

Change, Continuity and Challenges in Ethiopian TVET System: A Historical Sketch

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Abstract: *The purpose of this study was to explore change, continuity and challenges in the Ethiopian TVET system. Qualitative design that drew both primary (interview and questionnaire) and secondary data was employed. A total of 25 participants were selected by using purposive, availability and snowball sampling techniques. Data were organized thematically, triangulated and interpreted. Major findings included that with regard to continuity, the low images of TVET in the society and the weak TVET-University linkage have persisted through time. Concerning what has changed, it was found out that the number of TVET institutions showed dramatic increment over the last twenty years; unlike the Imperial Period and the Dergue Regime, gender equity has been achieved in the area of enrolment of trainees into TVET institutions in the last two decades; instead of the traditional objective-based TVET curriculum, an outcome-based approach has currently been put in place which is based on occupational standards; I – V levels were established to signify competencies expected of TVET at different points of entry into and exit from the TVET system. Major challenges included the reluctance of companies to provide genuine practical training for TVET trainees based on the scheme of cooperative training. It was concluded that despite the improved access and equity in the areas of TVET, the prevailing low image of TVET in the society, the provision of little or no genuine company-based practical training for TVET trainees and lack of the required competences among TVET trainers would negatively affect the development of the TVET sector. Suggestions were forwarded based on these findings.*

Keywords: *TVET, change, continuity, occupational standards, outcome-based approach*

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Introduction

Modern education began in Ethiopia during the first decade of the 20th century. The first public school to provide a western education was the Ecole Imperial Menelik II, which was opened in October 1908 under the guidance of Hanna Salib and a number of Coptic teachers (Pankhurst, 1968). In 1935, there were about 20 public schools, and in 1952, there were about 400 primary schools, 11 secondary schools, and 3 institutions offering college level courses. By the end of the year 1990, Ethiopia had 277 high schools, two public universities and five junior colleges.

In the 1940s and 1950s, three specialized TVET institutions were established. These were Tegbareid Polytechnic College, School of Commerce, and Ambo Agricultural College. In the 1960s, the World Bank advised developing countries to shift secondary schools into comprehensive secondary schools (comprehensivization) that offer a 10+2 certificate program to create more opportunity for students instead of the narrow field of specialized TVET institution. During this period, the Derg regime replaced the 10+2 certificate into 10+3 diploma through its policy of poly-technicalization of TVET since 1984.

In 1994, Ethiopia developed its Education and Training Policy which has aimed at addressing problems of limited access,

equity, relevance and quality of education at all levels. One of the general objectives of the Education and Training Policy of 1994 states that the objective of education and training is “Bring up citizens who can take care of and utilize resources wisely, who are trained in various skills, by raising the private and social benefits of education” (FDRE, 1994: 10).

In addition, the National TVET Strategy of Ethiopia states the general objective of TVET as follows:

“ to create a competent, motivated, adaptable and innovative workforce in Ethiopia contributing to poverty reduction and social and economic development through facilitating demand-driven, high quality technical and vocational education and training, relevant to all sectors of the economy, at all levels and to all people” (MoE, 2008), and it has formulated the following guiding principles of Ethiopian TVET system: demand-orientation, gender sensitivity, quality and relevance, lifelong learning, pathways, flexibility, and access and equal opportunity (MoE, 2008: 14-15).

The TVET reform in Ethiopia has played a crucial role in improving the relevance of curricula and gender equity. The following table shows the number of TVET trainees enrolled in the years 2011/12 and 2015/16.

Table - 1: Number of TVET trainees in Ethiopia in 2011/12 - 2015/16

TVET trainees	2011/12	2015/16
Male	173,148	146,291
Female	157,261	157,848
Total	314,159	304,139
% of female trainees	46.2	51.9

(Source: adapted from ESAA, 2011/12 and ESAA, 2015/16)

As indicated in Table 1 above, more than three hundred thousand trainees were enrolled in 2015/16 of which 51.9% was female trainees. Improvement in access, equity and relevance need to be accompanied by continuous improvement in quality of the TVET provision in the country. Yet, the researcher observed perceived low image and quality of the TVET system that he is interested in in studying what has persisted throughout the stages of TVET development and what has changed over the years.

Statement of the Problem

A number of researches were conducted on diverse aspects of Ethiopian TVET. For instance, Endalkachew (2018:131), in his PhD dissertation, found out that TVET institutions equipped graduates with such employability skills required in the world of work like team work, job-specific skills, planning and organizing, interpersonal communication skills, and reasoning skills”. Likewise, Wanna’s (2017) study indicated that youth unemployment is the outcome of different socio-economic and demographic factors.

In addition, a study by Alemayehu (2012) revealed that the salary of TVET system trainers in private organizations is higher than that of government TVET instructors and that the situation could lead to outflow of competent teachers from government to private colleges and institutions.

Moreover, Shaorshadze and Krishnan (2012) pointed out in their paper entitled “Technical and Vocational Education and Training in Ethiopia, Paper for the International Growth Centre - Ethiopia Country Programme” the need to make Ethiopia’s TVET system demand-driven. In addition, a number of research studies on broad areas of TVET

were conducted by Masters Students at AAU. For instance, Nahaom (2006) showed the prevalence of widespread disrespect for men of skill among parents as one of the major challenges to TVET in Ethiopia. Finally, two highly relevant studies were conducted by Ethiopian researchers. One was the study conducted by Ayele (2009) on the influences of individual and contextual factors on the professional development of TVET teachers. The other one was a study conducted by Getachew (2015) on competence based education in Ethiopia. Both studies were PhD dissertations of wider scope.

Even though the contributions of the above mentioned studies to analyzing and clarifying issues of TVET in the country are immense, to the knowledge of the researcher, there isn’t any study conducted on change, continuity and challenges in Ethiopian TVET system. Hence, I believe this research would contribute to closing the existing research gap. To this end, the following research questions were set:

- What has continued to exist throughout the Ethiopian TVET system?
- How are the changes observed in the TVET system of the country described?
- What are the existing challenges in improving the TVET system of the country?

Objectives

This study has both general and specific objectives. The overall objective of the research was to explore change, continuity and challenges in the development of the Ethiopian TVET system. The specific objectives were to:

- Explore what has continued to exist throughout the history of TVET system of the country;
- Analyze changes that took place in the TVET system over time;
- Investigate the existing challenges in the areas of TVET system; and
- Explore ways of improving the TVET system of the country.

Scope of the Study

This research study is institutionally delimited to two federal TVET institutions, two regional TVET agencies, one public university and two government TVET colleges. Furthermore, it dealt only with the following variables: change, continuity and challenges in the development of the TVET system of Ethiopia, challenges faced and ways of improving the system.

Definitions of Key Terms

Competency: It refers to the possession and application of knowledge, skills and attitudes to the standard of performance required in the workplace (TESDA, 2010:6).

Dual system: a vocational training of individuals, both academically by an institute, college, center or school, and vocationally by an employer or industry.

Occupational standards: It refers to the competencies needed to be considered qualified for a certain field (MoE, 2008).

Task analysis: It refers to the process of analyzing each task to determine the steps involved, performance standards, tools, and equipment needed, related knowledge, safety, attitudes, and decisions expected of workers performing it (TESDA, 2010:21).

Outcome-based education: It implies that the training received in TVET should be measurable according to the skill assessment

based on the occupation standards (MOE, 2008).

Review of Related Literature

The Concept of Technical and Vocational Education and Training

The origin of technical and vocational education and training can be traced back to the trend of the nineteenth century Europe, especially in countries like Great Britain, France, Germany and Switzerland (Choy, Waervik, and Lindberg, 2018). In different countries, TVET might have different objectives even though its overall goal is contributing to economic growth of a society. In the international discourse on TVET, increased attention is given to dual forms vocational education and training whereby the emphasis is how to create nexus between learning experiences in vocational schools with that of the world of work. Hence, the concept of work-based learning is also widely used today (Grollmann, 2018:64).

Forms of Vocational Education and Training:

There are diversified forms of vocational education and training. Forms of vocational education and training can be classified into four (Grubb and Ryan, 1999 as cited in Shoarshadze and Kirshinan, 2012:27):

- *Pre-employment training:* It prepares individuals for the initial entry into the employment.
- *Upgrading training:* It provides additional training for the employed individuals.
- *Retraining:* It provides the training for individuals that have lost jobs or for those wishing to switch careers.
- *Remedial training:* It provides training to individuals out of the mainstream labor force.

TVET and Sustainable Development

TVET plays an indispensable role in promoting socio-economic growth and environmental protection. In this study, the sustainable approach to TVET is focused for two major reasons: first, the issue of

sustainable development is a global agenda as indicated in the UN Sustainable Development Goals (2016-2030). Second, it is highly relevant to the Ethiopian aspiration of overcoming poverty.



(Source: After Orboi, M, et al., 2010: 752)

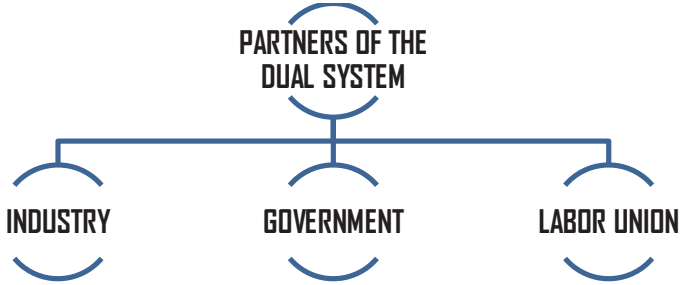
As indicated above, TVET is crucial for ensuring social, economic and environmental sustainability by equipping individuals with the necessary knowledge, skills, values and behaviors that help them effectively function in a society thereby enhancing gender equality and social justice.

Technical and Vocational Education: the experience of selected countries

In both developed and developing countries, technical and vocational education has become a sub-sector that is seen as instrumental to economic growth, poverty reduction. However, there are differences in the implementation of TVET among countries of the world. In this section, the experiences of Germany and Australia are briefly discussed.

The German experience

Germany has a well-developed TVET system. According to the Organization for Economic Cooperation and Development (OECD), vocational education and training has received wider recognition and positive image in Germany (OECD, 2010). The German dual system that allows TVET trainees internalize the theoretical knowledge in TVET schools and develop the practical skills and competencies in enterprises. This has led to the fact that the German dual system of vocational training has become very influential model all over the world today (Grollmann, 2018).



(Source: After Deissinger, 2015, p. 563)

The above major partners work together closely and they have realized the proper implementation of vocational training for diverse occupations in Germany. Furthermore, two chambers play an important role in the German dual system: the chamber of commerce (e.g. business companies) and the chamber of crafts (e.g. construction companies). Chambers are umbrella organizations that represent the industry in the dual system. The major responsibilities of chambers include (Sievers, 2014:13):

- Organization, registration, examination and certification at national level;
- Assuring quality throughout the process;
- Representing and organizing the companies’ needs, interests and inputs in cooperation with business associations.

In a nutshell, the German dual system ensures that TVET graduates possess both theoretical knowledge and practical skills. Hence, the experience of Germany is highly relevant to the Ethiopian TVET system where the negligence of the practical dimension of training has posed a constant threat to quality.

The Australian experience

Australia is also among countries of the world whose vocational education and training systems have got wider recognition. The Australian TVET system is appreciated, among others, for the following (Robison, 2000:2):

- Provision of competency-based training;
- The development of industry led training sector;
- Flexible training delivery;
- Emphasis on outputs and outcomes.

Nevertheless, Australia has also encountered several challenges which include (Australian National Training Authority, 2003):

- The aging population
- Meeting the diverse regional and community needs and development
- Coping with economic forces
- Addressing the changing employment patterns
- Enhancing social inclusion

In order to address the challenges mentioned above, Australia developed a strategy known as “Shaping our Future” in 2010. This strategy comprises the following three concepts that guide the vocational education and training of the nation:

1.	Servicing	Meeting the needs of business, industry and communities
2.	Building	Promoting the development of the capability and capacity of public and private organizations
3.	Improving	Continuous enhancement of the quality, accessibility, responsiveness and the reliability of TVET across Australia.

(Source: Australian National Training Authority, 2003).

To sum up, from the Australian experience, Ethiopia can learn the importance of identifying the needs of diverse stakeholders of TVET; connecting TVET provision to community development; enhancing the capacity of both government and non-government institutions providing TVET; ensuring the quality of the implemented TVET programs in the country as a whole.

Methods

Research Design

The purpose of this study was to explore change, continuity and challenges in the TVET system of Ethiopia. To this end, qualitative research design was employed because it is more appropriate to explore views of respondents by using open-ended questions, and interview data on the one hand, and to analyze pertinent secondary sources (document data on the other (Creswell, 2009). The qualitative data obtained from diverse sources were organized thematically, triangulated and interpreted. Tick descriptions, member checking and triangulation were used to avoid personal bias.

In this study, the historical method and document review method (Best and Kahn, 2003) were used. The former helps the researcher to analyze the development of TVET in the country during different historical stages of the education system; the latter helps him to explore changes that have occurred in the TVET system of the country.

Sources of Data

Both primary and secondary sources were used. The primary sources included TVET experts from the Federal TVET Agency,

Addis Ababa TVET Agency, Oromia TVET Bureau, dean and vice dean of two government TVET colleges in Addis Ababa, instructor of vocational education management at AAU, instructors from the Federal TVET Institute, an expert from the Korea Veterans Memorial TVET Trainers' Center of Excellence, and graduate students from the Department of Educational Planning and Management as well as Curriculum and Instruction at Addis Ababa University. The secondary sources were TVET related policies, strategies, guidelines and relevant proclamations.

Sample Size and Sampling Techniques

In this study, a total of twenty-five respondents were involved as participants. Purposive sampling technique was used to select two higher officials and three experts from the Federal TVET Agency, three TVET instructors from the Federal TVET Institute, and one instructor of vocational education management at AAU because they are persons who are well knowledgeable about the historical development of TVET in Ethiopia. Availability sampling was used to select one expert from Addis Ababa TVET Agency, one TVET expert from Oromia TVET Bureau, eight graduate students from the Department of Educational Planning and Management and three graduate students of Curriculum and Instruction at AAU. The TVET experts were selected because currently they are working as TVET officials for the respective regions indicated. The students were selected because they can provide

relevant ideas in relation to vocational management and curricular issues. Moreover, snowball sampling was employed to include one expert from the Korea Veterans Memorial TVET Trainers Center of Excellence. Finally, respondents from the office of Vice Dean of Entoto TVET College and from the office of the Dean of Berhan TVET College were selected from Addis Ababa City Administration. The former was one of a well-established TVET institution with relatively longer tradition whereas the latter is among the new generation of public TVET institutions. Having both institutions would help the researcher to get relevant information about the historical development of TVET in the country and to understand the prevailing challenges.

Data Collection Instruments

The following instruments of data collection were employed in this study:

Semi-structured interview guide: It was used to generate the required data from TVET experts from the Federal TVET Agency, Addis Ababa TVET Agency, Oromia TVET Agency and Korea Veterans Memorial TVET Trainers' Center of Excellence as well as from respondent instructors at the Federal TVET Institute and Addis Ababa University. The interview was conducted using Amharic Language so as to make it more convenient for conversation and each session took 30 minutes. The researcher jotted down notes during the interview session and this was translated back to English for analysis.

Open - ended questionnaire: It was employed to elicit the required information from 11 graduate students (eight from the department of Educational Planning and Management, and three from the Department of Curriculum and Instruction) at Addis Ababa University.

Document review: It was used to critically analyze relevant policy documents like the Education and Training Policy, the National TVET Strategy, Educational Statistics Annual abstract, TVET proclamations, and relevant researches.

Ethical consideration

First, the participants of the research were requested for their consent. Once, they expressed their agreement, the title and purpose of the research was explained to them. Then, date and time for conducting the interview was fixed based on the interest of the interviewees. During the interview sessions, notes were jotted down by the researcher. Biases and validity threats were controlled by using triangulation, soliciting feedback, and member checks. For those who were to use the open-ended questionnaire, the researcher urged them that their responses would be used only for research purposes.

Results and Discussions

Under this section of the study, data were analyzed and triangulated and the issues were presented thematically in line with the research questions.

Continuity in the TVET system of Ethiopia

In spite of the emergence of a paradigm shift in the TVET system of Ethiopia, there are certain aspects of TVET of the nation that has persisted throughout all stages of its development. During an interview session, one of the experts from the Federal TVET Agency (FTA-1) said:

Despite improvement in access, equity, availability of infrastructure, still the society is more interested in white collar jobs. Of course, the cultural legacy of negative attitude towards traditional crafts in the country has still remained a major problem (April, 2019).

The disrespect for men of skill has been also influenced by classical Greek philosophers in the West and the formal education that has expanded all over the world has also transmitted such thoughts everywhere even though their effects on TVET vary in different socio-economic and cultural contexts. In this connection, a respondent from the Office of the Dean of Berhan TVET College (D-BTC) also reported:

The society still shows less respect for technical and vocational education and training. Even those who joined the program have also less interest in learning. Of course, there is slight improvement through time, as many TVET graduates have become successful entrepreneurs. Hence, success stories of TVET graduates must be disseminated to

the society through mass media. In doing so, I hope, gradual change in the attitude of the society towards TVET will be improved (April 2019).

From the above response, it is clearly seen that the low image of TVET in Ethiopian society has still persisted despite slight improvement compared to the previous regimes. The prominent Australian scholar Stephen Billet (2014: 4) indicated the influence of elites of classical Greece like Plato, Aristotle and Aristophanes on the still low image of vocational fields by blatantly asserting that vocational occupations “are not only of low standing and limited worth, but those engaging in them are of inherently limited capacities and unable to innovate or respond to new requirements and challenges. So, such workers are held to be unable to improve, innovate, adapt or otherwise utilize their knowledge in novel ways.”

Likewise, one of the instructors from the Federal TVET Institute (FTI-1) reported the following:

Among the major dimensions of TVET that have continued to exist throughout the historical development of TVET, the following three are the major ones: First, the low image of technical and vocational education in Ethiopian society; second, lack of genuine practical training provided for TVET trainees by industries/companies; and third, little or no TVET- university linkage (April, 2019).

Hence, one can safely conclude that the low image of TVET in the society compared to academic fields of studies is a major problem that has continued to exist through successive governments of Ethiopia.

Changes observed in the Ethiopian TVET system

Modern TVET was introduced to Ethiopia since early 1940s. The researcher was interested to explore changes that have occurred since then. Accordingly, one of the experts from the Addis Ababa TVET Agency (AATA-1) reported during an interview session:

One of the major changes that took place in the Ethiopian TVET system is the idea of outcome-based TVET. We have now established Korea Veterans TVET Trainers' Center of Excellence which is hosted at Entoto Technical and Vocational Education College. I think is this a good practice in that it gives TVET trainers the opportunity to receive need-based short-term trainings as well as to see what kind of knowledge, skills, attitudes and behaviors industries expect from TVET graduates (April, 2019).

The researcher visited the practice of the Korea Veterans TVET Trainers' Center of Excellence which was established by Addis Ababa City Administration through Regulation No. 101/2018 (Addis Negari Gazeta, 8th June 2018) and conducted interview with the expert of the Center who reported:

Our Center of Excellence has already trained TVET instructors for two rounds. The third round training is currently running. The participants are trained based on identified skill gap. In addition to the training here at the center, they have the opportunity to visit companies/industries. In doing so, trainers could better understand the needs of companies/industries.

Hence, one can infer from the above response that the creation of center of excellence by itself and the provision continuous professional development for TVET trainers are among the changes observed that aimed at equipping TVET trainers with relevant knowledge, skills and values they need for effective teaching/training.

According to Boshier (2008: 86), the quality of effective teaching would be judged by:

- Clear aims and objectives;
- Sense of purpose, pace and challenge;
- Organization and presentation of materials;
- Match of content and tasks to students' needs, interests and abilities;
- Forms of initial, formative and summative assessment;
- Records of monitoring student progress;
- Use of accreditation and certification.

Quality of teaching is determined by the competence of instructors/trainers. Hence, elevating the competence of TVET instructors and trainers is critical

for effective teaching and student learning. According to Hager and Bekett (1995:3) as cited in Lum (2009:16), “competence is inferred from performance, rather than being directly observed. While performance of tasks is directly observable, abilities that underlie the performance are necessarily inferred.”

In the same vein, an expert from the Occupational Standards Development Unit of the Federal TVET Agency reported during an interview session:

I think, a major change in Ethiopian TVET system is the launching of occupational standards. They are being set for about 700 occupations. Of course, in terms of equipment and facilities, the utilization of information and communication technology as well as the availability of hundreds of government and non-government TVET institutions, one can undoubtedly assert that major changes have occurred (April, 2019).

Challenges encountered the Ethiopian TVET system

The Ethiopian TVET system like many TVET systems of developing countries has faced a number of challenges. Concerning this issue, the researcher asked one of the TVET instructors from the Federal TVET Institute (FTA-2) who replied:

There are a number of challenges that the TVET system of Ethiopia has encountered. The major ones are poor coordination and cooperation with stakeholders, lack of well contextualized curricula and lack of rigor in the assessment of graduates. Finally, it is worth mentioning challenges like the relatively low status of TVET in the society and the perceived negative attitude of parents towards blue collar jobs (April, 2019).

From the above response, it is clear that lack of adequate collaboration among stakeholders of vocational education and training on the one hand, and lack of rigor in assessing the competences of trainees undoubtedly lead to the deterioration of quality of the TVET system of the country. This in turn can also worsen the prevailing attitude of the society towards vocational education and training.

Similarly, one of the instructors of vocational education management from Addis Ababa University (Inst. AAU-1) emphasized:

It is important to develop a policy framework that encourages companies to voluntarily accept TVET trainees for practical training. Devoid of practical learning in companies/industries, the mere theoretical learning cannot help them in the world of work. Hence, companies need to be convinced about the significance of helping the young

people to learn practical skills so that they can get salaried jobs or create self-employment opportunities and become self-reliant citizens (April, 2019).

The response indicated above clearly shows that technical and vocational education and training need to combine both theoretical learning and practical training. It is also worth mentioning that the National TVET Strategy (MoE, 2008) recommends only 30% need to be the theoretical component whereas 70% of the training should be practical.

Ways of improving the TVET system of the country

An expert from Oromia TVET Bureau said during an interview session (OTB-1):

It is necessary to continuously raise awareness of the general public about the importance of TVET; second, the Government TVET structures at all levels must closely work together to mobilize all stakeholders towards the proper development, implementation and evaluation of TVET trainings provided by government, non-government organizations and the private sector (April, 2019).

The above indicated response shows that much more must be done to raise the awareness of the general public and communities about the contribution of TVET to improving one's livelihood and the socio-economic conditions of the nation at large. Furthermore, it implies

that without the active engagement of all stakeholders, it is practically impossible to elevate the social status of the TVET system in the country.

In addition, one of the instructors of Vocational education management from Addis Ababa University said the following during an interview session:

Vocationalization of the general education and enhancing the linkage between university and TVET system is indispensable for improving the TVET system of Ethiopia. Finally, adequate number of technical teacher training institutions need to be flourished in the country so as to avail well trained TVET teachers (April, 2019).

The above response indicates that lack of adequate vocational subjects in the general education of the country has led to the fact that students are lacking basic ideas of TVET when they join the TVET system after completing grade 10th. Moreover, it emphasizes the need to have adequate number of technical teacher training institutions that can produce adequate number of TVET professional teachers. It can be safely concluded that in a country with 95 million peoples (MOE, 2015) and with larger proportion of young people, it is indispensable to have more technical teacher education institutions.

In the same vein, an official from the Federal TVET Agency (FTA-1) said:

Currently, we are working with a number of partner organizations to enhance our TVET system. For example, the World Bank has allocated funding to launch East Africa TVET Qualifications framework whereby Ethiopia, Kenya and Tanzania are to be benefited from the scheme. All the necessary preparations are on the way to implement the scheme that would give TVET trainees an opportunity to obtain quality training, international experience and job opportunities elsewhere (April, 2019).

The above response implies the significance of working with international organizations in general and with the most influential final institutions like the World Bank for developing countries. Furthermore, such kind of partnership would lead to the provision of systematic, labor-market oriented and quality training.

Likewise, an official from Federal TVET Agency (FTA-2) asserted:

Our industries are relatively small in number compared to that of developed countries like Germany where the Chamber of Commerce, Chamber of Crafts and Chamber of Agriculture play an active role in the TVET system. Thus, companies are reluctant to accept trainees for practical training, or if they accept them, they do not provide them genuine and

appropriate practical training. To overcome this problem, we have planned to develop 'learning factories', where trainees receive both theoretical and practical training. We are to start soon in Holeta Agro-processing Company and then would scale it up gradually across the country (April, 2019).

As can be seen from the above response, Ethiopia is trying to apply an innovative practice known as 'learning factors' where trainees receive both theoretical and hands-on practical skill training in a given company. This can reduce the problem that the TVET system has faced in the area of implementing cooperative training.

Similar idea was also raised by a respondent vice dean from Entoto TVET College (Entoto VD) as follows:

Technical and vocational education and training undoubtedly contribute to economic growth of the country. This requires above all commitment of all stakeholders in general and the availability of well qualified TVET trainers in particular. We still need to work more on elevating the competence of our TVET trainers so that they can deliver what is expected of them effectively and efficiently (April, 2019).

Furthermore, graduate students of Educational Planning and Management as well as Curriculum and Instruction pointed out the following ways of improving the Ethiopian TVET system in the open-ended questionnaire:

- Strengthening the linkage between TVET system and the enterprises so that they work together in the areas of the development and implementation of curricula that reflect the needs of the industrial enterprises as well as in assessing to what extent graduates have acquired the competencies needed by labor market.
- Reviewing the TVET curricula to meet the changing demands of the labor market;
- Enhancing the pedagogical skills of TVET trainers;
- Building the capacity of TVET providing organizations so that they improve the management of TVET;
- Assuring the quality of the TVET programs by closely working with institutions like HERQA;

From the responses of the graduate students, it is possible to infer that improving the TVET system of Ethiopia requires the collaborative efforts of government, non-government and private organizations on the one hand, and enhancing the professional development of TVET instructors/trainers on the other hand.

Summary, Conclusions and Implications

In this section, the major findings are summarized, conclusion is drawn and implications are forwarded:

Summary of the Major Findings

The purpose of this study was to explore change, continuity and challenges in the historical development of Ethiopian technical and vocational education and training system. To this end, qualitative research design was employed. The historical method and document review method were used to analyze what has changed and what has been maintained over time in the historical development of the TVET system of the country. Both primary and secondary sources were used. The primary sources included 25 respondents: two higher officials and three experts from the Federal TVET Agency, one expert from Addis Ababa TVET Agency, one TVET expert from Oromia TVET Bureau, three instructors from the Ethiopian Federal TVET Institute, one instructor of Vocational Education Management at AAU, one respondent from the Korea Veterans Memorial TVET Trainers' Center of Excellence, Vice Dean of Entoto TVET college; Dean of Berhan TVET college; eight graduate students from the Department of Educational Planning and Management as well as three graduate students of Curriculum and Instruction at AAU.

The secondary sources were TVET related policies, strategies, guidelines and relevant researches. Data collection instruments were open-ended questionnaire, semi-structured interview guide and document review. The gathered data were qualitatively analyzed and the following major findings were obtained:

Continuity in Ethiopian TVET system

1. Positively seen, the aspiration to improve the status of TVET in Ethiopia has continued over the successive Ethiopian regimes since the 1940s.
2. However, it was found out that the low image of TVET in Ethiopian society has persisted throughout the different stages of the development of the TVET system (blue-collar jobs are disregarded);
3. The study disclosed that lack of TVET-University linkage has persisted (permeability is not clearly ensured).
4. Lack of Vocationalization of the general education (almost academic subjects are exclusively provided in Ethiopian general education).

Changes observed in the Ethiopian TVET system

Among the major changes observed in the Ethiopian TVET system were:

5. It was found out that ‘specialized TVET institutions’ were opened during the Imperial period (Tegbareid, School of Commerce, and Jimma and

Ambo Agricultural institutions) in the 1940s and 1950s, however, in the early 1960s the focus was on the establishment of Comprehensive secondary schools (Comprehensivization) that offer a 10+2 certificate program to create more opportunity for students instead of the narrow field of specialized TVET institution.

6. The study indicated that the Dergue regime replaced the 10+2 certificate into 10+3 diploma through its policy of poly-technicization of TVET since 1984.
7. The study revealed that access to TVET has dramatically increased over the last twenty years. During the Dergue regime there were 17 TVET institutions whereas today there are more than 580 government and non-government institutions.
8. The study showed that in comparison to the previous regimes, today:
 - Access to TVET has increased (until the end of the dergue regime, there were only about 17 TVET institutions; today more than 580 TVET institutions are available);
 - Equity has been achieved in the area of TVET. (In 2015/16, from a total of 304, 139 TVET trainees, about 51.9% of them were female).
 - Availability of the required infrastructure has been improved.
 - The use of information and communication technology in training has been improved.
 - TVET trainers were ranked as A-level, B-level and C-level trainers.

- Occupational standards were set for about 700 occupations.
- A growing number of young TVET graduates have become entrepreneurs and/or self-reliant by creating jobs for themselves.
- Regular quality control of the TVET system is undertaken by institutions like HERQA since 2003.
- The study disclosed that TVET Trainers' Center of Excellence was established by Addis Ababa TVET Agency in May, 2018 and it has been providing need-based short-term trainings for TVET trainers from the City Administration (best practice learned).
- Lack of accountability and transparency in the assessment of TVET graduates;
- Lack of clarity in the grading system, since only there are two options, namely 'competent' and 'not yet competent'.
- Lack of English Language proficiency among trainers as well as trainees;
- Lack of pedagogical competence among TVET instructors and trainers;
- Structural differences among regions in the arrangement of TVET system usually leads to confusion in coordinating the activities of the Federal TVET and TVET agencies.

Challenges faced by the Ethiopian TVET system

9. The study disclosed that lack of adequate technical teacher training institutions (TTE) in the country is a challenge to TVET (The diploma program opened in 1967 at AAU; and later also the degree program was launched in 1986 were closed).
10. It was found out that many companies in Ethiopia are reluctant to accept TVET trainees for practical training.
11. The study showed that there was lack of concrete policy framework to force companies to accept apprentices for practical training...
12. Other challenges to the Ethiopian TVET included:

Conclusions

Based on the major findings, it could be safely concluded that changes in the sense of improvement have taken place in the Ethiopian TVET system. These are observed in the efforts made to make TVET relevant and labor-market oriented as well as the introduction of occupational standards. However, lack of clarity and understanding among TVET providers on the one hand, reluctance of companies to allow TVET trainees for genuine practical training and the persisting low status of TVET in the Ethiopian society would have negative impact on the progress of the TVET system of the nation.

Implications

Based on the major findings and conclusion drawn, the following implications are forwarded:

- 1) The Ethiopian Government is advised to develop a conducive policy framework that provides incentive mechanisms such as tax exemption for apprenticeship offering organizations and encourages companies to accept TVET trainees for genuine practical training.
- 2) Ethiopian Higher education institutions are advised to provide continuous short-term trainings to upgrade the content knowledge and relevant vocational-oriented pedagogical knowledge for the TVET trainers.
- 3) Ethiopian higher education institutions are advised to engage more strongly in conducting research in the broad areas of TVET, its status, practices and challenges so as to help TVET planners make evidence-based decisions.
- 4) Regional TVET agencies are advised to develop more collaborative and transparent ways of monitoring and evaluating the quality of TVET programs in the country by working more closely with the Federal TVET Agency.
- 5) Media need to develop programs that could disseminate scientific information about the significance of TVET for economic, social and environment sustainability so as to

change the low status of TVET in Ethiopian society.

- 6) HERQA and other relevant bodies are advised to more adequately communicate best practices among Ethiopian TVET providing and/or supporting institutions.

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