



UNESCO Global Action Programme on
Education for Sustainable Development

SUSTAINABILITY STARTS WITH TEACHERS

*An ESD Action Learning
Programme for Secondary
Teacher Educators in Southern
Africa*

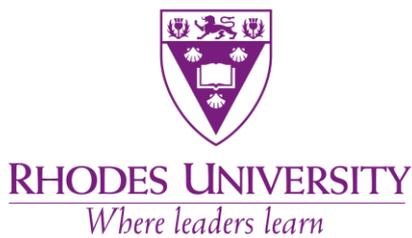


Project Report

June 2018



Sustainability Starts With Teachers is a regional flagship programme of the UNESCO Global Action Programme on Education for Sustainable Development, implemented between October 2016 to March 2018, by the following project partners:



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SUSTAINABILITY STARTS WITH TEACHERS is a regional flagship programme of the UNESCO Global Action Programme on Education for Sustainable Development. The UNESCO Regional Office for Southern Africa and its implementing partners, the Southern African Regional Universities Association, the Environmental Learning Research Centre at Rhodes University and the Swedish International Centre of Education for Sustainable Development, hereby acknowledges the following stakeholders and partners:

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LIST OF ABBREVIATIONS

AU	African Union
BW	Botswana
CESA	Continental Education Strategy for Africa 2016-2025
ELRC	Rhodes University Environmental Learning Research Centre
ESD	Education for Sustainable Development
GAP	Global Action Programme on Education for Sustainable Development
LS	Lesotho
MW	Malawi
MZ	Mozambique
NA	Namibia
SADC	Southern African Development Community
SARUA	Southern African Regional Universities Association
SDGs	Global Goals for Sustainable Development
SZ	Swaziland
SWEDESD	Swedish International Centre of Education for Sustainable Development
UNEP	United Nations Environmental Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNESCO ROSA	UNESCO Regional Office for Southern Africa
WSUP	Water and Sanitation for the Urban Poor Project
ZA	South Africa
ZM	Zambia
ZW	Zimbabwe

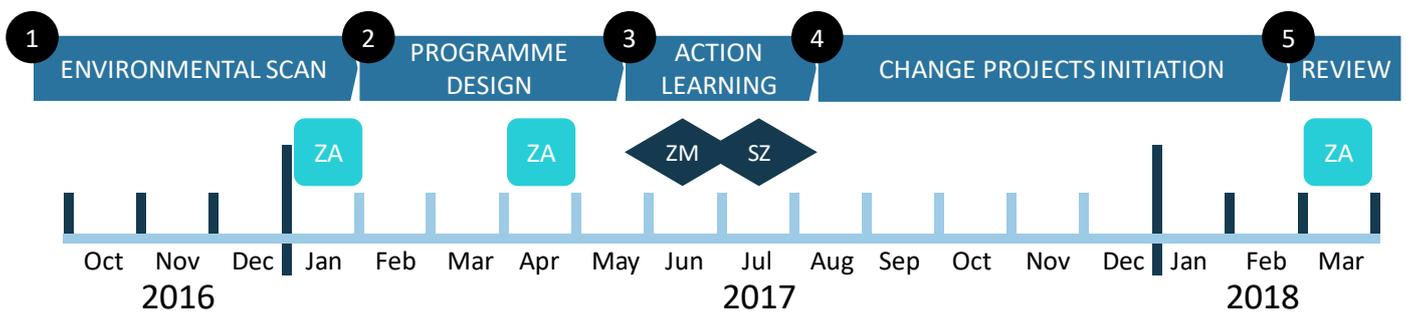
EXECUTIVE SUMMARY

OVERVIEW

SUSTAINABILITY STARTS WITH TEACHERS is an action learning programme that supports capacity building for southern African secondary teacher educators to respond to regional sustainable development concerns and opportunities and to the Global Sustainable Development Goals (SDGs). It is a regional flagship programme of the UNESCO Global Action Programme on Education for Sustainable Development (ESD).

Over a period of 18 months, Sustainability Starts With Teachers (1) assessed the needs of the southern African region, (2) developed an action learning programme for ESD curriculum innovation, (3) held two regional workshops with 61 representative teacher educators to embed ESD concepts into secondary teacher curricula and (4) initiated and (5) reviewed institutional change projects across nine countries with clearly-defined ESD learning outcomes.

TIMELINE



LEARNING PROGRAMME

The action learning programme comprised 5 learning actions:

1. ESD Policy, Context and Competences Review
2. SDGs and critical issues relevant to Secondary Teacher Education programmes
3. Transformative learning, Pedagogy and Learning Environments
4. ESD Learning Objective and Designing ESD assessments



GEOGRAPHIC SCOPE OF PARTICIPATING COUNTRIES AND TEI'S



Botswana



Lesotho



Malawi



Mozambique



Namibia



South Africa



Swaziland



Zambia



Zimbabwe

At the workshops, each country was represented by one academic reference group member and one delegate each from Teacher Education Institutions (TEIs) with secondary school teacher programmes. Additional local experts in ESD from the host countries also participated in both Zambia and Swaziland.

OUTCOMES

Sustainability Starts With Teachers concluded as a project in March 2018, but was specifically designed to be a catalyst for regional ESD communities of practice to flourish. It delivered a number of key outcomes:

1. A comprehensive environmental scan on ESD practices in nine countries of the SADC region can inform future interventions and networks.
2. 61 teacher educators were trained in ESD and curriculum innovation for secondary education, and along with regional and international experts became part of a regional curriculum innovation network.
3. More than 40 teacher educators successfully initiated institutional change projects involving future teachers and communities, and can support their colleagues and peers in the wider regional network to increase the number
4. Established ESD experts and new teacher educators and practitioners alike benefited from a learning process which will improve ESD practices in southern Africa.

BACKGROUND AND CONTEXT

1 CONTEXT

1.1 UNESCO Global Action Plan for Education for Sustainable Development

The **UNESCO GLOBAL ACTION PROGRAMME (GAP)** was launched in November 2014 and focuses on generating and scaling up ESD action at all levels and in all areas of education, and in all sustainable development sectors. It is the official follow-up to the UN Decade of Education for Sustainable Development (2005-2014) which envisioned a world “where everybody has the opportunity to benefit from education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation”.

The GAP puts education and in particular **EDUCATION FOR SUSTAINABLE DEVELOPMENT (ESD)** first and foremost in its approach and strategic action areas:

Education is essential in supporting the implementation of the sustainable development agenda, and its importance for human development is well recognised in Sustainable Development Goal 4 on education. Across the targets of all of the Sustainable Development Goals (SDGs), education can provide a valuable means in supporting their implementation and achievement. Education, and in particular ESD helps individuals to better understand the environmental and social impacts of their daily lifestyle choices, and it can support cooperative learning and critical examination which leads to collective reimagining of lifestyle practices and identification of sustainable solutions. Through education, learners are able to gain critical life skills and the capacity to be active in the pursuit of sustainable development.¹

According to the GAP, Education for Sustainable Development (ESD):

- Allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future;
- Empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations;
- Is a holistic and transformational education that addresses learning content and outcomes, pedagogy and the learning environment;
- Achieves its purpose by transforming social institutions so they can respond creatively to global sustainability challenges.

The five Priority Action Areas for the GAP are:

1. Advancing policy;
2. Transforming learning and training environments;
3. Building capacities of educators and trainers;
4. Empowering and mobilizing youth; and
5. Accelerating sustainable solutions at local level.

¹ *Education for Sustainable Development and the SDGs: Learning to Act, Learning to Achieve*. UNESCO Global Action Programme for Sustainable Development Policy Brief. Advancing ESD Policy. January 2018.

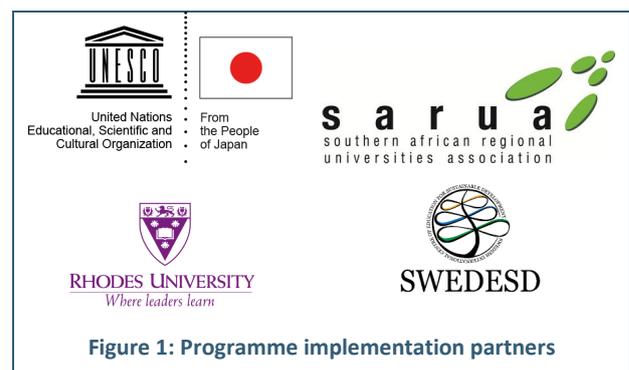
To advance the goals of ESD and the GAP priorities, UNESCO Regional Office for Southern Africa (ROSA) and its partners implemented a tailored ESD action learning programme in southern Africa in 2016-2018.

1.2 Sustainability Starts with Teachers

SUSTAINABILITY STARTS WITH TEACHERS is an action learning programme and flagship project of the GAP. It supports capacity building for southern African secondary teacher educators, to respond to regional sustainable development concerns and opportunities, and to the **SUSTAINABLE DEVELOPMENT GOALS (SDGs)**. It directly addresses the GAP Priority Action Areas 2 and 3, and aims to strengthen the implementation of especially SDG Goal 4, which seeks to "ensure inclusive and equitable quality education and promote life-long learning opportunities for all". It is also expected to contribute to achieving Goal 12 (ensure sustainable consumption and production patterns) and Goal 13 (take urgent action to combat climate change and its impacts). While the first funded phase of Sustainability Starts with Teachers has been formally concluded, the project has initiated a number of ongoing actions, including the establishment of communities of practice and the launch of institutional change projects in the nine countries. The project therefore continues to evolve in other forms and through the work of partner institutions and delegates.

Sustainability Starts with Teachers in 2016 to 2018 was implemented in nine countries of the Southern African Development Community (SADC) - Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia, and Zimbabwe. Ministries of Education and **TEACHER EDUCATION INSTITUTIONS (TEIs)** were key partners in the initiative. All countries in the SADC region face similar sustainable development concerns, such as *inter alia* poverty, health, climate change, biodiversity loss, water security, gender equity, sustainable housing and cities, sustainable rural development and improved governance. Opportunities in these countries include implementing renewable energy, saving and managing water resources better, creating more cohesive, equitable communities and more. All of these concerns and opportunities affect the well-being of southern African people and are critical concerns for the youth in southern Africa, to which Sustainability Starts with Teachers also responds.

The programme was implemented by UNESCO Regional Office for Southern Africa (ROSA) in partnership with the Southern African Regional Universities Association (SARUA), Rhodes University's Environmental Learning Research Centre and the Swedish International Centre of Education for Sustainable Development (SWEDES). It targeted secondary teacher educators in 60 southern African TEIs and in the process offered a learning network for these TEIs to drive curriculum innovation and



transformation of secondary teacher education towards transformation and sustainability. Sustainability Starts with Teachers directly addressed Target 4.7 of Sustainable Development Goal 4 – Quality Education.

Table 1: Quality Education – Target 4.7 definition

4

QUALITY EDUCATION



Ensure inclusive and equitable quality education and promote lifelong learning for all

TARGET 4.7: 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.

1.3 Project Structure

Sustainability Starts with Teachers was structured in a way to best respond to the needs of secondary teacher educators in the nine participating countries. For this reason, it was decided to first conduct an environmental scan of ESD practices before designing the action learning programme. To ensure relevance and contextuality, an 11-person academic reference group of ESD experts was appointed to provide advice and fulfil an oversight role. They were also present at the two learning action workshops held in Zambia and Swaziland respectively. The programme of both workshops were identical, with the different countries split into two groups. The workshops also served as a practical forum where delegates could conceptualise and develop their change projects, for implementation afterwards. In March 2018 a selection of delegates were invited to present their change project progress to their peers and to reflect on the process and learnings. The project phases are discussed in detail below.

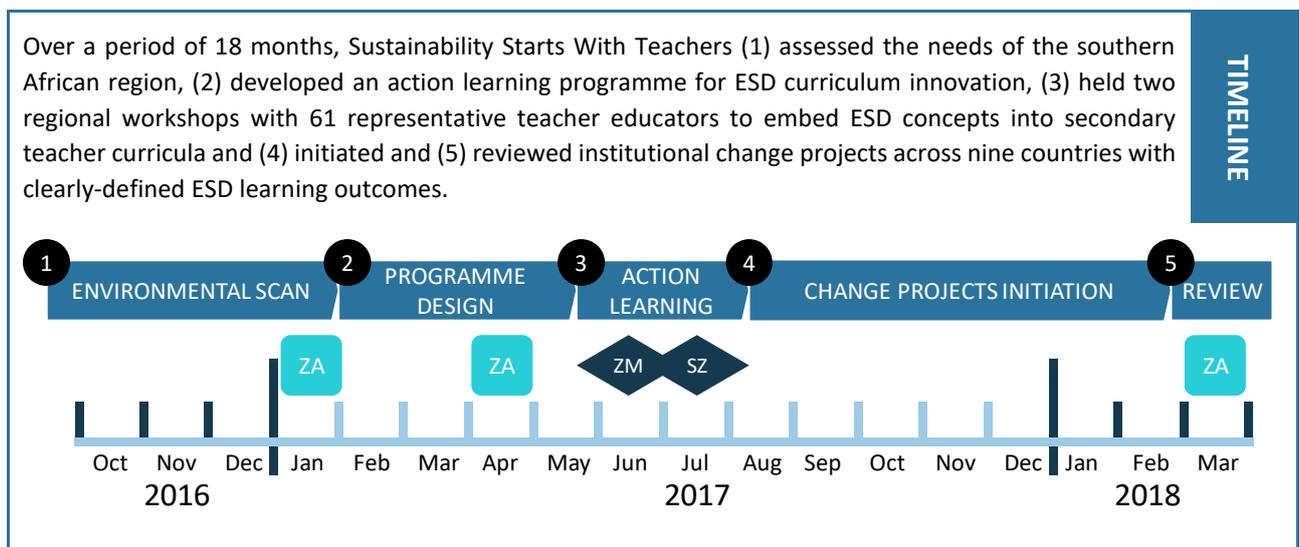
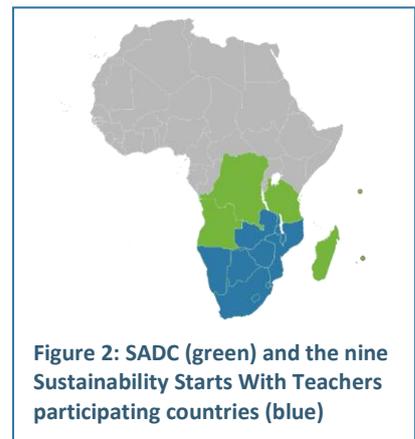


Figure 3: Sustainability Starts With Teachers timeline

ENVIRONMENTAL SCAN OF ESD PRACTICES

2 ENVIRONMENTAL SCAN VERIFICATION WORKSHOP: JANUARY 2017

To inform its learning programme design and to verify the current status of ESD in the SADC region, Sustainability Starts With Teachers in January 2017 produced a draft environmental scan report. This was presented to a regional group of government and TEI stakeholders at a Verification Workshop in January 2017, after which comments and suggestions received from the government officials and academics represented were incorporated. A final Synthesis Report was published in February 2017², which formed the basis for the action learning programme design.



Figure 4: Sustainability Starts With Teachers Validation Workshop - January 2017

3 SUMMARY OF ENVIRONMENTAL SCAN FINDINGS

The final environmental scan report confirmed a number of key factors that impact on ESD in teacher education in southern Africa.

² The Sustainability Starts With Teachers Environmental Scan Synthesis Report was compiled by the Environmental Learning Research Centre at Rhodes University, with contributions from representatives from nine SADC countries (Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia, Zimbabwe).

3.1 Educational Policies

Countries in southern Africa have used different approaches to integrate ESD in their education systems, with the most common approaches being the fragmented and cross curricular approaches. Most ESD coverage in the region is in secondary education curricula, implying that capacitating secondary level teacher educators has potential for successful implementation of ESD, and potential for achieving SDG-4's focus: improving the quality of education. While attempts have been made by the countries in SADC to mainstream ESD into their national policies and education systems, there is still a widespread need for more ESD content in national school curricula. The fragmentation of ESD integration in the education systems has led to ESD not being well defined in some of the teacher education syllabi evaluated.

3.2 Teacher Education Syllabi

Teacher education in southern Africa is mainly divided into initial teacher education (pre-service) and teacher development or continuing professional development (in-service). To achieve the SADC goals of ensuring all teachers can meet the demands of education systems, are properly qualified, and possess the relevant knowledge, skills and attitudes to teach effectively, requires a number of strategic interventions. Currently, ESD integration and implementation in teacher education is mainly through undergraduate and postgraduate pre-service programmes, with a trend around such themes as Biodiversity and ecosystems, Climate and earth systems, Water systems and security, Social justice and human rights, Sustainable development, and Socio-cultural issues such as equality, gender, diseases and poverty. There is thus a need for a more systemic approach to ESD integration and implementation in teacher education.

3.3 Professional Standards for Teacher Education and Assessment

Very few countries in southern Africa have developed professional standards for teacher education. Among those are Namibia and Zimbabwe, with Malawi's teacher education syllabi reflecting similar competences. The available standards emphasise the competences and knowledge that teachers need to have to implement the curricula, as well as the development of life long skills and competences. In terms of assessment, in most countries in southern Africa, where ESD is integrated into the teacher education syllabi, it is assessed formatively and summatively to a minimal extent. In South Africa, the knowledge and competences required from teachers are outlined in the *Minimum Requirements of Teacher Education Qualifications in South Africa*. Teacher educators are expected to ensure epistemological access; be knowledgeable; and be able to facilitate meaningful learning and this would need to apply to ESD too if it is a formally measurable standard.

3.4 Materials, Educational Resources and Networks

A variety of educational resources are used to teach ESD in SADC countries. Most TEIs do not have prescribed or specific reference books in teaching ESD; educators collate information from a range of sources including the internet, videos, local media, or personal collections from workshops and conferences attended. TEIs also adapt materials developed in collaboration with, and/or provided by, international organisations to teach ESD. Non-availability or insufficient educational resources are therefore often cited as a challenge faced by individuals who are involved in mainstreaming ESD in institutions. This implies an urgent need to develop educational resources on ESD, with new and updated content knowledge, teaching methods and assessment practices. For effective ESD integration and implementation, teacher education institutions in southern Africa also draw expertise from each other.

3.5 Constraining and Enabling Factors for ESD Integration and Implementation

3.5.1 Constraining factors

Based on an assessment of the typical factors highlighted as constraining factors impeding the implementation of ESD integration into curricula, the following were found to be of most relevance to southern Africa:

Table 2: ESD constraining factors in southern Africa

Constraint	Description
Inadequate capacities	Teachers and teacher educators have inadequate capacity to work towards achieving the ESD objectives, to develop ESD teaching and learning support materials, and for research and innovation on ESD at all levels of education to take place.
Lack of coordination, monitoring and reporting mechanisms on ESD activities.	ESD as a cross cutting area requires engagement with different disciplines and approaches, which requires a coordinating body or mechanism, which is often non-existent.
Limited national and regional platforms for dissemination and sharing of information on best ESD practices.	ESD concepts are fairly new in the region's education systems. Some teacher educators show resistance to embrace ESD due to no existing examples in their immediate environment, and hence a fear of failure. Creating platforms for sharing best practices on ESD would enable teachers and teacher educators to implement ESD effectively.
Insufficient integration of national ESD policy or strategy.	Teacher education is not fully oriented to mainstream ESD since ESD is not integrated into national policies and strategies. As a result, many teacher educators lack a shared understanding of ESD concepts and the abilities to interpret existing ESD policies.
ESD assessment practices are not sufficiently mature.	Modules on ESD are often elective, with ESD assessment not very pronounced or developed. This results in their further development not being taken seriously enough.
Inadequate political leadership.	ESD does not register high enough on the political agendas in southern Africa and a lack of high-level champions stymies its uptake.
Inadequate support structures and mobilisation of financial resources.	Fundraising capacity and existing financial support to strengthen ESD in education are not widely embedded and require dedicated regional initiatives to become sustainable.
Lack of a system-wide approach to ESD.	There aren't many examples of system-wide ESD policies and practices being pursued by multiple stakeholders in the region.

3.5.2 Enabling factors

While the constraining factors are substantive and challenge the ability of governments and other role players to implement and integrate ESD practices, the region has a long history of well-established programmes to build ESD capacity and a strong community of practice has developed over time. Some of the most significant enabling factors identified were:

Table 3: ESD enabling factors in southern Africa

Enabling factor	Description
Existing ESD networks and programmes.	There exists a strong network of institutions with interest in, and with experience of engaging with ESD across southern Africa. There are good historical partnerships with institutions such as SADC REEP, SWEDES, EEASA, UNESCO and UNEP and a strong network of education professionals with extensive experience of ESD.
Strong established institutional partners with a track record in ESD.	ESD learning and change processes in higher education can build on the experience of ESD-related institutional, regional and national structures like MESA, SADC REEP, UNEP and UNESCO.
National policies where ESD is integrated into national systems.	A few national policies exist that clearly specifies integration of ESD in the national systems and these can be used as examples and built upon. Good examples exist across the region where policies have been translated into curricula with substantial environmental content.
Occasional workshops and learning opportunities.	There are occasional opportunities for teachers and teacher educators to learn from each other in the region, especially as a result of events associated with existing networks mentioned above.
Well-documented case studies.	There are excellent case studies of ESD being integrated into teacher education and Sustainability Starts With Teachers both showcased existing ones and initiated a process of new change projects being developed.
Strong body of ESD research.	Strong body of research that brings ESD and educational quality into relationship and informs mainstreaming of ESD
Teacher education approach that allows for creativity.	Teacher education in the SADC region in general allows for creativity in reviewing, adapting and experimenting with ways to mainstream ESD.

4 PROGRAMME DESIGN PRINCIPLES

The environmental scan conducted in 2016 and validated in 2017 presented Sustainability Starts With Teachers with a number of key findings and principles to incorporate into its learning programme. The environmental scan in particular focused how the project could contribute to the objectives of the Global Action Programme, which aims to scale up past and current action in ESD by way of two key approaches:

1. integrating SD into education; and
2. integrating education into sustainable development.

Given the status of ESD integration and implementation in southern Africa as outlined by the environmental scan, it recommended:

- Scaling up the capacity of teachers and teacher educators, in terms of ESD knowledge, teaching methods, assessment practices, as well as how to develop teaching and learning support materials.
- Introducing innovative approaches to support teachers and teacher educators to enhance their competencies, for example to assist them to shift *inter alia* from teaching to facilitating learning, from transfer of knowledge to learner construction of knowledge and from memorising information to analysis, synthesis, evaluation and application of information.
- Building the capacity of teacher educators to use their strategic ability to negotiate and secure additional resources, such as human, material or financial resources, in and outside their institutions.
- Aligning teacher education syllabi and school curricular to policy and action plans.

- Building opportunities for collaboration and regional networks of teacher education institutions on best practices and methods of integrating ESD in the curricular, as well as to support research on ESD and funding. This can be done through strengthening existing partnerships, or by establishing new ones.

The synthesis report of the environmental scan concluded that there is a need to coordinate the ESD activities in the countries of southern Africa. It recommended cross-faculty curriculum dialogues and capacity development strategies, linked to monitoring and reporting mechanisms for ESD activities. It also acknowledged the important role a project like Sustainability Starts With Teachers can play to ensure that teachers and teacher educators in southern Africa are empowered, well trained and well-resourced to effectively implement ESD. This partnership programme has considerable potential in building ESD capacity and facilitating learning and change process at the personal, professional, institutional level and university social-ecological levels.

PROGRAMME DESIGN

5 PROGRAMME DESIGN WORKSHOP: 5-6 APRIL 2017

Based on the final synthesis report of the environmental scan, which incorporated the feedback received from government representatives and ESD specialists in the region, an initial framework was developed in March 2017 which would guide the Sustainability Starts With Teachers learning programme. The academic reference group representing specialists from ten SADC countries, which was confirmed in January 2017, convened to meet in April 2017 to review the learning programme and process for selection.



Figure 5: Sustainability Starts With Teachers Design Workshop - April 2017

The initial ideas discussed in January were refined by the reference group, based on a draft programme outline. It was decided that the programme would be an action learning programme, to be run over two workshops, each held within the space of four to five days. The nine countries were once again confirmed as Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe. It was

reiterated that 60 teacher education institutions would be invited to be a part of the programme and that each TEI would be able to nominate one delegate.

The programme implementation partners, along with the academic reference group, confirmed that the selection would be transparent and open. Participants would be pre-selected based on a formal Call for Nominations, and would be requested to submit their profile, as well as a small proposal of a change project to be implemented at their home institution. To address the issue of institutional support, it was confirmed that each participant would need the endorsement of at least a dean. Gender balance and regional diversity were confirmed as guiding criteria to be applied in selection.

Since the programme was designed with teacher educators in mind, it was stressed that the approach needed to ensure teacher educators could be as successful as possible without continuous external support or assistance outside of their network of peers. The action learning programme therefore needed to be as complete as possible, from defining clear learning outcomes for delegates, to giving them the tools required to apply the SDGs in a local context. The design workshop participants confirmed the necessity to review transformative pedagogical methods as well as monitoring and evaluation mechanisms in the action learning programme. The workshop concluded with an agreed timeframe and actions to take place before a first workshop was to be held in June 2017.

6 PROGRAMME APPROACH

The key differentiator of the programme, incorporated into its design, was that it would be an action learning programme, based on a tried and tested best practice regional model. The programme was made up of five distinct action learning units which together would help each delegate to initiate a situated **change project** in his/her TEI. The change project would be a 'work in progress' that can develop as the learning programme unfolds, but also generate enough momentum to continue afterwards and catalyse the initiation of more change projects.

The approach fosters collaboration through communities of practice, as teacher educators who work together have a better chance of success in bringing about curriculum innovation and practice changes. They are also able to provide strong leadership for ESD in TEIs and, through this, to inspire the next generation of teachers to offer better quality, more relevant education in southern Africa.

The learning actions were further designed to be repeated in ongoing action learning cycles in the participating TEIs after the programme, in order to take a change project through its full cycle and in the process inspire and catalyse other change projects and ongoing change towards sustainability in the TEI and amongst its partners and communities.

What is a Change Project?

A CHANGE PROJECT is any project that brings about change in a TEI's policy, strategy, curriculum, learning programmes, learning environments or TEI- community relationships, with implications for sustainable development 'on the ground'. To qualify as a Sustainability Starts With Teachers CHANGE PROJECT, it must be co-defined and should be collaboratively developed and implemented in a small community of practice in each participating TEI.

7 THE FIVE LEARNING ACTIONS

Each learning action was designed to have a specific purpose, clearly articulate key concepts while keeping it relevant to change projects, while also defining key questions for TEI delegates to engage with and respond to. As such, it clearly aligned with the UNESCO defined dimensions of ESD:

- *Learning content:* Integrating critical issues such as climate change, biodiversity, disaster risk reduction, and sustainable consumption and production into the curriculum.
- *Pedagogy and learning environments:* Designing teaching and learning in an interactive, learner centered way that enables exploratory, action-oriented and transformative learning. Rethinking learning environments - physical as well as virtual and online - to inspire learners to act for sustainability.
- *Learning outcomes:* Stimulating learning and promoting core competencies, such as critical and systemic thinking, collaborative decision making, and taking responsibility for present and future generations.
- *Societal transformation:* Empowering learners of any age, in any education setting, to transform themselves and the society they live in.



Below is a summary of each learning action's purpose and content.

Table 4: Sustainability Starts With Teachers learning actions

LA no.	Purpose	Description	Key Questions
LA-1	Review context, policy and progress related to 21st century teaching competences.	LA-1 focuses on developing a common understanding of Sustainable Development and ESD. TEI delegates learn how to undertake a local policy and context review and a review of how their TEI is addressing 21 st century teacher educator competences. The aim is to deepen an understanding of ESD, and how (or not) it is being integrated into Secondary Teacher Education, in order to identify what can be changed and improved.	<ul style="list-style-type: none"> • What is already happening in your TEI with regards to ESD? • Why do we need to expand our focus on ESD in Secondary Teacher Education? • What learning and competences can we work towards for ESD in Secondary Teacher Education?

LA no.	Purpose	Description	Key Questions
LA-2	Identify relevant content related to Sustainable Development in local context, the SDGs and other critical issues for Secondary TEI ESD programmes.	LA-2 focuses on how to assess the relevance of knowledge of sustainable development concerns and how to find it. Since knowledge is changing quickly and it is often difficult to keep up-to-date and to contextualise it, LA-2 aims to find, select, process and work with ever-changing ESD knowledge and how to integrate this into existing or new Secondary Teacher Education Programmes.	<ul style="list-style-type: none"> • What ESD content and issues are already being focused on in your TEI? How is this being done? • Which new knowledge of SDGs needs to be 'in focus'? And how does this relate to ESD Learning Objectives? • Which critical issues and concepts need to be covered, and where will you source further information on these? • Are there any useful / important knowledge resources that you can identify and use in your TEI programmes?
LA-3	Developing and piloting transformative learning processes and learning environments.	LA-3 focuses on planning and implementing transformative learning processes and learning environments. It considers the relationship that exists between indigenous knowledge and transformative learning, as well as the importance of involving people in sustainable development actions through ESD. It explores different pedagogies and methods that can be used for or ESD and focuses on how transformative learning environments for ESD can be created. LA-3 encourages reflection on existing pedagogical practice and learning environments, with a view to supporting and encouraging transformative practice.	<ul style="list-style-type: none"> • What kinds of transformative learning are you already engaged with? • Which new methods and approaches can you use in your teacher education practice? • How should others be involved in the transformative learning process (e.g. youth, communities etc.)? • How can transformative learning be supported and extended by focusing on transformative learning environments?
LA-4	Design and try out alternative assessment methods for ESD.	LA-4 emphasizes alternative forms of assessment and focuses on how, if assessment practice is changed, teaching and learning can also be transformed. It considers various approaches to assessment that can be used for ESD, including the use of formative, and informal approaches to assessment that enable learning of ESD. The aim is to strengthen ESD relevant assessment approaches.	<ul style="list-style-type: none"> • What approaches to assessment are already being used in the TEI? • To what extent do they help to assess ESD Learning Objectives? • How can assessment practice be changed to include a wider range of assessment practices that strengthen ESD teaching and learning outcomes?
LA-5	Monitor and evaluate programmes, and scale for impact	LA-5 involves monitoring the implementation of ESD in delegates' TEIs, with emphasis on progress being made with the Change Project. It provides tools for establishing what is valued / valuable about the change project, and also helps to think through what can be scaled for impact. The purpose is to reflectively review ESD practices as they are unfolding in the TEI.	<ul style="list-style-type: none"> • How can we develop high quality M&E processes? • What value is being created via the ESD Change Project in the TEI? • How can we scale and expand the change projects via policy, networking, and community engaged approaches to teacher education?

8 NOMINATION AND SELECTION PROCESS

An open Call for Nominations was issued to any public Teacher Education Institution (TEI) that offers secondary teacher education within one of the nine countries. A set of minimum requirements were defined in order for an individual to be nominated. The requirements included:

- The nominee had to be able to represent a small team of teacher educators who plan to work together on implementing a change project at their TEI.
- Only one nominee per institution would be selected.
- A letter of endorsement was required from an HOD, Dean, Director, Deputy Vice-Chancellor or Vice-Chancellor.
- Information was required on the proposed ESD change project at the TEI.
- Nominations had to include a short profile of the nominee and of Community of Practice members.
- Nominations had to be submitted on time.

Evaluation criteria applied to the nominations were regional representivity, the innovation showed in proposals, opportunities for intra- and inter-institutional collaboration, gender balance and level of experience with an emphasis on the transfer of knowledge to others.

In May and June 2017, the delegates were selected for the two workshops, invited and logistics arrangements made.

ACTION LEARNING

9 ZAMBIA WORKSHOP 6-9 JUNE 2017

Between 6-9 June 2017, the first of two four-day Sustainability Starts With Teachers workshops were held in Lusaka, Zambia. The workshop was attended by 27 delegates representing 26 TEIs from Malawi, Namibia, Zambia and Zimbabwe, five facilitators, the assistance of four academic reference group members, as well as representatives from UNESCO ROSA and SARUA.

Delegates were nominated by their respective deans/principals, with input from the UNESCO National Commissions and assistance from the reference group members. In line with the Call for Nominations criteria, the individuals selected were to become key change agents in their TEIs. The workshop programme consisted of four days of facilitated discussion and guided deliberation on the five Learning Actions which provide a framework for developing ESD curricula for teacher educators, as well as change projects.



9.1 Summary of Workshop Activities

The importance of change projects was a key theme that was addressed strongly at Zambia workshop and it was reiterated that successful projects would lead to teacher educators in the region who are able to teach in a way that empower students. A large part of the first day was spent defining change projects by using the framework of the action learning programme. The findings of the environmental scan were presented to delegates as part of the ongoing discussions, with an emphasis on community involvement underscored as a key part of change projects.



7: Delegates learning from the SDGs and other change projects

As an additional programme item in Zambia, representatives from the Agents of Change initiative (Zambia) presented their work and change projects involving school learners who speak about sustainable development issues, while also learning media skills. The day ended with presentations on change projects and



8: Delegates presenting change projects by country

Apart from informal reflection and sharing, delegates had two structured opportunities during the workshop to showcase their evolving change projects, as the programme advanced through the learning actions and added richness to the approaches defined. Delegates were also given access to an e-Library of important regional and international resources that would assist them in establishing their communities of practice.

The Sustainability Starts With Teachers action learning programme also explicitly made a link with continental initiatives and what SDGs in Africa mean in terms of the continental strategies i.e. the African Union's Continental Education Strategy for Africa 2016-2025 (CESA). These and others were reiterated, in order to facilitate South-South collaboration and the need to re-orient African education systems to meet SDGs at

national and continental levels. The African Union's Agenda 2063 was discussed as another important reference point and especially in terms of the development and incorporation of indigenous knowledge systems into ESD curricula.

Two case studies were presented on the value of indigenous knowledge systems:

Table 5: Indigenous knowledge systems - two regional case studies

Dr Alex Kanyimba (Namibia)	Mr Alex Simpande (Zambia)
<p>Dr Kanyimba related his experience with IK through a publication <i>Indigenous Knowledge Systems of Namibia</i>. It was written by Namibian authors around issues of climate change, human and wildlife conflict. He also shared his experiences i.e. live harmoniously with natural systems and rain making rituals. He also highlighted another study on traditional healing practices of Namibian peoples. For Dr Kanyimba, IK is connected to several domains: practical, behavioural, interpersonal, socio-emotional learning objective, functioning.</p>	<p>Mr. Simpande related his first contact with IK through a study at Copperbelt University that focused on astronomy. The aim of this study was to find out why most of this knowledge was not written down. The researchers carried out research into cultural and historical astronomy that was practised and whether it was being passed down. This was done to raise awareness of IK astronomy, so as to incorporate the knowledge into at schools, e.g. Physics and other subjects.</p>
<p>Dr. Justin Lupele presented the work of SPLASH, a five year collaboration with USAID. It sought to reach out to pupils in eastern Zambia and to improve their health care learning and to improve on delivery of quality education. The project also focused on providing sanitary services, especially to the girl child. The task areas which SPLASH focused on were to improve sanitation, hygiene behaviours, strengthen governance, advocate improvement in WASH, and strengthen the capacity for small scale services for WASH. The communities provided about 25% of the infrastructure needed and management of facilities. The project used the learners and peer educations to talk to the communities (influence of a child).</p>	

During the workshop, delegates were introduced to the *Fundisa for Change* booklet, which could assist them in enhancing transformative learning in their own ESD curricula.



9: Reviewing and discussing the Fundisa for Change programme

Four members representing the academic reference group and facilitation team presented experiences on how they used new teaching methods in practical examples:

1. **Ms Cecilia Mukundu (Zimbabwe)** reflected on how her teaching methods incorporated sustainability issues. She showcased how she incorporated ESD as a biology lecturer in her change project in health (malnutrition). With the assistance of a Master's student class, she integrated interaction and engagement to allow for better learning through field trips, to expose students to different environments and enable them to make visual observations. 
2. **Prof Overson Shumba (Zambia)** noted how important it was to connect meaning, context and concepts. He highlighted two projects done with students on teaching methods courses and research course/ project. The projects started with an analysis of official curricula being used, allowing students to define their knowledge gaps and to assist with research and developing innovative approaches to learning. 
3. **Dr. Sirkka Tshiningayamwe (Namibia)** presented frameworks that inform teaching methods. She related a project where students had to audit use of energy in homes, with the assistance of NGOs and stakeholders, after which they were required to provide feedback and develop ways of reducing electricity usage in homes as a practical way of learning. 
4. **Ms Tiffany Banda (Malawi)** showcased a change project initiated in 2014 on environmental justice and sustainability, which prioritised getting students involved in a curriculum review and conduct an assessment of environmental issues i.e. waste management, deforestation, water pollution. A student survey identified alternative energy, poverty and sexual exploitation as issues the community was grappling with and with the participation of the Law and Science Schools, further action was taken to address identified issues. 

The Zambian workshop delegates had the opportunity to meet Dr Qian Tang, the Assistant Director General of UNESCO for Education, who paid a visit to the delegates and delivered an address. He congratulated and thanked the delegates for being part of Sustainability Starts With Teachers and said he was eagerly looking forward to the contributions that will be made to regional ESD learning frameworks. He underscored the value and importance of education to promote learning and create innovative solutions to world problems. He pledged the support of UNESCO to assist Africa in reaching this goal. Dr Tang was interviewed for Zambian community radio by Ms Beatrix Phiri of Agents of Change Foundation Zambia.



10: Dr Qian Tang, Assistant Director General of UNESCO for Education addressed delegates

In preparation for a field trip to showcase a regional change project, the importance of reflective practice and collective social learning were underscored. This tied in with Learning Action 4, which motivated for the use of alternative assessment methods for change practices.

The field trip undertaken on Day 3 of the Zambia workshop was to Kanyama, a suburb of Lusaka. The field excursion comprised a guided tour of the Water & Sanitation for the Urban Poor (WSUP) Project, which addresses the many environmental issues in Kanyama, i.e. overcrowding, poor sanitation, and congestion. Because of the area’s geological characteristics, natural natural filtration does not happen and ground water stand the risk of being polluted by human effluent. WSUP implemented a faecal management systems (FMS), whereby faecal matter is disposed of in three stages: emptying, treatment and reuse, with a dry and safe fertilizer being created from the treated waste.





11: Field Excursion to view the work done by Water & Sanitation for the Urban Poor (WSUP)

In the debrief conducted the following day on the field trip issues of poverty, sanitation and how ESD can be applied to address these issues were discussed. The field trip was also used to develop an assessment rubric to evaluate Kameya, as part of the action learning approach, allowing delegates to see how a rubric for an alternative assessment could be constructed.

With the conclusion of the Zambia action learning workshop, the five Learning Actions were also used to prepare delegates for a project review that would take place in six to nine months' time. Delegates were urged to make do-able, realistic and simple change projects, and in particular to do the following:

1. Consolidate communities of practice upon return and find partners to collaborate with.
2. Develop clear understandings on the change projects with communities of practice, also with regard to a shared understanding of ESD.
3. Make use of the support manual and materials and stay in touch with others and the different interest groups.
4. Consider time allocations and recommendations, so that groups can pace themselves to complete all the phases of their change projects.
5. Monitor progress by way of regular meetings with the COP and allocate duties to members, to ensure management support.

10 SWAZILAND WORKSHOP 18 – 21 JULY 2017

The second of two Sustainability Starts With Teachers workshops where held in Manzini, Swaziland from 18 - 21 July 2017. The workshop was held at the Lugogo Sun Hotel in Swaziland and it was organised with the assistance of UNESCO National Commissions in the five countries represented. The workshop was attend by 38 delegates representing 34 TEIs and their education schools and faculties from Botswana, Lesotho, Mozambique, South Africa and Swaziland, five facilitators, the assistance of four reference group members, as well as representatives from UNESCO ROSA and SARUA.

Delegates were nominated by their respective deans/principals, with input from the UNESCO National Commissions and assistance from the reference group members. The workshop programme followed the same format as the Zambia workshop – four days of facilitated discussion and guided deliberation on the five Learning Actions.



10.1 Summary of Workshop Activities

Delegates were welcomed as part of an emerging network and regional community of practice. Delegates were also welcomed as part of the SARUA Curriculum Innovation Network (SCIN).

The bulk of Day's 1 activities saw delegates discuss, define and delineate their change projects. These were then used as a basis for subsequent debates and deliberations that took place over the course of the four-day workshop. Presentations were made by the full facilitation team, with support of the team from UNESCO ROSA and the reference group. There was extensive discussion over the meaning of the SDGs and their importance in teacher education. In discussing the findings of the environmental scan, delegates were made aware of the challenges to implement ESD if no integration between national and institutional policies are taking place. Delegates had a robust debate in which they discussed issues like the importance for young graduates to develop and hone soft skills, as well as to reflect on the importance of competencies like ICT skills, green entrepreneurship, strategic planning and project management. Community involvement was underscored as a key part of change projects.



12: Swaziland workshop delegates preparing for discussion

A number of questions guided the work of delegates in defining their change projects. These were:

- Which SDGs will you focus on?
- Who will be involved?
- How will you support everyone in your TEI to develop a common understanding of SD and ESD?
- What GAP priority will you focus on?
- How will the change project address/extend/improve your institutions' Vision and Mission?

- What 21st century competencies are required?

The issues of competencies was further explored on Day 2 around the issue of local knowledge and delegates were introduced to the link between ESD knowledge and Indigenous Knowledge (IK).



13: Group discussion

An initial discussion was followed by Individual presentations which focused on indigenous knowledge systems and examples of these in the context of ESD.

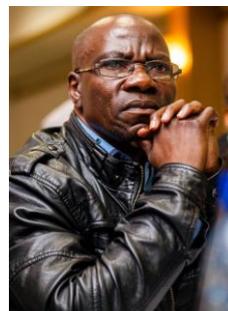
Dr Caleb Mandikonza (University of Witwatersrand)



Dr Mandikonza linked his experiences with IK systems and science. His example was how, in Zimbabwe, due to a lack of education facilities, the question then arose about how to teach science without these

facilities, as well as how to help teachers teach science using local experiences. By using the example of mahewu/amarrheu brewing, he allowed students to observe the full process, collaborate with local elders and to learn about the science behind indigenous knowledge.

Mr Tom Ssedija (National University of Lesotho)



Mr. Ssedija stated that the practical part of IK should take place through teaching and teacher educators should decide how and when to incorporate it. Mr Ssedija used bees as an IK intervention to show the value of insect life in a case study using

narration by elders. He mentioned the challenges of assessment where IK practices are used and proposed various ways, including in class, in the field, through models, construction, production and harvesting, storytelling. He highlighted the need for teachers to be masters of their subject area.

To provide insight into existing programmes with change projects, delegates were presented to the Mainstreaming Environment and Sustainability in African Universities (MESA) initiative in Swaziland, which was started in 2006 with in partnership with the United Nations Environment Programme (UNEP) and had diverse membership across faculties, all with the purpose of linking SDGs to education in Swaziland.



As with the Zambia workshop, delegates discussed how to enhance transformative learning practices based on the experiences of their colleagues, presented during the workshop.

1. **Mr Joel Mamabolo (South Africa)** provided an overview of the methods of teaching in University of Limpopo, where *inter alia* fieldtrips and interviews are used to do community-based research and to launch projects that would develop the communities. Students would compile reports of their findings and present them to class and through the process they become active members of the communities, as well as change agents.
2. **Ms Zinhle Songqwaru (South Africa)** used the example of a Fundisa for Change trip in Gauteng, South Africa, on water. She emphasised that the teaching methodology needs a sense of purpose on what must be achieved to be successful. Where students can interact with guides and experts, take photos and pictures as a means of analysis, and consolidate the information on their own, the learning process is valuable..
3. **Dr Aguiar Baquete (Mozambique)** initiated a third year student environmental club, with the intention to facilitate the development of students as agents for change. To develop students into active citizens, they were free to decide the agenda of their environmental club, while the teacher educator's task was to facilitate social change. The club becomes one way to assess students' progress through their 1st and 2nd years.
4. **Mr Andrew Peterson (South Africa)** provided delegates with an overview of a concept map of Environmental Education (EE) and its progression (epistemological). Mr. Peterson's presentation used an Education for Strong Sustainability and Agency (ESSA) approach. This approach also uses an active learning framework and was based on three aspects: knowing your subjects, improving practice, and improving assessment.



In preparation for a field trip, delegates on Day 3 further discussed tools to analyse sustainable development issues at the local level and were introduced to a range of transformative learning methods. The group excursion was arranged to central Swaziland. Delegates were shown how community members worked on restoring and rehabilitating a bad gully since 2010 with the permission of the local authority. The restoration process consisted of setting stone filled gabions into the gully, on top of a beading cloth to protect the soil. Along with this, interlocking plants have been placed to protect the soil. Delegates were shown how, since the start of the project, the first signs of regrowth of grass were seen in 2017.



14: Swaziland workshop group excursion

In the debriefing session on the field trip held on Day 4, delegates commended the innovative, community-based project, as well as the fact that the recovery effort was being led by and maintained solely by women. Dr Mandikonza asked the delegates to also provide their thoughts on what they heard and saw and what this meant for ESD.

The final day's wrap-up was focused on discussing monitoring and evaluation as an integral part of making sure change projects can be successful. Delegates were also introduced to various ways of scaling projects – from vertical (institutional or departmental) to horizontal (through practice extension), to functional (involving new stakeholders). As in Zambia, the Swaziland delegates were advised to keep their change projects focused and manageable, and to continue to monitor progress based on a clear understanding of what they want to achieve. Delegates reflected on the need for bottom-up collaboration and partnership in order to achieve the goals of ESD.

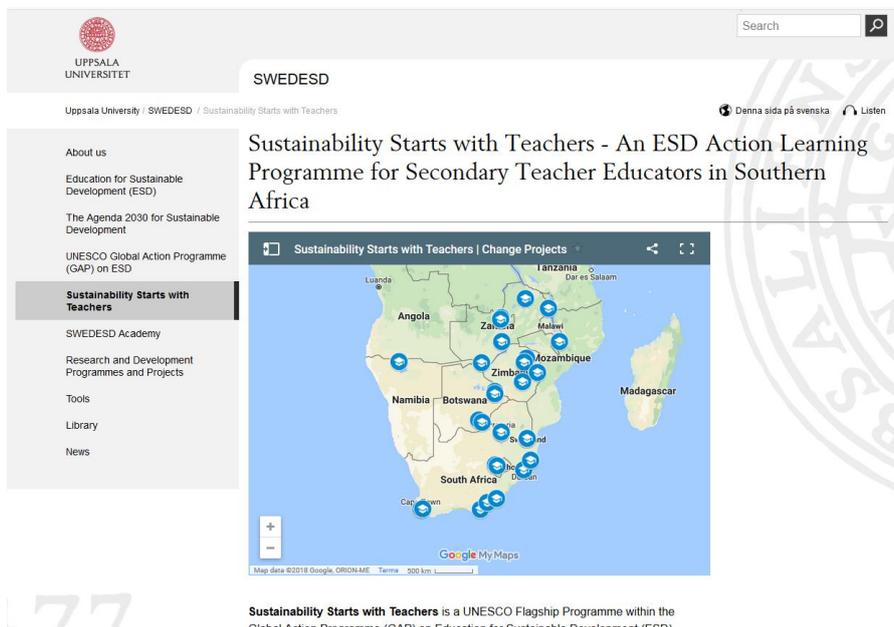
The second Sustainability Starts With Teachers workshop was officially closed by Ms Nelisiwe Nicky Ndwandwe of the Swaziland National Commission for UNESCO, in the Ministry of Education and Training.

INITIATING CHANGE

11 DEVELOPING CHANGE PROJECTS

Between July 2017 and March 2018, delegates continued with the development of their change projects in their respective TEIs. An online platform was created by SWEDESD, where the details of each change project could be loaded. Delegates began submitting their change projects in the 3rd and 4th quarters of 2017 and it showed that in some cases there were good progress made.

The themes chosen for the projects were diverse and addressed various localised issues related to ESD. By September 2017, the list of change projects defined included multiple projects from some TEIs, as delegates began to define what would have the most impact in their TEIs.



The screenshot shows the SWEDESD website interface. On the left is a navigation menu with items like 'About us', 'Education for Sustainable Development (ESD)', 'The Agenda 2030 for Sustainable Development', 'UNESCO Global Action Programme (GAP) on ESD', 'Sustainability Starts with Teachers', 'SWEDESD Academy', 'Research and Development Programmes and Projects', 'Tools', 'Library', and 'News'. The main content area features the title 'Sustainability Starts with Teachers - An ESD Action Learning Programme for Secondary Teacher Educators in Southern Africa' and a map of Southern Africa with blue circular markers indicating project locations in countries like Angola, Zambia, Malawi, Mozambique, Zimbabwe, Botswana, Namibia, South Africa, and Madagascar. Below the map, a caption reads: 'Sustainability Starts with Teachers is a UNESCO Flagship Programme within the Global Action Programme (GAP) on Education for Sustainable Development (ESD).' The Uppsala University logo is visible in the top left corner of the website screenshot.

No.	Teacher Education Institution	Change Project (Sep 2017)
1.	Domasi College of Education, Malawi	An assessment of how our activities affect climate change - a reflective model
2.	Mzuzu University, Malawi	Change strategies of teaching and learning and assessment to address SDG 4
3.	Chancellor College, Malawi	Integrated pedagogies approach - skills development for pre-service teachers
4.	Lilongwe University of Agriculture and Natural Resources, Malawi	Quality training of secondary school teachers - curriculum, pedagogy and assessment
5.	University of Namibia, Namibia	"Knowing the nearest" - recycle and reuse initiative on campus by focusing on grey water and paper use
6.	University of Namibia, Namibia	Establishment of Professional Learning Community for school teachers in the Etosha-Basin Cuvelai
7.	University of Namibia, Namibia	Transformed thinking (thinking & ESD living) - to develop instructional materials and improve school facilities
8.	Mufulira College of Education, Zambia	Supporting student teaching practice communities to include ESD
9.	University of Zambia, Zambia	Reorienting community practicum to address sustainability needs of the diverse labour market
10.	Mukuba University, Zambia	Biodiversity conservation

No.	Teacher Education Institution	Change Project (Sep 2017)
11.	Chalimbana University, Zambia	Introduction initiative to change the appearance of the institution in terms of greening the environment, integrating ESD through the students and approach
12.	Evelyn Hone College of Applied Arts and Commerce, Zambia	Cleaning campaign moving towards the 21st competencies for teachers
13.	Copperbelt University, Zambia	Science communication through research
14.	David Livingstone College of Education, Zambia	Combat climate change and its impacts
15.	Midlands State University, Zimbabwe	Mainstreaming sustainability issues into PQM
16.	Mutare Teachers College, Zimbabwe	The integration of ESD in the Environmental Education project assignment for final year Geography and Environmental Studies students at Mutare Teachers' College
17.	Bindura University of Science Education, Zimbabwe	Aligning the curriculum towards ESD
18.	University of Zimbabwe, Zimbabwe	Mainstreaming ESD in curriculum 'greening'
19.	Zimbabwe Open University, Zimbabwe	Mentoring teachers accessing information on school-based mentoring through MOOCs.
20.	Gweru Polytechnic, Zimbabwe	Waste management and recycling at the Polytechnic via ESD education
21.	Great Zimbabwe University, Zimbabwe	Improving teaching / student practical research towards SD goals
22.	National University of Science and Technology, Zimbabwe	Global Citizenship and cultural practices impacting on environmental preservation and climate change
23.	Hillside Teachers Training College, Zimbabwe	Addressing the issue of inclusive education with specific reference to the visually impaired
24.	Belvedere Technical Teachers College, Zimbabwe	Transformation of Teacher Education Pedagogical Practices to align with ESD.
25.	Tonota College of Education, Botswana	Recycling and reuse of grey waters from college cafeteria and students halls of residence
26.	University of Botswana, Botswana	Infusion of indigenous knowledge in a language education course (ELL 401: Foundations of Multicultural Literacy Education) at the University of Botswana
27.	Molepolole College of Education, Botswana	Modelling ESD best practice through water conservation at MCE
28.	Francistown College of Technical and Vocational Education, Botswana	Capacity building for ESD unemployed youth
29.	National University of Lesotho, Lesotho	Using water to grow crops instead of land (hydroponics)
30.	Lesotho College of Education, Lesotho	Sewage management in Themba Thebe Teacher Training College
31.	Lesotho College of Education, Lesotho	Integrating ESD into curriculum at Lesotho College of Education
32.	University of Lesotho, Lesotho	Sustainable energy consumption

No.	Teacher Education Institution	Change Project (Sep 2017)
33.	Universidade Pedagogica, Mozambique	Land Use and Climate Change in Lower Umbeluzi-Southern Mozambique: Towards Education for Sustainable Development in Local Communities
34.	Universidade Eduardo Mondlane, Mozambique	Using Local knowledge to conserve forest species and poverty alleviation of Movoco's families/communities
35.	Universidade Eduardo Mondlane, Mozambique	Using Local Knowledge to promote conservation of forest Species
36.	Universidade Eduardo Mondlane, Mozambique	Incorporating ESD in teaching materials
37.	Universidade Pedagogica, Mozambique	Land Use and Climate Change in Lower Umbeluzi-Southern Mozambique: Towards ESD in Local Communities
38.	Stellenbosch University, South Africa	Integration of ESD in teacher education
39.	Cape Peninsula University of Technology, South Africa	Conserving fynbos biomes biodiversity in the Western Cape: A radical approach to combat invasive alien species
40.	University of Zululand, South Africa	Assessment for sustainable development: Embracing quality education
41.	North West University, South Africa	Capacity development for ESD: Teaching/ training the teacher educator
42.	University of the Western Cape, South Africa	Green science and economy
43.	University of KwaZulu-Natal, South Africa	Environmental sustainable action and community enhancement
44.	University of Limpopo, South Africa	Reconfiguration of curriculum for rural empowerment
45.	University of Venda, South Africa	Human Rights Literacies
46.	University of Fort Hare, South Africa	Supporting teacher-learner interactions in the classroom: Promoting flexible thinking, organisation, memorisation through executive function strategies
47.	Nelson Mandela Metropolitan University, South Africa	Rethinking assessment practices for sustainable teaching and learning in the Faculty of Education at Nelson Mandela University
48.	Walter Sisulu University, South Africa	Creative arts education for sustainable development
49.	University of South Africa, South Africa	Teaching methods to incorporate ESD into the curricula
50.	Walter Sisulu University, South Africa	Exploring Learner's creativity for sustainable development
51.	University of Johannesburg, South Africa	Establishing common understanding of ESD in my institution
52.	University of Pretoria, South Africa	Appreciating our linguistic and cultural diversity in African languages at the University of Pretoria
53.	University of Cape Town, South Africa	ESD Innovate
54.	Rhodes University, South Africa	Common understanding of ESD in formal Education and approaches to implementation
55.	University of South Africa, South Africa	Enhance ESD Orientation in the New Curricula
56.	University of the Witwatersrand, South Africa	Teaching methods that promote sustainability
57.	William Pitcher College, Swaziland	Mainstreaming ESD to pre-service programme
58.	University of Swaziland, Swaziland	Revising a university programme for ESD

No.	Teacher Education Institution	Change Project (Sep 2017)
59.	University of Swaziland, Swaziland	Rooting ESD on the ground: Sustainability in communities
60.	University of Swaziland, Swaziland	Teacher / academics reflective thinking on gender equality and education for sustainable development connectivity
61.	Swaziland College of Technology, Swaziland	Applying entrepreneurship in poverty alleviation through ESD concepts
62.	University of Swaziland, Swaziland	Creating common understanding of ESD in the Faculty of Education at UNISWA
63.	University of Swaziland, Swaziland	using community knowledge to teach climate change in university curriculum

Delegates were asked to submit more detail on their change projects to the SWEDES team and by January 2018 a total of 27 change projects were listed with information on the communities of practice and progress made.

In order to facilitate shared learning, it was decided to select a smaller group of delegates to showcase their change projects in March 2018, for the purposes of review, but also to gain the benefit of peer feedback. Up to that point in the project, the two workshop delegations who attended the Zambia and Swaziland workshops had participated in the same action learning experience, but had not all met. It was also therefore seen as a key opportunity for networking and further expansion of regional communities of practice.

- About us
- Education for Sustainable Development (ESD)
- The Agenda 2030 for Sustainable Development
- UNESCO Global Action Programme (GAP) on ESD
- Sustainability Starts with Teachers**
- SWEDES Academy
- Research and Development Programmes and Projects
- Tools
- Library
- News

University of Namibia



Change Project | Knowing the nearest



Since some change projects had committed project managers, but were still struggling to get off the ground, it was decided that not only the best performing change project managers would be invited, but also the struggling ones, in order not to lose the commitment that had already been shown.

PROJECT REFLECTION AND REVIEW

12 CHANGE PROJECT REVIEW WORKSHOP 14 – 15 MARCH 2018

Based on the interaction with and responses received from delegates on their change projects, a selection of 40 was made where the projects either showed progress, or the project manager showed commitment, but was experiencing difficulty in implementation. Delegates were requested to prepare a short report on each project, which addressed the following questions:

1. What is the overall objective of your change project?
2. What are its specific expected outcomes?
3. How do you intend to implement this?
4. What is the specific link to SDG? How does your change project link to any one or more of the 17 SDGs?
5. What are the key progress made so far?
6. What are the challenges and ways you are addressing them? What kind of challenges/ success have you faced while starting up and implementing the project?

Formal feedback was submitted before the workshop and selected delegates also prepared short presentations on their projects, including these addressing these questions.



Figure 15: Review Workshop Delegates - March 2018

In his opening address, Prof Hubert Gijzen, Director of UNESCO ROSA, stressed that building the capacity of teacher educators provides an ideal entry point to address ESD in the context of SDG target 4.7. He argued that the next step is to go beyond teacher support and to rethink the modalities of how support is provided to member states, teachers and education stakeholders. He made the point that two other levels are very important for future projects: developing ESD policy and policy-making capacity and building school-based models for introducing ESD at school level.



Objectives of the Review Workshop

- Provide an opportunity to the leading TEI change project managers to showcase their projects, their communities of practice and what they have achieved in terms of ESD curriculum innovation;
- Provide an opportunity for passionate, but lagging project managers to learn from the experiences of others on how they can address shortcomings and create the necessary momentum for their projects;
- Offer a networking opportunity for participants in different workshops, representing all nine participating countries, to discuss other forms of sharing and collaboration;
- Plan for future phases or follow-up projects of Sustainability Starts with Teachers with all those involved.

During the course of the first day, delegates from Botswana, Lesotho, Malawi, Mozambique, Namibia and South Africa presented their change projects and highlighted for each what they focused on, what the

challenges were that they experienced in establishing change projects, and what their future activities will be. Projects touched on various inter- and transdisciplinary applications of ESD, and many showed examples on how communities and students, who will be future teachers, participated in the change projects. This ranged from upgrading a university's SDG garden to a learning space, calculating the carbon footprint of a campus, to addressing the lack of ESD teaching materials in African languages. Delegates also applied an evaluation framework to reflect on immediate, potential, applied, realised and reframed value of the projects they were introduced to.

A common theme that emerged throughout the workshop is the need for more collaboration between TEIs and government ministries and between TEIs and their departments.

From the presentations and discussions it emerged that some change projects have developed their own momentum, while others have struggled to get off the ground. The workshop became a forum for sharing ideas and giving advice on how ESD change projects could be approached to ensure success. Delegates who had participated in the process from early in 2017 confirmed the value they saw in building regional networks over time, which can lead to further collaboration and learning.

Critical Success Factors of successful workshops

Some shared critical success factors for change projects that emerged from the workshop included:

- The need for institutional champions – preferably on senior management institutional level – to support projects;
- The importance of establishing functioning communities of practice as soon as possible to lessen the burden on individuals who are driving the change process;
- The confirmed effectiveness of continuous reflection and project monitoring, which can inform what sort of project adjustments needs to be made, or whether projects need to be reconceptualised completely;
- The need for innovative ways to address shortages of resources, equipment and learning materials, which was a shared experience among most change project managers.



PROJECT CONCLUSION AND WAY FORWARD

13 SUSTAINABILITY STARTS WITH TEACHERS: ACHIEVEMENTS

During its formal duration of eighteen months (October 2016 – March 2018), Sustainability Starts With Teachers engaged with a variety of stakeholders representing Teacher Education Institutions (TEIs), government departments and Ministers of Education, communities and future teachers in nine countries of the SADC region, to introduce ESD in teacher education practices. The project was successful in bringing together stalwart ESD practitioners from the region with new emerging teacher educators in order to understand ESD and its implications, to engage with the requirements of SDG 4 – Quality Education, and to develop situated, practical change projects to being the process of curriculum innovation. It managed to do this via four large regional workshops and a smaller design workshop. In total more than 130 individuals were involved in some way and can become informed champions of ESD in the region.

The project also extended the work of the UNESCO GAP in a very practical way, through its action learning approach focused on ESD change projects. Combined with the extensive theoretical knowledge of curriculum innovation techniques, such as alternative assessment methods, teacher educators can more easily identify future opportunities for change in their institutions.

The environmental scan has highlighted many policy and institutional level issues to address in the region and many of these still require concerted effort. Sustainability Starts With Teachers has addressed them from an awareness raising perspective which can assist in bottom-up approaches to incorporating ESD in secondary school curriculum development. There is also a requirement for top-down alignment of national policies with the SDGs and their targets.

14 WAY FORWARD

Upon completion of the March 2018 Review Workshop, UNESCO ROSA and its programme partners – the Southern African Regional Universities Association (SARUA), Rhodes University and SWEDESD, as well as the TEI delegates and government representatives, agreed that while the formal activities of this phase have now been completed, it is only the start for a process of curriculum innovation and enhanced Education for Sustainable Development (ESD) in Southern African countries.

It was agreed by all that the process of ESD strengthening should continue and that the change projects already started and made available online should become thriving projects, which can also inspire future teacher educators to address ESD. Delegates found value in the way the project's evaluation framework would become a new way in which they would see which potential projects have value in the future. The change projects are still underway and the project partners will continue to engage with delegates to learn about progress with these projects. The intent is to develop change projects into potentially institution-wide or regional programme for introducing ESD change. Sustainability Starts With Teachers has therefore acted as a catalyst for change, of what can become pioneering ESD projects in the SADC region.



ANNEXURE A: DELEGATES AND PARTICIPANTS

	NAME	COUNTRY	SEX	INSTITUTION	EMAIL	STATUS	Inception Jan-17	Design Apr-17	Zambia Jun-17	Swaziland Jul-17	Review Mar-18
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5.	Dr. Aguiar Baquete	Mozambique	M	Lecturer, Universidade Eduardo Mondlane	aguiar.baquete@uem.mz	Academic Reference Group	X	X		X	X
6.	Dr. Alex Kanyimba	Namibia	F	Senior Lecturer, Environmental Education, University of Namibia (UNAM)	akanyimba@unam.na alexkanana56@gmail.com	Academic Reference Group	X	X	X		X
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8.	Prof. Esther Kibuka Sebitosi	South Africa	F	University of South Africa (UNISA)	consortiumafrica@yahoo.com	Academic Reference Group	X	X			
9.	Ms. Sindisiwe Malindzisa	Swaziland	F	Lecturer - University of Swaziland	sindisiwemalindzisa@gmail.com	Academic Reference Group	X	X		X	X
10.	Prof. Overson Shumba	Zambia	M	School of Mathematics and Natural Sciences, Copperbelt University	oshumba@yahoo.co.uk	Academic Reference Group	X	X	X		X

	NAME	COUNTRY	SEX	INSTITUTION	EMAIL	STATUS	Inception Jan-17	Design Apr-17	Zambia Jun-17	Swaziland Jul-17	Review Mar-18
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12.	Dr. Caleb Mandikonza	South Africa	M	Education Faculty, Wits University	calebmandikonza@gmail.com	ESD Specialist	X			X	X
13.	Zinhle Songqwaru	South Africa	F	Rhodes University		ESD Specialist				X	
14.	Dr. Justin Lupele	South Africa	M	Rhodes University		ESD Specialist			X		
15.	Dr. Sirkka Tshiningayamwe	South Africa	F	Rhodes university research fellow	sirkka.ts@gmail.com	ESD Specialist	X	X	X	X	X
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17.	Dr. Mandla Mlipha	Swaziland	M	University of Swaziland	mlipha@uniswa.sz	ESD Specialist				X	X
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21.	Mr. Remmy Shawa	South Africa	M	Programme Officer, UNESCO HIV and Health Education, South Africa	r.shawa@unesco.org	Implementing Partner					X
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27.	Moses Muakabeta	Zimbabwe	M	UNESCO ROSA		Implementing Partner				X	
28.	Prof. Hubert Gijzen	Zimbabwe	M	UNESCO ROSA, Director	h.gijzen@unesco.org	Implementing Partner	X	X			X

	NAME	COUNTRY	SEX	INSTITUTION	EMAIL	STATUS	Inception Jan-17	Design Apr-17	Zambia Jun-17	Swaziland Jul-17	Review Mar-18
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31.	Ms. Jesca Chikopa	Zimbabwe	F	UNESCO ROSA, Programme Assistant	Mj.chikopa@unesco.org	Implementing Partner					X
32.	Ms. Alice Gundani	Zimbabwe	F	UNESCO ROSA, Programme Assistant	a.gundani@unesco.org	Implementing Partner					
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34.	Dr. Peggy Oti-boateng	Zimbabwe	F	UNESCO ROSA, Head of Science	p.oti-boateng@unesco.org	Inter-sectoral partner	X				X
35.	Ms. Yvette Kaboza	Zimbabwe	F	UNESCO ROSA, Programme Specialist, Culture	y.kaboza@unesco.org	Inter-sectoral Partner	X	X	X		X
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48.	Ms. Lefika Chetty	South Africa	F	Education Officer, South Africa NATCOM	Chetty.L@dbe.gov.za	MoE Official	X				
49.	Ms. Fikile Mdluli	Swaziland	F	Chief Inspector, Teacher Education and Curriculum, Ministry of Education and Training, Swaziland	fcmdluli@gmail.com	MoE official	X				
50.	Mr. Samson Njapau	Zambia	M	Senior Curriculum Specialist-NS Ministry of General Education / Curriculum Development Centre	samnjpau@yahoo.co.uk	MoE official	X				
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53.	Luckson Mwale	Zambia	M	Agents for Change Zambia		Service Provider			X		
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57.	Mr. Isaac Mangadi	Botswana	M	Tonota College of Education		TEI Delegate				X	
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93.	Prof. Takalani Mashau	South Africa	F	University of Venda		TEI Delegate				X	
94.	Ms. Concepta Moufhe Thenga	South Africa	F	University of Witwatersrand		TEI Delegate				X	
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102.	Mr. Boyie Sabelo Dlamini	Swaziland	M	University of Swaziland	bsdlamini@uniswa.sz	TEI Delegate				X	X
103.	Prof. Marietta P. Dlamini	Swaziland	F	University of Swaziland		TEI Delegate				X	
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115.	Ms. Oakinah Mweembe	Zambia	F	Mulungushi University		TEI Delegate			X		
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126.	Dr. Lockias Chitanana	Zimbabwe	M	Midlands State University		TEI Delegate			X		
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128.	Mr. Joseph Kundhlande	Zimbabwe	M	Mutare Teachers College	josephkundhlande@gmail.com	TEI Delegate			X		X
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133.	Nelisiwe Nicky Ndwandwe	Swaziland	F	UNESCO Swaziland National Commission		UNESCO NatCom				X	