



Ministry of Environment, Forestry & Tourism

National Environmental Education and Education for Sustainable Development Policy

2019







National Environmental Education and Education for Sustainable Development Policy

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Foreword

Namibia has made great strides in including environmental sustainability into the development pathways towards sustainable development, but still faces an array of environmental sustainability challenges. These include land degradation, soil erosion, deforestation, risks and impacts of unsustainable economic development, water, waste and energy management, pollution and the impacts of climate change. These challenges call for the need to accelerate progress towards sustainable development as outlined in Namibia Vision 2030 (GRN, 2004), the Harambee Prosperity Plan (GRN, 2016a) and the Fifth National Development Plan (GRN, 2016b). These pronouncements are guided by Article 95 (l) of the Namibian Constitution, which calls for the “*maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future*”.

The protection of the environment is imperative as it is the support base for all life on earth. Environmental Education (EE) and Education for Sustainable Development (ESD) is a cross-cutting issue that needs to be mainstreamed by all sectors. Stakeholders should develop their own institutional action plans and support capacity building and training in EE and ESD based on the issues and needs in their own workplaces.

The Ministry of Environment and Tourism and the Ministry of Education, Arts and Culture believe that EE and ESD issues must be entrenched in the sectoral and sub-sectoral strategies of all stakeholders and at all institutional levels. The ‘carbon credit’, ‘polluter pays’ and ‘precautionary’ principles need to be embraced across sectors. To achieve this, a strong culture of networking is recommended in implementation of this EE and ESD policy as it will promote participation, information sharing, exchanging of views and ideas, and developing the necessary skills among all sectors.


Training and capacity building in EE and ESD is recognised in Namibian policies, curricula and strategies as one of the main strategies for addressing sustainable development challenges as it is expected to build a critical mass of citizens, who are not just informed and trained, but who are above all capable of using their achievements to bring about the economic, social, cultural and political changes required for sustainable development.

Our National EE and ESD Policy is aligned to the United Nation’s Sustainable Development Goals (SDGs). The 2030 Agenda for Sustainable Development aims to redirect humanity towards a sustainable path. Education, specifically EE and ESD, play a significant role in achieving all the SDGs. This EE and ESD policy provides the path for Namibia to mainstream Target 4.7 of SDG#4 on Quality Education, which seeks to ensure that all learners acquire the knowledge and skills needed to promote sustainable development by 2030.

The ESD Task Force, an inter-agency technical committee envisaged to drive the implementation of EE and ESD, is called upon to assist in mobilizing financial resources and developing strategic partnerships with leading environmental and sustainable development organizations.

At a time when environmental issues threaten Namibia’s development and the quality of life of its citizens, EE and ESD are of utmost importance to sensitize the nation on the role that each individual person has to play towards sustainability.


Pohamba Ntshela
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Executive Summary

Namibia has made great strides in including environmental sustainability into the development pathways towards sustainable development, but still faces an array of environmental sustainability challenges. The most challenging of these issues include land degradation and soil erosion, deforestation, risks and impacts of unsustainable economic development, water management, waste management, pollution and the impacts of climate change. These challenges call for the need to accelerate progress towards sustainable development as outlined in Vision 2030 (GRN, 2004), the Harambee Prosperity Plan (GRN, 2016a) and the Fifth National Development Plan (GRN, 2016). The notion of sustainable development in Namibia is rooted in the outcomes of international negotiations on sustainable development such as the Agenda 21 from the Earth Summits of 1992, the Johannesburg Plan of Implementation from 2002, Future We Want from the Rio+20 Conference in 2012 and most recently the Sustainable Development Goals in 2015.

These documents emphasize that education is critical for promoting sustainable development and achieving environmental and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision-making. They also highlight education as one of the means to change social, cultural, economic and political factors to secure ecologically sustainable development.

EE and ESD are recognized as one of the means of realizing the dynamic balance among environmental factors and socio-economic advancement and accelerating progress towards sustainable development. This policy on EE and ESD represents a vision for education that meets the needs of the current generation without compromising the ability of future generations to meet their needs. The EE and ESD policy empowers Namibian people of all ages to assume responsibility for creating and enjoying a sustainable future, and to act for positive environmental and social change. Therefore, this policy on EE and ESD presents the national guiding principles and frameworks for mainstreaming sustainable development issues, environmental education initiatives and environmental planning frameworks of the Namibian Public and Private Sector institutions as well as civil society. EE and ESD in Namibia is more than a curriculum issue and should be implemented across all sectors including schools, higher education institutions, technical and vocational education

institutions, national and local government, government institutions and parastatals, the private sector, non-governmental organizations and the general public. It should ensure that all sectors acquire the knowledge, attitudes and values, as well as the actions and skills required for managing natural resources in a way that causes no significant damage to the environment and considers the needs of present and future generations.

The policy context outlines the constitutional obligations of the Government of the Republic of Namibia (GRN) regarding the protection of the environment and the maintenance of the natural ecosystems for the benefit of present and future Namibians. It also acknowledges the importance of environmental sustainability in local contexts by recognising the existence of local guidelines that are significant to natural resources management at the environment and people interface. One such guideline is the Management of Conservancies and Standard Operating Procedures. The policy context also recognises the affirmation of the Southern African Development Community (SADC) of the need to protect the environment using education to build a regional lobby of action for sustainable development. It also recognises the anticipated "Education for Sustainable Development Towards achieving the SDGs (ESD for 2030)" which was adopted by the 206th session of the UNESCO Executive Board. It follows the UN Global Action Programme (GAP) which sought to generate and scale-up ESD and accelerate progress towards sustainable development through outlined goals, objectives and priority action areas. The policy also recognizes the Global 2030 Agenda for Sustainable Development of the United Nations and the SDGs. Namibia, as a member of the United Nations, has committed itself to mainstreaming EE and ESD in order to implement the ESD for 2030 objectives, the SDGs (Target 4.7 specifically) and each of the Multi-lateral Environmental Agreements (MEAs), particularly those on climate change, desertification and biological diversity.

The policy principles and environmental issues thereof span the social, cultural, political, economic and bio-physical aspects of the environment. This policy is designed to support EE and ESD in formal, non-formal and informal education processes across all sectors of the Namibian society including higher education, teacher education, technical and vocational education institutions, and general education. The guidelines are in accordance with ecologically sustainable practice



and serve as a basis for addressing local, national and global environmental issues. The mainstreaming of environmental issues into education processes will help Namibians to appreciate, understand and support our natural ecosystems to adapt to climate change, ensure that food production is not threatened and enable social and economic development to proceed in a sustainable manner. EE and ESD programmes should be designed to enhance knowledge, skills, attitudes and values as well as the actions necessary for informed decision making and sound environmental management practices.

EE and ESD in Namibia is to be developed and implemented through networking and collaboration between and among Government ministries, the donor community, NGOs, Community Based Organisations (CBOs) and the private sector. The emphasis will therefore be on participation, information sharing, exchange of views and ideas and development of relevant skills among the stakeholders. The coordination of the policy implementation will be enhanced by an ESD Task Force, which will represent an inter-agency technical committee to drive the policy implementation process. The task force shall consist of high-level representatives from the government, private sector and non-governmental organizations. The Policy is coordinated through the National Planning Commission (NPC), Ministry of Environment, Forestry and Tourism (MEFT), Ministry

of Education, Arts and Culture (MoEAC), Ministry of Sport, Youth and National Service (MSYNS), Ministry of Agriculture, Water and Land Reform (MAWLR) and the Namibian Environmental Education Network (NEEN). The high-level ESD Task Force shall assist in mobilizing the necessary financial resources for the implementation of EE and ESD activities through their respective institutions.

The Policy recognises that each participating institution shall create a unit responsible for EE and ESD and appoint suitable staff to mainstream EE and ESD policy and related programmes in sectoral and sub-sectoral plans. Constant monitoring, evaluation and reporting should form a critical part of the process. The monitoring of EE and ESD will focus on the financial and educational aspects. Educational monitoring shall focus on policy implementation, transformation of learning and training environments, capacity building of educators and trainers, empowerment and mobilization of the youth and implementation of sustainable solutions at the local level. Financial monitoring shall include success in fundraising and effectiveness of financial management towards achieving set goals. Each stakeholder should provide the high-level Task Force through the NPC with feedback on the EE and ESD policy implementation.

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- ♦ City of Windhoek (CoW)
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- ♦ De Duine Secondary School
- ♦ Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
- ♦ Dynamic Environment
- ♦ EduVentures
- ♦ Elephant Human Relations Aid (EHRA)
- ♦ Giraffe Conservation Foundation- Khomas Environmental Education Programme (GCF-KEEP)
- ♦ Habitat Research Development Centre (HRDC)
- ♦ Hanns Seidel Foundation (HSF)
- ♦ Hochland High School
- ♦ International University of Management (IUM)
- ♦ Khoebasen Human Power
- ♦ Ministry of Agriculture, Water and Land Reform (MAWLR)
- ♦ Ministry of Education, Arts and Culture (MoEAC)
- ♦ Ministry of Environment, Forestry and Tourism (MEFT)
- ♦ Ministry of Fisheries and Marine Resources (MFMR)
- ♦ Office of the President (OPN)
- ♦ Ministry of Sport, Youth and National Service (MSYNS)
- ♦ Ministry of Tourism, Environment and Culture (MTEC) – Lesotho
- ♦ Ministry of Works and Transport (MWT)
- ♦ Municipality of Walvis Bay (WBM)
- ♦ Mupolo Primary School
- ♦ Namib Desert Environmental Education Trust (NaDEET)
- ♦ Namibia Animal Rehabilitation Research and Education Centre (NARREC)
- ♦ Namibia University of Science and Technology (NUST)
- ♦ Namibia Youth Energy Sector
- ♦ Namibian Coast Conservation and Management (NACOMA) Project
- ♦ Namibian Environmental Education Network (NEEN)
- ♦ Namibian National Commission to UNESCO (Natcom)
- ♦ Namibian Press Association (NAMPA)
- ♦ Namibian Training Authority (NTA)
- ♦ Namibian Youth Coalition on Climate Change (NYCCC)
- ♦ Namutoni EE Centre (NEEC)
- ♦ National Botanical Research Institute (NBRI)
- ♦ National Institute for Educational Development (NIED)
- ♦ National Museum of Namibia
- ♦ National Youth Council (NYC)
- ♦ Okatjikona EE Centre
- ♦ Progress Namibia
- ♦ Rundu Teachers Resource Centre (TRCC)
- ♦ Southern African Development Community (SADC)
- ♦ Regional Environmental Education Programme (SADC-REEP)
- ♦ Stellenbosch University
- ♦ United Nations Development Programme (UNDP)
- ♦ United Nations Educational, Scientific and Cultural Organisation (UNESCO)
- ♦ University of Namibia (UNAM)

List of Acronyms

AIDS	Acquired Immunodeficiency Syndrome	NATCOM	Namibia National Commission for UNESCO
AMCEN	African Ministerial Conference on Environment	NAU	Namibia Agriculture Union
CBNRM	Community-based Natural Resource Management	NDP	National Development Plans
CBO	Community Based Organisation(s)	NEEN	Namibian Environmental Education Network
COTA	College of the Arts	NIED	National Institute for Educational Development
DESD	Decade of Education for Sustainable Development	NGO	Non-Governmental Organisation/s
EE	Environmental Education	NNFU	Namibia National Farmers Union
EEASA	Environmental Education Association of Southern Africa	NPC	National Planning Commission
ESD	Education for Sustainable Development	NQA	National Qualification Authority
FBO	Faith Based Organisation(s)	NTA	National Training Authority
GAP	Global Action Plan	NUST	Namibia University of Science and Technology
GEF	Global Environment Facility	OPN	Office of the President
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit	RLA	Regional and Local Authorities
GRN	Government of the Republic of Namibia	SADC	Southern African Development Community
HIV	Human Immunodeficiency Virus	SADC-REEP	Southern African Development Community- Regional Environmental Education Programme
ICT	Information and Communication Technology	SDGs	Sustainable Development Goals
MAWLR	Ministry of Agriculture, Water and Land Reform	SEEN	Supporting Environmental Education in Namibia
M&E	Monitoring and Evaluation	TVET	Technical, Vocational Education and Training
MDGs	Millennium Development Goals	UNAM	University of Namibia
MEAs	Multilateral Environmental Agreements	UN	United Nations
MEFT	Ministry of Environment, Forestry and Tourism	UNCBD	United Nations Convention on Biological Diversity
MFMR	Ministry of Fisheries and Marine Resources	UNCCD	United Nations Convention to Combat Desertification
MISA	Media Institute of Southern Africa	UNDP	United Nations Development Programme
MLR	Ministry of Land Reform	UNESCO	United Nations Organization for Education, Science and Culture
MoEAC	Ministry of Education, Arts and Culture	UNEP	United Nations Environment Programme
MSYNS	Ministry of Sport, Youth and National Service	UNFCCC	United Nations Framework Convention on Climate Change
NaDEET	Namib Desert Environmental Education Trust		
NAMCOL	Namibia College of Open Learning		

Glossary of EE and ESD policy-related key concepts and terms

Anthropocentric is the belief that human beings are the most significant beings of the universe and interprets nature in terms of human values and experiences.

Biocentric is the belief that extends the status of moral object from human beings to all living beings in nature. It is an ethic that calls for a rethinking of the relationship between humans and nature.

Carbon credit is a permit permitting the holder to emit *carbon* dioxide or other greenhouse gases. The *credit* limits the emission to a mass equal to one ton of *carbon* dioxide. The issuance of carbon credits aims to reduce the release of greenhouse gases into the atmosphere.

Carrying capacity is the maximum population size of the species that the environment can sustain indefinitely, given the food, habitat, water and other necessities available in the environment.

Community of practice is a group of professionals with a common passion for environmental protection and that acts and learns how to protect the environment better through regular interaction.

Conflict of interest is a situation in which the concerns of two different parties are incompatible or a situation in which a person is in a position to derive personal benefit from actions or decisions made in their official capacity.

Consumer action is the act of buying or not buying a product or service. This action category relies on the economic power of individuals to support or not support an idea.

Eco-centric is a term used in ecological political philosophy to denote a nature-centered, as opposed to human-centered (i.e. anthropocentric), system of values.

Eco-entrepreneurship is a business driven not only by the possibility of making a profit but also by environmental and social concerns.

Eco-management is a physical action taken to help improve the status of an issue, for example, picking up litter, building with wood, dux boxes or planting sea oats on dunes.

Education for Sustainable Development is an encompassing and evolving concept that can be broadly interpreted as holistic and transformational education that addresses learning content and outcomes, pedagogy and the learning environment to achieve societal transformation towards sustainable living. It incorporates key sustainable development issues such as – climate change, disaster risk reduction, gender equality, biodiversity, poverty reduction, and sustainable consumption – into teaching and learning.

Environmental education refers to the process of developing environmentally literate citizens who are aware of and concerned about the total environment. The process involves empowering citizens with knowledge, skills, attitudes and values, motivation, commitment, actions and shared decision making to individually and collectively achieve an improved quality of life through the sustainable use and appropriate development of Namibia's resources.

Formal education/learning refers to learning activities carried out in schools, colleges, vocational institutions and university systems based on an established curriculum and on approved teaching and assessment methods.

Global citizen refers to someone who identifies with being part of the world community and whose actions contribute to building this community's values and practices.

Global citizenship is the rights, responsibilities and duties that come with being a member of the global community as a citizen of a particular nation or place. The idea is that one's identity transcends geography or political borders and that responsibilities or rights are or can be derived from membership in a broader class of 'humanity'.

Green economy refers to a shift towards a development path that promotes resource efficiency and sustainable management of natural resources, social inclusion, resilience, and sustainable infrastructure development.

Informal education/learning refers to learning/education that results from daily life activities related to work, family or leisure, and is provided within families,



religious organizations, community groups and traditional cultures, as well as through news organizations, social media and various forms of entertainment. It also includes learning that includes needs-based short courses on environmental issues with the focus on sustainable development, sustainable livelihood development and environmental management.

Interdisciplinary refers to a learning or research process combining two or more different disciplines.

Legal action is an action that uses the legal system to bring about a certain solution to an environmental issue. This action category uses court orders, lawsuits and injunctions to enforce compliance to environmental management issues.

Mainstreaming refers to the systematic integration of environment and sustainability concerns into a wide range of disciplines, faculties, programmes and courses in universities, as well as the integration of these concerns into university policies, management practices and student initiatives.

Multidisciplinary refers to many subjects that are integrated into one topic or area of learning.

Non-formal education / learning refers to any organized educational activity taking place outside the framework of the formal education system and targets specific groups/categories of persons with life skills, values and attitudes for personal and community development.

Pedagogy is the study of the correct use of methods and activities of teaching.

Political action refers to action that brings pressure on political and governmental agencies and their representatives to persuade them to a certain action. Actions in this regard include lobbying, campaigning for political candidates who support environmental causes and letter writing to elected officials about environmental matters.

Polluter pays principle is an environmental norm that is enacted to make the party responsible for producing pollution to pay for the damage done to the natural

environment or to invest in activities aimed at protecting the environment.

Precautionary principle is an environmental principle that states that an activity that raises threats of harm to the environment or human health must implement measures to prevent harm even if some cause and effect relationships are not fully established scientifically.

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Systems thinking is a set of interrelated elements that make a unified whole. Individual things - such as plants, people, schools, watersheds, or economies - are themselves systems and at the same time cannot be fully understood outside of the larger systems in which they exist. Systems thinking is an essential part of schooling for sustainability. A systems approach helps people understand the complexity of the world around them and encourages them to think in terms of relationships, connectedness and context.

Transdisciplinary refers to teaching and/or a research strategy that crosses many disciplinary boundaries to create a holistic approach. A transdisciplinary approach enables inputs and scoping across scientific and non-scientific stakeholder communities and facilitating a systemic way of addressing a challenge.

Transformative learning is concerned with altering frames of reference through critical reflection of both habits of mind and points of view by critically reflecting on how patterns of consumption and production may have an impact on one's behaviors.

Whole school approach to ESD means that a school shall incorporate teaching and learning for sustainable development not only through aspects of the curriculum, but also through sustainable school operations such as integrated governance, stakeholder and community involvement, long-term planning, and sustainability monitoring and evaluation.



1. Introduction

1.1 Importance of Environmental Education (EE) and Education for Sustainable Development (ESD)

EE and ESD is our pathway to a sustainable future. While empowering individuals to sustainably co-exist¹ with the Earth's natural systems, EE and ESD should also support the well-being of future generations by promoting sustainable lifestyles.

The ideas of EE and ESD are linked to the international discourse on sustainable development. The Earth Summit of 1992 recognized the principle of ecologically sustainable development. The Earth Summit gave birth to Agenda 21 which specifies the roles for all governments and businesses to commit to and take responsibility to combat the deterioration of land, air and water, whilst conserving natural habitats and their diversity. It addresses issues of poverty, over-consumption, health and education. In December 2002, the United Nations General Assembly, through its Resolution 57/254, declared 2005-2014 as the Decade of Education for Sustainable Development (DESD). The Global Action Programme (GAP) on ESD from 2015-2019 is the follow-up programme to the DESD. The GAP sought specifically to generate and scale-up good practices in ESD and to accelerate progress towards sustainable development in line with the SDGs. To build upon these past achievements and to align with the United Nations' Sustainable Development Goals (SDGs), the new framework for EE and ESD is proposed as "Education for Sustainable Development: Towards achieving the SDGs (ESD for 2030)". This new framework will continue to support all ESD activities that contribute to the achievement of the SDGs (UNESCO, 2019).

The need to accelerate progress towards sustainable development has been fundamental to Namibia since its Independence, as evident in Article 95 (I) of the Constitution of the Republic of Namibia. This has led to several policies, including Namibia's Vision 2030 (GRN, 2004), the Harambee Prosperity Plan (GRN, 2016a) and the Fifth National Development Plan (GRN 2016b). These documents recognize the role of sustainable development in balancing socio-economic and social progression needs with natural resources availability and conservation. Today, EE and ESD are recognized as one of the means of realizing the dynamic balance

¹ *sustainably utilize, restore, and maintain*

between environmental factors and socio-economic advancement. The Namibian government supports formal, non-formal and informal education in developing environmental and ethical awareness among its citizens across all ages and sectors of society to develop competencies to identify and address environmental issues (Ministry of Wildlife, Conservation and Tourism, 1992; Namibia Draft Environmental Education Policy Guidelines, 2004; Murray, 2005; Ministry of Education, 2009; Ministry of Environment and Tourism, 2011).

EE and ESD is the responsibility of all of the people of Namibia. It is more than a curriculum issue and should involve all sectors of society including schools, higher education institutions, technical and vocational education institutions, government institutions, the private sector and the general public to ensure that they acquire relevant knowledge, attitudes, values and skills required for managing natural resources in a way that causes no significant damage to the environment and considers the needs of present and future generations. EE and ESD also concerns itself with equipping Namibians with the skills and resilience needed to combat the effects of climate change through appropriate mitigation and adaptation methods. Namibia is at a critical stage where environmental challenges pose developmental challenges that need careful planning which is inclusive of incorporation of nature in order to create harmony between human existence and nature. At a time when environmental issues threaten Namibia's development and the quality of life of its citizens, EE and ESD are of utmost importance in creating environmental literacy to sensitize the nation on the role that each individual person has to play.

This policy is designed to support the holistic approach and/or integration of EE and ESD across all sectors of society including formal education, non-formal education, teacher education, technical and vocational education and general education. The guidelines are in accordance with ecologically sustainable practices and serve as the basis for addressing local, national and global environmental issues.

The development of this policy was originally initiated already in the early 1990s. Over the years several widespread stakeholder consultations took place under the auspices of the Namibian Environmental Education Network (NEEN), which is now housed in the Ministry

of Environment, Forestry and Tourism (MEFT). The first key event was the development of the original draft document in 1994 which included stakeholders from the Ministry of Basic Education and Culture (MBEC), the Ministry of Environment, Forestry and Tourism (MEFT), the Ministry of Youth and Service, EE Centres, education institutions and NGOs. An inter-ministerial body was established at the time to facilitate the development of environmental education in the country and to coordinate efforts between relevant ministries. Despite this initial impetus for the policy development, it was not finalized and became dormant for some years for various reasons. The policy was then reviewed in early 2000 under the Ministry of Education's Supporting Environmental Education in Namibia (SEEN) project which was housed at the National Institute for Educational Development (NIED). During this time NEEN was re-activated and moved from being housed at the Rössing Foundation to the Namibia Nature Foundation (NNF). To ensure sustainability of the network, more direct linkages were forged with MEFT and ultimately NEEN was then supported by the Directorate of Environmental Affairs. Activities that gave access to multi-stakeholder exchanges, such as the annual NEEN conference, once again started. Importantly, stakeholder consultations across all 14 regions of Namibia were conducted to gain regional representation for the network and input into a consultative policy workshop in Walvis Bay in 2012. Finally, in 2017 under the Hanns Seidel Foundation (HSF) Environmental Awareness Project, funding was secured to continue and finalize the policy process. This included a two-day, wide-spread multi-stakeholder policy workshop in July 2017 which was officially opened by the Environmental Commissioner Theofilus Nghitila and well attended by Ministry of Education, Arts and Culture and other relevant line ministries. This was followed by a two-day policy validation workshop in September 2017. Stakeholders as outlined in the acknowledgement list were present at these workshops and gave input to the updating of the policy with reference to new developments and governmental policies. Throughout, input was also gathered from international and regional institutions such as the Global Environment Facility (GEF), the United Nations Development Programme (UNDP), the United Nations Organization for Education, Science and Culture (UNESCO), the Southern African Development Community - Regional Environmental Education Programme (SADC-REEP) and Lesotho's Conservation Office. The outcomes of these broad-based consultations have informed the formulation of this National EE and ESD Policy. It was then submitted to the Minister of Environment, Forestry and Tourism and

the Minister of Education, Arts and Culture for approval before submission to the Cabinet.

The approach to EE and ESD outlined in this Policy will guide all stakeholders and especially educators, trainers, learners, students and the general public in participating actively to address local environmental issues, form sound judgments on global environmental issues and to participate actively as global citizens in protecting the environment both locally and globally.

This policy document comprises the following aspects:

- ♦ Background
- ♦ Rationale
- ♦ Policy alignment
- ♦ Guiding principles
- ♦ Policy direction
- ♦ Implementation arrangements

1.2 The Background Underpinning EE and ESD in Namibia

Namibia has made great strides in including environmental sustainability into the development pathways towards sustainable development, but still faces an array of challenges in this regard. These include climate change, land degradation and soil erosion, deforestation, depletion of our natural resources on land and the oceans, water management, waste production and pollution control/management. These are further compounded by socio-economic issues such as HIV and AIDS and other health issues, including gender-based violence, high levels of poverty, the impacts of skewed income distribution, slow economic development and a high rate of unemployment (African Development Bank, 2014; GRN, 2016a; GRN, 2016b; Ruppel-Schlichting, 2016; Ruppel, 2016). In addition, sustainable development challenges add more to the miseries of poor people because they increase the impact of floods and other environmental catastrophes. Soil erosion, land degradation and deforestation lead to declines in food production along with shortages of wood for fuel, which also contributes to inflation.

Since Namibia's Independence on 21 March 1990, industrial development has significantly increased leading to a higher risk of environmental pollution. The food production, meat processing, mining and construction industries are all major potential sources of pollution. Carbon dioxide emissions are on the increase due to motorization and amounts of household waste are also rising (Ruppel-Schlichting, 2016; Ruppel, 2016). Ruppel-Schlichting (2016) maintains that climate change in Namibia has an impact on access to water

and sanitation, health, agriculture, fisheries and marine ecosystems, forestry, energy, and human settlements. Land degradation not only has negative economic consequences in that it reduces the country's economic contribution by natural resources (both tangible and intangible), it also poses a serious threat to food security as it reduces yields and rural communities who depend on subsistence livelihoods, which particularly affects the most vulnerable groups in Namibia's poor and densely populated areas. The most alarming effects of land degradation are deforestation, decreased availability of palatable grass and trees for livestock and wildlife, soil erosion, bush encroachment and soil salinization.

Namibians depend, directly or indirectly, on farming more than any other economic activity. Therefore, bad land management practices, such as overstocking and overgrazing, are considered to be the main causes of land degradation besides crop production and land for habitat. Further negative effects on land are caused by the unsustainable harvesting of forest resources such as wild plants, and the clearing of land for farming or housing purposes (Ruppel-Schlichting, 2016). Namibia's economic development currently depends on the well-being and growth of other sectors, specifically mining and fishing. Both of these industries also heavily rely directly on the exploitation of natural resources.

Namibia has received international recognition for its progressive policies and approaches to Community-based Natural Resource Management (CBNRM), particularly through the nationwide expansion of communal conservancies and community forests. Namibia is now recognized as a leading eco-tourism destination world-wide, with high-end lodges in exclusive and pristine environments. Such sectors need to be monitored and assessed for their impact on community upliftment to make sure they are not merely facades. Due to population growth and sustained high unemployment, these successes are threatened by deforestation, human-wildlife conflict and poor waste management practices, fueled by poverty and lack of awareness. Namibia has the opportunity, through EE and ESD, to build on these successes by changing negative attitudes and values to pro-sustainability through environmental awareness and education campaigns thus creating environmental citizenry. Through eco-friendly, recycle-entrepreneurship skills training, a new "green" economic sector can be developed that will create employment opportunities that are much needed for sustainable development. EE and ESD is a key factor in the long-term development of Namibia and must go hand in hand with short-term environmental remedial and mitigation solutions.

Education, training and capacity building in EE and ESD is recognised in Namibia as one of the main approaches to address sustainable development challenges. This is recognized in in Article 95 of the Namibian Constitution, the Green Plan (1992), the Ministry of Education, Arts and Culture (MoEAC) curriculum (2015) and Ministry of Education Namibian Education for Sustainable Development (ESD) Strategy (2009). In the formal sector, environmental education should be incorporated into existing subjects so as not to give additional work on an already overburdened curriculum. EE and ESD is recognised as the means needed to build "a critical mass of citizens who are not just informed and trained, but who are above all capable of using their achievements to bring about the economic, social, cultural and political changes required for sustainable development" on the global level (Association for the Development of Education in Africa, 2012). The recent shift from 'education for all' to 'quality education for all' identifies EE and ESD as a key factor to achieve this goal, as outlined in the Education 2030 Incheon Declaration and the United Nations Sustainable Development Goals [UN SDGs] (UNESCO, 2015).

Without a unified National EE and ESD Policy, valuable resources are diluted as human and financial resources are under-utilised and/or ineffectively employed as the policy provides an official base and institutionalisation for support. A clear policy and guideline will give EE and ESD the importance and recognition required by all stakeholders in order for them to prioritise education strategies to achieve national long-term sustainability goals and a nationwide sustainability ethic.

1.3 Understanding EE and ESD in the Namibian Context

Namibia embraces both the concepts of EE and ESD because they have converging goals and outcomes inherent in the concept of sustainable development (UNESCO, 2002; McKeown & Hopkins, 2009; and Cloud, 2009).

EE is defined as the process of developing environmentally-literate citizens who are aware of and concerned about the environment in its totality. The process involves empowering the citizens with knowledge, skills, attitudes and values, motivation, commitment and actions to engage in problem solving through shared decision making to individually and collectively achieve an improved quality of life through sustainable utilization and appropriate development of Namibia's resources.



ESD is defined as a learning process based on the ideals and principles underlying sustainability and concerned with all levels and types of learning to provide quality education and foster sustainable development. The purpose of ESD is to inform people about international agreements and build a global lobby of collective action for sustainable development and to raise awareness about the crucial and urgent need to limit damage to the atmosphere, mitigate and adapt to climate change. It promotes learning to know, learning to do, learning to live together, and learning to transform oneself, others and society.

Sustainable development is defined as:

The development that meets the needs of the current generation without compromising the ability of future generations to meet their needs.

The implementation of EE and ESD in Namibia considers the use of various channels of learning. These include formal learning (i.e. primary, secondary and tertiary level education), non-formal learning (structured, yet non-accredited programmes such as professional workplace training, education activities in outdoor nature centres and youth camps) and informal learning (unstructured, life experience learning, mass media, marketing/advertisements). These modes of learning shall embrace trans-, multi- and inter-disciplinary educational approaches to address interrelated sustainability issues resulting from interactions between society (culture, politics and economic) and the bio-physical environment.

It is envisaged that, through the successful implementation of the EE and ESD Policy, Namibia will be a regional and international leader in providing quality, life-long education for all towards achieving the SDGs and protecting our natural resources that the nation depends on for its well-being.

1.4 Rationale

The rationale for the National EE and ESD Policy is to ensure that the:

- ♦ Responsibilities of the State in promoting the well-being of the people through sustainable management of natural resources are defined and outlined.
- ♦ Global, regional and national environmental objectives in national programmes, plans and projects are promoted and mainstreamed in all sectors.
- ♦ Institutional and human capacities to meet Namibia's commitment to the SDGs and to global environmental conventions on climate change, biodiversity and desertification are increased.
- ♦ Sharing and effective management of resources such as facilities, staff and material resources are improved.
- ♦ Networking and collaboration among all stakeholders are increased for shared decision-making and resources including strategic action-taking and promoting a culture of stimulating dialogue and co-operation among individuals, groups and institutions.
- ♦ Developing, sharing and promoting best practices on EE and ESD is upscaled.
- ♦ The present generation is enabled to meet their responsibility to sustainably utilize the natural environment to the benefit of both present and future generations.

2. Policy Alignment

The National EE and ESD Policy is aligned to global, regional, national and local contexts as is demonstrated in this Chapter.

2.1 Global context

Following the Rio Conference (1992) and Johannesburg Summit (2002), the UN General Assembly adopted Resolution 57/254 to put in place a UN Decade of Education for Sustainable Development (DESD) (2005-2014). Through this Resolution the UN General Assembly proposed that all levels of education and training systems need to be oriented towards a model of education that meets the needs of the current generation without compromising the ability of future generations to meet their needs. The GAP on ESD was launched by UNESCO at the World Conference on ESD in 2014 in Nagoya, Japan, as the follow-up programme to the DESD. The GAP seeks to generate and scale-up ESD and to accelerate progress towards sustainable development.

The GAP has the following objectives:

- ♦ Reorienting education and learning so that everyone has the opportunity to acquire the knowledge, skills, values and attitudes that empower them to contribute to a sustainable future.
- ♦ Strengthening education and learning in all agendas, programmes and activities that promote sustainable development (UNESCO, 2014a; UNESCO, 2014b).

The GAP focuses on the following priority areas:

- ♦ Priority Action Area 1: Advancing Policy through mainstreaming ESD into both education and sustainable development policies and creating an enabling environment for ESD and to bring about systemic change.
- ♦ Priority Action Area 2: Transforming learning and training environments to integrate sustainability principles into education and training settings.
- ♦ Priority Action Area 3: Building capacities of educators and trainers to increase the capacities of educators and trainers to more effectively deliver ESD.
- ♦ Priority Action Area 4: Empowering and mobilizing youth to multiply ESD actions among youth.
- ♦ Priority Action Area 5: Accelerating sustainable solutions at local level (UNESCO, 2014a; UNESCO, 2014b) - At community level, scale up ESD programmes and multi-stakeholder ESD networks.

The SDGs evolved out of the United Nations Conference

on Sustainable Development in Rio de Janeiro in 2012. The SDGs replace the Millennium Development Goals (MDGs), which started a global effort in 2000 to tackle the indignity of poverty. The UN adopted 17 SDGs in September 2015, which comprise the 2030 Agenda for Sustainable Development aimed at ending hunger and poverty by 2030.

At the end of the GAP, the proposed new framework on ESD, adopted by the 206th session of the UNESCO Executive Board, is entitled “Education for Sustainable Development: Towards achieving the SDGs (ESD for 2030)”. The framework will continue to support the ongoing efforts under the GAP with or without explicit reference to the SDGs. ESD is prominent throughout the SDGs especially in SDG#4 on Quality Education target 4.7 which states:

“By 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture’s contribution to sustainable development” (United Nations, 2015).

Namibia, as signatory to most of UN conventions and protocols has an obligation to observe these and to mainstream EE as part of implementation of the agreed objectives of all the SDGS, in particular target 4.7, and all of the MEAs, particularly the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention on Biological Diversity (UNCBD) and United Nations Convention to Combat Desertification (UNCCD).

2.2 Regional context

The regional context that influences the National EE and ESD Policy environment is far-reaching. It includes the African Ministerial Conference on Environment (AMCEN), the forum that brings together all ministers of environment in Africa, and the Southern African Development Community (SADC) Environment and

Sustainable Development Programme within the SADC Secretariat's Food, Agriculture and Natural Resources Directorate as well as Trans-Frontier Conservation Areas (TFCA) agreements.

The 12th session of the African Ministerial Conference on Environment (AMCEN) on 10-12 June 2008 encouraged Governments, through their principal environmental authority, to facilitate inter-ministerial cooperation to undertake, among other things, the following key actions in the area of environmental education and technology-supported learning:

- ♦ An assessment of existing environmental education strategies, needs and challenges facing governments in the area of technology-supported learning;
- ♦ The development of a strategic approach to mainstreaming environmental education across all governmental institutions, including the design of programmes suitable for the primary, secondary and tertiary education sectors; and fostering cooperation with the non-formal environmental education sector;
- ♦ The development of an action plan for technology-supported learning in conjunction with the Human Resources, Science and Technology Department of the African Union (including e-learning) in follow-up to the strategic approach.

This was reinforced by the endorsement of one of AMCEN's regional flagship programmes, the Africa Environmental Education and Training Action Plan 2015–2024 (Lotz-Sisitka *et al* 2015), that commits Member States to strengthen environmental education and training covering formal and non-formal education.

Furthermore, the SADC has in place a Regional Indicative Strategic Development Plan (RISDP) that promotes education for environment and sustainability in one of its priority areas under 'Pillar D on special programmes of regional dimension (SADC, 2015). Its subsection 3.8.1 states that *the policies of Environment and Land Management are designed to assess environmental conditions for sustainable development; reduce threats to human health, ecosystems and future development; promote sustainable development; manage shared natural resources on an equitable and sustainable basis; and accelerate regional integration and capacity building.*

The SADC RISDP's provision for environmental education is supported by at least two SADC policy imperatives. One of these policy instruments is the SADC Environment and Land Management Sector's Environment and Sustainable Development Policy and Strategy that clearly expects SADC Member States to contribute to the SADC integration agenda through

education for environment and sustainability (SADC, 1996). The SADC Regional Environmental Education Programme (REEP) is derived directly from this policy. The SADC REEP (2013) has played a key strategic role in facilitating the shaping of environmental education policy and practices in Namibia for many years, including the establishment of the Namibia Environmental Education Network (NEEN), the development of the environmental education training programme at Namibia University of Science and Technology and the conceptualization of the Khomas-Erongo Regional Centre of Expertise in ESD.

The second policy instrument is the SADC Protocol on Environmental Management for Sustainable Development (SADC, 2014), which updates the national commitments by SADC Member States since the policy and strategies of 1997, and provides guidelines for cross-sectoral implementation of environmental education in the sub-region. Namibia signed this protocol in 2014 and it is expected to be ratified in 2018.

Namibia has also established several trans-frontier conservation areas with its neighbours, such as the Kavango Zambezi Trans-Frontier Conservation area (KAZA TFCA) with the Governments of the Republic of Angola, Botswana, Zambia, and Zimbabwe. The primary purpose of KAZA TFCA is to harmonize policies, strategies and practices for managing shared natural resources that straddle the international borders of the five partner states and deriving equitable socio-economic benefits through the sustainable use and development of their natural and cultural heritage resources. These conservation areas are implementing joint awareness and environmental education programmes.

Namibia, as a member of SADC, will mainstream EE and ESD as means to facilitate cooperation among actions in the area of environmental education and technology-supported learning in environmental management and management of shared natural resources.

2.3 National context

The Namibian Constitution mandates protection of the environment. It states:

Article 20 (1): that "all persons shall have the right to education". Furthermore, Article 21 (a) supports the "encouragement of the mass of the population through education and other activities and through their organizations to influence government policy by debating its decisions".

Article 95 (l): further states that "the state shall actively

promote and maintain the welfare of the people by adopting, inter alia, policies aimed at maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilisation of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future”.

Namibia has a number of laws and policies that are regarded as significant for the sustainable management of natural resources and the environment and human

interface as listed in Table 1. Given the cross-cutting nature of education, it is indispensable that all sectors and policies incorporate EE and ESD and develop institutional and human capacities to meet Namibia’s commitment to sustainable development through EE and ESD. There are overarching policies, frameworks and conventions, which this policy should support, include the Constitution of Namibia, Vision 2030, National Development Plans, and United Nations Conventions and Protocols.

Table 1: Key Policies and laws relevant to EE and

ESD in Namibia Source: MET (2011) and Ruppel (2016)

Sector	Policies and laws
Environment	Environmental Assessment Policy (MET, 1995) Environmental Management Act (MET, 2007) Land Use Planning towards Sustainable Development Policy (MET & MLR, 1994) Draft Pollution Control and Waste Management Bill (MET, 1999) Policy for Prospecting and Mining in Protected Areas (MET & MME, 2018) 2nd National Biodiversity Strategy and Action Plan NBSAP2 (2013-2022) Access and Benefit Sharing Act (MET, 2017) Nature Conservation Ordinance (4 of 1975)
Agriculture	Conservation Agriculture Programme (MAWF, 2015-2019) National Agriculture Policy (MAWF, 2015) National Drought Policy and Strategy (MAWF, 1997) Green Scheme Policy (MAWF, 2004 and revised 2008) National Rangeland Management Policy and Strategy (MAWF, 2012) Regional Planning and Development Policy (NPC, 1997) National Seed Policy (MAWF, 2005) 3 rd Action Programme for Namibia to Implement the UN Convention to Combat Desertification (NAP3) (MET, 2014)
Water	Water and Sanitation Policy (MAWF, 2008) National Water Policy White Paper (MAWF, 2000) Namibia’s Draft Wetland Policy (MET, 2004) Water Resources Management Act (MAWF, 2004 and revised 2013)
Planning	Vision 2030 (GRN, 2004) Harambee Prosperity Plan (GRN, 2016) Regional Planning and Development Policy (NPC, 1997) Regional Poverty Reduction Action Programme (NPC, 2003) Fifth National Development Plan (NPC, 2017)
Forestry, Parks and Wildlife	Forestry Development Policy (MAWF, 1998) Forest Act (MAWF, 2001) Wildlife management, Utilization and Tourism in Communal Areas Policy (MET, 1995) Amendment to the 1975 Nature Conservation Ordinance (MET, 1996) Promotion of Community Based Tourism Policy (MET, 1995) National Policy on Human Wildlife Conflict Management (MET, 2011)
Land	Land Degradation Neutrality Report (MET, 2015) National Land Policy (MLR, 1998) National Resettlement Policy (MLR, 2001) Commercial Land Reform Act (MLR, 1995) Communal Land Reform Act (MLR, 2002) National Land Tenure Policy (MLR, 2005)

Energy	White Paper Policy on Energy (MME, 1998) National Energy Policy (NEP) (MME, 2017)
Fisheries and coastal management	Territorial Sea and Exclusive Economic Zone of Namibia Act (MFMR, 1990) Sea-shore Ordinance (MFMR, 1958) Marine Resources Act (MFMR, 2000) Aquaculture Act (MFMR, 2002) Inland Fisheries Act (MFMR, 2001) Namibia's Aquaculture Policy (MFMR, 2001)
Education, Culture and Heritage	Education and Training Sector Improvement Programme (ETSIP) (GRN, 2007) The Education 2030 Act (No. 16 of 2001) The Higher Education Act (No. 26 of 2003) National Heritage Act, 2004 (Act No.27 of 2004) Education Sustainable Development Strategy (2009-2014) National Policy on HIV-AIDS for the Education Sector (2003) National School Feeding Programme (MoE, 2012) National Health Policy Framework (MoEAC, 2010) ICT Policy for Education (MoE, 2005) Namibia's National Safe School Framework (NNSSF) (MoEAC, 2018) Education Sector Policy for Orphans and Vulnerable Children (OVC) (MoE, 2008) Sector Policy on Inclusive Education Policy (MoE, 2013) Ministry of Education Arts & Culture Strategic Plan 2016/17 – 2021/22
Disaster risk management	National Policy for Disaster Risk Management (OPM, 2009) The Windhoek Declaration for Enhancing Resilience to Drought in Africa (UNCCD, 2016)
Climate change	National Policy on Climate Change for Namibia (MET, 2011) National Climate Change Strategy and Action Plan (MET, 2013) Intended Nationally Determined Contributions of The Republic of Namibia to the UNFCCC (GRN, 2015)
Biotechnology	Biosafety Act (No. 7 of 2006) Biosafety Regulations (GRN, 2016) Enabling the Safe Use of Biotechnology Policy (GRN, 1999)
Tourism	The Tourism White Paper (MET, 1994) National Policy on Tourism for Namibia (MET, 2008) Community Based Tourism Policy (MET, 1995) National Policy on Tourism for Namibia (MET, 2008) National Tourism Growth and promotion Strategy (MET, 2016)
Mining	Minerals Act (No.33 of1992)
Local Authorities	Public and Environmental Health Act (No.1 of 2015) Local Authority Act (No.23 of 1992)

2.4 Local Context

Namibia has developed local guidelines, strategies and policies that are significant to the natural resources/ environment and people interface. Some of these guidelines are:

- ◆ The Management of Conservancies and Standard Operating Procedure in Conservancies
- ◆ Community forest management
- ◆ Community water point committees
- ◆ National curriculum for basic education

The people of Namibia will actively endeavor to encourage, support and implement EE and ESD as a means to provide appropriate and effective support to conservancies, to enable communities to manage conservancies in a guided manner and enjoy benefits from the sustainable use of natural resources.

Local Authorities such as Windhoek, Swakopmund and Walvis Bay also have environmental officers to manage the implementation of environment related by-laws and public awareness.

3. Guiding Principles

The National EE and ESD Policy is guided by the following thirteen principles:

- i. Consider the environment in its totality including natural and human-made environment;
- ii. EE and ESD must be a lifelong process. It should begin at pre-school level and continue through all formal and informal educational stages;
- iii. EE and ESD must be inter-, multi- and trans-disciplinary in its approach, drawing on the specific content of each discipline to achieve a holistic and balanced perspective with systems thinking at its core;
- iv. Examine major environmental issues from a local, national, regional and international perspective so that all stakeholders receive insights into environmental conditions in other geographical areas;
- v. Focus on current and future environmental situations, while recognising the historical perspective;
- vi. Promote the value and necessity of local, national, regional and international cooperation in the prevention and solutions to environmental problems;
- vii. Explicitly consider environmental aspects in plans for development;
- viii. Enable all stakeholders to have a role in planning their learning experiences and provide an opportunity for making decisions and accepting their consequences;
- ix. Help stakeholders to discover the symptoms and root causes of environmental problems;
- x. Emphasize the complexity of environmental problems and thus the need to develop environmental literacy, critical thinking and problem-solving skills;
- xi. Use different learning situations and a variety of educational approaches to teaching and learning about, for, in/through the environment, with emphasis on practical activities and first-hand experience;
- xii. Build on and improve on existing resources, methods, practices and guidelines for EE and ESD;
- xiii. Integrate monitoring and evaluation into all EE and ESD initiatives.



4. Policy Direction

The people of Namibia will actively endeavor to encourage, support and implement EE and ESD policy programmes and initiatives as a means of empowering individuals, groups and organizations to maintain natural ecological processes and support the wellbeing of the present and future generations by promoting sustainable lifestyles. Namibia shall pursue an active programme to achieve sustainable development and sustainable living through environmental and sustainability education.

4.1 Vision

The vision of the National EE and ESD Policy is for an educated and empowered Namibia with environmentally literate people taking responsibility and action for a sustainable future.

4.2 Mission

The mission of the National EE and ESD Policy is to reorient, integrate and upscale quality EE and ESD in environmental awareness, education and training systems, research and innovation systems, policies, programmes and action for sustainable development.

4.3 Goals

The goals of the National EE and ESD Policy are to:

1. Establish and implement quality EE and ESD programmes, education and training systems across all sectors, including formal education, vocational and technical education, informal and non-formal education processes;
2. Improve synergies and partnerships across all sectors to mainstream EE and ESD programmes and initiatives, including development of sector specific policies;
3. Improve research and innovation outputs on existing EE and ESD programmes and initiatives;
4. Mobilize increased funding and resource allocations for EE and ESD programmes and initiatives;
5. Ensure recognition of the central role of EE and ESD in national sustainable development plans.

4.4 Objectives

The objectives of the National EE and ESD Policy are to:

- 4.4.1 Develop environmental literacy and communication strategies that promote the cognitive domain of learning in which verifiable facts are subject to scientific inquiry. It should inculcate the ability to communicate effectively orally and in writing, to use and interpret diagrams, graphs and sketches, conveying ideas and views on environmental issues through appropriate media, including new forms of social media.
- 4.4.2 Develop environmental knowledge and awareness programmes that create a general understanding of environmental issues, their causes, risks and solutions. This is vital to the development of environmentally aware and responsible citizens who will advocate for the well-being of the environment on a long-term basis. Local and indigenous environmental / ecological knowledge as well as cultural and religious environmental stewardship should be recognized and incorporated in this process.
- 4.4.3 Develop the skills necessary for the protection of the environment. EE and ESD programmes shall develop skills relating to systems thinking, the ability to think critically about environmental / ecological systems, and the ability to comprehend quantity, quality and values on environmental issues. Capacity will be strengthened to use various processes, including knowing, inquiring, acting, judging, imagining, connecting, valuing and questioning natural and social systems and environmental issues, and integrating problem solving methodologies in learning processes as well as strengthening abilities to screen and identify issues within the specific environment. EE and ESD programmes should seek to assess environmental issues holistically and ensure

that individuals, organizations and groups take appropriate action to solve environmental issues. The capacity of educators from all sectors to ensure that EE and ESD topics and issues are taught actively should be a focus.

4.4.4 Promote positive attitudes and behavioral change towards the environment (as in natural resources). Environmental attitudes have a cognitive (knowledge), conative (will) and affective (emotion) component. EE and ESD practitioners should develop strategies and programmes aimed at developing positive environmental attitudes and positive behavioral change. Mainstreaming of environmental awareness and activism within all spheres of life will contribute to more sustainable attitudes.

4.4.5 Promote environmental awareness and behavioral change at all levels from the individual to the large scale through activities such as recycling, permaculture, and water and energy efficiency and observing environmental days. The National EE and ESD Policy should also promote actions that develop a culture/habit of environmental responsibility, sustainable lifestyles and active participation in achieving a higher quality of life, eco-management, consumer action, political action, legal action and eco-entrepreneurship as an action to create employment and turn environmental challenges into opportunities. The active participation of individuals, groups and all levels of governments in the prevention and solution of environmental problems will be sought as will the development of support mechanisms (social, political and moral) which enable people to take control of their lives and environment.

4.4.6 Develop environmental ethics and values. The National EE and ESD Policy will develop an understanding of sustainable development and its associated benefits and ethics. EE and ESD programmes will embrace both bio-centric ('conservationist' values) and 'slightly anthropocentric' ('human-centred' values). They will promote social values of tolerance and objectivity, integrity, intergenerational equity, and environmental values that promote conservation,

respect for life, carrying capacity and willingness to promote sustainable living. The development of these values should follow a participatory and democratic process.

4.4.7 Monitor and evaluate EE and ESD programmes through participatory action-based processes aimed at strengthening the EE and ESD programmes and initiatives. The monitoring and evaluation processes need to relate indicators to the broadly outlined goals of EE and ESD and develop clear templates for dissemination and reporting.

4.4.8 Strengthen political will and government support for the implementation of EE and ESD policies and programmes through collaborative partnerships. These partnerships need to be innovative and dynamic, thereby adapting as new problems and issues arise, adopting appropriate solutions, and following guidelines and recommendations set out in International Treaties, Conventions and Agreements ratified by the Namibian Parliament. A multi-sectoral application to EE and ESD coordination and implementation will be promoted.

4.5 Strategies

The following constitute the basic strategies to achieve the broad goals and objectives of the National EE and ESD Policy.

4.5.1. Responsible citizenship action

Every citizen should take ownership and feel responsible for sustaining their environment and enabling social and economic cohesion. Citizenship action builds a sense of political urgency and responsibility for protecting the environment, builds a just society and promotes sustainable economic growth for human well-being. All citizens in Namibia should be involved and strive to raise awareness, organize activities promoting sustainable development and initiate EE and ESD change projects to protect the environment using mass media, such as social media, community radio and television. A sense of ownership should be cultivated amongst the citizens.



4.5.2 Sensitizing, lobbying and advocacy

A concerted effort will be made to educate and sensitize Namibians to environmental issues through, amongst others, the education system, electronic and printed media, the entertainment and advertising spheres. Education, sensitization and advocacy campaigns are to follow the approach outlined in this policy document. The use of local Namibian languages in various media must be emphasized. All sectors should develop public awareness campaigns and MET should distribute the National Environmental Calendar widely.

4.5.3 Training and Capacity Building

The EE and ESD professional community of practice will strive to improve its capacity, effectiveness and efficiency through continuous training, professional development and capacity building programmes and endeavor to develop human resources within the diverse interest groups. Environmental Officers and individuals involved in EE and ESD will be trained to address environmental issues in the workplace and to promote the global, regional and national policies and environmental conventions. Trained environmental officers should develop EE and ESD 'change projects' as part of the training. Peer training should also be incorporated in communities or amongst the public.

For awareness and action purposes, online platforms will be developed to facilitate capacity building interventions where face-to-face interventions will not be possible. Schools, higher education institutions, non-formal and informal learning EE and ESD initiatives may access environmental information and short courses on these online platforms and use them to develop the required EE and ESD skills. There should also be an emphasis on skills development in eco-entrepreneurship for employment creation purposes and the broader transition towards a green economy.

4.5.4 Curriculum development

EE and ESD practitioners should be involved in curriculum development, through the development of a separate EE and ESD curriculum and the integration of EE and ESD in all existing formal, non-formal, higher education and vocational education curricula. Curriculum development

is a participatory process and should involve all stakeholders. Curricula that will be affected include those from pre-school to university level, including lifelong learning and community education processes.

Since the integration of EE and ESD is perceived in some cases as an add-on, it is critical to create a general curriculum framework for EE and ESD which schools, institutions of higher education, government departments, NGOs and environmental centres can adapt and integrate into their existing curricula based on their context, conditions and needs.

4.5.5 Development of EE and ESD Programmes

All new projects, programmes and initiatives being developed within the EE and ESD community should take cognizance of this policy document and contribute towards its broad aims. Educational programmes for different audiences should be developed. Tertiary and vocational institutes should mainstream and integrate EE and ESD modules throughout all degrees and programmes. Transdisciplinary programmes EE and ESD courses and degree programmes up to PhD level should be developed by tertiary institutions considering systems dynamics and sustainability. Non-formal and informal programmes should be developed by stakeholders such as NGOs, CBNRM groups and Local Authorities with the assistance of lead government institution to educate the general public.

4.5.6 Development of learning support materials

EE and ESD learning support material content should be drawn from global, regional, national and local contexts. The material development process should be participatory and testing and evaluation will form the basis of resource material development for environmental education programmes. Materials should reflect EE and ESD aims, goals and principles outlined in this Policy. Learning support materials should enable the application of theory related to EE and ESD into practice (praxis in transformative learning process). Materials should be developed in all local languages, be cognizant of indigenous environmental/ecological knowledge and use local sustainability examples. Learning support materials should be accessible to all through the use of different media platforms.

4.5.7 Usage of Information and Communication Technology

Information and Communication Technology (ICT) is an essential and powerful tool in enabling the development of innovations that promote and maintain sustainability. The National EE and ESD Policy recommends the usage of available ICTs to ensure quality and contextually relevant education. The infusion of ICT into the learning environment is therefore of critical importance. Teachers should effectively use ICT to innovate and solve problems, and deliver EE and ESD curricula in transformative and innovative ways. The success of ICT is largely dependent on how effectively the tool is implemented and used to support learners and the public at large to develop modern competencies such as critical and creative thinking, systems thinking, anticipation and predictive thinking.

Research into ICTs best suited to this purpose must be conducted in order to encourage the development of new target-based methodologies and strategies to aid teachers in the delivery of EE and ESD curricula. ICT also allows for global collaboration with other countries where similar issues are being tackled. For example, ICT can help quickly overcome emerging problems such as disaster management.

4.5.8 Pedagogical Innovations

Pedagogical innovations are critical to support EE and ESD in Namibia to evolve in line with new and emerging developments and challenges. These innovations in pedagogy must take into consideration the needs of the specific context – the learning environment, access to resources and students' cognitive abilities. Teachers will need to constantly evaluate the learning needs and abilities of their students and use a combination of approaches to EE and ESD as required.

Since Namibia has already developed an online forum, the Kopano Education Forum for educators and practitioners in education, and a Pedagogical Innovation Network (PIN), this National EE and ESD Policy strongly advocates the use of these two tools which can promote the EE and ESD Community of Practice (CoP) and learning communities of EE and ESD professionals.

These tools provide a platform for collaboration, communication, material development, research and networking for a coherent coordination of EE and ESD activities. NEEN will play a central role in creating synergies between institutions and develop inter-sectoral / faculty exchanges related to EE and ESD issues through such fora. Best practices in EE and ESD nationwide should be up-scaled to improve quality programmes. The NGO sector has numerous examples of best practices in EE and ESD, such as the whole institution approach used by the NaDEET Centre and the integration of heritage, culture and climate change into EE and ESD by the Edu-venture's Ombombo Mobile Classroom.

4.5.9 Establishment of Centres of Expertise in EE and ESD

Training, networking and capacity building activities should take place in "Centers of Expertise". These centers should work in partnership with relevant sectors to develop EE and ESD training programmes, host seminars and learning programmes in EE and ESD for all sectors for life-long learning.

These centers should strive to be in natural areas and / or promote sustainability by example and inspiration. Centers of Expertise should be nationally registered and monitored to promote excellence. Through partnerships, their role can rapidly upscale the integration of EE and ESD. Existing centers within MEFT, MoEAC and MSYNS, tertiary and vocational institutes and NGOs should be utilized.

4.5.10 Research, Innovation and Development

Research, innovation and development play an important role in determining opportunities and future directions for sustainable development in Namibia. Theoretical and applied research projects should be initiated to publish more Namibian articles and books based on sustainability issues. Researchers in the field of environmental sustainability, including specifically EE and ESD research, are encouraged to join existing networks to enable substantial contributions on advancing EE and ESD and other sustainability concerns in Namibia.

4.5.11 Networking

The policy recommends that EE and ESD in

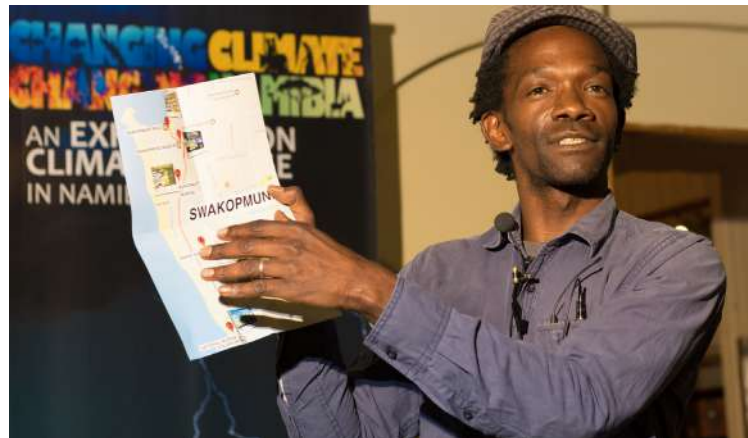


Namibia be developed through networking and collaboration between and among Government ministries, the donor community, NGOs, Community Based Organisations (CBOs) and the private sector. Emphasis will therefore be on participation, information sharing, exchanging of views and ideas, and developing relevant skills among the stakeholder groups.

Other functions of networking will include promotion of EE and ESD in Namibia, ensuring the development of quality-oriented curricula, programmes and learning support materials. A strong national coordination team for EE and ESD programmes should be developed that includes professional organisations and issue-related educational organizations (e.g. consumer

education, and equity education) in order to integrate their work into institutional EE and ESD initiatives through cooperation, collaboration, and sharing of ideas.

The coordination and networking capacity of NEEN should be strengthened to create a platform for sharing lessons and experiences learned and to promote synergies between institutions and develop inter-sectoral/faculty exchanges related to EE and ESD issues. NEEN should be provided with financing and the institutional capacity to realise its roles and responsibilities.



5. Implementation Arrangements

5.1 Institutional coordination

An ESD Task Force shall be established to work as an inter-agency technical committee to drive the implementation of this Policy. The ESD Task Force shall comprise senior level representatives from Government entities, institutions of higher learning, the private sector and NGOs. Since the NPC coordinates national development plans, the EE and ESD Policy should be coordinated accordingly, together with the main ministries namely MEFT, MoEAC and MYSNS. Other key offices, ministries and agencies such as the Ministry of Agriculture, Water and Land Reform (MAWLR), the Ministry of Fisheries and Marine Resources (MFMR) and other key stakeholders should also be represented. These stakeholders should develop their own institutional EE and ESD action plans and support capacity building and training based on the issues and needs in their own workplaces. NEEN should play the role of technical and operational facilitation within this process. EE and ESD issues should be entrenched in their sectoral and sub-sectoral strategies at institutional level.

In summary:

- ♦ Each institution should identify potential sustainability officers to take ownership of the National EE and ESD Policy and to mainstream environmental and sustainable development issues in their strategic plans;
- ♦ Each institution should create an EE and ESD Unit to coordinate and build capacity around EE and ESD issues;
- ♦ MET should assist line ministries and institutions to define the key performance indicators for environmental officers with a focus on EE and ESD.

5.2 Legal and regulatory arrangements

The National EE and ESD Policy is subject to legal and regulatory arrangements at global, regional, national and local contexts as outlined in section 2 of the Policy.

5.3 Resource mobilization

All stakeholders are to mobilize the necessary financial resources and create a budget line for the implementation of EE and ESD programmes, initiatives and activities in their respective institutions. The inter-agency ESD Task Force shall assist to mobilize necessary financial resources for the implementation of EE and ESD activities in various sectors. The EE and ESD focal person at

institutional level shall assist in developing strategic partnerships with leading environmental organizations. The financial resource mobilization process needs to be nationally coordinated by the ESD Task Force in order to prevent conflicts of interest and should integrate polluter pays and precautionary principles.

5.4 Monitoring and evaluation framework and reporting

Each stakeholder should present annual institutional/sectoral reports on how and what they have been doing in terms of EE and ESD programmes, initiatives and activities. The monitoring and evaluation (M&E) of EE and ESD processes will focus on financial and educational aspects. Educational M&E shall focus on advancing EE and ESD policies, transforming learning and training environments, building capacities of educators and trainers on EE and ESD; empowering and mobilizing youth on EE and ESD and accelerating sustainable solutions at the local level. The financial monitoring shall include pledges towards achieving set goals on EE and ESD. Each stakeholder should provide the task force with feedback on the policy implementation activities through the NPC.

5.5 Roles and responsibilities of stakeholders

Government Offices, Ministries and Agencies

There is a need to promote EE and ESD issues and actions among government officials and key personnel in order for them to support and assist in the development of ministerial strategies on EE and ESD issues. The public sector should encourage active participation of the general public in awareness regarding climate change campaigns, access to climate change information and adoption of climate change interventions.

Regional and Local Authorities

Regional and Local Authorities (RLAs) should assist in the collective development of Regional Sustainable Environment Frameworks. As planners, RLAs should assist in integrating EE and ESD policy issues into strategic and development plans, and thereafter implementing this commitment by working together with other stakeholders.

Educational institutions

Educational institutions include primary schools, secondary schools, Technical and Vocational Education and Training (TVET) institutes, universities and research institutions. They also include institutions such as Namibian College of Open Learning (NAMCOL), Environmental Education Centres and Colleges of the Arts (COTA), amongst others. These shall be required to mainstream EE and ESD issues into planning systems, policy and practice, school management, teaching and research, and community service. They should develop programmes and courses on EE and ESD and incorporate environmental sustainability issues of importance to Namibia in their curricula.

Media institutions

Media institutions include the Media Institute of Southern Africa (MISA) and other electronic and print media institutions/organizations operating in Namibia. They should promote and adopt environmentally friendly information technology systems, promote EE and ESD programmes and enhance coverage of EE and ESD issues in the media.

Civil Society

The Civil Society includes NGOs, CBOs such as conservancies and community forests, and Faith Based Organisations (FBOs). The civil society should work together with the public sector in developing strategic plans related to the EE and ESD Policy for common purposes and objectives, as well as for congruency in EE and ESD activities to be integrated or mainstreamed into their practice. They should devise EE and ESD interventions to address these issues in the workplace as well as develop EE and ESD programmes, initiatives and activities for the general public.

Private sector

The private sector should work together with the public sector in developing strategic plans related to the EE and ESD Policy for common purposes and objectives, as well as for congruency in EE and ESD activities to be integrated or mainstreamed into their practices. The private sector should identify the environmental impacts of their activities and devise relevant EE and ESD interventions to address these issues. As part of its corporate and social responsibility, it should also provide monetary contributions to improve EE and ESD activities in Namibia, fund EE and ESD activities and engage in cleaner production processes.

Associations

Associations refer to groups of people organized for a common purpose or interest. Farmer's associations include, amongst others, the Namibia National Farmers Union (NNFU) and the Namibia Agricultural Union (NAU). Other associations include conservation associations, clubs, sporting associations and related common interest public entities. Associations should work together with the public sector in developing strategic plans related to the EE and ESD Policy for common purposes and objectives and for congruency of EE and ESD activities to be integrated or mainstreamed into their practices. Associations should identify the environmental impacts of EE and ESD issues on their activities and devise relevant EE and ESD interventions to address these issues.

Traditional Authorities

Traditional Authorities are responsible for the governance of communal areas. Traditional Authorities should be linked to other stakeholders in developing strategic plans related to the EE and ESD Policy for common purposes and objectives, for congruency in EE and ESD activities to be integrated or mainstreamed into their practices. The Traditional Authorities should contribute through their traditional environmental / ecological wisdom and traditional environmental governance practices (laws, taboos, etc.) and provide advice on how these could inform EE and ESD interventions.

Women groups

Women groups can assist in the dissemination of information in EE and ESD activities. They can educate the youth and others about gendered environmental-related issues and environmental damage that impact on them negatively. Womens' groups should promote gender sensitive EE and ESD programmes, initiatives and activities such as promoting gender balance through equal participation and encourage young people to take initiatives.

Regional Partners

The regional development partners include SADC-REEP and the Environmental Education Association of Southern Africa (EEASA). These shall be the forums for regional networking and capacity building on EE and ESD issues.

International Development Partners

International Development Partners include UN organizations such as UNESCO, UNDP (through the Global Environmental Facility (GEF) and other programmes),



the United Nations Environment Programme (UNEP), as well as bilateral aid agencies, such as Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), amongst others. These shall help to mainstream EE and

ESD issues in accordance with bilateral and multilateral agreements signed within the guise of their international mandates.





6. Conclusion

This Policy emphasizes the incorporation of EE and ESD issues into Namibian development planning frameworks. It represents a vision of education that meets the needs of the current generation without compromising the ability of future generations to meet their needs. It has identified the goals, principles and actions necessary for mainstreaming of EE and ESD issues in national development planning. It has considered national,

regional and international development contexts that should guide and support the implementation of sustainable development activities and programmes through education. The National EE and ESD Policy is an opportunity and necessity for Namibia to meet its targets for the Sustainable Development Goals. This Policy should be reviewed every ten years.



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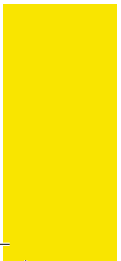
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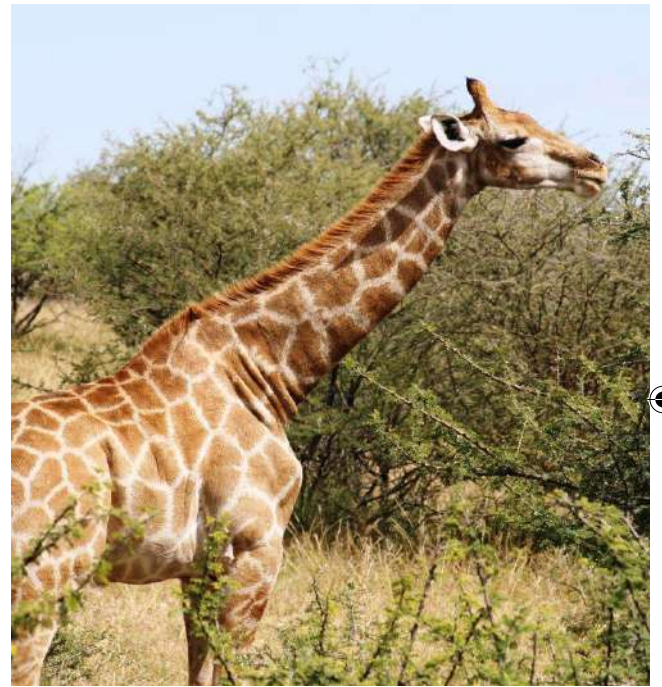
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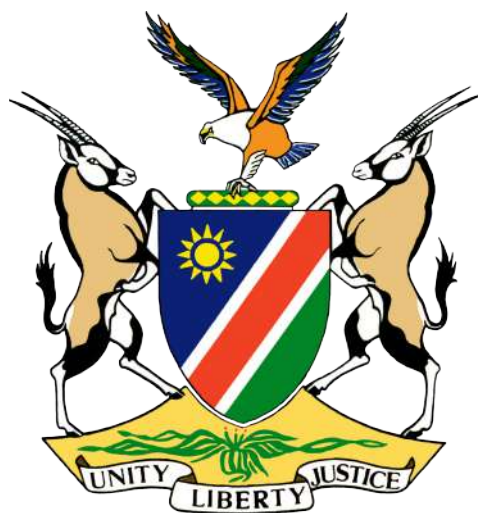
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