Engdawork, which is a gap from the previous study (2010). Technical vocational education training students, he claims, have the entrepreneurial potential to create their own firm. Others have expressed their unhappiness with Technical vocational education training by citing a lack of employment possibilities, bad leadership, poor teaching performance, and a negative community attitude toward Technical vocational education training. Previous study has concentrated on broad problems concerning Technical vocational education training - industry linkage, while current research should focus on challenges unique to the Tourism industries. The concerns that are particularly relevant to the Tourism industry must be identified.

### **1.3. Research questions**

The following research questions are developed from the problem statement to show the direction of the whole endeavour:

- What organizational capacity does exist to facilitate effective implementation of TVET-Tourism industry linkage in the study area?
- To what extent do the existing Policy framework and strategies support the implementation of TVET- Tourism industry linkage in the study area?
- What are the practical challenges that affect effective implementation of TVET-Tourism industry linkage?

## **1.4. Objectives of the Study**

### **1.4.1. General Objective of the Study**

The general objective of this study was to assess the TVET – Tourism Industry Linkage implementation and challenges encountered in Addis Ababa.

### **1.4.2. Specific Objectives of the Study**

**The following are specific objectives of the study**

1. To examine the extent to which organizational capacity facilitate effective implementation of TVET-Tourism industry linkage in the study area.
2. To assess the extent to which the existing conditions support the implementation of TVET-industry linkage in the study area.
3. To identify the challenges that affect effective implementation of TVET- Tourism industry linkage.

## **1.5. Significance of the Study**

This study helps Technical vocational education training bodies of both Federal and Regional/City Administration to be aware of linkage gaps (on policy and strategy implementation) and strengthen Technical vocational education training -industry linkage thereby enhance resource utilization efficiency to improve training implementation and the quality of education respectively. Furthermore, Technical vocational education training work closely together with the nearby Tourism industrial companies to make it possible to share costs and benefit. So, this study might be significant in bringing changes in the perceptions of some stakeholders about the linkage of Technical vocational education training -Tourism industries and probably provide alternative approaches to policy makers, public and private stakeholders. In addition, the study may also serve as a spring board for the researchers interested in further study on the issue under investigation.

## **1.6. Scope (delimitation) of the Study**

*Conceptually*, the study is delimited to assess the practices and challenges of TVET- Tourism industry linkage in Ethiopia with particular reference to Addis Ababa city Administration. This is because to carry out a study on the issue, it comprehensive and hard to cover the entire public and industry officials, experts and practitioners.

*Geographically*, Addis Ababa has three government TVET Poly Technique Colleges which are currently offering training on Tourism occupation. Thus, the study delimited to three

colleges namely Winget polytechnic campus one, Misrak Polytechnic College Campus two and CTTI (Catering and tourism training institute). *Methodologically*, the study apply cross-sectional research design and pertinent data gathered via questionnaire and interview as well as secondary sources, and analyzed through descriptive and inferential statistics.

### **1.7.Operational Definition of Basic Terms**

According to TVET proclamation, proclamation No 954/2008 Operational Terms are defined below.

- **TVET for the Changing World of Work:** means the work place requirements of different industries after industrial revolution has been changed due to frequent technological updating and ICT transformation that are mandatory in the human resource development training standards of TVET to cope up with the industries labor market demand.
- **Contract Based Training:** Is supplementary training in technical high schools
- **Occupational Assessment:** are national assessment meant to check skills gaps or ensure competence of citizens with formal, non-formal and in-formal backgrounds to accommodate varied interests.
- **Occupational Standards:** are standards that are expected to be developed by the current labor market demand of the country based on international/national best practices thereby used as mother document for TVET implementation (TVET strategy 2008).
- **Industry:** it is either public or private employing organizations to deliver services and produce products that regularly required skilled man power based on current labor market study conducted to set training standards with their workplace requirements
- **Industry ownership:** Special efforts will be directed to create awareness and ownership for TVET among employers and the private business sector.
- **Practitioners:** are experts who have five and more years working experiences in real industry with much more practically oriented workplaces in their fields of studies.
- **TVET-industry linkage:** is ensuring the demand-orientation of the actual TVET delivery and its linkage with the national to local labor market demand of respective line industries.
- **Education and Training System:** framework would define qualification levels, relationships and equivalences among different qualifications for the entire education

and training system including primary education, secondary education, TVET and higher education.

- **Stakeholders:** are actors who stakes in TVET policy development, resources provision, quality assurance of OS development and occupational assessment and training.
- **UNEVOC:** is about members of more than 250 UNEVOC centers in the World to ensure equal access to quality skills training to strengthen TVET to promote increased opportunities through sustainable livelihoods, personal empowerment and socio-economic development of youth, women and the disadvantaged by innovation, capacity-building and collaboration.

### **1.8.Organization of the thesis**

This thesis will be organized into five chapters.

The first chapter is devoted to the introduction and contains information on the study's history, problem statement, research questions, aims, significance, scope (delimitation), limitations, and organizational structure. The second chapter reviews relevant literature. In general, the chapter examines theoretical and empirical research as well as the conceptual framework of the study created in accordance with the research objectives. Chapter three discusses research methods. It will include the research methodology and design, the study's description, the data sources, the population, sample size, and sampling procedures, the data gathering process, the validity and reliability of the data collection tools, the method of data analysis, and ethical issues.

Data presentation, analysis, and interpretation are the main topics of chapter 4. The summary, conclusion, and recommendations based on the study's findings are presented in chapter five, to wrap things up.

## **CHAPTER TWO: REVIEW OF THE RELATED LITERATURE**

This chapter looks at TVET for the changing world of work, the concept of out-come based TVET system, demand driven training for youth employment, labor market study and industry, TVET and industry linkage, world experiences of the linkage and the Ethiopian experience on the linkage. Overall, the chapter discusses the theoretical and empirical studies, as well as the conceptual framework of the study developed in line with the research objectives.

### **2.1. Technical vocational education training for the Changing World of Work**

Globalization has ushered in a new era of business, as well as the way we live, study, and work. The emergence of the new economy has brought new opportunities and problems as a result of the synergy of globalization and new ICT. Many workers were displaced, dislocated, structurally unemployed, or underemployed as a result of the issues. The gap in income inequality has expanded due to the polarization of skills between skilled and unskilled workers. Although, by taking into account changing workplace requirements, Technical vocational education training has chances and challenges for transformation and innovation in the form of human capital as a comparative advantage in global competition (Madungwa, 2012).

Accordingly, since the mid-1990s, dominant policy narratives to confront challenges posed by globalization resulting from industrial revolution of post-industrial that necessitate societies to be knowledgeable. It needs to ensure the competitiveness citizens in economies based on a strong linkage between education and training; and occupation related criteria of employability. These have caused the changes in the demand side of the industries for particular kinds of paid employment (occupations) are shaped by transformations in the requirements particularly for vocational training practice in particular countries or regions (UNEVOC, 2009).

Today focus is given to prepare knowledge workers to meet the challenges faced during the transition from the Industrial Age to the Information Age in relation with post-industrial human-resource requirements and the changing world of work. Technical vocational education training is currently faced challenges created by the displacement of the traditionally manual work to mental work by changing competences required in the

workplace (UNEVOC, 2009). These might have been resulted from the changing work requirements from time to time up to now. Technical vocational education training has to respond these opportunities that requires new set of skill requirements.

Developing relevant skills and matching training with job for sustainable living is fundamental to effective Technical vocational education training. This objective can be achieved if Technical vocational education training knows the needs the workplace requires from Technical vocational education training products or graduates. These needs may include: practical capacity (capacity for skill acquisition); theoretical and technical knowledge (capacity to show knowledge of operating principles and relate to practice); creativity and entrepreneurship, social capacity, and information and communication technology (ICT) skills (Madungwa, 2012).

Other skills required by the workplace include communicative skills; critical thinking and problem Solving skills; team work; long learning and information management skills; entrepreneurship skills; ethics, moral and professional; and leadership skills. Technical vocational education training institutions cannot successfully play this role of providing high quality manpower with advanced skills if it operates in isolation of the operating industries that require skilled workers. Technical vocational education training institutions must establish collaborative linkages with these industries that require their graduates. Such linkages on a well fashioned partnership terms will guarantee quality skill and smooth transition from school to work. In meeting, the skill needs of the teeming youths and addressing ever-increasing trend of unemployment and underemployment, government globally have been compelled to strengthen the link between institutions and workplace. This in most cases takes the form of closely involving the industry and, developing occupational standards and, work based verification and continuous assessment of trainees. The world needs a production-oriented Technical vocational education training which must incorporate functional skill development and knowledge driven programmed with sufficient motivational and reward mechanism. For Technical Vocational Education Training to produce people with powerful skills and high quality innovative minds to build the world and make it a better place, some fundamental mechanisms such as Technical Vocational Education Training institution-workplace collaboration should be considered (Jane Itohan Oviawe 2018).

## **2.2. World Experiences of Technical Vocational Education Training -Industry Linkage**

Technical Vocational Education Training -industry linkage is intended to link the school

education with the work place requirements. This is done by linking the learning contents of the program with the tasks of an industry in order to help in the way to be trained that should satisfy the practical needs of the industry. Linking Technical Vocational Education Training and the enterprises/industries in deferent economic sectors are very important for both employers and jobseekers.

Such, linkages and “bridges” between the training providers and the companies cannot follow one uniform design in deferent cultures and economic circumstances and under deferent social requirements including many stakeholders’ conflicting interests, objectives and priorities in training. So, there are different linking experiences in different countries (Kasipar et al., 2009).

The researcher chose China and Vietnam because their Technical Vocational Education Training documents are readily available, they have a strong Technical Vocational Education Training practice, and their Technical Vocational Education Training implementation serves as a model. Our country uses Australia, Germany, and the Philippines as benchmarks for its Technical Vocational Education Training implementation so that we can see their strategies through the lens of Ethiopian Technical Vocational Education Training .

For example, Vietnam recently joined the WTO, and is now in need of highly qualified staff in order to increase the quality of their products and services. Thus, the link between industry and education is unavoidable (Kasipar et al., 2009). Worldwide, there are many strong national training agencies as the primary organization to develop policies and strategies to work together with industries (e.g., the National Training Board in South Africa, and the Federal Institute for Vocational Education and Training in Germany). For these, a strong political commitment towards the forging of links with industry is a basic necessity (Kasipar et al., 2009).

As the changes in the national economic situation, industrial demands on the vocational education are also changed in the 1960s and 1970s. However, the industrial needs for VTE have shifted to a demand for skilled workers since the 1990s. When systematic industrialization was introduced by the Korean government, agriculture was the dominant sector of the national economy. The school-based vocational education could be easily separated from work realities and could not be an effective vocational education in the era of rapid change. CBT is a supplementary training in technical high schools with the goals to qualify students to meet the needs of industry to get rid mismatching between skilled worker

demands and supply in the labor market (Kasipar et al., 2009).

Today, China guides the provision of VE to focus the labor market need for preparing students' employment, and combining workplace practice. It emphasized the importance of combining practical work-based training with education, close linkages between schools and enterprises, and encouraging students' work-based training. It highlighted to promote, and apply new technologies in training and in community service to meet the needs of ever-changing labor markets occupations. In 1994, the school established linkages with the Japanese Toyota company to set up a Toyota skills training school in Beijing. In 2002, the State Council also emphasized the close connection between vocational skills training and professional and vocational ethics (Kasipar et al., 2009).

Even in African context, Brew and Dadzie (2016) conducted a study to assess the industrial experience of staff of Ghanaian Polytechnics with Accra Polytechnic as a case study. An analysis was conducted on the industrial experience of all the 189 full time academic staff of the institution. Key findings was about 51 percent of the teaching staff have some form of industrial experience relevant to their areas of specialization. The study recommended the need for a national governmental policy to incorporate staff industrial internship into faculty development scheme to help foster partnership between Technical Vocational Education Training institutions and industry.

### **2.3.The Ethiopian Experience on Technical Vocational Education Training -Industry Linkage**

Previously, Technical Vocational Education Training had been the input-based that more rely on how much resources allocated determined the outputs of the sector. It has been done with the education and training sector sole involvement to determine the skilled manpower of industries which had been expected both in service provision and production manufacturing. In other words, it seems that Technical Vocational Education Training prescribes the human power demand of industries without considering dynamic nature of technology that is needed. These might have created gaps in the education sector and the industry the goes far up to employment opportunities. So, the issue of Technical Vocational Education Training reform came to discussion agenda in 2007/2008(TVET GTP II report).

As a result, the Technical Vocational Education Training reform developed based on the outcome-based orientation (MoE, 2008). It advocates to be emphasized is not the process but the outcome to the labor market/industries demand in an updated manner. Here “the process”

implies that number of human resource needed for training, fixed time resource duration, how much finance deployed, etc. determine your success in education and training.

For example, the previous three years stay to get diploma may not make the Technical Vocational Education Training graduate competent than making him/her certificate holder unless it is supplemented by practical industry experiences. On the other, hand “the outcome” is related to what the industries required results from the graduates. These has to be achieved by direct industries participation in setting their workplace requirements in standards forming training programs from the very beginning, planning and implementation of these standards and assessing and experts the graduates to their needs (MoE, 2008).

To do these, the government structure of priority sectors have been used to let the real industries under their respective jurisdiction to overtake the strategic endeavor on the labor market demand side. For these sectors including Agriculture, industry, health, culture and tourism, mining, trade, labor and social affairs, etc. have been playing their facilitating roles. So, they have been accomplished their responsibilities and achieved different performance levels though still they are the major actors of the industries’ stakes.

Even substantiated with current study conducted by Singh and Tolessa (2019) on “ Technical Vocational Education Training -Industry Linkage and Collaboration in Ethiopia: A Necessity for Improving Employability Skill” insisted the government of Ethiopia to formulate the policies on Technical Vocational Education Training – industry linkages through the frame work of Technical Vocational Education Training industry collaboration. This is an indication that the some sort of experiences has been entertained by the sector.

Furthermore, ILO Physical Review by Hamiltonian, Moser, The, & Rom (2019), Ethiopia Technical Vocational Education Training system has Supply-driven nature in training programs and curricula. Although explicit commitment by Technical Vocational Education Training system to labor market demands, program and curricula are not based on the demand to take in to account of the market’s changing skills requirements and may further the existing skills mismatch. So, these have been resulted in Weak Technical Vocational Education Training industry linkages. Linkages with industry practitioners are crucial to teach workplace-relevant skills and conduct proper assessment. However, low private sector take-up of the Cooperative Training Program. Even employers tend to have a negative perception and believe of Technical Vocational Education Training program and learners.

The impact of the program in the society of Technical Vocational Education Training -

industry linkage is also highlighted by job assessment done by ministry of foreign affairs last year. More particularly, in practice, linkages b/n private sector and Technical Vocational Education Training institutions are difficult due to lack of resources at Technical Vocational Education Training and lack of interest private sector (Affairs, 2020).

#### **2.4.The Concept of Out-come Based TVET System**

Outcome Based Training (OBT) is known as the competency-based training creates an open learning environment, encouraging experts to pick up new skills or improve their existing skills at their own pace unlike time-based programs/ input-based. Salient features of OBT that enhance learning experience include but aren't limited to flexible learning environment conducive to self-paced learning, measurable objectives and learner expectations, e-learning, comprehensive assessment of participant's skills at the end of the training and assessment linked to expert performance (Khanna, 2019).

Ethiopia has reformed the basic framework of the TVET system to outcome-based to replace the current curriculum-centered approach (MoE, 2008). Develop a comprehensive, integrated, outcome-based and decentralized by creating a strong coherent framework for all actors and stakeholders. Accordingly, developing national OSs based on international and national labor study that occupational assessment is open to candidates and graduates from all formal including non-formal or informal TVET schemes different from the previous input-based system.

## Theoretical Framework of Outcome-based TVET System

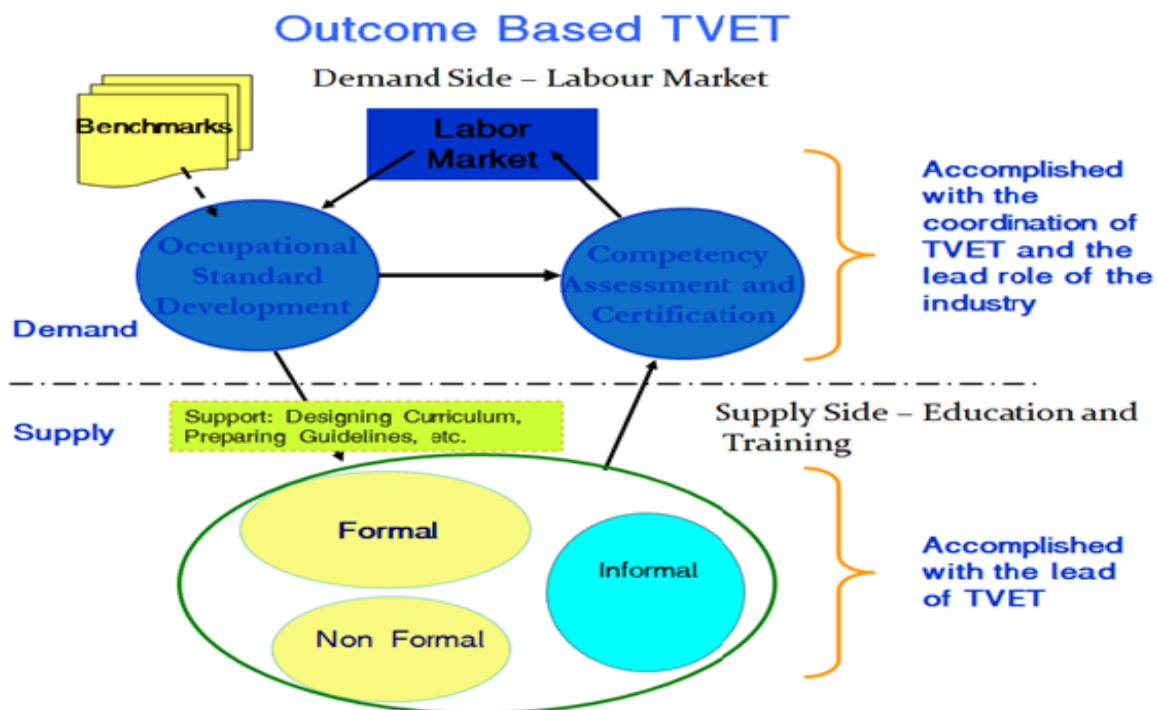


Figure 1: Outcome-based TVET System (MoSHE (2021) *Ethiopian Technical and Vocational Education and Training Policy and Strategy*.)

According to MoSHE (2021) *Ethiopian Technical and Vocational Education and Training Policy and Strategy*, we can see that those which are above *the broken line* are the demand side of industries' leading role with Technical Vocational Education Training coordination. Here the industries have been required to benchmark international best practices and study national labor market. Accordingly, they develop OSs/training standards based on their current workplace requirements and let it approved. Then, they prepare Assessment Tools and participate in designing curriculum for national assessment and training implementation subsequently both in the institute and in industries settings.

On the contrary, those which are below *the broken line* are the supply-side of Technical Vocational Education Training's leading role. Similarly, to supply the skilled man power to industries Technical Vocational Education Training is required to design training curriculum and prepare system guidelines, manuals, directives, etc. Accordingly, it is expected to deliver training in the formal, informal and non-formal modalities. By these, the needed linkage between Technical Vocational Education Training and industry is becoming real to ensure quality education and training there by enhance the employability of Technical Vocational Education Training graduates both in the self and being employed by the industries.

Guiding Principles of Technical Vocational Education Training System includes demand-orientation, quality and relevance, equal access and equal opportunity, pathways, flexibility, life-long learning, gender sensitivity, contributing to fight against HIV/AIDS and environmental protection. Likewise, Conceptual Principles encompasses making institutions centers of technology capability accumulation & transfer, aiming at a comprehensive and integrated Technical Vocational Education Training System, stakeholders' involvement, public private partnership and outcome- approach.

The outcome-based approach followed to assure a competent and adaptable labor workforce to find gainful employment and self-employment in the different economic sectors of the country. The economic sectors are organized as agriculture, health, culture and tourism, mining, labor and social affairs, trade, industry and economic infrastructure. The national Technical Vocational Education Training re-organized outcome-based allowed some sectors to identify competences needed in the labor market to ensure the creation of competent citizens for them(TVET strategy 2008).

Competence is a broad concept comprises the possession and application packed skills, knowledge and attitudes which help to be successful for the required jobs in the labor market to be a productive and adaptable to current demand as expert or self-employed. Accordingly, contribute to personal social and economic empowerment of citizens. The competences will be described in National OSs by people practically experienced in the world of work. This make the outcome of all training will achieve updated the by the labor market study of real relevant industries (Technical Vocational Education Training Occupational standard development manual 2016)

Technical Vocational Education Training delivery measured through a process of learners' achieved competence through occupational assessment based on the OSs by candidate who has proven for being competent and awarded a National Certificate as the official proof of a person's competence in a particular occupational area. Occupational assessment and certification is open to everybody in formal and non-formal or informal backgrounds. Thus Technical Vocational Education Training providers have to design curricula by considering specific work place requirements of labor market. As a consequence, the previous practice of prescribing binding national curricula will no longer be implemented once the outcome-based quality management system is fully established. (TVET strategy 2008)

## **2.5. Demand Driven Training for Youth Employment**

*Demand-driven training* is defined as skills development aiming at placement in employment. The focus is that actual labor market demand determines the scope of training offered, how it is organized and delivered. The assumption is that skills training aligned with the needs of the job market enhances the chances that graduates will be productively employed, for both personal and economic benefits. The alignment of the labor market demand the supply is skilled manpower is done (Lessons & Programs, 2020).

“*Demand*” means effective labor market requirements as articulated by employers/industries, or by requirements for gainful self-employment. In some instances, youth training in specific occupations cannot match with for labor market demand. *On the other hand*, “*training*” is job preparation aligned with knowledge, skills and attitude needed for employment or self-employment (Lessons & Programs, 2020).

So, *demand-driven training* can be achieved by various mechanisms. Identify employment needs by eliciting information from employers about their hiring plans, labor market information, surveys, rapid market appraisal and tracer studies; capturing employer views on training content through sector councils, local bodies to identify needs, employer participation in defining standards (certification, competences required), selection and final assessment for competency checkup.(Lessons & Programs, 2020).

In addition, the work on linking providers to employers in employer role in provider selection; joint proposals with employers, e.g. training plans, letters of intent; provider placement of in workplace trials; providing work experience to by on-the-job training, apprenticeships, dual apprenticeship, internships; providing resources for what is needed; and support graduate needs in job search, counseling and placement assistance (Lessons & Programs, 2020).

## **2.6.Labor Market Study and Industry**

Outcome-based organization of TVET system involves industry in planning, management and delivery of TVET. It increases the competitiveness of the sector based on international standards focusing creative technologies capacity building to contribute economic development of the country by solving regional problems. It is thought to be endowed with outstanding and international workforce ethics and are means through which teachers and trainer assistances transfer the technology to the industry.

The Federal Government represented in the Council by the including Priority Line Ministries like Ministry of Education, Ministry of Capacity Building, Ministry of Labor and Social

Affairs, Ministry of Agriculture, Ministry of Trade and Industry, Ministry of Health, Ministry of culture and tourism, Ministry of Finance and Economic Development, Ministry of Works & Urban Development, Ministry of Water Resources and Ministry of Women Affairs. The above list with some added bodies and TVET been engaged in different activities with labor market demand studies though not exhaustive in bringing real practitioner industries on board to overtake their leading roles(TVET GTP II report).

In the interface of different sectors, notably the education sector, the labor market, industry, agriculture and rural development, and public administration have strategic importance. Different stakeholders contribute their own expertise, experience and capacities to improve the relevance and effectiveness of the TVET system to serve to all these sectors through high quality and demand-responsive instruments. These may be resulted in better employment opportunities for TVET graduates.

## **2.7. Technical Vocational Education Training and Industry Linkage**

Before the outcome based strategy of TVET with demand-orientation, in 2000/01 those students who have completed grade 10 but did not score the required grades to join preparatory secondary education joined TVET. It was designed to fulfill the country's requirement for mid-level trained human resources. But that was the last of input-oriented training approach that follows curricular requirements instead of workplace and labor market requirements in TVET implementation.

*The labor demand-orientation* of TVET delivery and its linkage with the local labor market/industries, many endeavors have to be undertaken to balance the demand of skilled human resource with the supply of educational institutions. TVET expansion is complemented by Engineering Capacity-Building Program which integrates training, demand, and employment concerns in an outcome-based and demand-driven system with strong stakeholder participation (MoFED, 2006).

The TVET strategy further increases the role and involvement of private sector and non-governmental organizations and community involvement in the delivery of educational services to avoid the mismatch of the available resources with increasing demands, measures for improving efficiency and cost-effectiveness.

Education and training are directed in a wide variety of work-related skills through TVET programs. The Government's national development endeavor demands the supply of skilled human power at different levels. More particularly, training programs specific communities

will be organized in harmony with locally available resources and market demands (MoE, 2005).

Employer-based TVET schemes have been undertaken by Public Private Linkage between employers of both private and public in the forms of trade unions and; small and medium scale enterprises, public and private TVET providers; Civil Society and NGOs. These efforts have been resulted in gainful employment in different sectors.

## **2.8.Theoretical foundation of the study**

This study was viewed from the perspectives of systems theory as a unifying theoretical framework (Chen & Stroup, 1993: 447) that links educational organizations to the external environment (such as industries) and human capital theory (Olaniyan & Okemakinde, 2008; 157; McNamara, 2012: 2) as one major mission of educational institutions (in this case Technical Vocational Education Training) in producing competent and quality training completers for the labor market. The Triple Helix model was also used to explore the link between the government, Technical Vocational Education Training ,and industries as significant role players in the helixes (Ranga & Etzkowitz, 2013: 238; Etzkowitz, 2008: 9). To begin with, educational institutions are not viewed apart from the context in which they operate under system theory. The objective of systems theory in this regard is to take numerous inputs from its surroundings, process these inputs (in these case trainees) in some way, and produce outputs from the system (Mizikaci, 2006: 41). Different components interact in this complex process to produce the required outputs and, ultimately, outcomes. The multidisciplinary nature of systems theory, the ability to engage complexity, the ability to describe system dynamics and change, the ability to represent relationships between the micro- and macro-levels of analysis, and the ability to bring together the natural and human world are all applicable to this study, according to Chen and Stroup (1993: 447). The effect of systems theory in educational organizations is that managers, writers, educators, consultants, and others assist managers in taking a larger view of their organizations (McNamara, 2012: 2). Educational managers now have a new viewpoint on how to analyze patterns and events in their organizations because to systems theory.

Second, the application of human capital theory in this study is justified by the idea that formal education is very beneficial and even vital for improving a population's production potential (Olaniyan & Okemakinde, 2008: 157). Early human capital theorists such as Schultz (1971), Sakamota and Powers (1995), Psacharopoulos, and Woodhall pushed for this

approach (1997). Human capital theory is the theoretical framework most responsible for the sound adoption of education and development policies in this regard (Olaniyan & Okemakinde, 2008: 158). Technical Vocational Education Training s are expected to train qualified workforce that the economy requires as a way to build human capital. According to studies undertaken in various regions of the world, there is a positive relationship between a country's economic progress and its residents' educational attainment (Olaniyan & Okemakinde, 2008: 159; Marotta, Mark, Blom & Thorn, 2003: 2). This link can mostly be attributed to educational institutions' education and training. For this study, the fundamental premise is that human capital theory, which is the pool of competences, knowledge, social and personality qualities, including creativity, embodied in the ability to perform labor to produce economic value (Marotta, et al., 2003: 2).

As a result, the quality and amount of education in a country determines its economic growth potential (Olaniyan & Okemakinde, 2008: 157). To contribute significantly to economic growth and development, education must be of high quality in order to meet the economy's skill requirements. As a result, Technical Vocational Education Training's contribution to economic development through the creation of human capital is extremely valuable, necessitating competent management. Finally, the Triple Helix model is employed to examine the relationship between Technical Vocational Education Training and industry (Leydesdorff & Meyer, 2006: 13; Ranga & Etzkowitz, 2013: 238; Etzkowitz, 2008: 9). The Technical Vocational Education Training -industry-government interactions are described in the Triple Helix model as one of the generally equal yet interdependent institutional domains that overlap and take on the roles of others (Etzkowitz, 2011: 2). The model depicts the governments, Technical Vocational Education Training's, and industries' roles, which may be seen from many perspectives. According to Etzkowitz, Dzisah, Ranga, and Zhou (2007: 15), the notion consists of three elements:

- I. In a knowledge-based society, a stronger role for Technical Vocational Education Training in innovation with the government and industries.
- II. A significant shift toward more collaborative contact among the three role actors, in which innovation is mostly the result of genuine interaction among partners rather than government prescription.
- III. Institutions that fulfill non-traditional roles can provide potential sources of innovation. Furthermore, Etzkowitz (2002: 2) emphasizes that the internal transformation in each of the helices is the first dimension of the Triple Helix

model, such as the establishment of lateral links among industries through strategic allies or the Technical Vocational Education Training 'S assumption of an economic development mission.

This emphasizes the importance of Technical Vocational Education Training in meeting market demands. Increased international competitiveness through innovation and technology transfer is strongly encouraged by Technical Vocational Education Training -industry linkage. This study aims to analyze the issues of Technical Vocational Education Training - industry linkage from many perspectives in order to promote and strengthen this idea. In conclusion, Technical Vocational Education Training was created to serve society, demonstrating their strong ties to the outside world. From the standpoint of system theory, this is understandable.

Furthermore, Technical Vocational Education Training is the hub for developing competent, experienced, and knowledgeable workers who can effectively use technology in the age of competition. This brings up the concept of human capital theory once more. Finally, the Triple Helix model, which depicts the interdependence of Technical Vocational Education Training, industry, and government, is critical in understanding this relationship. The sections examine relevant study design and its philosophical underpinnings in connection to these theories and model.

## **2.9.The challenges of Technical Vocational Education Training -Industry Linkage**

Technical Vocational Education Training is an important tool that can improve the employability of individuals, increase productivity in industry and reduce poverty, however, it suffers from a mismatch as it produces entrants to labor force with qualifications that do not match the requirement of the productive sectors of the economy (T. E. Ejio 2013). The following are the notable challenges facing Technical Vocational Education Training - Industry linkage.

### **1. Non-involvement of industry representatives in development of Technical Vocational Education Training Curriculum:**

The curriculum of any Technical Vocational Education Training institutions should bear the skill needs of the industries in mind as they are the end users of Technical Vocational Education Training products. In the development of Technical Vocational Education Training curriculum, employers of labor are not usually consulted to provide the skills they

need Technical Vocational Education Training institutions to inculcate in their students to become employable in the work place. According to Tansen (2013), Technical Vocational Education Training system is hampered by inadequate links with industry, outdated curriculum and delivery strategies, little flexibility to respond to training needs at the local level as industries are not consulted during the accreditation process of the curriculum. This shows that there is no feedback from the employers to Technical Vocational Education Training institutions leading supply driven training skewed in favor of theory. According to Amissah (2006), Technical Vocational Education Training linkages with industry in terms of input for curriculum development are weak resulting in mismatches of supply and demand skills. Technical graduates lack hands on experience and have poor work attitudes and are inflexible to changes happening in industries (Republic of Kenya, 2002).

## **2. Lack of teaching and learning resources:**

Lack of up to date teaching and learning facilities in technical vocational education training institutions is a factor that has contributed in widening the gaps between technical vocational education training and industries. According to offei-ansah (2011), technical vocational education training teachers have limited experience of life outside the classroom and no access to resources materials through which to emphasize relevance. It has been observed that industries are the end users of technical vocational education training products, and currently, skill activities in industries are changing as the demand of the society is changing while little or no change is taking place in technical vocational education training institutions hence the gap between technical vocational education training and industries.

## **3. Image of Technical Vocational Education Training :**

Technical vocational education training graduates are struggling to fit in the work place because of the wrong perception society placed on it. It is entirely different in technical vocational education training graduates as there is no generally acceptable name given to the graduates from technical vocational education training. It has been observed in industries where technical vocational education training students seeking for industrial attachment are been rejected on the ground that they are not from faculty of engineering. Similarly, ratnata (2013) found out that young people and their parents whenever they have the possibility chose higher education over technical vocational education training due to their predominant perception of technical vocational education training not as valuable as

general education. According to au (2007) and afeti (2008), the impression sometimes created by government that the primary objectives of the technical vocational education training track is to keep dropouts off the streets rather than project this type of training as an effective strategy to train skilled workers for the employment market. This is a worrisome situation that has hindered the advancement of technical vocational education training in the country including industrial linkage.

## **2.10. Policy review**

The topic of university-industry linkage should be of paramount importance for a country like Ethiopia, which has selected higher education as its primary tool for poverty reduction and economic development. The availability of policy directives and rules that have been developed to govern the path in which University-Industry could take place is one of the hopeful signals in the Ethiopian context.

The necessity to provide conditions for industry to play a prominent role in the economy is one of the fundamental strategic pillars recognized by the Growth and Transformation Plan (GTP 2010) as important considerations for sustaining Ethiopia's rapid and broad-based economic growth path. "Educating and training a workforce that satisfies industries needs at all levels, notably the rising manufacturing industry," according to Education Sector Development Program IV (GTP 2010/11-2014/15:86). The driving forces at the national level are identified as "innovation-friendly institutions that enable genuine STI development, institutions that can develop a structured system with smooth science and technology information flow, technology incubation and utilization" in order to achieve these plans and realize the country's goal of becoming a middle-income country by 2025. (STIC20 14:4).

In view of the foregoing, Technical Vocational Education Training and HE institutions have a clear role to play as technology transfer and innovation centers. Higher education institutions are expected to cooperate closely with industry and make the knowledge generated on their campuses available to the general public in order to accomplish this mission. For example, Article 26:5 of the Higher Education Proclamation (HEP 2009:4991) emphasizes that "any institution must have the responsibility to create relationships with industries for mutual benefit." Article 26.6 of the Proclamation further mandates that higher education institutions make available to the general public the knowledge and skills obtained on their campuses.

In terms of the research lines that HEIS are expected to follow, the Higher Education Proclamation states that institutional research should focus on the country's development

challenges, with an emphasis on technology transfer, which obviously emphasizes the necessity for U-I linkage. The declaration further states that higher education institutions should set up a mechanism that allows them to collaborate on research initiatives with businesses (Article 24.4). Despite these directives, the government still has a lot of work to do in terms of providing the necessary attention, resources, support, and close monitoring, as well as developing a well-coordinated national innovation system that supports U-I connection on a national level.

### **2.11. Review of empirical studies**

Some studies, both locally and abroad, have been conducted in relation to the subject matter. For instance, Kedir (2007) investigated the effect of co-placement based micro and small enterprise in Butajera on how making its contribution with the necessary skills demanded by the labor market. The study revealed big gap in major employment opportunity including financial problems, lack of market linkage and lack of leadership skill. In co-op based job placement, self-employment is found to be low. Finally, concluded that graduates were ill prepared and have no vision of future personal development. Recommended to trickle the thinking of the decision makers at each level and can thus improve the life of operators of co-op based job placements.

Another study by Bekele (2008) investigated the level of teachers' performance in technical vocational education training institution of Addis Ababa based on students opinion. The finding revealed that teachers show deficiencies in almost all factors including unsatisfactory performance. Lack of the necessary equipment, the negative attitude teachers developed towards the subject matter they taught, and absence of any connection between technical vocational education training institutions and employer organizations were found to be the major problems that teachers face. Recommendations include improving teachers' practical training, the importance of close linkage between technical vocational education training institutions with curriculum developers and employer organizations to determine acceptable minimum competence to teachers to cope-up with. Here, the implementation emphasize is appreciable, somehow checking technical vocational education training and employer connection is good to see gaps in curriculum which may have resulted from oss. So, it is needed proper linkage between the industry labor market study and technical vocational education training supply beginning from federal to institute level by considering linkage of supply and demand sides effectively.

Furthermore, Tefera (2011) assessed the college-industry linkage in Addis Ababa City Administration and employed descriptive survey method. The finding of the study shown that linkage between public colleges and the industry is loose; colleges are not in a position of applying linking mechanisms like developing collaborative strategic plan and curriculum; the inefficient leadership quality strategies of monitoring the progress and lack of joint action plan. Hence, concluded that Technical Vocational Education Training and industry linkage was not promising to satisfy industry's demand. Recommended industries should be involved in the planning, implementation and evaluation of technical vocational education training program more specifically in the strategic plan and curriculum activity; colleges should follow flexible training modes to give opportunely to the mass of industry expert; intensive training in upgrading the skill of technical vocational education training management and awareness creation about mutual benefit of technical vocational education training industry linkage should be established. Moreover, colleges should conduct tracer studies about the employment status and employers' satisfaction of their graduates so as feedback mechanism between industries to technical vocational education training colleges and vice-versa.

Here, having recognized the loose college and industry in promising. However, the issue of linkage in not only emphasized at college level by focusing on the implementation aspect alone but also has strategic tie from federal with the meaningful far reaching to all actors. These has been always been manifested by setting national standards (occupational standards) based on labor market study of real industries that have been bases to any sort implementation. So, in this study, it will try focusing on how standards have been developed by industries and there relation with the implementation.

Furthermore, G/Michael (2014) conducted a study on practices and challenges of cooperative training in technical vocational education training institutes and companies in Gurage zone. The study found out that the trainer assistances are not qualified and experienced; stakeholders have no adequate awareness on the purpose the implementation process of ct; enrollment of was not as intended in the national technical vocational education training strategy, and shortage of delivering companies training were high. Similarity, the activities done in the world of work was major factors that affect the implementation of the program, lack of collaboration between stakeholders, shortage of capable supervisor, shortage of training resources, lack of training for trainer assistances, and pedagogical knowledge of trainer assistances moderately affected implementation. Then, recommended staff development in the college; organized technical vocational education training systems in

companies and colleges; awareness rising CT; and the college s’ enrollment as indicated in national the technical vocational education training strategy, necessary resources should be fulfilled.

## 2.12. Conceptual framework of the study

### TVET-TOURISM INDUSTRY LINKAGE

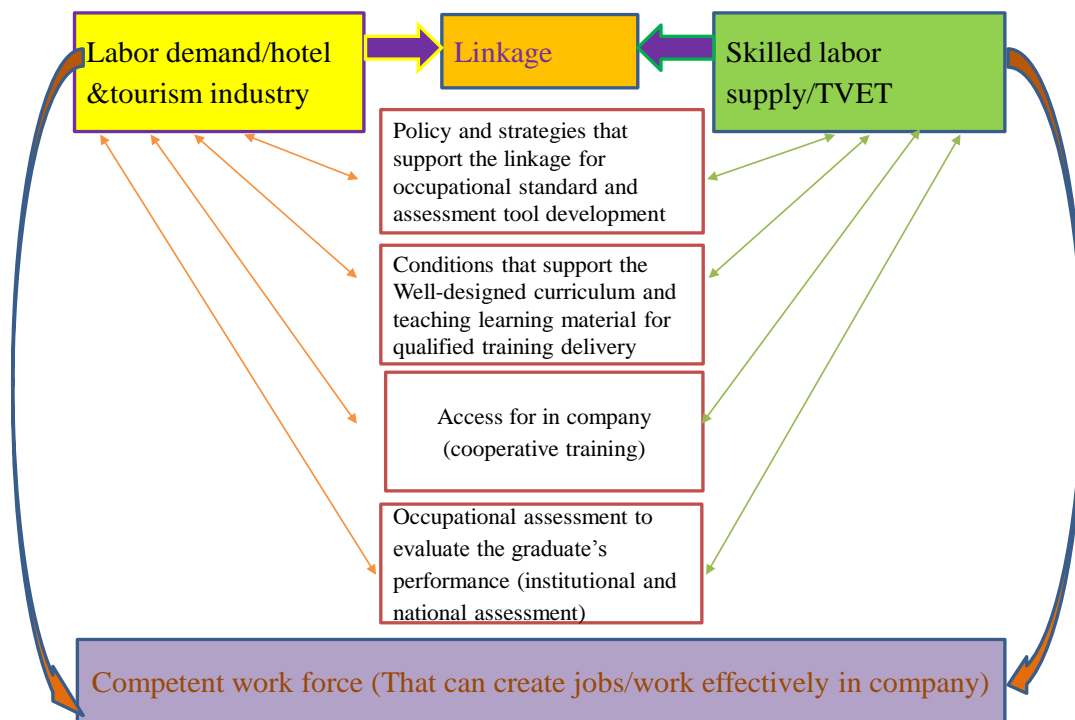


Figure 1: Conceptual framework of the study

As can be seen from the above framework, there is some form of linkage/relation between the industry's demand and the TVET sector's supply of skilled manpower. These are the logical/naturally acceptable relationships based on the strategy-aligned theoretical framework given just above. However, most of these initiatives have been carried out with the active participation of the supply side (TVET with line ministries), rather than the demand side of real practitioner industries, which is plainly contrary to the strategy. Instead of inviting specialists from the Ministry of Tourism to speak at the Training Program Standards, for example, Development for hotel operations Occupation is considerably more favorable in practice for individuals who have worked in hotels. As a result, these activities such as OS

Development, Assessment Tool Preparation, and Cooperative Training Implementation must be evaluated in order to discover gaps in Standards Development and their subsequent Practical Implementation and Assessment right before to hiring.

## **CHAPTER THREE:**

### **THE RESEARCH METHODOLOGY**

The subsequent sections of this chapter presents description of the study area, the research approach and design, sources of data, sample, sampling techniques and sample size, data gathering tools, procedure of data collection, methods of data analysis and ethical considerations.

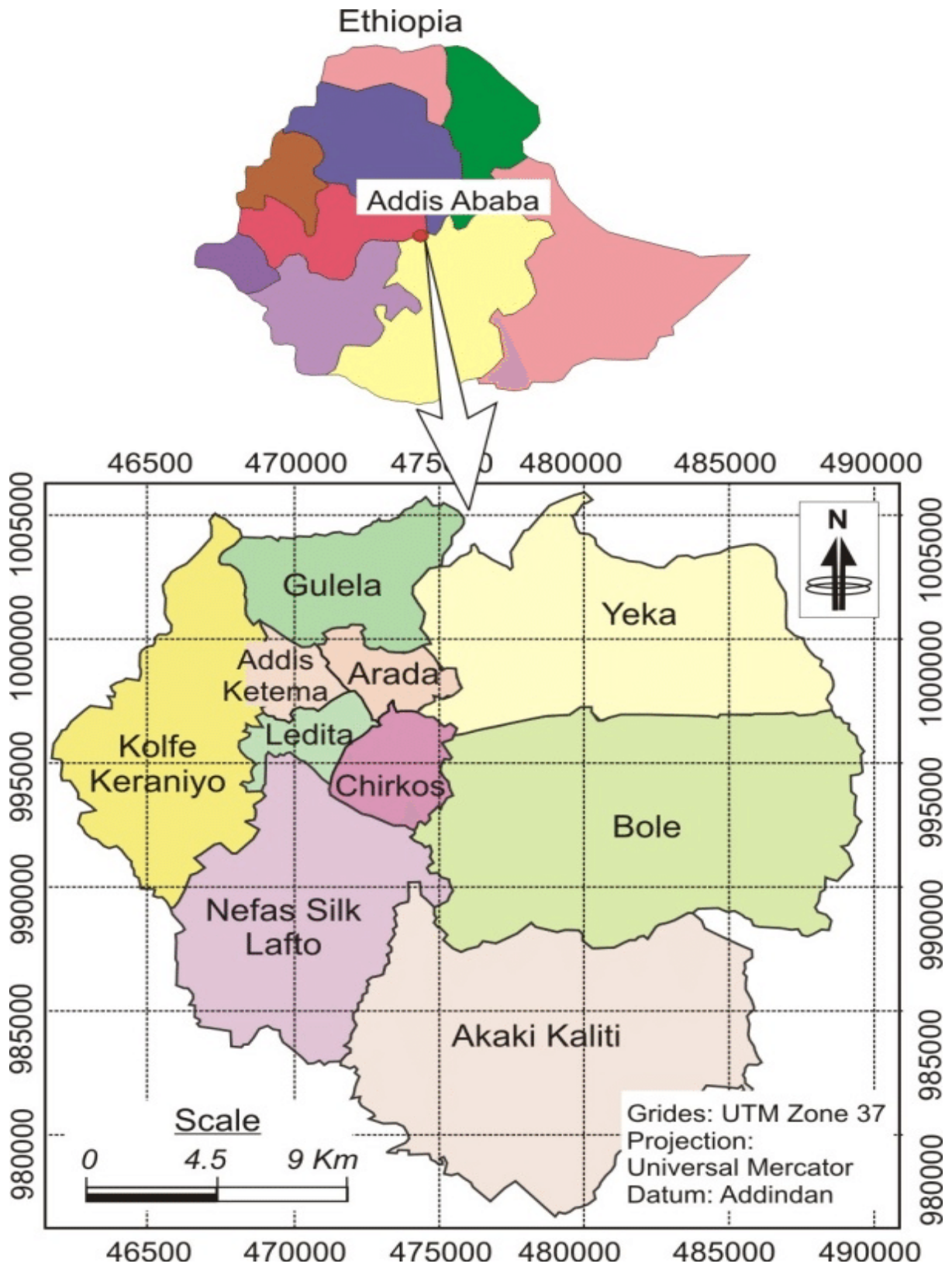
#### **3.1. Description of the Study Area (Addis Ababa)**

This study conducted in Addis Ababa, which is the capital city of Ethiopia and home for the African Union and is often diplomatic African city due to its historical, diplomatic and political significance for the continent and perhaps internationally. In view of that, the detail description of the city including population, climate and topography is discussed and illustrated in the subsequent section.

Addis Ababa is believed to have a total population of 5,228,000, urban and rural inhabitants based on the mentioned official last date of that time. For the capital city 662,728 households were counted living in 628,984 housing units, which results in an average of 5.3 persons to a household (CSA, 2007). Addis Ababa has a subtropical highland climate with precipitation varying considerably by the month.

The city has a complex mix of highland climate zones, with temperature differences of up to 10°C (18°F). The city is located at the southern foot of Mount Entoto, at an elevation of about 8000 feet (2440 meters) above sea level, on a plateau that is crossed by numerous streams and surrounded by hills and mountains, in the geographic center of the country. Mount Yarer overlooks the city from the east and Mount Wochecha from the west (New World Encyclopedia 8 April 2022).

In Addis Ababa there are 104 colleges that provide training in different occupation, out of them there is only 6 colleges that provide a training on tourism sector.



- Figure 2: Geographical map of the study area:- Web-based GIS Approach for Tourism Development in Addis Ababa City, Ethiopia (Karuturi Venkata Suryabhagavan jan.2017)

### **3.2. Research approach**

Depending on the nature of data, a research approach could be qualitative, quantitative or mixed. Mixed research approach is used for the empirical data collection using numerical and verbal or qualitative data. This approach is relevant to use both qualitative and quantitative data by counterbalance the weaknesses of one method with the strengths of another. Thus, in light of the above facts mentioned in the conceptual framework, this method which enable to the student researcher to evaluate TVET- Tourism industry linkage in Addis Ababa City Administration.

### **3.3. Research Design**

It is a plan to use the various procedures and tasks required to complete the study. According to C.R. Kothari (2004), research design is to provide for the collection of relevant evidence with minimal expenditure of effort, time and money. The preparation of such a design facilitates research to be as efficient as possible yielding maximal information. For this, what employed is descriptive survey research design to explain the features of the population under study and more specifically to describe the demographic component of the needed segment in a reasonable way. A survey approach used to gain an overall picture (Geeta, 2006). So, as the research is going to use a survey self-administered questionnaires, descriptive survey design is the best method to address the research problem under investigation.

### **3.4. Sources of Data**

In order to present a wide range of information, both primary and secondary data sources used in the study. Primary data gathered from public and private officials, trainer assistances and Tourism industry/ real industry practitioners by using data collection tools such as, questionnaires and semi structured interviews, observation and document review. To strengthen the primary data, secondary data will be gathered from related books, journals, magazines, working papers, and previous reports.

### **3.5. Population, sample size and sampling techniques**

#### **3.5.1. Population**

The population refers to the total number of people that are going to be benefited from research findings as the sample is drawn from them. As it is believed unmanageable to

include the entire population in the research; the researchers select **258** study samples from the total study population. The total number of trainers in three selected Technical Vocational Education Training s offering tourism and hotel management related programs in Addis Ababa is 46. More specifically, the number of trainers in CTTI, Misrak Polytechnic College, lion Tourism institute and Winget Polytechnic College is 21, 8, 10 and 7 respectively and Addis Ababa Technical Vocational Education Training Agency 10, and the Ministry of Tourism10, From Addis Ababa Tourism Bureau16, and From Federal Technical Vocational Education Training 10.

From the industry side/ real industry practitioners/, there are 131 total number of Hotels in Addis Ababa those are, five star hotel 10, four star hotel 40 and three star Hotels 81 and Tour and travel operator 35. The study's whole sample is shown in the table below.

### **Total Sample of the Study in Technical Vocational Education Training - Industry Linkage**

Members to be selected among *supply-side of TVE and Demand-side of industry* among linked stakeholders based on sample size to each stratum by proportional to the sizes of their strata calculated in *sample size determination part*.

<b>Responsible line industries and public sectors</b>	<b>No of organizations</b>	<b>Total number of experts from each institute</b>	<b>Data collection tool</b>	<b>Remark</b>
From hotels	131	131	Questioner	
Tour and travel operator	35	35	Questioner	
From Ministry of Tourism	1	10	Interview/group discussion	
From Addis Ababa TVET agency	1	10	Interview/group discussion	
From Addis Ababa Tourism Bureau	1	16	Questioner	
From Federal TVET	1	10	Interview/group discussion	
TVET Trainers	4	46	Questioner	

Responsible line industries and public sectors	No of organizations	Total number of experts from each institute	Data collection tool	Remark
<b>Grand Total 258</b>				

### 3.5.2. Sampling Techniques

Due to limited resources, there is almost always the need to sample respondents for investigation. Sampling is the statistical process of selecting a subset called a “sample” of a population of interest purposes making observations and statistical inferences about that population. Consequently, in this research both probability and non-probability sampling strategies applied. This is because; probability sampling allows generalizing the findings to a broader population, while non probability sampling allows drawing conclusions about the specific subjects of the research.

Thus, based on the probability and non-probability sampling techniques, stratified sampling technique and purposive sampling technique utilized respectively. Probability sampling method used to gather data from Technical Vocational Education Training trainers and hoteliers.

For the questionnaires probability sampling (i.e. stratified sampling technique) and for the interview non-probability sampling (i.e. purposive sampling technique) employed. Similar observation is carried out to evaluate the status (update-ness) of training standards and their application in the workplace. *The rational for selecting questionnaire* is as it is a technique used to focus on the differences in the views of the various groups like in the form heterogeneous samples in their profession and status of stratified random sampling to measure their attitudes towards thing (Fisher and Buglear, 2010).

In addition, this method helps to improve the representativeness of a sample. Finally, the researchers choose this method in order to generate unbiased statistics and more accurate information that may represent the true value of the study population. Hence, the sample divided in to three stratum (The sample frame was from each hotel one Manager and higher officials in federal technical vocational education training agency, Addis Ababa technical vocational education training agency, and four technical vocational education training institutes with their trainers).

Purposive sampling was utilized as the sampling approach for the interview. This technique was chosen because it allows for the collection of in-depth data by asking challenging questions on the topic at hand whenever necessary (Kumar, 2011). Additionally, observation is chosen because it is necessary to harmonize often altered training standards in implementation to guarantee technology up-to-dated where industry current requirements are expected to be satisfied. All in all, these could aid in triangulating the data as needed

### 3.5.3. Sample Size

The formula to determine sample size for total hotel industry is scholarly proposed by (Naing, 2003, p. 4).

$$n = \frac{N}{1 + Ne^2} = n = \frac{131}{1 + 131(0.05)^2} = 99$$

Where:

n= the size of the sample

N= the size of the population

e<sup>2</sup>= the margin of error

Thus, based on the above formula, the sample size of the research is 99 hotels, from three-star 62, from four-star 30 and from five-star 7 total 99 responses expected respectively. That means for the validity and reliability of data, from each hotel will have one manager.

As far as the sample size for tour and travel operators is concerned, due to their manageable size the researcher conducted census on 35 tour operators. Similarly, census method was applied to collect data from 41 TVET trainers from four TVET polytechnic colleges, and from 15 team leader and directors who work at Addis Ababa TVET Bureau.

To select from each stratum or allocate the sample size to each stratum by *proportional to the sizes of the strata*

That is, if  $P_i$  represents the proportion of population included in stratum  $i$ , and  $n$  represents the total sample size, the number of elements selected from stratum  $i$  ( $n_i$ ) is  $n.P_i$ , i.e.  $n_i = n(N_i/N)$

### 3.5.4. Data Gathering Tools

The questionnaires distributed to the sample of selected public and private experts, trainer assistances, s and graduates in the respective industries. Since the research applies a

triangulation approach, the questionnaires a combination both closed ended and open ended. The interviewees were chosen by the researcher with purpose for the interview. Consequently, the *interviewees* will be officials both in federal and A.A. city technical vocational education training agencies as well as polytechnic colleges. The rationale for this is, since these people are more knowledgeable and familiar regarding the technical vocational education training -industry linkages implementation of practice and challenges for years. In addition, observation & document analysis employed to substantiate the data gathered through other means. The observation done on target group (s) from which they are the direct beneficiaries of technical vocational education training education and training delivery

### **3.6. Procedure of Data Collection**

Since the study uses descriptive research design, the data collection method that will be used in the research is survey. The rationale of choosing a survey method is that; it is a fact-finding study and it helps to collect data about people's practice, intentions, beliefs, attitudes, judgments, perceptions and the like. For this reason, data gathering tools/instruments will be used in the research are self-administered questionnaires and semi-structured interviews.

### **3.7. Reliability and validity of data collection instruments**

Reliability and validity are used to test the quality of data gathering tools through pilot study undertaken just before the official research endeavor. Both constitute the foundational pillars of research those are to ensure quality tests of reliability and validity of the use and reporting of data (Wagemaker, 2020). But there are conceptual differences between reliability and validity in science. Accordingly, measurement may be reliable but not valid, but it cannot be valid without being reliable. That is, reliability is a necessary but not sufficient condition for validity (Garson, 2013).

Reliability is about the measurement of the same phenomena at different times and places yields the same measurement (Garson, 2013). The internal consistency or reliability estimate will be calculated using Cronbachs coefficient of Alpha for the questionnaire. Cronbachs alpha results should give you a number from 0 to 1, but you can get negative numbers as well. A negative number indicates that something is wrong with your data— perhaps you forgot to reverse score some items. The general rule of thumb is that a Cronbachs alpha of .70 and above is good, .80 and above is better, and .90 and above is best. Adequate reliability exists when the Cronbachs Alpha ( $\alpha$ ) is .80 or higher.

Whereas, validity is needed to test how the tools have measured as expected what to measure. Validity of a study's instruments is an important step at different levels to provide data to the researchers to clarify the structure to be used to describe different types of variables (Creemers, Kyriakides and Sammons, 2010). To ensure the validity of the instruments, initially the instrument is prepared by the researchers under the close guidance of the advisor which have the close relation with the subject under study and provide their inputs for the validity of the instruments. Similarly, to pre-test the instrument, pilot test will be carried out. Hence, based on respondent responses addition, omission and modification of question made.

If the study were to be done a second time and yields the same results we call the data are reliable. Consequently, if more than one person is observing behavior or some event, all observers should agree on what is being recorded in order to claim that the data are reliable. The same to validity, reliability also has both internal and external aspects.

Therefore, researcher will ensure the validity and reliability of the research through properly implementing mixed research methods and procedures as explained in the previous sections of this proposal. The researcher will follows up appropriate steps to develop standardized data collection instruments such as key informant interview guide, personal observation checklist and questionnaire survey and using tested models (WSM) which consider the source and richness of data to be collected. The researcher will take care of procedures in the selection of suitable sample design, sample size, sample response and data gathering procedures in order to get unbiased and rich information. In addition to that, during the analysis and interpretation cross check and triangulations of data gathered by different instruments will be insured.

Table: The reliability of data collection instruments

Variables	Cronbach 's Alpha	No of Items
The Existing Policies Support for TVET-Industry Linkage Implementation	0.840	10
Organizational Capacity to Facilitate Effective TVET-Industry Linkage Implementation	0.838	10
The Practical Challenges to TVET-Industry Linkage Implementation	0.812	10

### **3.8. Method of Data Analysis**

Data gathered using different data collection instruments analyzed using quantitative and qualitative data analysis techniques. The data obtained by using questionnaires will be processed by using the Scientific Package for Social Science (SPSS) version 25. The statistical methods that used to analyze quantitative data are descriptive statistics (frequency, percentage mean, and standard deviation). Tables and graphs used to present the data more elaborately in accordance with their importance. While the data was obtained through interview, observation, open ended questions and document review analyzed thematically. If there is idea difference between the supply-side and demand-side respondents, the researcher will try to analyze the gap by considering where the linkage blocked and see what strategic solution to be sought.

### **3.9. Ethical Considerations**

Ethics are the standards of conducts of a profession or group defined at disciplinary level to be used as code of conduct. Ethical issues in research command increased attention today. Ethical issues are research plans to be addressed at different phases beginning a study during data collection, analysis, interpretation; and even in reporting, sharing, and storing data. The ethical considerations that need to be anticipated are extensive, and they are reflected through the research process (Creswell, 2013).

So, ethics is generally a set of ‘rules, principles and conventions’ that outline socially acceptable behaviors that comprises of *Informed Consent* to provide a detailed clarification of the research’s purposes for research informants. Then, *Voluntary Participation* is mandatory to ensure the participation is on voluntary basis. Moreover, *Respect for Privacy* is crucial to avoided participants’ embarrassment and discomfort about study and question. Besides, *Safeguarding the Anonymity of Participants and the Confidentiality of Data* helps to not expose the participants based on response & data. Finally, *Accuracy of Report and Results* is a needed requirement as *advancements* in academic fields involve dignity, honesty and openness; the researcher must take the responsibility of reporting data and result that are the most accurate.

Based on this, the researcher carefully considers the quality and dependability of the data and controls the thesis for any biases.

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

The study tried to assess —The Practices and Challenges of TVET – Tourism Industry Linkage in the Case of AA City Administration. This section of the paper focuses on analysis, presentation, and interpretation of data collected from respondents mentioned in the methodology part of the paper. The qualitative data gathered through interview were analyzed using thematic analysis. Moreover, qualitative data gathered via questioner were processed by using SPSS version 25, and analyzed using descriptive statistics (frequency, percentage, mean and standard deviation).

#### 4.1. Response Rate

For this study a total of 218 were distributed questionnaires and interviews undertaken to TVET and tourism Industry Side's experts, trainers and officials. In Table 4-1 depicts that among the distributed questionnaires 188 (100 %) and the returned were 184 (97.34 %) with a response rate of 97.87 %. However, show that among all expected respondents from hotels, tour operators, Addis Ababa Tourism Bureau and the four college trainer, only the remaining 5 (2.66 %) were failed to return due to their personal reason.

Table 4.1: The Number of Distributed and Returned Questionnaires

No	Respondent Category	Distributed questionnaires	Returned	Percentage of the returned
1.	From hotels	99	97	97.97 %
2	From travel and tour operators	32	31	96.87%
3	From Addis Ababa Tourism Bureau	15	15	100%
4	TVET Trainers	41	41	100%
<b>Total</b>		<b>188</b>	<b>184</b>	<b>97.87 %</b>

Source; SPSS output computed on own survey, (2021)

**Table 4.2: The Number of planed and Retuned Interviews**

No.	Respondent Category	Planed Interviews	interviews conducted	Percentage of the returned
1.	From Ministry of Tourism	10	10	80
2.	From Addis Ababa TVET Bureau	10	9	90
	From Federal TVET	10	10	100
<b>Total</b>		<b>30</b>	<b>27</b>	<b>90 %</b>

Likewise, Table 4.2 shows that among the expected 30 (100%) interviewees From Addis Ababa TVET Bureau 1 (3 %) not interviewed due to the skill symposium and exhibition held at AA level though 29(97 %) were interviewed from TVET and Tourism Sector side.

#### **4.2. Demographic Data**

Based on the answers provided in questionnaires, the respondent characteristics of sex, age, education level, and experience were analyzed. As a result, the interpretations of the data are shown in table 4-3, which shows that of the total respondents for whom questionnaires were issued and interviews were conducted, 159 (86.44 %) were men and 25 (13.66 %) were women. This suggests that there are more men than women working in TVET and tourism industry.

In terms of age classification most of the respondents 143 (77.59 %) were classified under 31-40 years old, respondents more than 40 years were 27 (14.75%) the second highest and the third classified respondents 14 (7.65 %) were classified under 20-30 years old. This implies more number of the respondents is under 31-40 years old.

Regarding the educational level, most of the respondents were first degree graduates which accounted for 149 (80.87%), respondents who graduates Masters and above were accounted 17 (9.28%) and the remaining 18 (9.83 %) of respondents were "C" level and Diploma holders and certificate level. This implies more number of the respondents is degree owners.

Regarding their working experiences, most respondents were an experienced and have work experiences of 11-15 that accounted 104 (56.28%), while respondents who have

experiences of above 15 are accounted 45 (24.59%). And those with the experience of 5-10 are accounted 27 (14.76 %). The remaining respondents had an experience of below 5 in their respective organizations are accounted 8 (4.37%) of the total.

**Table 4.3: Demographic Data**

<b>Sex of Respondents</b>	<b>Frequency</b>	<b>Percent</b>
Male	159	86.44
Female	25	13.66
Total	184	100.0
<b>Age of Respondents</b>		
20-30	14	7.65
31-40	143	77.59
Above 40	27	14.75
Total	184	100.0
<b>Educational Qualification Level</b>		
"C" level/deploma	17	9.28
Degree	149	80.87
MA/MSc	18	9.83
Total	184	100.0
<b>Work Experience</b>		
Below 5	8	4.37
5-10	27	14.76
11-15	104	56.28
Above 15	45	24.59
Total	184	100.0

#### **4.3. Descriptive Statistics Identifying the Scale**

Illustration of the descriptive statistics for each main constructs and its dimensions using frequency (percentile) is given on this part. A total of 248 statements were presented to respondents in the AA city from industry and TVET side through the structured questionnaire to measure Assessment of TVET – Industry Linkage: The Case of Tourism Sector in Addis Ababa City.

To present the result of independent variables, mainly practice industry lead Cooperative Training implementation, industry lead occupational assessment and employment opportunities based on current official OSs. The descriptive analysis used frequency tables and pie chart for the responses given by the respondents on their exposure in training and development practice of the organization as well as the process in training and development.

On the other hand, for the research questionnaire designed using 5 points of Likert Scale indicated the extent they agree with the statements by choosing: 1- Strongly Agree, 2- Agree, 3-Undecided, 4-Disagree and 5-Strongly Disagree. Based on the response of the respondents percentile will be calculated of 0-1.5 means that the respondents strongly dis

greed, between 1.50 to 2.50 means they disagreed, 2.50 to 3.50 means the respondents were neutral, 3.50-4.50 means they agreed and above 4.50 means the respondents strongly agreed.

#### 4.4 The Policies Supporting Technical Vocational Education Training -Industries Linkage

Items	Measure ment	Stron gly disagr	Disag ree	Undeci ded	Agr ee	Strongly agree	Mean	Standard deviation
There is legal framework for TVET- Industry linkage implementation	<i>f</i>	21	83	9	71	-	2.64	0.96
	%	11.22	45.37	4.88	38.54	-		
There are Policies Supports for TVET- industry linkage implementation	<i>f</i>	-	92	3	89	-	2.97	1.08
	%	-	50.24	1.46	48.29	-		
The Implementation of Policies and strategies in enhancing TVET-Industry linkage	<i>f</i>	-	100	47	37	-	2.65	0.96
	%	-	54.63	25.85	20.00	-		
There is Effective TVET-Industry linkage implementation	<i>f</i>	63	85	27	9	-	1.88	0.68
	%	34.75	46.19	14.41	4.66	-		
The awareness of how the OSs have beendeveloped on the trainers/staffs practitioners	<i>f</i>	66	89	25	3	1	1.81	0.66
	%	36.02	48.73	13.56	1.27	0.42		
Real practitioner industries have leading role in labor market study	<i>f</i>	40	115	27	2	-	1.93	0.7
	%	22.03	63.14	13.98	0.85	-		
Real practitioner industries have leading role in the development of OSs	<i>f</i>	79	88	17	-	-	1.66	0.6
	%	43	48	9	-	-		
Awareness that has been created before recent OSs are made accessible to end users	<i>f</i>	66	93	24	1	-	1.78	0.65
	%	36.02	50.42	13.14	0.42	-		
Real practitioner industries have leadingrole in the preparation of ATs based on updated OSs	<i>f</i>	130	42	12	-	-	1.36	0.49
	%	71.19	22.03	6.78	-	-		
Industry involvement in national occupational assessment	<i>f</i>	24	133	27	-	-	2	0.72
	%	13	72	14	-	-		

The consideration of legal framework in the first row of the table 4.4 has been focusing on how the implementation of TVET-Industry linkage legalized. Among the total respondents disagree 83 (45.37 %) and strongly disagree 21 (11.22 %) responded respectively. Whereas, 71 (38.54%) rated agree and the remaining some 9 (4.88 %) was undecided. (The mean score 2.64 and standard deviation 0.96) which is under the agreement score of respondents ensures the support of the linkage in legalizing was unsatisfactory.

Similarly, based on open-ended questions responses and interviewees of 29 (97%) From both sides, the current TVET proclamation emphasizes government organizations 'responsible to provide CTs but not clearly promotes the linkage. They added that except the National TVET Strategy (2008) and Tourism sector Strategy, there is no national document which emphasizes the need for TVET-Industry linkage. Even, there has been no legal representation and proper involvement of the real practitioner industries with full sense of accountability. The real problem for the agency is the unresolved issue of being fully and legally empowered and supported in every sense by the government. Then added, the capacity of FTA requires basically a legal basis as being empowered to act upon all the stakeholders in the industry for the linkage to work properly.

Regarding the policies Supports to implementation of Linkage in the second row of the table, 92 (50.24 %) of the participants disagreed to the issue. Whereas, 89 (48.29%) rated agree and the remaining few 3 (1.46 %) were undecided. (The average mean value 2.97 and standard deviation 1.08) which indicated the insufficient of the policy support to the linkage. Similarly, from open-ended questions responses and interviewees of 29 (97 %) both sides concerning the issue under discussion said that the out-come TVET strategy insists the creation of the linkage and FTA Agency to lead the implementation.

Concerning the implementation of policies to the linkage in the third row of the table emphasizes the level on which the policies put in to effect. Accordingly, 100 (54.63%) of the participants responded disagree. However, 37 (20 %) agreed with the issue and the undecided responses were 47 (25.85 %) as well. (The mean score of total respondents 2.65 and standard deviation 0.96) which was below the score indicated the unsuccessfulness of the policies implementation.

Correspondingly, among Tourism industry side concerns of open-ended questions responses and interviewees on policy implementation, respondents said that in Tourism Sector TVET-industry linkage is supported by Ethiopian culture policy the pillar —Education and Training.!

Regarding Effective TVET-Industry Linkage **in row 4 focusing** on the extent the linkage implementation has been functioning up to now, among whom disagreed 85 (46.19 %) supported by 63 (34.7 %) strongly agreed but only 9 (4.66 %) agreed. The remaining was on undecided category with 27 (14.41 %). (The mean score of **respondents was 1.88** and standard deviation 0.68) which is **very low of** the total score of respondents shown us the linkage is not effective.

From open-ended questions responses and interviewees including previous director who is now working as a GIZ project said that TVET-Industry linkage in our country is still at initial stage and it is basically government driven so far. Primarily, the industry which FTA understands in Ethiopian context is not real industry because FTA calls Government Line Ministries as industries. Actually, the industry from international experience is those companies engaged in service provision. Usually the term 'private sector' is interchangeably used for industry. Besides, organized private sectors like chambers and professional associations are part of industry. The line ministries and associated development institutes are rather government organizations supporting industries. This is one major concept deviation to be corrected. Secondly, the private sector/industry landscape mapping towards strategic TVET-industry linkage has not been properly done so far. These has resulted from structural problem to be implemented to the level expected. They added that there is poor or unclear legal provision to enhance the linkage.

Moreover, there is also low capacity of TVET system in human resource, facilities, networking and commitment to mobilize prominent actors manifested in poor planning capability and budget allocation to mobilize relevant stakeholders. The FTA has detrimental role in effectively implementing the linkage away from acting as a sole governmental organization. This is mainly because the outcome-based TVET system by itself cannot be implemented without existence this linkage. In principle, the demand for qualified workforce, which is the basis for TVET programs emanates from the industry and those graduates of TVET to be destined to land in the industry. Meaning for smooth interaction and harmonization of the demand side to the supply an effective linkage is so decisive.

Among industry side concerns regarding the linkage, 3 respondents believed the importance of linking the education to their sector by making possible guidelines, allocating funds and mobilizing potential donors. The ministry of tourism support with limited budget for development of standard and training delivery. Similarly, 2 respondents

from Tourism Sector said not effectively applied due to lack organized follow-up mechanisms.

Likewise, from data analysis of government current official report of FTA the gaps in line ministry and other stake holders in establishing linkage. Tourism Sector said challenges in resource related issues (Cost of consumables, etc.) in the industry, lack of alignment (poor planning), lack of standards, communication issues, lack clear demarcation of power on ways of standards development, misunderstanding of unique sectorial behavior (generalization of the system) and complication..

As indicated in row 5 of the table, the awareness on OSs development has emphasized that it has been also the decisive factor to consider how it may have impact on the realization of the linkage. Of which, more of the respondents 89 (48.73 %) and 66 (36.02 %) ranked disagree and strongly disagree. However, those few who were on the opposite spectrum chose with agree and strongly agree were 3 (1.27%) and 1 (0.42 %). Moreover, the remaining of 28 (13.56 %) rated undecided. (The mean result of respondents which was 1.81 and standard deviation 0.66) which shows the awareness on OSs particularly on trainers is very low.

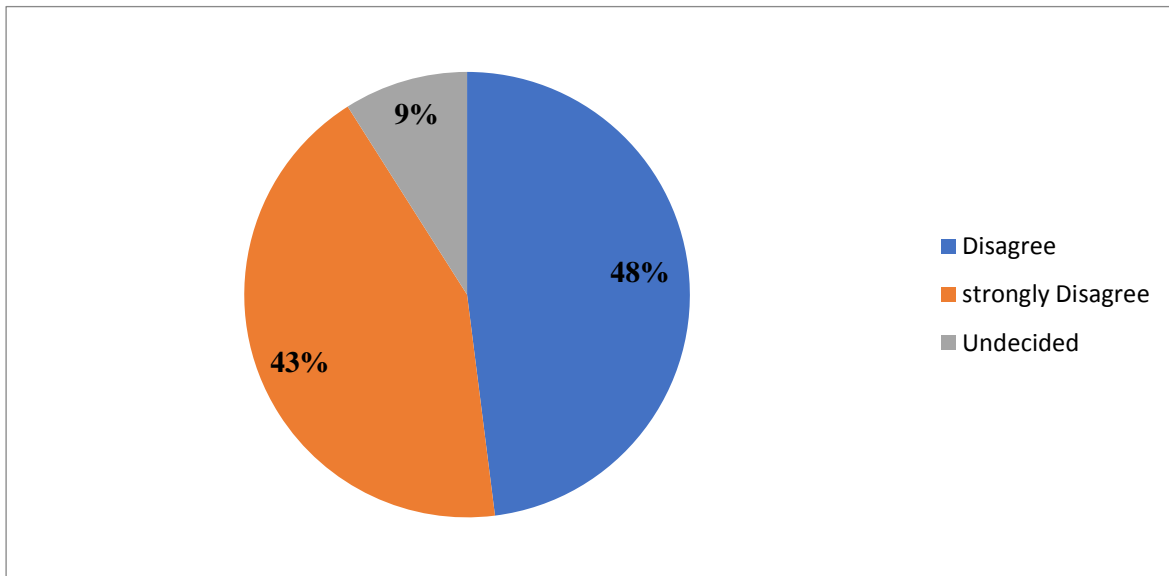
In row 6 of the table, the strategically issue of labor market study which is expected to be undertaken by benchmarking international and national best practices is displayed. The output of the labor market study is the direct and the only base form developing the mother document/OSs of the TVET system by strategic involvement of the real Tourism practitioner industries. More specifically, regarding the statistical analysis is of the labor market study, most of the respondents 115 (63.14%) and 40 (22.03 %) chosen disagree and strongly disagreed respectively. Conversely, those few on the opposite stand with agree were 2 (0.85 %). Furthermore those with undecided category were 27 (13.98 %). Even, having a mean score of 1.93 and standard deviation 0.7 confirmed us that labor market study undertaking is very low.

The logical descends of labor market is also shown in row 7 focusing on the involvement of real Tourism practitioner industries leading role the development of OSs that is a mother document to the TVET implementation.

This is unquestionably the true foundation for realistic occupational assessment, cooperative training, and other implementation components in both the TVET and business environments. As a result, 88 (48 %) and 79 (43 %) of respondents disagreed and strongly disagreed, respectively. However, the remaining 17 people (9%) fell into the category of

being unsure. This is also guaranteed by the overall **mean score of 1.66** and standard deviation of 0.6, both of which are below the agreement score of the respondents.

It is also figuratively presented with Pie Chart in 4.2.



**Figure 4.2: The Real Practitioner Industries Lead Developed OSs**

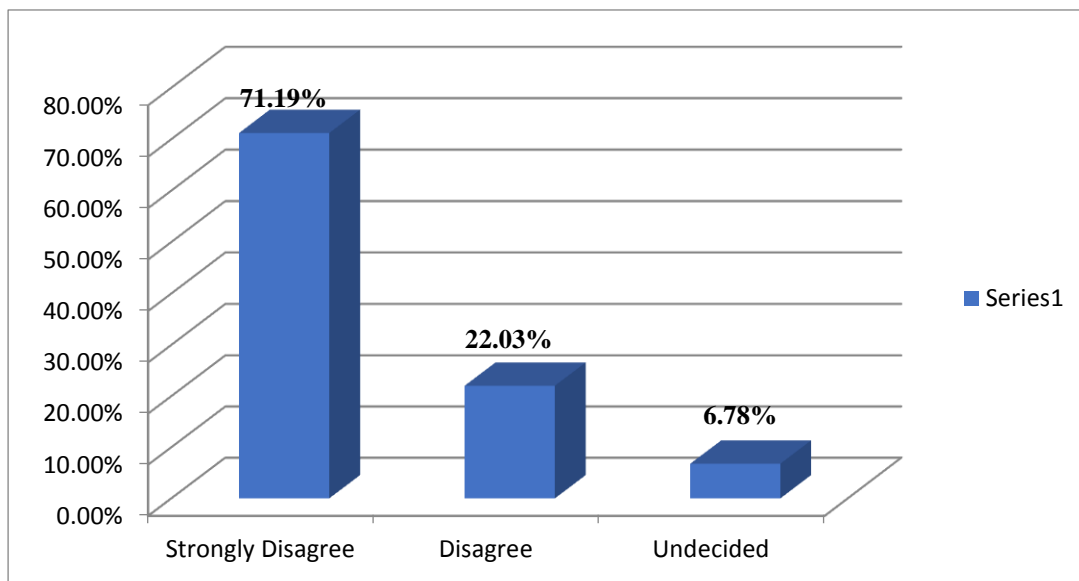
The level of real industries involvement in OSs, interviewees and opened questions responses everything accomplished so far by the name of the industry, including OSs development have been through diplomatic approach, negotiations and goodwill from the other end (industry). There are of lack of proper involvement of experts from local Tourism industries, most of the content of our OSs from which benchmarked are similar to the benchmarked countries.

Thus, OSs does not describe not only —what are expected from employees or what employers are expecting from employees; but they are also tools for maintenance and improving professional status of union members. Even in the level of real practitioners ‘industries involvement in OSs development has been poor due to the absence of appropriate experts/professional associations. Due to lack of awareness, the industries are not volunteers to send their relevant experts to be engaged workshops. So, the sector has been assigning experts that have poor experience in the occupations.

Among industry side concerns also said that Tourism Sector practitioners were highly participated in all OS preparation with the support from FTA. Accordingly, 8 Occupations namely front office service , food and beverage service, culinary art, Housekeeping and

laundry service, Tour guide, Bakery and Pastry Production, Tour Operation and Food and Beverage Control . However, reviewing the status of the OS after three years has shown that it has gaps needs to be rectified. Regarding the awareness creation before OSs dissemination **in row 8 is** to check the status. Hence, 93 (50.42 %) of the participants responded disagree and 66 (36.02 %) strongly disagree though very few on the other spectrum chosen agree 1 (0.42 %). The remaining with undecided category were 24 (13.14 %). (The average mean **value 1.78** and standard deviation 0.65) which indicated that proper awareness **hasn't been** created during dissemination.

Concerning the real practitioner industries leading role in the preparation of ATs in row 9 emphasizes how the tools are properly prepared by industry experts. Accordingly, 130 (71.19 %) and 42 (22.03 %) of the participants rated strongly disagree and disagree respectively. The rest had chosen 12(6.78 %) undecided. Even, the mean score of total respondents **1.36** and standard deviation 0.49 which was very low indicated the **unsuccessfulness** of ATs preparation with industry direct involvement. These have been also illustrated in Figure 4.3.



**Figure 4.3: The Assessment Based on Updated OSs**

Concerning the Industry involvement in national occupational assessment in row 10 focuses on how real practitioner industries get engaged in occupational assessment. Therefore, 24 (13%) and 133 (72 %) of the participants rated strongly disagree and disagree respectively. The rest chose 27 (14 %) undecided. Even, the **mean score 2** and standard deviation 0.72 below the agreement score of the respondents the industry experts **didn't involve** in assessment to the expected level.

Regarding the data analysis of government official report of occupational assessment, there are efforts to have additional versions of ATs to solve problems the shortage but still there are still leakages of Assessment tools. Digitalizing ATs has been 2019 window server resources allocation have been done and 4 modifying data systems Stills to ensure safety of ATs management have been done by experts by installing licensed antiviruses. To reduce fear related with habitually called CoC (actually called ATs) attitude of assesses and enhance assessment system awareness different medias have been popularized.

#### 4.5 The Organizational Capacity to Ensure TVET-Industry Linkage Implementation

The organizational capacity to ensure TVET-industry linkage implementation all issues that has to be been strategically undertaken based on current real practitioners industry developed national OSs to ensure training quality. More particularly, it encompasses nearly related to shared-plans, resources allocation, CT implementation, practical, occupational assessment and how two ways communication have been undertaken by all relevant stakeholders and partners. However, the focus is again how the industry get involve in almost all aspects.

**Table 4.5: The Organizational Capacity to ensure TVET-Industry Linkage**

Items	Measurement	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	Mean	Standard deviation
There is MoU between Industries and/or line Ministries/TVET colleges	f	-	39	127	17	-	2.87	1.04
	%	-	21.6	69.5	9.3	-		
There is TVET-Industry Joint Action Plan for meaningful implementation	f	32	132	19	-	-	2.92	1.06
	%	17.8	72.0	10.2	-	-		
Industries allocate tools, equipment and machineries for TVET's practical training	f	-	100	25	58	-	2.77	1
	%	-	54.7	13.6	31.8	-		
Occupational assessment has been conducted based on the updated version OSs	f	23	151	9	-	-	1.92	0.7
	%	12.7	82.2	4.9	-	-		
There is strong role played by technical support of colleges to the linkage	f	118	42	23	-	-	2.48	0.9
	%	64.4	22.9	12.7	-	-		
The poly- technique college gives	f	87	23	72	-	-		1.05

recognition to companies which host trainees.	%	47.9	12.7	39.4	-	-	2.91	
Real practitioner industries involved in Curriculum designing and TTLM.	f	94	21	68	-	-	2.86	1.04
	%	51.3	11.9	36.9	-	-		
The existing official OSs are bases for CT	f	47	77	22	17	20	2.37	0.86
	%	25.8	41.9	12.3	9.3	10.6		
Industries provide insurance coverage for student during CT.	f	118	46	19	-	-	1.46	0.53
	%	64.4	25.4	10.2	-	-		
Colleges have feed backing culture on official OSs	f	-	162	21	-	-	2.11	0.76
	%	-	88.6	11.4	-	-		

As depicted in table 4.5. Regarding MOU of the linkage, the 39(21.6%) of the sample respondents rated disagree to the signing of MoU. On the contrary, there were also 17(9.3%) who chosen agree category. The remaining majority falls on undecided 127 (69.5). Based on the mean 2.87 and standard deviation 1.04 it is likely to conclude that MOU signing from federal to college level unsatisfactory. Based on open-ended questions, responses including interviewees 27 of both sides said perception challenges on the linkage even in the Federal Technical Vocational Education Training Agency in not Signing MoU with ministry of tourism or Tourism industry to facilitate OSs and ATs development.

Regarding the Joint Action Plan, majority 132 (72 %) disagreed complemented with 32 (17.8 %) strongly disagreed. There are also participants who chose neutral range 19 (10.2). Accordingly, the average value 2.92 and standard deviation 1.06 tells us that joint action plan between the bodies of unsuccessful. Likewise, data analysis of government current official report of Federal Technical Vocational Education Training Agency gaps in having uniform plan with line ministries.

Industries provision of tools, equipment and machineries for Technical Vocational Education Training -industry linkage helps to see the status of the implementation. Hence, majority of participants ranked disagree 100 (54.7 %). Whereas, the opposite spectrum we had responses with agree rate 58(31.8 %). The rest were also on the neutral with 25 (13.5 %). To summarize with the average which is 2.77 and standard deviation 1 which deduced that provision of resources is below the expected.

The issue of occupational assessment based on updated version OSs was triad to be addressed fourth row. Accordingly, in most of the respondents of rated disagree 151(82.2 %) supported by 23 (12.7 %) in the in similar room. The undecided rate here was only 9

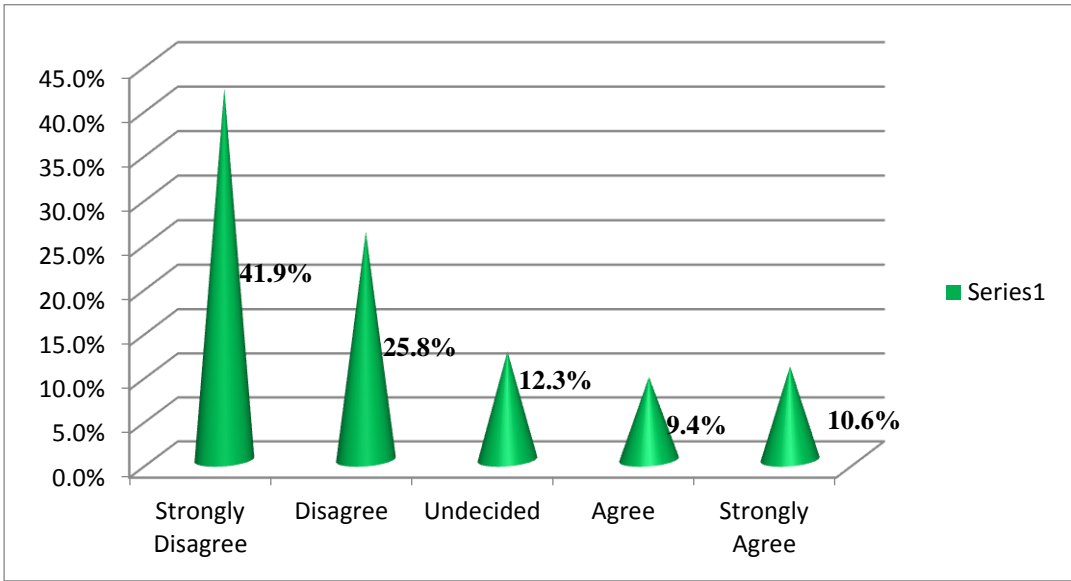
(4.9 %). Consequently, the very low mean score of 1.92 and the small standard deviation of 0.7 clearly indicate that there are gaps in assessment based on OSs.

On technical support of Technical Vocational Education Training Colleges to ensure the linkage, most respondents 118 (64.4 %) ranked strongly disagree complemented with it neighbor disagree with 42 (22.9 %). However no rate went the opposite but there are some who chose undecided by 23 (12.7 %). The disagreement is assured also by the total mean score and standard deviation which was 2.48 and 0.9 below the agreement score of the respondents exacerbated by the linkage implementation at college level.

Relating to poly-technique college recognition for companies which host trainees in row 6, 87 (47.9 %) of respondents were strongly disagreeing with the issue supported by 23 (12.7 %) disagreed. There also 72 (39.4 %) undecided and the mean and standard deviation score 2.91 and 1.05 is below the agreement score of the respondents indicated that recognition provision is not that much successful.

Issue of curriculum designing by engaging real practitioner industries was sort of in seventh row. There more 94 (51.3 %) of the respondents got together for strongly disagree rate with supplemented with 21 (11.9 %) disagree of the total. Moreover, those who chose neutral were also 68 (36.9 %). Regarding the mean and standard deviation score which is 2.86 and 1.04 respectively is below agreement score of the respondents shown that practitioner industries participation in curriculum designing is not successful.

The existing official OSs is bases for CT implementation. Among, the total respondents, most of them rated disagree 77 (41.9%) supplemented with strongly disagree 47 (25.8 %). Conversely, there were ranks in agree 17 (9.4 %) and 22 (10.6 %). The remaining was undecided with a rank of 22 (12.3 %). Likewise, the mean and standard deviation score 2.37 and 0.86 respectively is below agreement score of the respondents helps to deduce the CT is unsuccessful with real industry direct involvement. These have been also illustrated in figure 4.4.



**Figure 4.4: CT Delivered based on OSs**

Based on open-ended questions responses and interviewees of 14 and 13 both sides, there is good practices in CTTI, together with same industries have employment linkage. Though no feed backing has been done but additional training has been given to trainees to fill the skills gaps identified the study in addition to the OSs.

Among industry side concerns, Tourism minister respondents said commitment of higher officials in regions, follow up by Federal Technical Vocational Education Training Agency, there is JAP with industries but forgotten by both sectors, preparation of TTLM and ATs are always initiated from the industry.

In particular, one response from the minister of tourism stated that despite the Tourism OSs being prepared about two years ago, they have not yet been approved and put into practice because to frequent changes in higher officials and a lack of funding.

More particularly, from 15 (50%) respondents from industry, said that there is a declined in industry to host trainees in practical training, industries unwillingness to take risk while training incur cost of consumable goods to the industry.

Based on the observation data analysis of Technical Vocational Education Training colleges and Tourism industry, training programs has been mostly delivered at the institution level with the fear of the pandemic Covid-19 on the side of the industries now resulted poor achievement in CT in workplace setting.

The direct descendant of CT is insurance coverage to students is displayed in row 9. Hence, the big majority categorized themselves in strongly disagree 118 (64.4 %)

supported by disagreed 46 (25.4 %). The rest rated undecided by 19 (10.2 %). The mean and standard deviation score of having 1.46 and 0.53 respectively is very low that the issue of insurance coverage is not almost properly implemented (if there is an accident occurred on trainees).

In the last row of the table, feed backing culture on official OSs was dealt. Accordingly, the highest majority of respondents 162 (88.6 %) were under disagree with some undecided responses of 21 (11.4 %). The mean 2.11 and standard deviation is 0.76 score below agreement score of the respondents shown us that there is poor feed backing cultures by the end users on national OSs.

#### 4.6.The Practical Challenges to Technical Vocational Education Training -

##### Industry Linkage Implementation

Items	Measurement	Strongly disagree	Disagree	Undecided	Agree	Strongly Agree	Mean	Standard deviation
Industries conduct needs assessment and monitoring	f	28	127	27	2	-	2.14	0.78
	%	15.1	69.3	14.6	1	-		
There are gaps in newly OSs	f	31	91	62	-	-	4.2	1.52
	%	16.9	49.6	33.5	-	-		
OSs have been harmonized with the previous version using curriculum and TTLM	f	68	96	18	-	-	1.73	0.63
	%	37.3	52.5	10.2	-	-		
Industries are visited regularly by TVET trainers and trainees	f	43	86	21	16	18	2.34	0.85
	%	23.3	47	11.9	8.1	9.7		
Resistance from industries to accept students for CT	f	-	2	6	175	-	3.94	1.43
	%	-	0.8	3.4	95.8	-		
There are skill gaps in TVET graduates to therequired industry demands	f	-	-	11	143	31	4.1	1.49
	%	-	-	6	77.5	16.5		
TVET graduates have got employment opportunities based on occupationalassessment	f	77	67	24	15	-	1.88	0.68
	%	41.9	36.4	13.1	8.6	-		
The nearby industries and TVET college work with local community.	f	25	121	24	12	-	2.26	0.82
	%	13.6	66.1	13.1	7.2	-		
Recent OSs are used as immediate guideline for industries daily activities	f	9	54	103	19	-	2.71	1.98
	%	4.7	29.2	55.9	10.2	-		
Official training OSs are harmonized with the industries technology and innovation	f	27	132	23	2	-	2	0.72
	%	14.4	72	12.7	0.9	-		

The table 4.6., regarding in the industries conduct needs assessment and monitoring, most of the respondents 127 (69.3 %) disagreed with the issue complemented with 28 (15.1 %) strongly disagreed. On the contrary, only few rated agree 2 (1 %) and the remaining with undecided rank were 27 (14.6 %). This is also assured by the mean and standard deviation score which was 2.14 and 0.78 that need assessment is not properly undertaken by industries.

In row 2 of the table, vis-à-vis gaps on newly developed OSs were analyzed. Accordingly, majority of the participants 91 (49.6) rated agreed with the presence of gaps in OSs supported with strongly agreed scaled 31 (16.9 %). The rest participants responded undecided 62 (33.5). Even, the mean 4.2 and standard deviation value 1.52 is very high implied that there are gaps in newly developed OSs in contents and forms in relation to standards set.

In the third row regarding OSs harmonization, majority of the participated ranked disagree 96 (52.5) and associated with strongly agreed 68 (37.3 %). The rest some rated undecided 18(10.2 %). The mean and standard deviation score 1.73 and 0.63 is very low implied that OSs harmonization is not successful in most cases.

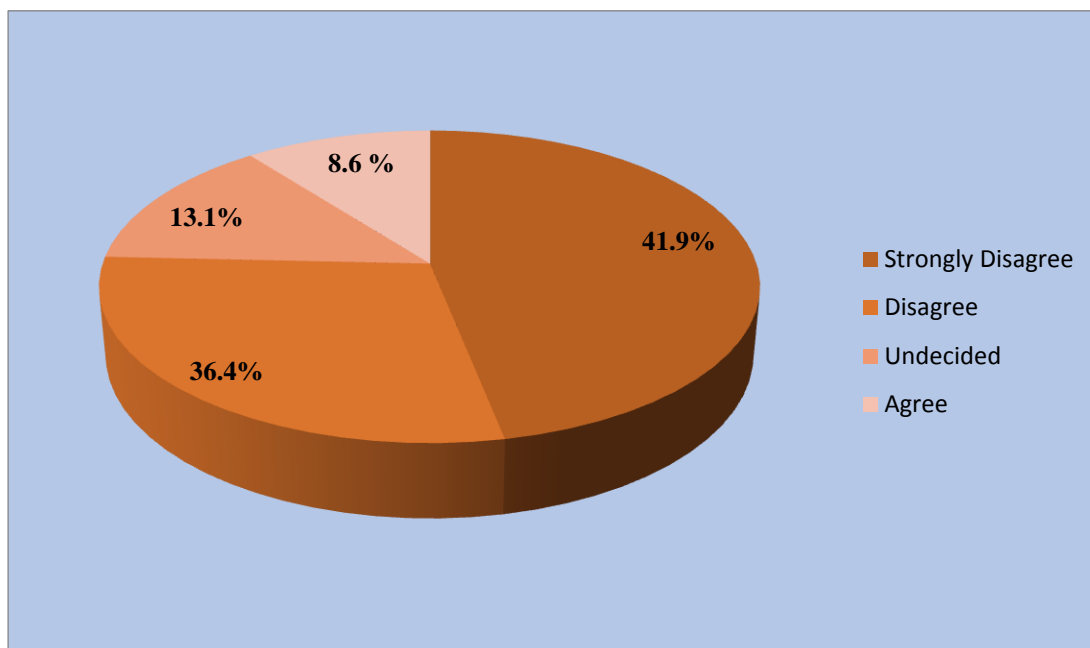
Concerning trainees regular visit to industries in row 4, many respondents 86 (47%) chosen complemented 43 (23.3 %). Contrariwise, some 16 (8.1 %) ranked agree followed with strongly agreed 18 (9.7 %). Those who were neutral were 21 (11.9%). The average mean and standard deviation score 2.34 and 0.85 implied that industries were not visited regularly.

Relating to industry resistance to host trainees in row 5, most respondents 175 (95.8%) agreed. Contrariwise, few 2 (0.8 %) ranked disagree. Those who were neutral were 6 (3.4 %). The average mean and standard deviation score 3.94 and 1.43 is very high implied that industries are not willing to host trainees. From the open-ended questions including interviews 13 (93.75 %), decline of industry to host trainees in practical training, industries unwilling to take risk while training students as they seek payment from other agency and even industries are afraid of financial, time resource to meet the standards.

Recounting to skills gaps of Technical Vocational Education Training graduates in row 6, most of the participant's 143 (77.5 %) agreed to it presence supplemented with 31 (16.5 %) strongly agreed. The remaining raters with undecided accounted for 11 (6 %). The average mean and standard deviation very high score 4.1 and 1.49 implied that there is skills gaps on Technical Vocational Education Training graduates.

In row 7 of the table focusing on Technical Vocational Education Training -industry linkage

implementation related with employment opportunities based on Assessment. This is mostly realized through proper match between the demands of skilled man power of industries with supply of skilled man power of Technical Vocational Education Training to them. Accordingly, most respondents accounted for 77 (41.9 %) and 67 (36.4 %) strongly disagreed and disagreed respectively that Technical Vocational Education Training graduate has employment opportunities depicts positive output of the study. Besides, some other rated undecided 24 (13.1 %). However, there some on the other extreme stand with agree 15(8.6%) being fewer than therest. In addition, these have been also illustrated in figure 4.5.



**Figure 4.5: The Employment Opportunities of Technical Vocational Education Training Graduates**

Based on 13 and 14 open-ended questions responses and interviewees of both sides on the practical challenges to the linkage, skill mismatch commonly observed during CT implementations to ensure OS gaps. The number of training programs being delivered in Tourism Sector is 20 OSs officially available nationally. Even, industries frequent complaining on OS for being direct copied from German and Australia and even some OSs are bulky in contents to manage in the timeframe. The Agency studied labor market to see gaps in the OSs and reflect in consultative meetings. These may have far reaching gaps of Technical Vocational Education Training graduates in employment opportunity by industries.

About colleges working with local community in row 7 of the table, most of the respondents

121 (66.1 %) ranged disagree followed with its neighborhood 25 (13.6%) strongly-disagreed. Inversely, some 12 (7.2 %) ranked agree with the remaining neutral rate of 25 (13.1 %). The average mean and standard deviation score 2.26 and 0.82 below the average implied that the colleges are not working with communities as expected.

In row 8 of the table under discussion on the industries 'using of OSs as immediate guideline for their daily tasks, majority of respondents 103 (55.9 %) were on undecided category. However, those some disagreed comprised of 54 (29.2 %) accompanied with its own type strongly disagreed by 9 (4.7 %). Dissimilarly, those who agreed were only 19 (10.2 %). The average mean and standard deviation score 2.71 and 1.98 is below the average implied that industries are not using OSs as their immediate guideline.

In last row the table focusing on OSs harmonization with technology and innovation, most of respondents 132 (72 %) ranked disagree accompanied with 27 (14.4 %) strongly agreed. Nevertheless, very few 2 (0.9 %) chosen agree with the rest 23 (12.7%) left on undecided. The average mean and standard deviation score 2 and 0.72 shows below the score means OSs harmonization with current technologies and innovation **is not accomplished** as expected.

From the practices and challenges of technical vocational education training – tourism industry linkage in Ethiopia: the case of A.A city administration. There are selected relevant variables based on three research questions aligned with the conceptual framework. Accordingly, the effects of independent variables namely ct, occupational assessment and employment opportunities to real industry lead OSs development.

The current technical vocational education training proclamation emphasizes government organizations 'responsible to provide CTS but not clearly promotes the linkage. They added that except the national technical vocational education training strategy (2008) and industry development strategy (2003), there is no national document which emphasizes the need for the linkage. Though there are some legal provisions like technical vocational education training strategy and proclamation, they need to be improved further. Even, the current technical vocational education training organization and management is incapable of promoting technical vocational education training -industry linkage due low human power quality and capacity, poor planning, budgeting and networking, and lack of commitment and confidence sticking to national policy and directives. However, 1 respondent enunciated 2021 the new policy and strategy with incentives mechanisms.

Hence, there has been no legal representation and proper involvement of the real practitioner industries with full sense of accountability. The real problem for the agency is the

unresolved issue of being fully and legally empowered and supported in every sense by the government. The capacity of federal technical vocational education training agency requires basically a legal basis of empowerment to act upon all the stakeholders in the industry for the linkage to work properly. Actually, the availability of funding, infrastructure and other inputs required the linkage effective implementation via legal empowerment given to the federal technical vocational education training agency by the government. If not properly empowered, the federal technical vocational education training agency doesn't have even the power to claim. Hence, federal technical vocational education training agency is doing things without proper empowerment from the government and the power to act upon others that have the stake in proper infrastructure and other resources. So, to establish effective and strong technical vocational education training - industry linkage, there must first be strong technical vocational education training system with legal backup.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter mainly deals about Summary of Major Findings, Conclusions and Recommendations based on the analysis conducted in the immediate previous chapter.

#### 5.1. Summary of Major Findings

Regarding the existing policies support for technical vocational education training -industry linkage implementation, the following summary sought of: the consideration of legal framework, a total of respondents 104 (56.58 %) disagreed and strongly disagreed respectively. Whereas, 71 (38.54%) agreed on the issue with the remaining 9 (4.88 %) undecided rates. The mean and standard deviation score 2.64 and 0.96 which is under the agreement score of respondents ensures the support of the linkage in legalizing was unsatisfactory. Similarly, open-ended questions responses and interviewees confirmed that technical vocational education training poor or unclear legal provision to enhance the linkage.

Regarding the policies supports to the linkage implementation, more 92 (50.24 %) participants disagreed to the issue though 89 (48.29 %) agreed with the remaining few 3 (1.46 %) undecided accordingly. The average mean and standard deviation value 2.97 and 1.08 indicated the insufficient of the policy support to the linkage. Correspondingly, from open-ended questions responses and interviewees concerning the issue said that the out-come technical vocational education training strategy insists the creation of the linkage and federal technical vocational education training agency to lead the implementation.

Concerning the implementation of policies to the linkage, more 100 (54.63 %) disagreed but 37 (20 %) agreed with some undecided 47 (25.85 %) as well. The mean and standard deviation score of total respondents 2.65 and 0.96 which was below the score indicated the unsuccessfulness of the policies implementation. Compatibly, among industry side concerns of open-ended questions responses and interviewees on the issue, the tourism policy supports tourism human capital development by strong academics and service integration and the technical vocational education training strategy also guides standardization.

Regarding effective technical vocational education training -industry linkage, whom disagreed 85 (46.19 %) supported by strongly agreed were 63 (34.7 %) but only 9 (4.66 %) agreed. The remaining was on undecided category with 27 (14.41 %). The mean standard deviation score 1.88 and 0.68 which is very low of the total score of respondents shown us

the linkage is not effective.

From open-ended questions responses and interviewees, the linkage in our country is still at initial stage and basically government driven so far. Primarily, the industry which federal technical vocational education training agency understands in Ethiopian context is not real industry government line ministries/tourism minister are called as industries. The line ministries and associated development institutes are rather government organizations supporting industries. Internationally industries are those companies engaged in service provision.

Besides, organized private sectors like chambers and professional associations are part of industry. Secondly, the private sector/industry landscape mapping towards strategic technical vocational education training -industry linkage has not been properly done so far. These has resulted from structural problem to be implemented to the level expected. Even, technical vocational education training system low capacity in human resource, facilities, networking and commitment to mobilize prominent actors manifested in poor planning capability and budget allocation to mobilize relevant stakeholders in industries and partners.

Federal technical vocational education training agency has detrimental role in effectively implementing the linkage mainly because the outcome-based technical vocational education training system be realized. Smooth interaction and harmonization of the demand side to the supply an effective linkage is so decisive that the reverse brings the total collapse of the technical vocational education training system. Among industry side concerns, tourism sector believed the importance of linking in mobilizing potential actors and allocating funds for development of standard and training delivery.

Likewise, from data analysis of federal technical vocational education training agency current official report, there are gaps in line ministry and other stake holders in establishing linkage. Tourism sector said challenges in resource related issues (cost of consumables, etc.), poor planning, lack of awareness, lack of standards, lack clear demarcation of power on ways of standards development, misunderstanding of unique pectoral behavior (generalization of the system) and complication and broadness of tourism disciplines.

Concerning the awareness OSs development process, total of most 90 (48.73 %) and 66 (36.02 %) was disagreed and strongly disagreed. However, only few agreed and strongly agreed 3 (1.27 %). Moreover, the remaining 25 (13.56 %) rated undecided. The mean and standard deviation score 1.81 and 0.66 shows the awareness on OSs particularly on trainers is very low.

Vis-à-vis labor market study by real practitioner industries leading role, most 156 (84.87 %) chosen disagree and strongly disagreed individually. Conversely, few agreed were only 2 (0.85 %) and undecided category was 26 (13.98 %). Even, having a mean and standard deviation score of 1.93 and 0.7 confirmed us that labor market study undertaking is very low.

Similarly, the leading role of real practitioner industries in OSs development, most accounted for disagreed and strongly disagreed 168 (91.21 %) but the remaining some 16 (9 %) undecided on the deal. This is also assured by the total mean and standard deviation score 1.66 and 0.6 below the agreement score of the respondents. Also, interviewees and opened questions responses confirmed that everything accomplished so far by the name of the industry, including OSs development have been through diplomatic approach, negotiations and goodwill from the other end (industry). There are of lack of proper involvement of experts from local industries, most content of our OSs from were similar to the benchmarked countries.

Even in the level of real practitioners 'industries involvement in OSs development has been poor. Due to lack of awareness, the industries are not volunteers to send their relevant experts to be engaged workshops. So, the sector has been assigning experienced experts direct from their offices or the expertise that have low experience in the industry. The major drawbacks to get the right people from the industry for joint activities and industry's blessing/endorsement on finalized documents of OSs.

Regarding the awareness creation before OSs dissemination OSs, most 159 (86.5 %) disagreed and strongly disagreed though very few 1 (0.4 %) agreed. The remaining 24 (13.14 %) undecided and the average mean value 1.78 indicated that proper awareness hasn't been created during dissemination.

Relating to the real practitioner industries leading role in the preparation of ATS, most 171 (93 %) strongly disagreed and disagreed. The rest 12 (6.78 %) undecided and the mean score of total respondents 1.36 which was very low indicated the unsuccessfulness ATS preparation with industry direct involvement. Accordingly, national occupational assessment by industry involvement, most 158 (85.6 %) strongly disagreed and disagreed. The rest 27

(14 %) undecided and the mean and standard deviation score 2 and 0.72 is below the agreement score tells us the industry experts didn't involve in assessment to the expected level.

Concerning the organizational capacity to ensure technical vocational education training - industry linkage implementation is abridged here below:

Regarding MOU signing of the linkage, some 39 (21.6 %) disagreed but 17 (9.3%) agreed. The remaining majority 127 (69.5 %) undecided and the mean 2.87 and 1.04 it is likely to conclude that MOU signing from federal to A.A city administration to colleges and nearby industries is at unsatisfactory level. Based on open-ended questions responses and interviewees said that there are perception challenges on the linkage even in the federal technical vocational education training agency in not signing MOU with ministry of tourism to facilitate OSs and ATS preparation by which facilitates the ct implementation.

In the issue related to the joint action plan of the linkage, majority 165 (89.8 %) disagreed completed with strongly disagreed. Hence, those chose neutral were 19(10.2) and the mean and standard deviation score value 2.92 and 1.06 tells us that joint action plan between was unsuccessful. Likewise, data analysis of government current official report indicated gaps in having uniform plan with tourism minister.

Apropos industries provision of tools, equipment and machineries for the technical vocational education training - industry linkage implementation, more 100 (54.7 %) disagreed though 58 (31.8 %) agreed. The rest 25 (13.5 %) undecided and the mean standard deviation score 2.77and 1 deduced that provision of resources is below the expected.

The issue of occupational assessment based on updated OSs, majority 175 (94.9 %) disagreed supported by strongly disagreed. But,the undecided was only 9 (5.1 %) and the mean and standard deviation score 1.92 and 0.7 clearly shown as gaps in assessment based on OSs.

The technical support of technical vocational education training colleges to ensure the linkage, most 161 (70.6 %) strongly disagreed complemented with disagreed. However, the remaining 23 (12.7%) undecided on the issue and the disagreement is assured also by the mean and standard deviation score 2.48 and 0.9 which is below the agreement score of the respondents.

Recounting to poly- technique college recognition for companies hosting trainees, more 111 (60.6 %) strongly disagreed buoyed by disagree. There were also 73 (39.4%) undecided

and the mean score 2.91 is below the agreement score of the respondents indicated that recognition provision of colleges to the contributing industries is not that much successful.

The curriculum designing by engaging real practitioner industries, more 116 (63.1%) strongly disagreed supplemented with disagreed. Moreover, those 68 (36.9 %) chose neutral and the mean and standard deviation score 2.86 and 1.04 is below agreement score of the respondents shown that practitioner industries participation in curriculum designing is not successful.

Concerning ct based on official OSs implementation, more 125 (67.7 %) disagreed supplemented with strongly disagreed. Conversely, there were ranks in agree and strongly agree by 17(9.4 %) and 20 (10.6 %). The remaining 22 (12.3 %) undecided and the mean and standard deviation score 2.37 and 0.86 is below agreement score of the respondents helps to deduce the ct is unsuccessful with real industry direct involvement. More particularly, 1 respondent from ministry of tourism said that though tourism OSs developed in 3 years ago back but not yet implemented due to higher officials frequently changes and the shortage of focus. More particularly, from 14 (93.75 %) respondents from tourism industry said that there is a declined in industry to host trainees in practical training, industries unwillingness to take risk while training incur cost. There are resources constraints for training implementation in occupations like hotel operation and cultural and foreign food preparation. Furthermore, the observation data analysis results of technical vocational education training colleges and industry, training programs has been mostly delivered at the institution level with the fear of the pandemic covid-19 on the side of the industries now resulted poor achievement in ct in workplace setting.

For that reason, concerning insurance coverage to trainees, the big majority 165 (89.8 %) strongly disagreed supported by disagreed. The rest 19 (10.2 %) undecided and the mean and standard deviation score of having 1.46 and 0.53 is very low implies that insurance coverage is almost not implemented.

Dealing on feed backing culture on OSs, the highest majority 163 (88.6 %) disagreed but 21 (11.4 %) undecided. The mean and standard deviation score 2.11 and 0.76 shown us that there is poor feed backing culture by the end users on OSs. Similarly, open-ended questions responses and interviewees, only CTTC undertaken OS deficits assessment though no formal feed backing done. When gaps identified, additional training has been given to trainees in addition to the OSs to fill the skill gaps.

Relating to the practical challenges to technical vocational education training -industry linkage implementation, the researcher tried to condense the major findings as displayed

below:

Regarding in the industries needs assessment and monitoring, most 155 (84.3 %) disagreed complemented with strongly disagreed. Whereas, only few 2 (1.3 %) agreed with remaining 27 (14.6 %) undecided. The mean and standard deviation score 2.14 and 0.78 also assured that need assessment is not properly undertaken by industries.

Concerning the gaps on newly developed OSs, majority 123 (66.5 %) agreed supported with strongly agreed. The rest responded undecided 62 (33.5) and the mean and standard deviation value is very high implied that there are gaps in newly developed OSs. In relations to this, OSs harmonization with the previous version, majority 165 (89.8%) disagreed associated with strongly agreed. The rest some 18 (10.2 %) undecided and the mean and standard deviation score 1.73 and 0.63 is very low implied that OSs harmonization is not successful in most cases.

Concerning trainees 'regular visit to industries, many respondents 129 (70.3 %) disagreed complemented strongly disagreed. Contrariwise, some 33(17.8 %) ranked agree followed with strongly agreed. Those who were neutral were 21 (11.9 %). The average mean score 2.34 implied that industries were not visited regularly. Concerning industry resistance to host trainees, most respondents 176(95.8 %) agreed but few 2 (0.8 %) disagreed. Those who were neutral were 6 (3.4 %). The average mean and standard deviation score 3.94 and 1.43 is very high implied that industries are not willing to host trainees. From the open-ended questions including interviews, industry decline to host trainees in practical training an unwilling to take risk while training seek payment from other agency and even industries are afraid of time resource to meet the standards.

Recounting to skills gaps of technical vocational education training graduates, most 173 (94 %) agreed supplemented with strongly agreed. The remaining 11 (6 %) accounted for undecided. The average mean and standard deviation very high score 4.1 and 1.49 implied that there is skill gaps on technical vocational education training graduates. As a result, employment opportunities of technical vocational education training graduates based on assessment, most respondents accounted for 144 (78.3 %) strongly disagreed and disagreed. Besides, some other 24 (13.1 %) undecided and 15(8.6%) agreed.

Similarly, based open-ended questions responses and interviewees of 14 and 13 both sides, there is good practices in CTTC, together with a number of industries have employment linkage. Tracer study had been done and better industries are coming to the college. There is also a system of ETS to check where the graduates have been employed and during implementations skill mismatch commonly observed to ensure OS gaps at A.A level. Even,

industries frequent complaining on OS for being direct copied from benchmarked counties and some OSs are bulky in contents to manage in the timeframe.

About colleges working with local community, most 147 (79.7 %) disagreed followed neighborhood with strongly disagreed. Inversely, some 12 (7.2 %) agreed with the remaining 24 (13.1 %) undecided. The average mean and standard deviation score 2.26 and 0.82 is below the average implied that the colleges are not working with communities as expected.

Regarding industries use of OSs as immediate guideline, majority 103 (55.9 %) undecided though some 63(33.9 %) disagreed accompanied with strongly disagreed. Dissimilarly, those who agreed were only 19 (10.2 %). The average mean and standard deviation score 2.71 and 0.98 is below the average implied that industries are not using OSs as their immediate guideline.

On the topic of OSs harmonization with technology and innovation, most 160 (86.4%) disagreed accompanied with strongly agreed. Nevertheless, very few 2 (0.9 %) agreed with the rest 23 (12.7 %) undecided. The average mean and standard deviation score 2 and 0.72 is below the score means OSs harmonization with current technologies and innovation is not accomplished as required.

## **5.2. Conclusions**

Based on the results of the study, the following conclusions were drawn

*Regarding the Existing Policies Support for Technical Vocational Education Training - Industry Linkage Implementation, the following major points sought of:*

The government must fully empower FTA in every way to influence the industry's stakeholders for the linkage, which is a legal issue that has not yet been resolved. The current TVET proclamation does not explicitly promote the linkage though strategies of TVET and industry have been highlighted, and there is no legal representation and proper involvement of the real practitioner industries with full feeling of accountability. The policies supporting the integration of TVET are insufficient, and the policies of other sectors do not align with the TVET agenda. Since the linkage is mostly pushed by the government, it is ineffective. There are also gaps in the FTA, line ministries, and other stakeholder organizations when it comes to building the linkage in terms of resources.

Trainers and higher officials, as well as surrounding industries, are not well informed on OS development. Before OSs is distributed for training, there has not been a sufficient effort made to raise awareness among all pertinent end users. There is a lack of understanding regarding Technical Vocational Education Training role and responsibilities related to

outcome-based strategy on the part of some line ministries as a result of the labor market study, which is very low by which practitioner industries haven't led the strategic endeavor OSs development and approval.

No data management was centralized in one place at the colleges' websites or the Addis Abeba Technical Vocational Education Training Agency, Real tourism industry professionals' preparation failure is due to their involvement. Despite efforts to prepare for future ATs versions, there are still ATs/sample exam leaks that allow some of the national assessment to be completed without using training that is driven by OSs. Some occupations lack assessors' follow-up mechanisms and there is dread surrounding CoC (officially termed ATs), according to Federal Technical Vocational Education Training Agency coaches.

*Concerning the organizational capacity to ensure Technical Vocational Education Training -Industry linkage implementation, the following foremost facts concluded:*

Unsatisfactory MOU signing from federal to college level led to an ineffective cooperative action plan and uniform plans at various levels. The industries' supply of tools, equipment, and machinery for the implementation of the Technical Vocational Education Training - Industry Linkage is less than anticipated. The Polytechnic College's identification of businesses hosting trainees is unsuccessful due to the limited technical support provided by Technical Vocational Education Training Colleges to ensure the linkage. The real practitioner industries are not directly evolved in curriculum designing.

In fact, hosting trainees for CT has decreased due to industries' unwillingness to take risks while training incurs costs for which almost no insurance is reimbursed. CT deployment based on official OSs is unsuccessful in all tourism occupations. Additionally, due to industry-wide fear of the Covid-19 epidemic, CT are now being provided at the institute level. Although there are a few effective techniques for providing additional training to fill skill shortages, the feed-back culture on official OSs hasn't been put to use.

*Relating to the practical challenges to Technical Vocational Education Training -Industry linkage implementation, the following key points deduced:*

As a result of the industries' improper assessment and monitoring practices, gaps in the compatibility of newly developed operating systems with earlier versions, and the industries' extreme opposition to hosting trainees, which prevented them from routinely visiting the industries, Although there are a few beneficial techniques, such as the establishment of ETS and the tracer study, to determine where graduates are hired, industries frequently complain that OS is cumbersome and directly copied from benchmarked countries. There are skills gaps found Technical Vocational Education Training graduates accompanied with low employment opportunities associated with their incompetence in national assessment

Because OSs are not widely known, industries do not use them as immediate guidelines, and OSs harmonization with current technologies and innovation are not carried out as required, colleges are not collaborating with communities in providing customized technology as expected.

### **5.3. Recommendations**

Based on the identified gaps of the study, the following recommendations were put forwarded:

#### **5.3.1. For Federal TVET Agency and Ministry of Tourism**

The Existing Policies Support for TVET-Industry Linkage Implementation has to be strategically approached by:

- The Federal TVET Agency legal issue has resolved to fully empower in every sense by the government to act upon all the stakeholders in the industry for the linkage to work properly.
- The TVET proclamation has to be clearly specified to promote the TVET- industry linkage
- Strategies of TVET and industry have to be improved to encompass legal representation and proper involvement of the real practitioner industries.
- Tourism sectors' policies has to be harmonized with TVET strategy to become on the same sheet
- The government driven linkage has to bring radical shift to hand over strategic endeavors to real practitioner industries.
- The awareness on establishing linkage in FTA and line ministry including other stakeholders 'higher officials has to be enhanced.

- The awareness level of trainers and other end users on OSs development processes should be increased before disseminating to users.
- FTA has to create rigorous awareness on OSs that they are technology documents harmonized with current technologies and innovation
- A sort of national platform has to be established to pave ways to smooth feed backing culture on official OSs gaps of end users of training standards
- The direct copied national OSs from host countries and their bulky in contents has to be validated using experienced real industries experts
- The awareness level of real practitioner industries on the linkage have to be enhanced to help strategic endeavor OSs development and approval to them
- Decentralized action plans emanates from FTA and relevant stakeholders has to be established and cascaded to the colleges to work with communities
- The real practitioner industries involvement in ATs preparation has to be strategically approached
- Fear of the pandemic Covid-19 has to be approached by MOH protocols and webinar technology by customizing to Ethiopia's context to ensure the continuity of TVET provision to address current in flexible modality,
- The data management of ATs has to be strictly confidential not to be leaked out as seen in some occupations and binding legal framework has to be in place to penalize those who are publically advertise CoC training to safeguard TVET system implementation up to occupational assessment gaps
- To reduce fear related with CoC (officially called ATs), awareness has to be created using different medias to enhance the implementation
- Higher officials frequent changes and the shortage of budget has to be considered heartily to simultaneously harmonize the political direction with operation duties and responsibilities

### **5.3.2. For Federal TVET Agency, Addis Ababa TVET Agency, Ministry of tourism /Polytechnic Colleges and nearby Tourism Industries**

The organizational capacity to ensure TVET-Industry linkage implementation has to be loomed thru:

- The MOU signing has to base and aligned with proclamation by FTA and AATA to ensure from federal to college uniform joint action plan at different levels.
- Decentralized action plans have to be in place has to be undertaken to ensure

industries provision of tools, equipment and machineries for the TVET- industry linkage implementation.

- AATA has to back up the technical support of TVET Colleges to ensure the linkage to the level expected.
- Win-win approach has to be devised by FTA and AATA with industries to sense their benefits with proper skilled man power to realize poly- technique college recognition for nearby industries to host trainees with initiative.
- Establishing awareness creation effort on the mutual benefits of ranging to quality service has to be undertaken to enhance the real practitioner industries involvement in curriculum designing.
- The resource of line ministry and real practitioners industries has to go beyond securing the fund to supporting in machineries, tools and equipment to training implementation of programs especially for hotel occupations.
- The awareness on practical training should enhanced focusing on quality service delivery of educational return through skilled man power provision.
- Rigorous awareness creation has to be in place for Colleges and nearby industries regarding the pandemic Covid-19 how to manage CT through MOH protocols and webinars.

### **5.3.3. For Addis Ababa TVET Agency /Polytechnic Colleges and Nearby Tourism Industries**

The Practical Challenges to TVET-Industry Linkage Implementation has to be tackled via:

- A sort of joint action plan has to be designed between Addis Ababa TVET Agency and the nearby industries to undertake assessment and monitoring semi-annually.
- Technical training on how to use newly developed OSs and curriculum conversion via harmonization with the previous version has to be continuously delivered
- Awareness creation on the mutual importance of CT ranging from joint action plan has to be strategically in place to alleviate the industries resistance in hosting trainees
- Preliminary and during implementation follow up mechanisms has to be established to check the progress undertaken and tracer study done to check the skill gaps available on graduates
- Awareness has to be created to real practitioner industries on OSs that definitely deals about technology set by their them and their counter parts nationally to make it immediate guideline in addition to training implementation

#### **5.4. Areas for Further Research**

Finally, the researcher recommends other researchers to do their research by including other factors that are not considered in the analyses of the practice and challenges of TVET-Tourism Industry linkage in AA selected colleges in more detailed ways.

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*APPENDICES*

**Addis Ababa University**  
**College of Development Studies**  
**Center for Environment and Development**  
**Program of Tourism Development and Management**

**Questionnaires for TVET trainers and Real Industry Practitioners**  
**(hoteliers, tour operators)**

Rear respondents,

The purpose of the questionnaire is to gather information on the MA research study which is entitled — Assessment of TVET – Industry Linkage: The Case of Tourism Sector in Addis Ababa City. Thus, genuine and sincere response to the items in the questionnaire helps to meet the objective of the study. Be sure that the information you provide is will be kept confidential and used only for the academic purpose. I strongly believe that your input is very important to this study, hence, I kindly request you to answer all the questions. The study is meant for impartial fulfillment of Masters of Arts Degree in Tourism Development and Management. Thank you very much for your willingness to spare 15 minutes to participate in this study.

.General Direction:

- Writing your name is not required
- Put —√|| mark wherever are alternatives chosen
- Write your opinion briefly for the open ended questions.

*Thank you for your time and cooperation!*

**Part I: Background of the Respondent**

- Sex A. Male  B. Female
- Age A. 20-30 male  B. 31-40  C. Above 40
- Level of qualification
  - A. -CII Level
  - B. Bachelor Degree
  - C. MA/MSc. and above

• Experience in years

A. Below 5

B. 5 to 10 years

C. 11 to 15

D. Above 15

**Part II: Practices and challenges of TVET-Industry Linkage**

In this part of the questioner, please put “√” mark under the number which indicates the level of your agreement/disagreement on the statements. Please read each statement carefully and choose the answer that corresponds best to your opinion and put a tick (√) mark in only one space provided for each question from the given options in the below table based on your level of agreement or disagreement. Use the following rating scale to show your agreement or disagreement. The options represent for the follow:

1= strongly disagree    2= disagree    3= undecided    4= agree    5= strongly agree.

No.	Questions	Measuring scales				
<b>I.</b>	<b>The existing policies support for TVET-industry linkage implementation</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
1.	There is legal framework for TVET-Industry Linkage Implementation					
2.	There are policy supports for TVET-Industry Linkage Implementation					
3.	There is good implementation level of policies and Strategies in enhancing TVET-Industry Linkage					
4.	There is effective TVET-Industry Linkage Implementation					
5.	Trainers/staffs/ practitioners have awareness about how the OSs have been developed					
6.	Industries have leading role in labor market study					
7.	Industries involvement in leading in the development and approval of recent Oss					
8.	Awareness level has been created before recent occupational standards are made accessible to end users					
9.	Real practitioner industries/ enterprises have leading role in the preparation of Assessment Tool based on current OSs					
10.	There is industry involvement level in national occupational assessment					
<b>II.</b>	<b>Organizational Capacity to facilitate effective TVET-Industry Linkage Implementation</b>					

1.	There is Memorandum of Understanding (MoU) between Tourism and hospitality industry and/or line Ministries/TVET colleges					
2.	There is TVET-Industry Joint Action Plan for meaningful Implementation					
3.	Tourism and hospitality industry allocate the required resources like tools, materials, equipment and machineries are suitable for TVET's Tourism practical training implementation					
4.	Occupational assessment has been conducted based on the updated version/recent OSs					
5.	There is strong role played by TVET-Industry linkage technical support office in TVET Colleges					
6.	The colleges give recognition to Tourism organizations which host trainees.					
7.	Real practitioner industries/ nearby industries are involved in OS designing and course development.					
8.	The existing official OSs are bases for Cooperative Training					
9.	Industries provide insurance coverage for student during Cooperative Training.					
10.	Colleges have feed backing culture on official OSs					
<b>III.</b>	<b>Challenges to TVET-Industry Linkage Implementation</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
1.	Industries do not conduct needs assessment and monitoring					
2.	There are gaps in newly OSs					
3.	OSs are not harmonized with the previous version using Curriculum and TTLM.					
4.	Industries are visited regularly by TVET trainers and trainees based on training schedules					
5.	There is resistance from industries to accept students for Cooperative training					
6.	There are skill gaps in TVET graduates to the required					

	industry demands					
7.	TVET graduates have got employment opportunities in industries.					
8.	The nearby industries and TVET college work with local community.					
9.	The recent OSs are used as immediate guideline for industries daily activities					
10.	Official training OSs are harmonized with the industries/nearby industries technology and innovation					

**Part III: Open-ended questions**

**Please write your opinion for the following questions.**

1. What does TVET-Industry linkage mean?

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2. What are the roles of the following stakeholders for the successful linkage of TVET and industry?

- A. Federal TVET Agency

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- B. Addis Ababa TVET Agency

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- C. TVET Colleges

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D. Industries/ nearby industries

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E. Trainers

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3. What do you think stake holders benefited from TVET industry linkage if created properly?

A. Community

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B. Industry/ Nearby industries

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C. TVET

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D. Trainers

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E. Trainees (the target group of the program)

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4. What do you think are challenges in linkage between TVET-Industries?

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5. What could be the possible solutions to the above mentioned challenges?

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6. What does Occupational Standard mean and its use?

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7. Who is responsible for the development of the OSs?

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8. What is the base for Assessment Tool Preparation, Curriculum Designing and CTs?

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## **Interview Guide for Federal and Addis Ababa TVET /Industry Officials**

The purpose of the interview is to get necessary detailed primary data on – Assessment of TVET – Industry Linkage: The Case of Tourism Sector in Addis Ababa City.¶ that help to assess The Practices and Challenges of TVET – Industry Linkage in selected stockholders .

General Information:

Service year with the current position: \_\_\_\_\_ Qualification:

Sex: \_\_\_\_\_

### ***Interview Questions:***

1. How does the existing policies support for TVET-industry linkage implementation in Tourism Sector?
2. What is the organizational capacity (funding, training, infrastructure, etc.) level to facilitate effective TVET-industry linkage implementation?
3. What is the level of OSs development by real practitioner industries involvement?
4. What are the practical challenges to TVET-industry linkage in ensuring industry ownership beginning with OSs development?
5. What is your recommendations regarding TVET-industry linkage implementation?

## Observation Checklist for the TVET Colleges and Industry

*Name of the TVET colleges/industry*

No.	Items to be measured	Responses	
		Yes	No
<b>I.</b>	<b>Points regarding status</b>		
1.	The Availability of MoU documents		
2.	The Availability of adequate tools, materials, and equipment and machinery		
3.	Management of official OSs documents		
4.	TVET graduates have been employed in the industries/self-employment		
<b>II.</b>	<b>Points regarding the number</b>	<b>#</b>	
5.	The number of current official OSs available in the institute		
6.	The number of current official OSs base for cooperative training and occupational assessment		
7.	The number of curriculums designed based on OSs		
8.	The number of practical skill trainings in the college have been delivered based on current OSs		

