



# Lessons from the Technical and Vocational Education and Training (TVET) and Enterprise-Based Training (EBT) Initiatives

## Building Opportunities for Resilience in the Horn of Africa

August 2020

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## Acronyms

BDSC	Business Development Support Centre
BORESHA	Building Opportunities for Resilience in the Horn of Africa
EBT	Enterprise-Based Training
ETH Br	Ethiopian Birr
EU	European Union
FGD	Focus Group Discussion
ICT	Information and Community Technology
KES	Kenyan Shillings
LMA	Labour Market Assessment
NGO	Non-Governmental Organisation
NITA	National Industrial Training Authority
ROI	Return on Investment
SAMTEC	Sayid Mohamed Technical Education College
SC	Save the Children
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational Scientific and Cultural Organisation
USD	United States Dollars
VCA	Value Chain Analysis
VTC	Vocational Training Centre
WASH	Water, Sanitation and Hygiene

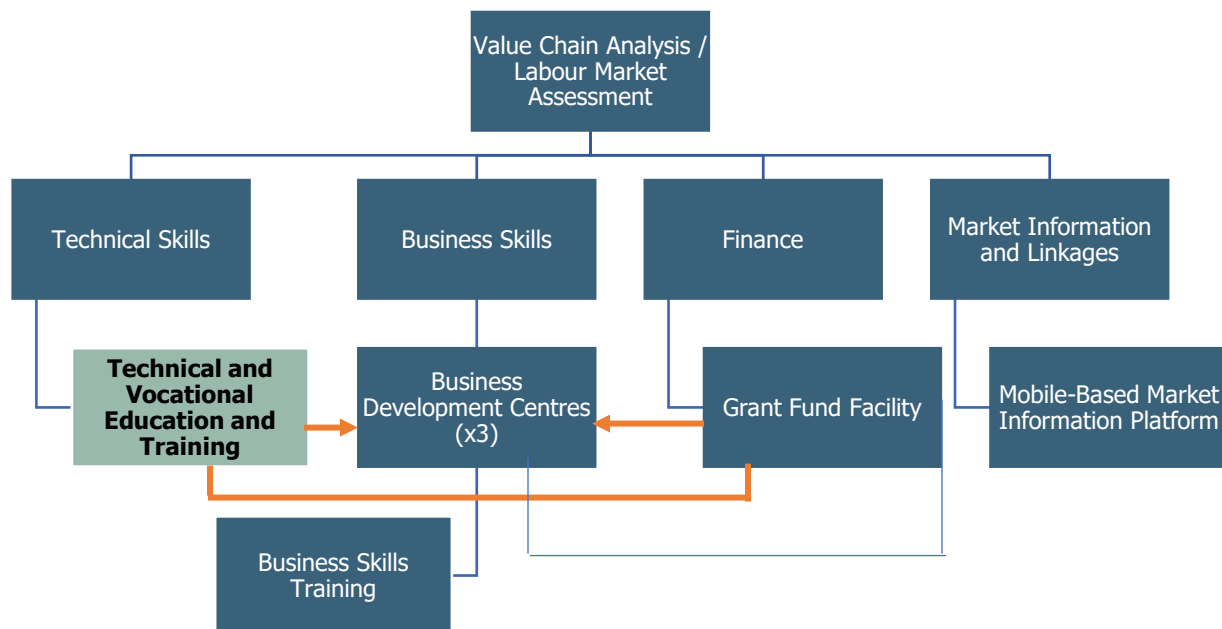
## The BORESHA Programme

Funded by the European Union Trust Fund for Africa, Building Opportunities for Resilience in the Horn of Africa (BORESHA) is a three-year project (2017 - 2020) that works with local communities and public authorities to promote economic development and greater resilience in the tri-border region between Kenya, Ethiopia, and Somalia. BORESHA is implemented by a Consortium led by the Danish Refugee Council together with two non-governmental organisations (NGOs) - CARE Deutschland-Luxemburg and World Vision UK - and a private sector company Tetra Tech International<sup>1</sup>.

In recent years, whilst Ethiopia, Kenya, and Somalia have seen economic growth, bouts of civil and political unrest and ensuing instability, including in the tri-border area, have meant that these countries are largely characterised by common problems of high unemployment, economic inequality, and a lack of (affordable and accessible) education. In addition, the low skill levels among youth across the tri-border region is a major constraint to local economic development.

Adopting a multisectoral approach, BORESHA interventions have included building conflict management and resolution capacities; enhancing and diversifying livelihoods; strengthening basic service delivery; natural resource management; and promoting cross-border trade and private sector development. In particular, towards designing and developing intervention activities that sought to enhance and diversify livelihoods, the BORESHA programme team drew on its Value Chain Analysis<sup>2</sup> (VCA) and Labour Market Assessment<sup>3</sup> (LMA) to identify four focal areas that would support cross-border livelihood development: Technical skills; Business skills; Finance; and Market information and linkages (see Figure 1 below).

Figure 1: Extract of BORESHA focal areas and interventions<sup>4</sup>



<sup>1</sup> Formally WYG International.

<sup>2</sup> BORESHA Value Chain Analysis on Livestock, Livestock Products and Alternative Livelihoods in the Cross-Border Area between Kenya, Ethiopia and Somalia, June 2018.

<sup>3</sup> BORESHA Labour Market Assessment Livelihoods in the Cross-Border Area between Kenya, Ethiopia and Somalia, June 2018.

<sup>4</sup> Adapted from BORESHA, Technical Brief 1, March 2020

Towards analysing the current status of technical skills, the LMA collected information on current and prospective vocational skills in demand by potential employers and identified occupational shortages across a number of sectors including: honey production; milk marketing; meat-selling; livestock fattening and marketing; tailoring; plumbing and construction in relation to water, sanitation, and hygiene (WASH); and business management. Moreover, the LMA highlighted that the demand for skilled carpenters, masons, construction workers and plumbing skills was projected to increase. The LMA also determined that the business community, particularly entrepreneurs of small businesses lack management and accounting skills. In particular, amongst young entrepreneurs, business failure was often related to a lack of understanding of the key concepts of profit, loss, and seasonality.

Recognising that technical, and vocational education and training (TVET) has become one of the key tools for generating youth employment, three key recommendations were made in the LMA:

1. TVET should focus on new and existing priority sectors for training, such as those identified above.
2. TVET support interventions should look at ways to lengthen the training periods funded, particularly for vocational skills that require longer-term training as opposed to short courses of six months or less.
3. Cooperatives of trainees should be formed and provided with support services.

In response to the LMA recommendations and drawing from its baseline study<sup>5</sup>, which determined that communities in the tri-border area mainly relied on pastoral livelihoods and so a high potential for livelihood diversification and skills development, BORESHA established its TVET<sup>6</sup>/EBT programming as a way to develop technical skills towards alternative employment opportunities. As BORESHA draws to a close, this document captures the lessons learned from the TVET sponsorship<sup>7</sup>, including the successes and challenges of using formal TVET institutions, and in the case of Kenya the use of non-formal enterprise-based training (EBT), as service providers to achieve the programme goal. Whilst the TVET intervention was implemented by several consortium partners, the study draws on the Tetra-Tech led TVET experience to elicit lessons learned.

To capture the lessons learned, this study adopted a mixed method approach including document review, analysis of monitoring data collected (qualitative and quantitative), observation, and semi-structured interviews with TVET and EBT suppliers<sup>8</sup> to address issues of intervention design, implementation and the result achieved<sup>9</sup>. Data was triangulated across different data sources and different interviewee groups. Whilst initial findings were cross-checked and triangulated through analysis of documents and monitoring data, preliminary findings were also presented to in-country BORESHA Business Development Support Centre (BDSC) Coordinators; this 'sense-making' supported validation of the findings and involved the programme stakeholders in interpreting and making sense of the emerging data, patterns, and themes.

This document's intended primary audience is the BORESHA implementation team, including all of the consortium partners, and its aim is to support evaluation and learning as well as considerations towards future design of similar programmes.

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<sup>5</sup> BORESA Baseline Survey, July 2018.

<sup>6</sup> The United Nations Educational, Scientific and Cultural Organisation (UNESCO) defines technical and vocational education and training as "education, training and skills development relating to a wide range of occupational fields...livelihoods...[which] includes work-based learning...which may lead to qualifications". TVET can be formal (provided by an education or training institution) or non-formal (for example, training taking place in a private business), and can lead to certification. See UNESCO. (2018). A Global Overview of TVET Teaching and Training: Current Issues, Trends and Recommendations. Geneva, July 2018.

<sup>7</sup> In relation to vocational skills training, the BORESHA TVET funding covered the cost of tuition.

<sup>8</sup> Nine KIIs were conducted: 1) the heads of the three TVET institutions utilized by BORESHA (Horn International College, Mandera VTC and SAMTEC); 2) Five private business owners providing EBT (Barwaqo Tailoring, Abdia Tailoring, Mustahil Tailoring, Jududi Electronics and Suftu Garage); 3) TVET Coordinator, Danish Refugee Council.

<sup>9</sup> Key limitation to additional data collection was time and the restrictions to travel as a result of the COVID-19 pandemic.

## Lessons from BORESHA TVET/EBT Initiatives

### The quality of TVET institutions and their curricula can vary considerably.

When considering TVET institutions to partner with as part of the BORESHA programme, implementation teams across the three countries conducted TVET institutional quality assessments. For example, in Kenya of the six TVET institutions identified in the region<sup>10</sup>, only one, Manderu Vocational Training Centre (VTC), was accredited and registered by the Kenyan Technical and Vocational Education Training Authority (TVETA)<sup>11</sup>, two VTCs<sup>12</sup> were found to have inadequate staff and learning resources and three VTCs lacked basic utilities such as water and electricity.

Another key distinction is that there are both public and private TVET service providers. Challenges with state funding, particularly in the targeted BORESHA regions, has meant that many public TVET institutions lack suitable facilities, resources, and teaching capacity. As a result, BORESHA partner institutions are drawn from both public and private TVET service providers. Four TVET institutions were contracted to provide vocational skills short courses: Horn International College, Ethiopia, Sayid Mohamed Technical Education College (SAMTEC), Somalia, and in Kenya, Madera VTC and Rhamu VTC, which, given the findings of the quality assessment, was limited to two courses.

Whilst the BORESHA quality assessment checklist for TVET institutions and private businesses providing EBT included considerations of facilities (see Figure 2 below), teaching resources etc., there was no assessment of the curriculum. A review of the curriculum could have considered the connections between the skills being taught and the appropriateness of the teaching capacity and facilities available.

Figure 2: Tailoring facilities at Horn International College, Ethiopia (left) and Manderu VTC, Kenya



For example, across the three countries, all institutional TVET providers offered Tailoring as a vocational skill and students across the three countries selected this course. A review of the Tailoring curriculum (see Table 1 below) illustrates that the Tailoring curriculum provided by Horn International College articulates to the National Qualifications Framework and occupational standards of working in the tailoring industry. It clearly lays out the teaching and learning content and structure and demonstrates the technical and soft skills (such as teamwork and workplace communication) a student would be developing over the course of the programme and the associated assessment criteria.

<sup>10</sup> Manderu VTC, Takaba VTC, Rhamu VTC, Elwak VTC, Banissa VTC and Fino VTC.

<sup>11</sup> Established by the TVET Act 2013, TVETA regulates and coordinates institutional TVET training. The other 5 institutions' registration and accreditation process by TVETA was ongoing.

<sup>12</sup> Such as Rhamu VTC and Banissa VTC.

Whilst the Manderu VTC curriculum is not as clearly structured, it largely provides similar components including details of both technical vocational skills training and soft skills such as personal safety, behaviour in the workplace and First Aid. Unfortunately, at the time of this study, there were no curriculum documents available from SAMTEC (Somalia). By way of explanation, the BDSC Coordinator for Somalia stated that as much of the existing TVET curriculum is derived from Kenya, there does not yet exist a standardised TVET curricula or system for assessment. International partners like UNESCO continue to work with the Education Ministry of the Government of Somalia and as such new TVET curriculum is impending.

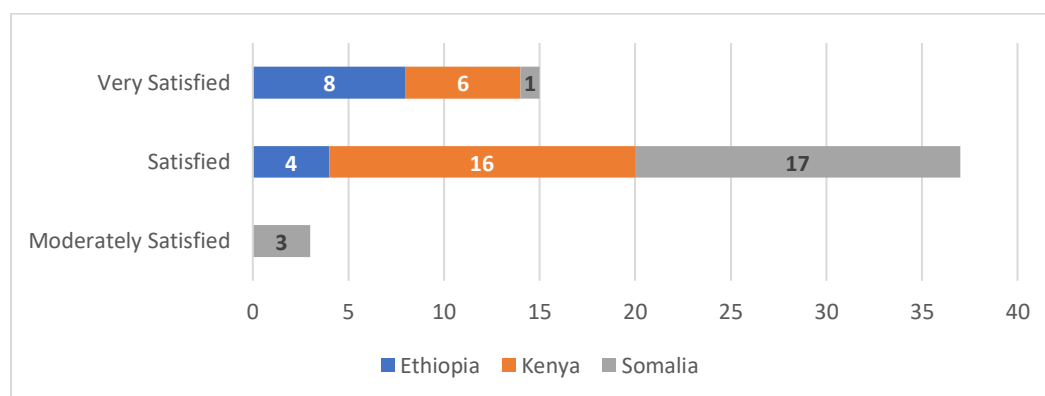
Table 1: Review of Tailoring vocational skill curriculum

Teaching-Learning Content/Structure	Horn International College, Ethiopia	Manderu VTC, Kenya <sup>13</sup>	SAMTEC, Somalia
Linked to National Qualifications Framework	✓	✓	<i>No curriculum documents were available at the time of this study</i>
Linked to Occupational Standards <sup>14</sup>	✓	✓	
Practical orientated pedagogy	✓	✓	
Integration of soft skills <sup>15</sup>	✓	✓	
Clear learning objectives	✓	✓	
Learning objectives match learning outcomes	✓	✓	
Clear assessment criteria	✓	X	

### Students were satisfied with the quality of the learning experience.

In December 2019<sup>16</sup>, a ‘tracer study’ was undertaken, which reached 55 students<sup>17</sup>, that is, 60% of total students supported by Tetra Tech. A graduate questionnaire that captured a wide array of post-training issues, such as the learning experience, was administered. For example, students were asked to assess whether they were satisfied with the training along the scale of not satisfied at all, not satisfied, moderately satisfied, satisfied, very satisfied. As Figure 3 below highlights, the majority of students were either satisfied (67%) or very satisfied (27%) with their training.

Figure 3: Student satisfaction rating of vocational skills training



<sup>13</sup> Kenya had two sets of TVET curricula – Dressmaking (female garments) and tailoring (male garments).

<sup>14</sup> Occupation Standards refer to the knowledge, skills and attitudes required for effective workplace performance.

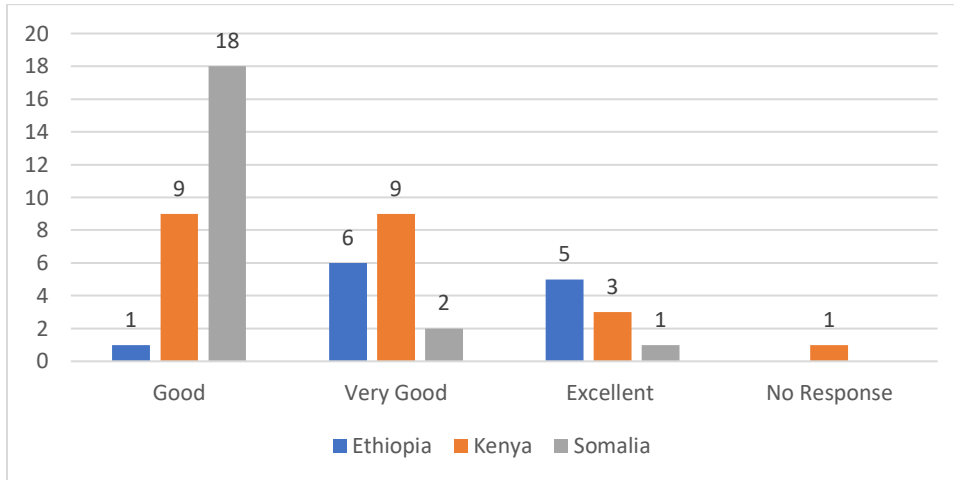
<sup>15</sup> For example, communication, teamwork, problem-solving, responsibility.

<sup>16</sup> This would be six to nine months after the student completed their training, depending on which course they selected and in which country.

<sup>17</sup> 12 students in Ethiopia, 22 students in Kenya, and 21 students Somalia.

In addition, students were asked to assess the quality of their training certificate along the scale of poor, fair, good, very good, excellent. As Figure 4 below demonstrates, 51% of students rated the quality as good, 31% very good and 16% excellent.

Figure 4: Student self-assessment of the quality of the training<sup>18</sup>



### EBT in Kenya supports access and equity to skills training.

BORESHA also made use of Enterprise-Based Training (EBT), which like apprenticeships, is a system that provides trade skills development through on-the-job training and often has some accompanying study.

The concept of EBT was established by Save the Children (SC), an international NGO that has implemented a number of livelihood programmes in the tri-border region. Determining that formal institutions were either located too far away or lacked the necessary capacity to provide quality education and training, SC identified private businesses that could be trained as certified TVET instructors and provided the necessary training and support to develop a cohort of private businesses that could provide EBT.

In Kenya, given that the three sub-counties targeted by the BORESHA programme were geographically widespread, the assessment team identified a pool of 19 EBT providers that had the capacity to offer the training<sup>19</sup>, all of whom had qualified personnel with training experience.

11 private businesses located in Banissa and Rhamu were contracted to provide EBT, including tailors, garages, and a beauty salon. The EBT approach enabled male and female students that could not afford to relocate closer to TVET institutions access to vocational skills training.

### Implementing the skills gaps identified in the LMA is challenging.

The LMA process held focus group discussions (FGDs) with a cross-section of private sector employers, public sector officials, and NGO administrators. The FGDs assisted in identifying current skills gaps, occupational shortages, and priority sectors for skills development.

<sup>18</sup> Whilst it could be considered that the students were asked to reflect holistically on the whole learning experience, such as training experience, attitudes of trainers, the interactive nature of learning etc., the graduate questionnaire did not provide a definition. Also, the graduate questionnaire did not ask students to elaborate why they chose a particular rating for the quality of the training. A key challenge with the Graduate Questionnaire is that the opportunity to provide qualitative responses was not sufficiently utilised.

<sup>19</sup> All the trainers had relevant National Industrial Trade Authority (NITA) certification.



For example in Ethiopia, from the government perspective, a lack of skills in honey production, milk marketing, livestock fattening and marketing, and business management were identified. From an NGO perspective, in the construction and WASH sectors, a dearth of skilled carpenters, masons, construction foremen, and plumbers was highlighted, whilst private sector employers identified critical shortages in administration, finance, and agricultural-related mechanical skills.

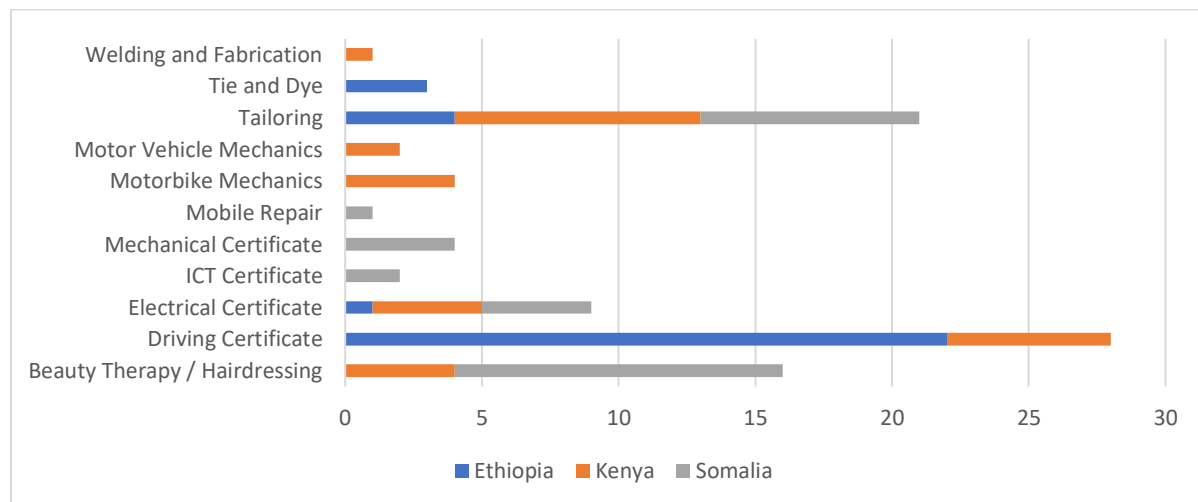
Yet, as the LMA recognises, “There are no focused programmes currently operating in most of these areas”.<sup>20</sup> This was certainly the case in terms of the range of training programmes the TVET institutions (and in Kenya the private businesses offering EBT) utilised by BORESHA offered.

For instance, Horn International College in Ethiopia offered the following nine TVET short courses: Information and Communication Technology (ICT); Tailoring; Tie and Dye; Hotel and Tourism Management; Metal and Woodwork; Male and Female Beauty Salon; Driving Skills; Electrical Trade (electrical fitting, electrical installation) and Mobile Maintenance. Thus, in the case of Ethiopia, comparing the skills shortages outlined above against what TVET training is available, three out of the nine TVET courses (ICT, welding and fabrication, mechanical and electrical certificates) could potentially meet some of the local skills shortages identified by the LMA.

Additionally, the design of the BORESHA programme was such that students selected vocational skills training that they were interested in, without any pre-selection support such as careers guidance. Whilst BORESHA data relating to why students selected particular courses is not available, a similar study undertaken by SC<sup>21</sup> in terms of its TVET programmes across the tri-border area determined that training course preferences were similar across the three countries, despite its own LMA findings. SC concluded that selection of TVET programmes by students were driven by two key factors: 1) previous experience; and 2) socio-economic conditions of others in their communities.

Given the SC findings, it is perhaps not surprising then that BORESHA vocational skills training programmes and preferences were largely similar across all three countries (see Figure 5 below). Achieving a driving certificate [licence] was the most popular study preference (28 students), followed by tailoring (21 students) and then beauty therapy/hairdressing (16 students).

Figure 5: Range of vocational skills by student numbers



<sup>20</sup> BORESHA Labour Market Assessment Livelihoods in the Cross-Border Area between Kenya, Ethiopia and Somalia, June 2018, p45.

<sup>21</sup> Save the Children. (2020). A Review of the Lessons Learned on ASST Programming from the Horn of Africa: Ethiopia, Kenya, & Somalia. <https://kenya.savethechildren.net/research-reports>

## Standardised approach to data collection for cost effectiveness could enable comparability.

During the BORESHA design stages, establishing which methods to adopt in order to profile and analyse TVET/EBT implementation would assist in determining what data is needed, where the data would be collected from, how the data would be collected and analysed, and when the data would be collected.

The use of standardised data collection approaches and tools is an effective way to profile TVET implementation and provides the basis for analysis. For instance, a useful approach to determining cost effectiveness for TVET is determining the return on investment (ROI). Calculating the ROI from a funders perspective can provide evidence on the performance of the intervention, be used as a tool for communicating impact, assist in attracting investment and inform public policy. Moreover, it can measure individual economic performance.

However, from the offset, which model<sup>22</sup> would be utilised would need to be agreed upon and designing the appropriate data collection tools an important next step. Regular intervals of data collection would need to be undertaken, for instance both during the TVET/EBT training and for as long as possible post-completion of TVET/EBT studies. For example, if BORESHA determined a Cost-Benefit<sup>23</sup> analysis as the approach to determining value for money (cost effectiveness), data collection regarding benefits (earning levels, work satisfaction, livelihood changes etc.) would need to be undertaken and the approach to data collection would need to be mindful that benefits might arise at different points in time.

In relation to costs, the prices charged by TVET institutions to provide vocational skills training are often linked to the type of training being offered and this is clearly demonstrated in the context of Horn International College in Ethiopia, which was contracted as follows:

- Tie and Dye USD 224/student<sup>24</sup>
- Tailoring USD 126/student<sup>25</sup>
- Electrical Certificate USD 194/student<sup>26</sup>
- Driving Certificate USD 105/student<sup>27</sup>

Interestingly, in Somalia and Kenya a flat rate was applied for all courses. Specifically, in Kenya both Mandera VTC and Rhamu VTC were contracted at a rate of USD 4.6/student<sup>28</sup> per month of training, so for example a six-month course would amount to USD 27.6/student. Whilst in Somalia, SAMTEC was contracted at a rate of USD 480, for each training course provided.

Additionally, in Kenya, the 11 private business that provided EBT were contracted at a rate of USD 39/student<sup>29</sup> per month of training. So, a six-month EBT course would cost USD 234/student. Whilst it would appear that a simple comparison of costs between the three countries can be made, several challenges needs to be taken into consideration.

For example, Table 2 below depicts the costs for vocational skills training in Tailoring across the three countries. In a literal sense, it would appear that embarking on Tailoring skills training is cheapest in Kenya at a TVET institution (USD 27.6) and the most expensive in Somalia (USD 480). In addition, within Kenya,

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<sup>22</sup> Several models could be utilized such as Cost-Benefit Analysis, Kirkpatrick Evaluation Model, Internal Rate of Return etc.

<sup>23</sup> In the case of BORESHA total costs would also need to include post-training costs, such as the cost of starter-kits and services provided by the Business Development Support Centres.

<sup>24</sup> ETB Br 8100/student

<sup>25</sup> ETB Br 4560/student

<sup>26</sup> ETB Br 7000/student

<sup>27</sup> ETB Br 3800/student

<sup>28</sup> KES 500/student/month of training.

<sup>29</sup> KES 4200 per student/student/month of training.

the cost of Tailoring skills training through EBT is eight times more expensive than through the more normal TVET route.

Table 2: TVET/EBT cost comparison

Tailoring Skills Training	Ethiopia	Kenya		Somalia
		TVET	EBT	
Cost (USD)	126	27.6 <sup>30</sup>	234 <sup>30</sup>	480

However, international price comparison is not straightforward, as many issues and factors determine how prices compare across the three countries. For instance, the length of courses varies between countries (see Table 3 below) which could mean that more skills are taught in one country versus another. Also, the facilities and teaching learning materials provided in each country would need to be taken into consideration and understanding how TVET institutions determine their prices would need to be understood. For instance, costing by government funded TVET institutions may include subsidies.

Even within Kenya, comparison between Tailoring skills training via TVET and EBT is problematic. The TVET institutions offering tailoring are government funded and factors such as access and affordability could account for the low cost of training fees, whereas the private tailoring businesses providing EBT would want to ensure all their costs are covered. Also, it is important to note that the cost of EBT in Kenya was at a rate negotiated by BORESHA so it would be important to understand the context from which pricing decisions were made.

### **A participatory student selection process can mitigate dropout and support gender equity.**

The BORESHA team established student eligibility criteria, including age (between 18 – 35 years old), geographical location (in terms of targeted regions), skill subject interests, confirmation of commitment, ability to cover own living costs - as BORESHA only funded tuition costs. No academic prerequisites were required for eligibility.

Applicants were required to attach a supporting letter from their local area chief and local selection panels consisting of 10 members including elders, youth, women, religious and traditional leadership etc., selected the students to be supported. Whilst the criteria were developed for the tri-border area, BOREHSA implementation teams adapted these to the local country context<sup>31</sup>.

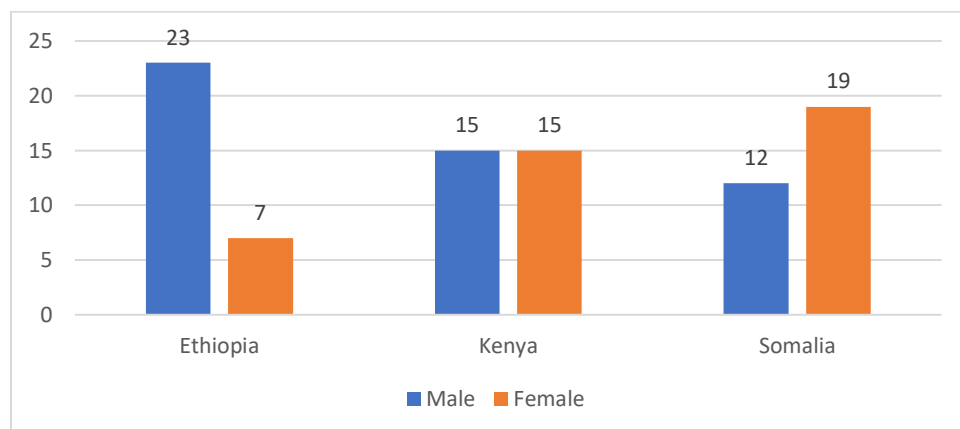
A total of 91 students – split between Ethiopia (30), Kenya (30) and Somalia (31) - were selected for Tetra Tech TVET programme support. In terms of gender near parity was reached for the programme as a whole (41 females and 50 males) but this varied by country (see Figure 2 below).

As Figure 6 below illustrates, in Kenya, as student selection student selection panels were specifically instructed to recommend equal number of male and female students, gender parity was achieved. Somalia, however, selected 22% more female students than males while Ethiopia had the largest gender imbalance with 23 male students and only 7 female students selected. As the BDSC Coordinators for reflected, a key challenge for prospective female students in the Ethiopian context was the distance to the TVET institution and as a result this may have caused fewer females to apply.

<sup>30</sup> Tailoring was a six-month course.

<sup>31</sup> For example, in Somalia SAMTEC also put forward ten candidates it identified as vulnerable and who could not settle college fees – seven of these were selected for BORESHA support.

Figure 6: Students numbers by gender



### Student themselves can challenge gender stereotypes.

Two students opted to challenge gender stereotypes with one male student selecting to study Tailoring (Somalia), whilst one female in Ethiopia selected to study for her driving certificate [licence].<sup>32</sup>

Whilst it is not clear what influenced the students to select against the norm, the BDSC Coordinators reflected that shifting cultural attitudes as well as offering a cooling off period to students at the start of their TVET studies – which enabled them to switch courses – may have played a role.

### Student representatives provide a mechanism for accountability.

Reporting to the BDSC Coordinators, student representatives across the various TVET institutions provided a platform for accountability. For example, student representatives provided information on the learning experience, including any challenges such as trainer absenteeism and poor institutional equipment. In Ethiopia student representatives proposed increasing the daily teaching timetable, thus reducing the overall course duration from six months to three months. This, they argued would mitigate the risk of dropouts that could be caused, for example, by family obligations, distance to college, cost of living etc., and was approved and successfully implemented by Horn International College (see Table 3 below).

Table 3: Duration of vocational skills courses

Course	Ethiopia	Kenya	Somalia
Beauty therapy / hairdressing		4 months	6 months
Driving Certificate <sup>33</sup>	3 months	1 month	
Electrical Certificate	3 months	6 months	6 months
ICT Certificate		6 months	6 months
Mechanical Certificate		6 months	6 months
Tailoring	3 months	6 months	6 months
Mobile Repair			6 months
Tie and Dye	3 months		
Welding and Fabrication		6 months	

<sup>32</sup> Both students went on to successfully complete their courses and in the case of the female student in Ethiopia, earn her driver's licence.

<sup>33</sup> After which students would be examined for their driving licence.

## In Kenya, through the EBT Model, students do real work.

Enterprise based training is similar to an apprenticeship where in the EBT model a student is a real job in an actual business. Tetra Tech utilised 11 private businesses to provide EBT to 20 students across five vocational skills areas (see Figure 7 below). As students learn through real work, they also have the advantage of interacting with actual customers and dealing with real business situations (see Figure 6 below), as opposed to, and where provided, TVET classroom-based simulations.

Figure 7: Vocational skills through EBT by student numbers

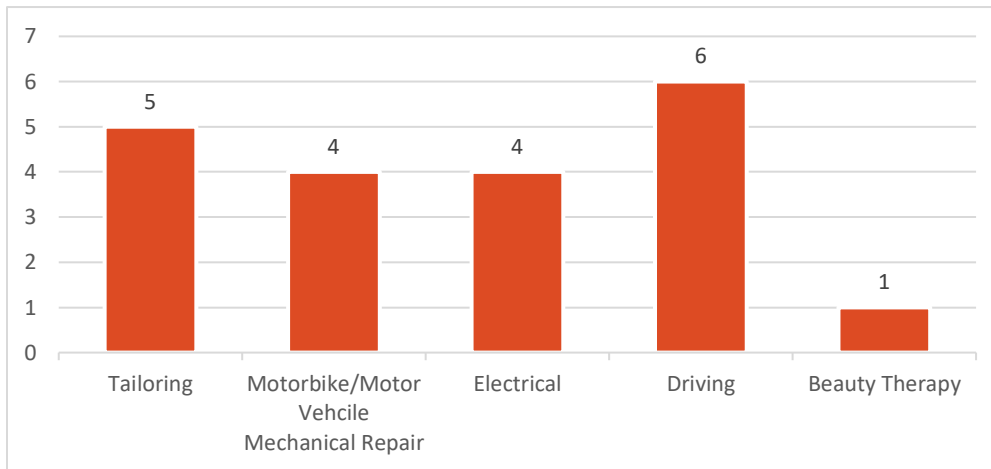


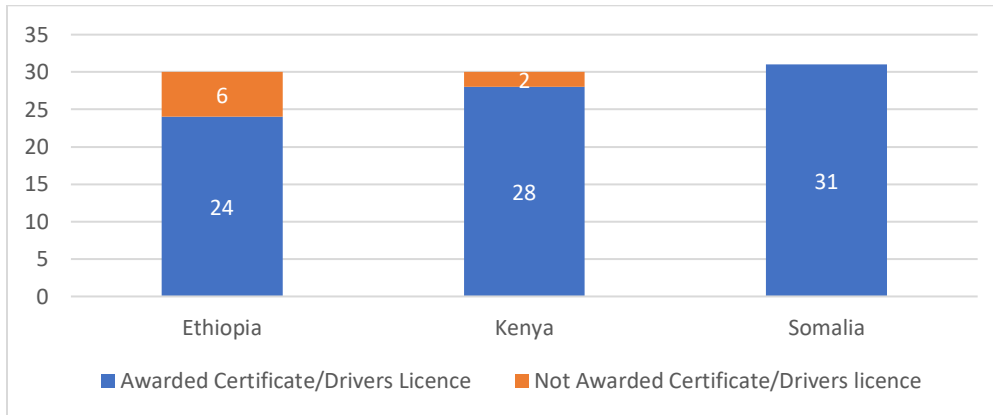
Figure 8: Electrical and mechanical EBT providers



## The student completion rate achieved was very high.

Across the range of vocational skills studied by the 91 students supported by Tetra Tech (see Figure 5 above), 83 students (91%) successfully completed their training courses and were awarded certificates<sup>34</sup> (or in the case of students studying driving, a licence) - see Table 9 below. In the case of Ethiopia, whilst six students did complete their driving course, they did not pass the driving exam.

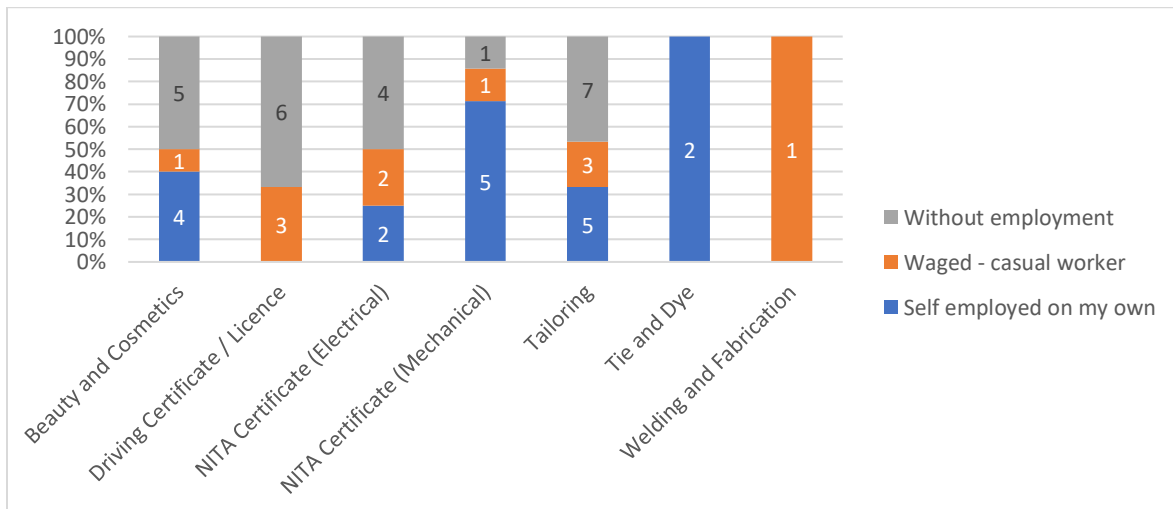
Figure 9: Number of students successfully completed their course



## Vocational skills training increases transition to the labour market.

As Figure 10 below illustrates, the student 'tracer study' identified the employment status of the graduate students. As at December 2019 at least 50% of the respondents across the various vocational skills were either in waged employment or self-employed. However, as monitoring data collection is ongoing, a more complete picture of the extent to student transition to the labour market should be evident when that final dataset is analysed.

Figure 10: Student employment status



<sup>34</sup> In Kenya, all students bar two, sat for their NITA exams at designated trade test centres to evaluate their competencies in a particular skill. NITA certification, which are widely recognised by employers, enables students to acquire relevant credits towards a particular occupation. All Kenyan students also received a certificate of course completion.

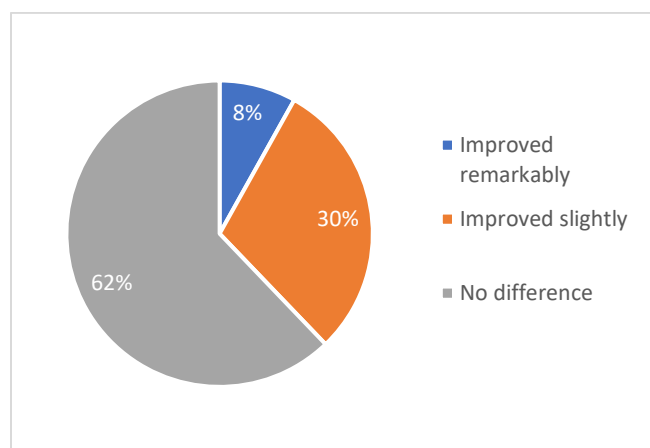
In terms of earning capacity (see Table 4 below), as at December 2019, in Kenya, the highest wage earner was a respondent that achieved a NITA Mechanical certificate with a private business providing EBT. Though, only one of the seven respondents that studied Tailoring reported any income. In Ethiopia, all the respondents that studied Tailoring and Tie and Dye reported an income. In Somalia, 16 respondents (76%) stated that they either started or continued to work in their own/family business. However, as no respondents provided any income data, it is not possible to analyse the impact the skills training had on improving their livelihood.

Table 4: Graduates transitioning to the labour market and earning an income

Research Question <sup>35</sup>	Ethiopia [12 Respondents]	Kenya [22 Respondents]	Somalia [21 Respondents]
1) How long did it take to find the first employment/start own business?	The shortest time reported was 1 week and the longest was 7 months.	The shortest time reported was 'immediately' and the longest was 9 months.	The shortest time reported was 9 months and the longest was 10 months.
2) What is your average weekly/monthly income generated in work using the skills acquired? <sup>36</sup>	Highest ETH Br 900 <sup>37</sup>	Highest KES 31,500 <sup>38</sup>	No income data captured in the tracer study utilised in this study. <sup>39</sup>
	Lowest ETH Br 150 <sup>40</sup>	Lowest KES 5,000 <sup>41</sup>	

With regards to changes to their livelihoods, 37 respondents (out of 55) provided their status, with 14 (40%) stating that their livelihoods had improved remarkably or slightly (see Figure 11). The ongoing monitoring data collection continues to review this status.

Figure 11: Changes in students' livelihoods



<sup>35</sup> Extracts from the student 'tracer study' Graduate Questionnaire, conducted in December 2019.

<sup>36</sup> At the start of the TVET/EBT initiative all students were unemployed and therefore not earning an income.

<sup>37</sup> USD 24.94

<sup>38</sup> USD 293.97

<sup>39</sup> Income data is now captured as part of the ongoing monitoring data collection.

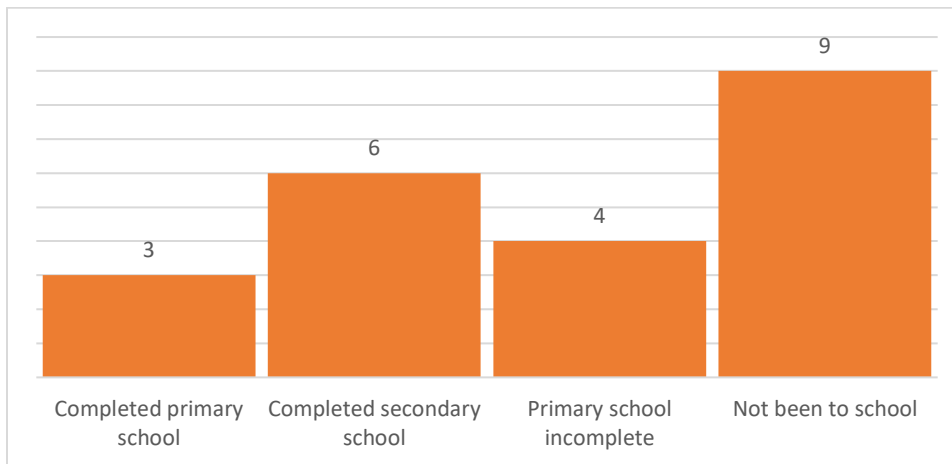
<sup>40</sup> USD 4.15

<sup>41</sup> USD 46.66

## In Kenya, students that had never been to school gained a vocational qualification and transitioned to the labour market.

Of the 22 students (out of 30) that were traced in Kenya, nine students stated that they had not been to school (see Figure 10 below). These students undertook a range of vocational skills - tailoring, mechanical, welding and fabrication and driving - and as at December 2019, at least six of them were earning an income.

Figure 12: Kenyan students' level of education



## In Kenya, the EBT Model supports private businesses to grow.

Interviews were conducted with five of the eleven EBT providers and between them, over the last five years, they have supported some 225 students in tailoring, motorbike/motor vehicle repair, and electrical vocational skills training. The respondents highlighted a number of advantages of providing EBT, including an additional source of income (through being paid to provide EBT), ability to purchase additional equipment<sup>42</sup> and the ability to the expand customer base.

Figure 13: Private tailoring business providing EBT



<sup>42</sup> For example, one Tailoring business, which started with one sewing machine has been able to invest the additional income to purchase equipment, and as a result now has six.



However, EBT providers also shared a number of disadvantages of providing EBT including wastage (such as fabrics that are cut wrongly), loss/misplacement of equipment, wear and tear of equipment, accidents, and injuries. It is these issues the coordinators attribute to the higher costs of EBT provision. In terms of post-course completion support, the EBT providers stated they assisted students in a number of ways including providing or lending students tools and materials, linking them to customers, and employing them as casual staff.

### **The mistiming of the TVET/EBT intervention denied students access to finance.**

As Figure 1 above demonstrates, two interrelated interventions alongside TVET was the BDSCs (which would provide TVET/EBT graduates with advisory and technical assistance to emerging businesses) and the Grant Facility which would provide financial support.

Whilst the implementation plan included students receiving Starter-kits it was also anticipated that students would have access to the Grant Facility. A Calls for Proposals for grant funding, either towards starting a business<sup>43</sup> (maximum grant of USD 6000) or towards growing a business (maximum grant of USD 12,000) was announced in January 2019 for the first round (when TVET studies were getting underway) and in December 2019, applications for the second round of awards were selected from the Reserve List of the first round.

Unfortunately, the timing of the grant awards did not coincide with the timing of the TVET/EBT provision, which meant that students graduating in their studies missed the opportunity to make a grant application, which could have supported capital expenditure and running costs they would have needed to establish their business.

### **Delays in the distribution of starter-kits was challenging for students.**

Some six to twelve months after TVET students successfully completed their training, and supporting their transition to the labour market, all students (bar those studying for a driving certificate/licence) received a starter-kit<sup>44</sup>. These starter-kits provided the relevant tools and a starter set of materials by which graduates could either seek employment or start their own business as well as practice their skills. For example, those students studying mechanical or electrical skills received toolboxes, whereas those that completed their ICT certificate received a computer, printer, printer paper and plastic chairs.

The BDSC Coordinators noted two key issues in relation to the starter-kits:

- 1) Some equipment included in the starter-kits was different to those the students had used as part of their skills training<sup>45</sup>; and
- 2) Delays in distributing the starter-kits impeded students' transition to the labour market.

### **Students were treated as individuals; networks could enable different types of business development.**

The focus of the BORESHA TVET/EBT interventions was on students as individuals, which meant that the likely transition to the labour market would either be as an employee or self-employed as a sole trader.<sup>46</sup>

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<sup>43</sup> This was for formal and informal, micro/small businesses, cooperatives, income generation projects led by community-based organisations/non-governmental organisations and credit and saving associations that had been established for at least three months.

<sup>44</sup> It was decided that students should first receive Business Skills training provided by the BDSC Coordinators before they receive their Starter-Kits to ensure sufficient business knowledge, particularly for those seeking self-employment.

<sup>45</sup> In Ethiopia, the BDSC Coordinator noted this was the experience for some students, highlighting that low literacy levels made learning new machinery, that was different to what they had trained with at the TVET institution, that much more challenging.

<sup>46</sup> Or as part of a family business.

By facilitating student networking, formal or informal connections could have led to the pooling of knowledge, social capital, and financial resources. As a result, alternative business models could have emerged, such as cooperatives. A cooperative is an autonomous association of women and men, who unite voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.<sup>47</sup>

Cooperatives provide a viable economic alternative to reducing poverty as they, “identify economic opportunities for their members; empower the disadvantaged to defend their interests; provide security to the poor by allowing them to convert individual risks into collective risks; and mediate member access to assets that they utilize to earn a living”.<sup>48</sup>

For instance, through networking, tailoring students could have formed a cooperative, jointly owning the enterprise, improving the bargaining power of the individual members, reducing costs incurred during the production process and improving their competitive advantage. This would have fitted well with the business environment in some of the recipient countries, most notably Ethiopia, where cooperatives are a common business model.

Even less formal networks could have provided a community of practice that the students could have benefited from. On the one hand, a student network could have provided new opportunities, exchange of ideas and word-of-mouth marketing. On the other hand, student networking could also have led to professional relationships such as trade between businesses in-country and across the tri-border area.

As the BORESHA VCA determined, petty trade “is one of the growing livelihood activities in [the] cross border area”<sup>49</sup> and the later BORESHA Baseline study highlighted, while cross-border trade is a competitive environment, vested interests have help to secure and maintain trade routes. For instance, tailors may have needed tie and dye material or drivers needing mechanical support. Moreover, student networking (within each country and across the tri-border area) could have provided a peer support network for graduates to share and learn from each other.

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<sup>47</sup> International Labour Organisation Promotion of Cooperatives Recommendation, 2002 (No.193)

<sup>48</sup> Berhan, E. and Gebeyehu, S. G. (2018). The Role of Cooperatives on the Socio-Economic Development of Ethiopia. *International Journal of Community and Cooperative Studies*, 6 (4), p39-49

<sup>49</sup> BORESHA Value Chain Analysis on Livestock, Livestock Products and Alternative Livelihoods in the Cross-Border Area between Kenya, Ethiopia and Somalia, June 2018, p76.

## Recommendations

### **1. Assessing the quality of TVET institutions should include a review of the curriculum.**

Whilst the quality assessments of TVET institutions considered factors such as staffing, facilities, range of courses, causes of learner dropout, and completion rates, no consideration was made of the curriculum. Vocational skills training curricula function as the link between the occupational skills that define competence in the work role and the qualifications offered by the training institutions.

### **2. Upscaling the EBT approach could increase access and equity to skills training.**

Drawing on systems thinking and subject to available resources, future programmes could consider scaling up the EBT approach to further address occupational shortages and enable unemployed youth in areas where TVET institutions are lacking (or absent) to access on-the-job skills training. This could involve a number of different strategies, including a hybrid model that on the one hand further builds on the work of SC by expanding the cohort of EBT service providers, which could address more immediate labour market needs. And on the other hand, expands the role of existing EBTs, for instance, to support TVET institutions to provide all students with concrete experiential learning. Moreover, whilst EBT has been developed in the Kenyan context, consideration should be made for testing the model in Ethiopia and Somalia as part of a tri-border strategy for EBT.

### **3. Providing business development skills training alongside TVET/EBT could fast-track students' transition to the labour market.**

As the TVET curriculum is very trade-specific, completing these skills alongside business development skills could improve students' readiness for the labour market. Such a combination would provide a more holistic package designed to teach various cognitive and technical skills needed for both wage and entrepreneurial employment. Determining when and how to provide business development skills should be formulated as part of the TVET project design as there are a number of different approaches that could be considered. For example, TVET colleges could supplement the trade-specific curriculum with business development skills training (though special arrangements would need to be made for those learning through EBT), which could benefit all students. Alternatively, once students complete their trade-specific skills training, those seeking to start their own business could be registered for part-time business skills training that would be delivered in such a way that whilst the student is embarking on establishing their business, they receive business development skills training that could mirror the start-up process.

### **4. Rapid and regular LMAs by TVET institutions could support demand driven TVET.**

Whilst formal LMAs can be costly and lengthy, supporting TVET institutions to conduct regular and rapid LMAs not only takes into account the evolving employment market, but provides a quick and flexible way of analysing information and data of labour market needs. In particular, regular, and rapid LMAs could assist TVET institutions to meet local market employment needs, which in turn could ensure their relevance, provide prospective students with better job opportunities, and contribute to their financial sustainability. Where required, this could also assist TVET institutions in their engagement with the relevant state authorities tasked with curriculum (re)development.

## 5. Careers guidance could assist students to respond to labour market needs.

Careers guidance provides an essential link between education and the labour market, enabling prospective students to make meaningful life choices about learning and work. Careers guidance can be in the form of careers information, education, and counselling. Whilst students should be encouraged to select skills training they have an interest in, part of the pre-selection process could also involve supporting students in their decision-making by disseminating careers guidance. Future programmes could support TVET institutions to develop this capability, particularly if they also embark on undertaking their own regular and rapid LMAs (see Recommendation 4 above). Alternatively, future programmes could consider providing careers guidance as part of their pre-selection activities through events such as 'open days' or indirectly through advertising using different media platforms (such as print or radio).

## 6. Calculating the ROI for TVET could support programme evaluation and learning.

The return on investment (ROI) assist in measuring the benefit of an investment relative to the cost of the same investment. Providing information on the ROI from TVET could provide funders evidence towards performance of TVET programming as well as future investment planning. A number of different ROI models could be utilised<sup>50</sup>; in the case of BORESHA, a cost-benefit analysis model could be a viable option if sufficient costs and benefits datasets exist.

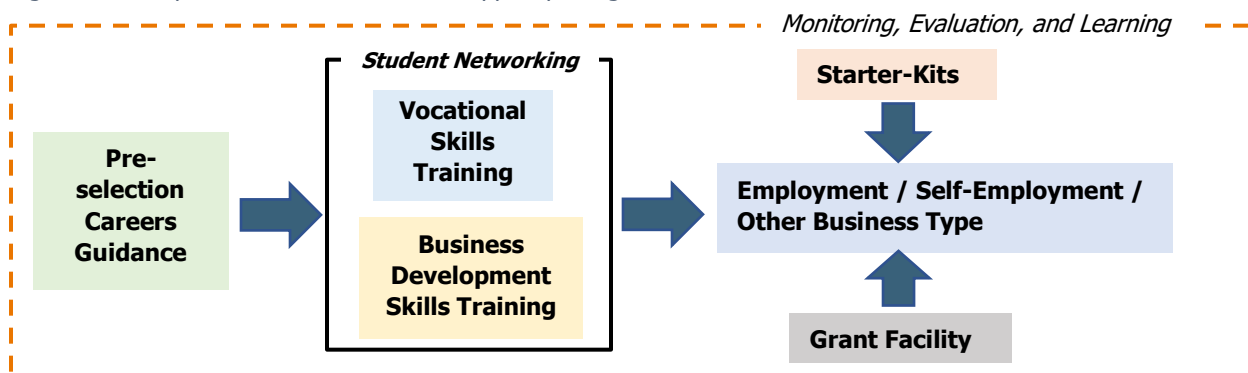
## 7. Applying a gender-sensitive design to student selection could mitigate inequity.

A gender-sensitive design to the student selection would require an assessment of the underlying causes for exclusion and deliberate measures to address gender-specific vulnerabilities. Such measures could include positive discrimination, the provision of female-friendly spaces during training and minimising the distance to training facilities.

## 8. Future programmes should consider a holistic approach to student support.

A more holistic and systematic design of skills training, business development skills (see Recommendation 2) and financial support should be designed and implemented as one package (see Figure 14 below). This would give greater consideration towards issues such as the timing of each element of the package. For instance whether starter-kits should be distributed towards the end of the vocational skills training, thus enabling students to gain practical experience under the supervision of their trainers of the equipment provided in the starter-kit.

Figure 14: Components of a holistic TVET support package



<sup>50</sup> UNESCO. (2020). Understanding the return on investment from TVET, a practical guide. [https://unevoc.unesco.org/pub/roi\\_practical-guide1.pdf](https://unevoc.unesco.org/pub/roi_practical-guide1.pdf)

## **9. Alternative approaches to the delivery of teaching and learning could expand student outreach.**

A key challenge of the BORESHA programme is the geographical spread of its target areas. As the BORESHA Technical Brief 1 (March 2020) highlights, using mobile vocational skills trainers is one option that future programmes could consider<sup>51</sup>,

In Somalia, World Vision [an international NGO] identified a different approach to reach rural youth and overcome the distance and the cost associated with attending the existing TVET centres. Three Community structures were set up in 3 villages and linked up with the existing institutions in Dollow and Belet Hawa to provide qualified trainers to deliver training directly in the communities.

Drawing from the World Vision experience, in the BORESHA context, the three BDSCs that were established could also have been utilised for TVET training. Further considerations could also include utilising mobile technologies to support teaching and learning or even mobile classrooms that can specifically designed to deliver specialist subjects, which could be more cost effective than fixed structures such as local community centres.

## **10. An integrated approach to planning and implementation.**

In complex programmes like BORESHA, interventions can often become disconnected. To mitigate fragmented implementation, designing an integrated approach from the offset would ensure programme planning considers the multiple activities, locations, and resource requirements, and by maintaining open lines of communication across the implementation teams, would facilitate learning and adaptation. If Figure 14 above represented all the components of the TVET support package, an integrated approach to planning would ensure, for instance, that Starter-kits are distributed timeously. In addition, a monitoring, evaluation and learning strategy, aligned to the integrated approach, would identify what data would need to be collected, when, how and from whom (see also Recommendation 6).

## **Conclusion**

The design and implementation of the TVET/EBT vocational skills training programme has enabled graduates to transition to the labour market and improve their livelihoods. The EBT model was a particularly unique feature in the Kenyan context as it enabled students to work and learn from a real business context. The private business that provided EBT also benefitted from participating in the programme.

However, drawing on systems thinking, a more holistic vocational skills approach, one that considers the whole journey of the student, from pre-selection to employed/self-employed, would prompt the need for an integrated approach to intervention planning and implementation.

Notwithstanding these improvements, what the TVET initiative has contributed to is a cohort of students, with very little or no schooling, to acquire a vocational skill and become employed/self-employed; an important step towards building their resilience and moving out of poverty.

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<sup>51</sup> <https://boreshahoa.org/wp-content/uploads/2020/04/BORESHA-Coordination-TB.pdf>