UNEVOC TVET Leadership Programme
for Southern and Eastern Africa
Capacity Building for Transformational TVET Leaders:
vision, knowledge and skills
23-27 October 2017, Harare, Zimbabwe
Education is UNESCO’s top priority because it is a basic human right and the foundation on which to build peace and drive sustainable development. UNESCO is the United Nation’s specialized agency for education and the Education Sector provides global and regional leadership in education, strengthens national education systems and responds to contemporary global challenges through education with a special focus on gender equality and Africa.

The Global Education 2030 Agenda

UNESCO, as the United Nation’s specialized agency for education, is entrusted to lead and coordinate the Education 2030 Agenda, which is part of a global movement to eradicate poverty through 17 Sustainable Development Goals by 2030. Education, essential to achieve all of these goals, has its own dedicated Goal 4, which aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.” The Education 2030 Framework for Action provides guidance for the implementation of this ambitious goal and commitments.
Acknowledgements

The UNESCO Regional Office for Southern Africa (ROSA) and the UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training would like to express their sincere gratitude to all delegates from Botswana, Kenya, Madagascar, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe who travelled to Harare, Zimbabwe for the UNEVOC TVET Leadership Programme for Southern and Eastern Africa, for their active participation in all the discussions, and for sharing their experiences.

UNESCO ROSA and UNESCO-UNEVOC would also like to thank the Zimbabwe Government for hosting this meeting and for their important efforts in making sure that this meeting could take place in a successful manner.

The organizers received positive feedback from the participants and hope that this report captures all reflections, discussions and recommendations.
# Table of Contents

Acknowledgements .......................................................................................................................... 3

Introduction ...................................................................................................................................... 5

Introductory session .......................................................................................................................... 6

  Opening ......................................................................................................................................... 6

  Concept and background ............................................................................................................... 6

Module 1: Sustainable Development Goals and UNESCO’s action for TVET .................................. 8

  Sustainable Development Agenda .............................................................................................. 8

  Sustainable Development Goals .................................................................................................. 8

  SADC Strategy and the alignment with UNESCO’s action in Africa ........................................... 11

Module 2: Transition to green economies and digital societies ...................................................... 12

  Transforming TVET through Greening of TVET Institutions ...................................................... 12

  Digitalization in TVET ................................................................................................................ 16

Module 3: Work based learning | Lecture: Regional Qualifications Framework ............................. 19

  Work based learning experiences in Africa .................................................................................. 19

  Regional Qualifications Framework ............................................................................................ 24

Module 4: Equity and gender equality .............................................................................................. 28

Module 5: Leadership and management ........................................................................................ 35

  Leadership and Management in the transformational arena ....................................................... 35

  Power .......................................................................................................................................... 37

  Change projects ........................................................................................................................... 38

Evaluation ....................................................................................................................................... 44

Summary and way forward .............................................................................................................. 44

Annex I: Programme ....................................................................................................................... 46

Annex II: Gender and TVET ............................................................................................................ 47

  Terms and definitions on Gender .............................................................................................. 47

Annex III: Attendance list ............................................................................................................... 50
Technical and vocational education and training (TVET) is higher on Member States’ agendas than ever before, and central in international discourse. The 2030 Agenda for Sustainable Development adopted in September 2015 promotes a vision of inclusive, equitable and sustainable societies and economies, and specifically Sustainable Development Goal (SDG) 4 calls on Member States to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Three of the seven targets under SDG 4 are related to TVET, highlighting the pivotal role of technical and vocational education and training in realizing this vision.

TVET professionals in Africa, as in other parts of the world, are concerned with transforming TVET. To ensure that TVET systems can contribute to the economic development of African countries, and to gain competitiveness at the global market, TVET institutions have to improve access, increase their effectiveness, evolve, and expand their offers. An important goal of this transformation is to ensure that TVET institutions focus on developing skills that are relevant, up-to-date, sought after in the job market, and ultimately, help their learners to find employment or become successful entrepreneurs.

Transforming TVET requires change at the national and institutional level that is informed by global and regional trends and vision. One of the perceived bottlenecks in effecting change in TVET institutions relates to the lack of change leaders and a lack of capacity to develop a vision and implement change. Transformative leaders need to have a clear vision, a sound thematic knowledge base and have the skills to drive change. They are experts in their fields and familiar with current theories, facts and figures and are able to make sound decisions. They are also able to capitalize on their knowledge to translate ideas into goals and eventually into action. They build support for the implementation of their vision by convincing colleagues, staff and other experts and defend their decisions convincingly.

The UNEVOC TVET Leadership Programme for Southern and Eastern Africa, jointly organized by UNESCO-UNEVOC and the UNESCO Regional Office for Southern Africa (ROSA), was conceived to develop the capacity of potential change agents in the TVET sector, and help them align local issues with the regional and global agendas, so that they can make full use of the opportunities that come with them.

TVET in Africa has clearly experienced growing momentum in the last two years. These developments have been guided by the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals, in which education plays a key and transversal role. The Southern African Development Community (SADC) launched a TVET strategy and is developing an updated one. The development of the PEFOP (Plateforme d’Expertise en Formation Professionnelle) platform for West Africa, and the Better Education for Africa’s Rise (BEAR) project in Southern, Eastern and Central Africa, show that UNESCO, as well as other regional and national actors from all over the world, have put the development of TVET in Africa at the top of their list.

For potential change leaders in TVET to better understand the regional and global development agenda, and use these opportunities to effect change in their institutions, the five-day Regional TVET Leadership Programme focused on three qualities that determine a leader’s ability to drive change efficiently and successfully:

- Strategic knowledge (vision for change);
- Thematic knowledge (knowledge for change); and
- Leadership and management skills (skills for change).
Opening

On behalf of Ms Margaret Chirapa, Secretary General of the Zimbabwe National Commission for UNESCO, Mr M Magava welcomed the participants to Zimbabwe. He emphasized the need for qualified, skilled and competent human capital to achieve the ambitious sustainable development agenda. This TVET Leadership Programme is therefore important as it will contribute to transforming the TVET sector to maximize its potential to contribute to SDG4 and SDG8, and in fact all of the other SDGs.

In his opening remarks, Professor Hubert Gijzen, Regional Director and Representative at the UNESCO Regional Office for Southern Africa (ROSA), said the training of TVET leaders is timely and UNESCO is committed to strengthening interventions to support its Member States.

“A skills revolution and skills development are vital for poverty reduction, development, job creation and self-employment especially for the youth and women”, said Professor Gijzen.

The Head of the UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training, Mr Shyamal Majumdar, congratulated the participants for being among the pioneers of the flagship TVET leadership training programme. He underlined that the TVET leaders are the ones who spearhead implementation and turn policy positions into reality on the ground. “Leaders matter, and they matter most”, he said.

Mr Majumdar informed the participants that to date, UNEVOC has trained about 70 TVET leaders at the global level. This group of 24 TVET leaders from Eastern and Southern Africa will join this group of alumni.

Concept and background

Mr Jean Hautier, Focal Point for the UNEVOC Network in Africa and Ms Carolyn Medel-Anonuevo, Senior Education Specialist and Head of the Education Unit at the UNESCO ROSA, explained the concept and background of this training.

Explaining the rationale for this leadership training, Mr Hautier referred to the economic, technological and social changes, which put TVET systems under pressure in terms of the constantly evolving and diversifying skill requirements. He underlined that for economies to become or stay competitive, national TVET systems have to adopt to changing requirements. This kind of change however requires leadership.

In order to effect change, leaders should have a vision for change, which should be backed by the appropriate knowledge and skills to drive the change. These are the concepts around which this training is built.
Providing the background to the concept of leadership, Ms Medel-Anonuevo emphasized that notions of leadership are shaped by different factors. There are different kinds of leaders, different notions of leaders and different functions leaders may be required to perform. Some of these functions include being the executive, the planner, the policy-maker, the expert, the external group representative, the controller of internal relationships, the purveyor of reward/punishment, the arbitrator and mediator, and the exemplar. These different functions require different skills.

She also talked about the six most prevalent competencies a leader should have: (1) communication, (2) team leadership, (3) teamwork, (4) personal credibility, (5) planning and organizing, and (6) vision and strategic thinking.

This training seeks to contribute to the transformation of TVET at national, regional and global levels. As potential change leaders in TVET, each of the participating TVET leaders was requested to outline a project that captures the kind of change they would like to bring to their work or institution. To assist them in implementing the change, Ms Medel-Anonuevo presented the following change model.

The other model she presented consisted of the following stages:

1. Understanding – Is the change desirable?
2. Scoping – Is the change feasible and viable?
3. Creating team – Who is driving, delivering and implementing the change?
4. Crafting approach – What is the approach and the plan?
5. Staging delivery – How will we land the change?
6. Embedding – How will we make the new ‘normal’?

Based on the discussions and the different modules throughout the training, the participants will be able to refine, redefine and revise their change project proposals. This is documented in the final section of this report.
Module 1: Sustainable Development Goals and UNESCO’s action for TVET

Sustainable Development Agenda

Sustainable Development Goals

Mr Shyamal Majumdar, Head of the UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training, informed the participants that the 2030 Agenda for Sustainable Development consists of 17 Goals and 169 Targets. He explained that this new agenda represents a new vision for people, the planet, prosperity, peace and partnership.

He explained that this agenda is different from the Millennium Development Goals in that it:

- is universally-relevant;
- is integrated, holistic, comprehensive and inter-connected (it is connected to the economic, the social, the environmental and is an agenda for all countries);
- focuses on inclusion, access, quality, gender equality and lifelong learning;
- is transformative, leaving no one behind.

The sustainable development agenda has one education agenda encapsulated in SDG4, which commits the international community to ensure inclusive and equitable quality education and lifelong learning opportunities for all by 2030. The Education 2030 Framework for Action guides the implementation of SDG 4 and is not a separate initiative or agenda.

Education and skills are the central to the realization of the 2030 agenda. Three targets under SDG 4 have an explicit mentioning of TVET covering issues related to access, relevance and gender equality:

SDG4.3: By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.

SDG4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

SDG4.5: By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.
Indirectly however, all the goals are somehow linked to education and training. Besides SDG4, five goals have specific targets related to skills.

- **SDG3**: Ensure healthy lives and promote well-being for all at all ages
- **SDG5**: Achieve gender equality and empower all women and girls
- **SDG8**: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- **SDG12**: Ensure sustainable consumption and production patterns
- **SDG13**: Take urgent action to combat climate change and its impact

**UNESCO Strategy for TVET**

With TVET and skills being at the centre stage of the 2030 agenda, it becomes necessary to transform, expand and enhance TVET at national, regional and international levels to enable systems to respond to the economic, social, cultural and environmental contexts of the communities and societies they serve. Existing TVET systems have their flaws and cannot simply be scaled up. To respond to new demands, TVET systems should be transformed through three lenses: economic, equity, and transformational.

Mr Majumdar explained the major dimensions of transformation implied by those lenses:

- Lifelong TVET – School-to-work and work-to-school, qualification frameworks, recognition of prior learning
- Greening TVET – Whole-institutional transformation with the Greening guide
- Inclusive TVET – TVET for disadvantaged, rural, non-formal sector and gender dimension
- Digital TVET – Responding to Digitization of work and life, Industry 4.0
- **STEAMing TVET**: Enhancing foundation knowledge for higher TVET

In response to this, UNESCO’s TVET Strategy for the period 2016-2021 aims to support the efforts of Member States to enhance the relevance of their TVET systems and to equip all youth with skills required for employment, decent work, entrepreneurship and lifelong learning, and to contribute to the implementation of the 2030 Agenda for Sustainable Development as a whole. UNESCO is working with Member States, UN Agencies and international, regional and bilateral organizations to support policy reviews and development, promote collaborative research approaches and capacity development, and foster cross-sectoral approaches.
Mr Jean Hautier presented the UNEVOC Network, which is a worldwide network of TVET institutions consisting of more than 200 UNEVOC centres in 167 countries. The network has multi-stakeholder representation with members being Ministries or departments, national TVET bodies, universities, research or teacher training institutes, and schools or training centres, all with their own capacity to transform TVET in their country.

The three major goals of the network are to:

- Improve TVET by fostering international and regional collaboration;
- Develop the capacities of UNEVOC centres;
- Share good practices and innovations in TVET across the network.

The Medium-Term Strategic Plan (2018-2020) aims to strengthen TVET capacities and cooperation in the Member States to enable quality education in a lifelong learning perspective. This plan has four programmatic strands of work:

- Developing capacity of TVET leaders;
- Supporting leaders and institutions in implementing TVET strategies;
- Generating new knowledge and developing knowledge resources;
- Strengthening network collaboration and partnerships.

Mr Hautier also informed the participants of tools developed by UNESCO-UNEVOC with the support of the Network which are available to all TVET experts, such as the TVET Forum, Virtual conferences, the Promising Practices and the World TVET database.
SADC Strategy and the alignment with UNESCO's action in Africa

Ms Carolyn Medel-Anonuevo presented a range of regional frameworks that are in place and have relevance for TVET.

The Continental Education Strategy for Africa 2016-2025 (CESA 16-25) is Africa's response to the global agenda for sustainable development and reflects the aspirations of the African Union members. TVET and skills development are strategic objectives in the framework.


Ms Medel-Anonuevo then moved down to the Regional Economic Communities (RECs) and mentioned the Vision 2050 for the East African Community (EAC), which is a regional vision for socio-economic transformation and development.

Since most of the participants of this programme are part of the Southern African Development Community (SADC), she focused on this REC. The SADC Protocol on Education and Training (signed in September 1997 and activated in July 2000) seeks to promote a regionally integrated and harmonized educational system especially with regard to issues pertaining to access, equity, relevance, and quality of education interventions. In the Revised Regional Indicative Strategic Development Plan (RISDP) 2015-2020, which is a guiding framework for the implementation of SADC’s regional integration agenda and programmes, TVET takes an important place, as well as the finalization of the SADC Qualifications Framework. The latter was approved in 2017.

The SADC Industrialization Strategy and Roadmap 2015-2063 reflects the urgent need for the region to leverage its abundant and diverse resources, especially on agriculture and mining, and to accelerate industrialization through beneficiation and value addition. Skills development is an essential element of industrialization, and therefore there is a need for increased spending on formal academic education, restructuring of education systems with focus on technical and vocational skills of all kinds, especially those appropriate for a modern, knowledge economy, among others. In this regard, the SADC region is the most advanced in term of positioning skills development at the center of the regional agenda.

For TVET leaders, it is important to understand the kind of regional frameworks that their national frameworks are placed within. This understanding will facilitate domestication and implementation at national level.

Guided by a Memorandum of Understanding between UNESCO ROSA and the SADC Secretariat, UNESCO is supporting SADC and its Member States to implement this agenda for skills development and to foster TVET for enhancing the development of skills and competences for life. UNESCO has been/is implementing several TVET projects in the region such as the South Korean funded Better Education for Africa's Rise (BEAR) project in Botswana, Malawi, Namibia and the Democratic Republic of the Congo, and the European Union (EU) funded Skills and Technical Education Programme (STEP) in Malawi. To inform evidence-based policy making, UNESCO has also commissioned research studies such as the

At the end of this module, participants were able to:

- Understand the 2030 Agenda for Sustainable Development and the Sustainable Development Goals, with a specific focus on Goal 4 on Education and its TVET-related targets;
- Understand the new UNESCO TVET Strategy 2016-2021 and the role played by the UNEVOC Network;
- Understand UNESCO’s efforts in strengthening TVET at the SADC countries;
- Have a common understanding of the strategic documents for TVET existing at the regional and global level.
Module 2: Transition to green economies and digital societies

Transforming TVET through Greening of TVET Institutions

Mr Shyamal Majumdar explained that economic and societal developments and growing concerns about climate change, environmental degradation and scarcity of resources are changing the nature of work. He presented a strong rationale for greening efforts in the TVET sector premised on the rapid ‘warming’ of global temperature which has consequences manifested in floods, droughts and unpredictable weather patterns in many areas of the world. The interconnections between climate, people and planet were emphasized. Mr Majumdar also used the metaphor of an ‘extra blanket’ that has emerged due to certain industrial activities and their consequences.

These developments demand that TVET develops skills and provides knowledge to ease transitions to green economies and societies. This is referred to as ‘Greening TVET’; the process of pursuing knowledge and competencies and practices with the intention of becoming more environmentally friendly, enhancing decision-making and changing behaviours and lifestyle in a more ecologically responsible manner. These actions are necessary to achieve environmental protection and sustainability of natural resources for current and future generations.

Mr Majumdar referred to four imperatives for Greening TVET: the environmental, social, economic and political. In groups, the participants discussed their meaning, which resulted in the following inputs:

### Environmental imperative
- Side effects of traffic congestions and air pollution
- Firewood chopping and charcoal selling
- Rising temperatures, floods causing top soil erosion, land degradation
- Unpredictable weather patterns, droughts, food production affected
- Plant trees; green economy

### Social imperative
- Family relocations due to droughts, floods, food shortages, need to change the production processes
- New diseases emerging, earthquakes, floods affect well-being
- Issue of greening may help restore some jobs, create new jobs
- Difficult and ‘dangerous’ jobs may be replaced by decent jobs

### Economic imperative
- Need to change the production process
- Need to train technicians in the new skills required
- New jobs created in TVET as technicians are trained to use renewable energy sources
- There are prospects for a new economic boom with new technologies
- New scientific discoveries on harnessing the ‘extra blanket’
- Possibility of a huge skill shortage on TVET for the future
- Recycling some products/waste is foreseen

### Political imperative
- Understanding that politics directs policy development to address the emerging challenges
- Understand political decisions in the Kyoto Protocol and related agreements and conventions e.g. the Paris Agreement ratified by 174/197 countries
- Enacting what governments have agreed to
Mr Majumdar continued to say that sustainable development requires a profound transformation in the way organizations and individuals think and act; it requires adequate knowledge, skills and attitudes to contribute successfully. Education and skills are therefore crucial for achieving the SDGs, and Education for Sustainable Development (ESD) takes centre stage, which is part of Target 7 under SDG4.

SDG4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.

Delivering ESD requires a process that could lead to mind-set changes that will put TVET at the centre stage. For example, investing in skills training to promote alternative renewable resources, such as solar, is important, especially in many countries in Africa where it is abundant. As the renewable energy sector is expanding, this translates to jobs, and jobs demand skills and qualifications. TVET is in a strategic position to develop the volume of the skills required in this sector since many of the jobs are being altered and require additional skills or qualifications. For the new and emerging jobs, new skills and qualifications are required altogether. They need to be incorporated in TVET training. However, we also need to rethink the curriculum behind related traditional trades, so that they lead to improved knowledge and competencies oriented to sustainability principles and ethos.
Mr Majumdar informed the participants of a UNEVOC research that analysed climate change adaptation plans and the role of TVET systems and institutions in addressing the skills gap in these plans of action. Thirty-two countries from five regions were studied and analysed with the objective of understanding priority sectors of selected countries in climate change adaptation, and identifying policy frameworks and institutional arrangements for climate change adaptation. It was found that across the African region, the identification of specific skills development and training requirements for climate change adaptation remains largely unfocused.

So why is that? The projected demand for green skills at the workplace and lifelong learning are pressing, yet the education and training response is very slow. Mr Majumdar posed this question to the participants, who identified the following challenges:

<table>
<thead>
<tr>
<th>Lack of Infrastructure</th>
<th>Lack of political will</th>
<th>Institutional resistance</th>
<th>Lack of efficient processes</th>
<th>Lack of skills…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prohibitive costs</td>
<td>Lack of awareness, leading to a lack of vision</td>
<td>Lack of awareness</td>
<td>Curriculum adaptation is too slow, preparing a curriculum is long</td>
<td>…from workers, trainers and teachers</td>
</tr>
<tr>
<td>Funding challenges</td>
<td>Conflict of interests</td>
<td>Resistance to change (teacher, principals etc.)</td>
<td>No professional development</td>
<td>…from Curriculum developers</td>
</tr>
<tr>
<td></td>
<td>Short term interests</td>
<td>Fear of Change</td>
<td>No mass production of relevant technologies</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Passivity</td>
<td>Lack of cooperation between TVET and industry</td>
<td></td>
</tr>
</tbody>
</table>

... Leads to a lack of policies, and inability to translate the existing ones into concrete actions

They also identified that:

- There is need for capacity development at all levels;
- There is need for advocacy together with committed ownership of response programmes - every leader needs to realize they have a ‘sphere of influence’ that they can use to make changes;
- Resistance to change is an impeding factor.

Mr Majumdar added that a multi-tier approach is needed to encourage the right adaptation strategies through education and training:

- Institutional Level: Whole-institutional transformation to greening TVET
- National Level: Align with coherent and coordinated policies for green growth
- Global Level: Sharing evidence-based policy and practices
- Industry and community: Engaging industry and community at all levels

Mr Majumdar walked the participants through the different elements contained in the recently published Greening TVET guide, which is a practical guide for TVET institutions in implementing ESD. It is designed as a practical tool for TVET institutional leaders, administrators, managers and teaching personnel to assist them in creating their own successive plan towards the greening of their institution. The Guide sets out helpful measures to facilitate institutions in their journey, and offers a set of approaches to be pursued and possible outcomes to expect once they are implemented.

The Guide emphasizes that the whole-institutional approach is the key for greening TVET. A whole-institution approach considers an integrated process for mainstreaming sustainability in the whole process of an institution and includes aspects of:
• Greening the campus – strengthen sustainability aspects in campus management;
• Greening curriculum and training – Integrate sustainability components in curriculum and training;
• Greening research – apply sustainability aspects in research methods and practices;
• Greening the workplace and community – engage enterprises and the community;
• Greening the institutional culture – embed greening in all the aspects of an institution. The Guide also outlines a four-step framework for the greening of TVET institutions, implying a whole institution approach.

He explained that the successful implementation of the approaches advocated in the Guide, will largely depend on the institution leader’s vision and his/her implementation strategy that can be incremental and driven in a phased manner. For instance, it can be strategically relevant to first focus on one aspect (e.g. greening the campus or greening the curriculum, and so on). To green the campus, institutions could consider implementing energy saving measures, which could lead to visible impact on their budget. Demonstrating such impact can help to justify further investments in other steps and approaches that they consider important in achieving their vision for greening the institution.

Participants had a discussion on the enabling and hindering factors that can facilitate or slow down the adoption of sustainable development concept/principles/actions in their national contexts. It was concluded that there is an important need for champion leaders of greening TVET to drive this agenda at the national, regional and global level.

At the end of this module, participants were able to:
• Situate TVET within the overall global sustainable development agenda, identify opportunities in which it could contribute to fulfilling the goals and expectations, and understand the interlocking issues influencing climate change actions and the nature of jobs and skills demands;
• Identify and analyse their institutional situations and contexts to identify the opportunities and enablers for greening their TVET institutions;
• Suggest possible plans of action to pursue the greening TVET agenda guided by the approach advocated by UNESCO-UNEVOC.

Figure: Greening TVET approaches and steps using whole-institutional process (Source: UNESCO-UNEVOC, 2017)
As a side note, participants were informed that Zimbabwe's Sihlengeni Primary School is among the three winners of this year's UNESCO-Japan Prize on Education for Sustainable Development (ESD). It was selected for its remarkable “Permaculture” programme involving its 17 teachers and 738 students as well as the adjacent community. Through an inspiring, participatory whole-institution approach, Permaculture uses the principles of ESD to provide quality education as well as increased access to a clean environment, food and water.

**Digitalization in TVET**

Mr Shyamal Majumdar informed the participants that this module on inspiring learning with technology in TVET is connected to SDG9 on building resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. ICTs have changed the way we work, live, play and learn. Mr Majumdar posed the question of how ICTs can improve TVET to the participants. Through group work, they provided the following answers:

<table>
<thead>
<tr>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Can get any information you want on TVET today</td>
</tr>
<tr>
<td>• Can access tutorials, instruction on TVET, video conferencing on TVET</td>
</tr>
<tr>
<td>• Learning platforms/chat groups on TVET</td>
</tr>
<tr>
<td>• Anywhere, anytime, anyhow learning - flexibility is ICTs strongest point</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• WhatsApp – use Whatsapp groups to communicate and share information at professional level</td>
</tr>
<tr>
<td>• TVET EMIS – data processed for planning and other things</td>
</tr>
<tr>
<td>• Websites – government websites etc.</td>
</tr>
<tr>
<td>• Matters being processed online</td>
</tr>
<tr>
<td>• No need to travel to communicate information – email / skype</td>
</tr>
<tr>
<td>• Research for policy-making – use ICT for efficient research</td>
</tr>
<tr>
<td>• Information-sharing and decision-making can be done very quickly</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provision of e-resources</td>
</tr>
<tr>
<td>• Quality of presentation of students' assignments (not handwritten)</td>
</tr>
<tr>
<td>• E-learning resources – courses that can be conducted from a distance</td>
</tr>
<tr>
<td>• Quality designs for practical – new aspect of simulation modelling – multimedia packages etc.</td>
</tr>
<tr>
<td>• Quality research – ICT gives access to quality resources</td>
</tr>
<tr>
<td>• ICT makes teaching interesting – innovative methods of delivery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ICT reduces the cost (no need for printing)</td>
</tr>
<tr>
<td>• ICT helps us save time</td>
</tr>
<tr>
<td>• ICT makes information more easily available</td>
</tr>
<tr>
<td>• Much more efficient to share information through ICTs</td>
</tr>
<tr>
<td>• Integration of parallel systems – can send assignments and school registration online</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Correspondence between supply and demand</td>
</tr>
<tr>
<td>• Work-based learning – ICT enables teacher, mentor, learner to stay in contact when on attachment</td>
</tr>
<tr>
<td>• Chance for best practices to be exposed – best practices from around the world to find synergies and improve TVET</td>
</tr>
<tr>
<td>• ICT very relevant in scalability</td>
</tr>
</tbody>
</table>
Integrating ICTs in education has become an important discussion. Integrating ICTs in TVET however has some distinct characteristics:

- TVET includes practice-based and hands-on skills and cannot just be taught virtually;
- TVET includes an aspect of work-based Learning/on-the-job training;
- Assessment of learning outcomes is based on acquired skills and practice.

Therefore, when integrating ICTs in TVET and psychomotor courses, there is need for a special type of learning architecture to implement blended learning. Part of this architecture are simulations, animation, virtual reality, multimedia and online experimentations.

The participants identified some major factors influencing effective integration of ICTs in TVET:

- Lack of equipment, infrastructure;
- Lack of experts – need for capacity building;
- Lack of political commitment/leadership;
- Resistance to change.

Mr Majumdar presented the ICT in education ecosystem, in which aspects of hardware, connectivity, pedagogy, teacher training and content are linked together and all have their own role to play.

Based on this, Mr Majumdar outlined the following factors influencing effective integration of ICTs in TVET:

- Strategic readiness: ICT master plans and strategic planning;
- Pedagogical readiness: audit of current teaching and learning practices;
- Organizational readiness: learning environment, curriculum, teachers’ ICT competencies;
- Technical readiness: hardware/software/connectivity and bandwith.
He emphasized that teachers are one of the most influential factors because they can change the institutions and hence the country. The UNESCO ICT Competency Framework for Teachers (ICT CFIT) is a framework for training teachers to effectively integrate ICTs in their practice. It outlines a set of competencies that teachers need in order to integrate ICT into their practice and professional development to advance student learning. Mr Majumdar pointed to the different stages of ICT integration, which depend on both a technological (need to know how to use the technology) as well as pedagogical (need to know how to teach and learn with the technology) dimension:

- **Emerging**: Getting acquainted with the basic proficiencies in ICT;

- **Applying**: Applying ICT in content delivery;

- **Infusing**: Infusing ICT to facilitate learning independently;

- **Transforming**: Transforming learning environment utilizing ICTs.

Mr Majumdar gave some examples of successful initiatives integrating ICTs in the TVET sector. One such example is e-TESDA, an open educational resource that aims to make technical education more accessible to Filipino citizens through the use of ICTs. He also referred to two very specific emerging challenges in the field of ICTs in TVET:

1. **Open Educational Resources (OERs)**: educational materials that are in the public domain or introduced with an open license, which can be legally and freely copied, used, adapted and re-shared them. There is need for sensitization on OERs in the TVET sector as they open up a wealth of learning resources.

2. **Industry 4.0**: refers to the current trend of automation and data exchange in manufacturing technologies. It includes cyber-physical systems, the internet of things, cloud computing and cognitive computing. For TVET, this means that there will be a demand for new types of competencies and a need for a new skills framework which includes transversal skills, foundation skills and specialized skills to drive this trend.

At the end of this module, participants were able to:

- Appreciate the role of ICT in transforming TVET teaching and learning specifically;

- Understand the challenges in integrating ICT in TVET and the different steps of ICT inclusion;

- Understand the global and regional efforts in favour of ICT.
Module 3: Work based learning | Lecture: Regional Qualifications Framework

Work based learning experiences in Africa

Ms Silke Partner, Advisor ProTVET at GIZ Namibia, started this module by asking the participants to identify their learning issues for work-based learning (WBL). Participants went on a dialogue walk and came back with the following inputs:

- Shrinking industry – lack of spaces, lack of industrial attachment
- Unclear responsibility of who owns WBL – conflict of roles – WBL policy – no single strategy for WBL – how to make WBL compulsive and credit baring
- Assessment – how to do it objectively – how to assess informal learning
- TVET personnel readiness for supervising and mentoring – lack of seriousness in supervision
- Building trust – sensitive information in the workplace – companies protective of their intellectual property
- Gender – should we look at a special gender policy
- Funding and lack thereof – how to sustain funding – who pays for insurance – expensive to interrupt production for mentoring – no incentives for private sector participation
- Organizational issues
- Quality assurance – interns assigned to repetitive and unrelated tasks – what should be the duration of the attachment/what is the formula to balance work and learning

Ms Partner explained the complexity of TVET systems around the world, and how the feedback mechanisms operate differently within each TVET system. This is based on two central dimensions: (1) willingness/ability of companies to invest in TVET Programmes, and (2) degree of State involvement in TVET governance structures. She presented four different TVET governance models as follows.
Liberal VET Governance Model

- Characterized by a low degree of coordination, where feedback between TVET providers and the labour market is mainly regulated through the market.
- TVET is largely delivered through the general education system and the labour market
- Typical for developing countries with traditional apprenticeship systems
- General education provides individuals with generic educational qualifications often followed by traditional apprenticeship schemes in the first stages of employment careers
- Example: Ghana/Madagascar
- Informal trade associations and master craftsmen organize TVET apprenticeship schemes independently from the state

Statist VET Governance Model

- Characterized by strong state regulation of education and weak links between education and the labour market in terms of formal communication.
- Public policy-makers are committed to supporting TVET as a viable alternative to academic higher education to promote the integration of young people with weak academic qualifications into education and employment
- Typical for many formal educational systems in developing countries
- TVET programmes are integrated into the general education system with the aim to allow and encourage people with vocational qualifications to pursue tertiary education
- Involvement of employers of TVET systems in development limited

Segmentalist (participatory) VET Governance Model

- Allows for the participation of social partners in the processes, but mainly in a consultative role.
- Characterised by high willingness of formal firms to invest in building their employees’ skills
- Through this system, a sizable share of a typical youth age cohort enters into the internal labour markets of large firms immediately after leaving general school system
- TVET programmes include job rotation schemes and off-the-job TVET programmes at in-house training centers and technical secondary schools
- Typical for Asian industrialised countries like Japan
Social partners are the drivers of renewal processes and play an active role in its implementation.

- Strong commitment of both State and companies to invest in the building of knowledge, skills and occupational competence
- Crucial prerequisite is the willingness of companies to play an active role
- Development of a stakeholder-driven TVET system
- Combination of strong involvement of companies in work-based TVET schemes with the commitment of the state to support apprenticeship training schemes
- Interests of employers, the state, and increasingly over time the trade unions play different roles in the development of the TVET system

The countries shared how they think their own TVET governance systems can be described:

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>Statist – the majority of learners are accessing TVET programmes at the training institutions but some companies are also training themselves</td>
</tr>
<tr>
<td>Kenya</td>
<td>Transitioning from Statist to Cooperative</td>
</tr>
<tr>
<td>Madagascar</td>
<td>Liberal – institutions autonomous to seek their partners but government trying to come in</td>
</tr>
<tr>
<td>Malawi</td>
<td>Transitioning from Liberal to Statist</td>
</tr>
<tr>
<td>Mozambique</td>
<td>Liberal</td>
</tr>
<tr>
<td>Namibia</td>
<td>Trying to move from Statist to Cooperative</td>
</tr>
<tr>
<td>Swaziland</td>
<td>Statist</td>
</tr>
<tr>
<td>Zambia</td>
<td>Statist</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>Statist – Government running apprenticeship schemes but companies are also training themselves</td>
</tr>
</tbody>
</table>

Participants speculated whether these differences could be related to the size of the country (in numbers) such that in bigger countries governments are more in need of partners to coordinate TVET governance. The industrial base of the economy plays a role as well. It was noted that there is need for a mind-shift as it is not just up to governments to come up with all the solutions. The private sector, as the main stakeholder in need of skilled workers, also has to step-up.

Ms Partner continued to say that the aim of any model for TVET is to achieve employability and to get students ready for work. She presented the following TVET learning path, which outlines the different learning modes and the desired outcomes.
The figure demonstrates WBL as an integral part of TVET. WBL is learning that occurs when people do real work in a real work environment. WBL contact for learners can be frequent or limited and can take on different forms (apprenticeships, traineeships, internships, on-the-job training). The stakeholders involved in WBL are many. Through group work, the participants identified the different interests for each group of stakeholders as indicated in the white row below. Ms Partner added some interests to the participants’ inputs; this is indicated in the light yellow rows.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Interests</th>
</tr>
</thead>
</table>
| Policy makers | - Importance of skills for economic development  
- Importance of bridging the gap between industry requirement and pedagogy  
- Convince the private sector of the return of investment of WBL  
- To address unemployment  
- To regulate the TVET system |

- Produces higher-quality skills that are more relevant to real work situations than does learning that occurs entirely in the classroom; and it produces skills that are likely to be more up-to-date with current practices in the workplace  
- Helps to strengthen cooperation between education and business, and to create strong links, both for individual students and for the system as a whole, between vocational education and the real demands of the labour market  
- Increases the link between learners and the labour market and so improves their chances of getting a job after they complete their training;  
- Involves employers in designing and managing TVET, thus increasing their confidence in the system  
- Makes economic sense, with costs shared between employers and government rather than all being met from the public purse; this means that government budgets should go further  
- Makes greater use of plant and equipment on employer premises for training, and so reduces the need to purchase expensive training equipment  
- Can create learning opportunities that many publicly financed VET schools and colleges cannot afford
### Companies
- Improvement of skills for the world of work
- Incentives for the company (e.g. tax rebates)
- Cheap labour
- Fresh ideas and positive energy from the apprentices
- Ability to choose the best of the apprentices that they are training

- Workplaces in which employees constantly learn new skills and new ways of doing things tend to be more productive and more profitable. They tend to be more innovative, be better at using employees’ knowledge to improve product quality and customer service, and have lower staff turnover

### Employees
- The chance to learn new things makes work more interesting. It encourages employees to be more interested in improving their career prospects, and increases the chances that they will undertake formal TVET

### Learners
- Expect to gain experiences and good reference
- Expect recognition in their certificates
- Expect possible future employment
- Expect to gain employable skills
- Expect some allowances and finances
- Career advancement

- Work-based learning can make their programmes of study more interesting and connect them more directly to the world of work. It can improve their job prospects by giving them more relevant work skills and by connecting them to employers who may offer them jobs after they graduate. This can be an important way of expanding opportunities and increasing social inclusion among groups that are disadvantaged in the labour market

### Heads of training providers
- Look at quality of graduates matching with industry
- Objective is quality of assessment by the professionals
- Availability of training materials
- Feedback of industry on gaps of skills

- Can be a powerful way to develop generic skills such as team-work and problem solving, and basic work habits such as punctuality
- Shows students the relevance of their courses to future jobs, and makes them more interested in studying; this can be important for increasing participation and outcomes for disadvantaged students
- Can be used in career guidance programmes to teach young people about what is involved in jobs and careers
- Leads to better school-to-work outcomes: young people who have been involved in work-based learning are more likely to get jobs, as their skills are more relevant to employers’ needs, they have better basic work habits, and their contacts with employers are stronger

### Employment services
- Need policy on industrial attachment developed by Ministry of Labour – with provision to protect interns from abuse (don’t want interns to be send to collect kids from school etc)
- Need for a central link to coordinate internships

- Can re-motivate those who are long-term unemployed and maintain their motivation to seek work
- Increases unemployed people’s contact with employers, and so can increase their chances of getting a job

The participants discussed that there are clearly some potential conflicts as well as overlap. In essence though, it was concluded that WBL has benefits for all stakeholders involved and that in that regard everyone wins. But how do we ensure quality of WBL? Ms Partner explained that quality assurance measures could be put in place at different stages of the WBL process. Ms Partner also talked about assessment and financing of WBL. Both raise questions in terms of responsibilities and modalities. There is not one fixed formula for WBL.
Ms Partner chose the case of Rwanda to exemplify good practices in TVET governance on the continent and to encourage the participants to analyse and critically reflect upon the key elements and challenges of WBL systems. Through group work, participants discussed recommendations as well as differences with their own countries in the areas of inclusiveness, funding, institutional framework, internships, attachments and apprenticeships. Issues discussed were modalities for creating sustainable funding systems, increased involvement of industry, coordinated and participatory approaches in TVET governance, developing regulatory frameworks for WBL and integrating greening TVET.

It was concluded that countries are at different levels and have put in place different systems responding to their national contexts. The sharing of experiences however, will allow countries to improve the efficiency of their own WBL systems.

Regional Qualifications Framework

Ms Coleen Jaftha, Director International Liaison at the South African Qualifications Authority (SAQA), presented the SADC Qualifications Framework (SADCQF). The SADCQF is a comprehensive Regional Qualifications Framework (RQF) that encompasses all sectors of education and training namely schooling, higher education and TVET. It is a reference framework based on learning outcomes and quality assurance principles. It provides a regional benchmark for aligning qualifications and quality assurance mechanisms in SADC. Alignment is enabled by mutual trust and recognition of achievement at a regional level. The vision is that regional alignment would enable individuals to make comparisons of their learning and competence levels, and reduce unnecessary duplication of learning and effort when moving through the SADC region for study or work purposes. The main purposes of the framework are therefore mobility and transparency.

Ms Jaftha talked about the timeline of events leading to the launching of the SADCQF in 2017 and presented it with the following visual. She noted that after approval in 2011, there was a five-year gap before reviving efforts in 2016. She emphasized this to demonstrate the importance of keeping the momentum at this stage and to progress with its implementation.

At the end of this module, participants were able to:

- Understand and explain different types of work-based learning models and their benefits;
- Analyse the key elements of work-based learning systems and describe implementation challenges;
- Compare approaches towards work-based learning in different countries.
Ms Jaftha presented the SADCQF change model, which consists of reviving the SADCQF, then making sure there is leadership and governance capability to then move on to implementation.

The SADCQF implementation model currently includes:

1. Development and alignment of National Qualifications Frameworks/Systems
2. Quality assurance
3. Verification
4. Communication and advocacy
5. Recognition of prior learning (RPL) and articulation

In terms of progress achieved, Ms Jaftha outlined the main steps since the SADC Technical Committee on Certification and Accreditation (TCCA) meeting of September 2016 where South Africa took up the chairpersonship. The TCCA will oversee the coordination of the implementation of the SADCQF. A two-year action plan was put in place and South Africa agreed to support the SADC Secretariat. Based on the Troika principle, Botswana, as outgoing SADC chair, and Swaziland, as current SADC chair, entered the TCCA Executive Committee (EXCO) in December 2016. Responsibilities were divided with South Africa taking on alignment, Botswana taking on quality assurance, and Swaziland taking on verification. The TCCA EXCO went for a capacity building study tour to Europe to learn from the European Qualifications Framework experiences. The SADC Qualifications Verification Network (SADCQVN) was launched in April 2017. Later that year Zambia and Namibia entered the TCCA EXCO and took on communication/advocacy and RPL/articulation respectively.

Ms Jaftha further unpacked the five aspects of the SADCQF implementation model.
Development and alignment of National Qualifications Frameworks/Systems

The main purpose of the SADCQF is to promote mobility. As such, the SADCQF plays a key role in setting the regional standard for comparing qualifications obtained in SADC.

Ten SADCQF alignment criteria have been identified. An alignment workshop was held in South Africa and eight countries are currently piloting the criteria. The different steps in the SADCQF alignment road map are visualized in the below:

![SADCQF alignment road map]

The SADCQF level descriptors have three domains (knowledge, skills, autonomy and responsibility). The vision is for the framework to build capacity to: (1) strengthen country NQFs/qualifications systems, develop NQFs, (2) develop country level descriptors and learning outcomes, (3) align with SADC level descriptors, and (4) interact with World Reference Levels.

Quality assurance

The SADCQF encourages SADC countries to have good quality assurance (QA) mechanisms. The SADCQF QA Guidelines consist of 16 elements to which Member States are requested to align themselves. The vision is to build QA capacity in terms of: (1) credible institutions/providers, credible qualifications, (2) quality assurance policies e.g. accreditation, recognition of prior learning, credit accumulation and transfer guidelines etc., (3) credible, accurate qualifications information, (4) align with SADC QA guidelines, and (5) align with Addis Convention.

Verification

While the preceding implementation areas promote trust by ensuring that qualifications and quality assurance meets the regional standards, it is important that countries have mechanisms that can verify information about qualifications obtained in Member States. To ensure that credible, trustworthy information is being shared across SADC, a regional Qualifications Verification Network (SADCQVN) was established. The SADCQVN was initiated to strengthen verification in SADC and has applied for
membership of the African Qualifications Verification Network to ensure that African qualifications can be trusted. To ensure that the SADCOVN employs modern and innovative technologies, there are plans to pilot real-time verification in SADC.

Ms Jaftha also talked about the need for countries to ratify the Addis Convention on the Recognition of Studies, Certificates, Diplomas, Degrees and Other Academic Qualifications in Higher Education in African States.

Advocacy and communication

The TCCA has identified platforms to advocate for and communicate about the SADCQF. Information about the SADCQF has been distributed at national, regional and international levels. A communication strategy, which includes promotional material on the SADCQF, was developed and approved. Social media sites were set up and used to disseminate information about the SADCQF and a webpage will be developed.

RPL and articulation

The SADC Regional Guidelines for RPL will be rolled out with support of the International Labour Organization (ILO). Furthermore a regional articulation plan will be developed, which will outline the pathways within and between schooling, TVET and higher education.

Addressing the road ahead, Ms Jaftha pointed to the plans to establish a regional implementation unit which will drive progress in the five areas of implementation, in order to achieve full implementation of the SADCQF.

Ms Jaftha concluded her lecture by emphasizing the importance of strengthening TVET partnerships and bringing TVET leaders on board, since TVET is a significant part of the overall framework. The participants echoed this concern. Ms Jaftha informed them that the next TCCA meeting will take place in Johannesburg in May 2018.

At the end of this lecture, participants were able to:

- Understand the latest information and major developments regarding the SADCQF and its implementation
- Appreciate the mobility opportunities that the SADCQF provides and how TVET is involved
- Grasp the leadership model and change practice underpinning the implementation of the SADCQF
- Understand the SADCQF vision for the region
Module 4: Equity and gender equality

Ms Jean Munro, Gender Expert on the EU-UNESCO Skills and Technical Education Programme (STEP) in Malawi, started the module by asking the participants to reflect on the following questions:

- What is the purpose of TVET? What are your government’s current reasons for technical training?
- What are three indicators that a TVET programme is successful?
- How would you describe your country’s current efforts to address gender equality issues in TVET?
- Describe your role in achieving gender equality in the TVET sector.
- Give yourself an assessment of your role in achieving gender equality in the TVET sector (on a scale from 1 to 5).

This introductory reflection allowed participants to think critically about TVET and gender, and their role in it.

In a next exercise, the participants were requested to match terms with the right definitions. The participants did this through group work, after which they reported back their answers (terms and their definitions can be found in Annex II).

After this group work, Ms Munro initiated a “World Café” on five topics:

1. Attachment – work-based learning (WBL)
2. Curriculum and training
3. Graduation into employment
4. Access, retention and success
5. Safe and inclusive learning environment

At each of these five cafés, the following questions were discussed and captured:

- What are the gender barriers and issues that impact your goal?
- What are the gender transformative solutions for these barriers?
- What is required to make this change?
The outcome of the different cafés is illustrated below:

**Café 1: Attachment – WBL**

- Proper training
- Awareness programmes
- Exchange visits within companies (best learning practices)
- Gender parity policies
- Boys
- Encourage girls to report issues

Clear policies with prescribed harassment issues and penalties.

**Café 2: Curriculum and training**

- Curriculum and training
- General guidance
- Inclusive classroom environments
- Constructing new facilities
- Sensitisation of communities, industries, and learners
- Some facilities not gender accommodating
- Lack of career guidance
- Stereotype on choice of training programmes

- Staff shortages
- Inadequate funding
- Inadequate training facilities
Café 3: Graduation into employment

Café 4: Access, retention and success
After this group work, Ms Munro unpacked the concept of gender barriers that may hinder gender equal participation and success in TVET. The following challenges were mentioned:

- **Gender biases (conscious or unconscious)** – often young women do not find employment because employers fear they will fall out because of pregnancy; also, many husbands ‘expect’ their wives to run the household and not to earn an income. This hinders women from having careers.

- **Decision-making** – ability of youth to decide the kind of programme they want to enrol in is limited; parents mostly decide. Moreover, information to base decision-making on is not complete.

- **Access to funds**

- **Mobility (e.g. transport)** – young person may end up in a certain programme because the school is nearby.

- **Previous discrimination** – in primary and secondary education, girls are often discriminated against and they learn that they are second class citizens.

- **Instructors have lack of training and understanding of gender issues** – instructor training programmes often do not address gender.

- **Resistance to change**

- **Acceptance of gender-based violence (GBV) and discrimination**
Ms Munro provided some solutions to overcome or significantly reduce these gender barriers in TVET, including:

**Enrolment and retention**

- Improve guidance and counselling
  - Provide orientation packages to parents and new students (that include the code of conduct, rules, rights and responsibilities)
  - Organize secondary school outreach – letting girls try different trades – organize tours of colleges – show role models by bringing in women who can speak about the trade
  - Organize parent outreach since they are the ones making the decisions
- Change the negative stigma around TVET (e.g. Malawi campaign Ngwazi Zachikazi)
- Organize a transparent application process
- Subsidize tuition, provide merit-based scholarships and bursaries, and loans

**Gender transformative human resources policies and practices**

- Ensure staff development on gender-responsive pedagogy and the dangers of unintended learning (e.g. teachers should not make fun of male students taking tailoring classes)
- Create a code of conduct for staff which is enforced with accountability measures in place
- Include gender specific indicators in performance assessment for teachers and principals
- Ensure an equal pay for women and men doing the same job within your institution, as well as equal treatment in grading and promotion. Offer child-care on and off campus

**Gender transformative curriculum**

- Gender mainstreaming in skills development curriculum
- Equal access to learning materials
- Offer new courses to address discrimination and empower youth – like public speaking courses (girls taught to be quiet and not to speak out) – drug abuse and alcoholism – comprehensive sexual and reproductive health – prevention of gender-based violence

**Gender transformative pedagogy**

- Refer to teaching and learning processes that pay attention to the specific learning needs of women and men. It calls for instructors to take an all-encompassing gender approach in the processes of lesson planning, teaching, classroom and workshop management and performance evaluation
- Encourage instructors to take a more transformative role
• Support positive behavior and reprimanding negative behaviour (being a positive role model)
• Make sure classroom is arranged well (not women in the back and men in the front)
• Ensure equal participation in workshops and classrooms, equal access to tools and materials
• Empower female students to teach and facilitate sessions

Apprenticeship
• Implement transparent application and matching process—ensure women have apprenticeships where their technical skills are used and not to be forced to do less valued, gender-biased tasks
• Share code of conduct with supervisors in the workplace
• Ensure equal pay of interns regardless of gender
• Allow students to anonymously evaluate their workplace experience

Support systems
• Implement counselling services in the colleges (psychological and social support, help link to employment and decent work)
• Ensure access for women to clubs and sports
• Student governance

Ms Munro also zoomed in on violence and gender-based violence happening in TVET institutions, based on a study done in three TVET colleges in Malawi. A study on a wider scale is currently on-going in TVET colleges in Malawi, as explained by Ms Doris Mtemang’Ombe, Head of Department at the University of Malawi - the Polytechnic. The early results are worrying as they highlight many discrimination against women, most notably coming from the instructors. No health programmes or support systems are in place so even when rape is reported, there is no adequate follow-up against the aggressor or in support of the victim. The orientation programmes at the colleges do not include anything about conduct and responsibilities.

To address gender-based violence in TVET colleges it is important to start with conducting a gender audit, which will analyse experiences, policies and impact. Based on the gender audit, the steps towards achieving a gender transformative TVET system can be planned for and subsequently implemented. Rigid monitoring and evaluation tools should be used to revise and improve the implementation.
In a final exercise, participants were encouraged to demonstrate gender transformative leadership through role-playing. Selected participants were given specific roles to play in a scenario. This exercise was an opportunity for participants to practice being a transformative leader who shapes gender responsive learning environments.

In her conclusion, Ms Munro emphasized that adding women to a biased and discriminatory system will not bring about gender equality. A gender transformative TVET system can only be implemented through its leaders because they have the power to shift the resources towards this goal. She reiterated that the steps to achieve this is to: (1) conduct a gender audit, (2) plan to create a gender transformative TVET system, (3) implement it, and (4) monitor and evaluate the system. This system should address gender dimensions in: (a) access and retention, (b) safe and inclusive learning environments, (c) curriculum and training, (d) apprenticeships and (e) transition to employment.

Working towards gender equality is not a woman’s business only but the duty of men and women as they are all duty bearers. Especially in TVET, which is a male-dominated field, the role of men in promoting gender equality is paramount.

At the end of this module, participants were able to:

- Understand and explain the difference in approaches to gender equality and TVET;
- Identify which gender equality approach is used in their TVET context and its strengths and limitations;
- Assess how best to address root causes of gender inequality through technical and vocation training;
- Identify effective responses to gender equality issues which hinder the effectiveness and success of TVET training.
Module 5: Leadership and management

Leadership and Management in the transformational arena

Mr Todini Marecha, TVET Institution Management Specialist for the EU-UNESCO STEP in Malawi, facilitated this module. He emphasized that the quality of TVET is heavily dependent on its leaders and managers and the kind of direction they give to the subsector. School leadership has received substantial attention and has been part of educational policy-making but rarely is this the case for the TVET subsector. However, without effective leadership in TVET, success is a challenge.

Through group work, the participants were asked to discuss and respond to the following questions:

- Identify differences and relationships between leadership and management
- Discuss and list skills required for TVET leadership and management
- Discuss and list aspects of being a leader in Africa

The groups reported the following answers to these questions:

### Leadership vs management

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Leaders</th>
<th>Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visionary (create a future direction)</td>
<td>Has function of planning, coordinating and controlling</td>
<td></td>
</tr>
<tr>
<td>Risk-taking</td>
<td>Controls the risk</td>
<td></td>
</tr>
<tr>
<td>Develops capacity/coach</td>
<td>Directs</td>
<td></td>
</tr>
<tr>
<td>Builds relationships</td>
<td>Builds processes and systems</td>
<td></td>
</tr>
<tr>
<td>Creates and nurtures change</td>
<td>Maintains the status quo</td>
<td></td>
</tr>
<tr>
<td>Role models</td>
<td>Perfects systems</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 2</th>
<th>Minister</th>
<th>Principal Secretary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creates vision</td>
<td>Coordinates the realization of the vision</td>
<td></td>
</tr>
<tr>
<td>Makes policies</td>
<td>Sustains the change process</td>
<td></td>
</tr>
<tr>
<td>Starts the change</td>
<td>People to work for</td>
<td></td>
</tr>
<tr>
<td>People to follow</td>
<td>Delegates</td>
<td></td>
</tr>
<tr>
<td>Inspires</td>
<td>Planning, budgeting and monitoring and evaluation</td>
<td></td>
</tr>
<tr>
<td>Gives directions</td>
<td>Back-up for people</td>
<td></td>
</tr>
<tr>
<td>Motivates</td>
<td>Controls</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizes</td>
<td></td>
</tr>
</tbody>
</table>

### Skills required for TVET leadership and management

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Skills required for TVET leaderships and managements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobilize resources - Analytical skills - Organize and plan - Visionary and communication (oral and written) - Critical thinking and innovation - Adaptive to change - Monitoring and evaluation - Motivate - Ability to demonstrate - Control - Team player - Gender responsive - Business mindset – Entrepreneur - Empathy - Influence - Continuous learning - Inclusive</td>
<td></td>
</tr>
</tbody>
</table>

| Group 2 | Planning and organizing - Communication (listening, accommodative, clarity) - Control - Budgeting - Managing (people, resources, time, politics, conflicts) - Engaging - Assertiveness (decision-making) - Delegation - Analytical skills - Multitasking |
Aspects of being a leader in Africa

Mr Marecha explained that **leadership** is the art of motivating a group of people to act towards achieving a common goal, while **management** is the organization and coordination of the activities of an institution or a business in order to achieve the defined objectives.

After this exercise, Mr Marecha set out the seven basic principles of leadership (insight, initiative, inspiration, involvement, improvisation, individuality and implementation) and some leadership traits related to intelligence and personality. He emphasized that leaders should also portray role model qualities and need to possess or build interpersonal trust (through communication, honesty, support, respect, fairness, predictability and competence).

There are different types of leaders (e.g. promotional leaders, charismatic leaders, leaders by moral example, intellectual leaders) and different types of leadership:

- Charismatic leadership (is followed due to his/her personality and charm)
- Situational leadership (adjusts according to followers’ readiness)
- Participative leadership (involves the team)
- Servant leadership (serves others)
- Transactional leadership (creates clear structures and expectations)
- Transformational leadership (guides team in direction of goals by clarifying tasks and roles)

Mr Marecha added that transactional and transformational leadership take place concurrently. Transformational leadership requires for the structures to be in place so that things move in an orderly manner, therefore transactional leadership and transformational leadership happen at the same time.

In line with the change projects the participants are developing, Mr Marecha showed the participants two short videos about **Change Management**. The main message was that in order to lead and manage change successfully it is important to communicate and be transparent, involve the team in decision-making, minimize uncertainty and celebrate successes. Leaders cannot just dictate change; it is important to involve the team/organization and thereby expand the ‘change team.’ Change managers should also address culture, use the power of the informal leaders in the organization and create a coherent environment. A change process is not an individual phenomenon, yet it requires all actors to work together.

Mr Marecha continued to say that the skills needed for managers and leaders may overlap. He set out the key skills for TVET leaders/ managers:

- Planning
- Staffing
- Human resource management
- Organizing
- Effective implementation
- Commanding (transactional)
- Coordinating
- Controlling
- Networking
Mr Marecha concluded by emphasizing the importance of leadership. Especially when implementing change projects, it is important to have a leader with transformational qualities to inspire and guide the team in the direction of the goal.

At the end of this module, participants were able to:

- Discuss and identify differences and relationships between leadership and management
- Discuss and list skills required for TVET leadership and management
- Identify and differentiate generic and sector-specific skills in TVET leadership and management
- Reach a consensus on a good TVET leader/manager
- Critically discuss the changing environment, technologies and analyse the implications for management and leadership
- Cascade global transformational perspectives of leadership and management to institutional levels

Power

Throughout the five-day meeting, participants were encouraged to explore the concept of power.

Ms Medel-Anonuevo indicated that one of the most important concepts connected to leadership is power. She asked the participants to think about what they associate power with. They reported the following:

<table>
<thead>
<tr>
<th>Power</th>
</tr>
</thead>
</table>

Most of the reported concepts were negative, associated with corruption and control. This is mainly because most of what one thinks of as power is power over. Ms Medel-Anonuevo then shared the following model of power interactions between people, illustrating that power can take on many forms.
Power-over means exercising control over another person or people through the use of formal authority and position, while power-under is the process of managing-up. Individuals all have power-from-within. Power-with is constructed when individuals are together and have an agreement in which all parties decide to act in ways that construct the welfare of all.

Leaders need to be careful of the way they use their power, as it can be destructive as well as constructive, depending on how it is being used. Ms Medel-Anonuevo indicated that power has many sources and also evolves over time. She exemplified this with a hunter-gather whose power came from his physical strength. She also talked about power based on age, healing power, the power of the storyteller, spiritual power, and religious power. Power can also be based on who controls the resources, or be based on physical attractiveness. Most of today’s power is based on education and knowledge. An emerging source of power is related to data and who holds and controls these. The more sources of power anyone has, the stronger he or she will be.

It is important for leaders to realize where their power lays so that they can constantly build and sustain their power base. For the participants, as TVET leaders, their powerbase is their knowledge and expertise in TVET.

Change projects

As potential change leaders in TVET, each of the participating TVET leaders was requested to outline a project that captures the kind of change they would like to bring to their work or institution.

Based on the discussions and the different modules throughout the training, the participants were able to refine, redefine and revise their change project proposals. Ms Medel-Anonuevo advised the participants to ensure the scope of the change projects they want to implement is within their control and their sphere of influence. She also emphasized the need for out-of-the-box thinking when conceptualizing, advocating for and implementing their projects. As this is not a specific learning objective for this training, she called this the hidden and implicit curriculum of this programme.

The different change project proposals of the participants relate to the following five thematic areas:

- Implementing or improving work-based learning (WBL);
- Improving information management and needs analysis;
- Increasing cooperation among TVET stakeholders;
- Making TVET inclusive/attractive, increasing mobility;
- Matching curriculum with the industry needs.

Grouped according to these five thematic areas, participants were given time to reflect on their change project proposals based on the information received in the different modules throughout the five-day training. These reflections gave them the opportunity to adjust and refine their proposals.

Participants were encouraged to think about the feasibility of the implementation of their proposals as well as how to advocate for them with their hierarchy. Avoiding corruption in the implementation was also a discussion point, as well as the kind of key leadership and management skills that are necessary to steer implementation. Most of the revisions that participants made throughout the five-day meeting had to do with fine-tuning broad and more general objectives, the inclusion of aspects of greening TVET and gender equality. Another notable revision was the coming together of proposals from the same country. For example in the case of Zambia, both leaders from TEVETA decided to combine their power to push forward the WBL agenda.

At the end of the meeting, the revised change project proposals of the participating TVET leaders were the following.
Rudo Masheke Banda, Acting Director Training Standards Division
TEVETA, Zambia

Aim: To develop the quality assurance monitoring tools and guidelines for the delivery of the Workplace based training to ensure that quality training is being delivered.

Expected Specific Outcomes:
1. Guidelines and instruments on how to effectively monitor quality for work-based training will be developed;
2. Inclusion of greening TVET in the guidelines and instruments;
3. Inclusion of gender aspects in the guidelines and instruments.

Virginia Onkgopotse Bojosi, Framework Development and Maintenance Officer
Botswana Qualifications Authority, Botswana

Aim: Establishment of sub-framework structures for the three sub-systems being general education, TVET and higher education (equating to Quality Councils in the context of South Africa). These structures will be responsible for coordination of the development and quality assurance of qualifications and learning programmes. Specifically advocate for infusion of the learnings from this training for the TVET sub-framework structure such as WBL (Core to TVET–CBET), greening of the curriculum, digitalization, alignment to the SADCQF, equity and gender equality.

Expected Specific Outcomes:
• Qualifications submitted to BQA for registration on the NCQF will be of a better quality;
• Technical colleges offering these qualifications will be well resourced producing learners that are work ready;
• Graduates of these qualifications will be work ready as qualifications will be aligned to industry needs.

Manuel Caetano, Head of Pedagogy Sector
Ministry of Science Technology, Higher Education and Professional Training, Mozambique

Aim: My project aims at strengthening the career guidance for TVET in Mozambique. At least from junior secondary schools students there is a need to raise consciousness on the different professions performance (what the professions are all about). This will allow them to choose the right professions for their future.

Expected Specific Outcomes:
• Consciousness and motivation and solid selection of the professions by students before they join the technical and vocational colleges;
• Increase the number of female students in those courses regarded as “male courses”;
• Increase the competencies of the graduates;
• Contribute to increase the success for the training and on employability.

Willard Chinhandavata, Principal Manpower Planning and Development Officer
Ministry of Higher and Tertiary Education, Science and technology Development, Zimbabwe

Aim: TVET lecturers have the prerequisite qualifications but with the change of technology a skills gap has notably developed between the artisans being produced in TVET institutions and what today and future industries require in terms of skills competencies and environmental attention.

Expected Specific Outcomes:
The change project seeks to address the issue of relevance to TVET lecturers. These lecturers received their industrial training long back and they are using the same old skills and technology in training today and future’s artisans. The institutions are equipped with obsolete tools but the industry has moved on with state of the art equipment. Exchanging and attaching TVET lecturers to industry would keep them relevant and motivated this would help boost industry by producing high end innovative skilled artisans.

Thomas Tichaona Gatsi, Deputy Director
Psychomotor Activities in Education, Zimbabwe

Aim: To develop specific lifelong skills training programmes for decent job, self-sustainability and employment creation for the youth, women and disadvantaged people including those living with disabilities.

Expected Specific Outcomes:
The specific outcomes are decent job, self-sustainability and employment creation for economic growth among the youth, women and disadvantaged people including people living with disabilities in the local community using resources around them.
<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Country</th>
<th>Aim</th>
<th>Expected Specific Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amon Haufiku, Manager: VET Programmes</td>
<td>Namibia Training Authority (NTA), Namibia</td>
<td>Namibia</td>
<td>The ultimate aim of my change project is to address the competence level of TVET graduates through the development of Work-integrated learning (WIL) Policy to enforce compulsory job/industry attachment of TVET graduates such that no one shall be certified as competent without proof of industry attachment in the form of portfolio of evidence.</td>
<td>Competent TVET graduates of the Namibian TVET sector who can confidently demonstrate their competence level in a practical way as well as theoretical.</td>
</tr>
</tbody>
</table>
| Yusuf Josaya, Deputy Principal | Labour, Youths, Sports and Manpower Development/ Technical and Vocational Training, Malawi | Malawi        | To investigate the effect of information strategy implementation on the performance of Soche Technical College.                                                                                                                                                                                                                                                                                                                                                                                                  | a. To explore the socio-economic factors of students pursuing different programmes guided by information strategy of the college;  
   b. To examine the effect of information strategy on the students' quality of service delivery within the college premise.                                                                                                                                                                                                 |
| Winnie Jotia, Registration and Accreditation Specialist | Botswana Qualifications Authority, Botswana | Botswana      | To spread awareness to TVET lecturers/trainers about the importance of upskilling themselves and to upgrade their qualifications                                                                                                                                                                                                                                                                                                                                                                  | Most of TVET lecturers/trainers have a Diploma and do not seem to see the need of upgrading their qualifications to Bachelors or upper level qualifications.                                                                                                                                                                                                                                                |
| Catherine Musenge Kanyensha, Director – Assessments and Certification | TEVETA, Zambia                        | Zambia        | Implementation of Work-place learning (WPL) and recognition of prior learning (RPL) in the TEVET sector, for both for the formal and non-formal learning environments, taking into account the greening concept, information (data) management and gender issues.                                                                                              | 1. Development of systems and procedures;  
   2. Capacity building for administrators (TEVETA Staff) and assessors;  
| Kornelius Mpande Lukas, Centre Manager | Rundu Vocational Training Centre / NTA, Namibia | Namibia       | My overall aim is to improve on work-based learning (WBL) and greening TVET                                                                                                                                                                                                                                                                                                                                                                                                  | We will engage companies that are eager to take our trainees male and female and to be given proper training that are needed in the industries (WBL). ICT link to the industrial will be realized and our workshops will be linked to new technology equipment's and machineries. Our greening borehole application has been channelled through to the Rundu Town Council for approval so we can have adequate water and include introducing solar panel to pump water from borehole. |
| Christopher W. Mudzingwa, Principal Manpower Planning and Development Officer | Ministry of Higher and Tertiary Education, Science and technology Development, Zimbabwe | Zimbabwe      | The main aim is to come up with strategies to reduce gender parity in the engineering disciplines in TVET training institutions in Zimbabwe.                                                                                                                                                                                                                                                                                                         | Increase in the enrolment of girls in engineering disciplines.                                                                                                                                                                                                                                                                                                                                                      |
### Kelesitse Kelly Maikaelelo, Planner - Workplace Learning
Human Resources Development Council (HRDC). Ministry of Tertiary Education, Research, Science & Technology
Botswana

**Aim:** To have a coordinated, congruent, TVET Stakeholders’ involvement thus promoting public – private participation in Botswana as well as changing the “mind-set of all” towards TVET

**Expected Specific Outcomes:**
- A well-built strong and defined participation of all TVET stakeholders, which will see competent TVET graduates who are employable, contributing to the sustainability of the economy of the country and entrepreneurial graduates;
- Changing the mind of stakeholders about TVET and giving it a “choice of career” for socio-economic development;
- Promoting lifelong learning;
- A mode to promoting greening TVET;
- Influence the policy-makers to substantively allocate better budget for the TVET system in the form of a Government subvention;
- Influence for the review of the Training Levy to entice stakeholders in partaking in skills development through the TVET system.

### Musa Thabang Mokoena, Principal
Gwamile Vocational and Commercial Training Institute Matsapa (VOCTIM), Swaziland

**Aim:** A curriculum review exercise to meet teaching/industry gap in the teaching of automotive mechanics, and electrical and electronics, with introduction of aspects of greening practices in institution, and a drive towards encouraging a gender transformative TVET.

**Expected Specific Outcomes:**
- Newer technology relevant equipment introduced in automotive mechanics and in electrical and electronics: to include computer diagnostics, auto electrics, auto electronics and new models engines for simulations, for automotive mechanics, and programmable logic controllers for electrical and electronics;
- Teaching staff together with industry trained on use of first world technologies to create capacity (including future change);
- Teaching staff trained on maintenance of new equipment;
- Curriculum reviewed to include new technology, as well as aspects of greening in teaching practices;
- Graduates not only industry ready but capable to handle some newer technology not yet used in industry;
- College staff consciously taking on greening practices;
- More females encouraged to take TVET programmes normally dominated by males.

### Lawrence Mukhongo Manyonge, Director, TVET Programmes
Technical University of Mombasa, Kenya

**Aim:** To develop structures and plans to embrace revitalization of TVET through greening strategies, use of ICT in TVET for lifelong learning, enhancing work-based learning to achieve gender equality and empowerment for all.

**Expected Specific Outcomes:**
- To provide an institutional advocacy, knowledge enhancement as well as governance and management skills to greening TVET within Technical University of Mombasa;
- To promote work-based learning in all its forms, with special attention to apprenticeships/ internships by working together with the private sector within Kenya;
- To use of ICTs in addition to administrative purposes, communication, teaching and learning, but also in labour market information and job placement;
- To advocate for gender-friendly environment in TVET institutions and work places.
Refilwe Matshambani, Registration and Accreditation Officer
Botswana Qualifications Authority, Botswana

Aim: Assist TVET lectures to upgrade and upskill themselves as a way of preparing themselves to be absorbed by the new system that is being implemented. The programme will also make them aware of the different programmes of study they can enrol for as a way of upgrading their qualifications.

Expected Specific Outcomes:
1. Design a programme aimed at sensitizing the lecturers about the importance of upgrading and upskilling themselves, which will also cover issues on gender equality, work-based learning, Sustainable Development Goals, national credit and qualifications framework, and most importantly funding opportunities available in and outside the country;
2. Roll out training by grouping lecturers by regions to attend the training;
3. Select leaders per regions to assist in monitoring the change.

Mary M Muthoka, Chief Principal
Kenya Coast National Polytechnic, Kenya

Aim: Increasing student numbers from the local community and coast in general.

Expected Specific Outcomes:
1. Higher enrolment;
2. Less idleness and less/no involvement in crime;
3. Improved livelihoods/incomes.

Doris Mtemang’Ombe, Lecturer/Head of Department
University of Malawi – The Polytechnic, Malawi

Aim: To develop a programme/structure where ambitions for TVET careers should be nurtured from primary education so that as the children are growing, they should be able to see the potential more specifically from their own environment and also being able to see possible opportunities they may venture into.

Expected Specific Outcomes:
• To foster TVET career choices in youths especially girls at primary school level;
• To promote communities’ positive attitude in TVET;
• To provide entrepreneurial ideas related to TVET;
• To advocate for greening within the communities.

Muvatera Ndjoze-Siririka, Director
Ministry of Higher Education, Training and Innovation

Aim: To transform the overall management system of human resources development. That is, to reduce the number of agencies involved in human capital development. Reduce the duplication of functions between the various entities.

Expected Specific Outcomes:

Nomcebo Marilyn Nhlengetfwa, Vice-Principal
Swaziland College of Technology, Swaziland

Aim: To engage in development of a curriculum that will address the current gap between teaching and industry expectations in automotive mechanics, electrical and electronics, incorporating ICT, green technologies in the institution and advocating for gender transformative TVET.

Expected Specific Outcomes:
• Curriculum reviewed to incorporate new technology and green technologies;
• Introduction of relevant equipment in auto-mechanics and electrical and electronics (for instance computer diagnostics, auto electrical equipment, newer model engines for simulations, and programmable logic controllers for electrical and electronics;
• Capacity development of lecturing staff to equip them with skills of first world technologies; and training on maintenance of the new equipment;
• College staff engaging on greening practices;
• Increase in the proportion of females enrolling for programmes that are traditionally male dominated.
<table>
<thead>
<tr>
<th>Name and Title</th>
<th>Organization</th>
<th>Aim</th>
<th>Expected Specific Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brian Nyagwande, Deputy Director Vocational Training and Skills Development</td>
<td>Ministry of Youth, Indigenisation and Economic Empowerment, Zimbabwe</td>
<td>The overall aim of my project is to inculcate a culture of entrepreneurship amongst trainees. The project will also as a model of work-based learning where the trainees will have incubation.</td>
<td>• Production unit established at the centre; • Public-private partnerships; • Self-sustenance at the centre.</td>
</tr>
<tr>
<td>Elisha Rupiya, Director</td>
<td>Department of Psychomotor Activities in Education, Zimbabwe</td>
<td>The project aims at providing agriculture based technical skills training to young persons that will have dropped out of school such that they are productive and generate employment for themselves. Zimbabwe being an agro-based economy has a lot of potential to generate employment for school dropouts once these are empowered with the necessary technical knowledge and skills in the area of agriculture.</td>
<td>1. Technically oriented and agriculturally productive young persons; 2. Literate young persons; 3. Empowered young persons that can create own jobs; 4. Improved nutrition and food security at household level; 5. A supportive community that puts to core the young persons.</td>
</tr>
<tr>
<td>Earnest Simelane, Senior Inspector TVET</td>
<td>Ministry of Education and Training, Swaziland</td>
<td>To strengthen the prevocational education programme/secondary level TVET to align with direct employment fields, further training and capacity to establish business enterprises.</td>
<td>• Restructure the prevocational education programme to accommodate all learners irrespective of academic capabilities including female learners and avail opportunities for progression and direct gainful employment; • Avail practical assessment at early stages of the programme; • Expand the number of schools offering the programme; • To increase the number of subjects offered in the prevocational education programme.</td>
</tr>
<tr>
<td>Richard Wekesa, Principal/CEO</td>
<td>Bukura Agricultural College, Kenya</td>
<td>Offer TVET curriculum that will produce graduates with relevant skills, knowledge and attitude, is inclusive and emphasizes the use of appropriate and sustainable technology</td>
<td>• Develop CBET for the agriculture TVET curriculum; • Curriculum infused with gender issues, environmental sustainability and utilizes ICT; • Curriculum aligned to SDG 4, 7, 9 and 13.</td>
</tr>
<tr>
<td>Lova Raharimihaja Zakariasy, General Manager</td>
<td>Higher Institute of Technology Antsiranana, Madagascar</td>
<td>Implementing a single digitalized device to manage the information system in the institution.</td>
<td>• Automated information system, from students enrolment to issue of diplomas and graduate follow-up; • Better uses of digital educational resources in teaching and learning; • Digital tools for administration.</td>
</tr>
</tbody>
</table>
Evaluation

A survey was sent to all participants on the last day of the UNEVOC TVET Leadership Programme for Southern and Eastern Africa. Overall, the respondents expressed satisfaction regarding the week they spent in Harare.

On average, the relevance of the training modules was rated 4.5/5 and their quality of delivery 4.3/5. Most importantly, respondents reported that the modules had impacted their change projects, as shown by the previous session.

All respondents judged the size of the group to be “just right” and were satisfied or highly satisfied with the facilities and logistic support during the training period. However, 57% believed that the programme was too short. It is also worth noting that the only lecture in the Programme also recorded the lowest ratings from the participants in terms of impact on change projects (independently from the module’s relevance and quality of delivery). It highlights how important a participatory approach is when the objective is to move to action.

Summary and way forward

“Great leaders don’t set out to be a leader. They set out to make a difference. It is never about the role—always about the goal.”

TVET professionals in Africa, as in other parts of the world, are concerned with transforming TVET. To ensure that TVET systems can contribute to the economic development of African countries, and to gain competitiveness in the global market, TVET institutions have to improve access, increase their effectiveness, evolve, and expand their offers. Transforming TVET requires change at the national and institutional level that is informed by global and regional trends and vision.

One of the perceived bottlenecks in effecting change in TVET institutions relates to the lack of change leaders and a lack of capacity to develop a vision and implement change. Transformative leaders need to have a clear vision, a sound thematic knowledge base and have the skills to drive change. The UNEVOC TVET Leadership Programme for Southern and Eastern Africa aimed to develop the capacity of potential change agents in the TVET sector, and help them align local issues with the regional and global agendas, so that they can make full use of the opportunities that come with them.

The programme focused on three core areas of a leader’s ability to drive change efficiently and successfully: strategic knowledge (vision for change), thematic knowledge (knowledge for change), and leadership and management skills (skills for change). The participants were introduced to the SDGs, existing global and regional frameworks, and UNESCO’s action for TVET. The programme focused on
issues of greening TVET, digitalization in TVET, work-based learning (WBL) and gender equality. Notions and concepts of power and leadership were unpacked throughout the programme. One aspect that was emphasized was that effective leadership requires many skills and attributes and that as leaders, all participants have capacity to act and to effect change, within their sphere of influence.

All participants agreed that the need to rebrand TVET was urgent and a key strategy. Rebranding however cannot be separated from ensuring the quality of TVET provision. Urgent matters include improving the quality of teachers and CBET, improving the relevance of TVET through the inclusion of greening and ICT aspects, gender equality and the optimization of systems for WBL. UNESCO ROSA and UNESCO-UNEVOC are committed to providing support to the countries in implementing this agenda of rebranding and ensuring quality.

The TVET leaders started out with predominantly negative thoughts about power (power is corrupt, power is arrogant) which they counter-balanced in the course of the programme with positive perceptions. By discussing the notion of “power”, leaders’ role in transforming TVET appeared to be paramount and participants learned that to be a transformational leader is to be a servant leader.

The TVET leaders developed change projects for their institutions prior to the training, indicating the change they envision for their institutions and how this will be implemented. As the training progressed, the participants were given the chance to reflect on, refine and revise their change projects based on the different modules of the training. Once implemented these TVET change projects will positively transform the TVET landscape in Southern and Eastern Africa.

The critical and strategic thinking about effecting positive institutional changes, combined with the information provided through the different training modules, encouraged the participants to think out-of-the-box. This kind of creative thinking is what facilitates transformation, and Ms Medel-Anonuevo referred to it as the hidden curriculum of this training.

The sharing of country practices and the formal and informal networking throughout the training week helped the TVET leaders from Southern and Eastern Africa to understand that they face similar challenges and can be inspired by other countries’ solutions.
Annex I: Programme

The full Programme is available online: www.unevoc.unesco.org/l/561
### Terms and definitions on Gender

#### Gender
Is a social and cultural construct, which distinguishes differences in the attributes of men and women, girls and boys, and accordingly refers to the roles and responsibilities of men and women. Gender-based roles and other attributes, therefore, change over time and vary with different cultural contexts. The concept of gender includes the expectations held about the characteristics, aptitudes and likely behaviours of both women and men (femininity and masculinity). This concept is also useful in analyzing how commonly shared practices legitimize discrepancies between sexes.

#### Sex
Refers to the biological and physiological reality of being males or females.

#### Gender Equality
This means that women and men, girls and boys have equal conditions, treatment and opportunities for realizing their full potential, human rights and dignity, and for contributing to (and benefitting from) economic, social, cultural and political development. Gender equality is, therefore, the equal valuing by society of the similarities and the differences of men and women, and the roles they play. It is based on women and men being full partners in the home, community and society.

Equality does not mean that women and men will become the same but that women’s and men’s rights, responsibilities and opportunities will not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men and girls and boys are taken into consideration, recognizing the diversity of different groups and that all human beings are free to develop their personal abilities and make choices without the limitations set by stereotypes and prejudices about gender roles. Gender equality is a matter of human rights and is seen as a precondition for, and indicator of, sustainable people-centred development.

#### Gender Equity
This is the process of being fair to men and women, boys and girls and is about equality of outcomes and results. Gender equity may involve the use of temporary special measures to compensate for historical or systemic bias or discrimination (such as affirmative action, quota’s, etc). It refers to differential treatment that is fair and positively addresses a bias or disadvantage that is due to gender roles or norms or differences between the sexes.

It is a means to ensure that women and men, girls and boys have an equal chance not only at the starting point but also when reaching the finishing line. It is about the fair and just treatment of both sexes that takes into account the different needs of the men and women, cultural barriers and (past) discrimination of the specific group.

#### Gender Stereotype
The constant portrayal, such as in the media, conversation, jokes or books, of women and men occupying social roles according to a traditional gender role or division of labour.

#### Gender Discrimination
"Any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on the basis of equality of men and women, of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field.” [United Nations, 1979. ‘Convention on the Elimination of all forms of Discrimination Against Women‘ Article 1]

#### Duty Bearer
Duty bearers are those actors who have a particular obligation or responsibility to respect, promote and realize human rights and to abstain from human rights violations. The term is most commonly used to refer to State actors, but non-State actors can also be considered duty bearers.
### Empowerment

Refers to increasing the spiritual, political, social or economic strength of individuals and communities. Empowerment of women and girls concerns women and girls gaining power and control over their own lives. It involves awareness-raising, building self-confidence, expansion of choices, increased access to and control over resources and actions to transform the structures and institutions which reinforce and perpetuate gender discrimination and inequality.

The core of this concept lies in the ability of a person to control their own destiny. This implies that to be empowered, women and men must not only have equal capabilities (such as education and health) and equal access to resources and opportunities (such as land and employment), but they must also have the agency to use these rights, capabilities, resources and opportunities to make strategic choices and decisions (such as is provided through leadership opportunities and participation in political institutions).

### Gender-Based Violence (GBV)

GBV is an umbrella term for any harmful act that is perpetrated against a person’s will and that is based on socially ascribed (gender) differences between females and males. The nature and extent of specific types of GBV vary across cultures, countries and regions. Examples include sexual violence, including sexual exploitation/abuse and forced prostitution; domestic violence; trafficking; forced/early marriage; harmful traditional practices such as female genital mutilation; honour killings; and widow inheritance.

### Gender Blindness

This is the failure to recognize that the roles and responsibilities of men/boys and women/girls are given to them in specific social, cultural, economic and political contexts and backgrounds. Projects, programmes, policies and attitudes which are gender blind do not take into account these different roles and diverse needs, maintain status quo, and will not help transform the unequal structure of gender relations.

### Gender Equality Programming

This is an umbrella term encompassing all strategies to achieve gender equality. Important examples include gender mainstreaming, gender analysis, prevention and response to gender-based violence (GBA) and sexual exploitation and abuse (SEA), promotion and protection of human rights, empowerment of women and girls, and gender balance in the education setting and workplace.

### Gender Mainstreaming

Gender mainstreaming (GE) is a strategy to accelerate progress on women’s rights and equality; integrating attention to equality and rights. It is a strategy for implementing greater equality for women and girls in relation to men and boys. Gender equality is the goal.

Gender mainstreaming is the process of assessing the implications for girls and boys/ men and women of any planned action, including legislation, policies or programmes. It is a strategy for making girls’ and women’s, as well as boy’s and men’s, concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes so that girls and boys / women and men benefit equality, and inequality is not perpetuated.

### Gender Neutral

This refers to anything – a concept, an entity, a style of language – that is unassociated with either the male or female gender. The nature of systemic and embedded or internalized bias is such that, unfortunately often, what is perceived to be gender neutral is in fact gender blind.

### Gender Norms

These are the accepted attributes and characteristics of male and female gendered identity at a particular point in time for a specific society or community. They are the standards and expectations to which gender identity generally conforms, within a range that defines a particular society, culture and community at that point in time. These are ideas about how men and women should be and act. Internalized early in life, gender norms can establish a life cycle of gender socialization and stereotyping.

### Gender Parity

Is a numerical concept. This concerns relative equality in terms of numbers and proportions of men and women, girls and boys. It addresses the ratio of female-to male values (or males-to-females, in certain cases) of a given indicator.

### Human Rights-Based Approach (HRBA)

This approach entails consciously and systematically paying attention to human rights in all aspects of programme development. A HRBA is a conceptual framework for the process of human development that is normatively based on international human rights standards and operationally directed to promoting and protecting human rights. The objective is to empower people (rights-holders) to realize their rights and strengthen the State (duty-bearers) to comply with their human rights obligations and duties. States’ obligations to human rights require them to respect, protect and fulfill women’s and girls’ rights, along with the rights of men and boys.
## Rights Holders
Rights-holders are individuals or social groups that have particular entitlements in relation to specific duty-bearers. In general terms, all human beings are rights-holders under the Universal Declaration of Human Rights. In particular contexts, there are often specific social groups whose human rights are not fully realized, respected or protected. More often than not, these groups tend to include women/girls, ethnic minorities, indigenous peoples, migrants and youth.

## Gender Responsiveness
Refers to taking action to correct gender bias and discrimination so as to ensure gender equality and equity.

## Practical Needs
Basic needs or survival needs that relate to inadequacies in living and working conditions, e.g. Toilet facilities, food, water, shelter, healthcare.

## Strategic Needs
Needs for equality and empowerment that such as equal access to education and training, equal decision making and participation that relate unequal power relations between women and men.

## Gender Exploitative
These programs take advantage of traditional gender roles to achieve project outcomes. Although the program’s strategies may contribute to its outcomes, they are unlikely to be sustainable because they do not address root issues, and can have significant, harmful consequences. For example, a social marketing program that promotes an aggressive image of masculinity to sell a product can be dangerous because it reinforces traditional roles of men being dominant. Educational campaigns that portray men as uncaring, irresponsible, and aggressive, and women as unknowing, shy, or sexy objects, reinforce negative stereotypes and gender norms. This practice should be avoided.

## Gender Blind or Neutral
These programs or intervention intentionally or unintentionally fail to acknowledge the role of gender in their theory of change. These programs do not necessarily do harm, but may indirectly support the status quo of gender inequality. Gender blind programs often miss an opportunity to address an important determinant that would likely add impact to their programs.

## Gender Accommodating or Sensitive
These programs recognize and respond to existing gender norms and inequities and seek to implement strategies that adjust to these norms. These projects do not actively seek to change gender norms and inequities, but they try to limit any harmful impact. Such programs are important, but not sufficient, because they do not fundamentally alter the balance of power between gender roles and norms.

## Gender Transformative
These programs or interventions aim to accomplish three tasks: 1) raise awareness about unhealthy gender norms, 2) question the costs of adhering to these norms, and 3) replace unhealthy, inequitable gender norms with redefined healthy ones. These interventions often take an ecological approach -- that is, they aim to change multiple forces of a person’s environment (e.g., schools, workplaces, families, health centers, media, government, etc.) that may be perpetuating harmful gender norms. From an ecological perspective, the forces acting on the development of an adolescent’s sense of gender include:

- Parents, family, peers, romantic partners
- School, community, health care system, work place, faith community
- Media, religious doctrine, laws and policies, government and politics, business and marketing
# Annex III: Attendance list

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Position</th>
<th>Institution</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>Winnie Jotia</td>
<td>Registration and Accreditation Specialist – TVET</td>
<td>Botswana Qualifications Authority</td>
<td>w <a href="mailto:jotia@bqa.org.bw">jotia@bqa.org.bw</a></td>
</tr>
<tr>
<td></td>
<td>Kelesitse Kelly Maikaelelo</td>
<td>Workplace Learning Planner</td>
<td>Ministry of Tertiary Education, Research, Science &amp; Technology, Human Resources Development Council (HRDC)</td>
<td><a href="mailto:kmaikaelelo@hrdc.org.bw">kmaikaelelo@hrdc.org.bw</a></td>
</tr>
<tr>
<td></td>
<td>Refilwe Matshambani</td>
<td>Registration &amp; Accreditation Officer</td>
<td>TVET</td>
<td><a href="mailto:rmatshambani@bqa.org.bw">rmatshambani@bqa.org.bw</a></td>
</tr>
<tr>
<td></td>
<td>Virginia Bojosi</td>
<td></td>
<td>Botswana Qualifications Authority</td>
<td><a href="mailto:vbojosi@bqa.org.bw">vbojosi@bqa.org.bw</a></td>
</tr>
<tr>
<td>Kenya</td>
<td>Lawrence Mukhongo Manyonge</td>
<td>Director, TVET Programmes</td>
<td>Technical University of Mombasa, Kenya</td>
<td><a href="mailto:mukhongo@tum.ac.ke">mukhongo@tum.ac.ke</a> <a href="mailto:directortvet@tum.ac.ke">directortvet@tum.ac.ke</a></td>
</tr>
<tr>
<td></td>
<td>Mary M Muthoka</td>
<td>Chief Principal</td>
<td>Kenya Coast National Polytechnic</td>
<td><a href="mailto:info@kenyacoastpoly.ac.ke">info@kenyacoastpoly.ac.ke</a></td>
</tr>
<tr>
<td></td>
<td>Richard Wekesa</td>
<td>CEO/Principal</td>
<td>Bukura Agricultural College</td>
<td><a href="mailto:principal@bukuracollege.ac.ke">principal@bukuracollege.ac.ke</a> / <a href="mailto:rkwekesa@gmail.com">rkwekesa@gmail.com</a></td>
</tr>
<tr>
<td>Madagascar</td>
<td>Lova Raharimihaja Zakariaisy</td>
<td>Director General</td>
<td>Higher Institute of Technology Antiiranana</td>
<td><a href="mailto:Lova.zakariaisy@ist-antsiranana.mg">Lova.zakariaisy@ist-antsiranana.mg</a></td>
</tr>
<tr>
<td></td>
<td>Yusuf Josaya</td>
<td>Deputy Principal</td>
<td>Soche Technical College</td>
<td><a href="mailto:yjosaya@yahoo.com">yjosaya@yahoo.com</a></td>
</tr>
<tr>
<td>Malawi</td>
<td>Doris Mtemang’Ombe</td>
<td>Lecturer/Head of Department</td>
<td>University of Malawi-The Polytechnic</td>
<td><a href="mailto:dmtemangome@poly.ac.mw">dmtemangome@poly.ac.mw</a></td>
</tr>
<tr>
<td>Mozambique</td>
<td>Manuel Caetano</td>
<td>Head of Pedagogy section</td>
<td>Ministry of Science, Higher Education and Professional Training/National Directorate for Technical Education</td>
<td><a href="mailto:manuel.caetano@mined.gov.mz">manuel.caetano@mined.gov.mz</a></td>
</tr>
<tr>
<td>Namibia</td>
<td>Amon Haufiku</td>
<td>Manager: VET Programme</td>
<td>Namibia Training Authority</td>
<td><a href="mailto:ahaufiku@nta.com.na">ahaufiku@nta.com.na</a></td>
</tr>
<tr>
<td></td>
<td>Muvatera Ndjoze-Siririka</td>
<td>Director</td>
<td>Ministry of Higher Education, Training and Innovation</td>
<td><a href="mailto:Muvatera.Ndjoze-Siririka@mheti.gov.na">Muvatera.Ndjoze-Siririka@mheti.gov.na</a>/ <a href="mailto:muvatera@live.com">muvatera@live.com</a></td>
</tr>
<tr>
<td></td>
<td>Kornelius Mpande Lukas</td>
<td>Centre Manager</td>
<td>Rundu Vocational Training Centre Namibia Training Authority</td>
<td><a href="mailto:klukas@rvtc.edu.na">klukas@rvtc.edu.na</a>/ <a href="mailto:Klukas718@gmail.com">Klukas718@gmail.com</a></td>
</tr>
<tr>
<td>Swaziland</td>
<td>Musa Thabang Mokoena</td>
<td>Principal</td>
<td>Gwamile Vocational and Commercial Training Institute Matsapa (VOCTIM)</td>
<td><a href="mailto:Mokoena0308@gmail.com">Mokoena0308@gmail.com</a></td>
</tr>
<tr>
<td></td>
<td>Nomcebo Marilyn Nhlengetfwa</td>
<td>Vice Principal</td>
<td>Swaziland College of Technology</td>
<td><a href="mailto:nomcebof@yahoo.co.uk">nomcebof@yahoo.co.uk</a></td>
</tr>
<tr>
<td></td>
<td>Earnest Simelane</td>
<td>Senior Inspector TVET</td>
<td>Ministry of Education and Training</td>
<td><a href="mailto:simelanearnest@gmail.com">simelanearnest@gmail.com</a> / <a href="mailto:es_simelani@yahoo.co.uk">es_simelani@yahoo.co.uk</a></td>
</tr>
<tr>
<td></td>
<td>Country</td>
<td>Name</td>
<td>Role/Position</td>
<td>Organization</td>
</tr>
<tr>
<td>---</td>
<td>---------</td>
<td>--------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>18.</td>
<td>Zambia</td>
<td>Rudo Masheke Banda</td>
<td>Acting Director Training Standards Division</td>
<td>TEVETA</td>
</tr>
<tr>
<td>19.</td>
<td></td>
<td>Catherine Musenge Kanyensha</td>
<td>Director – Assessments and Qualifications</td>
<td>TEVETA</td>
</tr>
<tr>
<td>20.</td>
<td>Zimbabwe</td>
<td>Willard Chinhandavata</td>
<td>Manpower Planning and Development Officer</td>
<td>MoHTESTD</td>
</tr>
<tr>
<td>21.</td>
<td></td>
<td>Thomas Tichaona Gatsi</td>
<td>Deputy Director Psychomotor Activities in Education, OPC</td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td></td>
<td>Christopher W. Mudzingwa</td>
<td>Principal Manpower Planning and Development Officer</td>
<td>MoHTESTD</td>
</tr>
<tr>
<td>23.</td>
<td></td>
<td>Brian Nyagwande</td>
<td>Deputy Director: Vocational Training and Skills Development</td>
<td>Ministry of Youth</td>
</tr>
<tr>
<td>24.</td>
<td></td>
<td>Elisha Rupiya</td>
<td>Director Department of Psychomotor Activities in Education, OPC</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>Resource people</td>
<td>Silke Partner</td>
<td>Component Manager VET System and VET Financing</td>
<td>GIZ Namibia</td>
</tr>
<tr>
<td>26.</td>
<td></td>
<td>Coleen Jaftha</td>
<td>Director International Liaison</td>
<td>SAQA</td>
</tr>
<tr>
<td>27.</td>
<td>UNEVOC</td>
<td>Shyamal Majumdar</td>
<td></td>
<td>UNESCO UNEVOC</td>
</tr>
<tr>
<td>28.</td>
<td></td>
<td>Jean Hautier</td>
<td></td>
<td>UNESCO UNEVOC</td>
</tr>
<tr>
<td>29.</td>
<td>ROSA</td>
<td>Hubert Gijzen</td>
<td>Director and Representative</td>
<td>UNESCO ROSA</td>
</tr>
<tr>
<td>30.</td>
<td></td>
<td>Carolyn Medel-Anonuevo</td>
<td>Head of ED Unit</td>
<td>UNESCO ROSA</td>
</tr>
<tr>
<td>31.</td>
<td></td>
<td>Moses T Mukabeta</td>
<td>ED National professional officer</td>
<td>UNESCO ROSA</td>
</tr>
<tr>
<td>32.</td>
<td></td>
<td>Gertie Steukers</td>
<td>ED Programme Consultant</td>
<td>UNESCO ROSA</td>
</tr>
<tr>
<td>33.</td>
<td></td>
<td>Abdoul Wahab Coulibaly</td>
<td>ED Programme Specialist</td>
<td>UNESCO ROSA</td>
</tr>
<tr>
<td>34.</td>
<td></td>
<td>Patience Awopegba</td>
<td>ED Programme Specialist</td>
<td>UNESCO ROSA</td>
</tr>
<tr>
<td>35.</td>
<td></td>
<td>Jesca Chikopa</td>
<td>ED Assistant</td>
<td>UNESCO ROSA</td>
</tr>
<tr>
<td>36.</td>
<td></td>
<td>Tadiwanashe Murahwi</td>
<td>ED Assistant</td>
<td>UNESCO ROSA</td>
</tr>
<tr>
<td>37.</td>
<td></td>
<td>Maxwell Mutukwa</td>
<td>Volunteer</td>
<td>UNESCO ROSA</td>
</tr>
<tr>
<td>38.</td>
<td></td>
<td>Jean Munro</td>
<td>Gender Expert</td>
<td>UNESCO ROSA / Malawi</td>
</tr>
<tr>
<td>39.</td>
<td></td>
<td>Todini Marecha</td>
<td>TVET Institution Management Specialist</td>
<td>UNESCO ROSA / Malawi</td>
</tr>
</tbody>
</table>