

# Technical And Vocational Education And Training Institutions-Industry Relationship For Ethiopia's Labor Market Needs

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## ABSTRACT

Collaboration between industries and TVET institutions serves a vital purpose for both. The fact that industries can use TVET institutions' output as an input is convenient. A significant amount of research conducted to date has focused on cooperative training or apprenticeship attachments which emphasize technical training provided in industries facilities and resources instead of establishing an extensive and complete collaborative relationship in which both parties benefited from the link between them. An exploratory research design based in a literature review has been employed for this study. The research's primary objective is to pinpoint the most important packages for collaboration, as well as the hindrances and strategies for improving the relationship between TVET institutions and the industries. In this regard, the main initiatives that both sides undertake jointly for their mutual benefit are the elements that deeply integrate TVET Institutions and Industries. These are Technical Skill Development, conducting a Labor Market Demand Assessment, building technology Capacity, collaborative TVET Research, sharing of technical and expertise from industry, Industry's supply of placement possibilities for TVET graduates, Entrepreneurial Skill Development for SMEs, and Externship programs for TVET Teachers. Regarding the linkage's challenges, one of the primary barriers to industry-TVET collaboration, particularly in Ethiopia is the former's lack of effort and the latter's inadequate responses. This suggests that TVET institutions are not adapting to the demands of the labour market, which will lead to a mismatch in skill sets. The government's viable policy and strategy are essential for improving the relationships between TVET institutions and industries. TVET institutions ought to base all of their training on the needs of the labour market and conduct regular assessments of that demand.

**Key words-** Vocational education and Training, institutions, industries, labour market demand

## 1. Introduction

The intention of planned education and training known as technical and vocational education and training (TVET) is to provide students with the information and skills necessary for job opportunities (Hiim 2020). Moreover, OECD (2010) describe TVET as an educational programme that can have a significant contribution on economic development; by supporting to provide competent employees whose competencies are essential to the labour markets educating the young generations for jobs and upgrading the competencies of older employees. TVET has been acknowledged in the literature as having a positive impact on economic development, increasing job opportunities, and lessening joblessness (Zancajo and Valiente 2019).

Technical and vocational education and training, or TVET, is one area of education that has recently been under increased attention, particularly in developing countries. Singh & Ehlers (2020), outlined the importance of technical and vocational education and training in helping people escape poverty because it gives them the means to become more productive and earn a living. In particular, high-quality Technical and Vocational Education and Training (TVET) assists people in expanding their technology and knowledge base

in a range of occupational domains that require specific occupational skills in addition to professional and technical capabilities.

Technical and Vocational Education and Training, or TVET, is the process of combining all technical training and vocational education activities to enhance workplace learning and advance people's occupational abilities. More specifically, high-quality TVET helps people broaden their technology and knowledge base in a range of occupational areas that require professional and technical competences in addition to particular occupational abilities. According to Dobbo, 2018 the acquisition of knowledge, attitudes, and practical skills essential to various economic and social areas is the scope of technical and vocational education and training, or TVET. TVET attempts to accomplish two main objectives: firstly, it is social in nature, including youth training and workforce integration; secondly, it seeks to promote economic development and job creation (Ridge, & Kippels, 2019).

One of the primary objectives of TVET colleges is to offer top-notch instruction that will produce capable graduates with knowledge, skills, and work ethics who are motivated by market demand and market orientation. Like many other growing nations, Ethiopia's success in TVET is primarily attributable to its collaborations with training institutes and the industry (Singh & Tolessa, 2019).

The main goal of skill development is to assist individuals in acquiring marketable skills that would allow them to obtain respectable jobs for both social and financial reasons. Needs have to be considered, at the absolute least, for skill development techniques to work (Dunbar, 2013). The need for skills is changing significantly in the labour market as a result of globalization, demographic shifts, and technological improvements. In light of this, it is more important than ever to guarantee that a country's labour force have the skills that the labour market requires. Uneven results in the labour market for both individuals and businesses can result from imbalances in skills, such as excesses, shortages, and mismatches (OECD, 2017).

In order to improve cooperation between academics and industry, create mutual understanding of needs, and ascertain how industrial programs may answer those needs, TVET institutions are dedicated to fortifying their partnership with industry. TVET institutions will work with their local industry to establish standards and develop their own programs. In this case, increasing economic stability and employability will be the main objectives. Most emerging economies have instructors and enterprises that operate in different domains from one another and often interact little (Siddiky & Uh, 2020).

Industry partners must be included in the development and execution of technical education programs in order to ensure that the skills being taught are in line with what employers are seeking. Companies are becoming increasingly aware of the need to assist employees in acquiring new skills and preserving their competitiveness. Credentials can gain further legitimacy through substantial industry interaction, which raises their worth for graduates and the larger job market (Mardis et al., 2018).

According to the World Bank, TVE institutions' credibility is determined by their ability to produce young people who are competent and ready to work immediately (Rumsey, 2005). The industries get the TVET institutions' outputs as input. The Republic of Kenya (Osman et al., 2008) says that in order to query enterprises for support for improving hands-on learning through programs like staff exchanges, supplies and instrument contributions, and the employment of staff members and students on work experience attachments, technical colleges should have closed relationships with the industry.

### **1.1. Research Questions**

For this research the following research questions have been formulated: -

1. What are the main elements of Ethiopia's industry-institutions of vocational education and training collaboration?
2. What are the main obstacles to the collaboration between Ethiopian industry and institutes of vocational education and training?
3. What are the best strategies for strengthening the partnerships between Ethiopia's industry and institutes of vocational education and training?

### **1.2. Research Objectives**

**The specific objectives of this research are: -**

1. To identify the basic components of the cooperation between industries and educational vocational and training institutions.
2. To find out the main obstacles that the collaboration between industries and institutes of vocational education and training faces.
3. To identify the most efficient means of strengthening the relationships between industries and vocational educational and training institutions.

### **1.3. Research Methodology**

The study used an exploratory study design about the relationship between technical and vocational education and training institutions and industries based on a review of the literature. Accordingly, the emphasis is on identifying the collaboration's major elements and the difficulties that the relationship between TVET institutions and industries faces.

## 2. Review of Related Literature

**Singh, B., & Tolessa, M. B. (2019)** The industries' input is the TVET institutes' outputs. Hence, in order to support industry efforts to improve practical training through trainee placement on work experience attachment and staff exchange programs, technical colleges should maintain closed relationships with the working world. The purpose of this study was to determine how much TVET and business are linked to enhance employable abilities. It explained TVET's basic idea and covered the topic's current state in Ethiopia. The disparity between the knowledge produced by TVET training systems and the abilities that Ethiopian employers require is growing.

**Rijal, N. (2020)** TVET entails formal, informal, and non-formal instructional strategies that impart knowledge and abilities needed for employment (Khan, Siddiqui, & Abbasi, 2020). It would be challenging to achieve, but adding capabilities to the current approach both developed and developing countries stand to gain from the TVET system. Modern ideas began to emerge at the start of the twenty-first century, including the emergence of the knowledge-based economy, which is still difficult for underdeveloped nations in particular. In order to achieve planned future goals, a strong relationship between training providers and industry is primarily needed for TVET to be strengthened. Understanding, integrating, and implementing 21st-century learning abilities into current TVET systems and procedures, including methods for instruction, learning, and evaluation, is crucial. Thus, creating an economy based on knowledge depends on both trainees and trainers exercising critical thought, effective communication, teamwork, and creative performance.

**Wahungu, D. K., wawire, V., & kirimi, F. (2023)** Global dynamics are undergoing profound and unprecedented changes as a result of the quick changes occurring in the workplace everywhere. The explanatory power of the human capital theory was utilized to evaluate TVET's contribution to the shift of society to a knowledge economy. The literature assessment identified a conceptual gap in the study that calls for collaboration agreements between the industry and technical institutions. An in-depth overview of TVET training was provided via a descriptive survey that combined qualitative and quantitative methodologies. 489 people participated in the study: 339 trainers, 3 TVET, KAM, and LIWA directors, 24 industry representatives, 64 TVET engineering trainees, and 59 TVET engineering trainees who had graduated. The finding indicates that TVET training is the significant skills gaps in engineering courses caused by inadequate industry consultations with curriculum developers, instructors without the necessary exposure to and expertise in the workplace, and outdated and underutilized training resources.

**Jahonga, W. M., Canute, B., & Murey, E. J. (2016)** A significant factor in guaranteeing that TVET graduates receive up-to-date skill transfer is the industry-institute link that arises from the industrial attachment program among TVET institutions. The survey design used in the study was descriptive. A sample of 245 respondents—which included 30 lecturers, 3 industrial liaison officers, 5 workplace supervisors, and 207 TVET students—was chosen using a stratified proportionate simple random selection technique. The result shows that in order to ensure high-quality instruction, vocational education and training institutions must improve their ties to the industry. Several forms of cooperation were divided into five groups. These included placement opportunities provided by the business community, training and educational resources provided by the business sector to institutions, extra training provided by training institutions to industry employees, insurance coverage provided by the factories for students on IAP, and the existence of industry-training institution partnerships in research.

**Marope, P. T. M., Chakroun, B., & Holmes, K. P. (2015)** TVET in Africa is beset by inadequate and antiquated training resources. Due in large part to the lack of industrial and technical competence among most trainers as well as the gap between academia and business, the region has also seen a decline in the quality of training provided. The industrial actors can only be involved in the TVET planning process through a restricted number of methods or structured arrangements.

**Kayere, E., Moritz, S., & Paquin, C. (2019)** It is undeniable that creating an effective and easily accessible Technical and Vocational Education and Training (TVET) system is essential to producing a skilled labour force that will contribute to economic growth, productivity, and access to high-quality jobs. However, there are still gaps in Kenya's TVET system. Important one is how appropriate training is to the demands of the job market. In this regard, the purpose of this survey was to gather information about the following: (1) industry evaluations of the technical and life skills of their workers who possess technical degrees from public TVET institutions; and (2) their engagement in curriculum and program development at public TVET institutions. Purposive sampling was used to select industry respondents, and valid data was gathered from 71 industry respondents working in 31 counties. Employers believe that relationships between industry and training institutions are essential to ensuring that TVET course curriculum is pertinent and tied to job competences and that industry participates in training to minimize the need for reskilling. Partnership structures, coordinated industry interactions, and joint applied research activities between TVET institutions and industry can all help with this.

**Santos, A., & Stuart, M. (2003)** Reports show that the real-life setting of students' present and future environments and what they learn in the classroom differ significantly in the majority of countries. The key idea is that innovation both domestically and globally is fostered by the relationship between TVET and industry. It also supports economic growth and market competition. The World Bank claims that TVET's viability is dependent on its capacity to generate young people who will be working at that point in time. The

relationship between TVET and industries is essential. Technical institutions are the primary source of industry for TVET graduates, and the industry itself plays a significant role in the job market.

**Ikenga, G. U. (2022)** The relationship between TVET and industry for skill development and long-term national development was examined in the article. A descriptive survey research design was used for the investigation. Three inquiries served as the paper's focus. 53 administrators and experts in Technical and Vocational Education and Training (TVET) and 86 administrators and experts in Industry made up the 139 participants in the study, which was carried out in Enugu State, Nigeria. The study's conclusions demonstrated the benefits of linking TVET with industry, which include the following: sharing of technical and expertise, improving the standard of TVET curricula and programs, providing infrastructure and other supports, and supplying trained labour to companies.

**Nwoye, E. G., ndubuisi, B. N., omale, B. A., & nengak, I. S. (2020)** This study shows that working together between TVET and industry has several advantages, such as increasing operational efficiency, giving TVET institutions access to apprenticeship programs, giving TVET students employability skills, and reducing the expense of holding workshops and retraining for industrial workers. The study's findings also revealed strategies for improving TVET-industrial collaboration, such as fostering positive relationships between TVET instructors and companies, consulting with enterprises when developing and reforming curricula, creating a strong network for interactions, and fostering trust.

### 3. Conclusion

Collaboration between industries and TVET institutions serves a vital purpose for both. The fact that industries can use TVET institutions' output as an input is convenient. This is accurate since the output and input of an industry determine its productivity and extent of production. However, in order for TVET institutions to provide successful outcomes, industries must be properly involved in order for TVET institutions to receive the necessary inputs. In this sense, the arrangement between TVET Institutions and Industry Linkages should be based on mutually beneficial effects and should concentrate on comprehensive and recognized common issues that extend beyond the agreement. The ultimate purpose of the agreement should be to contribute to the development of the national economy. In summary, appropriate foundations of partnership between TVET Institutions and Industries should exist.

#### 3.1. The Major Elements of Collaboration between Industries and TVET institutions

The main initiatives that both sides undertake jointly for their mutual benefit are the elements that deeply integrate TVET Institutions and Industries. These are Technical Skill Development in which Training need assessments (TNAs) should be conducted by a collaborative team from TVET institutions and industries in order to develop technical skills for TVET students through cooperative training in the industries and the training institutions' offering additional training to industry experts; conducting a Labor Market Demand Assessment is another element in which Industry participation in this process and the establishment of training and occupational standard development initiatives should be enhanced; building technology Capacity is third important element undertaken by an organized team from TVET Institutions and Industry to identify and collaboratively address technology gaps that exist within the micro and small companies (SME). Moreover, collaborative TVET Research is conducted by collaborative research team from TVET Institutions and Industry to uncovers research areas or existing challenges and carries out studies that address the gaps especially in industries. Finally sharing of technical and expertise from industry, Industry's supply of placement possibilities for TVET graduates, Entrepreneurial Skill Development for SMEs, and Externship program are also among the important elements of the collaboration.

#### 3.2. The Challenges in Collaboration between Industries and TVET institutions

Regarding the linkage's challenges, one of the primary barriers to industry-TVET collaboration, particularly in Ethiopia is the former's lack of effort and the latter's inadequate responses. This suggests that TVET institutions are not adapting to the demands of the labour market, which will lead to a mismatch in skill sets. Moreover, the main relationship was discovered to be industrial attachment; Technical and Vocational Education and Training (TVET) institutions favour linkages with industries for apprenticeship attachment or cooperative training which concentrates on technical training offered in the industry's facilities and resources, instead of creating a mutually beneficial comprehensive partnership where both sides profit from their relationship.

#### 3.3. Strategies to Enhance Collaboration between Industries and TVET institutions

The government's viable policy and strategy are essential for improving the relationships between TVET institutions and industries. TVET institutions ought to base all of their training on the needs of the labour market and conduct regular assessments of that demand. Additionally, as it reduces mismatch and rework, TVET Institutions should endeavour to organize and carry out cooperative activities with industry based on joint market demand assessment. The majority of employers think that industry should have a bigger part in creating curricula and training programs and that working with training institutions is essential. Furthermore, emphasis should be placed on developing practical training and career-related skills above theoretical

knowledge. There is therefore much room for improvement in TVET's partnership with the industries in order to boost the capacities of TVET graduates in terms of curriculum development and delivery, industrial attachments and apprenticeships, and retraining.

#### 4. Limitations and Future Research

A significant amount of research conducted to date has focused on cooperative training or apprenticeship attachments which emphasize technical training provided in industries facilities and resources instead of establishing an extensive and complete collaborative relationship in which both parties benefited from the link between them. The foundations of collaboration as an all-inclusive package, which significantly increase productivity and production are neglected in the existing studies. Therefore, if further research is required to determine the extent or improve the relationship between vocational education institutions and industries, it is recommended that one look into the following areas: the extent of the implementation and factors affecting the collaboration in terms of technical skill development, the development of occupational standards, technological capacity building, collaborative TVET research, industry sharing of technical and expertise, and industry provision of placement opportunities for TVET graduates.

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