



REGIONAL ENVIRONMENTAL EDUCATION PROGRAMME

The Southern African Development Community (SADC) leadership recognised the importance of environmental education in enabling cross-country co-operation for a sustainable future when they set up the SADC Regional Environmental Education Programme. Forming a partnership with Sweden in 1996/7 enabled this programme to flourish. The story told here is of a 15-year programme and its partnership. It is also a story of the **kinds of relationships and practices** that need to be developed if humanity is to learn to build a sustainable future.

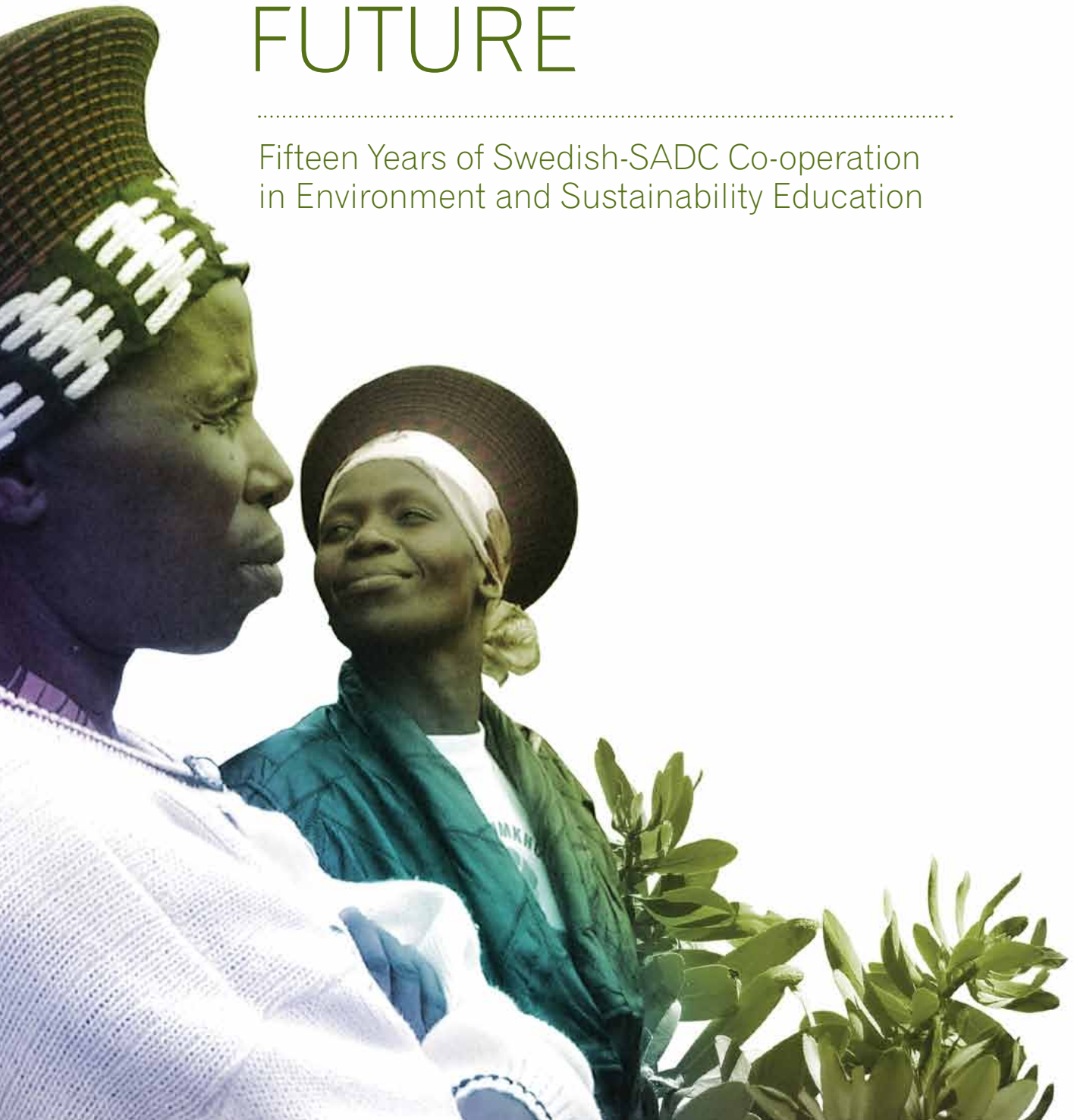
In partnership with





LEARNING FOR A SUSTAINABLE FUTURE

Fifteen Years of Swedish-SADC Co-operation
in Environment and Sustainability Education



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ACKNOWLEDGEMENTS

This 15-year story was produced to mark 15 years of Swedish-Southern African Development Community co-operation in implementing the Southern African Development Community Regional Environmental Education Programme (SADC REEP).

The SADC REEP is a programme of the SADC Food, Agriculture and Natural Resources Management Directorate and is implemented by WESSA (the Wildlife and Environment Society of South Africa). Its purpose is to strengthen capacity for responding to environment and natural resource related issues and risks in southern Africa. It recognises the importance of investing in human capacity for a sustainable future, and puts learning at the centre of these processes.

The story told here is only possible because of the contributions of thousands of people that have participated in the activities of the SADC REEP from 15 southern African countries, over a 15-year period. These contributions are acknowledged here. Similarly the contributions of the citizens of Sweden are acknowledged. It is through partnerships like this that humanity can learn to create a more sustainable future.

The story brings alive the SADC vision of a shared future, a future within a regional community that will ensure economic well-being, improvements of the standards of living and quality of life, freedom, social justice, peace and security.

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A vertical photograph on the left side of the page shows a young child in a red shirt working in a vegetable garden. The child is surrounded by various green plants, including leafy vegetables and a red chili pepper. The background shows a lush green field and a large tree.

01 ESTABLISHING A VISION

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"Southern Africa is richly endowed with abundant agricultural, mineral and other resources ... About 70 percent of the region's population depend on land [and the environment] for food, income and employment. ...Despite progress and commitment to environmental management, the SADC region continues to experience considerable levels of land degradation, deforestation, loss of biodiversity, inadequate access to clean water and sanitation facilities, and poor urban conditions. It therefore comes as no surprise that SADC places high priority on these and other challenges." (SADC, 2008, 1, 7)¹

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STATE OF THE ENVIRONMENT: HUMAN LEARNING IN FOCUS

The state of the environment and its consequences for the well-being and continued flourishing of people has been one of the key driving forces in establishing and expanding the vision for the Southern African Development Community Regional Environmental Education Programme (SADC REEP). It is the basis of the long-standing partnership between SADC and the Swedish government formed to implement this programme.

There can be no doubt that the global environment continues to deteriorate. Scientific report after scientific report is produced to help humanity understand the environmental consequences of its chosen development path. From early reports, such as the Brundtland Report in 1987, to an array of reports produced in the past 25 years, the message remains the same: **Humans are altering the environment in ways that are unprecedented in human history, with uncertain consequences for the future of the earth, and humanity itself.** This affects people in southern Africa on a daily basis. As the SADC Executive Secretary, Tomaz Augusto Salomão² said recently:

...today we have come to realise that the environment not only supports our economy, but determines our destiny as a people and as a region. Therefore, environmental issues, both in the region and the wider world, should be addressed at all levels by all stakeholders...

In the past 15 years alone, this same point has been emphasised in numerous reports such as the United Nations Environment Programme (UNEP) *Global Environmental Outlook* (and its African version – the *African Environmental Outlook*); the *UN Millennium Ecosystem Assessment*, a visionary scientific project led by Koffi Annan; the

International Panel of Climate Change (IPCC) reports which have provided insight into the projected scope and impacts of climate change; and the beautifully produced *Atlas of the African Environment*³, amongst others. All these share information on the state of the planet, and most give us score-card reviews of ever-increasing environmental degradation, emphasising the intimate relationship that exists between people and the environment.

More recently, reports are being produced that not only provide information on the state of the environment, but also **on what needs to be done**, foregrounding the need for new forms of learning and agency. For example, the recent UN General Secretary's High-Level Panel on Global Sustainability entitled *Resilient People, Resilient Planet: A Future Worth Choosing*, argues that it is time to make sustainable development happen. The report recognises human agency and choice in this process, noting that "We are not passive, helpless victims of the impersonal, determinist forces of history"⁴. The report recognises the need to empower people to make sustainable choices, inter alia through **advancing education for sustainable development in all sectors of society**.

Related to this are new directions for science. The International Council for Science is launching a 10-year research initiative that seeks to develop the knowledge for **responding** to the risks and opportunities of global environmental change and for supporting transformation towards global sustainability in the coming decades. This major initiative, called 'Future Earth' plans to mobilise thousands of scientists to provide sustainability options and solutions. It emphasises **the need for effective inter-disciplinary collaboration; and increased capacity building**.

Interestingly, and importantly for this story, is the fact that these reports are emphasising **the central role of human learning in enabling and creating the change needed for a sustainable future**. For

example, UNEP have recently released a report entitled **Decoupling natural resource use and environmental impacts from growth**⁵ which states that the reduction in overall resource use will require substantive eco-innovation. This requires "new knowledge and information processing capabilities, as well as changes in values, beliefs, knowledge, norms, and administrative acts (amongst others)". The report states further that:

Innovations are continuous learning processes that are necessary in a highly complex globalised world where fixed bits of knowledge rapidly become obsolete. The modern economy is better seen as a learning economy rather than a knowledge economy, underlining the importance of innovations in technology, institutions, solidarity, social cohesion ... and social learning.

Similarly the Green Economy report of UNEP⁷ explains that, if Green Economy objectives are to be met, then there is a need to invest in education and training: at a broad societal level to facilitate re-orientation in consumption patterns and to foster social innovation for sustainability; and at a technical level to provide training for new economic activities, and re-skilling for sustainability in 'old jobs' where technologies and production processes become obsolete (as is emerging in the energy sector, for example). Training and capacity of managers, policy makers and societal leaders is emphasised in all these reports, as is the issue of creating new opportunities for youth. Education, training and capacity are emphasised and seen to be an **enabling condition** of a more sustainable future.

Few of these reports, however, shed light on **how** such learning and change is to occur, particularly in countries of the 'South' that are still heavily impacted by poverty and other ills such as poor quality education systems. As such, this 15-year story sheds light not only on how such learning can be conceptualised in the face of ongoing

environmental degradation and social-ecological change, but also **on how it has been done**, at a Regional Economic Community (REC) level involving 15 countries in southern Africa.

The story is of a 15-year programme and its partnerships. It is also a story of the **kinds of practices** that need to be developed if humanity is to learn to build a sustainable future. Learning how to build a sustainable future requires education, and over the years, environment and sustainability education have emerged as a critical new focus for education systems around the world, including in southern Africa, where this story is located.

ENVIRONMENT AND SUSTAINABILITY EDUCATION IN FOCUS

As scientific understandings of the modern human-environment relationship have emerged, so have political processes designed to produce solutions. Numerous global gatherings have been held involving the world's leaders, all of whom have debated how we might shape solutions to this seemingly intractable problem. The role of education, training and public awareness has always been present in these discussions.

Starting in 1972, the Swedish government under leadership of Gro Harlem Brundtland, hosted the Stockholm conference on Environment, the world's first ever gathering of world leaders to discuss the human environment. Soon after this, the Tbilisi Principles for Environmental Education were released as the first set of international principles for Environmental Education.

Other global gatherings followed: the Rio Earth Summit in 1992 left the world with Agenda 21, a global compact to work together to address some





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"...the programme could develop the region's 'human resources' or people's capabilities to protect and improve the health, environment and livelihoods of people."

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of the environmental problems. This document included a chapter (Chapter 36) on Education, Training and Public Awareness which still provides guidance to governments today. In 1996 SADC ELMS had, for example, included a policy objective on environmental education, training and public participation, which gave rise to the SADC Regional Environmental Education Programme⁸. The SADC report to the Rio Earth Summit noted that the recent regional integration, through the newly established SADC structures, presented the region with 'new opportunities' for transforming areas of weakness into strength, especially in the area of 'sustainable use of natural resources'.

Ten years after the Rio Earth Summit was the World Summit on Sustainable Development held in South Africa in 2002, where a UN Decade on Education for Sustainable Development was proposed in the Johannesburg Implementation Plan. Three years later in 2005, the UN Decade of Education for Sustainable Development⁹ was launched, influencing education thinking and practice around the world, including the thinking and practice of the SADC REEP.

Recently, in June 2012, the world returned to Rio to continue deliberations on how humans can develop in more sustainable ways, and halt the degradation of the very environments on which they depend for their survival. The Rio+20 Earth Summit confirmed the need for education, training and public awareness in achieving a sustainable future. All these developments have shaped the SADC Regional Environmental Education Programme and its 15-year history in various ways, as will be seen across the pages of this report.

THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY VISION

Depending on the environment for livelihoods and survival is perhaps most acutely noticed and experienced in the world's regions that have not equally benefited from industrial developments. They have instead been subjected to over 300 years of colonial resource extraction and oppression of people. These countries are commonly known as the 'countries of the South'. Prior to 1950, all African countries were still under various forms of colonial and / or apartheid rule.

Since the 1950s Africa has experienced a miraculous and hard-won political freedom from 300 years of colonial rule, and by 1994 every country had attained political freedom and independence. This is testimony to the agency and capabilities of African people to shape their own destiny. Institutions that were formerly focussed on liberation could now turn their attention to other forms of liberation: liberation from poverty and its exacerbating forces, such as ongoing environmental degradation, and education that lacked relevance and future purpose.

One such institution is the Southern African Development Community (SADC). Early on, it changed its primary focus from liberation in southern Africa, to liberation of its people from the ills and effects of colonial intrusion. This was expressed in the SADC Treaty of 1992, which expressed a vision to liberate the people of Southern Africa from the impact of the long histories of oppression and marginalisation, and to assist them to create a new future through equity led growth, quality education for all, eradication of poverty and health risk, improved land use management and sustainable environmental management.

In agreeing to set up the SADC Regional Environmental Education Programme (SADC REEP) in

1993, the SADC leadership recognised the importance of environmental education in enabling cross-country co-operation in learning for a sustainable future. The programme was established through multi-lateral agreement involving SADC Heads of State in 1993, in the SADC Environment and Land Management Sector (SADC ELMS). A widespread consultation process was initiated, leading to a number of SADC workshops, oriented to establishing the most effective form that the SADC REEP should take. Discussions focussed on how a programme could be developed that would help to address poverty, ensure equity-led and sustainable development, and how the programme could develop the region's 'human resources' or people's capabilities to protect and improve the health, environment and livelihoods of people. The initial concept of a Regional Environmental Education **Centre** (reflected in the first programme proposal), soon broadened to the idea of a **Programme**.

After the consultation process, the then Chairman of SADC, Nelson Mandela, signed the document that was to finally confirm the operationalisation of the SADC REEP. It is no small irony that Howick was to be the location of the programme, close to the site where

Mandela had been arrested some 30 years earlier.

With its futures' vision, the SADC REEP recognised the importance of enhancing people's knowledge and capacity for learning as an important response to the range of complex environment and sustainable challenges facing the southern African region. Education that strengthened participation in environment and development was a key goal for SADC wide policy in the SADC ELMS. By 1996, SADC was successful in seeking and gaining support for the REEP from the Swedish government, with its longstanding commitment to quality education and environmental concerns.

The next step was to identify an implementation partner with the capacity and expertise to implement such a regional programme. The Wildlife and Environment Society of South Africa (WESSA) was identified as this partner, and with support of the South African Government, a 'SADC REEP office' was built in Howick, South Africa, from where the programme has operated ever since. It was through this partnership with the Swedish government and its international development agency, Sida, that the concept of the SADC Regional Environmental Education Programme was given life.







SUSTAINED SWEDISH GOVERNMENT SUPPORT

Since 1997, the Swedish government have provided funding for this programme. On occasion this has also been supplemented by funding from other sources. However, the sustained and ongoing support from Sida has been the most fundamental contribution to the programme over the past 15 years.

This story shares the 15-year relationship that has existed between the SADC Regional Environmental Education Programme (SADC REEP) and its global partners, especially the Swedish community through the Swedish International Development Cooperation Agency (Sida) and the SADC nation states and their people that have benefitted from the programme's actions. It demonstrates a successful, long-standing partnership between North and South, and illuminates some of the more positive processes that unite people on the planet. It also reflects on, and shares some of the exciting moments, the successes, struggles, impacts and outcomes of this 15-year partnership.

The story is not an evaluation of the programme, as this has been done elsewhere, but it does draw on evaluation data produced during the life of the programme. It also draws on stories of people who have been involved in the programme. It tries to reflect the richly textured life of a programme, that has consistently worked with 15 countries for 15 years, to strengthen capacity to learn how to create a sustainable future on the African continent.

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"The sustained and ongoing support from Sida has been the most fundamental contribution to the programme over the past 15 years."

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02 FRAMING THE PROGRAMME

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"SADC Member states have committed themselves to integrated and sustainable development as reflected by the Treaty ... The overall goal of the environment intervention is to ensure equitable and sustainable use of the environment and natural resources for the benefit of present and future generations ..."
(SADC, 2003:76)¹⁰

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THE SADC ENVIRONMENT AND DEVELOPMENT CONTEXT

The SADC Member States made a commitment early on to ensuring sustainable development and sustainable management and use of natural resources for the benefit of current and future generations. This commitment was made in the context of 'multiple challenges' framed in their 1997 SADC report on progress made since the Rio Earth Summit¹¹ in this way:

After several decades of often marginal economic growth, increasing poverty and escalating environmental degradation, SADC countries face a formidable series of critical transitions in order to move from largely unsustainable development toward development that is economically, socially and environmentally sustainable.

Critical transitions reflected on at the time included:

A **demographic transition** toward an optimal size and distribution of population and economic activity in relation to the environment and natural resource base;

A **gender transition** toward expanded rights and participation in the development process;

An **economic transition** to equity-led growth with priority to the poor and to protecting the environment and natural resources needed for future development;

An **agricultural transition** toward better and sustainable use of land for greater production and productivity with priority to household and regional food security;

An **energy transition** toward more efficient use of and less polluting sources of energy, with priority to the accelerated development of renewable sources and affordable alternatives to fuelwood for the poor majority;

A **technological transition** towards accelerated industrial development with priority to technologies

that produce less waste and are more energy and resources efficient;

An **institutional transition** toward new national and regional institutional arrangements with priority to integrating economic, equity and environmental imperatives in planning and decision making among different Ministries and countries;

A **governance transition** toward greater public accountability and participation with priority to new sustainable development partnerships amongst governments, industry and NGOs;

A **capacity building transition** toward greater public accountability and participation with priority to accelerated development and use of local know-how, technology and expertise;

A **development budget transition** from aid dependence to self reliance;

A **peace and security transition** after decades of conflict toward a new era of regional cooperation and integration with priority to the peaceful settlement of disputes and equity-led growth for sustainable development.

This visionary, yet realistic agenda of SADC in 1997, maps the pathway and content of much of the SADC REEP's work over the years. The SADC REEP's work shows, in many ways, that environmental education processes contribute in some way to all of these transitions; and that they are interrelated. All are central for moving toward development that is economically, socially, and environmentally sustainable. As is also reflected in the SADC REEP's work, and by the original SADC intentions, the common priority that cuts across all of these transitions is an attempt to improve the health, lives and livelihoods of the poor majority, the majority of whom live in rural areas (up to 70% of people in SADC live in rural areas and depend heavily on their natural resources). A core assumption underpinning the entire SADC system and its set-up, is that the pace and scale of the change, as well as the opportunities for success, "will be far greater with expanded regional cooperation and integration".¹²

CORE POLICY DIRECTION

The SADC REEP has, since its inception, taken its directional mandate from SADC level policy. This has included the SADC Treaty, which provides for environmental education in its sixth intervention area of Environment and Sustainable Development.

Early on, the programme also drew policy direction from the SADC ELMS policy and strategy particularly the SADC Policy and Strategy for Environment and Sustainable Development (SADC, 1996) which provided for a Capacity Building Programme for Sustainable Development with the objective to expand and make the best use of environmental expertise in the region. This was designed to develop a programme that could create strategy and a network of regional environmental education training centres and also establish a register of environmental expertise in the SADC region. These objectives and programme areas were effectively mandated to the SADC REEP in 1997.

Later in the life of the programme, as policy and strategy at SADC level was refined, so was the programme's policy directives. In the latter eight years, the programme has taken its direction from the SADC Regional Indicative Strategic Development Plan (RISDP)¹³, as well as from various other regional policies such as Protocol on Education and Training, Protocol on Fisheries, Revised Protocol on Shared Watercourses and the SADC Declaration on Agriculture and Food Security.

Core to all of the SADC policies and strategies is a commitment to regionalisation, and to co-operation, harmonisation and mainstreaming of environmental, sustainable development and natural resource management objectives. From this policy direction, the programme made a commitment to incorporate a range of **cross-cutting issues** in its work, namely sustainability, gender equity, poverty reduction, health issues including HIV/AIDS, equity, human development and policy relevance. Led by Mike Ward, programme manager

at the time, the programme also framed a set of **principles** to guide its actions, which were published in the 2002 SADC REEP Programme Document¹⁴. These remained steady throughout the rest of the programme's development, and include:

- Responsiveness;
- Flexibility;
- Participation and partnerships;
- Recognition of diverse contexts;
- Regionalisation;
- Building on existing structures and research experience;
- Transparency and accountability;
- Process and product;
- Open-endedness; and
- Monitoring, evaluation, research and reflexivity.

Principles are often 'nice to have statements', but in the case of the SADC REEP, they have had a core driving effect on the way in which the Programme operates. The May 2005 SADC REEP evaluation report commented on the programme's principles and their actualisation. It stated that:

SADC REEP was conceptualised according to a set of principles which can be applied as Programme evaluation criteria; when one does, the Programme appears on balance to operate according to these principles, applying them in a coherent and reflexive way which significantly adds to the value of the Programme; these principles seem to be in fact what 'makes the Programme work', and gives it an innovative character that is internationally recognised.¹⁵





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"Poverty has wider historical and structural antecedents, and so it is not possible to simply 'blame the poor'; rather there is a need to address the historical and structural factors that maintain poverty, using all of society's structures and resources."

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DECIDING ON THE PROGRAMME'S 'CORE BUSINESS'

In this context, with guidance provided by policy and context, and with its core mandate being 'environmental education', the programme had to conceptualise its 'core activities' that would respond to the policy and context through environmental education.

Thus, one of the first challenges faced by the SADC REEP was to frame a programme that would service governments from 14 different countries, and that would further the objective of the programme which was to:

Enable environmental education practitioners in the SADC region to strengthen environmental education processes for equitable and sustainable environmental management choices.

This involved wide ranging consultations, which Dr Jim Taylor, Director of the SADC REEP remembers as building on the existing strengths and expertise in the region. In this way, he argued, the programme would emerge from strengths in the region, and not be victim to deficit development perspectives. The programme therefore started its 'life' with a perspective and confidence in regional strength and practices, seeking to grow and expand these further.

Following these early deliberations, it was agreed that the programme would focus on four key elements, all necessary for developing capacity in the region to learn for a sustainable future:

Environmental education **policy development;**

Environmental education training and **capacity development;**

Environmental education **materials development;** and

Environmental education **networking.**

In the seventh year of the programme, a fifth focus area was added to the programme, after realising

the central role that research plays in reflexive growth and development of a field, particularly a newly emerging field such as environmental education. The fifth component of the programme became:

Environmental education **research and evaluation.**

ENVIRONMENTAL CONDITIONS, POVERTY REDUCTION AND QUALITY EDUCATION

None of these activities, however, could take place without giving attention to the core referents that shaped and frame the activities that take place. These emerge from the context, and include environmental conditions, poverty reduction demands, and educational quality issues.

Thus, another key framing influence on the SADC REEP is the environmental conditions and their relationship to poverty reduction strategies and actions in the region. The SADC State of the Environment Report sheds some light on what these issues are. For example, pressure on resources by increasing population growth; access to clean water, health services and sanitation; access to quality education; and skewed government priorities due to limited resources towards basic needs at the expense of environmental management.¹⁶ According to the SADC *Environment Outlook* of 2008, "people living with poverty cannot afford to take proper care of the environment. Poverty is a cause and consequence of environmental degradation and resource depletion".¹⁷ Poverty has wider historical and structural antecedents, and so it is not possible to simply 'blame the poor'; rather there is a need to address the historical and structural factors that maintain poverty, using all of society's structures and resources.

Poverty statistics, but more importantly, experiences and conceptions associated with the notion of poverty in the SADC region, have provided an impor-

tant referent for the SADC REEP's work. Early on, the programme engaged critically with the notion of poverty, recognising its international constitution in econometrics discourse, but also recognising that poverty has many different meanings. As an expert small-scale food producer in Zimbabwe noted in the SADC REEP research into health, poverty and environment relations: "I am not poor because I am able to feed my family". This same gentleman however, lamented the difficulties placed on his family to obtain reliable health care services in the rural area where he was residing.

In engaging with conceptions of poverty, the programme has always sought to work with a more complex understanding of poverty than that used in econometric data. For example, early on the programme noted in its guiding document that "in this Programme, poverty is defined as a state characterised by limited choices and opportunities for living a good and meaningful life".¹⁸

Of primary concern to the educational work of so many of the participants in the SADC REEP programmes and activities has been the effort to contribute to absencing the ills of poverty through environment and sustainability education actions and practices. In doing so, the programme has also had to recognise that absencing the ills of poverty requires more than educational processes. Structural changes are needed, as much as efficient governance systems and institutions. Hence, the programme has sought to focus its educational activities, not only at the level of the individual and his or her professional growth, but also at the level of the institution, seeking strategies to effect institutional change and greater efficacy through educational praxis.

In its latter years, the programme has worked more consistently with the notion of 'capabilities' as put forward by Amartya Sen in his 1999 work on poverty, development and social justice.¹⁹ Sen proposed a wider concept of evaluating human development than economic statistics only. He included other 'valued beings and doings' of people into his concept of human development, such as freedom to live a healthy life; and/or freedom to become educated; or

to live in peace; or one could include freedom to live in a healthy environment. Sen was particularly committed to people's agency to deliberate what they see as 'valued beings and doings'. In some ways the SADC REEP have internalised this notion through adopting approaches to education that foreground deliberations with people about their 'valued beings and doings', seeking ways of expanding these through education. Such an approach has helped to frame ways of learning for a more sustainable future. For example, community discussions on Lake Mwalija in Malawi²⁰ indicated that the environment in the area has really changed. People used to harvest enough yield from their fields for their home consumption throughout the year; but this is no longer the case. This was of concern to the community members, as was their declining fish stocks; showing that in this case, environmental change was affecting peoples' valued beings and doings, or their abilities to easily feed their families. As can be seen from this example focusing on people's concerns and their 'valued beings and doings', can help to set the direction for environmental education activities that are contextual, relevant and valued.

In later years, the programme also included a focus on **educational quality** in its engagement with environmental conditions and poverty reduction interests. This is because the issues of educational quality permeate all educational work in SADC countries. Environment and Sustainability Education has a contribution to make to educational quality, but this was under-defined in the SADC region. The need to further develop this focus in the SADC Programme's research and practice emerged from a collaborative workshop between UNESCO's Windhoek Cluster Office and the SADC REEP. The focus of this work has been directed at understanding contextual realities and strengths, and the validity of local knowledge in improving educational practices and quality. For example, teacher education and classroom practice in Zambia was found to be substantively enriched with new environmental education methods that took social-cultural contextual factors such as learners' knowledge of local household practices into account.²¹

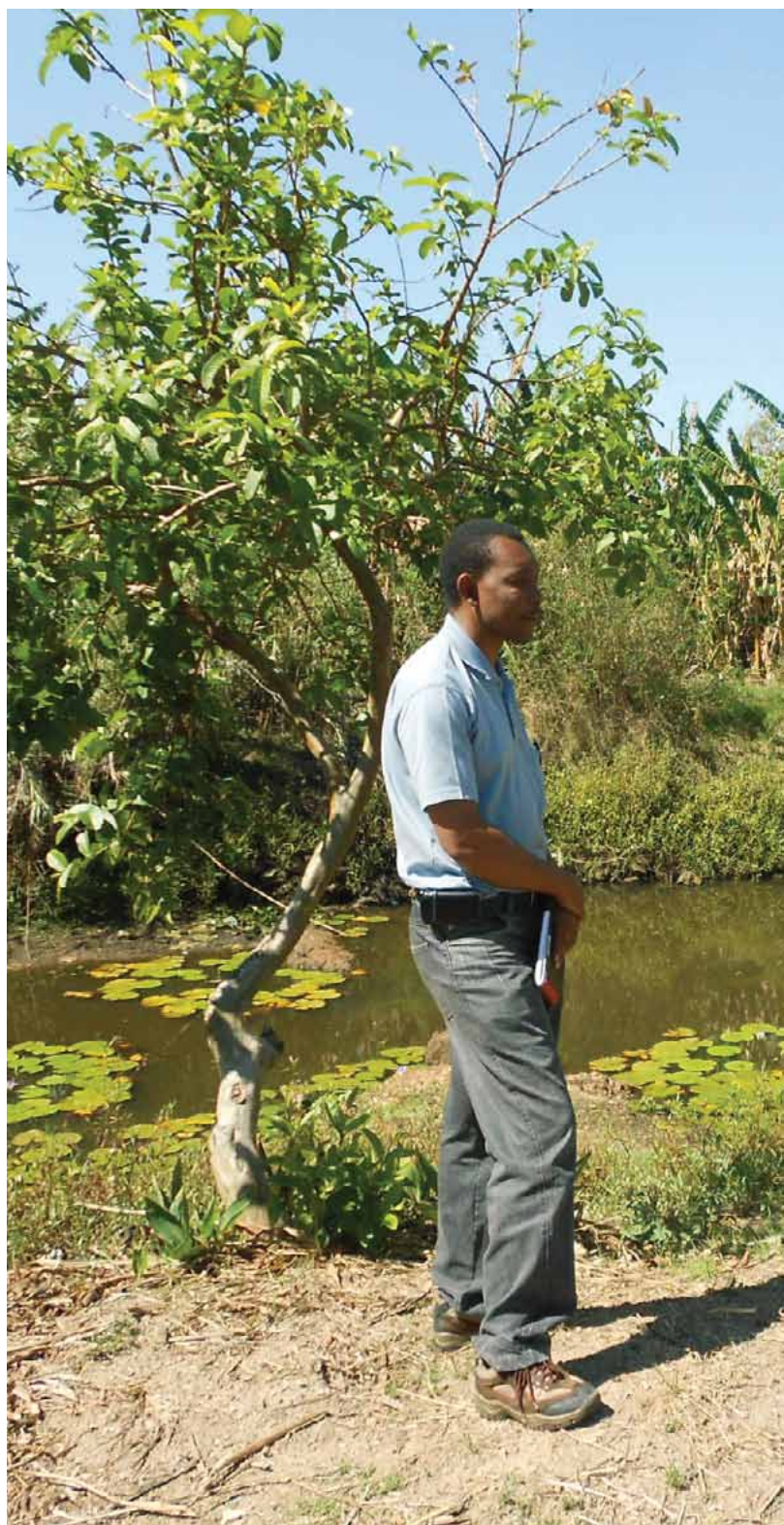
CONCEPTUAL FOCUS AND ORIENTATION

The five 'core business' foci noted above, and the engagement with the contextual referents have remained a stable feature of the SADC REEP ever since they were established. The original objective of the programme has remained the same.

However, the conceptual focus and orientation of the programme has broadened to include environment and **sustainability** education, or Education for Sustainable Development. This occurred as the programme was influenced by, and aligned itself with international priorities emerging from the World Summit on Sustainable Development, and the UN Decade of Education for Sustainable Development (ESD).

While a discourse shift can be discerned towards the global ESD trajectory in international policy, the primary focus on environment and environmental concerns in the context of the region's primary concern for poverty alleviation and sustainable development has not been diluted. If anything, the focus on sustainability and sustainable development has **deepened and broadened understanding of the importance of maintaining an environmental focus in discussions of sustainable development.**

This may well be because the programme has, since its inception, engaged with a social-ecological understanding of environment, which included political, social, ecological and economic **interactions**, and futures thinking. Sustainable development, resilience, adaptation and other environmental science discourses have sharpened the programme's focus on 'more sustainable alternatives' and new forms of practice that can be developed **in response** to the issues and risks that exist at the people-environment interface in the region. This can be seen in the programme's course materials and documents over the years. The most recent version of the SADC International Certificate Course





materials, for example, shows contextual engagement with these perspectives:

In our countries there are many examples of more sustainable alternatives that draw from our natural resources, but we often don't think of them in that way. Some of the examples in the readings draw from simple ways by which locals in Northern Namibia build houses using locally available materials. Today designers and technologists around the world are trying to develop strategies for building houses in more sustainable ways, using local resources and materials (green buildings). Africa has much to teach the world in this regard as there is expertise for producing affordable houses using locally available materials.²²

This reflects an internal re-orientation within the programme from primarily a contextually focussed issues and risk discourse, to a contextually, yet globally connected, alternatives and solutions discourse.

Another key feature of the conceptual orientation of the programme was its commitment to active learning approaches, and particularly the notion of 'open processes' of active learning. These approaches were developed in and through the ongoing work on learning and social change pioneered by Professor Rob O'Donoghue, who in the early days of the programme was a regular visitor at the SADC REEP centre, and who, in later years supported the programme with learning centred research when he joined Rhodes University. The active learning model (see Figure 1), by now famous in the SADC region, is so often used in courses, in attachment programmes, and in network linked activities associated with the SADC REEP.

This model of learning is based on a dialectical and situated engagement with environmental concerns, in which actors come to understand the issues and risks better through use of available or new information, through inquiries, and through action taking. As such it reflects a **situated and deliberative model of learning**. This is consistent with the

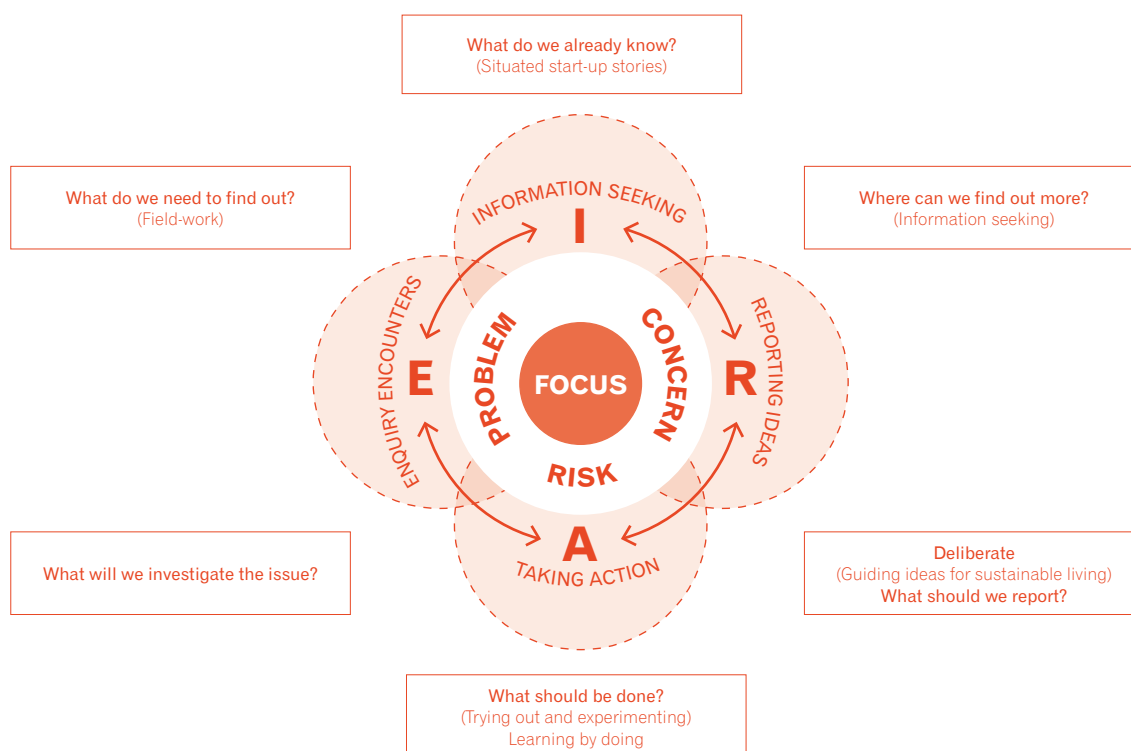


Figure 1: Active Learning Model (O'Donoghue, 2001)²³

programme's commitment to taking account of issues and risks, learning more about them, but also responding to them with alternatives, new actions and practices.

This concept of learning has, however, been broadened and enriched through research-based work on social learning approaches which theorise learning not only as a situated interaction in context (as the active learning model of O'Donoghue does), but broadens this view of learning to consider the dialectics of complexity and dissonance; and how one may engage some of the more difficult aspects of problem solving in wider societal contexts. These have come to be seen as important 'springboards' for new learning, and for taking account of diversity and collaborative meaning making in the learning process. Arjen Wals²⁴ work on **social learning**

has been significant in expanding the active learning framework's implications to a broader, societal engagement level, and actors engaged in environmental education in the SADC REEP may more often be heard asking questions about active social learning encounters in communities of practice than in earlier years.

It was one of the programme managers, Dr Justin Lupele who, through reflexive scholarly engagement with concepts of learning in the SADC REEP, brought the notion of communities of practice into play with SADC REEP's notions of learning. Current programme leaders Tichaona Pesanayi, Dick Kachilonda and Caleb Mandikonza are taking this tradition forward: they are reflexively engaging with the notion of expansive social learning, and are asking questions about how such learning

emerges and can be better supported in the diverse communities of practice in the SADC region.

These shifts in orientation, which also reflect an ongoing deepening of understanding and engagement with environmental education praxis, have been both supported by, and developed through the research component of the programme. This component sought to understand the regional context and needs surrounding environmental education programmes, and the types of responses required in environment and sustainability education programmes.

While the story outlined above may seem somewhat 'academic' as it shares how thinking about learning in the SADC REEP has emerged and changed over time, the importance of 'thought leadership' in guiding praxis can be noticed on the ground: in real projects where the active learning framework has been taken seriously, and where expansive social learning in communities of practice is being facilitated, with real outcomes on the ground. Roy Bhaskar²⁵, a world famous philosopher, would explain this **as achieving unity of theory and practice in practice**. He explains that it is necessary to do this if we are to attain a more sustainable, just world order. There are many examples, but one good example illustrates the point:

During the cholera crisis in Zimbabwe this approach to learning proved a 'turning-point' for many health workers and government officials attending an environmental education workshop. Caleb Mandikonza (SADC REEP Training Manager) using an experiment, was able to share information on how the cholera bacteria spread. He then shared possible solutions of how careful hygienic practices could eradicate the risk. Engaging with people's concerns; using a simple experimental process; and a concept of more sustainable alternatives, Caleb was able to support participants to come to a deeper understanding of the health risks and possible solutions associated with cholera.

Other examples abound. The change-oriented learning processes were integrated into the course designs of the SADC REEP, which has resulted in enhanced environmental learning and actions in many SADC countries. For example, Jacinta Assey, a school principal in Dar-es-Salaam, Tanzania embarked on a materials development change project which she used to transform the landscape of her school from an eroded dumpsite and uncontrolled human-made water channel, into an integrated landscaped green environment which the students are using for recreation and for environmental learning. The previously poor toilet system has now been linked to a working biogas plant which is now used to energise the school kitchen.

The use of ICT-enhanced environmental learning in the development of contextualised learning support materials in schools, government institutions and non-governmental organisations and networking has strengthened environment and sustainability education communities of practice. For example the change-oriented learning and action processes (change project approach) in Namibia by Maurice Nkusi, an ICT expert, and David Sampson at the National Institute of Education, resulted in the formation of a national EE/ESD network based on Google-groups. This has grown to regional proportions and has been instrumental in enhancing sharing of best practices and the exchange of environment and sustainability education knowledge, encouraging further sustainability actions.

REGIONAL CONTRIBUTIONS AND REGIONAL INTERACTIONS

Core to the shaping and framing of the programme were the SADC REEP National Network Representatives, established as an advisory group. For the past 15 years, they have ensured that the SADC REEP's programme addresses the needs of the SADC member states. They have regularly contributed to shaping the programme's strategies, vision, and documents. The Network Representatives have also made it possible for the SADC REEP to roll out its capacity building work through cluster activities which they made official, organised and hosted. Some of these Network Representatives have served the programme for virtually the full 15 years including Arabang Kanego (Botswana), Noël Kiaya Katiete (Democratic Republic of Congo), Lemohang Sekhamane (Lesotho), Anna Maembe and Bartholomew Tarimo (Tanzania). Other past and current Network Representatives include Vladimir Russo, Joaquina Caetano and Nascimento da Costa Alexandre (Angola), Dollina Malepa (Botswana), Dany Mpolesha (DRC), Mamasheane Motabotabo (Lesotho), Clement Tikiwa and Allan Kaziputa (Malawi), Doolaree Boodhun, Sarita Meeheelaul and Jaya Naugah (Mauritius), Vilela de Souza and Sónia da Silveira (Mozambique), Lesley Losper (Namibia), Jeanette Larue and Lena Desaubin (Seychelles), Isaac Dladla (Swaziland), Solly Mosidi and Thomas Mathiba (South Africa), Justin Mukosa and Chama Mwansa (Zambia), Johane Gandiwa and Steady Kangata (Zimbabwe).

There are many examples of how the SADC REEP National Network Representatives have helped to frame and shape the programme, including:

At the National EE Network Representatives meeting in July 2005, country representatives agreed to support an enquiry process related to the status of ESD in the SADC region, which they did effectively.

Between July and November 2005 Network Representatives organised national consultations in 13 SADC countries. These consultations involved over 600 representatives from UNESCO, Education Ministries, other relevant Ministries, curriculum development centres, higher education institutions, the private sector, NGOs and other key stakeholders from health, agriculture, environment and education. The outcomes from these national consultations were then summarised in four research reports that formed the basis of a series of policy briefs. Network representatives also play an important role in communicating the work of the SADC REEP in wider forums in their own countries. Such networking processes support greater sharing and alleviate uncertainties that may develop about the programme.

However, it is not only regional contributions to the core programme that have been important, but also the regionalisation of core components or aspects of the programme. This has been a core focus of the programme from the start. But it has not been easy to achieve, as funds for regional applications in nation state countries (beyond small-scale seed funding) was not part of the regional programme focus. Often it is also erroneously expected that a regional institution such as SADC can do the work of the nation states. But their mandate and responsibility lies at the level of regional co-operation, and can therefore only extend to providing guidance and support for nationalisation of agreed-upon regional strategies and approaches. A primary function of a regional programme such as the SADC REEP is therefore to provide orientation and guiding support, but not implementation actions in nation states. Capacity building and networked support therefore becomes an important objective and contribution of a regional organisation such as the SADC REEP, and it is around this activity that major achievements in regionalisation have occurred.

Nation states, through their interactions with SADC REEP activities, have taken up various roles and

responsibilities for implementation of environmental education in specific countries. They have, however, received support from the SADC REEP in various ways, in its capacity as a regional organisation. There are numerous examples of how this regional-nation state relationship has emerged, and has functioned through interactions with the SADC REEP, although the full scope of the relational impact of a regional programme such as the SADC REEP will remain difficult to establish.

One of the most critical and enabling features of the SADC REEP's work has been its capacity to leverage opportunities for regional interaction. In all of its training programmes, networking activities, research programmes and policy activities, the principle of multi-state participation has been a key feature. This has constantly allowed environmental educators from diverse SADC countries to meet. Today, a network of no less than 2000 environmental educators across 14 SADC countries exists, many of whom not only know each other in passing, but who work actively together in sustained ways. Without a regional programme such as the SADC REEP and its regional mobilisation capacity, this interaction would not have been possible, and regional knowledge sharing and co-operation would not have taken place.

Examples here are the communities of practice that arose in the SADC REEP network, due to capacity developed by SADC REEP but are operating largely independently of SADC REEP interventions. The Zambian Network for Teacher Education Institutions in Education for Sustainability (ZANTEIS) is one case of Teacher education network in the region operating at the Member State level and yet with regional influence. This Zambian network is coordinated by Evaristo Kalumba, a lecturer in a teacher training college who developed capacity for EE/ESD through participating in the SADC REEP Course Development Network, the Rhodes/SADC International Certificate in Environmental Education Course and more recently in the

SADC REEP research network. Other examples which demonstrate aspects of this nation-state/regional relationship, include the collaborative work that took place between the Zimbabwe Ministry of Higher and Tertiary Education, led by Mr Abraham Mashumba, and the Zambia Curriculum Development Centre in developing the Zimbabwe ESD curriculum for the Technical and Vocational Education and Training Colleges. This was developed through self-sponsored visits to each other, after being brought together by the International Training Programme through SADC REEP. This interaction and cooperation took place without the prior knowledge of the SADC REEP staff. Many other similar examples exist.

ENVIRONMENTAL EDUCATION HISTORIES AND RELATIONAL GOODWILL

These framing issues reported on here are, of course, all framed by the larger history of environmental education in the SADC region at the time of the programme's establishment. Core here was the role of the Environmental Education Association of Southern Africa (EEASA) which had established itself 15 years earlier than the SADC REEP, and which had already developed substantive regional interactive practices. The concept of the SADC REEP was, for example, first debated at an EEASA Conference in Windhoek in 1993. Many of the members of EEASA have also been strong contributors to the work of the SADC REEP over time. EEASA conferences and the *Southern African Journal of Environmental Education* have been supported by the SADC REEP, but have in turn, also supported the SADC REEP, particularly in its networking and communication roles.

Another strong contributing regional shaping influence



was the Rhodes University Chair in Environmental Education, established in 1990, initially under the capable leadership of Dr Eureka Rosenberg and subsequently Professor Heila Lotz-Sisitka, to develop the praxis of environmental education in the southern African region. This Chair has worked closely with the SADC REEP since its inception, sharing its conceptual capital and resources with the regional programme, particularly in its establishment years. This relationship has been sustained throughout the life of the SADC REEP, contributing in an ongoing manner particularly to the capacity building and research components of the programme. In the last five years, the SADC REEP has expanded the network of research chairs that support its activities, and has actively supported the establishment of research chairs at the University of Zambia, the University of Botswana, and the University of Swaziland to further spread leadership capacity across the region.

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"A network of no less than 2000 environmental educators across 14 SADC countries exists, many of whom not only know each other in passing, but who work actively together in sustained ways."

.....

There are also a range of other equally important organisations that have shared their conceptual capital and resources with the SADC REEP, in its early years of establishment. These include the Mokolodi Environmental Centre in Botswana, the Wildlife Society of Malawi, the Swaziland Environmental Trust, the Environmental Learning Forum, Environment Africa, and Mukuvisi Woodlands in Zimbabwe, the Malawi College of Fisheries in Malawi, the Ecological Youth of Angola (JEA), the National University of Lesotho in Lesotho, and teachers' colleges in Zimbabwe (amongst many, many others). Without the goodwill and contribution of these organisations, and the histories of environmental education that they had established prior to the emergence of the SADC REEP, the SADC REEP's work, and consequential impact, would have been much more limited. Thus, the 15-year story of the SADC REEP is deeply and intimately embedded in the longer history of EEASA, and all the regional organisations that had developed environmental education praxis, on which the programme could build and draw.

It is perhaps fitting here to see the SADC REEP's growth and development within the spirit of 'Ubuntu' which means 'I am because you are'. The SADC REEP, as it is today, is because of its regional partners and the organisations that have provided goodwill, relational competence, conceptual capital, human competence and so many other dynamics to the functioning of the SADC REEP. Similarly, the goodwill of the Swedish people, whose taxes have provided the much needed financial capabilities, has enabled the SADC REEP to function.

These relational 'goodwills' need to be recognised, and valued in the reading of this story. So often they go unreported, yet they are vital for the ongoing successful framing and functioning of a programme such as the SADC REEP. Without these relational 'goodwills', learning for a sustainable future, in any context, could not take place.





03 CHANGING POLICY

"Policy development processes for ESD will need to be multi-sectoral and multi-disciplinary, and be inclusive of the range of stakeholders that are actively contributing to ESD in southern Africa. Multi-sectoral policy development processes require co-operative governance and special efforts to ensure policy synergy. Key sectors that need to be involved in ESD policy making are: Education and Training, Public Awareness and Communication, Natural Resources and Environment, Social Welfare and Culture, Health and Economic Affairs, and the Energy Sector (at the very least). Ideally the Education and Training Sectors should act as 'lead agents'." (SADC REEP, 2006, 6)²⁶

SETTING OUT

Changing policy is a complex task, which relates to the roles of different players in the policy development system. A regional organisation such as SADC can make policy at a SADC level, to guide regional integration and co-operation, but it cannot make policy at the level of the nation state. Similarly, a global organisation such as UNESCO can make policy at an international level to guide internationalisation of key ideas such as human rights. UNEP can facilitate international policy making such as the multi-lateral agreements that govern trans-boundary environmental management activities such as the Convention on Biodiversity or the Kyoto Protocol which has been deliberated so intensely over the past few years. SADC, a Regional Economic Community, therefore sits 'in between' these levels of policy – the international level of policy and the nation state level of policy. A question that has guided the SADC REEP's policy change work over the life of its existence has therefore been "What responsibility for policy and policy making can and should the SADC REEP take up?"

Policy making is a multi-levelled, complex process that often has to cross boundaries. Thus, a second core question associated with the policy change mandate and responsibility in the SADC REEP, is related to where the policy development work ought to focus.

In the context of environment and sustainability education, policy making is a multi-sectoral process. Ever since the programme's inception, therefore, it has had to work with two major sectors: the environmental sector and the education sector. This may seem easy to do. But one needs to consider that the environmental sector is a relatively new sector, with many new policies in a range of different areas such as water, waste, biodiversity, pollution control and land use management (amongst others). The education sector is an older, more established sector

with critical issues of its own (provision and quality of, for example, basic education, technical and vocational education, and higher education). It is not easy to find the 'cross over' points where environmental policy makers can meet educational policy makers to make 'new policy' that is embedded in other policy priorities and directions.

This multi-sectoral nature of policy making in the environment and sustainability education context has probably been one of the most intractable issues facing those with an environmental education / education for sustainable development policy interest such as the SADC REEP. It is not only a SADC level issue, but is characteristic more broadly of the field of environmental education / ESD policy making, as was noted in the first UNESCO Global Monitoring and Evaluation Report for the UN Decade on Education for Sustainable Development.²⁷

Added to this, is the question of multi-levelled policy making. Is it effective to support schools to make local level environmental policies and management plans to guide practice on the ground in schools? Or is it more effective to impact on national level curriculum policy, which shapes all teacher practices in the country? Even more significant, is it more effective to develop a national environmental education / ESD policy that influences all aspects of the education and training system such as higher education, early childhood education and basic education all at once? And if this is the case, how does this get done practically?

Early on, it was decided in the programme that the SADC REEP could only realistically work with an **enabling approach** to policy making, and could support nation states to deliberate, review and revise their policies through encounters with regional stakeholders who were aiming to do the same. The SADC REEP's policy change work was therefore **facilitatory, enabling and supportive, rather than instructive or policy development per se.**

The first major policy related activity that the SADC REEP engaged in was the IUCN-NETCAB project. The IUCN-NETCAB project was managed by Kim Ward (WESSA) and supported by USAID and IUCN. In essence, it sought to strengthen environmental education processes in Botswana (through school environment policy processes), environmental education for industry processes in Malawi (Autman Tembo), environmental resource materials development in Mauritius (Jaya Naugah) support for a qualifications setting processes in South Africa (Nomfundiso Giqwa) and an environmental education policy development programme in Zimbabwe (Kathy Stiles and Soul Shava).

Following this early policy project, the programme developed a number of key strategies used within the **enabling approach** to policy which included:

Co-operative policy workshops where policy concepts and processes were discussed, and individual country based policy initiatives were reflexively reviewed, and were strengthened through regional understandings and interaction.

Development of environmental education policy guidelines which drew on existing experience of environmental education policy making at regional level.

Seed funding support for national level policy development which provided small amounts of funding to enable national level meetings and policy development deliberations.

This set the trend for SADC REEP's policy change work. It tended to continue supporting policy development praxis using an enabling approach, working with mid-level policy makers who were primarily developing policy at multiple levels, where policy making leverage could be mobilised. This approach, while strong on mid-level praxis, lacked high-level policy engagement. Thus the programme did not manage to achieve substantive policy outputs at higher levels of policy development, both at nation state level and at regional policy making level.

EXPANDING CAPACITY AND LEADERSHIP

The SADC REEP's enabling and facilitatory role described above, and the complexities surrounding levels and sectoral aspects of policy making, became a strong focus of the second five-year term of the SADC REEP. Funding for these kinds of policy activities was difficult to secure, since most countries already had national policies or were in the process of developing them.

The mid-term review of the programme in 1999²⁸ noted that this was surprising, given the priority placed upon policy development by delegates at regional workshops and the fact that environmental education policy development and implementation processes in the SADC countries were still embryonic. Fortunately, funding from DANIDA enabled the development of the SADC Regional EE Support (SADC-REES) project, which was able to strengthen environmental education policy processes in five DANIDA priority countries (namely Lesotho, Namibia, Swaziland, Botswana and South Africa). Through this, the programme was able to maintain its interest in environmental education policy development in the region.

Both the mid-term review of 1999 and an evaluation conducted in 2005 suggested that "the demands for the programme to not only expand in the sectors in which it is currently operating, but also to extend its reach even further, are an indication of exceptional relevance on the ground". At SADC-FANR Margaret Nyirenda, Nyambe Nyambe, Alex Banda and various other colleagues provided invaluable support for the ongoing policy related work of the programme, which after 2002 were funded by Sida. During the DANIDA-funded period, policy work in the programme was given a 'boost' through the appointment of a dedicated policy co-ordinator. Experienced policy maker from the SADC Environment and Land Management Sector, Dr Charles





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"It is not easy to find the 'cross over' points where environmental policy makers can meet educational policy makers."

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Obol was appointed to the programme. His main task was to review progress that had been made with environmental education policy in the region, and to influence higher level policy at the level of the SADC Secretariat.

A policy audit was produced in 2004, as part of an effort to strengthen environmental education policy and capacity in the region. This led to the inclusion of environmental education as a recognised activity in the SADC Regional Indicative Strategic Plan in 2004 (under Intervention Area 6, Environment and Sustainable Development), which stated:

To achieve these objectives, measures have been taken to monitor and guide all sectors on the implementation of environmental policies, strategies and programmes; promote sound environmental management through pollution control, waste management and environmental education"... and ... a commitment to ... "strengthen environmental education in all sectors".²⁹

Another 'policy boost' came through the programme's participation in the World Summit on Sustainable Development. Although there was little possibility to actually **contribute** to policy making or policy change through this event, it was an important opportunity for raising policy change awareness. The SADC Network Representatives were supported by the SADC REEP to attend the Summit. At the Summit, relationships were developed with senior officials from countries such as Angola and this led to greater collaboration between the SADC REEP, Angola and Mozambique.

The policy audit³⁰ prepared by Charles Obol and Irma Allen in 2004, revealed that applied and integrated policy processes were lacking. Follow-up to this policy analysis has taken a number of forms, and the programme responded to the challenge seeking to provide broader leadership and capacity for policy making. The programme manager at the time, Mumsie Gumede took this component

seriously enough to undertake substantive research on the policy making processes associated with the SADC REEP at regional and nation state level.

Other policy researchers in the region, especially Dr Mphemelang Ketlhoilwe also contributed valuable insights into environmental education policy developments in the region. The SADC REEP evaluation at the end of this period (2005)³¹ recommended that the programme continue to provide policy support. It recommended in particular that seed funded support for country level policy development, and policy interpretation support be continued. Additionally, the evaluation recommended that the programme "seek more sophisticated ways of understanding and approaching policy work". It also recommended interpretation of, and engagement with, the UN Decade of Education for Sustainable Development.

Following this, and drawing on Mumsie Gumede's policy leadership and knowledge, the SADC REEP took up a role of engaging proactively with the UN Decade of Education for Sustainable Development. In 2006 the SADC REEP undertook a 12 country consultation in which countries were asked how they could foresee participating in the UN Decade of Education for Sustainable Development. This led to the publication of four documents, one of which focussed on policy and policy recommendations.³²

The focus on policy outputs, and its engagement with the UN Decade of Education for Sustainable Development (DESD), also enabled the SADC REEP to establish a strong partnership with UNESCO (the lead agency for the UN DESD) at a regional and international level. These efforts complemented the implementation of the Environmental and Sustainable Development Operational Plan of the SADC-RISDP. Environment and natural resource management was also strengthened through environmental education processes, information exchange and the exchange of expertise amongst SADC member states.

Thus, by 2006, the SADC REEP had not only developed an understanding of its policy development role (and the limitations thereof), but had also pro-actively sought to develop leadership and capacity for policy change within the region. It continued with its enabling policy change activities, supporting seed-funded initiatives in diverse countries where there was an interest in policy making praxis. It also sought to provide a broader regional **understanding** of the status quo of environmental education policy making, and to make regional level policy contributions.

The SADC REEP also took up a mediatory role, between UNESCO and its international implementation scheme, and the SADC nation states in engaging with the propositions and possibilities of the UN Decade of Education for Sustainable Development. This, it was argued, was necessary if environmental education was to be strengthened through engagement with development questions and concerns, and if the SADC REEP were to remain 'relevant' in the face of the fairly hegemonic emergence of ESD in international discourse, policy and funding circles. One of the struggles experienced by the programme in this phase was its ability to reconcile the histories of environmental education which were important to its identity and praxis, and the somewhat ahistorical approach to environmental education adopted by global Education for Sustainable Development (ESD) discourses and players. This problem was exacerbated by international players who sought to describe environmental education as 'nature studies only', writing mainly from their experience of nature study based environmental education experiences. This, perspective, however, was viewed as wanting in southern Africa: here environmental education's roots were to be found not only in conservation education, but also in development education and a strong understanding of the social-ecological nature of environment and sustainable educators in SADC therefore continued to recognise the importance of environmental concerns in ESD,



and mostly settled for the use of 'environment and sustainability education', although ESD is used interchangeably in contemporary policy discourses.

From this phase, in which the SADC REEP pro-actively sought to provide enhanced leadership and capacity for policy change, new insights were gained into the policy process. While this was the case, the programme's own reflexive reviews indicated an ongoing dissatisfaction with its capacity to make a 'high level' impact at policy level.

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"Another 'policy boost' came through the programme's participation in the World Summit on Sustainable Development."

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EXPANDING IMPACT

Building on this history, in the last five years of the programme's operation (2007-2012), the emphasis has been on seeking out ways of strengthening policy impact. The programme has developed a series of new strategies to strengthen policy impact, all of which have been pioneered and led by the new programme manager, Tichaona Pesanayi. These strategies have included:

Ensuring closer interaction with key SADC and education policy making structures, such as the SADC Education and Skills Development Programme. This has led to the inclusion of SADC REEP ESD work in the Annotated Agenda of the SADC Ministers of Education. It has also led to greater regional involvement of SADC curriculum directors in ESD processes, and to the possibility of the Eastern and Southern African Curriculum Organisation (ESACO) contributing to a proposed SADC Technical Committee on ESD curriculum.

Developing materials and training components that focus directly on understanding and use of policies that guide environment and sustainability education praxis at regional and nation state levels. The emphasis here has been to strengthen regional co-operation and understanding of SADC level policy and how it interfaces with national level policy making. This is built on the 2005 evaluation finding that an important role of the SADC REEP was to build capacity for policy interpretation.

Working more closely with international organisations such as UNESCO, and providing mediating support at a regional level for engaging with the UN Decade of Education for Sustainable Development. Examples of practice here include the collaborative development of *Policy Dialogue* documents with UNESCO which have been used and translated for use at regional level; and supporting the UNESCO

Windhoek Cluster office and the UNESCO Paris office to test out core materials designed to support policy makers. A key example is the partnership established between UNESCO and SADC REEP to pilot test the UNESCO ESD Lens³³ materials which are being used for curriculum policy review and development.

Running policy workshops at nation state level to pro-actively provide support for nation state policy initiatives. This has led to significant policy contributions at nation state level, for example the ESD Policy and Strategy in Lesotho (2009) and Namibia (2012). The latter strategy benefitted considerably from lessons and technical support from Lesotho, through SADC REEP facilitation. Both strategies are signed by either the Principal Secretary (Lesotho) or the Minister of Education (Namibia), which is significant for education sector leadership for ESD.

These approaches to policy making and policy change have been strongly directed towards enhancing policy impact. But the programme also realised that it lacked adequate information on issues associated with capacity development for policy implementation and impact achievement. This seemed to be a key 'missing ingredient' in the search for attaining policy impact, as desired by the programme. A regional capacity assessment was therefore commissioned to provide this understanding. This recent contribution (2012) confirmed that there were substantive 'lacks' or absences in relation to capacity for policy development and implementation in the SADC region, particularly as these related to environmental policy implementation. The capacity assessment also noted the importance of developing environmental education capacity to enhance other forms of policy implementation. For the first time, the role of environmental education as *substantive policy implementation* support was brought to the fore.



LESOTHO: STORY OF CHANGE

We have been engaging with the SADC REEP since 2001 and some of our people have participated in different training courses such as the international certificate course in Environmental Education, and the International Training Programme. Through networking, we have learnt a lot. The development and launch of our ESD Strategy in 2009 with the help of the SADC REEP seed funding of R25 000, *has been the most significant change because it gave us directions in the implementation process*. There has also been wider public sensitisation and people are now cautious about what they do. We have registered a network in Environment and Sustainability, we hosted the EEASA Conference in 2011, and have done many other things to strengthen environmental education and ESD.

NAMIBIA: STORY OF CHANGE

Engagement with the SADC REEP started in 2001. It supported the development of Namibia Environmental Education Network (NEEN). Since that period to the present, Namibia has been sending teachers and educational officers for short international courses in Environmental Education and Education for Sustainable Development. This situation has built capacity and developed skills in EE and ESD. We started working on the Namibia EE policy linked to ESD strategies, and we have established a Regional Centre of Expertise (RCE) with SADC REEP support. The significant changes have been recorded in different ways. For example, the Environmental Education Centres at Namutoni in Etosha National Park and Okatjikona in Water Bell National Park are now being run by people who participated in the international certificate training in SADC/Rhodes EE and ESD course. There has also been a significant production of learning resource materials for the youth, which was funded by the SADC REEP. *The most significant change has been the development of the NEEN Google group to share ideas and information in EE and ESD. Through networking and frequent sharing of EE and ESD information, several stakeholders, the government and individuals in Namibia have joined EE and ESD activities. During the revitalisation of NEEN conferences in 2010, between 80 and 100 people were in attendance and this gave an impetus for agency in EE.* There has also been an increase in the number of applicants to courses offered by the National Environmental Education Centre. This was due to massive publicity about EE and ESD in the media. Tutoring on the NEEC courses has helped us with reflexive skills in order to meet the needs of the participants. Moreover, the staff at the University of Namibia have come to appreciate EE and ESD through the SADC REEP. There has been EE collaboration and development of Bachelors of Arts in Education (BA.Ed) and Masters of Education (M.Ed) in EE. The drafting started in 2010 and is currently undergoing review by the University of Namibia. ESD is being mainstreamed into four national colleges of Education and Vocational Training Centres. It is only this year (2011) that MoE and the University of Namibia are closely collaborating on matters of EE and ESD and this could partly be attributed to the SADC REEP in supporting educational policy processes and activities.

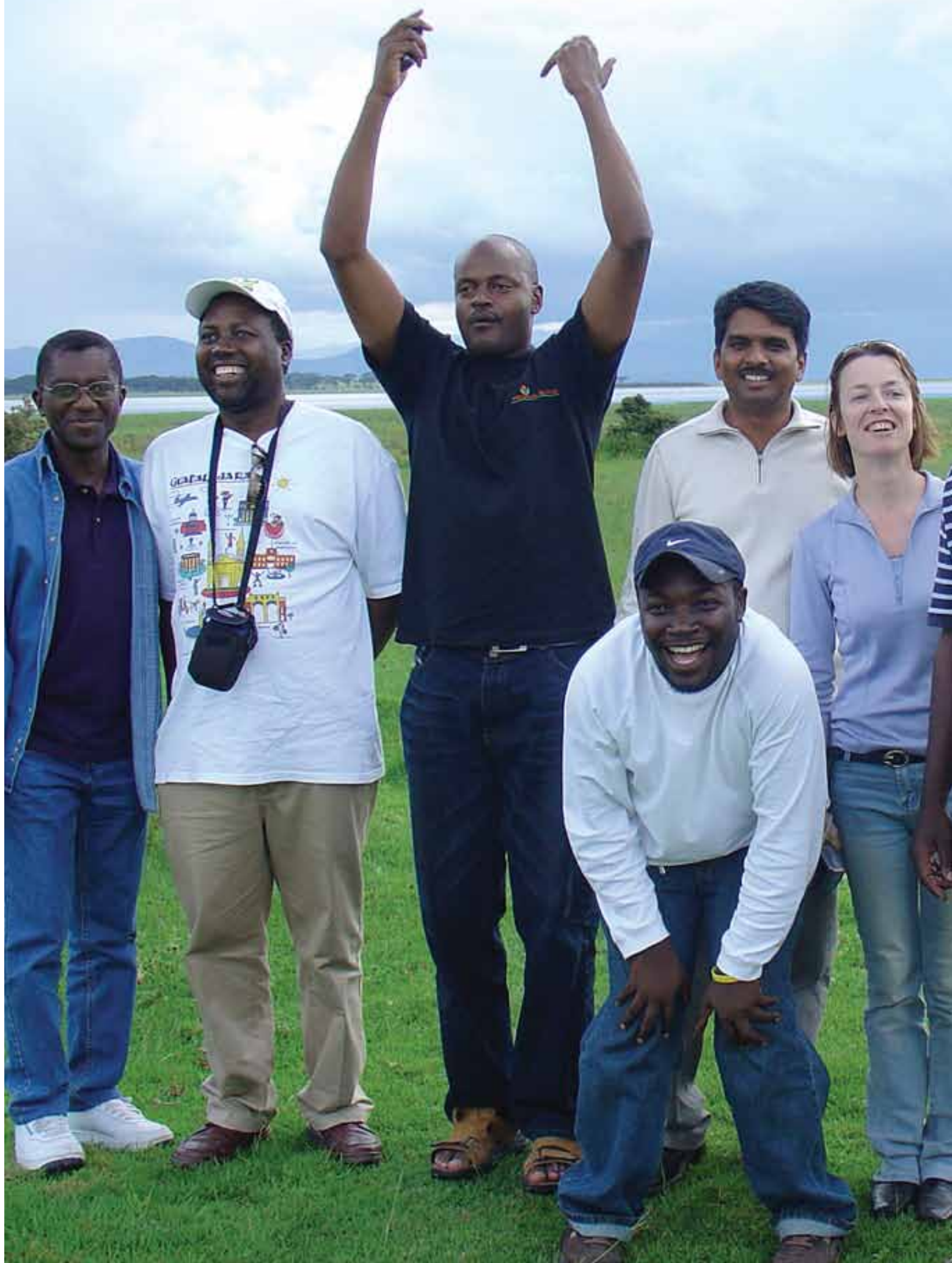
IN SUMMARY

In summary, the story of policy change in and through the SADC REEP shows that the programme has a) sought to understand its role in the policy making process and b) sought to actively develop capacity and leadership for policy change in various ways. The story above is a reflexive one, as well as a story of ongoing struggle with a difficult area of practice, due to its multi-levelled, and multi-sectoral nature. It is also an area of practice that is power laden, and for high impact, requires engagement with high level structures.

In some ways, the SADC REEP's mandate for policy change may have been somewhat ambitious for its actual role and level of capacity in the policy hierarchy. But in other ways, if the sum total of the policy change achievements were to be carefully documented, analysed and interpreted from a critical policy studies perspective, combined with a networked policy systems perspective, the results may well be surprising.

It may well be that the programme has not (yet) developed the reflexive tools necessary to fully understand its policy role and impact. This leaves the door wide open for a more sophisticated development of the policy change role of the programme in future. It is hoped that the programme's summative evaluation could shed further light on this important feature of societies learning to create more sustainable futures, using their structural tools such as policies.







04 BUILDING CAPACITY

"The diverse issues and educational contexts within the SADC region require that a range of educational processes are supported through the Regional Environmental Education Programme ... the training must provide opportunities for environmental education practitioners to share and build capacity amongst themselves ... The Programme needs to respond to the training needs of a broad and diverse range of practitioners including teachers, journalists, conservationists, government officials, and community members (amongst others)". (SADC REEP, 2002, 42)³⁵

SETTING OUT

A programme oriented to developing environmental education across 14 countries could not be conceptualised without a strong training and capacity building element. This element has probably been the primary or the most substantive of all of the SADC REEP programme elements. The programme has literally run on average five to ten regional training programmes every year since its inception. These have been powerful 'community builders' and have created the substantive intellectual and reflexive space for environmental educators across the region to meet, and to deliberate what it means to practise environmental education within a regional context.

Thus, from its inception the programme needed a training and capacity building model that could bring environmental educators working in a diverse range of contexts and countries together to develop their own practice, while also developing and building an emergent understanding of what environmental education might look like within a region with its particular environmental issues and risks, environmental features and contextual challenges (e.g. poverty, food security, educational quality etc.), highlighted elsewhere in the story above.

In setting out, the SADC REEP, decided to form a partnership with an established programme that had been developed through an already existing five-year partnership with Rhodes University (the Rhodes University / Gold Fields Participatory Certificate Course) and with WWF International (who had funded the application of this model for a two-month SADC level training programme) based on some of their earlier investments in providing in-service professional development to environmental educators in Glasgow, Scotland. By the time the SADC REEP was established, the first Rhodes University / WWF International Certificate in Environmental Education had been pilot tested as a Rhodes University / WESSA implementation

partnership under the leadership of Dr Eureka Rosenberg, Chair of Environmental Education at Rhodes University and Dr Jim Taylor, Director of Environmental Education at WESSA.

In 1997, the year in which the SADC REEP was established, the first Rhodes University / SADC International Certificate Course was run in partnership with the SADC REEP office at Howick. Fourteen course participants, one from each SADC country, participated in this course. Access to the course was on a competitive basis. Each year past course participants from diverse countries assisted with the selections, identifying those mid-career professionals with potential or proven leadership capacity in environmental education. From this has grown a strong cadre of environmental education leaders in the SADC region, some of whom have gone on to become national, regional and international leaders in environment and sustainability education.

Since 1997, the course has run every year, and in 2012 the SADC REEP and Rhodes University will celebrate the 15th year of the annual Rhodes University / SADC International Certificate in Environmental Education. Since the start, this course has been seen as the 'flagship capacity building programme' of the SADC REEP. It has been a central space for leadership development and growth in the SADC REEP. By 2012, approximately 225 mid-career environmental education professionals in the SADC region would have completed this course.

Of significance was the curriculum design of this course, which enabled ongoing reflexive practice, learning of new theory and concepts relevant to environmental education, and application and reflexive engagement with these in contexts of practice. Each educator that attended the course also implemented a substantive 'home-based' change project, thus contributing not only to the educator's professional development, but also to institutional development in home workplace contexts.

The SADC REEP did not, however, focus on this as the only training and capacity building initiative. Early on it instituted shorter 'attachment programmes' which were run initially by Vladimir Russo and Sanele Cele, and later by Shepherd Urenje and Caleb Mandikonza as a 'key offering' for further regional interaction and capacity building. These programmes, offering practice-centred experiences where professionals could work on a resource or a project of their choice with support of others, led to the development of a large range of materials for use in environmental education programmes. It also ensured integration of the materials development and training components of the programme.

Added to this were workshops designed to address specific topics of interest to environmental educators. For example, early on in the programme a workshop was hosted on indigenous knowledge and environmental education, led by Eureka Janse van Rensburg, Soul Shava, Sibongile van Damme and Rob O'Donoghue. There have been a number of these workshops hosted by the SADC REEP over the years, with many of them run in the different SADC countries.

EXPANDING CAPACITY AND LEADERSHIP

With these models of process and established programmes at hand, the SADC REEP was able to expand their capacity development programmes, and simultaneously, develop further leadership for capacity development across the region.

One of the features of the Rhodes / SADC International Certificate Course was its principle of building capacity for running training programmes. Each year two course participants were offered the chance to be course tutors in a following year, and those who developed a keen interest in course development and design were often offered places on the Rhodes

University Masters Degree Programme where they could further their expertise in issues associated with course design and development. It is through such processes that course participants and tutors such as Mike Ward, Heila Sisitka, Vladimir Russo, Justin Lupele, Cryton Zazu, Lausanne Olvitt, Tich Pesanayi and Caleb Mandikonza, amongst others, have gone on to design, develop and support other training programmes in diverse contexts in the region. The SADC REEP programme therefore provided not only a training programme, but a model of process for in-service professional development course design. Through this, course tutors and facilitators were able to learn not only how to run such courses, but also how to design and expand them.

By the early 2000s there was a high demand for the design and development of new environmental education courses in the region, and the SADC REEP's capacity to respond was too limited. In response, the programme raised additional funding from the Danish Foreign Ministry to establish a Course Development Network, involving some 12 course developers from across five SADC countries. The course development network hosted a number of cross-country deliberations on the processes of designing, running and evaluating courses, which led to the development of a number of sourcebooks for course developers. Led by Dr Justin Lupele this network grew in strength, and offered its insights into course design and development widely including at an international level, at the World Environmental Education Congress in Portugal in 2003. It was here that the United Nations Environment Programme, based in Kenya, encountered this 'home-based' expertise on the African continent, and invited the SADC Course Development Network to play a key role in founding the Mainstreaming Environment and Sustainability in African (MESA) Universities Programme in 2004, as one of UNEP's flagship programmes for the UN Decade of Education for Sustainable Development. This substantively expanded the impact of the SADC Course Development Network to a regional level.





Principles developed in the capacity building programmes of the SADC REEP were shared at regional levels, and provided the framework for the MESA ESD Innovations Programme (which has been used to train over 200 university professionals), and for Sida-funded International Training Programmes. The International Training Programmes were co-ordinated by Ramboll Natura and now NIRAS – one for Formal Education (which has trained over 800 professionals in Africa and Asia since 2000) and one for Higher Education (which has trained over 200 professionals since 2008). Both training programmes have expanded not only to Africa, but also to the Asian continent, providing African participants with valuable North-South-South interaction opportunities. In all these programmes, the 'home-based change project' concept has been retained and developed. It is now a 'signature feature' of capacity building offered through or in association with the SADC REEP. Some examples of the impact of this training model are listed below:

In Namibia, Liina Nantinda from Hochland High School, developed a booklet called *My Carbon Footprint* and was invited, by the Prime Minister of Namibia, to present the resource at the COP15 summit in Copenhagen in December 2009. The Namibian Minister of Education requested Liina and her school to assist in sharing the resource and associated climate change activities in other schools across Namibia. This project proved so successful that Liina and her resource were invited to join the official delegation to COP 16 in Mexico.

Justin Lupele, completing the SADC International Certificate course in 1999, adapted the SADC course for WWF Zambia, and ran the course for a number of years for teachers in his home country. Later he led the SADC Course Development Network, and contributed to the design of the Mainstreaming Environment and Sustainability in African Universities Programme before serving a term as SADC REEP programme manager. Following this he applied these course development skills to a national programme for Educational Leadership and Management in Zambia, which included a component on ESD.

Cecilia Mukundu at the University of Zimbabwe, completed the SADC International Certificate course, and improved her teaching approach to the topic of "Nutrition" by including practical activities of sustainable gardening: vegetables grown organically in used vehicle tyres, used buckets and old bags, to produce nutritional foods at household level.

Cecilia Nkwabi, working for the Tanzania National Parks at Serengeti National Park, in the outreach section, worked with learners in schools to integrate practical indigenous seed germination and seedling care into the teaching and learning experiences. The seedlings were used for tree planting activities in schools and communities. Thousands of trees have been planted.

Mbatshi Malibamba from a primary school in Botswana worked on whole school improvement that has integrated classroom learning to school greening. The school now has indigenous plants as well as productive exotic fruit trees such as oranges and paw paw that are grown and tended by learners as part of their classroom experience.

Bernice Sethebe from a primary school in Botswana has led a school greening process: her school has a vibrant solid waste management system, especially regarding recycling. Learners produce artefacts such as hats, skirts, blouses, from waste materials such as plastic and jute bags.

These examples show that the change-oriented learning outcomes emerge at different levels and have different impacts, depending on the scope and focus of the participant's experiences, practices and institutional mandates. All lead to changes at the personal professional level; the institutional level; and all reflect changed education-society-environment relationships. They demonstrate at a micro-level how a regional environmental education programme can, through capacity building, contribute to the transitions needed for a more sustainable society, as outlined by SADC, through real changes in practice and influence.

Out of the MESA initiative developed in partnership with UNEP, the SADC REEP also supported a regional MESA network of SADC universities. Many of these universities are engaged in course design activities, following on from earlier work in the Course Developers Network. Thus, while core capacity building activities such as the Rhodes University / SADC International Certificate programme have continued faithfully in the 'middle years' of the SADC REEP, so did expansion of programmes, and the emergence of leadership for course development and design in environmental education.

EXPANDING IMPACT

In the past five years of the SADC REEP, the early capacity building programmes such as the International Certificate course and the attachment programmes have continued to remain key features of the programme. Additionally, however, there have been further initiatives to expand the course design model and a broader range of focus areas have been included in the capacity building programme of the SADC REEP.

The training programmes have also, in the past five years, been more strongly developed to 'nest within' networks of course developers, materials development activities and relevant partners and partnerships. This provides a stronger 'systems environment' for the courses and their sustained implementation. For example, a SADC / UNESCO teacher education network was formed in 2008 around a capacity building course for teacher educators. Using the situated, reflexive change project model of professional development, teacher educators participating in the programme have continued to meet in a network structure, and have been supported by the development of a teacher education workbook. Courses have also been offered in different country-based sites, with the

MESA Chairs offering strong institutional support. For example, a climate change course for Higher Education participants was offered at the University of Botswana in partnership with the MESA Chair for Policy and Curriculum. This was linked to the Southern African Vice Chancellors' Association emphasis on climate change and development in Higher Education, and to the regional MESA network of universities, where deliberations were held on how climate change issues can be integrated into university courses at these universities.

Additionally, the core course materials that inform many of the other courses and their design have been improved and updated to align with new thinking and practice in the field of environmental education. For example, recent course materials provided insights into new science such as resilience science, the results of the Millennium Ecosystem Assessments, new development pers-

pectives (e.g. capabilities and sustainable development), new issues and risks (such as climate change and loss of ecosystem services), and new theories and approaches to learning and environment and sustainability education (such as social learning and ESD). Developing the conceptual capital of the capacity development programme has probably been as *important* as the development of the scope and expanded impact of the programme. This has enabled the expansions of the programmes to be informed by **an important emphasis on quality and relevance**. Ongoing research into **the model of professional development** (see Figure 2) using the change oriented learning process of reflexive engagement with home-based change projects has been equally important. This has ensured relevant applications of the courses in local contexts, and the development of reflexive professional competence, and institutional developments.

EMERGENT, REFLEXIVE MODEL OF PROFESSIONAL DEVELOPEMNT

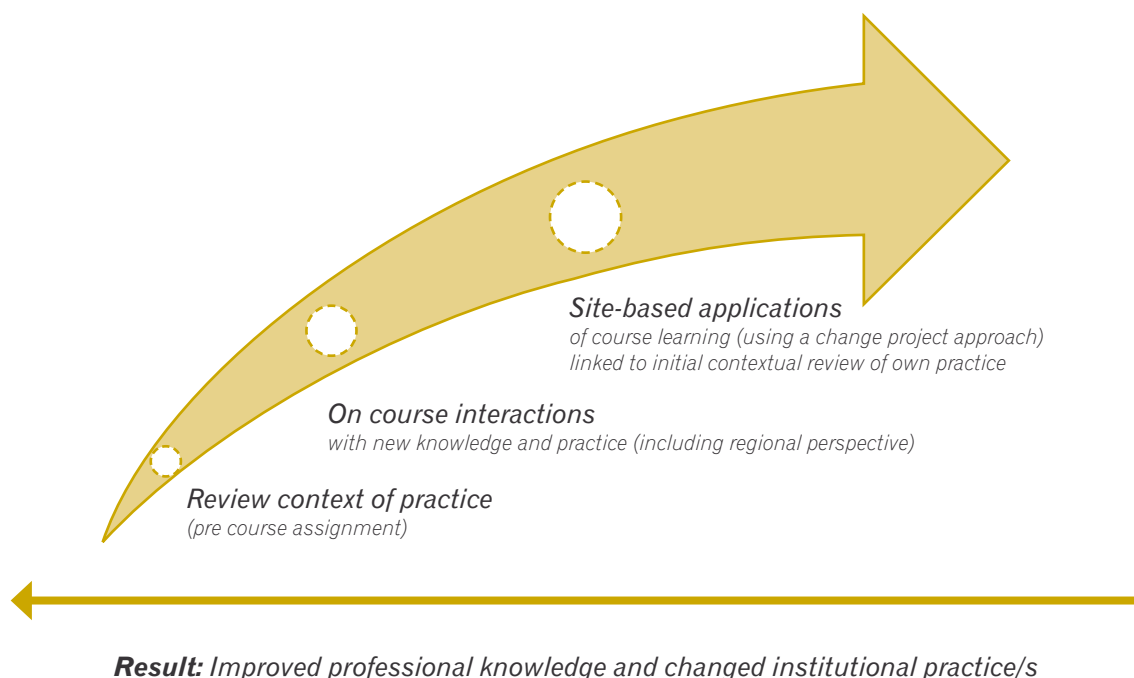


Figure 2: An emergent, reflexive model of professional development

As mentioned above, this model has been used and further developed in a number of international training programmes that are affiliated with the SADC REEP, including the recently established Swedish International Centre of Education for Sustainable Development (SWEDESD) programme based in Gotland, and funded mainly by Sida. SWEDESD adapted the change project model for use in its teacher education programmes, and in its urban sustainability capacity building programmes. The model has also now expanded to inform the Global Universities Partnership for Sustainability's partnership International Training Programme with Sida, and it is possible to find a number of Asian universities also using the change project model in developing their environmental education praxis.

The capacity building component of the SADC REEP has been extensive. It has had an impact via the practices of all those who have participated directly in the training programmes. Their numbers are in excess of 1 400 (trained at the SADC REEP); with at least as many trained at a regional level (it is not easy to calculate the full scope of reach). Additionally however, the programme appears to have had an impact beyond capacity building of those accepted onto the many capacity building programmes run by the programme itself.

Through its investment in course design research and capacity development, the SADC REEP has contributed to a much wider impact: the models of process pioneered in the programme have been adapted for use in much wider circles of practice than what the SADC REEP itself could reach.

A key area of impact appears to lie in the **leadership for course design and development** that the programme has been able to support. This has, in turn, led to new and different forms of capacity building being developed out of the initial models and practices established early on in the SADC REEP programme. This has, in part, also been achieved through the programme's capacity for working within a partnership orientation. For

example, its partnership with Rhodes University has provided access to post-graduate degrees for further study for leaders in the field, as well as ongoing and sustained research into the course design models and approaches. The partnership with UNEP enabled course design leaders to further develop their skills at regional and international levels. Partnerships with national level partners such as the Wildlife and Environment Society of Malawi, WWF Zambia, Mulanje Mountain Conservation Trust, Swaziland National Trust Commission, Swaziland Environmental Justice Networking Forum, the Polytechnic of Namibia, Environment Africa and government departments, amongst others, have allowed the course leaders to continue practising and expanding their leadership in this area at local and regional levels.



"Change-oriented learning outcomes emerge at different levels and have different impacts."

BOTSWANA: STORY OF CHANGE

The University of Botswana got involved with the SADC REEP in 1997. SADC REEP helped in policy implementation because it gave an impetus to what was already in existence. In terms of material development, the SADC REEP financially supported the development of the 'School Environment Policy Pack', which is now circulating in schools. It also sponsored the Course Developers Network (CDN) monograph in EE to which various higher learning institutions from Botswana, Namibia, Swaziland, Lesotho, Zambia, South Africa, and Mauritius contributed some chapters. About six books have been developed under the CDN and MESA network, all courtesy of the SADC REEP. SADC REEP has also supported research to facilitate evaluation of EE in secondary schools of Botswana in 2003. In 2007, the SADC REEP further provided research support for the needs analysis prior to the introduction of Masters Programme in EE at the University of Botswana. Since 2009, the University of Botswana has been conducting gender-based research on the 'role of women in natural resource management' with SADC REEP support. *The most significant changes have been noted in capacity building. This is because SADC REEP has trained a lot of people from Botswana through attachments and international certificate course in EE. SADC REEP has been very crucial in funding capacity building and skills development in Botswana. The MESA Chair is now providing training support in curriculum and policy, and earlier SADC REEP supported a 'training of trainers in environmental education' at the University of Botswana during which several teachers were trained.*

SWAZILAND: STORY OF CHANGE

We started engaging with the SADC REEP in 2000 through the Course Developers Network (CDN). *The most significant change has been noted in capacity building. The SADC REEP, through the CDN, helped us develop capacity to design and develop courses.* Our capacity has also been developed through the International Training Programme and the SADC/Rhodes Environmental Education Course. For example, some of our people from Swaziland have been trained on these programmes. People are now better than before in environmental education and ESD as evidenced by the development of the Swaziland Regional Centre of Expertise in Education for Sustainable Development and the MESA Chair at the University of Swaziland as well as involvement in community outreach programmes.

IN SUMMARY

While the scope of the professional development programmes have expanded, it would seem that much room still exists for the SADC REEP's proven model of professional development to be used in a much wider range of areas for capacity building. The 2012 Assessment of SADC Capacity for Policy Implementation report³⁶ highlights potential for training and capacity building in the areas listed in the table that follows.

Priority Sector	Key sector human capacity / professional needs	Cross-cutting human capacity / professional needs
Climate change	Atmospheric sciences; Climate change modelling, climate change adaptation; Clean technology development, absorption and use; Risk and opportunity assessment; Space Science	Sustainable development planning and governance Environmental assessments and reporting Policy planning and review
Land management	Agro-ecological planning and management; Integrated land use planning and management; Extension and knowledge sharing; Adaptive and integrated land planning and management	Information, communication and technology use Environmental law and law enforcement Human resources management and retention
Biodiversity	Biological sciences; Environmental economics; Intellectual property rights; Taxonomy; Law enforcement; Biosystematics; Bio-prospecting; Bio-safety; Community based natural resources management; Biodiversity management	Mainstreaming SD into theory, policy and practice Risk and disaster management Curriculum development and implementation
Waste and pollution	Environmental health and protection; Waste management research; Rural and urban planning; Environmental engineering; Toxicology; Landfill design; Clean technology development	Environmental education and training; public awareness and social learning
Inland and marine resources	Earth sciences; Aquatic biology; Oceanic sciences; Fisheries and aquaculture sciences; Marine Protected Area Management	

Table 1: Summary of major human / professional capacity needs in SADC priority sectors identified for capacity building (Source: Mukute, Marange, Masara, Sisitka & Pesanayi, 2012).

Capacity building programmes oriented to these areas of sustainable development practice will also need to be underpinned by capacity building activities that develop 'underlabouring skills' for institution building and institutional capacity development. These include:

Integrative skills that allow individuals to work with other sectors and other stakeholders in a participatory and symbiotic manner;

Environmental leadership skills that enable individuals to move beyond their disciplines and mobilise distributed knowledge, skills and attitudes to address complex environment, sustainable development and education needs;

Resource mobilisation and accountability skills which enable individuals to identify and tap into international and local funds available for supporting fair and sustainable development;

Policy development and review skills that enable individuals to mainstream new developments in a coherent and holistic manner and that provide a framework for different sectors to work collaboratively;

Knowledge and values generation and brokering skills that enable individuals to draw on different ways of knowledge to address issues of technology development, environmental ethics, social and economic justice;

Monitoring, evaluation and insight generation skills that allow for continuous learning and improvements that result in the improvement of practices, theories and methodologies, policies and operating contexts, including feeding into COPs; and

Education, training and capacity development skills; and skills to work with and inform the public in ways that foster broader social learning and changes in practice towards sustainability, adaptation and resilience in the face of increasing social-ecological degradation, risk and challenge.

Such an expansion to new focus areas would, however, suffer without adequate investment in the leadership necessary to design, run and assess courses of this nature. An intimate understanding of the philosophy, processes and practices of **situated, reflexive and change oriented professional development** is necessary for the successful running of these training programmes. Investment is needed to develop this 'education and training competence' as it is counter-intuitive to the prevailing dominant transfer-centred models of training.

There are, however, already emerging processes in place to develop this work further. For example, the SADC REEP, in partnership with the Environmental Management Agency in Tanzania, recently facilitated a workshop to build capacity for establishment for developing Communities of Practice for mainstreaming Environment / Sustainable Development issues into Natural Resources Management and Agriculture related institutions. Informing this process is the SADC REEP expertise and approach to training and capacity development.

"New and different forms of capacity building are being developed out of the initial models and practices established early on in the SADC REEP programme."





05 DEVELOPING MATERIALS

"A responsive and participatory process – as well as product – orientation to resource materials development is important, particularly in terms of relying upon and strengthening regional capacity for resource materials development. This helps to ensure that resource materials are relevant to the contexts in which they will be used ..."

(SADC REEP, 2002, 37)³⁷

SETTING OUT

Developing educational materials is a notoriously laborious process. Most often materials can't be easily developed because of the excessive costs associated with production, and the complex technical processing required. One of the major contributing factors to the ongoing success and impact of the SADC REEP is the manner in which its materials development component was conceptualised, actualised and sustained. In fact, the model of materials development and the low-cost, accessible materials development facilities at Share-Net, a programme of WESSA in Howick, South Africa, is probably one of the key reasons why SADC decided to work with WESSA as the implementing agent for the SADC REEP. WESSA, at the time, was one of few centres that supported and produced low-cost, copyright-free materials for the environmental education community. Additionally, Share-Net had already started to offer low-cost materials production services to environmental education programmes more widely in the SADC region.

The model of materials development established at Share-Net was based on principles of accessibility, low cost and participation in the materials development process. This, in turn, assumed a principle of relevance and application of materials developed (by participants) to their contexts of practice. These principles informed and shaped the materials development component of the SADC REEP, in its early days, and continue to do so. They can be considered, therefore, as proven and important principles for enabling environmental education materials development, but also for environmental education materials **use** in the support of learning how to build a more sustainable future.

A key feature of the materials development programme of the SADC REEP, inherited from the earlier Share-Net practices, was the principle of participation in materials development. This principle led to the convergence of materials development and

capacity building objectives within the SADC REEP. Participants on attachment programmes (described in the capacity building part of this report) not only attended a short course, but also produced a low-cost material or 'resource' for use in their own context of practice. During the attachment programme they were provided with various forms of support to improve their materials. Before departing for home, the Share-Net low-cost printing facilities enabled the attachment course participants to produce a small print run of their materials. They were thus able to take them home for immediate use. This model proved to be extremely popular, and there were literally hundreds of applications for participation in the attachment programmes.

This programme drew the interest of talented environmental educators such as Vladimir Russo from Angola, who completed a number of these attachments together with his colleagues from Angola to produce the materials that they needed to expand their environmental education praxis. Later, after completing a SADC International Certificate Course, Vladimir came to work at the SADC REEP centre. Here he actively pursued the further development of the attachment programme and personally supported hundreds of people to develop low-cost materials for use in their own contexts of practice. By the time of the first evaluation of the programme, this was already recognised as a powerful and important feature of the SADC REEP, and its capacity to support environmental education at regional level. Through this context-centred support, low-cost materials were produced in English, Portuguese and Spanish.

A key competence that Vladimir brought to this work was a high level of information and communication technology (ICT) competence, as low-cost materials production needed to be done on computers, and computer problem solving is necessary if the deadlines for production before leaving the centre were to be met. The development of computer skills in participants and the maintenance of functioning computers was an ongoing challenge in

the early days when computer skills were relatively undeveloped in the region. Vladimir was followed in this role by Shepherd Urenje, who also took a deep interest in the materials development process, and the results of this work. The need to continuously strengthen ICT capacity for materials development and other aspects of environmental education has become an ongoing feature of the SADC REEP's work. This, however, remains an area of struggle, as ICT competence is only one aspect of a functioning ICT-based culture of practice. The quality of software, virus protection services and finances to purchase new equipment have a substantive role to play in developing and maintaining enabling systems. Resources for this level of support in a variety of regional centres have not always been readily available, or easy to source.

EXPANDING CAPACITY AND LEADERSHIP

After the early years of establishing this context-sensitive and supportive materials development programme, with its many outputs, Vladimir Russo began to reflexively review the programme, asking questions about the quality and use-value of the materials. He also started to ask questions about how the materials were being used as **learning support materials**, a point also raised in the 2005 Programme evaluation. As with the capacity building programme, the demand for this support for materials development from the SADC REEP was expanding. It became too extensive for the available support that could be provided, even with the additional support provided by the Share-Net team at WESSA.

In seeking to solve this problem, and to deepen the SADC REEP's engagement with the production of low-cost materials, the programme changed strategy slightly and worked towards **providing guidelines for materials development, based on lessons**

learned in the first five years of the programme. Marshalling the support of his fellow Masters in Environmental Education colleagues, Vladimir launched a participatory research project on the use of learning support materials in environmental education, observing and documenting **how** the materials that had been developed had been / were being used in support of environmental learning. This together with a series of regional consultations with materials developers in the SADC Region led to the production of a 'sourcebook' on **Learning Support Materials Development**³⁸, through a process of deliberation and consultative responses.

After the production of this sourcebook, the programme had a stronger set of conceptual tools and guidelines that could be used in programmes that were supporting the development of materials. The discourse on 'Materials' changed to 'Learning Support Materials', with emphasis on how the materials were to be used to **support learning, and environmental learning** in particular. This strengthened the quality and the outputs of this component of the programme. Numerous materials were still being produced, but with a stronger emphasis on how they might be effectively used to support and enhance learning.

Leadership for materials development was also developed through the stronger in-depth engagements with how and why materials were produced in and for environmental education. The Course Developers Network (described within the capacity building component of this report) also helped to strengthen leadership for materials development. The CDN supported the use of resource-based learning approaches to course design, where environmental education materials (developed through the attachment programmes) were developed for use in environmental education courses. An example here is the case of the series of biodiversity materials developed by Dr Tsepo Mokuku from the National University of Lesotho for use in local environmental education programmes, but also for use in the



Science Education Teacher Education programmes that he was teaching.

Additional sources of funding provided for the specialist development of various materials, which were developed in various partnership formations in this phase of the SADC REEP's history. Examples here include a partnership with UNESCO to adapt the 'Learning for a Sustainable Future' CD Rom for use in Southern African Teacher Education as a key resource discussed at the World Summit on Sustainable Development in 2002, and the Lesotho 'Enviro-Box' of resources aimed to support remote schools across Lesotho as an activity associated with the implementation of the ESD Strategy. Thus, in about mid-term, the SADC REEP had shifted focus from only supporting individual educators to develop materials through attachment programmes, to having the leadership capacity to support programmes and international organisations to develop and adapt materials for wider use at a regional level, or to support countries with major materials development initiatives at a national level. This focus was developed, however, with the same principles of low-cost accessibility, and small print runs, but was better informed **by the reflexive work on what constitutes** learning support materials, guided by the sourcebook.

EXPANDING IMPACT

Under the leadership of Shepherd Urenje and later Dick Kachilonda, this aspect of the programme's activities has continued to deliver materials that support environmental learning at regional, national and local levels. In the last phase of the programme, materials development and ICT capacity building workshops have been offered at a cluster level (in Malawi, Seychelles and Zimbabwe), using the sourcebook, and working pro-actively with groups to design, write and produce learning support materials. Additionally, these materials are also being located

within networked systems of application, and have been linked to the emergence and development of the Regional Centres of Expertise in Education for Sustainable Development.

Today the programme is still able to offer the competence of supporting transboundary materials development services, as is happening in the most recent example of this work, the Orange-Senqu River Commission (ORASECOM) programme. ORASECOM promotes the equitable and sustainable development of the resources of the Orange-Senqu River and is led by Imakando Sinyama, who in earlier years completed materials development attachments, and the SADC International Certificate course, as both participant and tutor, through which he was able to hone his skills as materials development leader in the SADC region.

Materials development at country and project levels continues unabated, and all educators attending courses or programmes at the SADC REEP receive copies of the Learning Support Materials Development sourcebook, which is also used in training programmes offered by partner organisations such as the MESA programme. More than 1000 copies of this sourcebook have been printed and distributed for use by the SADC REEP, showing it to be one of the most popular and widely used resources to have been developed by the SADC REEP to date. Other popular materials that have had high print runs include:

A Year of Special Days: This resource provides ideas for meaningful activities aligned to international and national days of the year. The resource has been adapted and reproduced in at least five SADC countries sometimes appearing in mother-tongue languages.

Enviro-Facts are easy to use one-page sheets of topical environmental issue and risks. Over 30 000 Enviro-Fact sheets have been produced and shared over the years. These have also been adapted for country-specific needs as in the case of Namibia

where a full set of Namibian Enviro-Fact sheets were developed on the Namibian environment. Producing locally relevant enviro-fact sheets is also a popular activity in the training programmes of SADC REEP.

Water quality monitoring resource kits are also extremely popular in the SADC region with over 5000 being selectively purchased or adapted to local contexts.

Impacts associated with the use of learning support materials are hard to establish. However, it is easy to visualise what these may be if one imagines an education and training system with no learning support materials, as is often the case in poorly resourced education and training environments in SADC countries. Providing access to low-cost, rapid production technologies, and copyright-free production services has been an important **enabling** factor in all other aspects of the SADC REEP's work. For example, the MESA ESD Innovations course files continue to be produced under the SADC REEP's enabling system at extremely low cost for use in African universities. Since their first production over 500 copies of these files have been produced for use in African universities (despite the fact that they are also electronically available). A version of the file, adapted for Asia, has also been produced on request from the Share-Net offices. Without the materials development function of the SADC REEP and the supportive infrastructure of Share-Net at WESSA, attaining resource-based learning in environmental education in southern Africa would be almost impossible. Costs of production, high print runs for cost viability and uniformity (in place of contextual diversity) would make this almost impossible.

MOZAMBIQUE: STORY OF CHANGE

We started engaging with the SADC REEP in 2009. Many things have resulted including changes to the Science Education textbooks by the Ministry of Education. *The most significant change has been that we now have a good orientation in linking ESD to Science Education.* Students have initiated and implemented project based environmental education research and learning in water management. Seed funding has helped us move from one point to another especially in development of research and materials.

"Numerous materials were still being produced, but with a stronger emphasis on how they might be effectively used to support and enhance learning."

ZAMBIA: STORY OF CHANGE

We have been engaging with the SADC REEP for many years. SADC REEP has helped us to develop resource materials. It has also provided training and has contributed to capacity building for policy implementation in Zambia. *Networking has been the most significant because it made us aware of activities which are relevant to environmental education, and we learned what others are doing.* It has been helpful in expanding knowledge, ideas, perspectives and insights. In 2003 SADC REEP helped us develop our National Network of Environmental Educators (NNEE). There has, however been a challenge to develop a firm environmental education policy in Zambia, mainly due to lack of political will. There is a need to mainstream environment and sustainability amongst decision makers in order to win their support.

IN SUMMARY

The materials development component of the SADC REEP, while conceptualised as a 'separate' component, is more accurately described as being core or integral to all of the other components of the programme. Yet it has its own history and particular features. The programme continues to develop different types of materials including, inter alia, local and contextual relevant materials for specific programmes; materials that can be adapted for wider use; regional sourcebooks that draw in expertise from across the region to share more widely for ongoing use; course materials to support training programmes. The programme has also attempted to produce electronic materials, the latter being the least successful of all of its attempts at materials development. At the heart of this lies the low-cost, easy to access production-based technical support capacity provided by Share-Net at WESSA, which was also one of the key reasons for initially selecting this site as 'home base' for the SADC REEP. Despite encouragement to establish other regional centres of materials production like Share-Net, this has not taken off, probably because the SADC REEP does not have the levels of funding to support technical centres of this nature in other countries as its funds are mostly operational. However, as the Share-Net / SADC REEP model shows, it is a powerful combination for enabling environmental education processes to flourish. It, as shown by the history of the SADC REEP's work in this area, also requires ongoing attention to capacity building for leading materials development activities, including ICT competences.





06 NETWORKING

"The National Network Representatives will be formally responsible for supporting the development of the SADC Regional Environmental Education Programme by facilitating and supporting environmental education activities within their country and across the region. The informal network is made up of the many institutions and individuals within the SADC region and beyond that interact with a common interest in environmental education processes in the SADC region... All of these networking processes have an important role to play." (SADC, 2002, 33)³⁹

SETTING OUT

Networking is often seen to be something of a nebulous concept. In recent years, mainly since the publication of Manuel Castell's famous book on the networked society in 2004⁴⁰, the concept has gained more recognition as an important sociological concept with implications for social change as well as social justice.

The SADC REEP took this concept seriously from the start, establishing a National Network Representatives structure which survives to this day, as mentioned previously. In the first programme proposal, the Network Representatives were given a substantive responsibility to shape and inform the SADC REEP as stated below:

*The role of the Network Representatives is to supervise, support and facilitate the work of the Regional Environmental Education Centre (REEC). It will also continuously monitor the work of the programme ... and will be responsible that information from each member state is forwarded to the REEC and vice versa. The focal points will also be responsible that various follow-up activities are undertaken at national level.*⁴¹

In the early days of the SADC REEP, besides the formal structural concept of the Network Representatives, concepts of networking were also discussed in terms such as 'we should net-work', with the emphasis on getting together to **do** something, a concept which has remained strong within the SADC REEP. Networking in the SADC REEP has therefore been strongly tied to collective practices, and particularly also to deliberations on collective practice.

So, for example, in the early days of EEASA, from which some of the SADC REEP's starting networks grew, groups would get together to discuss how to start a professional development course (such as the Gold Fields Participatory Certificate Course) and this would lead to actually starting the course together; or they would get together to discuss

how to make an impact on national policy and this would lead to actually working together to influence national policy; or they would get together to deliberate how they might strengthen environmental education at a regional level, which led to the **formation and implementation of the SADC Regional Environmental Education Programme.**

In the early years of the SADC REEP, networking groups were getting together to decide on **how to design and run the SADC International Certificate Course and their expanded versions**, leading to the widely used *Developing Curriculum Frameworks*⁴² 1999 sourcebook that was used to shape and inform a number of courses supported by the SADC REEP. Similarly, groups were getting together to decide **how to adapt the UNESCO CD-ROM for use in Southern Africa**, leading to the revised CD-ROM released at the World Summit on Sustainable Development, or they were getting together to decide on how to improve the materials development work in the SADC REEP, leading to the development of the sourcebook on Learning Support Materials, and so on.

This early culture of **networking practice** has been sustained and developed in the SADC REEP's networking activities, but has expanded in scope over the years.

*Overall, the networking dimension of REEP has progressed well under difficult circumstances. A valuable, non-formal network of contacts and friends has been created and is continuously growing and becoming substantial in the sense that as contacts deepen more is transferred between the "partners": knowledge, skills, materials resources, information, etc. ... and ... There should be a more flexible and permeable approach to "Networking" with less emphasis on the "formal" roles of Network Representatives and a greater emphasis on more in-formal partnerships that develop over time. This would require a greater degree of autonomy by REEP over its budget in order to cover travel, subsistence and time costs.*⁴³

EXPANDING CAPACITY AND LEADERSHIP

In the early to 'middle years' of the SADC REEP, the networking component of the SADC REEP continued to grow. The formal Network Representatives structure continued to guide the programme. Its emphasis shifted from a focus on networked practice, and establishment of network information, to also include a stronger focus on **network communications**. There was an increasing demand amongst those who participated in SADC REEP programmes to link up with each other via communication systems that were not only linked to the SADC REEP 'headquarters'. Consequently, Elizabeth Martens was employed to establish a database of all of the participants that by now were associated with the SADC REEP. She developed two important networking resources for the programme. One book listed all participants who were associated with the SADC REEP, including the courses they had participated in, their current place of work and their particular sphere of expertise. A further booklet listed all the resources available in support of the SADC REEP as well as brief descriptions of their relevance and availability. Sally Cumming, who has supported the programme with administration for the past six years, has continued this networking resource in the form of an electronic database of all people associated with the SADC REEP over this period. Today the database stands at almost 2000, and provides a very useful mechanism for rapid regional communication on issues, events and opportunities for environmental education growth and development in the region.

This shift towards network communications was also visible in the regular publication of the SADC *EEMail*, a programme newsletter that was produced in hard copy twice a year, commencing in 1998. Initially this newsletter was produced in English only, but with the help of Vladimir Russo, then employed at the centre, the *EEMail* was produced in Portuguese with selected articles also being

produced in French. This made the SADC REEP's activities and learning opportunities visible to those in Angola, Mozambique and the Democratic Republic of the Congo. This was a critical move to ensure greater inclusivity across Anglophone, Lusophone and Francophone countries. The *EEMail* was produced drawing on contributions from active environmental education programmes in the region, and also reported on the programme's regional activities. The *EEMail* was later converted into an electronic newsletter, and Sally Cumming regularly produces and distributes this.

The networking component of the SADC REEP has not, however, only focussed on networked practices and networked communications. Most important perhaps is the focus on **network support**. To add impetus to this component, experienced environmental educator in the SADC Region, Dr Bernard Bakobi was employed by the programme to support capacity development for NGOs. Bernard Bakobi established and developed capacity building processes and linkages for many NGOs, and worked actively with key project partners. These were then able to connect with wider networks including at least 400 organisations and schools throughout the SADC region. Support courses developed and offered to the NGO networks by Bakobi included project management, resource materials development and use, courses in communication technology as well as research and evaluation.

This component has furthermore involved providing seed funds to a wide range of local level networks in SADC countries to further their environmental education networking and praxis objectives. Examples here include Regional Centres of Expertise in Lesotho, Malawi, Namibia, Swaziland, Tanzania, Zambia and Zimbabwe; and the Learning Support Materials community of practice in Mozambique, Seychelles, Tanzania, Zambia and Zimbabwe. This has been very important for building networked systems of environmental education practice in the region, at the grassroots level, and has contributed greatly to the validity and the impact of the SADC

REEP in its constituent countries. Through this, local leadership capacity for network expansion and co-ordination has been enhanced, as is shown by the number of networks collaborating in the region.

Dedicated network structures formed around some of the other key activities of the programme such as training. The best example here would be the Course Development Network which also benefited a number of NGOs from the region both directly and indirectly. Workshops on course development and implementation were adopted by the Swaziland Environmental Justice Agenda (SEJA), WWF-Zambia, the Wildlife and Environment Society of South Africa (WESSA), and the South African Environmental Learning Forum (ELF). All these NGOs were then able to implement substantial national courses and supported the development of further course development in their countries and beyond. Many of these courses have contributed directly to the ongoing development the NGO community in the region.

Somarelang Tikologo is one NGO in Botswana that has benefited from the NGO support. It has developed innovative urban environmental education programmes in Gaborone, Botswana, including the rehabilitation of urban parks and gardens and recycling depots. Somarelang Tikologo has hosted delegates from UNESCO, SADC FANR and the National Network Representatives who were all shown the environmental demonstration park in Gaborone.

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"This early culture of networking practice has been sustained and developed in the SADC REEP's networking activities."

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EXPANDING IMPACT

All three of these features of networking have continued in the SADC REEP in the past five years of its operation. Networked practices have continued, and have included particularly the work of the SADC MESA network. Substantial impetus has been given to this network through support for the establishment of MESA Chairs at three Southern African universities.

The research programme has been established through a networked form of practice, and through this the research network and research capacity for environmental education research in the region has been able to expand. Other new and important networked practices that have emerged in the past five years of the programme's operation include networked curriculum development practices amongst both a group of agricultural colleges and a group of teacher education colleges.

Networked communications too have continued, and it is ever more visible that environmental education groups in the region do not always communicate via the SADC REEP centre. Instead they use the SADC REEP communication infrastructure or contact lists to establish their own sub-networks with communication structures and systems. The SADC REEP has also established a website⁴⁴ where some of its resources are published for wider use by these networks.

Additionally, support for regional and local networks has continued. Small-scale networks continue to be supported with seed funds to complete proposed activities. These include the Teacher Education Network in Zimbabwe; evaluation of the Regional Centres of Expertise in Swaziland; and the rolling out of learning support materials skills development workshops in clusters in Malawi, Tanzania, Seychelles, Zimbabwe and South Africa, within local network structures.

To add strength and impact to the networked activities, the SADC REEP have also joined forces with the United Nations University and their flagship UN Decade of Education for Sustainable Development programme, which seeks to recognise Regional Centres of Expertise (RCE) in Education for Sustainable Development. This provides international recognition for strongly constituted regional networks. In 2007, the SADC REEP facilitated and supported the establishment of four RCEs in **three** countries in southern Africa, which were confirmed by the United Nations University in 2008. These are the Swaziland RCE; the KwaZulu-Natal and Makhana RCEs in South Africa; and the Zomba RCE in Malawi. Two more RCEs have been confirmed by the UNU in **two** SADC countries in 2011: an RCE in Lesotho and a Namibian RCE. **Three** more SADC countries have been supported in developing RCEs: Tanzania (RCE Candidate Dar-es-Salaam), Zambia (RCE Candidate Lusaka), and Zimbabwe (RCE Candidates Harare and Mutare). The RCE facilitation process in the SADC region has been groundbreaking, providing good lessons for the regional, continental and global RCE community. It is also interesting to note that the global coordinator of the African RCEs, Dr Abel Atiti, completed the SADC International Certificate course in 1998, and thereafter completed a Masters and PhD degree in environmental education. The African RCE co-ordinator at continental level, elected in 2011, is also the SADC REEP Networking co-ordinator, Dick Kachilonda.

This development is seen as an important 'sustainability' move for the SADC REEP, as the networking roles and functions that it has played for 15 years need to be decentralised to national levels, while still retaining capacity for broader networking at regional and international levels. One of the early expectations of the SADC REEP was that it would support the establishment of national environmental education centres, which appears

to be coming to fruition in the RCE concept in a way that allows for regional, continental and international networking to flourish.

The RCE networks can potentially learn from the SADC REEP and combine the three types of networking that the SADC REEP has developed: networked practices (working together on things); networked communications (staying in touch with each other); and network support (supporting smaller networks and groups to flourish).

Additionally, the SADC REEP network component has also supported its 'mother network', EEASA, with much needed funding to strengthen the regional capacity and impact of the Association. It has supported the publications of the Association, and participation in the EEASA conferences. In turn, EEASA has sought to provide conceptual and network linked support to the SADC REEP.

SWAZILAND: STORY OF CHANGE

Financial constraints are a major challenge. The economy has not been doing well and environmental education is most likely to be impacted following unprecedented economic adjustments. Small though Swaziland might be, poor coordination of activities has been one of the challenges due to limited capacity. In order to address some of the challenges, a Regional Centre of Expertise (RCE) was established to coordinate environmental education activities. It has been a centre for strategic utilisation of limited resources. This community of practice has been the source of some funds. University of Swaziland, National Trust Commission (NTC) and the Ministry of Education (MoE) have contributed to funding the activities. All the environmental education activities have been planned within fiscal ability through internalisation of the activities. The MESA Chair of UNISWA, supported by SADC REEP, had been very instrumental in Environmental Education and ESD activities. This lessened the financial deficits. One of the observed changes is that environmental education discourse has been taken seriously by more organisations which are doing quite a lot of projects on their own. It also played an important role in bringing teachers, heads of departments and others on board to build capacity in teacher education in the field of environmental education and ESD. *Involvement of teachers in environment and sustainability has been the most significant change because in its initial version, the curriculum barely embraced them, and if the teaching-learning activities are not in line with environment and sustainability, Environmental Education would not to be fully achieved*



MALAWI: STORY OF CHANGE

Engaging with the SADC REEP started in 2006 when 20 African countries such as Swaziland, Lesotho, South Africa, Malawi, Zambia, Malawi, among others met in Nairobi, Kenya, at the UNEP headquarters for a MESA meeting. We joined the SADC REEP through the MESA Chair. At the meeting in Nairobi, SADC REEP offered to start supporting the MESA Chair meetings. Some significant changes have taken place since the past six years of partnership between the University of Malawi/LEAD and the SADC REEP. Among these significant changes are the development of the Regional Centre of Expertise at Zomba. Other significant changes include the introduction of support for the MESA chairs. Networking is another significant change. The SADC REEP has strongly supported it in order to ensure exchange of educational ideas and experiences in environment and sustainability. Capacity building has also been a significant change because the SADC REEP has been training our people through international Environmental Education Courses and attachments. *The most significant change has been experienced in networking. This is because it has promoted information and knowledge exchange. Sharing ideas brings change and helped in identifying people to work with. The growing population of RCEs is a good signification of change.*

IN SUMMARY

The networking component of the SADC REEP deserves closer scrutiny in order to more fully understand its role and impact in building a large, cross-country community of networked practice that has a characteristically energetic dynamic. Perhaps a closer reading of Castells or other current popular network theories may shed light on the sociology of this network, and its role in learning to build a more sustainable future.

One thing is clear when reflecting back on this component: much of what has been achieved in the rest of the programme would not have been possible without this networking component. Perhaps it provides the mechanism that allows the **relational agency and energy to emerge, needed for the development of a regional community of practice, of the size and scope of the SADC REEP / EEASA system in southern Africa.**







07 REFLEXIVITY & RESEARCH

"At the start of this section [of the evaluation report] we documented several ways in which reflexivity features in the programme, and we noted the role that research played in the conceptualisation of the Programme. This principle should be applied vigilantly to prevent stagnation and provide direction ... The kind of research used [must be] relevant – applied (to the concerns of the Programme) but also reflexive (that is, prepared to challenge the underpinnings of the Programme itself. Such research, together with critically collaborative evaluations and reflexivity, can guard against dogma." (Rosenberg, 2005, 119)⁴⁵

SETTING OUT

When the SADC REEP was first conceptualised, it did not include a research component. It did, however, have a sense of the importance of reflexivity, as noted in the SADC REEP 2002 Programme Document which states that "Evaluation involves the reflexive review of the Programme... and research is occasionally needed to develop deeper understanding of particular aspects".⁴⁶ While this is the case, it was only later, after the 2005 evaluation, that research became a specific activity of the SADC REEP. As a result, the research component can therefore be seen as the 'late starter' when compared to the other components of the programme.

This does not mean, however, that the first five years of the SADC programme were devoid of research or reflexivity. Early research commissioned by the programme was related to its other core functions. For example, to inform the course designs and the curriculum development work needed in its capacity building and training component, the SADC REEP commissioned Heila Lotz-Sisitka to lead a deliberative review of existing courses, and course design principles. This led to the writing of a *Developing Curriculum Frameworks* sourcebook which was widely used thereafter to guide the design and development of environmental education courses at a regional level. It, for example, provided the 'start up' resource for the Course Developers Network, established in 2000 to strengthen courses and curriculum development in a range of different country contexts. The sourcebook also provided an important tool for enhancing programme reflexivity. This research product, presented in a useful applied format has been used in various forms across the SADC region as well as in India, Asia and Scandinavia.

Other early research undertaken to support the work of the SADC REEP was the development of an Indigenous Knowledge Monograph, led

by Eureka Rosenberg at Rhodes University, and published in partnership with EEASA in 1999. This too was deliberated at a workshop held at the SADC REEP, to explore the implications for application to environmental education contexts. Issues represented in the monograph drew heavily on issues that were being foregrounded in Masters degree studies that were being undertaken at the time by past SADC International Certificate Course participants, Sibongile van Damme and Soul Shava who had subsequently registered for Masters Degrees at Rhodes University, and by Tsepko Mokuku who was completing a PhD at the time.

The value of these early research-based contributions to the programme was recognised by the programme managers at the time, Jim Taylor, Mike Ward and Mumsie Gumede, who proactively argued the case for including a research component into the SADC REEP's work. In 2002 the first substantive SADC REEP research activities were launched out of a DANIDA-funded research-based review of major curriculum initiatives in the SADC Region, known at the time as the LEESP, the NEEP and the SEEN. This research project, led by Karsten Schnack from Denmark and supported by Teresa Squazzin and the late Professor Ben Parker, provided cross-country insight into the contributions that were being made by Danish funding in environmental education curriculum contexts. This further informed curriculum development interventions in other SADC countries. It brought the concept of action competence to the fore, for example, and examined how education systems were adapting to external learner-centred interventions focussed on environmental education.

This study also produced a critical analysis of the trends in environmental education occurring at a global level following the promulgation of the UN Decade on Education for Sustainable Development.⁴⁷ This critical review pointed to the political economies at play in establishing the UN DESD, and some of the silences in sustainable development

discourse, particularly ongoing militarism, and corporatism. It raised a critique of ESD, and encouraged the SADC REEP and southern Africans to develop a stronger, contextualised perspective on what sustainable development actually means in the region, and how environment and environmental education ought to position itself within this shifting terrain. A key argument made was that approximately 75% of people in the SADC region live in close relations with the natural environment, as this provides a key source of livelihood. To jettison environmental discourse in favour of an uncritical adoption of global ESD discourse may therefore be

a mistake, with serious material and performative consequences.

The early phase of engaging with research in the SADC REEP could therefore be characterised by a developing understanding of the potentially useful and valuable role that research can play in the reflexive unfolding of a donor-funded development programme. Programme managers at the time recognised the value of this, and were strong champions for including a research component in the next phases of the programme, which continued as the programme unfolded.



EXPANDING CAPACITY AND LEADERSHIP

Following this, a second research project was launched in 2007, which sought to deepen insight into the main sustainable development issues in the region, and what this might mean for environment and sustainability, and the SADC REEP's participation in the UN Decade of Education for Sustainable Development. This research project took the form of 'regional participatory research' and involved a 10 country case study involving a mix of registered Masters students at Rhodes University and other regional researchers who had completed masters degrees previously. The research was co-ordinated by Professor Lotz-Sisitka at Rhodes University, who by now was also serving on the UNESCO International Reference Group for the UN DESD. She was therefore in a good position to both inform the programme of the global discourses, and also inform the global discourses from a regional perspective. The task of the researchers in this programme was to examine the relationship that existed between poverty, health and environmental issues, and in particular to examine how education systems at different levels were responding to these. The case studies delivered many interesting

findings. Most notable however, was the inadequate and fragmented response to these issues at all levels of the education and training system. It seemed that while people were acutely aware of the issues, they lacked an adequately integrated concept of education to create a coherent and sustained educational response. It is in this research report that the need for integrated responses that included both pro-active and re-active educational responses was conceptualised. This also included engagement with institutions and institutional change (see Figure 3 below).

The framework developed from this research questioned SADC REEP participants to actively engage with the **educational opportunities** that exist for strengthening 1) coping strategies and responses; 2) prevention and mitigation of risk; and 3) institutional and structural changes. It also introduced notions of agency and local capabilities. It questioned how capabilities for risk negotiation in the everyday were being developed in and through environmental education. Thus it raised a question about the purpose of environmental education, and whether it could be more directed towards 'capability for risk negotiation in the everyday'. Moreover the report developed further insight into the importance of contextual profiling in educational research. The

NEW ORIENTATIONS TO EDUCATION ARE NEEDED THAT FOREGROUND CAPABILITY AND AGENCY

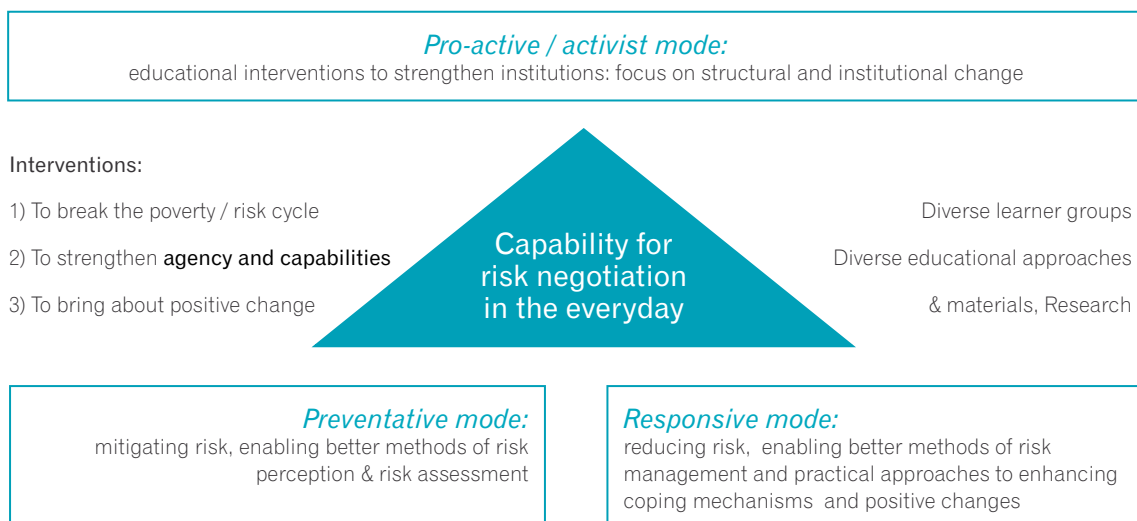


Figure 3: New orientations to education that foreground capability and agency (Source: Lotz-Sisitka & Zazu, 2012)

case studies, together with their methodology are incorporated into a report entitled *Context Counts: Contextual profiling and contextual responsiveness in environmental education research and practice*.⁴⁸

This research project provided the SADC REEP with a deepened understanding of the **core focus** of their work, notably how environmental education may be conceptualised in a regional context. This expanded concepts of environmental education that were used earlier, to include the notion of capability for risk negotiation in the everyday. It also ushered in a concern for alternative practices.

From here it was agreed that a formal research programme would be established for the SADC REEP, and this was included in the next funding proposal. The research component was sub-contracted to Rhodes University, who insisted on broadening the network of universities involved in the research, and a five university research partnership was established which included: the University of Zimbabwe, the University of Botswana, the University of South Africa, Rhodes University and the University of Zambia. These universities had previously been active in the Course Development Network and were also not receiving other forms of support from the SADC REEP seed funding programme at the time. It was therefore possible to offer them seed funded

support to undertake case study research in their home countries.

After engaging with UNESCO on the UNDES and based on the dearth of information on the relationship that existed between educational quality and education for sustainable development, it was agreed that the research network would tackle this research question. Background understandings developed through the earlier SADC REEP research would be held in mind. A set of community-based enquiries were launched to establish what this relationship might be, and what communities and teachers thought about this relationship. At the same time wider literature review work was undertaken into the same question. This led to a number of publications in the 2008 *Southern African Journal of Environmental Education (SAJEE)*, and to the expansion of the research network. Important findings from this phase of the research related mainly to the absence of a strongly defined socio-cultural and social-ecological perspective in educational quality discourses. This is despite the fact that these seem to hold meaning for teachers, learners and parents in the SADC region. A draft 'revised' conception of Educational Quality research was devised from this phase of the research (see Figure 4 that follows).

RE-FRAMING EDUCATION QUALITY

Three intersecting traditions?

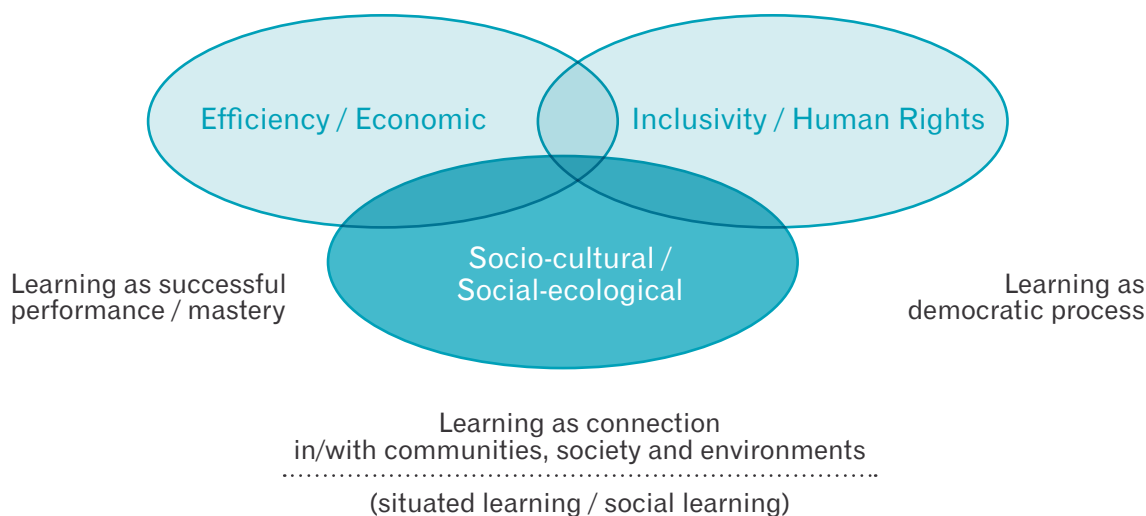


Figure 4: *Re-Framing Education Quality* (Source: Lotz-Sisitka (Ed), 2012)





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"The networked approach to research capacity building and research in the SADC REEP has therefore provided the programme with new directions for the establishment of conceptual capital to guide its research and a cadre of researchers willing and capable of undertaking ESD research in the SADC region."

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EXPANDING IMPACT

This earlier research was taken forward in the past five years of the SADC REEP, with more funding allocated to the research, and with the capacity to support 10 SADC universities to participate in the research network. The network was subsequently expanded to include 12 universities, and remains open to expansion. It was decided to retain the focus of the research programme, namely the exploration of educational quality and relevance and environment and sustainability education. But the research would be expanded to diverse contexts and the case studies extended in different ways. The programme therefore remained exploratory, seeking mainly to deepen its concepts such as the concept of capabilities, agency, action competence and educational quality and relevance.

The programme also enabled various opportunities for research networking (annually at least once) and regular presentation of research papers at the EEASA conferences. Researchers were also able to participate in a research design course hosted at Rhodes University and a Writing Workshop. Here writing skills were honed and further developed, to assist with final production of papers from the research. These will appear in the 2012 edition of the EEASA Journal, whereafter synthesis work will take place, in an effort to communicate the findings of the broader research programme to an international audience in high impact journals. Plans are also in place to produce a book: *Educational Quality and Relevance: Contributions to the debate from Environment and Sustainability Educators in Southern Africa*.⁴⁹

While this research programme was ongoing, and researchers continued to develop local case study research informed by wider literature reviews, the network widened to include a group of researchers (some overlaps occurred between this group and the EDQual research group) interested in climate change education research. After a few meetings it was decided to link up the two research networks, and to bring efforts together under one

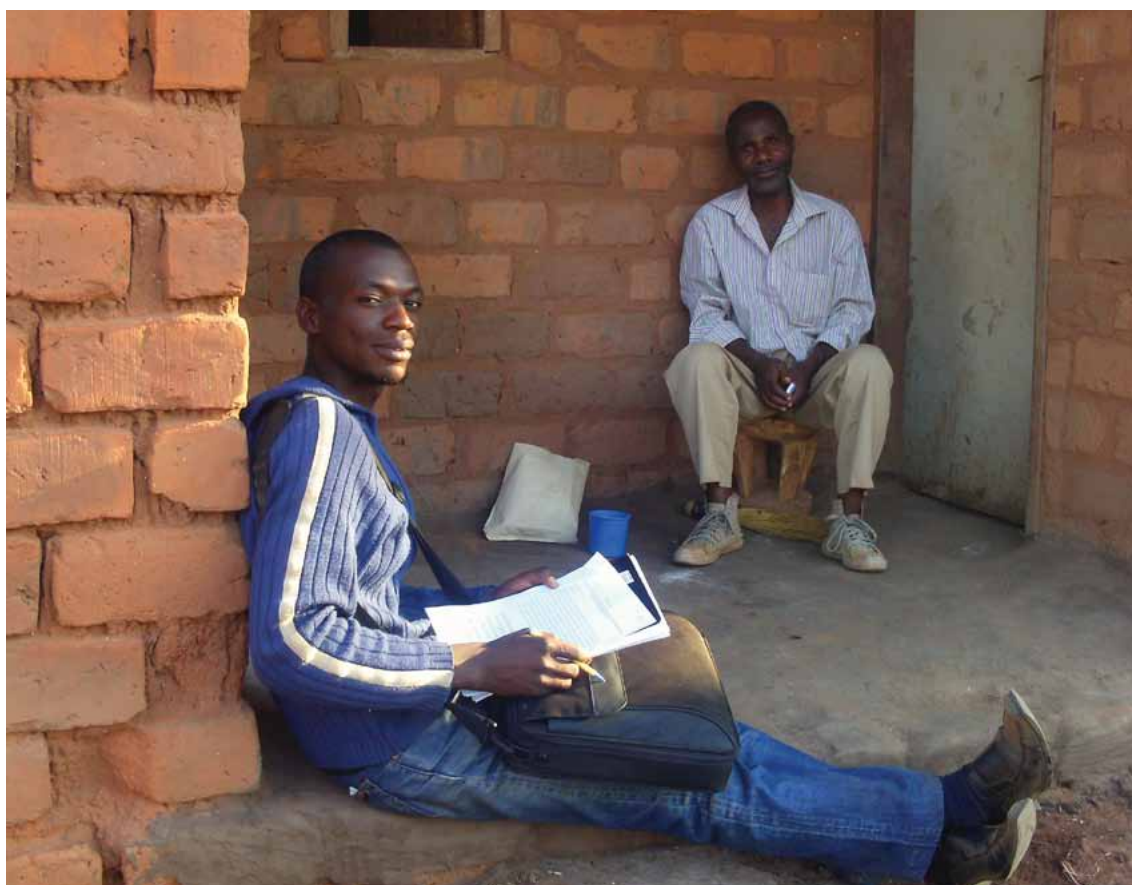
ESD research network. Through this process, the research network has grown in the region, and there are now about 40-50 active researchers involved in ESD research under the banner of the SADC REEP research support. Research networks have also emerged at local levels (for example, there are three ESD researchers working at Copperbelt University, between three and five ESD researchers working at the University of Zimbabwe, and a further three to five researchers working at the University of Zambia.

The research findings from this phase of the research provide a range of deepened understandings of approaches and pedagogies that strengthen the quality of education via a stronger emphasis on socio-cultural and socio-ecological approaches to education. A tool for monitoring quality as constituted by this model has also been tested out and can be further adapted for use in other contexts. It has, together with other insights of the research, been published in a report for UNESCO informing the second half of the UN DESD monitoring and evaluation process entitled *Learning Today for Tomorrow: Education for Sustainable Development Learning Processes in Sub-Saharan Africa*.⁵⁰

Thus, the research programme has produced useful concepts and tools that have the potential to substantively strengthen educational quality praxis under the Education for All umbrella of UNESCO. It has arguably succeeded in linking up the concepts of educational quality and education for sustainable development, which in international and regional discourses have remained under-defined in the context of the UN Decade of Education for Sustainable Development. The contributions of the climate change education network, co-ordinated by Dr Charles Namafe from the University of Zambia, have provided an added contextual feature to this argument, which has potential to enrich and strengthen it. In addition to the above mentioned publications, a summative review of the findings will be used to prepare a final synthesis paper on the research programme for international release and publication.

ZAMBIA: A CHANGE STORY

The SADC REEP has provided support to different environmental education initiatives in Zambia (for example, SEPEEC, publication of an environmental education textbook and establishment of a MESA Chair). Significant change has also taken place through the establishment of the SADC Research Network on Educational Quality and Relevance; which has shared new perspectives on strengths-based approaches to working with local knowledge and service learning approaches in Zambian schools and universities. However, *it is the establishment of the three MESA Chairs in Zambia, Botswana and Swaziland that has been the most significant because these can guarantee achievement of the SADC agenda of integration if properly utilised.* Our MESA Chair has already been able to provide regional teacher education training for SADC through a Regional Teacher Education Programme.



ZAMBIA: A CHANGE STORY

I have participated in the SADC ESD research network since 2007. The seed funds have enabled us to conduct locally relevant research, and to have our research published. Junior researchers that I partnered with have grown in confidence to do environment and sustainability education research. In my research and teaching, I now incorporate, whenever possible, EE/ESD in efforts to contextualise and to increase relevance and quality. I have also noticed an increasing effort to engage with Amartya Sen's capability approach to create agency through learning as connection. Increasingly, researchers are becoming problem solvers working in collaboration with communities and within communities of practice. *The most significant change however, is that researchers are working in collaboration with communities and within communities of practice to explore and model practical solutions to real-life problems. Research and practice are not separated, and collaboration is becoming a norm. The focus on creating 'change' in quality of life of communities and the widening of the scope of environmental education by adopting an ESD thrust. The international networks linked to the research network have also been valuable.*





"The research programme has produced useful concepts and tools that have the potential to substantively strengthen educational quality praxis under the Education for All umbrella of UNESCO."

IN SUMMARY

The networked approach to research capacity building and research in the SADC REEP has therefore provided the programme with new directions for the establishment of conceptual capital to guide its research. It has also established a cadre of researchers willing and capable of undertaking ESD research in the SADC region. How to sustain this momentum and maximise this potential will no doubt be an item for discussion at the forthcoming network meeting.

The research has also contributed substantively to an emerging reflexivity within the programme. This has helped it to establish conceptual direction and to enhance its relevance and applicability within a changing globalised discourse which needs to operate contextually and locally. The 2002 Programme document described reflexivity as "a process of critical and contextual review and action through which participants in the programme and significant others work together to understand the programme, its components and **the context** in which it is coming to present and **use this understanding** to inform the ongoing shaping of the programme.

The research, as it has unfolded through a growing network of researchers, and research-based perspectives on environmental education in the region, is contributing to the programme's reflexivity. As noted in the 2005 evaluation, "our evaluation suggests that a reflexive orientation is one of the key contributors to the relevance and success of the SADC REEP and is therefore not a mere 'nice to have'.⁵¹ Through expanding the research platform of the SADC REEP to include a range of partners in the region, including three new MESA chairs, this reflexive capacity has expanded considerably. New influences and perspectives continue to enhance the relevance and applicability of the SADC REEP and its associated contributions to learning how to build a more sustainable future.





08 FRAMING THE FUTURE

"The 2002 SADC REEP programme document includes a principle of 'open-endedness'. Open-endedness is associated with flexibility, responsiveness and indeed a reflexive orientation to education and development. As such it is an appropriate principle to apply".⁵²

Learning how to build a sustainable future requires open-endedness since it is not yet fully known how this should be done.⁵³

THE PAST 15 YEARS: WHAT HAS BEEN ACHIEVED?

This 15-year programme has achieved so much. It has established strong conceptual foundations for environment and sustainability education that are regionally robust. These have proven to be relevant amongst educators and communities involved in the education programmes and processes. They have been critically constituted in relation to international discourses, retaining their regional relevance, but not alienating potential partnerships and enabling networks.

In particular, the programme has established an open process, social learning approach to education that is centred on deliberations of valued beings and doings of communities and stakeholders, while also taking environmental issues and risks into account. It also includes a focus on possible more sustainable alternatives. It has done so within a context of poverty that has not been narrowly interpreted. This is a context where agency of all (educators, policy makers, community members, women's groups, and children in school) is valued and recognised as being significant to the societal changes necessary for a sustainable future.

Furthermore, the programme has a strong advisory community in the form of a national network representatives structure and forum. This has contributed considerably to the programme, and has guided its ongoing reflexive development and growth over time. The programme also has an historical structure out of which it has grown and to which it has contributed over the life of the programme. This wider community, loosely organised under the banner of EEASA with its 30-year history, provides a mechanism through which much of the programme's work can be taken forward in the region into the next 30 or more years. Additionally, the programme has been able to draw on, and contribute reciprocally to a vast body of organisations and networks in the region who have contributed uncountable amounts of goodwill, time, human capacity, conceptual and intellectual

capital and an ethic of mutual well-being and care. It is hoped that the seeds of regional co-operation that have been established by the programme will continue via this strength of agency and co-operation across the SADC region in future.

From a policy change perspective, the programme has developed an understanding of what regional policy is. It has actively explored how regional policies can be engaged with and used to strengthen and develop policy at the nation state level. It has also developed understandings of the complexity of the policy making system, particularly as it relates to environment and sustainability education at national, regional and international levels. It has developed practical knowledge and experience of how these policy relationships can be mobilised and developed to further understandings of environmental education policy at all levels. It has also reflexively engaged with the complexities of the policy making process, and has stubbornly continued to seek policy impact. It has shown commitment to realising the important role that policy plays in enabling societies to learn how to establish a more sustainable future.

From a capacity building and training perspective, the programme has developed and sustained a number of innovative professional training programmes. These have not only developed capacity of thousands of people in SADC who have participated in the programmes, but have also led to institutional changes, using the 'change project model'. This model is based on a situated, reflexive approach to professional development. It supports change-oriented learning, and shows results in practice.

Additionally, the programme has developed this model of professional development in such a way that it has been 'taken up' and applied in a wide range of contexts, in SADC nation states, but also in major international initiatives such as UNEP, the Sida International Training Programmes and in the Swedish International Centre for Education for Sustainable Development. At the core of this 'take-up' however, are also the processes of leadership development and the 'training of trainers'. The

programme has supported a cadre of course developers, with course design competence which can be applied to a range of other contexts. A set of course design 'sourcebooks' exist to support these developers.

From a materials development perspective, the programme, together with Share-Net at WESSA, has pioneered a model of materials development based on principles of access, low cost and participation. It has successfully supported the development of thousands of low-cost materials for use in environmental education programmes. Furthermore, it has researched this practice, and has reflexively developed understandings of the difference between a 'material' and a '*learning support material*', emphasising the latter in its materials development training programmes. Regional resources, most notably a Sourcebook on Learning Support Materials, have been developed that support ongoing materials development work. This work has taken place at sub-regional cluster levels and as a core activity of various networks in the region.

Networking has also been a key activity of the programme. The programme has developed three importantly interlinked approaches to networking which include: **networked practices** (where people meet and do things together); **networked communication** (which allows people to link up with each other and to share environmental education news across the region); and **network support** (which provides various forms of support to other, self-formed and self-directed networks at local, national or regional level). This has supported the development of key networks such as the MESA network and EEASA, and a number of country level RCEs which are affiliated to, but not dependent on the SADC REEP.

From a research perspective, the programme has established a vibrant research network involving some 50 active researchers in the SADC region, across 10 academic institutions, all of whom are located in Faculties of Education. The programme has also supported the establishment of three MESA Chairs at three southern African universities,

strengthening their capacity to offer Masters Degrees and to contribute to regional leadership and regional research. This, together with the capacity that exists at the Rhodes University Chair (where the research programme was co-ordinated), leaves capacity for further research focussing on Environment and Sustainability Education in all of these institutions.

The research programme has produced in the region of 30 published/ publishable academic papers, documenting the research efforts. Researchers have presented their work at all EEASA Conferences since the inception of the research programme, offering in total approximately 50 conference papers and presentations to regional audiences. The work has also been presented at SADC level, and a summary of cases has been presented to UNESCO for inclusion in the ESD Learning Processes evaluation report. The research has also been included in the Association for the Development of Education in Africa conference, and has been presented to a UNESCO Teacher Education Meeting.

From a content perspective, the research programme has developed a richly textured view of what environment and sustainability education in a southern African region is all about. It has also explored how environmental educators can go about enhancing and strengthening environmental education. Furthermore, it has developed perspectives which have shaped the content of many of the programmes and materials produced by the programme. The research programme has developed applied understandings of concepts such as action competence, capabilities, agency and social learning. In combination, it offers a substantive platform for understanding educational quality and relevance questions in a southern African context, from socio-cultural and socio-ecological experiential and meaning making perspectives. The research programme has also probed what climate change education may mean in the southern African context, setting out conceptual and practical research pathways to take this work forward.





.....

"The programme has established an open process, social learning approach to education that is centred on deliberations of valued beings and doings of communities and stakeholders, while also taking environmental issues and risks into account."

.....

FOR THE FUTURE THEN: WHAT REMAINS?

In reporting what has been achieved, there is always much that has **not** been achieved. For example, there has not been adequate funding for scaling up activities at country levels, although it has been recognised that this is primarily the responsibility of national governments. There have also been suggestions made for more strategic regional support for fundraising amongst the various networks that have been established, and for more sustained support for sub-regional nodes. Other suggestions include more regular follow-up and 'keeping track' of emerging outcomes, and providing ongoing support at regional levels.

These, and many other suggestions which will emerge from the final evaluation, are important pointers for the future. This section, however, does not seek to point to the future by responding to evaluation findings, but rather by locating these possibilities in what has been learned in the SADC REEP over the past 15 years. It cuts to the core of what has and what has not been achieved, while drawing on the immense capital that has been generated through the programme. Combined with the final evaluation findings, this section could be used in or for future planning and reflection purposes.

Futures research has indicated that predicting the future is most often notoriously difficult to do. Projections are more often than not proven wrong. However, some genres of futures studies are showing that it is possible to plan for the future, if one has a good understanding of the key mechanisms at play that have shaped, and that are shaping the present.

POLICY CHANGE

The SADC REEP through its 15 years of engagement with policy change practices has identified

that there are key mechanisms at play that are influencing our capacity to bring about policy change. These are the power laden nature of policy making; its hierarchical structural functioning; and the need for building capacity for policy making and implementation. For the future then, it would seem that there is an ongoing need to engage with policy change, but that this work would need to be done:

.....
At the highest level of policy making, where the powers and agency of policy makers can effectively be harnessed to change policy structures necessary to enable the region's people to learn how to create a sustainable future;

.....
With due recognition of the need for policy making and implementation capacity, at the levels of human professional capacity, and institutional capacity; and

.....
With due recognition that the kind of policy change necessary requires inter-disciplinary co-operation and multi-sectoral engagement; as well as multi-levelled engagement and policy coherence at international, regional and nation state levels.

As mentioned earlier, developing these policy change processes within a stronger critical policy studies framework, combined with networked policy systems analysis tools, could further strengthen policy change activities in the SADC REEP.

CAPACITY BUILDING

Key mechanisms at play that shape and influence capacity building programmes include a broad-based lack of capacity for implementing environmental policy; institutional inertia and institutional blockages; and inadequate environmental education and training structures for high quality 'training of trainers' who have capacity to run high quality, situated, reflexive capacity building programmes. Excellent models have been developed in the SADC REEP to address these mechanisms, and to take this work forward there is need to:

Make the professional development model and approach more explicit and show more clearly how the model works in practice, and how it can be adapted and applied to other contexts (there is much evidence to show how this has been done);

Ensure that enough effort and investment goes into training of trainers to use this model successfully. This involves developing in-depth applied knowledge of the situated, reflexive and change-oriented learning model on which the courses are built. Here a large network of existing capacity can be further developed (in, for example, the MESA network, the research network, the capacity building network etc.) to source competent 'trainers' with capacity to launch and support substantive, high quality training programmes.

Apply this model to new areas of capacity building, especially those areas of capacity which have been identified as lacking policy implementation. Retain the 'regional mix' in the capacity building programmes as the regional mix is a powerful learning agent. This allows for reflexive understanding of one's own context in relation to others. The concept of Regional Training Programmes is useful here.

MATERIALS DEVELOPMENT

Key mechanisms that influence materials development include technical capacity, and systems of materials development production which can be either enabling or constraining. The SADC REEP has pioneered a system of materials development that is for the most part enabling. It has also been shown to be a core element of all other elements, as materials are always required in capacity building programmes. In taking this component forward there is a need to:

Maintain the system of low-cost, accessible and copyright-free publication, with ongoing emphasis on professionalised production and capacity development for materials development.

Maintain the emphasis on *learning support materials*, i.e. their conceptualisation as core resources that can support learning for a more sustainable future.

Expand the capacity of the system to especially produce and develop high quality course / training materials to further strengthen and support the capacity building 'core strength' developed in the SADC REEP.

NETWORKING

Key mechanisms that influence networking include distance, availability of communication systems, purposes and inadequate local level support for generative support of smaller networks. In taking this component forward it would be important to:

Maintain the strength of the formal Network Representatives structure and its functioning and expand this where necessary.

Maintain the triple networking focus established in the SADC REEP: networked practice, networked communication and network support.

Continue to strengthen the independent emergence of networks such as the MESA network and the RCE network, and assist with establishing collaborative links.

RESEARCH

Mechanisms that shape the research component of the programme include a poor culture of research in many SADC universities; inadequate research funding; inadequate mechanisms for publication of research outputs; and a complex intellectual terrain, with many fragmented possibilities for research. In taking this component forward it would be important to:

Continue with the concept of a research network that is open and that allows for more researchers to join the network. Encourage members of the research network to 'carry back' their learning in

the research network and support smaller research groups in home countries.

Ensure that research capacity building activities are established and maintained within the research network; for example, research design courses, writing workshops, and conference presentations.

Support publication of the research, as well as carefully structured engagement with core concepts that 'cross boundaries' (e.g. educational quality and relevance, capabilities, social learning etc.) as these provide for regional meaning making, and a deepening of understanding of key issues relevant to a particular research field.

Support locally relevant case study research in which these concepts are deliberated for their relevance, tested, applied and given meaning, as this helps to develop contextualised meaning.

DEVELOPING A FIELD OF PRACTICE THROUGH REGIONAL CO-OPERATION

The individual components of the programme as reported on above, are not, in reality, separate, but highly integrated and related. At the core of all of the practices lies the development of a field of practice (or a huge community of practice as the programme likes to refer to it) through regional co-operation. Over 15 years it is possible to see how this has emerged; and also how this can further emerge with sustained support and commitment. This would be possible in any other field of practice, where **learning to build a sustainable future** is necessary. The enabling feature of the SADC REEP has been its capacity to mobilise and bring together regional groups. It has also been important to resource these gatherings with conceptual and practical tools to take forward the work of environmental educators across the region. This needs to be done with ongoing reflexivity, humility and commitment. To take this model of capacity building to **develop**

a field of practice through regional co-operation forward at regional level, or in other regions, it would be important to ensure:

Sustained, long term commitment and support.

A core of activities that remain constant, but not the same, which develop reflexively over time through ongoing praxis.

Models of process that are practical, but also reflexively informed by new perspectives and applied research-based evidence.

A model of process which believes in and actively develops the agency of those who choose to participate in the programme, seeking ways to demonstrate this agency at local, national and international levels through the programmes activities.

LEARNING TO BUILD A SUSTAINABLE FUTURE

If societies are **to learn to build a sustainable future**, they need to invest in learning. As shown by this case study of a regional programme, the Swedish government and the Southern African people have both invested considerably in this learning for a 15-year period. This investment has demonstrated **how capacity can be built for learning for a sustainable future**. This is a positive story of global co-operation that has benefited people in a region where such support is most needed. It tells of equalising some of the inequalities that exist on a global scale. It highlights the importance of investing in people but also of investing in our common future.

The story of the SADC REEP is not simply a 15-year story of Swedish-Southern Africa partnership, although this lies at its core. It is also the story of a programme and a region, Southern Africa – one of the so-called poorest in the world – that has

taken the opportunities provided by this partnership seriously. It has mobilised the rich diversity and agency of people across the region to build a field of practice that is so essential for enabling people to learn how to build a more sustainable, just future.

The story shows that without educators' agency and commitment, and the vision and support of educational institutions, and without creative, reflexive and critical educational theory and practice being played out in practice, the concept of learning to build a sustainable future together is not possible. The SADC REEP is one such story of where this is happening. It deserves to be celebrated, not in egoistic or self congratulatory terms, but in terms of the meaning and praxis it has created in the lives of people over a 15-year period.

AND FINALLY ...

Not much of what has been reported here would have occurred if it were not for the agency, commitment and dedication of those that given so much of their time and energy to the goals and objectives of the SADC REEP. These include those that have had the privilege to serve in management and leadership roles in the programme: Jim Taylor, Malcolm Powell, Mike Ward, Mumsie Gumede, Justin Lupele, Heila Sisitka, Eureka Rosenberg, Tichaona Pesanayi, Vladimir Russo, Sanele Cele, Elizabeth Martens, Sally Cumming, Shepherd Urenje, Dick Kachilonda, Caleb Mandikonza, Charles Obol, Bernard Bakobi, Helen Springall Bach, Imakando Sinyama, Kim Ward and others. They also include all those who have supported the programme's activities in so many ways such as Mphemelang Ketlhoilwe, Mandla Mliphahla and Charles Namafe (the new MESA Chairs); Akpezi Ogbuigwe and Mahesh Pradan (UNEP); Edem Adubra (UNESCO); Zinaida Fadeeva and Abel Atiti (UNU) and others

who believed in the role of the SADC REEP and its work, and have contributed to enabling it in many ways. The role of national Environmental Education Network representatives,⁵⁴ past and present, has been critical in steering and facilitating the achievements of the SADC REEP. They include Vladimir Russo and Nascimento Soares (Angola), Arabang Kanego and Dollina Malepa (Botswana), Noël Kiaya Katiete (DRC), Keratile Thabana (now Principal Secretary of the Ministry of Education and Training), Lemohang Sekhamane and Mamasheane Motabotabo (Lesotho), Clement Tikiwa (Malawi), Doolaree Boodhun (Mauritius), Vilela de Souza, Sonia Silveira (Mozambique), Michelle Martin and Jeannette Larue (Seychelles), Solly Mosidi and Thomas Mathiba (South Africa), Isaac Dladla (Swaziland), Bernard Bakobi, Anna Maembe and Bartholomew Tarimo (Tanzania), Justin Mukosa and Chama Mwansa (Zambia) and Steady Kangata (Zimbabwe).

In the formative years of the programme Paul Maro, Jobo Molapo (both from SADC-ELMS) as well as Tomas Hertzmann, Mikael Seggeros, Marie Gronval (nee Neeser), with support from Mia Zacco, and Marie Bystrom, were all influential in establishing and sustaining the early developing SADC REEP. Later Janet Vahamaki, Martin Westin, Christian Lien, Annika Jagander and Elphas Ojiambo contributed considerable wisdom to the developing programme.

Mostly, however, those that have participated in all of the SADC REEP's activities, who now number over 2000 people, are acknowledged, for without their interest and commitment to environmental education, nothing that the SADC REEP had to offer would have mattered.

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