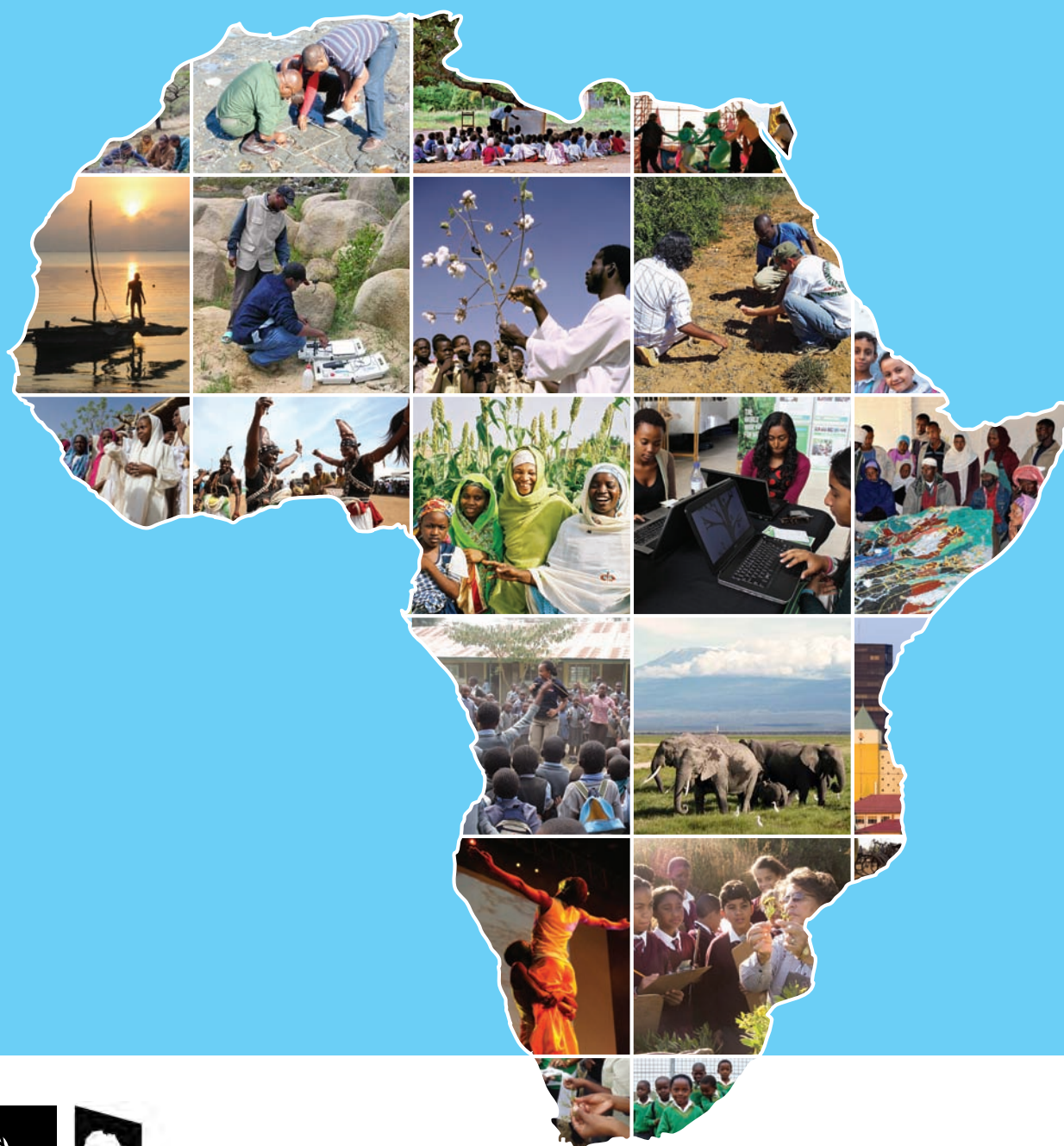


Strengthening Sustainable Development in Africa



In response to the AMCEN Arusha Declaration, 2012

Africa Environmental Education and Training Action Plan 2015–2024

Strengthening Sustainable Development in Africa



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Preparation of the AEETAP was certainly an international stakeholder collaboration and consultation exercise with representation from the Mainstreaming Environment and Sustainability in African Universities (MESA) partnership programme, the Horn of Africa Regional Environmental Programme and the Southern African Development Community Regional Environmental Education Programme (amongst others), and also participants attending the 7th World Environmental Education Congress in Morocco (2013).

Finally, we would like to point out that this Action Plan aims to be a “living document” that is updated on a regular basis, based on feedback from African member states and relevant stakeholders. An electronic online portal, where stakeholders are able to incorporate and share their experiences in the implementation and updating of AEETAP, will be created.

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FOREWORD

A lack of clear and sustained environmental awareness in many African countries has contributed to environmental degradation within the continent. To address this challenge, UN Environment, in collaboration with other stakeholders, is promoting capacity development for future professionals through environmental education.

The Africa Environmental Education and Training Action Plan (AEETAP) 2015–2024, as called for by the African Ministerial Conference on the Environment (AMCEN), is one of UN Environment’s modes of facilitating and promoting environmental awareness, education and training. The Action Plan advocates for ecosystem resource management; communication and dissemination of environmental material in all forms of education; spatial planning and urban design through green campus designs; sustainable tourism and efficient transport; and water and sanitation, among other green practices.

The Action Plan seeks to promote innovation based on best sustainability practices through information and communications technology (ICT). This includes the development and implementation of Massive Open Online Courses (MOOCs) on sustainable development, as well as the promotion of positive attitude and behaviour change, all geared towards ensuring an environmentally resilient continent.

The Action Plan will support UN Environment’s Mainstreaming Environment and Sustainability in African Universities (MESA) Partnership Programme.

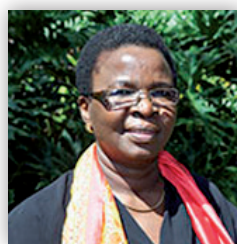
MESA seeks to mainstream environment and sustainability concerns into teaching, research, community engagement and management of universities in Africa. The Action Plan will also contribute to the achievement of AMCEN’s Regional Flagship Programmes, including among others: Green Economy Partnerships; African programmes on sustainable energy development; and Partnerships for sustainable consumption and production. As such, the Action Plan will help ensure that the African Union dream of “A prosperous Africa at peace with itself and its partners” becomes a reality.

The practical application of the Action Plan among member states will build learners’ capacity to critically analyse, synthesise and use emerging environmental information for decision making; promote values and commitment to the environment, based on an understanding of the role of the environment in social justice and in people’s health, quality of life, livelihoods and socio-economic development; and advocate for action competence based on their understanding of environmental issues and on their associated values.

Above all, the Action Plan will complement national and regional sustainability agendas; the achievement of the 2030 Agenda on sustainable development and the Sustainable Development Goals (SDGs); the African Agenda 2063; and the UNESCO Global Action Plan for Education for Sustainable Development.



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PREFACE

Environmental integrity in Africa and the world continues to grapple with a myriad of threats, consequences of increased anthropogenic activities. These issues include desertification, reduced quality and quantity of fresh water, biodiversity loss, climate change, degradation of arable soils, food insecurity and increased pollution. Together, these challenges impact sustainable development, human health and ecosystem resilience.

The African Ministerial Conference on the Environment (AMCEN) has, over the years, recognised environmental education as an effective means for confronting environmental challenges and identifying future opportunities. Environmental education is critical for creating awareness, enhancing values, changing people's attitudes and improving skills consistent with sustainable development.

To address environmental challenges facing Africa, AMCEN agreed to strengthen environmental education and training and develop an action plan for Africa. The Africa Environmental Education and Training Action Plan (AEETAP) 2015–2024 has been prepared as a direct response to the 2012 AMCEN Arusha Declaration on Africa's post Rio+20 strategy for sustainable development.

The core objective of the Action Plan is to enhance community environmental education and training within Africa, through various forms of education: training, life-long learning, capacity building programmes and projects. It calls for reorientation of the education system; policy development; curriculum and programme innovation and design; transformative learning approaches that support action and change; transformative assessment practices; development of materials to support new approaches to environmental learning and action competence; and technology enhanced learning to foster wider access and participation in environmental education and training.

I take this opportunity to commend all those who have been involved in preparation of this Action Plan, especially UN Environment's Environmental Educational and Training Unit (EETU) for coordinating and driving this initiative. I hope this Action Plan will encourage and support action and participation by all stakeholders at all levels in Africa, to promote an environmental conscious African citizenry and contribute to the achievement of a sustainable, clean, peaceful and healthy Africa.

A handwritten signature in black ink that reads "Khaled Fahmy".

H.E. Dr. Khaled Fahmy
Minister of Environment, Egypt,
and President of the African Ministerial Conference on the Environment

ACRONYMS

ABET	Adult Basic Education and Training
AEETAP	Africa Environmental Education and Training Action Plan
AfDB	African Development Bank
AGEP	Africa Green Economy Partnerships
AU	African Union
AUC	African Union Commission
ECA	Economic Commission for Africa
ECD	Early Childhood Development
ECDA	Early Childhood Development Agency
EE	Environmental Education
EE&T	Environmental Education and Training
EEASA	Environmental Education Association of Southern Africa
EETU	Environmental Education and Training Unit
ESD	Education for Sustainable Development
GUPES	Global Universities Partnership on Environment for Sustainability
ICT	Information and Communications Technology
IPCC	Intergovernmental Panel on Climate Change
LDBE	Land Management, Desertification, Biodiversity and Ecosystems-based Adaptation to Climate Change
MDG	Millennium Development Goal
MESA	Mainstreaming Environment and Sustainability in African Universities
MOOC	Massive Open Online Course
NEPAD	New Partnership for Africa's Development
PIDA	Programme on Infrastructure Development in Africa
QA	Quality Assurance
REEP	Regional Environmental Education Programme
SADC	Southern African Development Community
SCP	Sustainable Consumption and Production
SDG	Sustainable Development Goals
SE4ALL	Sustainable Energy for All
TVET	Technical Vocational Education and Training
UNDESD	United Nations Decade of Education for Sustainable Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organisation

EXECUTIVE SUMMARY

The Africa Environmental Education and Training Action Plan (AEETAP) was initiated by the UNEP AMCEN Secretariat in partnership with the UNEP Environmental Education and Training Unit (EETU) following the 2012 Arusha Declaration 18, which states:

To agree to strengthen environmental education and training and develop an action plan for Africa, covering formal and non-formal education, capacity-building and information networking components, among others, and to explicitly include a focus on technology-enhanced learning in this action plan.

The main objective of the AEETAP is to enhance community environmental education and training within the continent, through various formal education, training, lifelong learning and capacity building programmes and projects, encouraging participation of both males and females equally. These programmes and projects are envisaged to fundamentally improve the environmental, societal and economic state of Africa for the benefit of Africa's people, and are closely aligned to the five AMCEN flagship programmes.

The goals of the AEETAP are to:

- ▶ Strengthen the capacity of **formal education institutions and actors** to integrate AMCEN priority areas, and associated environment and sustainable development concepts, values and action learning approaches into their policies, practices and outcomes;
- ▶ Strengthen **training activities and programmes** to include and respond creatively and critically to AMCEN priority areas, and wider environmental issues, risks, green economy opportunities in ways that maximise potential for sustainable development and poverty alleviation;
- ▶ Strengthen the **capacity of policy makers, leaders and decision makers** to meaningfully integrate environment and sustainable development concerns into their planning, strategies, policy making and budgeting frameworks through carefully planned capacity building programmes;

- ▶ Strengthen **lifelong learning systems and community education and training systems and programmes** to integrate AMCEN priority concerns, and to expand the relevance and use of indigenous knowledge in environmental education and training;
- ▶ Strengthen the capacity of environmental education, training and social learning **networks and institutions** to support and further develop an expanding system of environmental education and training on the African continent;
- ▶ Integrate **innovations** in e-learning, curriculum, **Massive Open Online Courses (MOOCs)**, transformative learning, assessment and materials development into environmental education and training programmes on the African continent;
- ▶ Enhance the **professional capacity of trainers, lecturers, social learning facilitators and environmental educators** to use innovation centred approaches to EE&T in their policies, programmes and outcomes, including technology enhanced approaches to learning where relevant;
- ▶ **Contribute to environmental actions and change** through support for critical, participatory and action-centred approaches to environmental education and training in all sectors of formal, non-formal and lifelong learning; and
- ▶ **Monitor and evaluate** environmental education and training programmes for ongoing reflexive improvement and change and expanded, relevant outcomes on the African continent.

The Action Plan was developed through a participatory consultative process with the Mainstreaming Environment and Sustainability in African Universities (MESA) partnership, the Horn of Africa Regional Environmental Programme and the Southern African Development Community (SADC) Regional Environmental Education Programme (amongst others), and also involved participants attending the World Environmental Education Congress in Morocco. Over six consultative review and AMCEN secretariat meetings were conducted across the continent during the drafting stages.

CHAPTER 1

ORIENTATION AND BACKGROUND



1.1 Introduction: The consultative process

This Africa Environmental Education and Training Plan (AEETAP) was initiated by the UNEP African Ministerial Conference of the Environment (AMCEN) secretariat in partnership with the UNEP Education and Training Unit (EETU) following the 2012 Arusha Declaration which called for the formulation of an African Environmental Education and Training Action Plan. The AEETAP seeks to enhance community environmental education and training within the continent, through various formal education, training, lifelong learning and capacity building programmes and projects. These are envisaged to fundamentally improve the environmental, societal and economic state of Africa for the benefit of Africa's people, and are closely aligned to the AMCEN flagship programmes. The Action Plan was developed in consultation with, among others, the Mainstreaming Environment and Sustainability in African Universities (MESA) partnership programme, the Horn of Africa Regional Environmental Programme and the Southern African Development Community Regional Environmental Education Programme and also involved participants attending the World Environmental Education Congress in Morocco. It has been developed through a participatory process involving a number of consultations, including: a consultation in Addis Ababa, Ethiopia in November 2012; a consultation

in Nairobi, Kenya in May 2013; a consultation in Marrakech, Morocco in June 2013; a consultation with SADC representatives in South Africa in June 2013; consultations in Addis Ababa in May 2014; and further consultations in Grahamstown, South Africa, in November 2014; as well as consultations with the AMCEN secretariat at UNEP.

The proposed key result areas, with programmes and projects in this Action Plan are those which are considered by the Environmental Education and Training Community in Africa to fundamentally improve sustainable development in Africa. They are carefully designed to address the AMCEN priorities for environment and sustainable development via environmental education and training activities and as such will also contribute to the achievement of the UN Sustainable Development Goals, the post-2015 development agenda, and the NEPAD Environmental Action Plan.

The priorities and strategies presented in this Action Plan are considered to be 'catalytic' in the sense that they will deliver compelling, tangible results that can be measured, and that can be achieved in the medium to long term. Additionally, they are seen to be catalytic, as they are likely to seed ongoing system innovation for environmental education and training.

1.2 The Arusha Declaration (2012) and AMCEN's approach to environmental education and training

The Arusha Declaration on Africa's post Rio+20 Strategy for Sustainable Development, signed in September 2012 by Africa's Environmental Ministers at the fourteenth session of the African Ministerial Conference of the Environment (AMCEN), recognises the ongoing United Nations Decade of Education for Sustainable Development (UNDESD) 2005-2014 and the Tbilisi communiqué – *Educate Today for a Sustainable Future* – adopted by the Tbilisi Intergovernmental Conference on Environmental Education for Sustainable Development (Tbilisi +35), held on 6 and 7 September 2012. It furthermore resolved, under clause 17:

To agree to strengthen environmental education and training and develop an action plan for Africa, covering formal and non-formal education, capacity building and information networking components, among others, and to explicitly include a focus on technology enhanced learning in this action plan.

This AEETAP therefore directly responds to this resolution in AMCEN's 2012 Arusha Declaration. The Plan seeks to directly build capacity for responding to environmental issues, risks and associated sustainable development challenges in Africa, as outlined in the African Environmental Outlook Reports. It articulates the resolutions of the Arusha Declaration on Africa's Post Rio+20 Strategy for Sustainable Development and other recent environmental, educational and sustainable development declarations and policy documents, taking into account current developments at the international level. It also explicitly strengthens the role of environmental education and training in achieving the wider objectives of Education for Sustainable Development, and the objectives of the UN Global Action Plan on Education for Sustainable Development, proposed for the post-2015 period.

This AEETAP, mandated by the Arusha Declaration (2012) and building on earlier commitments of the AMCEN to environmental education and training processes as well as the principles, practices and outcomes of the United Nations Decade of Education for Sustainable Development (2005-2014), provides a common strategic direction for Environmental Education and Training in Africa so as to facilitate transformative change towards sustainable development through education and training. It outlines immediate actions for strengthening and expanding environmental education and training in Africa, in countries, but also across countries within a ten-year framework of action. The AEETAP is also in line with the UNDESD Global Action Programme (GAP) that seeks "to generate and scale up action in all levels and areas of education and learning in order to accelerate progress towards sustainable development", through two objectives:

- a) to reorient education and learning so that everyone has the opportunity to acquire the knowledge, skills, values and attitudes that empower them to contribute to sustainable development; and
- b) to strengthen education and learning in all agendas, programmes and activities that promote sustainable development.

GAP focuses on **five priority action areas** in order to enable strategic focus and stakeholder commitment. The following priority action areas are considered as key leverage points to advance the ESD agenda:

- 1) policy support;
- 2) whole-institution approaches;
- 3) educators;
- 4) youth; and
- 5) local communities.

**BOX 1.1****ENVIRONMENTAL EDUCATION AND TRAINING
IN THE CONTEXT OF AMCEN**

AMCEN recognises education as an effective means for confronting environmental challenges and identifying future opportunities. In this regard, AMCEN views environmental education and training as indispensable to changing people's attitudes towards assessing and addressing their development concerns. Further, environmental education and training is viewed as critical for attaining environmental and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development.

Over the years, AMCEN has taken a number of decisions related to environmental education:

At its **first session** in 1985, AMCEN adopted a programme of action on environmental education and training in Africa. It declared the firm resolve of governments of Africa to implement the Programme of Action by:

- a) Developing and integrating environmental education and training at all levels of society in Africa through formal and informal means; and
- b) Orienting the Programme of Action towards solution of specific urgent environmental problems.

At its **second session** in 1987 and subsequent meetings, AMCEN re-emphasised the need for governments to take firm measures to implement a Programme of Action on Environmental Education and Training.

At its **fifth session** AMCEN decided to review national reports on capacity-building (environmental training).

At its **sixth session**, AMCEN decided to focus attention on capacity building, environmental education and public awareness.

At its **twelfth session**, the strategy included a decision to support and introduce environmental education and technology-supported learning.

At its **thirteenth session**, AMCEN again supported a decision on environmental education and technology-supported learning

At its most recent, **fourteenth session**, governments agreed to strengthen environmental education and training through the development of an Africa Environmental Education and Training Action Plan.

1.3 Environmental education and training in Africa

Environmental education and training (EE&T) is critical for the acquisition and application of knowledge, skills, values and action competences for participation as active and informed citizens in the development of an ecologically sustainable, socially just, economically viable and sustainable society. Environmental education and training is also critical for poverty reduction and for ensuring human well-being and sustainable livelihoods development on the African continent.

Environmental education and training fosters self-understanding on ecosystem functions and services, improves quality of lives and raises people's productivity. This results in environmentally sound entrepreneurship, behavioural changes and technological advances. EE&T also secures economic and social progress by improving income distribution and survival skills which may consequently aid in combating poverty.

Environmentally literate citizens with the competence to bring about change towards sustainable development do not simply materialise from nowhere. People need to *learn to understand* environmental issues and risks, and their causes. They also need to *develop the values and action competences necessary to respond to and develop alternative solutions and change practices* to ensure ecological sustainability, human well-being and sustainable development. Environmental education and training is therefore an indispensable process within the overall goal of Education for Sustainable Development.

Environmental changes impact upon men and women differently and usually have a disproportionate impact on women. Women are more likely to benefit most directly from environmental conservation, protection and improvement; benefits are often passed more completely by women to their communities than those experienced by men.



A. Fleuret / USAID



Over the years, the field of environmental education and training has changed from a narrow and somewhat limited focus on awareness raising and behaviour change, to a stronger and broader focus on **strengthening individual and collective participation in socio-ecological change processes necessary for sustainable development, resilience, adaptation and transformation**. This requires the development of systems thinking, critical and creative thinking, relationship building, capacities to act and wider forms of social learning. It involves formal acquisition of knowledge, development of action competence, values, and participation in social learning and environmental actions and change processes. It involves all sectors of society, both men and women, at all levels of the education and training system, and includes wider forms of capacity building, networking and social learning that occur outside of formal education systems.

Evidence abounds, however, of the importance of investing in environmental education and training – this is often a neglected area in environmental thinking, policy and decision making and in educational thinking, policy and decision making alike. This is also a problem particularly evident on the African continent. It is widely known that environmental education and training often ‘falls between the cracks’ i.e. it is *under-valued by both the environmental sector and the education sector*.

The continent does, however, have many good practices to draw on, such as the work of the SADC Regional Environmental Education Programme, the Eco-Schools initiatives in Africa, the Mainstreaming Environment and Sustainability in African Universities (MESA) programme initiated by UNEP as a UNDESD Decade of Education for Sustainable Development flagship programme, and the associated Green University Networks that are currently being established (Kenya, Uganda, Morocco and West Africa). Participation in these and other initiatives can still expand substantively, and in principle the AEETAP must build on existing strengths if progress is to be made.

Collective participation is crucial to ensure collective solutions are found for both men and women. When launching environmental literacy initiatives, services must be made available to both males and females equally. Females have historically had limited access to basic education and training, hence special attention should support bridging the knowledge gap. Women still often lag behind when it comes to gender parity at institutions of learning. A gender analysis should be used to indicate men and women’s involvement, with the target being equal representation in teaching, training and outreach activities, at the national, organisational and leadership levels, and for the recipients of the education.

The AEETAP will seek to strengthen individual and collective participation in socio-ecological change processes needed to respond to critical environmental and sustainable development concerns in Africa. It will do this through emphasising acquisition, evaluation, use and application of environmental knowledge, values, skills and action competence in a variety of education and training settings for both men and women, including formal, non-formal, and informal social learning and technology-enhanced learning contexts.

Capacity building, networking, participation, social learning and the use of modern technologies such as information communication technologies (ICTs) have been identified as crucial components of effective environmental education and training for sustainable development.

1.4 A systems perspective

The AMCEN broad approach to environmental education and training adopts a systems perspective in that it aims to:

- ▶ Develop and integrate environmental education and training **at all levels of society** in Africa through formal and informal means;
- ▶ Orient the AMCEN Programme of Action towards **solution-specific urgent environmental problems**; and
- ▶ Use **technology-supported and technology-enhanced learning** to strengthen environmental education and training.

Firstly, the AEETAP recognises social-ecological systems as the basis for environmental education

in that environmental issues are not separate from social contexts, systems and processes (see Figure 1.1 below). Noting that human action is substantively changing the Earth systems, scientists are suggesting that these changes have far-reaching and dangerous consequences, threatening the well-being of people, living things and the stability of our planet.

There is therefore a strong urgency for human beings everywhere to work together to ensure effective **planetary stewardship**. This means adopting holistic and integrated forms of environmental education and training by all sectors of society towards sustainable development. Failure to do this risks driving the Earth systems onto a trajectory from which we will not easily be able to return.

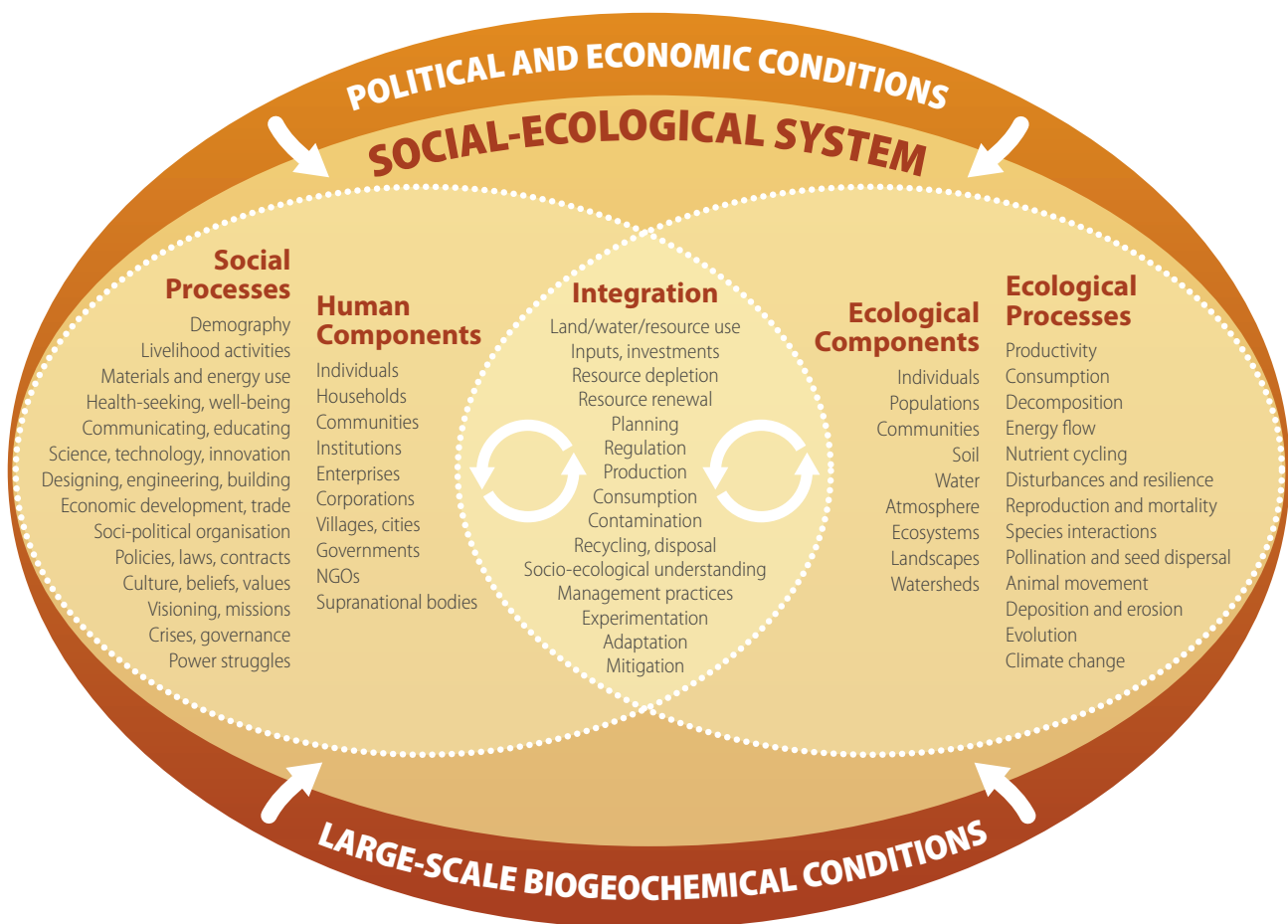


Figure 1.1 A schematic diagram of a socio-ecological system (Source: www.snre.ufl.edu)



In an African setting, it is also important to interpret the socio-ecological system from a cultural perspective, and to recognise that there are important cultural connections between people and their environments and the natural resources base on which many communities depend directly. Much indigenous knowledge derives from the intimate relationships that exist between people and the environment, and this represents a valuable resource for environmental education and training on the African continent.

Secondly, the AEETAP supports a systems view of knowledge which includes different forms of knowledge in learning, such as tacit knowledge, indigenous knowledge and scientific knowledge. It also

recognises that many new forms of knowledge and learning can be made available through technology enhanced learning. Use of technology enhanced learning is yet to be fully developed in and for environmental education and training in Africa.

In terms of access and control of resources in Africa, usually men own the land and women are the users; hence any environmental educational interventions must take into consideration the status quo and additionally consider the impact of education on gender relations and social standing. It is important to take into consideration constraints that might arise with the introduction of environmental education and training targeting both genders.



Figure 1.2 Capacity building

EE&T for sustainable development in a context of lifelong learning

To cover the entire education, training and social learning contexts, the AEETAP addresses these three dimensions and encourages governments to integrate environmental education and training, focussing

on the AMCEN Regional Flagship Programmes (AMCEN RFP), into all education and training systems as outlined briefly in Box 1.2.



Lysippos / Wikimedia

BOX 1.2

AMCEN REGIONAL FLAGSHIP PROGRAMMES

The AMCEN RFPs aim at developing partnerships for capacity building and technology transfer to support poverty reduction and sustainable livelihood in Africa through Environmental Education and Training actions that strengthen:

- ▶ Green Economy Partnerships;
- ▶ African programmes on sustainable energy development;
- ▶ Partnerships for sustainable consumption and production, as well as integrated waste management;
- ▶ Integrated environmental assessment for sustainable development; and
- ▶ Sustainable land management.

There are four key results areas through which the RFP can be implemented through environmental education and training (EE&T).

EE&T Key Result Areas

Education and training will contribute to capacity building and awareness creation along the lines of the RFPs, focusing on:

- ▶ Education system policy development;
- ▶ Curriculum and programme innovation and design;
- ▶ Transformative learning approaches that support action and change;
- ▶ Transformative assessment practices;
- ▶ Materials development to support new approaches to learning and action competence; and
- ▶ Technology enhanced learning to foster wider access and participation in environmental education and training.

EE&T KEY RESULT AREA 1 Formal Education	EE&T KEY RESULT AREA 2 Training	EE&T KEY RESULT AREA 3 Lifelong learning and community education	EE&T KEY RESULT AREA 4 Capacity building, networking and social learning
<p>Including:</p> <ul style="list-style-type: none">▶ Early childhood education▶ Basic education▶ Further education and training▶ Teacher education▶ Higher education▶ Equally targeting girls and boys	<p>Including:</p> <ul style="list-style-type: none">▶ Technical vocational education and training – TVET▶ Workplace learning▶ Green economy conversion training and demonstration centres▶ Training of key stakeholders▶ Equally targeting both men and women	<p>Including:</p> <ul style="list-style-type: none">▶ Adult learning▶ Youth empowerment▶ NGO/CBO/FBO programmes▶ Indigenous knowledge▶ Equally targeting both men and women	<p>Including:</p> <ul style="list-style-type: none">▶ Media and social learning approaches▶ Building and strengthening networks and communities of practice▶ Mentorship▶ Training of trainers and EE&T specialists▶ Equally targeting both men and women▶ Opportunities to work with government ministries whilst integrating a gender element is important e.g. Ministry for Gender/ Social Affairs▶ Collaborations with women leaders to foster environmental literacy initiatives

CHAPTER 2

PRIORITIES FOR ENVIRONMENTAL EDUCATION AND TRAINING IN AFRICA



2.1 AMCEN Regional Flagship Programmes: Priorities for environmental education and training in Africa

Environmental education and training in Africa can be as wide as all environmental and sustainable development issues and risks in all contexts, in all countries, and can involve all education and training systems (formal, non-formal and informal institutions). To reach all of these at once is simply not possible given resource and other constraints. An

AEETAP must, therefore, seek to identify priorities for environmental education and training.

The AMCEN Regional Flagship Programmes provide a core focus for environmental education and training programmes on the African continent. The five AMCEN Regional Flagship Programmes are:

Table 2.1 *AMCEN Regional Flagship Programmes*

Cluster	Regional Flagship Programmes	Facilitating agency	Contributing agencies
1	African Green Economy Partnership	UNEP, AfDB, ECA	UNDP, AU/NEPAD, UNIDO
2	Land Degradation, Desertification, Biodiversity and Ecosystems-based Adaptation	AUC/NEPAD	UNEP, ECA, AfDB, UNDP
3	Partnership for Sustainable Consumption and Production (including integrated waste management)	UNEP	ECA, AUC/NEPAD, AfDB
4	Africa Sustainable Energy Development Programme	UNDP & AfDB	AUC/NEPAD, UNIDO, UNEP, ECA
5	Africa Integrated Environmental Assessment for Sustainable Development	UNEP, AfDB	AUC/NEPAD, ECA, UNDP

2.1.1 African Green Economy Partnership (AGEP)

The main objective of the AGEP is to facilitate the provision of coordinated and consolidated capacity building and technology support to African countries to implement Rio+20 outcomes in a Green Economy that contributes to poverty reduction and sustainable development. Important to the AEETAP is the intention to enhance understanding and appreciation of the implications of inclusive green economy approaches for Africa's development and to develop the capacity and skills necessary to develop and implement policies and action plans that facilitate the effective integration and mainstreaming of Green Economy and green growth principles and approaches. Capacity also needs to be developed for the assessment of natural capital at national and local levels, and for practical implementation of Green Economy at the sub-national level. Educators and trainers also need to be supported to make use of models, approaches, principles and best practices and the sharing of knowledge of Green Economy approaches in their education and training work, especially in Higher Education and TVET education

streams. One of the key actions in the AGEP is the need to “support programmes on training, skills building, and youth entrepreneurship to enable African countries to take advantage of emerging areas of the green economy”. The AGEP also proposes the need to support a knowledge platform that can be used by environmental educators and trainers to support the Green Economy. Consideration should be given to inclusion of strategies that strengthen gender integration and gender equality at all levels of environmental training and education.

2.1.2 Land Degradation, Desertification, Biodiversity and Ecosystems-based Adaptation to Climate Change (LDBE)

The main objective of this flagship programme is to provide a framework for coordination across countries and stakeholders at all levels to adapt to climate change, combat land degradation and desertification as well as to conserve biodiversity,



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water resources, and promote the integrity and resilience of ecosystems. One of the key actions in this programme focuses on “analysis and outreach activities in the context of knowledge generation and sharing” in order to support innovation, the sharing of lessons learned, and the scaling up of ecologically based actions. In line with the intentions of this programme will be the need to develop environmental education and training programmes that improve alternative livelihood opportunities, natural resources management, the restoration of eco-climatic balances, and biodiversity and ecosystem integrity. Additionally, environmental education and training programmes would focus on improved ecosystem services and biodiversity conservation in ways that can also potentially enhance income generation and job creation for local people. Approaches should both contribute to rehabilitation (and thus prevent future land degradation) and to improvement of land productivity and ecosystem services, leading, ultimately, to improved living standards and health of people and their environments. This educational focus should be introduced into all sub-sectors of the education and training system, including citizenship education and non-formal and social learning in communities. Outreach activities will target both men and women equally. Women, in particular, are adversely affected by land degradation and climate change as they are directly involved with tilling the land to feed their families and yet they are usually left out of outreach activities, are not given the opportunity to share their lessons learnt, and are often left out of the decision-making processes.

2.1.3 Partnership for Sustainable Consumption and Production (SCP) in Africa

The main objective of the Partnership for SCP in Africa is to provide support for the development, mainstreaming, implementation and up-scaling of SCP programmes and projects in the region that would effectively contribute to poverty reduction and sustainable development of the region. Capacity development is needed for strengthening and expanding existing SCP initiatives, and environmental education and training focussing on SCP will be needed in programmes that provide direct support to Small and Medium Enterprises and community groups that create employment (including green and decent jobs) based on innovative SCP practices.¹ The Partnership for SCP in Africa also highlights the important role to be played by teachers, academic institutions, and other training institutions such as TVET and community education programmes in expanding knowledge and practices for SCP. The partnership further highlights the need for capacity building, training and awareness raising on SCP programmes. SCP programmes and projects in the region will ensure gender equality in the activities and focus on partnerships with women organisations or women groups. Research indicates that women are most likely to reap direct benefits from environmental conservation, protection and improvement; and there is clear evidence that such benefits are more completely passed on to their communities than those experienced by men. Positive environmental outcomes ensure sustainability for all.

2.1.4 Africa Sustainable Energy Development Programme

The main objective of this programme is to facilitate the provision of coordinated and consolidated support to African countries to develop their energy sector to achieve a sustainable energy mix. This is done in

¹ The 10 Year Framework on SCP is developing a specific SCP Education and Training programme that is aligned to Education for Sustainable Development.

collaboration with the AU-NEPAD Programme on Infrastructure Development in Africa (PIDA), other investment programmes related to infrastructural development and decentralised solutions, and the UN Secretary General Initiative on Sustainable Energy for All (SE4ALL), with an objective of contributing to poverty reduction and sustainable development. Capacity building and training will be required for the development of new energy options and technologies, and higher education institutions and TVET programmes have a key role to play in this. Wider knowledge of renewable energy options needs to be shared into businesses, communities and amongst citizens, especially in relation to new forms of energy for household and commercial use. The drive for sustainable energy also requires education and training related to energy efficiency, and green technology skills development. The AEETAP can help to develop a common understanding of sustainable energy on the African continent through knowledge sharing, and development of the skills and competences needed for participating in a sustainable energy future. Highlighting gender equality in the capacity building and training initiatives is crucial. The introduction of renewable energy options, especially for use in households, should target women, who are usually responsible for the use of natural resources for domestic purposes. Ensuring that women acquire energy efficiency and green technology skills, will go a long way in improving not only their households, but also the wider community.

2.1.5 Africa Integrated Environmental Assessment for Sustainable Development

The objective of this programme is to introduce and foster the use of integrated environmental assessment in Africa in order to instigate appropriate and timely consideration of current and future environmental challenges by decision makers, as well as other partners for sustainable development. Additionally, there is an objective to strengthen the capacity of African countries and institutions to collect and access environmental data, as well as information and knowledge to support the management of Africa's natural resources and the environment as



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a basis for improved livelihoods. This programme aims to improve the quality of environmental assessment products and processes. This requires increased capacity to use such products and processes which in turn will require education and training. The AEETAP will contribute to the development of such capacity, and will help to strengthen increased awareness and knowledge of the impacts of human interactions with the environment in Africa. Women are not usually involved in fact finding activities and neither are they involved in the decision-making processes. Women and men are impacted differently by environmental changes due to the nature of their roles within society, as well as their levels of education, with many women lacking access to basic education. Considering gender equality and involvement of women in usage of integrated environmental assessment is crucial. Women and men should equally be considered for education and training initiatives. The AEETAP can also help to disseminate and make use of information products on environmental impact in education and training programmes, and to facilitate knowledge acquisition of environmental impact amongst policy makers, civil society, the public, academic, the media and other stakeholders. The AEETAP can further facilitate the development of the relevant scientific expertise that will be needed to support integrated environmental assessment activities in the region.

2.2 Principles informing the Action Plan activities and programmes

The key result areas and the associated environmental education and training programmes proposed in the AAETAP will be guided by the following principles influencing their conceptualisation/operation:

1. *Explicitly incorporate action-oriented learning for the following content and changed practice areas from the AMCEN Regional Flagship Programmes into Environmental Education and Training Programmes in key EE&T result areas.*

The following should be a key focus of content and approaches to EE&T, and these should be developed to strengthen the objectives of the AMCEN Regional Flagship Programmes:

- ▶ Africa Green Economy Partnerships (AGEP);
- ▶ Sustainable Land Management, Desertification, Biodiversity and Ecosystems-based Adaptation to Climate Change (LDBE);

- ▶ African programme on Sustainable Energy Development;
- ▶ Partnership for Sustainable Consumption and Production (SCP) in Africa; and
- ▶ Africa Integrated Environmental Assessment for Sustainable Development
- ▶ Gender equality

2. *Address critical environmental, sustainability and education and human capacity development issues and challenges as identified in recent sustainable development reports and documents such as a) the Arusha Declaration (2012); b) the Rio+20 Outcome document – *The Future We Want* (which is committed to actively promoting collection, analysis and use of gender sensitive indicators and sex-disaggregated data in policy, programme design and monitoring frameworks); c) the Global Environment Outlook Report 5*





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(GEO5); d) the African Environment Outlook Report 2 (AEO2); e) the UN Foresight Report; f) the Tbilisi+35 Declaration; g) the African Union Agenda for Africa; h) UNEP's priorities; i) the UN Decade of Education for Sustainable Development Monitoring and Evaluation Reports and post-2015 development agenda and the Global Action Plan on ESD (amongst others), some of which are listed in brief below:

- ▶ Promote **stronger integration of environmental, societal and economic aspects** of sustainable and climate compatible development in all activities, plans, programmes and initiatives. These aspects should not be seen as separate areas but rather a deeper understanding of their interrelated nature is needed at all levels of society and in all sectors.
- ▶ Strengthen capacity of **politicians, decision makers, leaders (including women and youth leaders) and parliamentarians** to participate in regional sustainable development action planning, global negotiations, and to

integrate environmental and sustainable development concerns and priorities into MEA programmes, national policies, strategies, action plans and budgeting frameworks.

- ▶ Integrate the **knowledge and findings of the African Environmental Outlook Reports** (and other relevant environmental system documents such as the IPCC reports, GEO 5 reports etc.) into all education and training programme contents, policies and strategies. In particular, take careful account of the relationship that exists between environment, poverty reduction and sustainable development, taking into consideration gender, on the African continent.
- ▶ Recognise that the UN Foresight Report identifies **human capacity, and human capacity to act in more sustainable ways**, as two of the most critical factors influencing human progress towards a more sustainable future. Knowledge on its own is not enough and must be accompanied

by **action competence and social learning** systems that involve individual and collective system and practice changes, involving both men and women.

- ▶ Develop capacity for initiating and implementing an **African Green Economy** that acts as a strong vehicle for poverty reduction, the creation of decent jobs equally for both men and women, and sustainable development of society more broadly. Agriculture, as the backbone of the African economy, and as the source of livelihood for many, must receive particular attention in efforts to establish sustainable agricultural production systems in the face of climate changes, and loss of natural resources and ecosystem services.
- ▶ Recognise the importance of preparing African society for **the growing risks associated with runaway climate change and associated catastrophic impacts**, as projected for Africa. These impact men and women differently and this needs to be taken into account. Associated with this is the need for human capacity development for fast tracking new forms of social innovation, developing stronger climate science modelling and planning capacity, and development of transdisciplinary knowledge and capacity to engage African societies in a climate compatible

development trajectory, based on, but extending existing sustainable development, mitigation and adaptation thinking and practice. As emphasised by AMCEN's Regional Flagship Programmes, this also involves ecosystem-based adaptation measures.

- ▶ Strengthen knowledge of, and understanding that Africa's **biodiversity is foundational to all life, economic activity and societal well-being**. Develop deeper and stronger understandings of the relationships between biodiversity and ecosystem services, and the implications of biodiversity loss for present and future well-being of African societies. Strengthen capacity to participate in biodiversity management and sustainable use of natural resources and ecosystem services in all sectors of society.
- ▶ Strengthen the **quality and relevance of Africa's education and training systems** to make them 21st century 'ready' and available to both men and women equally.
- ▶ Strengthen **participatory, stewardship and action learning approaches** that at the same time deepen knowledge and understanding, build action competence and develop values, and that engage the dialectic between tradition and innovation. Such learning approaches, when focussed on both individual and collective learning processes, can also expand social learning, social change and changes in practice.
- ▶ Strengthen **educational leadership and the capacity of educators, lecturers in universities, teacher trainers, vocational trainers, media practitioners and social learning facilitators** to understand the importance of environment and sustainability education content, principles and approaches, and through this, significantly expand and extend environmental education and training capacity, giving attention to the institutional contexts of their practice and the learning resources needed for their work (e.g. ICT facilities).





3. ***Adopt approaches to Environmental Education and Training that strengthen ‘agents of change’ (both women and men), stewardship, and practice-based approaches to socio-ecological systems change and poverty reduction:*** This would require action learning approaches that contribute to the direct addressing of environmental issues and risks in ways that also address poverty reduction in Africa, and in ways that contribute to changes and new practices on the ground. Learning should be ‘change oriented’, and outcomes should be practical and have meaning in the lives of the majority of citizens who are struggling with poverty related issues on the ground. They should contribute to Africa’s sustainable development.
4. ***Be characterised by the highest level support and commitment:*** The key result areas in the AAETAP and associated programmes and projects should obtain and be constituted with explicit commitment of a constellation of major concerned stakeholders who have the access, influence, commitment and resources to catalyse resources for the key result areas and programmes, and who can facilitate and support the implementation of changed practices in education and training institutions and settings, and also in socio-ecological institutions and

settings. These should include the following among others: national governments, the African Union, UNEP, UNESCO, UNDP, UNICEF, the donor community, Higher Education associations and institutions, Environmental Education and Training organisations and networks, women’s networks (including the involvement of the gender ministry or specific groups that involve women at the community level) and civil society.



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5. **Implementable within a reasonable period of time:** The AEETAP programmes and projects should be specific and achievable enough to accomplish key, measurable results within three to five years, i.e. they should have specific and realistic targets.
6. **Be catalytic and support and expand capacity for change oriented learning and environmental education and training system development at multiple levels:** The AEETAP key result areas and programmes should be catalytic, and should support and seed ongoing change oriented learning and environmental education and training system development at multiple levels. At the grassroots level, this would include men, women and youth. They should be set up to have a life that extends beyond the ten-year period of this Action Plan.
7. **Be conceptualised within the wider ambit of Education for Sustainable Development, as established by the UN Decade on Education for Sustainable Development:** While focussing more on AMCEN environment and sustainable development priorities as a starting concern, the AEETAP programmes and projects should be implemented in support of the wider goals of the UN Decade on Education for Sustainable Development, and the post-2015 Global Action Plan on ESD, and should draw on and contribute further to policies, capital, materials, networks and other mechanisms that have been established in and for the UN's Education for Sustainable Development work. Care should be taken not to see environmental education and training and ESD in opposition, but *rather to see environmental sustainability as a core concern within ESD*, as is necessary if a strong approach to sustainability is adopted in ESD as shown by Figure 2.1 below.

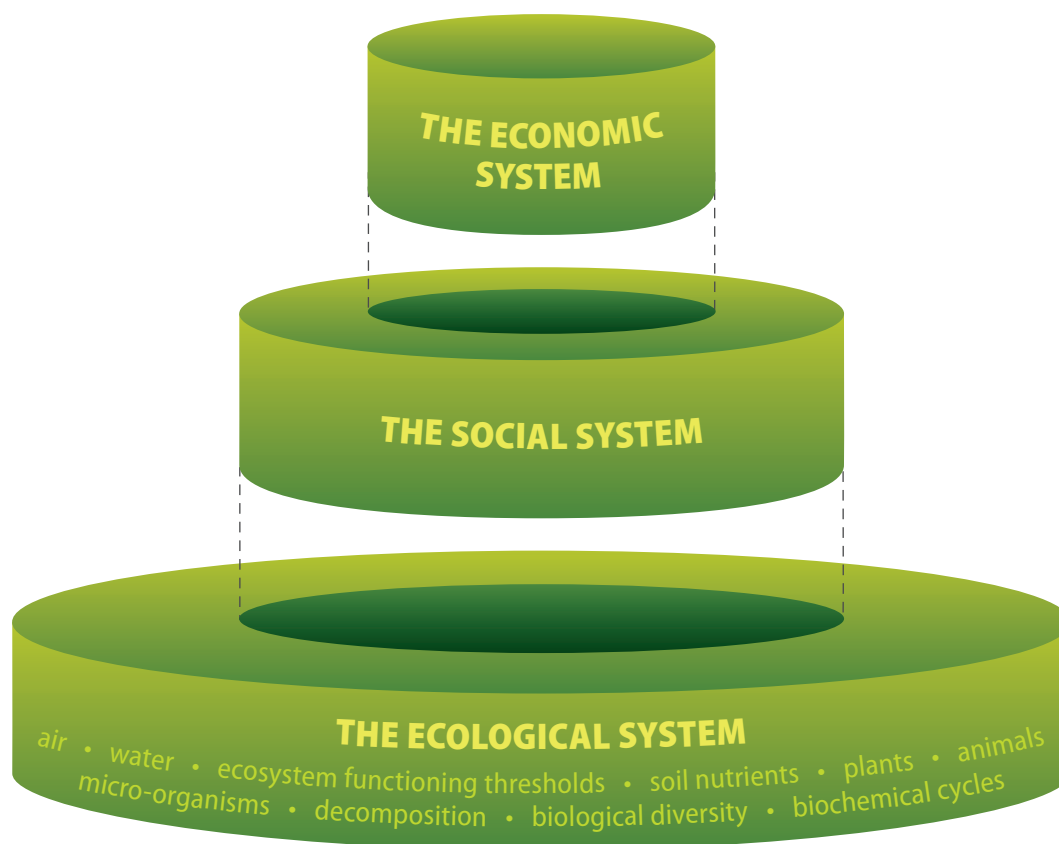


Figure 2.1 The 'strong' model of sustainability recognises that social and economic systems are directly related and often emerge out of ecological systems. The AEETAP adopts this understanding of the relationship between environment, society and economy. (Source: Hahn, 2013)

2.3 Challenges facing environmental education and training in Africa

There are a number of challenges facing environmental education and training systems in Africa which need to be considered if real outcomes are to be achieved. These relate to and include:

General education and training system weaknesses:

- ▶ High levels of illiteracy on the African continent which emerge from a history of educational neglect prior to independence, and inadequate resources to provide full systems of education and training for all of Africa's citizens in the post-independence period;
- ▶ A history of inadequate access to education and training, and unequal patterns of participation in education and training with some sectors of education poorly developed (e.g. TVET systems);
- ▶ Historically, women have been passed over for education opportunities due to their cultural roles associated with taking care of the home. This has led to a reduced number of women with basic education, more so in poverty stricken rural areas. Additionally, some cultures do not encourage education for women, particularly higher education;
- ▶ Neglect of Africa's higher education system since the 1970s, with international interest in

and focus on basic education rather than other education sectors;

- ▶ Poor quality education, and a perceived lack of relevance in many of the education and training systems;
- ▶ High levels of demand for education and training which puts pressure on institutions to accommodate large numbers of scholars, where facilities are often not matched by demand;
- ▶ The brain drain which has drawn much of Africa's high level skills to other countries;
- ▶ Colonial education system structures and contents which have marginalised indigenous knowledge and ways of knowing that are culturally situated in African socio-ecological contexts; and
- ▶ Infrastructure to accommodate the ICT revolution in education.

The rapidly changing environmental knowledge context:

- ▶ Environmental sciences and content knowledge produced by environmental scientists globally is moving faster than society's capacity to absorb and make good use of the knowledge being produced. This is partly related to



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the practice of science itself, but also to the growing understanding of the planetary condition, and new opportunities associated with the emergence of a Green Economy.

- ▶ Knowledge institutions (e.g. universities, curriculum development institutions etc.) are challenged to 'keep up' with new environmental content, concepts, solutions and alternative technologies and practices being put forward. This requires strong partnerships between global knowledge producing institutions (e.g. the UN) and African education and training institutions.
- ▶ Community-based problems and problem solving approaches are hampered by poverty and ongoing structural inequalities that are exacerbated by some forms of development. Sustainable development thinking is yet to reach the level of social innovation for real poverty reduction. This is partly because African universities and knowledge producing institutions are yet to take their place as 'social innovators' in the sustainable development trajectory; most scientific and social innovation in the sustainable development context has been generated elsewhere. Gender inequality hampers problem-solving approaches. When women are not involved in the decision-making process, the solutions tailored for them end up being difficult to implement practically. Distribution of resources has to be considered when creating solutions; for instance, women might farm on land for food crops and collect firewood to cook in the home, but men are usually the owners of the land. Hence finding solutions for land degradation should target both groups to ensure that both perspectives are considered.

Neglect and fragmentation of the environmental education and training sector in Africa:

- ▶ While there is evidence of innovative approaches to environmental education and training in a wide variety of education and training settings and contexts in Africa (these can be found in all countries and all corners of the continent), there is no co-ordinated system of engagement for environmental educators across the African continent.



- ▶ Some regions have histories of stronger sub-sector organisation than others. For example, the SADC region has had a 15-year programme on environmental education (2008-2013) funded by Sida and other international donors, which was also supported by a 33-year old Association of Environmental Education since 1982. Similar organised systems are not as prominent in other regions of the African continent, and few pan-African systems of engagement exist.
- ▶ There are also few postgraduate programmes in environmental education and training on the continent, which does not thus adequately promote development of leadership for environmental education and training. This situation leaves the environmental education and training sector on the African continent largely fragmented, without adequate intellectual and leadership resources to strengthen and expand environmental education on the continent, at least not in relation to the demand and necessity for expanded environmental education and training as envisaged by the AMCEN agenda and the African Environmental Outlook report findings.

CHAPTER 3

THE ACTION PLAN



3.1 Strategic approach to the AEETAP

A key objective of the Africa Environmental Education and Training Action Plan is to ensure that specific, achievable environmental education and training outcomes translate the principles of the AMCEN Regional Flagship Programmes and the Arusha Declaration to actual commitments and actions for sustainable development. This is to be done through selected formal, non-formal, informal social learning, networking and capacity building systems in Africa, with gender equality throughout, and achieved through the following three major strategies that underpin the AEETAP:

1. Supporting EE&T that is aligned with the AMCEN Regional Flagship Programmes:

- ▶ Support environmental education and training programmes that are directly or indirectly oriented towards ensuring that the AMCEN Regional Flagship Programmes are implemented.
- ▶ Integrate these regional flagship programmes into the EE&T key result areas, programmes and projects so that a coherent, and clearly focussed environmental education and training system is developed in Africa.

2. Expanding and upscaling existing good practice:

- ▶ Identify, evaluate, extend, upscale, expand and where necessary, re-focus existing

environmental education and training programmes and networks in African countries to maximise existing capacity for environmental education and training, so that key environmental priorities as identified by AMCEN are more effectively addressed with expanding existing resources.

3. Strengthening environmental education and training capacity:

- ▶ Strengthen capacity for environmental education and training systems in African countries by giving attention to the capacity building of policy makers, training of trainers especially training of environmental educators, trainers and learning facilitators.
- ▶ Strengthen the critical thinking, innovation, institutional, e-learning, and networking infrastructure necessary for a stronger environmental education and training system in Africa.

In addition to the key objectives, AEETAP should collect sex-disaggregated data to monitor whether gender equality needs to be addressed. A gender analysis should be carried out at the community level (to determine women's roles, their needs and existing gaps and inequalities) and at the policy level (to determine to what extent existing policies on climate change or education and training etc., are gender-sensitive).

3.2 Vision, goals and outcomes

3.2.1 Vision

The overall vision of the AEETAP is a region that is proactively transforming society by responding to environmental issues and reducing risks, alleviating poverty and maximising green economies and sustainable development on the African continent, while building new societies based on the principles of ecological, social and economic justice and sustainability.

3.2.2 Goals

The following are the goals of the AEETAP:

1. Strengthen the capacity of **formal education institutions and actors** to integrate AMCEN priority areas and associated environment and sustainable development concepts, values and action learning approaches into policies, practices and outcomes;
2. Strengthen **training activities and programmes** to include wider environmental issues, risks, green economy opportunities, etc. that respond creatively and critically to AMCEN priority areas that maximise potential for sustainable development and poverty reduction;
3. Strengthen the **capacity of policy makers, leaders and decision makers**, ensuring gender equality, to meaningfully integrate environment and sustainable development concerns into their planning, strategies, policy making and budgeting frameworks through carefully planned capacity building programmes;



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4. Strengthen lifelong learning systems and community education and training systems and programmes, with consideration for gender equality, to integrate AMCEN priority concerns, and to expand the relevance and use of indigenous knowledge in EE&T;
5. Strengthen the capacity of environmental education, training and social learning **networks and institutions** to support and further develop an expanding system of environmental education and training for both men and women in Africa;
6. Integrate **innovations in e-learning, curriculum, transformative learning, assessment and materials development** into environmental education and training programmes in Africa;
7. Enhance the **professional capacity of trainers, lecturers, social learning facilitators and environmental educators**, ensuring gender equality, to use innovation-centred approaches to EE&T in their programmes;
8. **Contribute to environmental actions and change** through support for critical, participatory and action-centred approaches to environmental education and training in all sectors of formal, non-formal and lifelong learning for both men and women; and
9. **Monitor and evaluate** EE&T programmes for reflexive improvement and relevant outcomes on the African continent.

3.2.3 Expected outcomes

1. There will be advancement in the **integration of EE&T for both men and women, especially related to the AMCEN priority areas, in the formal education and training sectors and systems** in each country of Africa;
2. There will be an **increase in innovative and diverse research** related to EE&T and ESD in all the African countries via strong involvement of African Ministries of Education, universities and research support institutions and organisations;
3. **Schools, universities and training centres (e.g. TVET colleges, NGO training centres) will be important models** of sustainable environmental management for their communities and can also provide demonstration centres for green economy practices and transitioning;
4. **Community involvement and participation in EE&T** will increase through networked support of NGOs, CBOs and Faith Based Organisations, enhancing the use of indigenous knowledge in environmental learning and sustainable development, and in environmental and green economy citizenship practices and actions;
5. The **public and private sector** will increase its support and involvement in national and regional EE&T initiatives and programmes in support of the overall sustainable development of the region, based on the agreed upon AMCEN regional flagship programmes;
6. The EE&T strategies of **teachers, lecturers, and Environmental Education and Training practitioners** and other stakeholders in Africa will be **professionally enhanced** through capacity building and leadership opportunities; and through Training of Trainers programmes and curriculum innovation and transformative learning interactions;
7. **Civil society** in all sub-regions in Africa will be effectively engaged in the development of EE&T nationally and regionally; especially in non-formal and social learning contexts of all major groups as defined by Earth Summit (Agenda 21).



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The nine major groups are business and industry; children and youth; farmers; indigenous peoples and their communities; local authorities; non-governmental organisations; the scientific and technological community; women; and workers and trade unions.

8. There will be effective and continuous **regional exchange of knowledge, skills, experience, expertise and best practice** via effective **ICT platforms** and channels and through the building and strengthening of national and regional networks;
9. There will be increased capacity and opportunities for women and **youth** from all sub-regions in Africa to take leadership roles in the sustainable development of their countries and societies;
10. There will be **increased understanding of the importance of EE&T** for achieving sustainable development by policy and decision makers – in both the environmental and the education sectors, and through this understanding, there will be stronger support of environmental education and training initiatives and programmes at local, regional and national government levels;
11. There will be a range of **practice-centred outcomes** through **critical, action-centred and applied approaches to environmental education and training** that strengthen participation in environmental management practices (such as ecosystem adaptation; biodiversity management; green economic activity; sustainable production; integrated waste management etc.).
12. There will be an increase in **networking and collaborative partnerships** supporting and utilizing **environmental education and training** for advancing sustainable development on the African continent, between all sub-regions, sectors and at multiple levels;
13. There will be **strong monitoring, evaluation and reporting mechanisms** in place for EE&T within the framework of ESD in each of the sub-regions of Africa;
14. The AEETAP will have a key and effective role in taking forward the Global Action Plan on Education for Sustainable Development and other relevant regional and international initiatives; including the African Union's commitment to revitalising and improving the quality and relevance of education in Africa.

3.3 Key Result Area 1: Formal Education

3.3.1 Overview of Key Result Area 1

In Key Result Area 1 of the AEETAP, formal education includes:

- ▶ Early Childhood Education;
- ▶ Basic Education;
- ▶ Further Education and Training;
- ▶ Teacher Education; and
- ▶ Higher Education.

NOTE: Technical Vocational Education and Training (TVET) is also formal education, but due to its work integrated nature, it is included in Key Result Area 2: Training.

These areas of formal education provide a continuum of learning opportunities for societies. If the existing formal education channels and systems are well utilised for environmental education and training, the formal education institutions and systems present a significant resource for strengthening ecological literacy, knowledge of environmental concerns, issues and solutions, and for developing action competence amongst the youth and citizenry of the continent.

For example, if children are exposed to environmental concepts and values in early childhood education and in basic education, they are more likely to be able to participate in Green Economy TVET programmes, and/or to become environmental scientists, environmental lawyers or environmental economists. It is therefore important to understand the ‘value chain’ of formal education in supplying environmentally literate graduates, and also for building foundational environmental knowledge and competence required for sustainable development in society.

Formal education is critical for both foundational learning, and specialist competence development in both men and women. If Africa is to achieve its environmental objectives, develop an African Green Economy, and respond to environmental challenges and risks such as climate change in ways that are to ensure sustainable development, resilience, adaptation and transformation of societies, it will be critical to ensure that environmental concepts, values and action learning concepts and approaches are integrated into all phases and levels of the education and training system, within a wider framework of education for sustainable development. Integrating environmental education into teacher education will also need to be formally considered.

Some African countries have made progress towards integration of major environmental concerns and issues into national education systems, especially into curriculum policies and teacher education programmes, and into university education. But progress remains uneven and even reactive. A much stronger effort is needed to strengthen efforts to integrate environmental concepts, and action learning approaches into critical subjects and disciplines in schools, colleges and universities, to ensure that foundational environmental literacy and action competence exist in all African societies. For example, as found in the UNEP Mainstreaming Environment and Sustainability in African Universities programme, most universities in Africa today have an Environmental Science Department, but few have integrated environmental concerns into Law faculties, or into Education faculties or into Humanities faculty offerings or even into Agriculture programmes. There



is a need therefore to strengthen the integration of environmental concerns, values and action learning approaches into a wider range of disciplines in universities, and to continue to strengthen research, teaching and community engagement in universities, for both men and women equally. Additionally, universities need to develop capacity for inter- and transdisciplinary research and practice to address socio-ecological system concerns.

This is true also of teacher education programmes, as few teacher education programmes are adequately preparing teachers to teach the new environmental contents and concepts and action learning approaches in school curricula. Basic environmental literacy also remains neglected in Early Childhood Education Programmes, as has been reported by UNICEF, which has been running a programme that seeks to prepare young children for climate change responses.

A key intervention into the formal education sector is to provide for professional training of the educators, both men and women. This has catalytic results and is necessary for changes to occur in the system.

3.3.2 Key priorities and strategic actions for Key Result Area 1

Goals:

- a) Environmental Education in formal education is aligned with AMCEN regional priorities and is incorporated into all levels of the formal education sector for both men and women equally, relative to national capacity and directives in each of the African member states;
- b) Environment and sustainability education concerns are mainstreamed into Teacher Education in Africa;
- c) Environment and sustainability concerns are mainstreamed into higher education institutions in Africa through active and continuous research, curriculum innovation, teaching, community engagement, sustainable campus management and sustainability reporting, involving both men and women equally; and



- d) More educators on the African continent have capacity to successfully mainstream environment and sustainability concerns into national education and training systems.

Strategic actions/priorities:

1. Aligning formal education Environmental Education policy and quality assurance systems with AMCEN priorities

- ▶ Establish a baseline assessment on the extent to which formal education systems in Africa are reflecting AMCEN priorities in their educational policies and curricula. Also consider how these relate to key national and international environment and sustainable development policies including the post-2015 MDG/SDG agenda, and UNEP's priorities.
- ▶ Develop and distribute guidelines to ensure that Quality Assurance (QA) systems (i.e. national standards) and policies include environmental education and education for sustainable development (EE/ESD) concerns that are aligned with AMCEN priorities combined with national environment and sustainable development priorities in the relevant subject frameworks, disciplines and assessment systems. QA systems should include measurement of women and men and how environmental issues might impact them differently; EE&T should be contextualised to take into account roles of men and women and how these impact their decision-making abilities.



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- ▶ *Means of verification for M&E: Baseline assessment report; guidelines distributed; evidence of use of guidelines to change policy and practice.*

2. Curriculum innovations support

- ▶ Develop guidelines for curriculum innovation that includes environment and sustainability concerns (aligned with AMCEN priorities) for various levels of the formal education and training system (including Early Childhood Education, Basic Education, Further Education and Higher Education). Curriculum innovations should include workshops that target both men and women, and women participation must be encouraged. Grants should target men and women equally to promote participation of both towards environmental issues.
- ▶ Arrange workshops with national curriculum development centres and curriculum policy makers to engage them in curriculum innovation issues relevant to environment and sustainability education.
- ▶ *Means of verification for M&E: Curriculum innovation guidelines; evidence of curriculum innovations supported by guidelines and professional development programmes.*

3. Mainstreaming environment and sustainable development concerns into teacher education

- ▶ Establish a baseline assessment on the extent to which teacher education programmes (in-service and pre-service) address EE/ ESD theory

and practice (with reference to the AMCEN priority areas, and national priorities for SD).

- ▶ Develop a major teacher education programme for all forms of teacher education (Early Childhood Education, Basic Education, Further Education and Higher Education) to address gaps identified using the best available materials and programmes and using ICT enhanced learning/portal approaches.
- ▶ *Means of verification for M&E: Baseline assessment report; number of teacher education institutions mainstreaming environment and sustainability issues; number of teachers trained in environment and sustainability education.*

4. Mainstreaming environment and sustainable development into universities and higher education institutions

- ▶ Establish a baseline assessment on the extent to which universities are mainstreaming environment and sustainability concerns into Higher Education through teaching, research, community engagement and campus management activities.
- ▶ Expand the Mainstreaming Environment and Sustainability in African Universities (MESA) Partnership programme to more universities in Africa and deepen and expand existing mainstreaming practices in MESA universities.
- ▶ Support new programme development in universities at diploma, degree and postgraduate levels focusing on AMCEN priority areas and EE&T capacity building.
- ▶ Strengthen and support student organisations and student organisation leaders working on environment and sustainability issues on campuses, and create networking platforms for them to interact and share experiences.
- ▶ Develop and support MESA universities to use sustainability assessments and institute a sustainability reporting initiative for universities in Africa that is aligned with AMCEN priorities, and African university campus realities.
- ▶ *Means of verification for M&E: Number of MESA universities; types and results of*

mainstreaming interventions; numbers of new courses and graduates of these courses; sustainability reports and results from universities.

5. Professional development of educators

- ▶ Review the range and scope of available professional development programmes for educators and their alignment with AMCEN priorities.
- ▶ Develop a ‘flagship’ training programme for ongoing professional Development of Educators (Training of Trainers), including university educators, educational officials (e.g. curriculum developers), and teacher educators drawing on knowledge of existing ‘best practices’ of change oriented learning (e.g. SADC REEP / ITP Change Project model) in this area and align these with AMCEN priorities.
- ▷ *Means of verification for M&E: Review of PD programmes; numbers of professional educators trained; educational change projects implemented by professional educators showing changes in practice.*

6. Contextualisation and development of learning materials

- ▶ Establish a professional development e-learning platform that a) makes relevant materials available for use in African contexts, and b) that supports educators to contextualise materials to national and local contexts.
- ▶ Make new research knowledge available in accessible format for use in educational programmes and project through this portal / e-learning platform.
- ▶ Train key educators and educational networks to use the portal / platform where experience of contextualising and developing materials can be shared.
- ▷ *Means of verification for M&E: Use of e-learning platform and numbers and quality of materials exchanged and developed via the platform.*

7. Grants and scholarship programme to promote environmental and environmental education research

- ▶ Promote research on EE/ ESD issues in formal education to ensure continuing development and renewal of thinking and approaches in these areas.
- ▶ Develop a core research programme on ICT-enhanced EE/ESD approaches to inform upscaling of EE/ESD initiatives in formal education and other learning settings.
- ▷ *Means of verification for M&E: Number of research projects; evidence of how research is changing practices, especially in ICT use.*
- ▶ Establish and maintain a grant and scholarship programme for EE&T and AMCEN RFP research areas.
- ▶ Develop an alumni system for grant and scholarship holders linked to the MESA programme, and regional and sub-regional networks.
- ▷ *Means of verification for M&E: Grant scheme exists; annual applications; completed studies; alumni participation in networks.*

3.3.3 Strategies for implementation

Suggested strategies for implementation include:

- ▶ Step 1: Review existing programmes and activities in each key strategic action area
- ▶ Step 2: Identify key partners/participating organisations and networks
- ▶ Step 3: Engage with these partners/ participating organisations to review existing practice and renew existing practice in line with AMCEN priorities
- ▶ Step 4: Identify implementation partners for key activities
- ▶ Step 5: Establish effective communication systems for the key result area
- ▶ Step 6: Establish and maintain online monitoring and evaluation systems that collect generic M&E data across the key result area
- ▶ Step 7: Bi-annual reporting



BOX 3.1

SOME RECOMMENDATIONS FOR IMPLEMENTATION OF THIS KEY RESULT AREA FROM THE ADDIS ABABA AEETAP CONSULTATIONS

- ▶ There is a strong need to ensure that formal environmental education is conducted at university level. Governments must design clear, comprehensive environmental policies that can also guide educational interventions and priorities and environmental education must be a core component in the education system.
- ▶ Teacher education for environmental education should be prioritised in all countries so that teachers are empowered and able to teach environmental education in a creative, proactive and futures-oriented manner.
- ▶ Environmental education in the formal education system must be systematised, and must offer a 'long term education', starting from early childhood education, progressively continued through to tertiary level. This should include teacher education at all levels.
- ▶ Environmental education should adopt an applied approach, it should be practical and should be linked to action outcomes. Additionally, it should be adaptable and context based. There should be specialised teaching packages that address environmental concerns, and help children and learners to develop more proactive approaches to preventing environmental degradation, and to develop care and ethics of planetary stewardship. It must be relevant at a local level but also be connected to other contexts, places, scales and levels.
- ▶ To integrate environmental education successfully into the education system, there is a need to strengthen existing core curriculum activities both inside and outside the universities and schools.
- ▶ Environmental education must be ethics based and must create love of the environment; it must be visionary and help learners to envision a better future or 'the world we want'.
- ▶ There is a need to establish sustainable funding sources for formal environmental education and training and to integrate environmental education and training activities into mainstream education system budgets. It should not be seen as an 'add on'.
- ▶ Children and learners everywhere in all formal education institutions should be encouraged to celebrate and contribute actively to special environmental days such as World Environment Day, Earth Day, etc., and to connect with others around the planet to share experiences.

3.4 Key Result Area 2: Vocational Education and Training and Training of Government Officials

3.4.1 Overview of Key Result Area 2

Few Technical and Vocational Education and Training programmes have started integrating sustainable development concepts and approaches, and there is much room for innovation here as an African Green Economy is conceptualised. To date, even those faculties and colleges offering agricultural training (the backbone of the African economy) are not adequately integrating environmental concepts and sustainable agricultural / green agricultural economic approaches.

Business needs to be oriented towards climate compatible development, and low carbon futures, while new green economy innovations need to be nurtured and supported through green economy training programmes. New technologies and initiatives need to be made available for demonstration in vocational education and training centres to ensure stronger integration of theory and practice, and to provide for viable practical and work-oriented education and training in the TVET stream.

There is also a strong need to support green entrepreneurship through models of training that support knowledge of the green economy, but that also emphasise the new opportunities that are emerging in and through the green economy for employment, especially amongst youth. It is essential that women are supported alongside men for green entrepreneurship. Leadership training and curriculum development training is also critical for advancement of green economy thinking and environmental education in the training sector. Women are more likely to benefit most directly from environmental conservation, protection and improvement and to share these benefits with their communities. Additionally, involving women leaders in the decision-making process is key, as men and women are impacted differently by environmental changes. Women's voices are key especially for poverty stricken women who are rarely heard, and

who have a direct impact when it comes to use of natural resources in the home.

Core to the above is the training of a new cadre of TVET lecturers and policy makers, that includes women, who are able to identify opportunities in the green economy, and to realise them in and through Green Economy oriented qualifications design, curriculum design and partnership development with business for demonstration and work-experience opportunities at TVET college level. Links and learning pathways for Green Economy and technology need to be built from TVET into Universities of Technology. Such Green Economy learning pathways currently hardly exist on the African continent, and this presents a huge new area of educational innovation and education and training system development.

Of importance is the fact that these forms of education are also crucial for decision making and for



ongoing policy implementation, and for developing and strengthening leadership for the environmental sector. Environmental issues are often new and have not formed part of the educational experience of most politicians, government officials and others leaders. There is therefore a need to strengthen their knowledge of these new concerns, issues and approaches, and to develop professional development programmes that strengthen their capacity to apply these new ideas and policy directions in their everyday practice of policy making, decision making, leadership provision and governance.

3.4.2 Key priorities and strategic actions for Key Result Area 2

Goals:

- a) To ensure that the profile, content and facilities for green TVET are enhanced and expanded on the African continent;
- b) To ensure mainstreaming of Green Economy principles and practices into TVET policy

and practice and into government in-service training programmes;

- c) To build capacity of TVET educators, policy makers, public sector officials and lecturers; and
- d) To expand partnership frameworks , which includes women's groups, for Green Economy and Green TVET.

Strategic actions/priorities:

1. Demonstration learning environments for green TVET

- ▶ Support the establishment of Green Economy Conversion Centres, workplace environmental practices and viable demonstration facilities (e.g. green campuses; green technology demonstration sites) to strengthen action learning, innovation and practical opportunities for youth empowerment.
- ▶ Expand partnerships with business and industry to supply and support the establishment of model demonstration sites within TVET campuses.
- ▶ Support the greening of institutional practices, and adoption of green economy principles (e.g. green procurement) in TVET institutions.
- ▶ *Means of verification for M&E: Numbers of Green Economy Conversion Centres and demonstration sites being used for TVET learning; Green campus and Green Economy reporting in TVET centres.*

2. Establish competence-based models for green TVET

- ▶ Develop competence-based approaches to sustainable development / green sector career pathways development. Such competence-based approaches should take account of international critiques of competence-based models (e.g. to ensure the inclusion of adequate knowledge as well as skills), and should be modelled on best practices and on African Green Economy priorities and realities.
- ▶ Develop a stratified approach to competence-based models for TVET (e.g. artisan level, management level etc.), and ensure learning pathway alignment and relevant forms of articulation between TVET colleges,



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and higher education institutions such as Universities of Technology, Faculties of Engineering and Agriculture, etc. to ensure viable learning pathways for Green Economy and Green TVET development.

- ▶ Train TVET curriculum developers in the abovementioned approaches, issues and learning pathways to ensure coherence and progression in TVET approaches.
- ▷ *Means of verification for M&E: Quality and quantity of Green TVET programmes based on competence-based models; availability of viable Green Economy / TVET learning pathways.*

3. Career guidance and career pathing support

- ▶ Review existing initiatives that are promoting Green Career Guidance and Career Pathing in Africa and review them in relation to AMCEN priorities framework.
- ▶ Make available (link up with existing initiatives) and develop new 'Green Career' guidance materials for youth in Africa interested in Green Career pathways and maintain such a 'Green Careers' portal for regular youth access. Also encourage partnerships that can facilitate active use of the portal.
- ▶ Identify role models (both men and women) and include them on the Green Careers portal to model successful Green Economy / Green Career opportunities on the African continent.
- ▶ Train Career Guidance Facilitators in Green Career Guidance and in how to make use of the portal.
- ▷ *Means of verification for M&E: Green career guidance initiatives report; options available on the portal; use of, and participation in the portal; numbers of trained teachers.*

4. Training of TVET college lecturers and curriculum developers

- ▶ Review and develop a baseline analysis of existing initiatives that are oriented towards Green TVET lecturer / curriculum development training on the African continent.
- ▶ Establish a Training of Trainers programme specifically dedicated to TVET college lecturers

and curriculum developers focussing on Green TVET and Green Economy skills development planning, curriculum development and training (including theory-practice integration; competence-based approaches; demonstration sites and centres etc.). Both men and women need to be trained as curriculum developers, lecturers and to work in government at decision making levels. Include a change project / change oriented learning component to strengthen implementation of training outcomes in TVET training sites.

- ▷ *Means of verification for M&E: Green TVET Training of Trainers and Curriculum Developers Review; Green TVET ToT programme and change project outcomes.*

5. Training of government officials, decision makers

- ▶ Integrate the AMCEN priorities, including M&E competence, into curriculum and programme development and Training of Trainers programmes for Schools of Government / Public Management Training Programmes.
- ▶ Support environmental / ESD curriculum development and curriculum innovations in Schools of Government / Public Management Training Programmes and other institutions with primary responsibility for training government officials.
- ▶ Develop a network and communications structure to facilitate ongoing environmental/SD policy information communication into Schools of Government/Public Management Training Programmes and their ToT programmes.
- ▷ *Means of verification for M&E: Level of integration of AMCEN and SD priorities into government training programmes and curricula; capacity of lecturers to work on SD issues in schools of government; information communication system use.*

6. State investment in green TVET facilities and programmes, and public private partnerships

- ▶ Produce a baseline study on the scope and possibilities that exist for increasing state investment in TVET programmes and facilities, and the leveraging of private-public



partnership platforms for Green TVET programmes and facilities in key AMCEN priority areas.

- ▶ Based on the baseline assessment report, develop a communications and policy brief series that is oriented to a) strengthening state investment in Green TVET programmes and facilities; and b) expanded public-private partnerships for Green TVET programmes and facilities development.
- ▶ Strengthen public private partnerships for EE&T capacity building at all levels of the TVET and government training system through country-based and regional platforms (south-south, and south-east / south-north) for, for example, carbon trading capacity building; renewable energy capacity building, etc.
- ▷ *Means of verification for M&E: Baseline data report on the extent to which the state is investing in Green TVET programmes and facilities; available platforms (old and new) in use; outcomes of the programmes.*

7. Policy information communication

- ▶ Develop an innovative, attractive, adaptive and highly visible networked learning system for policy information communication that can be used to share and mobilise information and knowledge sharing with political leaders at various levels of the system for decision making purposes (e.g. regular translation of research information into policy briefs; sharing

results of positive political decisions related to SD and AMCEN priorities, etc.).

- ▶ Integrate the use of this site into all Training of Trainers programmes to facilitate wider uptake and use at all levels of the political decision making system.

3.4.3 Means of implementation and expanding on existing initiatives

Suggested means of implementation include:

- ▶ Step 1: Review existing programmes and activities in each key strategic action area
- ▶ Step 2: Identify key partners / participating organisations and networks
- ▶ Step 3: Engage with these partners / participating organisations to review existing practice and renew existing practice in line with AMCEN priorities
- ▶ Step 4: Identify implementation partners for key activities;
- ▶ Step 5: Establish effective communication systems for the key result area
- ▶ Step 6: Establish and maintain online monitoring and evaluation systems that collect generic M&E data across the key result area
- ▶ Step 7: Bi-annual reporting

BOX 3.2

SOME RECOMMENDATIONS FOR IMPLEMENTATION OF THIS KEY RESULT AREA FROM THE ADDIS ABABA AEETAP CONSULTATIONS

- ▶ To develop the Green Economy and TVET for Green Economy development, there is a need to focus on improved technologies and the active use of new technologies through TVET. For this, high quality demonstration sites are needed that model principles of the Green Economy and also how the new technologies work. There should also be research on how the new technologies can be used and accommodated by communities.
- ▶ There is an urgent need for curriculum revision and review of TVET centres (e.g. agricultural productivity – in line with the new green technologies) as these are currently not in line with agricultural sustainability, climate change adaptation, etc.
- ▶ Another key priority is the training of lecturers and policy makers to develop their concepts of 'environment and sustainability' and the 'Green Economy', 'renewable energy', 'sustainable consumption and production' as these are all new concepts within the TVET system.
- ▶ There will be a need for advocacy work with officials for bringing environment and sustainability into the TVET programmes – at local levels, and there is also a need for awareness creation and validation of the important role of TVET in achieving sustainable development. Governments need to give TVET much more attention as it is critical for development of the continent, and also offers new pathways for youth into work and into sustainable enterprises.



3.5 Key Result Area 3: Lifelong Learning, Youth Development and Community Education

3.5.1 Overview of Key Result Area 3

Lifelong learning and community education, in this Action Plan, include:

- ▶ Adult basic education;
- ▶ Community/citizenship education programmes;
- ▶ Workplace learning;
- ▶ Media education programmes and other social learning systems; and
- ▶ Informal ICT enhanced learning environments.

These forms of education complement and extend formal education learning opportunities. They are also often most critical in contexts where poverty, war and other societal ills have deprived citizens of a formal education. Adult basic education and community citizenship education and training programmes are most often provided by NGOs and other community based organisations. Increasingly, however, much new learning is taking place in workplaces and these have become an important site for learning new competences and skills, especially those necessary for greening existing jobs. Information and communication technology is also making a range of new lifelong learning opportunities available to citizens.

Adult basic education is a critical area of skills development for poverty reduction, especially for women. It has been shown that adult education, when offered to women has significant development benefits.

Adult education, community citizenship education and training and workplace learning programmes are an ideal context for integrating principles and practices of sustainable development as they can result in immediate practice outcomes if action learning approaches are adopted.

Media based education and learning programmes are also a very powerful source of learning in African societies, and there are examples of how strategies such as community radio programming and other social marketing approaches can be used to further community learning and sustainable development outcomes.

There are new areas of opportunity for such approaches to education and learning, for example green economy entrepreneurship development programmes for out-of-school youth or women farmers – two priority target groups for community education and lifelong learning programmes.

There is much to be done in strengthening environmental education and training concepts and approaches in and for lifelong learning and community-based education in Africa.

3.5.2 Key priorities and strategic actions for Key Result Area 3

1. Adult learning

- ▶ Conduct a baseline analysis of how existing Adult Education and Training Curricula (ABET and other forms of Adult Learning e.g. Open and Distance Learning) Programmes are incorporating AMCEN priorities and where key areas of expertise lie.
- ▶ Integrate EE&T approaches and strategies into Adult Education and Training curricula and programmes to address key priority areas of AMCEN (e.g. ecosystem-based adaptation in rural areas).
- ▶ Implement a Training of Trainers Programme for adult educators and planners of Open and Distance Education (e.g. SADC ODL unit), with gender equality in mind, to integrate environment and sustainability issues into existing ODL programmes and courses.



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- ▶ Integrate EE&T priorities into workplace upskilling programmes (informal and non-formal) in key institutions (e.g. major energy companies).

2. NGO, CBO, FBO environmental organisation, government extension and public health learning partnership programme

- ▶ Conduct baseline assessment on how NGOs, CBOs and FBO environmental organisations mainstream/can mainstream AMCEN priorities into their practices and work more effectively with government extension and public health partners to strengthen action-oriented community learning and extension practices.
- ▶ Based on the assessment and analysis, develop a framework and guidelines on how NGOs, CBOs, and FBO environmental organisations can strengthen partnerships and links with government and extension and public health programmes to mainstream AMCEN priorities, and to upscale best practices, examples of practice that work and models of change.
- ▶ Establish a suitable e-learning platform where examples of best practice and networked learning can occur across countries focussing on this strategic action.
- ▶ Integrate use of this platform into all Training of Trainers Programmes to facilitate uptake and use of the platform at country and at local levels.

- ▶ *Means of verification for M&E: Existence of partnerships between NGOs, CBOs, FBOs and government extension and health services promoting learning and new practices associated with the AMCEN priorities; use of e-learning platform and integration of concepts and approaches into training programmes.*

3. Indigenous knowledge and learning for sustainability

- ▶ Analyse, evaluate and capture relevant indigenous knowledge to inform and strengthen sustainable development practices for present and future well-being on the African continent, and in relation to key AMCEN priority areas. As users of natural resources for the household, women are a key source of indigenous knowledge. Women's groups can be approached for their contributions.
- ▶ Mobilise and link indigenous knowledge and other forms of scientific knowledge through participatory learning approaches.
- ▶ Create mechanisms for the publication and sharing of indigenous knowledge and associated learning processes for sustainability.
- ▶ Integrate knowledge of how to analyse, evaluate and capture IK to inform and strengthen SD into all Training of Trainers programmes to enhance uptake and use of such approaches in education and training systems.
- ▶ *Means of verification for M&E: Captured IK and evidence of use of IK in training programmes, and related changed practices.*

4. Small grant system for social innovation through EE&T

- ▶ Establish a small grant fund and system for supporting the development of innovative approaches to EE&T that also further the goals of social innovation for sustainability on the African continent, and lifelong learning on the African continent. Small grant systems should also target women as key to furthering goals of sustainability and innovation.
- ▶ *Means of verification for M&E: Availability of small grants; use of small grant system; innovations emerging from small grant system.*

3.5.3 Means of implementation and expanding on existing initiatives

Suggested means of implementation include:

- ▶ Step 1: Review existing programmes and activities in each key strategic action area
- ▶ Step 2: Identify key partners / participating organisations and networks
- ▶ Step 3: Engage with these partners / participating organisations to review existing

practice and renew existing practice in line with AMCEN priorities

- ▶ Step 4: Identify implementation partners for key activities
- ▶ Step 5: Establish effective communication systems for the key result area
- ▶ Step 6: Establish and maintain online monitoring and evaluation systems that collect generic M&E data across the key result area
- ▶ Step 7: Bi-annual reporting

BOX 3.3

SOME RECOMMENDATIONS FOR IMPLEMENTATION OF THIS KEY RESULT AREA FROM THE ADDIS ABABA AEETAP CONSULTATIONS

- ▶ This is a vital area for environmental education, and teachers, university lecturers and environmental educators should all engage communities and the youth wherever possible. Voluntarism is an important approach to cultivate as people can do much to improve the condition of the environment if they are willing to engage with the issues. Educators should also look for ways of strengthening voluntarism amongst student communities and amongst out-of-school youth groups, as well as amongst school children where appropriate.
- ▶ Innovative and exciting community citizenship programmes should be developed to enthuse youth and their communities to participate in sustainable development actions. Here good use can be made of expert exchange and community engagement programmes, as well as links with NGOs, CBOs, faith based organisations and community leadership structures and organisations.
- ▶ The private sector and government organisations should also be encouraged to make contributions to community engagement for sustainability programmes.
- ▶ Government departments can also be encouraged to launch competitions and small grants for community innovations that promote sustainability.
- ▶ Much better use should be made of media including film and visual media that can for example show land degradation and demonstrate the environmental problems, and what can be done. New social media such as Facebook and twitter can be used as more people have access to cell phone technology. Better use can be made of SMS information texting as has already been the case in some farmer education and support programmes.
- ▶ There should also be a strong focus on workplace ethics to strengthen informal lifelong learning in workplaces as many sustainability practices can be followed in such workplaces (e.g. energy efficiency, resource use reduction etc.).

3.6 Key Result Area 4: Capacity Building, Networking and Social Learning

Learning takes place in formal institutional contexts, in non-formal learning environments, but also through more complex forms of networked learning, in communities of practice, and through longer term social learning. These forms of learning are not new, but they have gained prominence in recent years as the use of ICTs have spread and as people have gained access to the internet and a variety of new forms of networked learning. Learning in communities of practice has also gained prominence as it has become obvious that learning extends beyond formal learning contexts. Learning in such contexts can also be cultivated, supported and enhanced through various means. Also, as learning opportunities have expanded, so have learning networks and today many different learning networks exist, which also need to be supported. Learning through such networks can also significantly expand professional and other forms of formal and informal learning.

On the African continent, use of the internet is expanding, and mobile phone usage is already extremely common, creating many new opportunities for learning. Media use also provides important new possibilities for learning and knowledge exchange, as so does access to new platforms such as Massive Open Online Courses (MOOCs) that are offered free to people around the world. However, there is a need for capacity building for strategic stakeholders such as media practitioners, those that are leading and developing networks and for the building of communities of practice.

The internet has introduced into society a range of new learning approaches and tools such as the use of social networks (e.g. Facebook) for informal learning. In Africa, the prominence of the mobile phone as a major e-learning tool is increasingly being seen as an important tool for networked learning. Successful experiments have been conducted in how messages can be communicated to farmers using internet and mobile phone technologies that have real development outcomes. Such technologies can also be mobilised for sustainable development and environmental learning.

It has also been proven that formalised environmental education networks considerably strengthen EE&T programme development. Such networks are particularly important for strengthening quality and for ongoing knowledge sharing and exchange, as can be seen from the EEASA network in southern Africa which has a 30-year history, and the MESA network which has a nine-year history. Such networks need to be supported, strengthened and expanded through deliberate network support approaches. Women's groups and other informal groups can play an important role in supporting environmental education and training. There is also new interest in social learning in communities of practice as a new and innovative way of seeding change through education and training. These approaches can all be more successfully harnessed for environmental education and training.

3.6.1 Key priorities and strategic actions for Key Result Area 4

1. Media, social media and social learning and e-learning capacity development

- ▶ Undertake a baseline assessment to examine the extent to which, and the manner in which the different types of media, such as social media, e-learning and social learning approaches are currently being used for EE&T in Africa. Identify examples of innovative practice that can potentially be upscaled and expanded.
- ▶ Develop and/or adapt a Training of Trainers programme/module for Environmental Educators and Trainers to develop capacity for, and share knowledge of EE&T programmes and platforms using media, social media, mobile learning and other social/media/technology enhanced approaches to learning – integrate this into all Training of Trainers programmes.
- ▶ Develop a Training of Trainers programme/module capacity building programme focussing



on use of e-learning and technology enhanced learning approaches, with strategies on how to assess and evaluate such learning and its outcomes.

- ▶ Network with the private sector, and form partnerships with key private sector organisations that have examples of innovative ways of working with e-learning, media, social media and social learning technologies for environment and sustainability education and learning.
- ▶ Historically, women have had reduced access to basic education based on their traditional domestic roles. Women should be involved in the development of training programmes and should also be participants in e-learning and other courses.
- ▶ *Means of verification in M&E: Baseline assessment; evidence of use of media, social media, e-learning and social learning approaches in EE&T programmes; evidence of partnerships for innovation.*

2. Network building and support

- ▶ Identify existing networks that are aligned with the AMCEN priorities and the key result areas of this Action Plan. Clarify their potential roles and contributions for strengthening EE&T and action learning for the AMCEN priorities in

various education, training and social learning contexts. Assess capacity gaps within these networks and where their practices can be expanded and upscaled.

- ▶ Strengthen and expand existing networks identified above with appropriate and relevant 'catalytic' support, including training and capacity building for network development and sustainability.
- ▶ Develop guidelines for network sustainability and functioning based on experiences and the baseline analysis that can be shared amongst partner networks, with M&E tools to monitor ongoing outcomes and strength of networks and network functioning.
- ▶ Strengthen South-South networking with specifically funded interventions, and also potentially through a small grant system that strengthens South-South networking.
- ▶ *Means of verification for M&E: Existence of networks for EE&T; expansion of networks and networking capacity for EE&T; sustainability of networks; expanded number of South-South networks for EE&T.*

3. Mentorship and leadership programme

- ▶ Develop a mentorship programme for out-of-school youth to become actively engaged in

environmental and sustainability related citizen and green economy activities. Women need to play mentorship roles to encourage young girls to venture into more adventurous and dynamic roles.

- ▶ Strengthen community leadership in key community organisations for environment and sustainability education activities focussing on AMCEN priority areas.
- ▷ *Means of verification for M&E: Mentorship programme exists; numbers of youth mentored into the sector; strengthened community leadership for EE&T.*

4. Donor and research organisation involvement

- ▶ Engage with donor and research organisations to include EE&T in their policies, calls for programmes and criteria. It is also important to engage with donors who support gender initiatives so as to have specific gender-related goals where possible.
- ▶ Share research and practice outcomes and insights with them, and the impact (immediate and catalytic) of environmental education and training interventions, based on M&E data.
- ▷ *Means of verification for M&E: Increased donor and research organisation participation in EE&T.*

5. Capacity to build capacity: Environmental education innovation, infrastructure and leadership

- ▶ Develop a focussed Africa-wide Environmental Education and Training International Certificate Course for the key ‘leaders’ in all of the programmes associated with the Key Results Areas of the Action Plan, giving attention to their capacity building and practice innovations.
- ▶ Develop an e-learning platform for sharing innovation in environmental education and training amongst organisations and practitioners that are leading and or contributing to the implementation of the Action Plan.
- ▶ Support Masters and PhD level studies in Environmental Education and Training (and the emergence of such programmes in African

universities) to develop leadership for the field of environmental education and training and to resource the African EE&T Action Plan with innovations in Environmental Education and Training. Women leaders can play a key role here.

- ▶ Support the emergence of more EE&T ‘champions’ within the various key result areas of the EE&T Action Plan, and facilitate international / South-South leadership co-operation and knowledge exchange.
- ▷ *Means of verification for M&E: A highly trained, professional network of environmental educators / ‘champions’ exists across the African continent, with access to postgraduate study and leadership capacity development; and networked links to international environmental education and training professionals.*

3.6.2 Means of implementation and expanding on existing initiatives

Suggested means of implementation include:

- ▶ Step 1: Review existing programmes and activities in each key strategic action area, ensuring that gender considerations have been taken into account
- ▶ Step 2: Identify key partners / participating organisations and networks
- ▶ Step 3: Engage with these partners / participating organisations to review existing practice and renew existing practice in line with AMCEN priorities
- ▶ Step 4: Identify implementation partners for key activities
- ▶ Step 5: Establish effective communication systems for the key result area
- ▶ Step 6: Establish and maintain online monitoring and evaluation systems that collect generic M&E data across the key result area
- ▶ Step 7: Bi-annual reporting

BOX 3.4

SOME RECOMMENDATIONS FOR IMPLEMENTATION OF THIS KEY RESULT AREA FROM THE ADDIS ABABA AEETAP CONSULTATIONS

- ▶ Make better use of existing social networks that are powerful in mainstream societies (e.g. community societies), and link advocacy to these networks.
- ▶ Focus on mobile technologies for community learning – use the platform of mobile banking to reach people more widely (e.g. for early warning, capacity building).
- ▶ Focus on capacity building for using e-learning in high schools, college and universities (e.g. AEO for Youth Programme).
- ▶ Make better use of School Television Programming and link this to club and voluntary initiatives in schools and their communities.
- ▶ Establish a strong Africa Voluntary Environmental Initiative which focuses on youth but is also an inter-generational initiative.
- ▶ Help to establish and support stable secretariats for membership organisations and networks; extend MESA programme to other universities, and use peer review and seed funding to strengthen existing projects and programmes to expand to other universities.



CHAPTER 4

CROSS-CUTTING ISSUES



There are a number of cross-cutting issues that need to be dealt with in all of the Key Result Areas and AMCEN focus areas for the successful development and implementation of environmental education and training as outlined in the AEETAP. Dealing with these cross-cutting issues *in tandem* with the

key result areas will be essential for enabling an innovative and relevant approach to environmental education and training in Africa. These issues are briefly discussed below, and those working with the AEETAP are encouraged to consider these carefully as programmes are developed and expanded.

4.1 Contextualisation

Environmental contexts differ, as do environmental issues and risks in different contexts, and appropriate responses to these issues. Similarly, people who are engaging with the environmental issues and risks are not all the same; they have diverse cultural and social histories, diverse languages, and diverse systems of practice. Thus for any environmental education and training programme to be successful, there is a need to give attention to both the contextualisation of the environmental concerns being dealt with, as well as the socio-economic and socio-cultural and socio-historical contexts of the people that are involved in the educational and training work. There is also a need to contextualise environmental education and

training in diverse subjects, sub-fields and levels of the education and training system.

When considering environmental issues and risks in different contexts, the gender perspective must be taken into account and training must factor in these findings. Varying roles in use of natural resources should be considered. For instance, when it comes to cultivating food crops, women are usually the main land users whilst men are usually the landowners. There needs to be careful consideration of the power balance. Negative impacts on women following the training should also be considered; in many households men are the main decision-makers, hence getting buy-in from men is crucial.

4.2 Integration and inter-disciplinarity

As indicated in the first section of the AEETAP, environmental issues need to be viewed from a socio-ecological systems perspective which requires integration of both natural and social scientific perspectives, as well as integration of knowledge, skills, values and action. Thus, EE&T processes

require integration and inter-disciplinarity at all levels of the education and training system, and also in all contexts where EE&T takes place. Another key issue to be considered is the integration of local and indigenous knowledge with scientific and other forms of more abstracted knowledge.

4.3 Policy development

For environmental education and training to be fully developed in African education and training systems there is a need for ongoing policy development. As indicated earlier in the AEETAP, there has been some progress made in this area, but there is still much to be done to ensure that EE&T is integrated into all education and training policy at all levels and in all sub-sectors of the education and training system – from ECD to higher education, including TVET, public and community education, adult education and social learning via the media. Policy development should include strategies that strengthen gender equality. Gender relations and roles need to be taken into careful consideration. There is also a need to ensure that EE&T is integrated into different levels of policy making. For example, it can be included

in broad-based educational policy, but must then also be included specifically in curriculum policy, and also in examination and assessment policy. This should be done within the framework of Education for Sustainable Development as many countries have already started doing. However, such policy development work should be fast-tracked and upscaled.

There is also a need to shift from ‘outreach’ and ‘awareness raising’ on environmental education to action competence and practice, as it has been shown that raising awareness on issues is not adequate; people have to become engaged in actions to resolve and address problems for change to materialise.



Brian Waswala / UNEP

4.4 Curriculum and materials development

A very important part of education and training is curriculum and materials development, which helps teachers to know what to teach, and to bring high quality knowledge and approaches to learners. There is a need to focus on integrating environmental education and training into curricula at all levels of the educational system, and curriculum developers

should be adequately empowered to do this. Textbook authors should also be supported to include high quality and accurate environmental information in the learning materials that they develop, and teachers should be supported to use these materials as well. Curriculum and materials development processes should take gender dimensions into account.

4.5 Transformative learning and assessment

Environmental education requires learners to become engaged in processes of change to reduce environmental risk and to implement alternative practices to those that are unsustainable. It also requires learners to engage in societal transformation towards a more sustainable future. Thus, environmental education and training support

active learning, creativity and critical approaches to learning and transformative approaches to learning, taking into account gender dimensions. This needs to be reflected in assessment practice and may require that more formative types of assessment are used for environmental education, rather than summative testing only.

4.6 Values and ethics

Environmental education and training is also values-based as it requires a critique of norms that bring about unsustainable practices and habits. Learners engaged in environmental education and training at all levels of the education and training system and in all education and training contexts should therefore

be encouraged to explicitly engage in discussions on values and ethics, and to participate in building an ethics of fairness, justice and sustainability for an improved future for all people and living things on Earth. Some discussions need to focus on gender equality.

4.7 Learning and changes in practice

Environmental education and training also involves getting engaged in actions for change. A focus on changes in practice can help teachers and learners to become more action-engaged. Small scale practices such as using energy more efficiently, or recycling practices can be good places to start, and these can scale up and outwards to other practices such as using green technologies. Learners should be encouraged to examine existing practices in society, taking into account gender dimensions, and to discuss how

such practices could be changed. It is also helpful to consider that practices can be changed by people, either individually or collectively, and to support learners to develop the action competences necessary to participate successfully in changing practices in the environment (school, university campus, community or surrounding social-ecological context). Eco-Schools and Green Campus programmes have shown how successful this approach can be for engaging people actively in changing practices through EE&T.



John Hogg / World Bank

4.8 Use of information and communication technologies

A new challenge for many educators in Africa is to make better use of ICTs in their teaching and learning. There are many rapidly emerging approaches to using ICTs in education and training, including in EE&T, and the AEETAP must encourage the creative use of ICTs in contexts where this is possible, taking

into account gender equality. This means that environmental educators and trainers must have the skills necessary to assess which forms of ICT could best be used for environmental education in different contexts, and then know how to integrate the use of these ICTs into their teaching and learning.

4.9 Capacity building for environmental educators and trainers

To expand environmental education and training in Africa, it is important to give attention to capacity building or professional development of environmental educators and trainers. Taking into account gender equality, there should be adequate provision made for professional learning interactions, training of trainers, and participation in professional environmental education and training networks and forums so that best practices can be shared, and so

that the field of environmental education and training can progress and offer the best possible quality of learning across the system. This also requires research into environmental education and training and the sharing of best practice approaches and models across the continent. Dedicated training programmes for environmental educators and trainers must be made available to strengthen the delivery and design of EE&T programmes.

4.10 Resources for environmental education and training

Dedicated resources must be allocated to EE&T in national government systems of education and training, and in the environmental sector and via the private sector. Environmental and social changes for a more sustainable society are not likely to come

about without a population that is aware and able to act more sustainably, and this will require dedicated support for environmental education and training programmes. Gender dimensions need to be included in resource allocation and training.

4.11 Concepts and conceptual development

One of the challenging aspects of environmental education and training is that it deals with many new concepts and areas of knowledge such as climate change, biodiversity, ecosystem services, ecosystem-based adaptation, green economy, renewable energy and so forth. Thus, there is a need to develop clear descriptions of the main concepts that are used in environmental education to facilitate good understanding of the field. There is also a need to consider issues of gender and knowledge progression in the education and training system. For example, what one would teach primary school children about Earth Systems and Climate Change would be different to what high school learners would focus on. This may also be different from what university students would learn about. In addition, there can

be different ways to approaching topics. Climate change, for example, can be approached from a social science perspective, or from an earth system science perspective, or from a philosophical perspective.

Thus, there is need to give attention to not only the concepts and their meaning, but also knowledge progression in environmental education and training. As many of the concepts are new, the issue of knowledge progression has not yet been dealt with in depth in many of the education and training systems in Africa or elsewhere. There is therefore need to create a knowledge sharing platform for Africa's environmental education and training community where understandings of these concepts and knowledge progression issues can be discussed.

4.12 Monitoring, evaluation and expanded learning and practice

Monitoring and evaluation are vitally important for the development of environmental education and training in Africa. There is need to monitor what is being taught and learned, how it is being taught and learned, why it is being taught and learned, and how such teaching and learning can be improved. There is also need to monitor the relevance and contextualisation aspects of environmental education and training, as well as capacity and professional learning aspects. Additionally, there is need for systemic monitoring and evaluation to judge the

extent of environmental education and training uptake at national and regional levels. However, it is also vitally important to monitor the extent to which environmental education and training is expanding learning, knowledge, values and practices for a more sustainable world and for improved livelihoods, poverty reduction and better quality of life. Environmental educators and trainers need to be supported to develop the relevant monitoring and evaluation capacity to strengthen learning and practice.

CHAPTER 5

IMPLEMENTATION MODALITIES, MECHANISMS AND APPROACHES



This chapter provides some strategies to ensure efficient, effective and result oriented implementation of the environmental education and training strategies proposed under the different result areas in the AEETAP.

Presently, there is an increasing disconnection between educational and environmental management, which is evident in the formulation of key economic and social development. The AEETAP will help bridge this divide by reinforcing the role of environmental education in policy making and community management. The Action Plan will be implemented based on the principles and core values of the African Union Vision 2063, post-2015 SGD agenda, and it will complement NEPAD's Action Plan.

Africa's Vision 2063 seeks to drive Africa's development into an integrated, prosperous and peaceful continent, driven by its own citizens and representing a dynamic force in the global arena.

With a vibrant population (70%) of youthful people under 25 years, there is great need to tap into African youth to promote innovation through current environmental education programmes to actualise this vision: "A global strategy to optimise use of Africa's resources for the benefits of all Africans". Both men and women need to participate in activities at the grass roots level; research has shown women are key in propagating practical changes on the ground.

The AEETAP will also link directly to the AMCEN Regional Flagship programmes that call for the implementation of the Rio+20 outcomes, in addition to complementing NEPAD's Action Plan.

The role of education in the achievement of the post-2015 SGDs, since it is a cross-cutting thematic area, is not only confined to goal 4. It is also essential for spurring economic growth and social development.

5.1 Proposed priority pilots within the key result areas

5.1.1 Teacher capacity building

Education is cross-cutting to the actualisation of all MDGs and SDGs. The Action Plan will aid in the development of teacher curricula. This will aid in the transfer of knowledge and concepts at an early age (early education and basic education). Teacher capacity building will also positively contribute to the actualisation of the role of education in Africa by developing environmentally sound generation leaders; by ensuring behaviour change and policy influence; developing incubation hubs for innovation; and ultimately extending impacts – society, community and culture. Gender-disaggregated data should be utilised to ensure both male and female teachers are targeted for the environmental education and training.

In addition, the Action Plan proposes the use of indigenous knowledge in addressing environmental concerns, since indigenous people are more aware of their environments and have stronger attachment to the living and non-living things around them. Men and women are impacted differently by environmental changes and it is useful to work with both perspectives.

5.1.2 Higher education, research and innovation (MESA)

AEETAP will aid in the promotion of university and teacher education and training on environmental matters. This will ensure that the continent will be better placed for translating education into suitable policies for the integration, prosperity and peace. The action plan calls for the strengthening of the MESA platform, through the Association of African Universities. It will also seek to build and develop capacity through the sub-regional hubs, educational programmes and associations such as SARUA and Green University Networks (Kenya, Uganda, Morocco and West Africa). AEETAP assimilation will also showcase and expose African academia to UNEP's



ELRC / Rhodes University

most recent publications, as a way of promoting innovation. Student engagement and competition on various thematic areas such as green energy and waste management will be promoted, as a means of promoting African solutions to African problems.

The AEETAP will also call for research on the role of indigenous knowledge in environmental management. This will be of high priority since the failure to document this leads to 'language extinction', which results in the loss of environmental knowledge from many traditional cultures.

5.1.3 Youth participation in sustainable development learning and action

Education is essential in the building of values and positively impacts on economic growth. It also gives the population a sense of meaning. For this reason, the need for African countries and the AU to invest in education is essential. The AEETAP will help in sustainable development and learning for the African

population, especially since the majority of the African population is youthful.

5.1.4 Technology enhanced learning innovation

An innovative approach to technology and capacity building of the African populace at a young age is required. The widespread use of the internet and mobile phones could be used for the dissemination of environmental education. Technology assisted learning also needs to be explored. In addition, the AEETAP calls for the development and implementation of an African EE MOOC that will showcase African case studies and solutions.

5.1.5 Leadership development

The Action Plan seeks to build capacity and knowledge exchange for both men and women in an Educators and Policy Makers Partnership. AMCEN and UNEP EETU will act as lead agents to inform 'the model' at other levels. The leadership programmes will be modelled along the lines of the

Asia-Pacific Leadership Programme on Environment for Sustainable Development. It will build capacity and share best practices for emerging leaders from the African continent on holistic sustainability thinking and evidence approaches towards effective action; improve all-round thinking and decision-making abilities of emerging leaders; and provide a platform for emerging leaders in Africa to communicate and network amongst each other while working to address complex practical sustainable development challenges. The proposed training, one course to be held each year, will run alternatively to cater for the Anglophone and Francophone speaking nations.

The AEETAP will also promote capacity in ecosystem management through the REDD+ Academy (African Chapter). The Academy will offer a comprehensive training course on all aspects of REDD+ (global climate change mitigation challenge and enable systematic, focused capacity development to deliver REDD+ on the ground) for African members of parliament, environmental journalists, and REDD+ future leaders and practitioners. Participation is by invitation only and limited to participants from UN-REDD partner countries. Outcomes of the Academy will aid in the development and launch of a MOOC.



5.2 Implementation modalities

5.2.1 Inception meeting

On endorsement of the AEETAP, key stakeholders envision convening an inception meeting. This meeting, to be held in partnership with the AU, will identify sub-regional stakeholders, both men and women, and hubs for the mainstreaming of the Action Plan. The inception meeting will clarify the following:

Baseline study

A baseline study on formal education systems in Africa, the environmental education programmes, institutions and educators will be conducted. The baseline studies will contribute to reflecting AMCEN priorities in educational policies and curricula; developing and distributing guidelines to ensure that Quality Assurance (QA) systems (i.e. national standards) and policies include environmental education and education for sustainable development (EE/ESD) concerns that are aligned with AMCEN priorities. Gender-disaggregated data will be collected and used to ensure equal participation of both males and females.

Funding proposals

UNEP-EETU, in collaboration with partners, will develop specific proposals for funding to national governments, regional and development partners including development banks. The proposals will primarily focus on environmental and sustainability research, especially green economy, technology and urbanisation, and need to include gender-based initiatives.

Grants and scholarship programmes will also be encouraged that develop South-South cooperation to address the environmental challenges and emerging issues that plague the continent. The scholarships would be modelled along the lines of sandwich programmes that will be held in China and Africa. A blend of Chinese and African students, both men and women, as a means of sharing experiences is proposed.

As a living document, the AEETAP will be updated periodically. Following the inception workshop, a mid-term review will be held in 2020 and a final review held in 2024. These reviews will offer essential platforms for sharing ideas in strengthening and meeting the intended outcomes of the action plan. Bi-annual reports will also be shared with stakeholders, as modes of feedback.

Thematic focus approach

Stakeholders need to establish a thematically focussed approach. The following need to be considered:

- ▶ Systemic approach (formal, non-formal, capacity building, networking);
- ▶ Best Practices and expand on existing momentum and structures (an enabling approach);
- ▶ Partnership approach;
- ▶ South-South co-operation;
- ▶ Communities of Practice development;
- ▶ Research;
- ▶ Monitoring and evaluation; and





- ▶ Infrastructure – universities / MESA focal has ‘knowledge hubs’ that can support the EE&T strategy implementation.

Additional key points

In addition to the themes and approaches listed above, the following key points also need to be considered:

- ▶ Accountability and realistic targets – AMCEN;
- ▶ Organogram: GUPES, MESA etc.;
- ▶ Starting point: Sustainability and Poverty Reduction;
- ▶ Civil society involvement;
- ▶ Gender and women in rural areas;
- ▶ Technology access;
- ▶ Articulation and capturing of best practices needs to be strengthened – show how universities are acting as ‘hubs’;
- ▶ Sub-regional analysis of critical issues;
- ▶ What M&E is in place for AMCEN declarations;
- ▶ UNEP / UNESCO partnership, UNESCO virtual campuses;
- ▶ Where research is placed in the action plan;
- ▶ Sustainable funding system for the EE&T Action Plan; and
- ▶ A realistic, but ambitious focus on practices.

5.2.2 Overview of recommendations for implementation of key result areas

Table 5.1 overleaf considers and summarises some recommendations for implementation of key result areas from the Addis Ababa meeting.

Table 5.1 Some recommendations for implementation of key result areas from the Addis Ababa meeting

Key Result Area	Initial scoping of some initiatives that can be expanded/scaled up
1	<ul style="list-style-type: none"> ▶ MESA and GUPES networks, programmes and outcomes to date including the ESD Innovations Toolkit ▶ AFRITIEIS, SADC REEP and UNESCO Teacher Education Network and Training Programmes for ESD ▶ MESA/UNEP/Natura International Training Programme for ESD in Formal Education and Higher Education ▶ UNICEF Climate Change Programme for young children ▶ UNESCO Schools Programmes and TTSSA teacher education resourcing network ▶ Fundisa for Change Teacher Education network and Community of Practice in Southern Africa – supported by SWEDESD ▶ SARUA Knowledge co-production framework on universities and climate compatible development ▶ Eco-Schools programmes in different African countries (Kenya, Namibia, South Africa) ▶ Regional Teacher Education Programmes – University of Zambia; University of Botswana; Rhodes University, etc. <p><i>This list will need to be expanded in the scoping phase.</i></p>
2	<ul style="list-style-type: none"> ▶ UNESCO/UNEVOC programmes and initiatives and their expansion into African TVET systems ▶ UNEP Sustainable Production and Consumption and Industry Environmental Programmes and initiatives ▶ Other sustainable production, cleaner production, green economy and sustainable consumption networks (e.g. PERL network) ▶ UNESCO's GREEN TVET initiative ▶ UNIDO/GIZ/World Skills Foundation: 'Green Industrial Skills for Sustainable Development. Risks and Challenges for Least Developed Countries' Conference outcomes ▶ ILO reports on Green Economy Skills ▶ South African 'Human Capacity Development (HCD) Initiative for Promoting Green Skills Development in Green FET Colleges in South Africa' (GIZ – includes use of an e-learning training programme for college lecturers) ▶ GIZ funded vocational school network ▶ GIZ publications on Green TVET for Green Economy ▶ South African FET Colleges network on Green Colleges for Green Economy ▶ Kenya School of Government ESD programme and others ▶ South African Public Services SETA programmes on Green Economy and Green Skills for green economy transitioning ▶ Various Local Government Sustainable Development Training Programmes and Initiatives ▶ Parliamentary training programmes (UNEP) ▶ Sustainability Leadership programme (WWF-SA)
3	<ul style="list-style-type: none"> ▶ UNESCO, UNICEF, UNAIDS, UNDP and other UN linked Adult Education Programmes in priority SD areas ▶ PROLINOVA and other forms of agricultural innovation training for social innovation in agriculture ▶ National and international NGO programmes and activities (e.g. WWF and others) ▶ Highway Africa Journalism conference and training UNEP environmental journalism training ▶ YES programmes ▶ Youth networks (various) ▶ Activate youth development network
4	<ul style="list-style-type: none"> ▶ UNEP Mentor programme ▶ Postgraduate Environmental Education and Training Programmes (e.g. Rhodes University, University of Botswana, Kenyatta University and others – need to audit these) ▶ SADC REEP ESD Leadership Training Programme for EE&T 'champions/leaders' ▶ Eye on Earth Initiative ▶ EEASA and MESA networks ▶ HOAREC ▶ SADC REEP Community of Practice

CONCLUSION



This Environmental Education and Training Action Plan has been developed to strengthen sustainable development in Africa. Focussed on specific ways of using education, training and social learning to strengthen and expand the AMCEN Regional Flagship Programmes, the document also provides mechanisms for implementation of the Sustainable Development Goals, and the AU's Vision 2063 which sets out a wider strategic and Africa-centred approach to sustainable development for the continent.

Education, training and social learning cannot be separate goals to achieve sustainable development. Importantly, environmental education must play

its part in strengthening sustainable development. Environmental education, as represented in this Action Plan, is therefore not seen as separate from or different to education for sustainable development, Africa's Vision 2063 pathway, and the AMCEN agenda. All are interlinked. To involve Africa's people, men and women working together in achieving these goals, investments must be made in environmental education and training for sustainable development. This action plan can guide the prioritisation of such investments at national government levels, amongst regional economic communities, and in international co-operation discussions.

ANNEX

EE&T KEY RESULT AREA GOALS AND ACTIVITIES

Key Result Area 1: Formal Education

Strategic Priorities	Activities *	Verification †
Enhance EE in all levels of formal education through policy and quality assurance systems	<ul style="list-style-type: none"> ▶ Conduct baseline assessment on the extent of national EE and ESD programmes. ▶ Develop and distribute guidelines to on EE Quality Assurance. 	<ul style="list-style-type: none"> a) Baseline assessment report; guidelines distributed; b) Evidence of use of guidelines to change policy and practice.
Support curriculum innovations	<ul style="list-style-type: none"> ▶ Develop guidelines for curriculum innovation that includes environment and sustainability concerns for various levels of the formal education and training systems. ▶ Hold national curriculum development workshops with curriculum development centres and policy makers on innovation issues relevant to environment and sustainability education. 	<ul style="list-style-type: none"> a) Curriculum innovation guidelines; b) Evidence of curriculum innovations supported by guidelines and professional development programmes.
Mainstream ESD concerns into teacher education	<ul style="list-style-type: none"> ▶ Conduct national baseline assessment on the extent to which teacher education programmes address EE/ ESD theory and practice. ▶ Develop national teacher education programme for all forms of teacher education. 	<ul style="list-style-type: none"> a) Baseline assessment report; b) Number of teacher education institutions mainstreaming environment and sustainability issues; c) Number of teachers trained in environment and sustainability education.
Mainstream environment and sustainability education in HEIs	<ul style="list-style-type: none"> ▶ Conduct baseline assessment on extent universities are mainstreaming environment and sustainability through teaching, research, community engagement and campus management activities. ▶ Expand the Mainstreaming Environment and Sustainability in African Universities (MESA) Partnership programme to more universities in Africa. ▶ Deepen and expand existing mainstreaming practices in MESA universities. ▶ Support new programme development at diploma, degree and postgraduate levels. ▶ Strengthen and support student organisations working on environment and sustainability issues on campuses, and create networking platforms. ▶ Develop and support MESA universities to use sustainability assessments and institute sustainability reporting initiatives aligned with AMCEN priorities, and African university campus realities. 	<ul style="list-style-type: none"> a) Number of MESA universities; b) Types and results of mainstreaming interventions; c) Numbers of new courses and graduates of these courses; d) Sustainability reports and results from universities.
Professional development (PD) of educators	<ul style="list-style-type: none"> ▶ Establish the range and scope of available professional development programmes for educators and their alignment with AMCEN priorities. ▶ Develop a 'flagship' training programme for ongoing professional development of educators (ToTs), including university educators, educational officials (e.g. curriculum developers), and teacher educators drawing on knowledge of existing 'best practices' of change oriented learning (e.g. SADC REEP / ITP Change Project model) in this area and align these with AMCEN priorities. 	<ul style="list-style-type: none"> a) Review of PD programmes; b) Numbers of professional educators trained; c) Educational change projects implemented by professional educators showing changes in practice.
Contextualise and develop learning materials	<ul style="list-style-type: none"> ▶ Establish a professional development e-learning platform that makes relevant materials available for use in African contexts, and supports educators to contextualise materials to national and local contexts. ▶ Make new research knowledge available in accessible format for use in educational programmes and project through this portal/e-learning platform. ▶ Train key educators and educational networks to use the portal/platform where experience of contextualising and developing materials can be shared. 	<ul style="list-style-type: none"> a) Use of e-learning platform and numbers and quality of materials exchanged and developed via the platform.
Grants and scholarship programme to promote environmental and environmental education research	<ul style="list-style-type: none"> ▶ Promote research on EE/ ESD issues in formal education to ensure continuing development and renewal of thinking and approaches in these areas. ▶ Develop a core research programme on ICT-enhanced EE/ESD approaches to inform upscaling of EE/ESD initiatives in formal education and other learning settings. ▶ Establish and maintain a grant and scholarship programme for EE&T and AMCEN RFP research areas. ▶ Develop an alumni system for grant and scholarship holders linked to the MESA programme, and regional and sub-regional networks. 	<ul style="list-style-type: none"> a) Number of research projects; b) Evidence of how research is changing practices, especially in ICT use; c) Existence of grant scheme; d) Annual applications; completed studies; e) Alumni participation in networks.

* Gender considerations need to be taken into account in all activities.

† Gender analysis and gender disaggregated data need to indicate whether interventions are working for both men and women.

Key Result Area 2: Vocational Education and Training and Training of Government Officials

Strategic Priorities	Activities *	Verification †
Promote demonstration learning environments for green TVETs	<ul style="list-style-type: none"> ▶ Support and establish Green Economy Conversion Centres, workplace environmental practices and viable demonstration facilities and practical opportunities for youth empowerment. ▶ Expand partnerships with business and industry to supply and support the establishment of model demonstration sites within TVET campuses. ▶ Support the greening of institutional practices, and adoption of green economy principles. 	<ul style="list-style-type: none"> a) Numbers of Green Economy Conversion Centres and demonstration sites used for TVET learning; b) Green campus and Green Economy reporting in TVET centres.
Establish competence-based models for green TVET	<ul style="list-style-type: none"> ▶ Develop competence-based approaches to sustainable development / green sector career pathways development. ▶ Develop a stratified approach to competence based models for TVET and ensure learning pathway alignment and relevant forms of articulation between TVET colleges and HEIs. ▶ Train TVET curriculum developers on green TVET approaches, issues and learning pathways to ensure coherence and progression in TVET approaches. 	<ul style="list-style-type: none"> a) Quality and quantity of Green TVET programmes based on competence-based models; b) Availability of viable Green Economy / TVET learning pathways.
Promote and support career guidance and pathing	<ul style="list-style-type: none"> ▶ Review existing initiatives that promote Green Career Guidance and Career Pathing in Africa and review them in relation to AMCEN priorities framework. ▶ Make available and develop new 'Green Career' guidance materials for youth in Africa. ▶ Identify Green Economy / Green Career role models, both men and women, and include them on the Green Careers portal to model successful Green Economy / Green Career opportunities on the African continent. ▶ Train Career Guidance Facilitators in Green Career Guidance and in how to make use of the portal. 	<ul style="list-style-type: none"> a) Green career guidance initiatives report; options available on the portal; b) Use of, and participation in the portal; c) Numbers of trained teachers.
Train TVET college lecturers and curriculum developers	<ul style="list-style-type: none"> ▶ Develop a baseline analysis of existing Green TVET lecturer / curriculum development initiatives in the African continent. ▶ Establish a Green TVET and Green Economy ToTs programme for TVET college lecturers and curriculum developers focussing skills development planning, curriculum development and training. 	<ul style="list-style-type: none"> a) Green TVET Training of Trainers and curriculum; b) Developers review; c) Green TVET ToT programme and change project outcomes.
Train government officials, decision makers	<ul style="list-style-type: none"> ▶ Integrate the AMCEN priorities into curriculum and programme development and ToTs programmes for Schools of Government / Public Management Training Programmes. ▶ Support environmental / ESD curriculum development and curriculum innovations in Schools of Government / Public Management Training Programmes and other institutions with primary responsibility for training government officials. ▶ Develop a network and communications structure to facilitate ongoing environmental/ SD policy information communication into Schools of Government / Public Management Training Programmes and their ToT programmes. 	<ul style="list-style-type: none"> a) Level of integration of AMCEN and SD priorities into government training programmes and curricula; b) Capacity of lecturers to work on SD issues in schools of government; information communication system use.
State investment in green TVET facilities and programmes, and public private partnerships	<ul style="list-style-type: none"> ▶ Conduct a baseline study on the scope of state investment in TVET programmes and facilities. ▶ Develop more private-public partnership platforms for Green TVET programmes and facilities in key AMCEN priority areas. ▶ Establish national and regional communications and policy briefs oriented to strengthening state investment in Green TVET programmes and facilities; and expanding public-private partnerships for Green TVET programmes and facilities development. ▶ Strengthen public private partnerships for EE&T capacity building at all levels of the TVET and government training system through country-based and regional platforms 	<ul style="list-style-type: none"> a) Baseline data report on the extent to which the state is investing in Green TVET programmes and facilities; b) Available platforms (old and new) in use; c) Outcomes of the programmes.
Policy information communication	<ul style="list-style-type: none"> ▶ Develop an innovative, attractive and highly visible networked learning system for policy information communication. ▶ Integrate the use of this network into all ToTs programmes to facilitate wider uptake and use at all levels of the political decision making system. 	

* Gender considerations need to be taken into account in all activities.

† Gender analysis and gender disaggregated data need to indicate whether interventions are working for both men and women.

Key Result Area 3: Lifelong Learning, Youth Development and Community Education

Strategic Priorities	Activities *	Verification †
Adult learning	<ul style="list-style-type: none"> ▶ Conduct a baseline analysis of existing Adult Education and Training curricula programmes and where key areas of expertise lie. ▶ Integrate EE&T approaches and strategies into Adult Education and Training curricula and programmes to address key priority areas of AMCEN. ▶ Implement a ToTs Programme for adult educators and planners of Open and Distance Education to integrate environment and sustainability issues into existing ODL programmes and courses. ▶ Integrate EE&T priorities into workplace upskilling programmes in key institutions. 	a) <i>Number of Adult Education and Training curricula programmes.</i>
NGO, CBO, FBO environmental organisation, government extension and public health learning partnership programme	<ul style="list-style-type: none"> ▶ Conduct baseline assessment on how environmental organisations are mainstreaming AMCEN priorities into their practices and work more effectively with government extension and public health partners. ▶ Develop a framework and guidelines on how environmental organisations can strengthen partnerships and links with government and extension and public health programmes to mainstream AMCEN priorities, and to upscale best practices, examples of practice that work and models of change. ▶ Establish a suitable e-learning platform where examples of best practice and networked learning can occur across countries focussing on this strategic action. ▶ Integrate use of this platform into all ToTs Programmes to facilitate uptake and use of the platform at country and at local levels. 	a) <i>Existence of partnerships and health services promoting learning and new practices associated with the AMCEN priorities;</i> b) <i>Use of e-learning platform and integration of concepts and approaches into training programmes.</i>
Indigenous knowledge and learning for sustainability	<ul style="list-style-type: none"> ▶ Analyse, evaluate and capture relevant indigenous knowledge to inform and strengthen sustainable development practices for present and future well-being on the African continent, and in relation to key AMCEN priority areas. ▶ Mobilise and link indigenous knowledge and other forms of scientific knowledge through participatory learning approaches. ▶ Create mechanisms for the publication and sharing of indigenous knowledge and associated learning processes for sustainability. ▶ Integrate knowledge of how to analyse, evaluate and capture IK to inform and strengthen SD into all Training of Trainers programmes to enhance uptake and use of such approaches in education and training systems. 	a) <i>Captured IK and evidence of use of IK in training programmes, and related changed practices.</i>
Small grant system for social innovation through EE&T	<ul style="list-style-type: none"> ▶ Establish a small grant fund and system for supporting the development of innovative approaches to EE&T. ▶ Further the goals of social innovation for sustainability on the African continent, and lifelong learning on the African continent. 	a) <i>Availability and use of small grant system;</i> b) <i>Innovations emerging from small grant system.</i>

* Gender considerations need to be taken into account in all activities.

† Gender analysis and gender disaggregated data need to indicate whether interventions are working for both men and women.

Key Result Area 4: Capacity Building, Networking and Social Learning

Strategic Priorities	Activities *	Verification †
Media, social media and social learning and e-learning capacity development	<ul style="list-style-type: none"> ▶ Conduct a baseline assessment on the extent to which, and the manner in which the different types of media (social media, e-learning and social learning approaches are currently being used for EE&T in Africa. ▶ Identify examples of innovative practice that can be upscaled and expanded; ▶ Develop a ToT programme/module for EE&T to develop capacity for, and share knowledge of EE&T programmes and platforms using media, social media, mobile learning and other enhanced approaches to learning. ▶ Develop a ToT programme/module capacity building programme focussing on use of e-learning and technology enhanced learning approaches, with strategies on assessment and evaluating its outcomes. ▶ Form networks and partnerships with private sector organisations that have innovative e-learning, media, social media and social learning technologies for environment and sustainability education and learning. 	<ul style="list-style-type: none"> a) Baseline assessment; b) Evidence of use of media and social learning approaches in EE&T programmes; c) Evidence of partnerships for innovation.
Network building and support	<ul style="list-style-type: none"> ▶ Identify existing networks aligned with the AMCEN priorities and the KRAs; clarify their potential roles and contributions for strengthening EE&T and action. ▶ Assess capacity gaps within these networks and where their practices can be expanded and upscaled. ▶ Strengthen and expand existing networks identified above with appropriate and relevant 'catalytic' support, including training and capacity building. ▶ Develop guidelines for network sustainability and functioning based on experiences and the baseline analysis that can be shared amongst partner networks, with M&E tools to monitor ongoing outcomes and strength of networks and network functioning. ▶ Strengthen South-South networking with specifically funded interventions, and also potentially through a small grant system that strengthens South-South networking. 	<ul style="list-style-type: none"> a) Existence of networks for EE&T; b) Expansion of networks and networking capacity; c) Sustainability of networks; d) Expanded number of South-South networks for EE&T.
Mentorship and leadership programme	<ul style="list-style-type: none"> ▶ Develop a mentorship programme for out-of-school youth to become actively engaged in environmental and sustainability related citizen and green economy activities; and ▶ Strengthen community leadership in key community organisations for environment and sustainability education activities focussing on AMCEN priority areas. 	<ul style="list-style-type: none"> a) Development of mentorship programmes; b) Numbers of youth mentored into the sector; c) Strengthened community leadership for EE&T.
Donor and research organisation involvement	<ul style="list-style-type: none"> ▶ Engage with donor and research organisations to include EE&T in their policies, calls for programmes and criteria; and ▶ Share research and practice outcomes and insights with them, and the impact (immediate and catalytic) of environmental education and training interventions, based on M&E data. 	<ul style="list-style-type: none"> a) Increased donor and research organisations participating in EE&T.
Capacity to build capacity: EE innovation, infrastructure and leadership	<ul style="list-style-type: none"> ▶ Develop a focussed Africa-wide Environmental Education and Training International Certificate Course for the key 'leaders' in all of the programmes associated with the KRAs of the Action Plan; ▶ Develop an e-learning platform for sharing innovation in EE&T amongst organisations and practitioners that are leading and or contributing to the implementation of the Action Plan; ▶ Support Masters and PhD level studies in EE&T to develop leadership for the field of environmental education and training and to resource the African EE&T Action Plan with innovations in Environmental Education and Training; ▶ Support the emergence of more EE&T 'champions' within the various key result areas of the EE&T Action Plan, and facilitate international / South-South leadership cooperation and knowledge exchange. 	<ul style="list-style-type: none"> a) Highly trained, professional network of environmental educators / 'champions' exists; b) Access to postgraduate study and leadership capacity development; c) Networked links to international environmental education and training professionals.

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