

Competency-based approach to technical and vocational education and training in Africa

Country report: Ethiopia

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1. Executive summary

The Federal Democratic Republic of Ethiopia is located in the Horn of Africa. The country is bordered by Eritrea, Djibouti, Kenya, Somalia, Sudan and South Sudan. The second most populous nation in Africa behind Nigeria and the ninth largest on the continent. Essentially formed by high plateaus, the country is divided into six climatic zones, a real wealth in terms of agriculture and the diversification of production and processing activities.

With strong political will and TFPs support, Ethiopia has achieved significant social, economic and educational reform. After episodes of recurrent food crises and poverty, Ethiopia is now known for its fast economic growth, making it one of the most dynamic countries in Africa. Over the past ten years, Ethiopia's GDP growth rate has averaged 10% (reference UNESCO Report 2017).

Since the entry into force of the Ethiopian Constitution in 1994, Ethiopia is based on a federal system consisting of nine regions and two "administrative cities". Education is mainly funded by the Government and free. At primary level, the language of instruction is one of the regional languages. English is the second language. Developed by the Ministry of Education, the Ethiopian academic curriculum lasts ten years and provides access to technical and vocational education and training (TVET) or higher education.

TVET is divided into five levels and the language of instruction is English, except for levels I and II where the language of instruction is both the regional language and English. The Federal TVET Agency (FTA), under the guidance of the Ministry of Education, manages the implementation of vocational training provision policy. This agency is responsible for submitting to the schools the occupation-competencies framework (OCF) and the assessment frameworks. The responsibility for the development of the training frameworks is delocalised to the training schools.

As stated by the stakeholders met and references consulted, the country has focused its growth and economic development strategies on educational renewal, particularly TVET through the adoption of the CBT approach. A real political will and persistent support from TFPs have made it possible to reform the obsolete TVET system: in twenty-five years, TVET has adopted a system based on the CBT approach and the participation of businesses and employers in the development of competencies that they need. In 2019, 675 occupation- competencies frameworks (OCFs) are developed, about 200 training frameworks are taught according to CBT, 21,000 TVET trainers are trained in CBT, and more than 1,500 TVET schools offer all their curricula in CBT (initial and continuing training). As a result, the transition to CBT is being rolled out across the country and across schools (whether under the responsibility of the Ministry of Education or technical ministries, such as Transport or Health, or even the Ministry of Tourism and Culture, or Agriculture). In terms of CBT methodological adoption, Ethiopia has taken up the challenge of mainstreaming knowledge and understanding of the procedural steps among all its stakeholders, regardless of their lead ministry.

Although the transition to CBT approach is comprehensive, some challenges are encountered, mainly in terms of the quality and consistency of training frameworks, the technical (practical) skills of trainers, lack of material resources in some schools and, finally, partnership approach developed with the private sector.

Underlying the implementation of CBT engineering was the willingness to actively involve the private sector, which guided Ethiopia's decision to adopt it. In the initial vision, the Government intends to have TVET fully managed by the private sector by 2025. Although many achievements have been made in 2019, this objective appears ambitious in view of the real involvement of businesses and professional actors from the private sector in the TVET system.

By adopting the CBT approach, Ethiopia's paradigm shift has resulted in a significant increase of OCF based, among others, on the global model of Singapore for the qualifications framework, Australia for the content of OCF and the German model for the introduction of cooperative training. This first step made it possible to implement an Ethiopian CBT model to which all bilateral and multilateral cooperation have adapted. The model could be applied in a transversal and coherent way to all professional sectors, without territorial limitation.

After a few years of CBT implementation, some lessons can be learned. The number of OCF is now sufficient to cover the current skill requirements of businesses. The rate of development of training frameworks is more limited, in particular due to the needs of the training schools and their capacity (their trainers) to develop training frameworks. Therefore, the first lesson is the importance for Ethiopia to enter a phase of continuous improvement and consolidation of its achievements.

Although a system for reviewing OCF is in place, it is important to focus on increased adaptation of content to local realities in order to support a better alignment between training provision and Ethiopian social and cultural realities. The addition of cross-cutting competencies to the OCF developed is also an important element that Ethiopia will need to reflect on in order to offer greater professional mobility to TVET trainees. Similarly, the private sector representatives invited to write the OCF are not always representative of the same job practised in the capital or in a less developed region. It would be important to support increased awareness so that they can have a better understanding of local realities and thus avoid the divide between centrally developed OCF and the socio-economic realities present in the regions. In this sense, the involvement of a variety of stakeholders from training schools or regional offices would add value to the centralised development of OCFs (and the associated assessment framework).

The complete decentralisation of the responsibility for writing training frameworks by schools creates challenges in terms of quality and consistency of curricula content. Therefore, another key lesson is that Ethiopia has downplayed the importance of establishing a process of regional office coordination that would support schools or at least take some responsibility for the development process. The Government accountability of schools, while valuable in terms of local involvement, results in

significant variance in curricula content due to differences between schools. The expertise and experience of trainers, as well as the diversity of equipment available in the schools, are the main explanations for these differences.

Finally, in terms of sustainability and a long-term vision for the CBT implementation, a more dynamic and structured involvement of the private sector is needed. The increased involvement of businesses in the management of training must be based on formal partnership agreements, not just on their goodwill: the provision of TVET is undermined by the lack of businesses available to take on learners. The regulation of training provision is becoming a key factor in an equation in which businesses are expected to become an increasingly important stakeholder. The final lesson for Ethiopia focuses on the implementation of a structured and formal system of training provision management. Evidence of training needs (employability), but also the recruitment of trainees, is needed to ensure the sustainability of the achievements of CBT implementation.

2. Abbreviations

ADLI	Agriculture Development – Led Industrialization	LMIS	Labour Market Information System
ATVETs	Agricultural TVETs	NEAEA	National Education Assessment and Examination Agency
CBA	Competency-based approach	NGO	Non-governmental organization
CBT	Competency-based training	OCA	Outcome Competency Approach
COC	Certificate of Competence	OCF	Occupation-competencies framework
CTTI	Catering and Tourism Training Institute	OIF	International Organization of la Francophonie
ENQF	Ethiopian National TVET Qualifications Framework	PASDEP	Plan for Accelerated and Sustained Development to End Poverty
ESDP	Education Sector Development Program	PPO	"Teaching by objectives" approach
ETP	Education and training policy	SNNPR	Southern Nations and Nationalities People's Region
FTA	Federal TVET Agency	TFPs	Technical and Financial Partners
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German cooperation)	ToR	Terms of reference
GTP	Growth and Transformation Plan	TVET	Technical and Vocational Education and Training
GTP-II	Second Growth and Transformation Plan	UNESCO	United Nations Educational, Scientific and Cultural Organization
ICT	Information and communications technology	VTC	Vocational training centre
IFEF	Francophonie Institute for Education and Training	WSA	Work situation analysis
IIEP	International Institute for Educational Planning		

3. Background

3.1. Study objectives

For the purpose of finding out how competency-based training (CBT) approach is customized, how syllabi are adjusted and aligned on CBT and what positive outcomes were registered as a consequence, IIEP-Dakar and IFEF conducted a joint study on the customisation and contextualisation of the CBT approach in eight (8) African countries: 4 of them are members of the OIF (i.e. Benin, Morocco, Rwanda and Senegal) whereas the other 4 are non-francophone countries (i.e. Botswana, Ethiopia, South Africa and Tanzania). The study focuses on non-francophone African countries who apply a modular CBT, the certification of which is validated by companies.

The aim of the study is, firstly, to identify good practices and explore how those practices can be used in other contexts/countries to enhance the performance of the CBT approach in their TVET systems and, secondly, to identify the challenges that emerged when the CBT approach was introduced and/or sustained. The identification of positive or negative tipping points when implementing the CBT approach is carefully considered in order to take stock of the lessons learned.

Based on the findings drawn from the CBT implementation in those eight countries, the study makes recommendations aimed at helping to better adapt the CBT approach to the specificities of African countries.

3.2. Methodology

The week from 5 to 9 November 2018 was dedicated to planning and guidance: the terms of reference (ToR) of the study were fine-tuned, the conceptual views and practices of the team members were streamlined, the scope and goals of the study clearly defined and the data collecting tools were developed. After that, a validation of tools and comparison of preliminary outcomes from the two country missions carried out in Morocco and Senegal was completed at a joint workshop held on 31 January 2019. Attended by representatives from IIEP-Dakar and IFEF, the workshop served to finalise the work tools and to strengthen the functional links among the team while ensuring synergies. The mixed pool of experts that contributed to this study was most valuable for the various methodological approaches and, in particular, for understanding the qualitative and cultural dimensions of assessment and for the analysis and interpretation of the data collected.

3.3. Limitations of the mission

The main challenges that the country mission faced were:

- The way the availability of the various players was managed: several activities were held at the same time which made it difficult for them to attend all of them;
- Frequent changes made to the work schedule, even though contact was established and planning was completed two weeks before the launch of the mission, in addition to the excellent collaboration extended by the focal point at the Federal TVET Agency (FTA);
- The long time it routinely took to confirm attendance to meetings;
- The wide range of stakeholders that had to be met, from various ministries or entities, in order to obtain a secure triangulation of data, due to the relationship between the FTA and the specific ministries (Agriculture, Tourism).

There is an eight-year gap between the Ethiopian and European calendars: the 2011 results for Ethiopia correspond to the 2018 (from September) and 2019 results. Therefore, it is sometimes difficult to have an exact triangulation, depending on the data available.

4. Analysis

4.1. History and institutional context of CBT introduction

4.1.1. General data and economic environment

In 2018, Ethiopia had a population of 105,800 million, divided into 85 different ethnic groups. Of the total population, 28% are between 15 and 29 years of age, while people under 15 years of age represent 44% of the population. Ethiopia's ethnic diversity has resulted in a number of languages, 25 of which are introduced in primary school. Religiously, 62% of the population is Christian and 34% Muslim.¹

Ethiopia is a federation divided into nine regions (Afar, Amhara, Benishangul-Gumuz, Gambela, Harari, Oromia, Somalia, Southern Nations and Tigray) and two administrative cities (Addis Ababa and Dire Dawa) that are significantly decentralised and financially self-sufficient through regional taxation administered by the region.

With its cultural diversity and rapid economic growth, Ethiopia is one of the most dynamic countries in Africa. Economically, the GDP per capita in 2017 is USD 1,899 (while in 1992, the GDP/capita was EUR 351).² Over the past ten years, Ethiopia's GDP growth rate has averaged 10%.³ These changes are the result of several initiatives, including the implementation from 2005 to 2010 of the Plan for Accelerated and Sustained Development to End Poverty (PASDEP). The plan focused on strengthening SMEs and microenterprises as

¹ www.economiesafricaines.com

² *Ibid.*

³ 2017 Report, UNESCO.

well as consolidating employment within these structures. The PASDEP has also focused on the development of the TVET system, focusing on the skills required by the labour market. Thereafter, in 2010, an ambitious Growth and Transformation Plan (GTP) was implemented for the country's economy based on priority sectors (agriculture, industrial development and processing - including agribusiness and textiles), infrastructure (such as roads, maritime, energy, ICT, water and irrigation), education and training, health, sport, culture and tourism, export, mining and extractive sector, labour and social affairs).

The aim of this plan is to revive the country's dynamism based on the mechanisation of agriculture and the development of the industrial sector. It focuses on improving the productivity of micro and small businesses. Another innovative aspect of this GTP involves taking into account TVET management by involving employers to ensure a better match of training needs, in order to maintain the objective of 11% annual growth. Through the initial five-year GTP, significant results have been achieved in infrastructure development. To give just a few examples, road construction and telecommunications are among the major achievements of this first GTP.

After a national revival driven by the establishment of the first GTP (2010-2015), the second Growth and Transformation Plan (GTP-II - 2016-2020) is intended to serve as a stepping stone towards the achievement of the national vision of becoming a low to middle income country by 2025. At the same time, the Government has initiated a series of institutional reforms to stimulate TVET. To avoid cycles of hunger and famine, the Government has focused on large-scale access to basic education and TVET. The main objective is to make TVET an effective tool for capacity building and to focus on the country's economic sectors with high employment potential.

In this context, an interesting initiative led by the Government has been carried out to support the development of TVET system: a programme has been launched to encourage the development of microenterprises for the construction of low-cost houses for the poorest populations. In doing so, it has focused on TVET and implemented funding support systems. This initiative has resulted in the construction of 171,000 houses, creating 176,000 jobs, increasing the technical capacity of the construction sector and sustaining the microenterprises established. A road paving programme has also enabled the employment of young people with little training (2,000 microenterprises and 90,000 jobs created). By focusing on training young people in a particular sector, TVET has expanded by connecting training to the realities of performing a job in a real work environment.

In addition to the focus on TVET, the Government has implemented a strategy to support the increased development of agriculture and industrialisation (Agriculture Development - Led Industrialisation - ADLI). This strategy is based on the agricultural sector due to its high potential for professional and social integration (80% of employment in the country) and its major economic impact (50% of GNP - 90% of exports - 70% of commodities for SMEs). Agriculture and related industries (agro-processing and agribusiness) are inseparable from the country's development and growth.

The service sector accounts for 40% and industry for 10% of GNP. Seven industrial parks have been created in the last ten years, generating significant manufacturing output in the textile, horticulture and leather products sectors, which has also resulted in a demand for skilled people and thus TVET.

4.1.2. TVET background in Ethiopia

Although major efforts to support the development of TVET have been ongoing for the past decade, the real transformation of the Ethiopian education system started with the 1994 Education and Training Policy (ETP) reform. This reform restructured the education system into three components: basic education (ten years of schooling), secondary and FET (twelve years of schooling) and finally higher education. In 2011, 85% of Ethiopian children were in school. The Education Sector Development Program (ESDP) has given the TVET sector a mandate to increase the number of trained, skilled and empowered people at the intermediate level (after basic education, not at the higher level). In addition to supporting individual development, the ESDP presents a vision of development at the level of TVET system and at the level of training schools. As such, it promotes the improvement of TVET quality, both for initial and continuing training, in order to support the creation of jobs and self-employment in the formal and informal sectors of the economy. Finally, the ESDP supports technology transfer within businesses in order to increase their competitiveness and productivity, in a context of taking into account international standards due to the importance of exports.

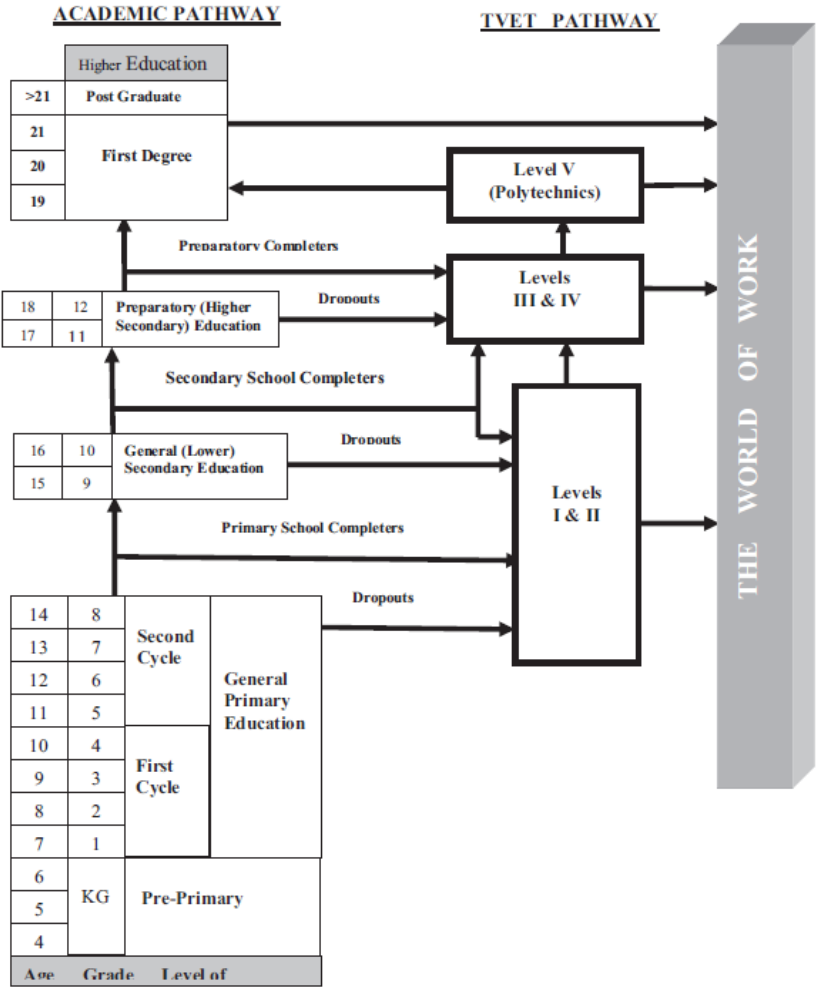
At the operational level, it is necessary for learners in initial training to have completed their ten years of schooling (basic education) before proceeding to TVET. Students in levels 10 to 12 must pass a national examination administered by the National Education Assessment and Examination Agency (NEAEA). Depending on the result of the tenth general year examination, the student can go directly to TVET (level I or II or III depending on the result) or complete one or two years of preparatory training before enrolling in TVET or in higher education (after twelve years of schooling). Each TVET level (I to V) gives access to the labour market. A TVET student can also pursue studies at a higher level if he/she has successfully acquired the competencies of TVET levels IV and V. University students can also enter directly into level V. For reference, Figure 1 shows the structure of the Ethiopian education system.

4.1.3. Language of training and assessment

The visits to the schools, as well as the interviews, enabled us to observe that all the documents (OCF, assessment and training frameworks) were written in English. English is the language of instruction, although regional language instruction is permitted for levels I and II, although all available materials are in English. From level III onwards, teaching must take place in English as a second language. As part of the assessment, since the examination for level I and level II learners is exclusively practice-based, the examination can be presented orally to the learner in the regional language. From level III onwards, since the language of

instruction is English, assessment is carried out exclusively in English. Although this fact alone does not explain the low success rate in the certification examination, it is clear that it contributes to it, due to the low level of English language proficiency among both learners and trainers.

Figure 1 – Structure of the Ethiopian education system



From TVET Mapping in Ethiopia – Final Report

4.1.4. TVET management

TVET management is handled by the Federal TVET Agency (FTA), which is responsible for the development of the occupation-competencies framework (OCF), accreditation of TVET centres, development of the assessment frameworks for each OCF and the strategic guidance of TVET.

The implementation is decentralised and is entrusted to TVET regional offices. The latter accredit the schools (public and private) or non-governmental organisations (NGOs) that provide training. They are accountable for paying trainers' salaries.

The schools develop the curricula, thus leaving them complete autonomy. They are responsible for recruiting or providing trainers according to the fluctuating demand for training. It should be mentioned that the initial plan of the Government was that TVET could be entirely managed by the private sector by 2025.

The management model introduced by Ethiopia has led to the development of a standardised and generalised TVET model according to CBT approach (development of OCF, learning assessment processes, curricula levels, categories of trainers, dual and cooperative training approach, continuing education) for all TVET courses under the authority of the FTA, as well as TVET courses under the authority of the technical ministries (Health, Agriculture, Transport, and Tourism and Culture).

4.1.5. TVET in the agricultural sector

The current organisation of TVET is closely related to the development of the agricultural sector over the last twenty years. The agricultural TVET and ATVET (Agricultural Technical Vocational Education and Training) colleges under the Ministry of Agriculture are subject to both federal and regional governance. There are **five federal colleges** (Ardaita, Alage, Agarfa in Oromia; Mizan Teferi in Southern Nations and Nationalities People's Region [SNNPR] and Gewane in Afar Region) and **fourteen regional colleges** - five in Oromia Region (Bako, Holeta, Kembolcha, Nejo and Yabelo); three in Amhara (Kombolcha, Mertule Mariam and Woreta), three in Tigray Region (Malchew, Shire and Wukro), two in SNNPR (Dilla and Wolaita Sodo) and one in Benishangul-Gumuz Region (Assosa). **The governance of regional colleges varies from region to region.** In Oromia and Tigray, governance of ATVETs is managed by the TVET regional office, while in Amhara and SNNRP it is managed by the regional agriculture office.

The mandate of ATVET is to train development workers to support the expansion and modernisation of agriculture. Therefore, similar training curricula are offered in each centre, but with an orientation towards regional specificities and relevant expertise in order to meet the needs of businesses in each region. As of September 2018, a total of **70,000 trained development agents** were counted with an annual turnover of **7,000 new agents**. Similar to the colleges under TVET, the language of instruction is English.

4.1.6. History and implementation of CBT

CBT approach, known as the Outcome Competency Approach (OCA) or Competency-based Approach (CBA), was introduced in Ethiopia more than twenty years ago and has been widely implemented since 2005-2006. The major education reform was the trigger for the CBT choice, due to an increased will of the Government to integrate businesses and to counter the challenges of chronic unemployment. The CBT introduction was mainly driven by technical and financial partners (TFPs). German cooperation (GIZ) is unquestionably the most important partner in the TVET structuring in Ethiopia, both in terms of duration and

funding. In addition to Germany, other countries have participated (Australia, China, Cuba, Italy, Japan, Korea, Singapore, etc.) with one significant result: **in twenty-five years, the Ethiopian CBT model has been implemented in all TVET schools and all trainers (over 21,000) are trained in CBT teaching.** Despite the challenges, it is acknowledged by stakeholders that the involvement of employers in the process of developing OCF has significantly increased the quality of training. The TVET policy strategy implemented has enabled the Government to overturn the equilibrium that prevailed in the study choices of young people: nowadays, 70-80% of young people are trained in a TVET course, while 20-30% are in general and university education.

- [TVET data according to CBT in 2018-2019⁴](#)

Today, Ethiopia has **675 OCFs from which about 200 training frameworks have been developed and are taught.** For the year 2017 and 2018 (the equivalent in the Ethiopian calendar is the year 2010), Ethiopia has nationally **21,727 trainers (A, B and C levels), of which 21% are women.** All are trained with CBT approach and are active in general and polytechnic colleges, as well as all training centres of related ministries (Agriculture, Health, Transport, Culture and Tourism). The trainers are divided among **1,554 schools:** 647 are public (including **63 polytechnics**), 834 are private and 73 are NGOs. These schools welcome **343,464 learners in initial training** (level I to V - from all sectors concerned by the TVET).

In 2017-2018, **671,773 learners** in initial training have taken the certification, while the overall success rate was **59.9%.** For the **343,464 learners in initial training,** the success rate was **76%.** The gap between the number of enrolled and certified learners is due to the fact that learners from previous years did not pass the certification or dropped out and took the certification in 2017-2018. Meanwhile, **865,605 individuals** in continuing education were admitted to certification with very variable success rates: **50.59%** for medium and large businesses in the industrial sector; **89.13%** for learner training (short term); **72.82%** for SMEs/SMIs; and **96.37%** for the agricultural and agropastoral sectors. Therefore, in total more than **1.5 million** learners benefited from TVET (regular or other methods) in 2017-2018.

The TVET system has seen significant growth (**from 17 schools in 1997 to more than 1,500 in 2017-2018**) and, from 2007 to 2010, the percentage of young people with ten years of schooling enrolling in TVET has increased from **22 to 32%.** However, the aim of further increasing the number of regular TVET enrolments (**in 2011, 371,347 enrolments instead of the expected 723,000**) still remains a challenge, mainly due to organisational weaknesses and the availability of sufficient trainers. Another challenge concerns the placement rate, which remains low in the year following graduation, despite the CBT adoption. The rate was around **50% in 2017-2018** (and even 10% for one school visited).

⁴ Data provided by FTA – Meeting of 14 February 2019

- Funding

As already mentioned, the CBT implementation was driven by the TFPs. The major TFPs still active in the TVET is the GIZ, which is involved at federal and local levels. Its actions were focused on the development of the TVET policies and system as well as on the curricula, on the methodological and technical training of trainers, on institutional development and, finally, on strengthening relations with businesses (among others for the dual approach) for the provision of continuing training and technology transfer. For instance, **China** has been involved in the field of agriculture through the Ethio-China TVET Program (training of 6,000 trainers and development agents, about 50,000 students trained), as well as in the construction and provision of equipment in TVET centres. Korea (training of trainers, institutional development and technology transfer), Italy and Cuba (institutional development and technology transfer), Australia (curriculum development), Netherlands (continuing training) and Japan (training of trainers and technology transfer - KAIZEN) are other countries that have supported Ethiopia in the CBT implementation. UNESCO is also engaged in TVET with the BEAR I and BEAR II projects.

Ethiopia has drawn on different models to develop its own training engineering, **which it successfully harmonised**. In addition to the annual investment by the Ethiopian Government, the presence of TFPs remains essential to the CBT implementation, due to the inability to generate sufficient funds internally to support the technological development of the centres and the continuous renewal of material resources (it was not possible to determine the share of the TFPs annual investment).

The annual budgets (the details of which we did not have for the TVET) are prepared at the central level, which then transfers the budgets to the regional offices responsible for monitoring the schools. The latter have little opportunity to generate funds, as selling (short-term) continuing education services or technology transfer services is not a practice in Ethiopia. It is the mandate of the schools (colleges and polytechnics) to provide capacity building services to the private sector at no cost. Apart from exceptions, where the sale of services (e.g. Catering and Tourism Training Institute - CTTI) appears to be more common and relationships with the private sector are strong, the other schools are more primarily dependent on Government funding (or community contributions - e.g. Buee College). There are few, if any, businesses donating materials or directly funding the schools. Their financial contribution is more indirect, i.e. they contribute to cooperative training. Furthermore, Ethiopia has no tax on vocational training.

These funding realities have an impact on schools, many of which report financial insufficiency for the management of their training activities and the maintenance of their equipment. The availability of equipment is limited in some cases, resulting in too many learners around existing (or functional) equipment.

Economic development and support for TVET development

If there is one strong element to highlight in Ethiopia, it is the drastic turn the country has taken to boost its economic development and, at the same time, support TVET development by involving the private sector. In twenty-five years, CBT is now widespread on the national scale, and in all fields (whether or not under the responsibility of the FTA). Ethiopia has transitioned from an outdated education system to a structured and standardised CBA implementation. In addition to initial TVET, CBT is also applied in all continuing, short-term, apprenticeship or re-integration initiatives for adults in TVET. In 2019, 675 OCFs are available, 200 training frameworks have been developed, delivered and evaluated according to the CBT, and over 21,000 trainers have been trained in teaching according to CBT. Although efforts still need to be made to support the continuous improvement of the CBT implementation and to address the challenges encountered, the political will shown since 1994 has not only been seen at the legislative level, but has been translated into a sustained approach of coherent action plans and strategic decisions. The TVET (especially by choosing the CBT approach) has become the tool for accompanying the country's economic development.

4.2. Processes of job and economic potential analysis

Ethiopia has organised its TVET policy around labour market demand. The country has relied on the integration of businesses to raise the level of job frameworks. The country has ensured that these frameworks are accessible and used for the development of all training provided by any training centre, whether public, private, formal or informal. To support its development perspective, the country has developed a **Labour Market Information System (LMIS)**.

In 2017-2018, growth is driven by services (8.8%) and industry (12.2%), with strong employment in energy development, industrial parks and transport infrastructure.

- Perspectives: positive and negative factors

The African Development Bank's⁵ 2018 report projected GDP growth of 8.2% in 2019 and 2020, driven by the growth of industry and services and the recovery of the agricultural sector. Further development of industrial areas will stimulate industrial growth and agriculture will benefit from investments in fertilisers, irrigation and improved seeds. The forthcoming privatisation of the public sectors of maritime and air transport, logistics, energy and telecommunications will stimulate private investment and reduce public expenditure.

The export-led industrialisation strategy includes the development of industrial areas and the use of facilitators for energy, transport and trade logistics. An abundant, inexpensive and easily trained labour force is beneficial to exports, especially in the leather, textile and agribusiness sectors. Strategic location facilitates access to lucrative Middle Eastern and European markets. Investment in renewable energy will generate up to USD 1 billion in exports by 2020. Political reforms and standardised relations with Eritrea will promote prosperity and stabilise the region.

Despite the decrease in the rate of extreme poverty from 46% in 1995 to 23.5% in 2016, Ethiopia has more than 25 million people suffering from poverty due to population dynamics and low initial levels of development. The promotion of inclusive growth through deep structural transformation is thus essential.

Until 2012, and in the formal sector of the economy, unemployment was higher in urban centres than in rural areas, mainly due to high migration to the cities. In 2011, the informal sector of the economy in cities accounted for 37% of the working population. In the same year, 32% of men and 28% of women were self-employed, 32% of men and 38% of women were employed in the private sector and 18% of men and 16% of women were employed in the government. In 2012, **agriculture accounted for 85% of employment** (coffee, food crops, oils, spices, cotton, flowers, livestock). Microenterprises, accounting for 99% of businesses, are the foundation of the Ethiopian economic fabric. This information explains why Ethiopia has strongly focused its development on agricultural training, as well as on promoting self-employment.

Overall, **the orientation of the courses offered** in the schools takes into account the realities and specificities of regional development. For example, regions with greater agricultural potential are characterised by a significant training focus in this area. The same applies to training opportunities related to construction or industrial occupations, tourism and catering, as well as to clothing and textile sectors (taking into account industrial parks). Given that each school has the authority to define the training frameworks, we can generalise that each region develops the training frameworks with local businesses according to the trades identified and for which needs are expressed.

The regulation of the training offer is implemented by the training schools. They have the flexibility to suspend training courses for a given period of time (e.g. for one year, or even to

⁵ www.afdb.org

offer a training course every other year), and depending on the number of enrolments in the course or on the demand from businesses. The schools visited confirmed that they carry out an annual survey on the needs of businesses in terms of training or skills required, and the analysis of these needs may then lead to the introduction of a new course of study or short-term training (continuing or refresher training). The curricula are designed in modules: they can be broken down into units of competencies for customised training for the industry.

Although there is some mechanism for regulating training, it is not based on a systemic or Government-run approach. As a result, practices within schools vary. Some are taking a more radical approach to managing training offer, while others continue to offer the training courses, although the recruitment rate is low (10%). As a result, the system is regulated more on the basis of supply or the expectations of businesses alone and on the dynamism of the management of a school, without necessarily taking into account the recruitment of trainees.

4.3. Development processes for work situation analysis (WSA), occupation-competencies framework (OCF), training frameworks and evaluation frameworks

As mentioned earlier, GIZ has strongly supported the CBT implementation, thus giving a significant stimulus to the development of this new methodology. From the discussions, it seems that the transition has taken place in tandem with the Government reforms. The political will to bring the country out of its economic and social stagnation has resulted in a real vision for the TVET development, relying on CBT thanks to the support of TFPs. Following the implementation of the regulatory frameworks supporting the reforms and the CBT choice, the political vision was expressed through actions such as the development of a high number of OCFs, the training of all CBT trainers in TVET schools and the integration of CBT educational training within the school of training of trainers.

As a result, Ethiopia now has 675 OCFs (of which 203 have already been revised) and approximately 200 training frameworks developed and taught. An OCF review process is planned, thus making the CBT dynamic (for the current year, 52 OCFs are planned to be reviewed). The process of developing curricula according to the CBT in Ethiopia is carried out at two levels: at the central level, with FTA providing the OCF and the evaluation framework; and at the regional level, with the schools being responsible for developing the training frameworks with the support of TVET regional offices. The latter train in the methodology of developing training frameworks, using a training framework design template also submitted by the FTA.

As far as responsibilities are concerned, here is how they are defined:

- [At the federal level](#)

The TVET is managed by the FTA, under the Ministry of Education in Addis Ababa, which prepares the framework laws and regulates the engineering steps according to the CBT and administrative procedures. The agency coordinates the development of the occupation-competencies frameworks with the technical ministries (Health, Agriculture, Transport,

Tourism, etc.), federations and businesses. The development of the OCF is thus based on a real partnership approach with the private sector, since the FTA is in charge of the whole process related to the identification of the stakeholders involved in the WSA (with the support of the technical ministries as needed), the coordination of their participation, carrying out of the WSA, development of the resulting OCF and its validation with the businesses and federations. FTA also ensures the development of the national evaluation frameworks in line with each OCF developed.

- [At the regional level](#)

The regions have implemented their own organisation with offices and a local administration for the TVET. These offices plan, coordinate, finance and supervise TVET within their territory. Through regional taxes, the region covers the salaries of trainers and the purchase of equipment and raw materials for the training schools. The regional offices are also responsible for ensuring the budget allocation for the schools in their territory, according to a funding formula that takes into account the distance from the centre, the number of students, etc. The regional offices do not have a real engineering role, but rather a support and guidance role.

- [At the training centres level](#)

The trainers ensure the development of the training frameworks (regular or continuing) based on the OCF provided by the FTA, as well as the training frameworks template. Level A trainers in a given field are responsible for coordinating the development process carried out by level B and C trainers, and then for validating the developed curriculum. The training curricula are delivered by these same trainers (depending on the level of teaching), and then the learners are assessed internally (by the trainers within the school). This stage is preparatory to the national external assessment (under the responsibility of the Certificate of Competence - COC) which must be passed, as it is the only one recognised for further study at a subsequent level (e.g. from level II to level III). In the case of external assessment, the assessor is a professional from a business or a trainer from another TVET school in the region. The external assessment is under the responsibility of the FTA.

Although the process of developing training frameworks grants full autonomy to schools, this delegation of power raises some challenges:

- The level of technical competencies of the trainers is not the same (especially due to work experience);
- The availability of equipment in schools is not always consistent with the OCF orientation;
- The knowledge of the CBT methodology varies from school to school;
- Trainers' ability to adapt to technological change is limited.

As a result, although the FTA provides a framework for the upstream and downstream stages of the process of developing the training frameworks, the content developed within schools may vary in terms of the quality and nature of the content. For this reason, some

schools have taken the initiative to join forces to share expertise in the development of a single curriculum offered by several schools in the same region. Therefore, it is relevant to mention that these findings have been established by the schools themselves, which also leads them to suggest that the development of training frameworks should be the responsibility of the TVET regional offices and not the schools.

At the operational level, it is the responsibility of the schools to initiate the development of training frameworks (initial or continuing), according to the needs identified on their part with businesses (or according to the demand for training from learners). If the school decides to offer a new training course, it can therefore either use a curriculum that has already been developed and adapt it to the regional situation, or, in the event that the course does not exist, start developing a training curriculum. In this case, it should be based on the OCF, but adapted to the situation of the region. The ability to develop new training frameworks is therefore limited by the availability of trainers, but also their capacity to do so within a given school. The responsibility for engineering is therefore very high for the trainers and their respective schools.

Another factor raised in the various interviews was that some of the OCFs imported from Australia were either not well adapted to the social and cultural context of Ethiopia or did not include cross-curricular competencies, such as those related to languages or ICT, which businesses expected learners to have (especially during internships or recruitment). In addition to the fact that it is possible to highlight a shortfall in the OCF adaptation to the Ethiopian context, there is also a problem in terms of representation of private sector stakeholders in the WSA. Depending on the positions held in the business, these professionals do not always have a holistic view of the tasks performed by the worker for a given occupation.

It is further noted that the presence of trainers directly from the university, but without hands-on experience, creates gaps in the application aspects of the training. As a result, although CBT is implemented, the training content may be too theory-oriented. Given that the CBT engineering process in Ethiopia is widespread and standardised, the findings shared by stakeholders in the technical ministries (Agriculture, Tourism and Culture) are identical to those mentioned above. Although some challenges were noted, the visits to the schools and all the interviews conducted led to the conclusion that the CBT engineering process is well mastered by all stakeholders, whether they are under the guidance of the FTA or a technical ministry. All steps are well understood, the roles and responsibilities of all facilities encountered are well defined. This demonstrates a strong and lasting methodological CBT implementation.

4.4. Implementation of curricula in accordance with the CBT approach

The administrative structure recommended by Ethiopia for the TVET management gives **total autonomy to the schools**, as much in terms of human resources management as in terms of the design of training frameworks and budgets. As such, they play a key role as agents of the federal structure (FTA or technical ministries) in implementing TVET strategic directions under the CBT system. These same schools are, in this regard, the interface

between the Government and the community, including businesses. Given their local positioning, they are in contact with employers, whether in conducting surveys for training needs or in offering continuing training (customised and short-term).

In terms of the organisation of teaching, visits to the schools and discussions with the trainers helped us to understand that they are making every effort **to place learners at the heart of their training priorities**. The differences in equipment (quantity, modernity, etc.) affect the way in which training is delivered and the development of **a work-based learning environment**. The fact that some trainers are recruited directly from university without any practical technical experience, may have consequences for the educational environment. In order to support this important work-based environment factor in CBT, the TVET system has advocated the delivery of curricula in a cooperative training system, which is based on the German learning model. Therefore, 70% of the training should be practical - practice learned in a school or business - and 30% should be theoretical teaching.

It is thus the mandate of schools to identify potential employers who can provide practical learning experience for learners. It was mentioned at the FTA meeting that 70% of the trainees in initial training were doing an internship in a business either in a dual way or over a few weeks at the end of the year (cooperative training). As a result, the remaining 30% of learners will carry out their hands-on experience within the training school (which was confirmed during the visits), due to the fact that the number of businesses (available and interested) is insufficient compared to the number of learners. In addition to this first reason, some schools with well-equipped workshops choose to take on hands-on training due to the lack of appropriate equipment in some businesses or the fact that they do not provide satisfactory guidance for learners (although it was explained to us that the workers in the businesses are trained to supervise the learners). Therefore, even for the 70% of learners who have had a work-based learning experience, this is not always a successful experience and the outcomes achieved vary, due to the factors outlined above.

This strategy of supporting the practice and development of learners' skills in businesses seems to vary in terms of results, since in the hotel and catering industry the relationship with the private sector seems to be dynamic (which was observed during the visit of the CTTI), as is the case in the textile industry and the agricultural sector. In return, since few partnerships are official in the form of an agreement, the hosting of learners is based on a voluntary basis by businesses, as is the participation of businesses in the training offered in the schools. This leads to very diverse results in terms of the impact of the cooperative training formula and demonstrates that the partnership dynamic has to pursue its development.

In terms of quality assurance, having the private sector involved at central level, through its participation in the design and validation process of OCF, as well as in the certification of learners, ensures a minimum threshold of quality in terms of training-employment compatibility, although some challenges exist. Another example of Ethiopia's commitment to continuous improvement of its TVET system is its development of a mechanism for reviewing OCF. In this sense, the feedback collected by the schools is channelled through the FTA. On the other hand, there seems to be a delay between the OCF revision and the

integration of the proposed changes. Finally, there is currently no formal monitoring and assessment system under the FTA, although the implementation of such a system is being considered.

4.5. Training trainers on CBT teaching methods

In Ethiopia, the classification system for trainers working in TVET schools is divided into three categories. Each is associated with the trainer's professional development and, therefore, with his or her technical and educational training. The classification of trainers is as follows for all schools (FTA and technical ministries) offering TVET curricula:

- **Level C:** A young trainer who completed twelve years of schooling and went on to technical studies. He/she teaches the TVET levels I and II competencies and assists trainers of levels A and B in the development of the training curricula;
- **Level B:** This is a C-level trainer with two years' experience as a trainer eligible for training at Bachelor's level at the Trainer Education Institute. This training lasts for three years. Upon passing the exams successfully following this university-level training, he/she will be able to take on the position of trainer for TVET levels III and IV;
- **Level A:** A level B trainer, continuing his or her training at the Training of Trainers School for two additional years. He/she thus achieves the level of Master and can then take on the position of trainer for all TVET levels (I to V). He/she is responsible for coordinating teams of B and C level trainers in the development of training curricula.

It should be mentioned that TVET trainers are technically trained in three universities (Addis Ababa, Adama and Bahir Dar) and educationally (including the CBT component), in a training of trainers school under the FTA.

All trainers have received technical and educational training according to the CBT approach, either as part of their initial training (at a technical college or university level) or through the upgrading activities carried out by TVET regional offices. The visits to the schools also showed that they have access to the OCF, that they use the training curriculum developed and are aware of the contents of the assessment frameworks. Both the OCF and the assessment frameworks are hence used as a basis for the development of the training curriculum.

Trainers, whose training curricula are suspended due to low demand for training, remain employees of the government and their salaries are still paid. They are reoriented to take on training in other fields (depending on their competencies and the level of the training curriculum versus the level of the trainer) or take on technical capacity building in businesses (either through training or through technology transfer). These services are provided at no cost to businesses, as the mandate of the colleges (and polytechnics) is to support the economic and capacity development of businesses/private sector.

4.6. Development of occupational certification frameworks

Ethiopia's strategy for TVET implies that the training offered is based on competency assessment, which is derived from occupational frameworks set by businesses. Consequently, in order to emphasise its goal of increasing the impact of the TVET system, the certification is open to all. Indeed, anyone from the workforce or from a training school can take the certification test (which partly explains the high number of candidates taking the certification test compared to the number of candidates in training). Ethiopia has developed an Ethiopian National TVET Qualifications Framework (ENQF) based on the OCF for all occupations to support this vision. This framework has five levels of complexity, ranging from level 1 (blue-collar occupations with simple competencies) to level 5, corresponding to occupations with high levels of autonomy, understanding, team supervision and innovation.

4.7. Impact of CBT approach on the quality of TVET products

CBT implementation in Ethiopia has been based on an inclusive vision of the Government in relation to businesses and the private sector as a whole. The Government wanted to rely in part on the private sector to support TVET, which is why businesses are involved in the OCF development and the assessment frameworks, just as they are involved in the national certification testing. Furthermore, the Government wanted to increase the participation of the private sector by promoting the cooperative training formula inspired by Germany and its apprenticeship system. The responsibility of TVET schools is still important, as they are responsible for identifying potential employers who can provide a learning experience for learners. Although the identification and involvement of employers in some sectors (particularly those owned by the government) has been successful, it seems that other businesses resist this practice and see apprentices as a burden.

Some stakeholders interviewed mentioned that the involvement of the private sector was considered through “increased awareness”, although they were currently encountering some reluctance. In fact, private sector employers do not consider themselves under any obligation to accept learners if they do not want to. At a time when the number of TVET students is increasing (and will continue to do so), this private sector attitude is a cause for concern, as the current known gap, requiring learners to complete the practical element of the training within the school, could become more accentuated if training positions in businesses do not increase.

According to the information provided in the report by Krishnan and Shaorshadze (2013), cited in the bibliography, the satisfaction of businesses with TVET trainees seems to be overall rather good, but varies, depending on the field and the level of the trainees. However, **there is no large-scale, standardised assessment of the outcomes of TVET graduates in Ethiopia, either in terms of employer satisfaction or recruitment rates.** Although we were told that employment rates (within one year of completing the training) were generally 50% (all fields and levels included), or even 10% for one school visited, or

even 100% in the case of the Ministry of Agriculture, these data are not drawn from formal surveys centralised under the guidance of a responsible facility. There are surveys carried out by the training schools, so that the available data report short-term impacts and outcomes for a small sample of learners. Therefore, the results of these surveys tend to be used internally within schools, which makes it difficult to compare the results obtained, since the surveys are not based on the same foundations.

Moreover, the data, even if available at the FTA (as they are from the regions), are not under the responsibility of the same service. The data are thus spread out among various stakeholders making it difficult to confirm if these data are related to each other, which was also observed when comparing some of the data obtained from the technical ministries with those from the FTA.

5. Methodology

5.1. References

A literature review of the documents listed in this report was completed before, during and after the study mission.

5.2. Collection, analysis and interpretation of data

The collection of preliminary data, from reviewed literature, was supplemented by other data collected through semi-structured interviews that were carried out with most stakeholders who were directly or indirectly involved in the CBT approach implementation process, and who may have influenced the customisation and generalisation of CBT. Focus groups were also added with students or educational stakeholders (trainers, educational coordinator, director of studies, head of projects, etc.) or stakeholders linked to management (director, communication unit coordinator, material accountancy, bursar, etc.). Depending on the schools visited, the focus groups were adapted to the situations and the availability of the people we met. Consequently, the various strategies supported by the data collected enabled the triangulation of such data and, thus, instilled a greater reliability to the findings and recommendations suggested in this report.

The data was collected then processed in order to extract the most relevant elements therein. The analysis of the interviews carried out with stakeholders and actors on the ground (beneficiaries, trainers, managers, support staff) and the cross-checking of data served to highlight findings and recommendations.

Lastly, a brainstorming workshop where observations were shared, following the two missions carried out in Morocco and Senegal, was held and enabled consultants as well as IFEF and UNESCO representatives to agree on the methodology, to adjust some strategies and to discuss the scoping of the content of the country report (and possibly the synthesis report). The subsequent reading of all country reports by all the members ensured a shared understanding of the recommendations and information contained therein.

6. Conclusions

6.1. General remarks

Over two decades, Ethiopia has generalised CBT approach throughout its territory, in all its TVET schools, whether under the authority of the FTA or of technical ministries. A standardised engineering is present in all levels and fields of training and the processes inherent to it are well mastered by the players whether they are at the central, regional or local level (schools). Many results have been achieved, such as the high number of 675 OCFs, training of 21,000 trainers and a large number of schools (more than 1,500) of various levels.

Ethiopia's progress in CBT implementation approach and adaptation is based on slow and rigorous work. The country now needs to fine-tune what is in place and reflect on new strategies that will support the effectiveness of its TVET system by continuing the incremental and iterative approach that is characteristic of the CBT implementation process. With the successful implementation of the main steps of the CBT, Ethiopia is now entering the stage that supports the continuous improvement of what it has implemented.

6.2. Extent and evolution of establishments

Due to the consistency that characterises Ethiopia in terms of its training engineering process and implementation, it is reasonable to conclude that the implementation is complete both territorially and methodologically. The main elements to establish this finding are the following:

- Existence of a standard framework for the OCF development;
- Existence of a template for the development of the training curriculum, a document used by all schools;
- Standardisation of the CBT implementation practice for both regular and continuing training (short-term and in a business);
- CBT engineering training for all trainers;
- Existence of a well-defined and implemented certification framework in all sectors;
- Existence of an annual review mechanism for OCF;
- Proper assignment of roles and responsibilities at all decision-making levels by all players.

Despite these very positive elements, the fast CBT expansion poses some challenges. The high number of schools, as well as the high number of TVET learners and the government's target of continued growth in numbers (723,000 in 2011), explain some of these challenges, including:

- **The number of qualified trainers:** The continuous supply of technically and educationally qualified trainers presents a quality challenge for both the engineering and teaching of the training curriculum. The quality of the trainers varies according to their previous work experience or professional background. Some of them entering the teaching field come directly from university. As a result, their practical skills are more limited and they are more likely to offer theoretical training.

Since the CBT engineering process in Ethiopia relies entirely on trainers to develop training curricula, the number of qualified trainers has a direct impact on the quality of the developed curricula. Therefore, the curriculum may vary in content and even in the length of training for some competencies depending on the trainers' ease with a given course. The approach can also vary greatly in terms of practical aspects versus a more theoretical orientation, again due to the varying level of technical expertise. Finally, the availability and profile of A-level trainers to coordinate the development teams is another challenge. In addition to the fact that there are fewer of them than level B and C trainers, trainers who have moved from profile C to profile A have a stronger combination of theory and practice than those who have come directly from a university B profile.

- **The limited rate at which new training curricula can be developed:** The development of a new training curriculum is based on the needs expressed by employers or by learners. These needs can therefore be of two kinds:
 - i. oriented towards the development of competence elements (continuing education and professional development);
 - ii. focused on training for a new occupation (regular training of learners). If the training curriculum has already been developed, the provision of a new training curriculum can be developed quickly, especially if the school already has some of the material resources that can be used. In the case of non-existent curricula, the process is slower, as it is limited by the number of available and qualified trainers, as well as by the level and availability of equipment. Efficiency in this case even limits the development of continuing training for the private sector.
- **The process of reviewing and incorporating changes to OCF:** Although Ethiopia has a mechanism in place to review OCF, it appears that the pace of integrating changes made by schools or employers (especially in cross-cutting competencies - IT, language, etc.) is slow. Given that the process of developing OCF is centralised and relies on the involvement of businesses identified by the FTA or related ministries, there appears to be a gap between the inputs of these private sector stakeholders at the central level and the needs of the private sector at the local/regional level. This gap can be explained by the representativeness of the stakeholders involved in OCF development.

Given also that some of the initial OCF relied heavily on curricula from Australia, the gaps in some areas (e.g. for tourism and catering) appear to be higher, partly because of cultural and social differences in Ethiopia versus Australia. The process of adapting to an Ethiopian tourist, cultural and artistic reality seems slow and represents a real challenge for the players involved.

- **The active role of employers and the private sector:** Although part of the CBT paradigm and the vision of the Ethiopian state in implementing its educational reform, the involvement of the private sector still varies, even qualifying as “inconsistent” depending on the sector concerned or on the regions or training schools. Although it is considered as important at central level when developing the OCF and assessment frameworks (although the choice of representatives sometimes seems to present challenges), and although it is also important when carrying out the external certification of learners, it is above all at the level of the centre-business alternation (cooperative training) that the impacts are most felt. The voluntary involvement of businesses currently covers only 70% of the candidates in initial training, especially as some of these experiences are not regarded as positive (the learner’s learning is not supported because of inadequate equipment or poor support from the business). This requires schools to address these weaknesses in terms of practical application within their own infrastructure, which is also sometimes lacking in material and physical resources (including, collaterally, trainers with the necessary skills to use these resources). This means that the training is still too theory-oriented.

Due to the uneven involvement of the private sector, the training of trainers must therefore rely, at first, on the strengthening of schools so that they can fill this learning gap, as long as the private sector cannot offer more sustained support. Then, this strengthening of TVET schools should be based on a regional strategy and thus be directed towards the most deficient facilities in order to quickly remedy the greatest inequalities encountered. This strengthening strategy should also be accompanied by a consideration of indicators related to the performance of schools (training rate, certification rate and recruitment rate), in order to ensure better coherence with the strengthening of schools and the real needs of the private sector in the school's immediate community.

- **Lack of a central system for regulating training:** Even if actions are implemented to support the regulation of training, they are isolated and based on practices within schools. The latter carry out annual surveys to obtain training needs, but information related to recruitment is not systematically collected or is only collected for the current year. Although some schools have established a system of annual data collection for some years, the data are not centralised at the regional level and are not very standardised between schools because of the different tools used for the survey. As a result, the data is fragmented and difficult to use. Since they are not disaggregated either by field or level, the overall recruitment percentage of 50% is somewhat of an estimate, or a raw figure, hiding very different situations from 10% to 100% recruitment in different schools or training sectors.

Based on the findings of the literature review and the interviews, as well as the observations made during the visits to the schools, a number of ideas are presented to support decision-making by the Ethiopian stakeholders concerned.

6.3. Potential avenues for future action

Ethiopia has strategically oriented its socio-economic development towards TVET by choosing to give a leading role to businesses and professional players. Given this perspective, the CBT approach has emerged as the most appropriate choice for carrying out the reform. Combining political will and TVET support, the CBT approach was implemented and generalised to the whole country. Further efforts to be invested by Ethiopia are now to support the improvement of the quality of the processes and procedures implemented, as well as to orient its strategies towards the sustainability of the achievements of the last two decades. More specifically, this would involve:

- **Supporting the improvement of the OCF quality:** a high number of OCFs are available and a regular review process is in place. At the same time, the lack of adequacy between the content of some centrally developed OCF and the realities encountered at the educational level seems to be a challenge in terms of quality according to the information noted in this study. One reason is that some of the OCF were originally based on content from Australia and were not properly adapted to Ethiopia. Another possible explanation is the representation of experts from the private sector in the development of OCF by FTA.

Therefore, it would be wise for the FTA to seek local/regional representation in the revision of OCF in order to minimise the disparities between OCF content (and subsequent assessment frameworks) and the needs of employers (or the realities of Ethiopian self-employment). In addition, by adopting a slight decentralised approach in the process of revising OCF (or drafting new OCF), the involvement of regional players will be supported as well as the appropriation of the content.

With regard to the representative of the private sector stakeholders, it is important for the FTA to increase the awareness of the participants (especially when they are referred by the technical ministries) of the necessity to have a good knowledge and understanding of the regional situations which may differ from the situations of the urban administrative centres. In this case, it would thus also be wise to support the diversified participation of private sector stakeholders from regions with heterogeneous contexts and realities.

Finally, also in terms of the OCF quality, it seems that the consideration of cross-disciplinary competencies (IT, language, etc.) is not a factor in OCF development process. If this is the case, bearing in mind that needs may vary according to the region or the field concerned (e.g. for the catering and hotel industry, English language skills are important), the process of revising/developing the OCFs should offer flexibility to adapt the general competencies to the specific situations encountered. Consequently, the specific (technical) competencies must be of the

same level, but a variation could be allowed to ensure a better adaptation of the graduates' profile to the needs of the labour market.

- **Formalising the involvement of the private sector:** Although the private sector is involved in training engineering or in welcoming learners during cooperative training, the commitment is not formalised. As a result, TVET is vulnerable and somewhat weakened if the private sector steps back. It is therefore important that incentives are implemented to support a stronger involvement of the private sector, especially as the Ethiopian economy is booming in several sectors. A dynamic, structured and committed involvement of the private sector is an important factor in supporting the continuous improvement of training and competencies, but also in terms of sustainability.
- **Analysing the process of drafting training curricula:** Although the decentralisation of the drafting of training curricula and the delegation of responsibilities to schools are valuable, the disparity of curricula obtained (in terms of level, quality, content, etc.) suggests that the process needs a thorough reconsideration. In fact, it can be argued that an important step was missed in the educational reform process, namely that of managing change or managing the transition of responsibilities. While schools seem to be able to manage the planning, provision and administrative coordination of training curricula adequately, they are less able to take responsibility for the design. As a consequence, delegating this responsibility to the schools has a significant qualitative and even quantitative impact (limiting the speed of development of training curricula - hence the number). In addition, as the writing is trainer-based, professional interests or expertise can sometimes bias the curriculum orientation.

It would therefore be advisable to consider making regional players more responsible, so that they are more closely involved in the drafting of training curricula, whether in terms of coordinating the drafting process or taking full responsibility for it. Such a reorientation of the drafting process would be aimed at standardising the content and increasing the standardisation of the curricula offered. Although the drafting of curricula could be done at regional level, it is important that schools remain very much involved and are represented in the drafting teams. As such, this shift of responsibility for drafting training curricula to the regional level should be accompanied by a strategy of increased capacity building for trainers in training schools so that they can better contribute to the curriculum design process. Although trainers benefit from capacity building activities, it seems that the duration of these activities is insufficient for them to be sufficiently equipped to meet the expectations they face.

- **Supporting the material and technical strengthening of schools:** Training quality is mainly based on the level of technical competencies of the trainers and the availability of quality (and adequate quantity) of material resources. The observed variance between schools suggests that the training offered does not have the same

level of complexity or the same level of practice depending on the school's situation. One risk mitigation measure proposed by Ethiopia was to rely on cooperative training, although this is an ingenious approach that has its challenges. Since the input of some businesses is limited, it is imperative that schools are brought up to standard to ensure quality training, which implies functional and well-equipped workshops and competent trainers to develop the technical competencies to the learners.

Another important aspect of strengthening schools is that Ethiopia should start thinking about self-generated income by these same facilities. As the current mandate of the schools is to support the development of businesses, services to businesses (continuing education and technology transfer) are offered, mostly at no cost. Therefore, it is important to carry out an in-depth analysis of this practice in order to determine whether it is possible to increase the financial (or material) benefits of this practice for the schools. In a context of continuous pressure on the system to develop its training offer, and in a context of limited resources, the capacity of the centres to generate additional income must be analysed.

- **Establishing a structured national system for regulating the training supply:** Although some regulation is currently in place, it is based on decisions taken at the institutional level. The data used is variable and fragmented, particularly with regard to the recruitment rate. In the light of the significant economic and sectoral developments in Ethiopia (agriculture, infrastructure, construction, textiles and clothing, etc.), the country needs to develop a system that will enable it to better manage its training supply. This relies on a national mechanism for monitoring employment, but also the recruitment of trainees. By having a better vision and understanding of the challenges faced by trainees during their recruitment (and self-employment), Ethiopia will be able to better adjust its training supply (and content), both nationally and regionally. The Government will thus be able to develop strategies adapted to local variables and constraints or to economic and social environments that vary according to the region or where schools are located.

ANNEX 1 – Interview Guidelines

Themes	Sub-themes	Questions
1. History and institutional context of CBT introduction	Implementation conditions and history	<ul style="list-style-type: none"> • Could you please explain the history of CBT implementation? • How and by whom was it initiated? <ul style="list-style-type: none"> ○ Who made the decision to initiate it? ○ What type of CBT approach was adopted (what external support) and how was it adapted to the specificities of the country? ○ What contributions have been made by government, TFPs, private sector and civil society? ○ What was the level of commitment of each of these actors? • How is TVET organised: technical education and vocational training, apprenticeship? • What is the status of CBT roll-out across the different sectors and regions? (Management of the transition) <ul style="list-style-type: none"> ○ What have been the difficulties or obstacles to roll-out? ○ What are the roles of regional and local actors in CBT implementation (education system, link between TVET and the private sector)? • What influence do private school operations (e.g. Don Bosco) have on CBT?
	Political and institutional framework	<ul style="list-style-type: none"> • What key legal documents are required for the implementation of the CBT approach? • How has the CBT approach influenced TVET operations and schools? • How did you (do you) establish linkages with socio-economic development priorities by sector? • Has the partnership inherent to CBT implementation helped to organise partnership governance mechanisms? <ul style="list-style-type: none"> ○ What is the scope of that partnership? ○ How about its national, regional, local and sectoral roll-out?
	Issues of financing	<ul style="list-style-type: none"> • Who funded (is funding) CBT implementation? <ul style="list-style-type: none"> ○ And, has CBT implementation facilitated private sector involvement in funding the mechanism? ○ What has been the trend in the level of government involvement? Has it increased or decreased? • What was the impact of transition to the CBT approach on funding? • What was the extent of funding invested in CBT teaching and training and what were the funds used for? Question on CE and apprenticeship.
2. Processes of job and economic potential	Background and analytical process	<ul style="list-style-type: none"> • Before CBT implementation (or in the case of non-CBT design curricula), what process was used to analyse jobs and economic potential? <ul style="list-style-type: none"> ○ What has changed since CBT implementation?

analysis in the countries	Job analysis process	<ul style="list-style-type: none"> • What mechanism was used to analyse jobs by priority of economic sector? • How are priorities set to select economic sectors or industries for CBT curriculum design? • How are new occupations identified? • What is the decision-making framework/process for developing new fields/occupations or for discontinuing fields that no longer meet needs? <ul style="list-style-type: none"> ○ How is the situation of trainers in the discontinued fields being dealt with? • How are businesses/employers associated in decision-making? <ul style="list-style-type: none"> ○ At what level are decisions made? At public, private, partner level? • Has the training method facilitated CBT implementation?
	Managing and regulating the flow of students	<ul style="list-style-type: none"> • How does the CBT approach help manage/regulate the flow of students?
	Consideration of distinctive features of regional/local development	<ul style="list-style-type: none"> • How are the distinctive features of regional/local development factored in to training programme development/revision? • Have vocational training centres (VTCs) begun specialising in sectors according to the qualification needs of businesses in their respective economic environments and geographical areas?
	Monitoring mechanism	<ul style="list-style-type: none"> • Is there a monitoring mechanism to support regular revision and adaptation of training curricula to meet new qualification needs? <ul style="list-style-type: none"> ○ Is the system revised on a regular basis to meet the needs of the labour market? ○ What organisation or body organises or deals with curriculum revision? Is the private sector involved? • Has CBT approach facilitated the monitoring of the supply of training and the productive sector's demand for skills and needs in terms of qualification (regulation of certification)? <ul style="list-style-type: none"> ○ What is the structuring effect of CBT approach in rationalising of needs or their analysis? ○ Has the CBT approach helped facilitate the decision-making process? ○ Have CBT practices in private training centres had an impact on the practices of public institutions?
3. Development processes for work situation analysis (WSA), occupational competency standards, training curricula and evaluation standards	Development and validation processes	<ul style="list-style-type: none"> • Is the CBT curriculum design process supported by a normative and/or methodological framework (e.g. CBT guide) or is reflected in a government policy? Who is involved in programme design (oversight and decentralisation)? <ul style="list-style-type: none"> ○ What is the subsequent validation process for the curricula developed? • What body(ies) are involved in CBT programme development? • What is the validation process? <ul style="list-style-type: none"> ○ Who validates the certification/evaluation standards?
	Partnership approach	<ul style="list-style-type: none"> • Were standards designed in partnership with all stakeholders in vocational training and notably with the

		<p>participation of the employers organisations, businesses and industries, as well as government?</p>
	Management of the transition	<ul style="list-style-type: none"> • How substantive is the transition? <ul style="list-style-type: none"> ○ Is the CBT implemented alone (pure CBT) or is there a transition between outcome-based training and CBT (in the country)? Within a VTC? Within a single programme (e.g. a CBT approach but a conventional assessment system)? • What are the obstacles to a full transition? <ul style="list-style-type: none"> ○ How long has the transition been taking place? • What is the degree of acceptance/ownership of CBT use? <ul style="list-style-type: none"> ○ Has the transition been successful? ○ Do donors still invest in the transition? • What major changes have been observed since the adoption of the CBT approach?
4. Status of CBT programme implementation	Independent management of vocational training facilities (including their finances)	<ul style="list-style-type: none"> • How was the CBT implementation process set in motion? <ul style="list-style-type: none"> ○ What is the current status of roll-out? ○ What are the obstacles and leverage for its deployment? ○ How well is the process accepted? • Are all VTCs given administrative, financial and pedagogical autonomy? <ul style="list-style-type: none"> ○ Can they hire professional trainers? ○ Do they devise their own strategic and operational planning? ○ Do they manage their own budgets? ○ Has the CBT approach led training centres to generate funds through production units (financial innovation) and/or influenced their teaching methods (application)? ○ Has the CBT approach helped training centres develop a lifelong learning plan? ○ Have VTCs become players in the economic development of their respective areas? Or communities? ○ Is budget adapted to CBT requirements (materials, infrastructures, equipment, working materials)? • Is there an accountability mechanism in place? If so, how does it work?
	Organisation of learner-centred teaching	<ul style="list-style-type: none"> • What teaching changes have been made as a result of CBT (more specific questions)? • What is the role of the student in the learning process? • What learning strategies were put in place: subject-to-modular approach; multidisciplinary approach; reflective learning, etc.? • What percentage of training time is used for practice? • What is the ratio of workstations (tool sets) to learners per class?
	Training environment modelled on the working environment	<ul style="list-style-type: none"> • What changes have been noted in the training environment as a result of CBT? • Are technical and professional tools in line with what is used in the local industry? • Are the consumables used the same as the ones used locally? • Beyond compliance, is there any added value that can enhance the quality of production locally?

	Partnership dynamics	<ul style="list-style-type: none"> • What changes resulting from the introduction of CBT are observed on local partners? <ul style="list-style-type: none"> ○ Has a school-environment consultation framework (professional environment, NGOs, etc.) been put in place? ○ Have teaching methods used for training in conjunction with companies (work-study, apprenticeship), or in the workplace, been adopted and coupled with CBT approach? ○ Are they followed?
	Quality assurance system	<ul style="list-style-type: none"> • What changes resulting from the introduction of CBT are observed in the quality assurance systems of training centres? • Is there a mechanism to gauge the status of CBT implementation (quality over the mid to long term)?
	Degree of compartmentalisation (roll-out)	<ul style="list-style-type: none"> • What stage have you reached in the roll-out of the CBT implementation process? • What are the challenges that hindered, or the levers that helped, the roll-out (to other sectors and geographical areas) of CBT?
5. Training trainers on CBT teaching methods	Training trainers	<ul style="list-style-type: none"> • How are trainers trained on CBT methods? <ul style="list-style-type: none"> ○ Duration; and ○ Resources. • Do trainers have access to standards and guides? • Do trainers use the standards and guides (and do they understand them)? <ul style="list-style-type: none"> ○ What challenges and/or difficulties are encountered? • What changes in teaching practices resulted from the training of trainers? • Who, in the VTC, is officially in charge of the implementation, coordination and management of CBT? • Is there a teaching methods unit within the VCT (or outside the centre, such as inspectors, sectoral, regional/national) for the purpose of pooling trainers learning or for sharing/sustaining the training of trainers? • What strategies are in place to support trainers' acceptance of, or commitment to, CBT implementation? <ul style="list-style-type: none"> ○ What are the main challenges faced? • Were apprentice instructors and trainers, seconded from businesses, trained on CBT? <ul style="list-style-type: none"> ○ Are they supervised? ○ Do they have access to documentation (standards, guides)?
	Training of other VTC players	<ul style="list-style-type: none"> • Are teaching consultants and/or inspectors, entrusted with the revision and development of syllabi (or with the facilitation of implementation), trained in CBT? <ul style="list-style-type: none"> ○ Are they trained at the same time as the trainers? ○ What kind of training do they receive? • Are VTC administrative and management staff trained on CBT? <ul style="list-style-type: none"> ○ Are they trained at the same time and in the same place as the trainers? ○ What is the content of the training they receive (what are they trained on? Merely teaching methods or on their implications as well)?
6. Development	Development and/or	<ul style="list-style-type: none"> • Has the introduction of CBT impacted the development

<p>of occupational certification frameworks</p>	<p>revision of certification/qualification frameworks</p>	<p>and/or revision of certification/qualification frameworks?</p> <ul style="list-style-type: none"> • Is there a linkage between certification/qualification framework and the national occupational framework? • Has CBT approach facilitated the development/revision of systems for the validation of acquired experience? • Does the qualification and certification framework work? • How are professional organisations involved in the assessment and certification process? • What is the impact of the CBT approach on creating bridges between TVET and other educational sub-systems (basic education, basic entry level for illiterates) and higher education? • How has CBT changed the certification offer (creation of new degrees and diplomas)?
<p>7. Impact of CBT approach on the quality of TVET products</p>	<p>Business satisfaction</p>	<ul style="list-style-type: none"> • How has business satisfaction changed in relation to staff recruited after their graduation from TVET following the introduction of the CBT approach? <ul style="list-style-type: none"> ○ Have actual improvements been observed in the professional act of freshly graduated staff? ○ What are the main differences observed? • What systems to collect business operators' feedback were put in place to feed and facilitate CBT implementation? • What tools are used to gauge business satisfaction?
	<p>System to measure employability</p>	<ul style="list-style-type: none"> • Is there a tool to monitor the professional integration of graduates? <ul style="list-style-type: none"> ○ In the affirmative, are there elements to determine whether the CBT approach facilitated their employability? If so, what changes have been observed in the measuring of professional integration following CBT implementation?

ANNEX 2 - List of persons/entities contacted/met

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Addis Ababa – Ministries			
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Hawassa (Southern Nations region)			
19.	AKLILU		
20.	ATNAFU		
21.	DAFURSA		
22.	Beyeche Gemechu KEBEDE		
OIF Permanent Representation to the African Union (PRAU) – Addis Ababa			
23.	Issa Boubacar ABDOURAHMANE	Director of the OIF Permanent Representation to the African Union (PRAU) – Addis Ababa	boubacar.issa-abdourhamane@francophonie.org
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Mission members			
Mrs. Sonia MICHAUD	Consultant – Director of the International Cooperation New Brunswick Community College (NBCC)		Sonia.michaud@ccnb.ca
Ms. Barbara MURTIN	Coordinator of the training and vocational integration programme for young people – IFEF Senegal		barbara.murtin@francophonie.org

ANNEX 3 – References

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