

# TVET- Industry Linkage and Collaboration in Ethiopia: A Necessity for Improving Employability Skill

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**Abstract** - The outputs of the TVET institutions are the input of the industries. Therefore technical institutions should have closed linkages with the world of work to facilitate support of industry for the enhancement of practical training through placement of trainees on work experience attachment and exchange programs for the instructional staff. This research paper aimed at establishing the extent of linkage between TVET and industry for improving employability skills. It outlined the concept of TVET and also discussed the present status of TVET in Ethiopia. The gap is widening between knowledge generated through training systems of TVET, and the skills demanded by employers in Ethiopia. Thus, the research paper recommends that the industry should provide contemporary skills by training and establish networks with TVET institutions for minimizing the gaps. The research paper highlights on how to bridge the gap between the industries and TVET institutions in Ethiopia.

**Key Words:** technical vocational education, training, institution, industries, employability skill.

## 1. INTRODUCTION

Providing quality training to produce competent graduates in Knowledge, Skill and Work ethics and demand-driven and market-oriented are some of the major components of TVET institution mission. Collaboration with the industries and the training institutions is the foremost concern in proving the success in TVET of Ethiopia like many other developing countries. UNESCO emphasizes the improvement of training systems systematically referred to the need to forge closer links between training and the labor market. Lack of initiative by TVET institutions and poor responses from the industries are among the major challenges facing the collaboration of TVET and industry, particularly in Ethiopia. It was found out that industrial attachment was the most pronounced linkage; lack of initiative by TVET institutions and poor response from the industries were among the major challenges facing the collaboration of TVET and industry [5]. This paper discussed extensively on TVET institutions and industry partners as a necessity for graduates' skill acquisition. New skills are needed and educational institutions are required to meet the need by providing not only the minimum of schooling or vocational training but also training for scientists, innovators, and high-level specialists [8]. Technical institutions should have closed linkages with the world of work to solicit support of industry in the increment of practical training through such activities as donations of equipment and tools, staff exchange programs and placement of trainees and staff on work experience attachment. The outputs of TVET institutions are the input of the industries (shown in figure-1). According to the Republic of Kenya [7], technical institutions should have closed linkages with the world of work to solicit support of industry in the enhancement of practical training through such activities as donations of equipment and tools, staff exchange programs and placement of trainees and staff on work experience attachment.

The adoption of market-responsive TVET is still on-going process in Ethiopia and a very new experience in emerging economies or those moving away from a centralized, command and control dominated recent history. The dimensions of competency in relation to Employability Skills [9] or Employability Skills for the future identified eight Employability Skills [1]: Learning, Technology, Communication, Teamwork, Problem Solving, Initiative and Enterprise, Planning & Organizing, and Self-Management.

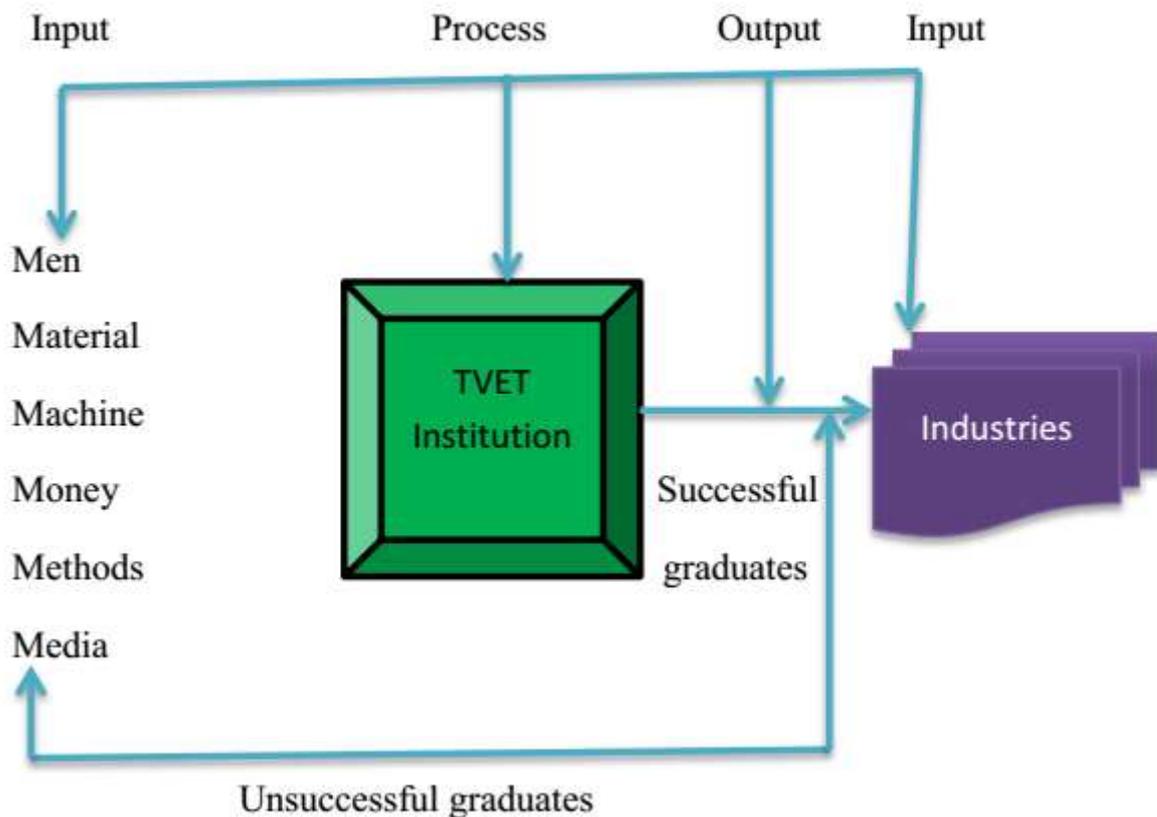


Figure: 1 Output of TVET are the inputs of industries

## 2. CONCEPT OF TVET - INDUSTRY LINKAGE IN ETHIOPIA

From too long, TVETs have been considered as the major sites for knowledge creation and accumulation. The realization that knowledge by itself does not transform economies has created the impetus to seek ways of using the knowledge acquired in various contexts [10]. With the growing importance of their role in knowledge utilization, the value of universities in assisting the economic development of a given country is widely acknowledged. The realization of using universities as the main driving forces of economic development has enticed many governments to offer strengthened focus to this consideration and to put increasing pressure on HEIs to improve national competitiveness [11] and to forge appropriate U- I linkage. The major customer of TVET is industry. Without the linkage with the industry TVET graduates cannot maintain professional competencies and also the industrial output can't be growth only with low-level human resources. The graduates of TVET are working in different countries. [12] Reports that in most countries there is a considerable gap between what is learned in the classroom and the real-life context of pupils' present and the future world. The vital point is that the correlation between TVET and the industries creates innovation in the national and international. It also helps with the competitive market and economic development. According to World Bank, the status of TVET is depends on their ability to produce young people who will be at that time operational in the workplace. The linkage is vital between TVET and industries. For TVET graduates, industry is an important place for the job market and for the industry, technical institutions are the main. Companies that link with learning institutions mainly have higher production rates than companies that do not have such relationship [13]. TVET institutions operate in an environment characterized by immediate technological progress, emerging careers, changing jobs requirements and adding competition, these changes have necessitated industry -TVET collaboration in order to address this challenge [14].

The problems facing vocational and technical education are many [15]. New skills are needed and educational institutions are required to meet the need by providing not only the minimum of vocational training but also training for scientists, innovators, and high-level specialists [16].

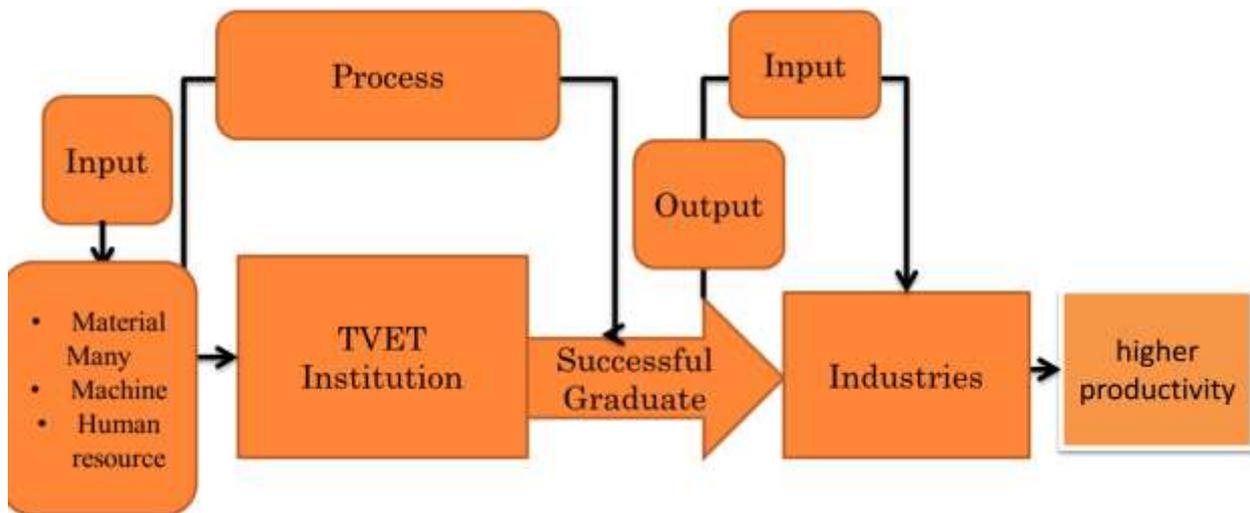


Figure: 2 Outputs of TVET is the inputs of Industries

### 3. COLLABORATION BETWEEN TVET INSTITUTION AND INDUSTRIES

The article ends with discussion, implementation issue, and recommendation that the industry should establish networks with TVET institutions for decreasing the problems of skill gaps and finally to increase employability of TVET people in Ethiopia. Collaboration between TVET and industries is critical for skills development, generation, innovation and technology transfer.

**Means of industry- institution collaborations:** TVET institutions could bridge the gap with industries by updated technologies. The TVET curriculum should consider those means of collaboration.

**Why TVET institution needs to link with industries:** The TVET institutions strictly want to strengthen links with industries to improve networking between academia and industries to create a good understanding of each other's needs and to identify how they can be met through the industries programs. The TVET institutions will have a link with their home industries to determine their standard and to develop their own curriculum. The enhancement of employability & economic stability will be ultimate ambition in this regard. In most emerging economies, educators and industry operate in different worlds and often have little contact with each other.

Frequently their social networks and association linkages have no overlap. Surveys often show a complete lack of understanding or respect for the interests and commitments of the other group. In countries with a tradition of central planning, a market place that creates demand for training is unknown. The practice has been for Government to provide free training in skills determined by the government, independent of employer demand. The system uses curriculum created by academics with little or no understanding of industry requirements or local needs.

**Consumer-driven approach:** Industry is the primary consumer of TVET graduates. Industry participation in TVET curriculum and workplace training opportunities is the primary way of achieving this. If employers are not involved in the process of the specific skills attitude and behaviors required by graduates, they are less likely to see any relevance between TVET and their skills needs.

**Effectiveness:** Very few countries can afford to provide a comprehensive and effective TVET system purely through Government financing. In many developed countries, it is estimated that up to 80% of skills development is provided by the industry for its own workers [4].

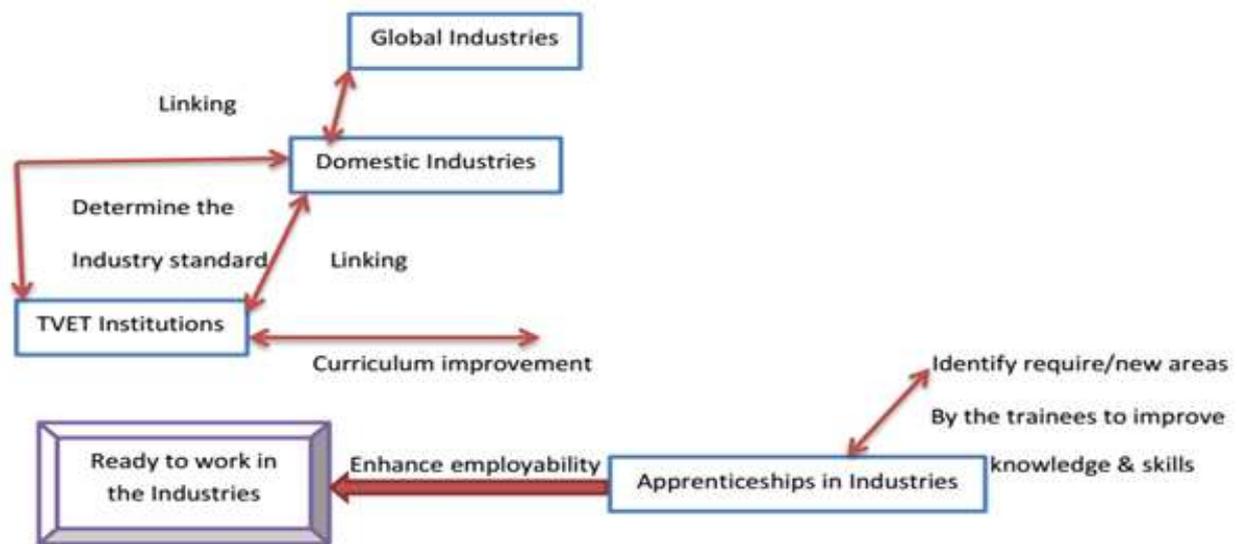


Figure:3 Linking TVET with Industries

**(i). Because industries are the primary consumer of TVET Graduates.**

The outputs of TVET institutions are the inputs of industries; the products of TVET institutions to be relevant and contribute to national development. So, effective TVET-Industry linkages must be established; this is why TVET –Industrial linkage is important for skills development, as it enhances the skills of TVET products to be relevant in world of work.

**(ii). Providing the skilled manpower to the Industries.**

The second reason why TVET Institutions need linkage with industries is to provide Knowledgeable, Skillful, having good Attitude, and work ethics trained manpower to industries, TVET institutions itself, and for non-Governments sectors.

**(iii).Cost of Material and equipment in TVET Institutions.**

TVET is a skilled oriented programmed that requires Different facilities for effective implementation involves a huge amount of money to achieve the desired goal. The cost utilized by this sector is very expensive that government cannot finance alone and because the dynamic nature of work skilled manpower required. This means, Linking TVET institutions with industries will provide the institutions access to facilities that are not in institutions to expose their students to have skills relevant to the industries.

**(iv). Improving (Changing) the wrong perception of Societies towards TVET Institution.**

The perception of people towards TVET is not good; in order to avoid the wrong perception towards TVET and avoiding the struggling of TVET graduates and to fit them in the workplace, Create the awareness of the key role of TVET institution is a powerhouse for national development.

**4. IMPORTANCE OF COOPERATIVE TRAINING**

Cooperative training is expected to play a great role in improving the quality of current Ethiopian systems and Companies get competent workforce shaped according to their demand and will be assured of the long- term availability of qualified staff in the labor market. Also they can get new technologies transferred through the trainers and trainees from training institutions and trainees are more motivated to training, and they learn more easily Since they are aware of what they are training for and how they will apply competency in their practical work. Gain practical work experience in areas that complement their personal strengths.

**4.1. Challenge Implementation of Cooperative training**

The lack of collaboration between TVET and Companies and low commitment of the industries. Sometimes TVET in Ethiopia uses curriculum prepared by academics with little or no understanding of industry requirements or local needs. The adoption of market-responsive TVET is still an on-going process in Ethiopia and a very new experience in emerging economies.

Lack of operational capacity in the industries is another problem in arranging this collaboration with the training institutions. Know, there may be fast changes in partnerships between the two parties when they will start to realize that effective collaboration brings them together for mutual benefits. Know, industry Organizations have been actively participating in TVET. TVET institutions that lack in capacity rely on personal relations with the industry, which limits them in formalizing and expanding their collaboration with enterprises.

**Curriculum upgrading:** In academic education, the curriculum is relatively stable. In TVET, a 3-year-old curriculum may be teaching the history of technology and not the skills currently required by industry. Curricula are expected to be developed with the objective of producing skilled and employable workers that can easily fit into the industry without being trained [17]. Ethiopian TVET graduates are exposed to several re-training programs since most of the graduates are regarded as unemployable going by the quality of instruction acquired from their various institutes [18].

### 5. THE COLLABORATION INITIATIVES

Collaboration initiatives (shown in figure-4) may be taken on by TVET institutions for various reasons. Of the most emphasized collaboration objectives feature; the improvement of research capacities and commercialization potentials, the improvement of technical skills, to reduce demand and supply mismatch, to enhancing of employability skills, and the promotion of knowledge transfer between institutions and the community.

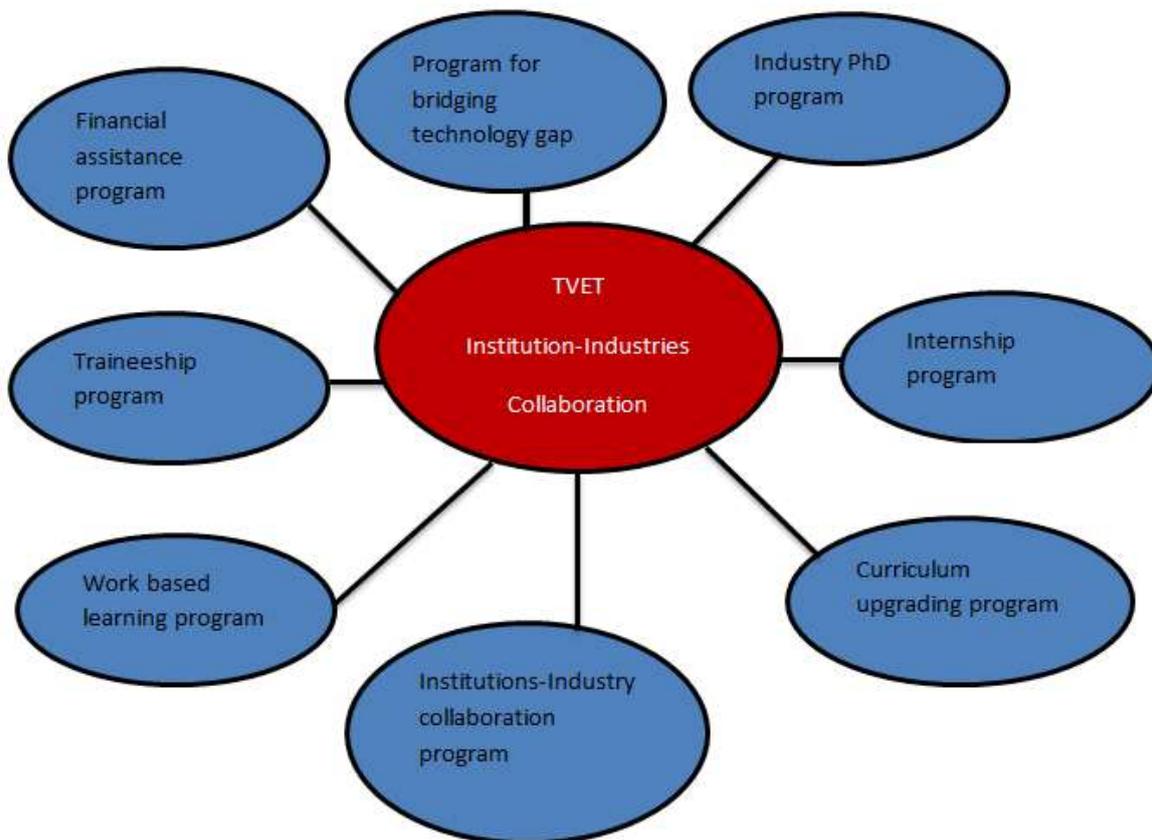


Figure: 4 Institutions & Industries Collaboration

The following collaboration initiatives of TVET-industries may consider enhancing employability skills in Ethiopia. The Industry-institution collaboration program can bridge the technological gap. The appropriate knowledge and skill required for handling modern technologies all around the world. The modern industries are equipped with sophisticated technologies that are most of the time unfamiliar by the TVET students in Ethiopia. To set up the collaboration criteria is essential for the country. Institutions too are facing a challenge in finding suitable industries. In general the programs have been rather successful as the numbers of students securing work after graduation as a result of their training are quite high. Students returning to universities or polytechnics after industrial training often feel more confident in their ability to learn and undertake vocational-related tasks.

**The Industry-institutions** collaboration program can eliminate the technological gap. The convenient knowledge and skill needed to accept latest technologies all besides the world. The new industries are fulfilled with mechanized technologies that are abundantly most of the time new for TVET students in Ethiopia.

Industry Ph.D. program may invite educators from industry to take on industry-based which develops innovations directing to increase competitiveness. Each scholar (Ph.D. candidate) can be supervised by at least two supervisors, one from TVET (University) at which the candidate registered where one from the industry where the candidate works.

**Institutions-industry** collaborations are expected to develop research capacity on both directions, change production rate and promote commercialization powers of products that emerged from the research projects. To develop institution- industry collaboration, Organizational assist should be providing through center for research and for TVET (University) relations. Increasing research capabilities is one of the goals of collaborations in the higher education sector. The main of the work-based learning program will be to increase employability potential of graduates by promoting their soft skills, practical skills. Despite its capacity benefits, the WBL faces many problems in terms of students' logistics services [2].

**Trainee ship programs:** One of the most common forms of U-I linkage involves placing students at industries during their study period so that they would have practical exposure. This is usually practiced by many institutions, though it requires greater institutional capacity in order to reap maximum benefits. Trainee ship programs will be representing institution – industry collaboration to introduce into the TVET program (system). The programs will involve polytechnic students to delegate in the factory in different ways. The aim of the traineeship will deliver job training for the TVET trainees and giving workshop facilities, Machinery, training Materials, and sample products. Some factories are accepting the TVET institutions are as a center of excellence for training and center of competence (COC) and workers [1]. Some industries are hesitating to accept trainees that have yet to become fully skilled trainees. Thus, to invite better participation from industries, the government and all stakeholders have to kindly improve the human resource development fund given to participating industries in which industry can to demand 100% of training related expenditure [3].

## 6. CONCLUSION

The TVET institutions should growth the linkages between industrial production and education and serve the needs of domestic economic development. The government of Ethiopia should prepare the policies on TVET – industry linkages provided the basis for the policy framework for TVET industry collaboration. Providing quality training to produce competent graduates in Knowledge, Skill and Work ethics and demand-driven and market-oriented are some of the major components of TVET institution mission. The adoption of market-responsive TVET is still on-going process in Ethiopia and a very new experience in emerging economies or those moving away from a centralized, command and control dominated recent history. The major customer of TVET is industry. Without the linkage with the industry TVET graduates cannot maintain professional competencies and also the industrial output can't be growth only with low-level human resources. Collaboration between TVET and industries is critical for skills development, generation, innovation and technology transfer. The trainees' feel industrial training provides them with the real experience they can link to theoretical knowledge that TVETs or University exposed them too. Research indicates these industrial training do actually improve trainee's soft skills as expected [6]. The TVET institutions have to strengthen links with industries to improve networking between academia and industries to create a better understanding of each other's needs and to identify how they can be met through the industry programs. One of the major features of this collaboration is its emphasis on the preparation for trainees' employment.

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