Sustainability Challenges

Zimbabwe, well-known for its dramatic landscape and diverse wildlife, is also rich in natural resources. Key environmental challenges facing the country are land degradation, deforestation, inadequate quantity and quality of water resources, air pollution, habitat destruction and loss of biodiversity. Many of the environmental problems are poverty induced, worsened by climate change prompted disasters such as droughts and floods. Zimbabwe has had an education system that has been admired by most countries in the region. However, a deteriorating economic, political and social environment since 2000, has had negative impacts on poverty, food security, and general service delivery. The economic and political challenges have had knock-on effects that negatively affected social services like health, sanitation, energy provision, employment, economic growth and quality education.

Against this background, the Sustainability Starts with Teachers consultation workshop was designed to assess how the education system, particularly teacher education, can respond to these challenges via Education for Sustainable Development.

Sustainable Development

Zimbabwe has committed itself fully to Agenda 2030. Sustainable development is a core constitutional imperative and an overall strategic objective for the country. Zimbabwe’s Constitution guarantees political, civil, economic, social and cultural rights for all citizens. With regard to reducing poverty, some of the initiatives that government has taken include the launch of an Interim Poverty Reduction Strategy Paper in September 2016 as part of the government’s international re-engagement efforts in eradicating poverty and ensure inclusive growth and the December 2016 launch of the National Social Protection Policy Framework, which seeks to strengthen mechanisms for reducing poverty and vulnerability by improving the coverage and effectiveness of the various social protection programmes in place.

Zimbabwe is working towards food security and improved nutrition, and has prioritised ending hunger within its overall development agenda. The government, with support from the United Nations, recently introduced the zero-hunger strategy. Interventions in the agricultural sector have been aligned to the principles of the Comprehensive African Agriculture Development Programme.

Zimbabwe has made positive efforts to create an enabling policy environment to improve public health. Some of these initiatives include provision for the right to health under Section 76 of the Constitution and the National Health Strategy for Zimbabwe 2016-2020, which focuses on communicable diseases; non-communicable diseases; reproductive, maternal, new-born, child and adolescents; and public health surveillance and disaster preparedness and response.

Government is committed to the achievement of gender equality and women’s empowerment and the Constitution provides a robust legal framework for the promotion of Sustainable Development Goal 5. Several policies and institutions have been put in place to actualise these provisions, for instance the National Gender Policy, whose goal is ‘to eradicate gender discrimination and inequalities in all spheres of life and development’, and the Zimbabwe Gender Commission, which seeks to ensure gender equality as provided for in the Constitution.
Integrating Education for Sustainable Development in Teacher and TVET Education

Zimbabwe has made visible strides towards the integration of Education for Sustainable Development in education. The important step in this regard is the introduction of the Competence Based Education in 2015 by the Ministry of Primary and Secondary Education. The new curriculum framework includes competences derived from the 17 Sustainable Development Goals (SDG). This could guide the implementation of Sustainable Development Goal 4 in ways that can support the integration of Education for Sustainable Development in Teacher Education Programmes in ways that align with Target 4.7 of Goal 4.

Education for Sustainable Development Challenges in Teacher Education

Participants who attended the national workshop highlighted severe challenges in the implementation of the new Competence Based Education. The Ministry of Higher and Tertiary Education, Innovation, Science and Technology Development was not fully involved in the development of this curriculum yet it is responsible for both in-service and pre-service teacher development. The weak coordination of the two ministries was identified as a major obstacle in implementing the Competence Based Curriculum in teacher education.

The two ministries have however recently embarked on a harmonisation of teacher education curriculum with the Competence Based Curriculum. The aim of this national exercise is to align or integrate school and teacher education curricula. This provides a definite opportunity for the Sustainability Starts with Teachers programme to support teachers to introduce and strengthen Education for Sustainable Development knowledge, values and competences in the classroom.

Representatives of institutions that attended the consultation workshop further mentioned the absence of Education for Sustainable Development related policies as another obstacle to the integration of Education for Sustainable Development in teacher/TVET education curriculum.

The main framework of the Ministry of Higher and Tertiary Education, Innovation, Science, Technology and Development entitled “Education 5.0” does not explicitly mention Education for Sustainable Development nor make deliberate links to sustainability. Nonetheless, the five aspects of 5.0 – Teaching; Research; Community Service; Innovation; and Industrialisation – potentially provide space for Education for Sustainable Development integration.

The Contribution of the ‘Sustainability Starts with Teachers’ Programme in Zimbabwe

The Sustainability Starts with Teachers programme aims to build on progress being made in countries to integrate Education for Sustainable Development into teacher education with a focus on Early Childhood Care and Education, primary, secondary and Technical Vocational Education and Training (TVET) teacher education institutions.

There is special focus on Sustainable Development Goal 4, which is oriented towards the achievement of educational quality within a lifelong learning framework, and Target 4.7 which emphasises integration of Education for Sustainable Development.

The Sustainability Starts with Teachers programme is an action-learning programme centred on a contextually defined Education for Sustainable Development Change Project. A Change Project is an institutional curriculum or educational transformation initiative, relevant to a given context.
Seventeen institutions in Zimbabwe are participating in the programme and participating teacher educators have conceptualised various Change Projects, as outlined in the paragraphs that follow.

1. Curriculum harmonisation: Aligning teacher/TVET education with the Competence Based Education in schools

Competence Based Education aims at developing competences, knowledge, skills, values and attitudes that ensure sustainability, including Unhu/Ubuntu, 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.

A complete transitioning from the traditional subject knowledge-based and examination-oriented education that has dominated teacher development in the country is required, towards teaching and learning approaches that develop competences in support of social and environmental sustainability. A number of Sustainability Starts with Teachers participants, through their Change Projects, are therefore collaborating with schools in producing suitable education materials, enhancing pedagogies, and reviewing and interpreting curriculum documents for both schools and teacher/TVET education institutions.

For example, Midlands State University and Hillside Teachers’ College are engaging with communities and their multi-ethnic students as cultural heritage resource persons in producing relevant educational materials that are culturally based and inclusive for early childhood development learners.

2. Whole-institution ESD approach

Sustainable development requires whole-institution approaches to reflect the principles and practices of sustainability. This requires re-orienting practices such as campus management, and institutional life to reduce waste, save energy and water, and reflect ethics of care and sustainability.

Some Change Projects are designed to ensure the institution includes sustainability actions in every aspect of school, college, university and institutional life. This includes administration, teaching content and methodology, campus and facility management as well as cooperation with colleagues and the broader communities.

One example is a Change Project at Mary Mount Teachers’ College where sustainability practices are integrated in all aspects of the college life. Different departments including students and staff are engaged in projects such as clean-up campaigns, horticulture, production of learning materials and community engagement projects. Learning and teaching methods have been transformed to become more participatory. Everyone has developed an interest in using local resources to solve problems.

3. Improving the quality and relevance of education by harnessing IKS and formal education

Good quality relevant education addresses social and ecological risks and vulnerabilities in a community. Unfortunately, curriculum transformation in Teacher/TVET education has rarely been driven by local socio-ecological concerns. The Sustainability Starts with Teachers programme tries to harness and valorise indigenous knowledge systems (IKS) to strengthen relevance and quality of Teacher/TVET education. It looks into the role of culture in Science, Technology, Engineering and Mathematics (STEM) disciplines. Promotion of STEM education in the context of ESD and with references to local knowledge therefore provides a good platform for teaching and learning of science in a fun way with lifelong experience for sustainability.

For example, a Change Project at Bindura University anchors science teaching and learning on nature and indigenous knowledge (bio-cultural heritage). Working with over 100 first-year Environmental Science student teachers, the project seeks to develop science teaching and learning competences through the use of bio-cultural heritage. Through this Change Project, the teacher education institution has reviewed course outlines and developed innovative practical teaching tools with students and teachers for using bio-cultural heritage in teaching science concepts.

Another example is the Madziva Teachers’ College Change Project, which has incorporated Indigenous Knowledge and cultural practices in various topics in the Science and Technology curriculum as well as in Geography and Environmental Science.

4. Building capacities of teachers and communities

An important focus for Education for Sustainable Development is building the capacity of teachers and communities to engage with, and participate in sustainable development activities and practices. Some Change Projects are providing training through in-service workshops for their institutions and schools on Education for Sustainable Development implementation. Participants are training teachers and engaging colleagues and student teachers.

For example, a teacher educator in the Sustainability Starts with Teachers project at Mutare Teachers’ College has enlarged the Education for Sustainable Development community of practice to include teacher educators from Theory of Education and Professional Studies (compulsory for all student teachers) and the Business Studies and Languages Learning Areas.

Another example is a Change Project at the University of Zimbabwe that has established a professional and social network with the Zimbabwe Prison Services as well as with incarcerated mothers – healthy for the holistic development and education of children jointly incarcerated with their mothers.
5. Transforming learning and training environments

Education for Sustainable Development requires the transformation of learning and training environments so that these environments offer rich learning opportunities for sustainability learning. Therefore the learning and training environments themselves need to be transformed to reflect principles and practices of sustainability.

Building on activities that have been taking place in institutions and schools in Zimbabwe in alignment with the Global Action Program for Education for Sustainable Development (2015-2019), some Change Projects are collaborating with schools in producing suitable education materials, enhancing pedagogies in both teacher education institutions and schools. Some of these Change Projects are providing institutions and schools with a framework to improve their environmental performance by improving waste management or conserving energy and water.

One example is a Change Project at Masvingo Teachers’ College that has engaged all the teacher educators and student teachers in the early childhood development in the production of Instructional Media Technology and toys using locally available waste thereby turning “trash to treasure.”

Another example is a Change Project initiative at Ezekiel Guti University, which involves using hydroponics and aquaponics for crop production. The Change Project involves communities and students in innovative ideas for food production. Curriculum development, through this Change Project, aims to sensitise students to issues of climate change, sustainable livelihoods and encompasses several Sustainable Development Goals.

6. Broadening assessment

The Zimbabwean curriculum in general is driven by summative assessment of knowledge. Teachers teach learners to pass examination papers set at the end of the year. Teacher educators acknowledged they are also inclined to teach teachers to deliver and assess content. This leaves very little space for teaching practices that consider the development of other competencies e.g. collaboration, school-community activities and many more. Sustainability Starts with Teachers also seeks to broaden the assessment framework. The aim is to contribute towards a revision of the national framework for assessment towards a framework that effectively assesses cognitive, social-emotional, behavioural, and transformative learning.

For example, Belvedere Technical Teachers’ College is designing a new industrial attachment assessment tool meant to assess Education for Sustainable Development competencies. Midlands State University is developing a new assessment framework for supervising student teacher projects. Harare Institute of Technology has integrated sustainability knowledge in assessment tools. The new assessment schedules developed through these Change Projects allow students to conduct self-evaluation, as well as to evaluate whole community service-learning.

References


Implementation and monitoring of Target 4.7 of SDG 4

One of the outcomes of the Sustainability Starts with Teachers programme is increased national capacity for monitoring and evaluation of Sustainable Development Goal 4, Target 4.7. Through the Sustainability Starts with Teachers Change Projects teacher/TVET colleges are being supported to contribute towards preparing teachers for critically engaged, participatory citizenship, peace and sustainable development with respect to: rights, duties and responsibilities; tolerance and mutual respect; management of diversity, differences and conflicts; preserving and protecting the environment and resources and social cohesion among others. Governments can monitor the outcomes of the Change Projects for reporting on SDG 4, Target 4.7.

September 2020

For further information on the Change Projects and the Sustainability Starts with Teachers Programme, visit www.sustainabilityteachers.org