Republic
of
Kenya

Education For Sustainable Development

Implementation Strategy

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**National Environment
Management Authority (NEMA)**

**United Nations
Educational, Scientific and
Cultural Organisation**

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LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ASAL	Arid and Semi-Arid Lands
AU	Africa Union
CBO	Community-Based Organisation
CBS	Central Bureau of Statistics
CSO	Civil Society Organisation
DAE	Department of Adult Education
DEAP	District Environmental Action Plan
DESD	Decade of Education for Sustainable Development
EE	Environmental Education
EFA	Education For All
ESD	Education for Sustainable Development
FBO	Faith-Based Organisation
GDP	Gross Domestic Product
GoK	Government of Kenya
HIV	Human Immunodeficiency Virus
ICT	Information Communication Technologies
IEC	Information, Education and Communication
IK	Indigenous Knowledge
KESI	Kenya Education Staff Institute
KESSP	Kenya Education Sector Support Programme
KIE	Kenya Institute of Education
KISE	Kenya Institute of Special Education
KNCCI	Kenya National Chamber of Commerce and Industry
KOEE	Kenya Organisation for Environmental Education
KSTC	Kenya Science Teachers College
KU	Kenyatta University
M & E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MoE	Ministry of Education
MoU	Memorandum of Understanding
NEAP	National Environmental Action Plan
NEMA	National Environment Management Authority
NEPAD	New Economic Partnership for Africa's Development
NGO	Non-Governmental Organisation
PEAP	Provincial Environmental Action Plan
RCE	Regional Centre of Expertise

TSC	Teachers Service Commission
TIVET	Technical, Industrial, Vocational and Entrepreneurship Training
TOT	Trainer of Trainers
UNCED	United Nations Conference on Environment and Development
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNLD	United Nations Literacy Decade
UNU	United Nations University
WSSD	World Summit for Sustainable Development

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Also, we thank the ESD National Steering Committee and in particular the members listed below, for their tireless efforts in putting together this document:

- Mr. Eliud Barasa, Ministry of Youth Affairs and Sports (formerly Ministry of Education)
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- Dr. Ayub Macharia, NEMA (formerly Kenyatta University)
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- Mr. David K. Rono, NEMA
- Mr. John B. Wabwire, KOEE

Last but not least, are the participants to the various consultative forums and whose contributions enriched the Strategy. I look forward to successful implementation of this Strategy by the various stakeholders.

Dr. A. M. Mwinzi
Director General, NEMA

EXECUTIVE SUMMARY

The Government of Kenya (GoK) recognises the development challenges facing the country and being a signatory to many international agreements and conventions is keen and aware of its responsibilities to implement measures that promote sustainable development through different modes of education. For this reason, the government recognises Education for Sustainable Development (ESD) as an opportunity to continuously build its citizen's capacity towards healthy measures for utilising the country's resources to lead productive livelihoods and improve quality of life. It therefore became paramount to develop an implementation strategy to guide and give direction to the provision of ESD in all sectors of the economy.

The ESD Implementation Strategy document provides an elaborate explanation of the social, economic and ecological context of the country with an inclination towards aspects of ESD. The definition of operational terms and the government's policies relevant to education and sustainable development are also highlighted. Although prevailing education policies speak of sustainable development, gaps are noted in the modalities of implementation. A situation analysis revealed that the education system had missed out on building important values, knowledge and skills that recognise the importance of sustainable development. ESD provides an excellent opportunity for Kenya to fill the existing gaps.

In December 2002, the United Nations (UN) General Assembly proclaimed 2005-2014 as the Decade of Education for Sustainable Development (DESD) to be observed by all Member States. As a member of the UN, Kenya has developed this ESD Implementation Strategy, which explains the steps to be taken to implement the interventions to achieve the ESD goals.

This document examines the Decade's vision, mission and objectives. ESD objectives for Kenya are a 'domestication' of the DESD objectives, which are to improve quality of education at all levels, reorient education, enhance public awareness and understanding and build capacity for sustainable development.

It identifies and discusses the three pillars of ESD, namely society, environment and economy. This is followed by detailed review of the Decade's strategic objectives, the vision for ESD in Kenya and that the various approaches to achieve it. The emphasis is that ESD's goals can only be realised through a multi-sectoral approach. ESD stakeholders are therefore drawn from the government, civil society, private sector and development partners. These stakeholders hold the 'key' to ESD implementation and its fulfilment borne of the seven-implementation strategies that are proposed in the Decade's International Implementation Scheme.

This ESD Implementation Strategy presents objectives and the interventions for achieving the objectives. The strategy has a plan of action to enable Kenya to implement the educational component of Agenda 21, World Summit for Sustainable Development (WSSD) and DESD.

To enhance the implementation of ESD, a proposal has been made to establish Regional Centres of Expertise (RCEs) in line with the framework recommended by the United Nations University (UNU). These will constitute local and regional knowledge bases to support and promote the long-term goals of ESD, which are the attainment of environmental stewardship, social justice and improvement of quality of life. Finally, as a guide, an ESD strategy implementation framework and matrix have been proposed.

FOREWORD

The United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992 recognised education as an important tool for enhancing the attainment of sustainable development. Chapter 36 of Agenda 21 emphasised the role of education in supporting sound decision-making and hence the need to re-orient education towards sustainable development. In December 2002, the United Nations General Assembly adopted the resolution 57/254 that designated the period from 2005-2014 as United Nations Decade of Education for Sustainable Development (DESD). During this period, governments are expected to promote education across sectors on sustainable development using formal and non-formal approaches. In addition, the UN mandated UNESCO to spearhead the implementation of the Decade by governments, and to develop an International Implementation Scheme.

In response to this international commitment, the National Environment Management Authority (NEMA) has spearheaded the development of the Education for Sustainable Development (ESD) Implementation Strategy for Kenya. The document has been developed through a broad consultative process involving a wide range of stakeholders.

It is important to note that ESD provides a dynamic concept that addresses public awareness, education and training to enhance the understanding of sustainable development. It will also enable the development of knowledge, skills, perspectives and values, which will empower the citizenry to assume responsibility for creating and enjoying a sustainable future. The role of education and public awareness in achieving sustainability is therefore critical in mobilising all sectors to embrace a holistic approach and concerted efforts towards attaining sustainable development.

The ESD Implementation Strategy documents challenges facing sustainable development in Kenya and proposes appropriate interventions and recommendations to address them. The integration of ESD across all sectors is expected to enhance the attainment of sustainable development guided by the following strategy objectives;

- To enhance the role of education and learning for equitable, efficient and sustainable utilisation of the country's resources;
- To promote quality education through diverse learning and public awareness for improved quality of life and productive livelihoods; and
- To promote teaching and learning that inculcates appropriate values, behaviors and lifestyles for good governance and sustainability.

The strategy provides mechanisms for engaging all stakeholders in embracing sustainable development through activities across the three ESD pillars namely, environment, economy and society. The ESD implementation process will help safeguard the

environment, through appreciating the need for its protection, conservation and preservation of natural resources. In addition, ESD will offer life-long options to livelihoods, enhancing equity and better quality of life for all.

The development and implementation of the ESD strategy is, therefore, a major step towards attaining sustainable development in Kenya through appropriate learning, capacity-building programmes and development of skills in sustainable use of resources at all levels. This will inculcate environmental values among the citizenry aimed at influencing informed decisions on various aspects. In turn, this will improve the quality of learning through better understanding of natural, social and economic processes.

Vision 2030 is Kenya's new roadmap to realisation of sustainable development. ESD will make a significant contribution to addressing the cross-cutting issues in all sectors under Vision 2030. The lessons learnt and experiences throughout the DESD will be documented and replicated to enhance the integration of the ESD across sectors.

I urge all sectors to embrace the ESD Strategy as a tool towards the attainment of sustainable development in Kenya during the DESD and beyond.

Hon. Prof. Sam Ongeri, EGH, EBS, MP
Minister for Education

PREFACE

The Education for Sustainable Development (ESD) Implementation Strategy for Kenya is a response to the United Nations declaration to designate the period from 2005-2014 as the Decade of Education for Sustainable Development (DESD). The strategy provides an opportunity for educating the Kenyan people on the importance of sustainable development and the contribution of various stakeholders.

The National Environment Management Authority (NEMA) has spearheaded this activity in collaboration with key stakeholders. The strategy provides an overall framework based on which other specific strategies for various sectors and stakeholders will be developed. The implementation of the ESD strategy will create awareness and capacity by all stakeholders in enhancing sustainable development. The strategy provides a mechanism for adopting a holistic approach to sustainable development by engaging all sectors and stakeholders. The Strategy will complement other national initiatives such as the Environment Action Plans (EAP) aimed at prioritising environmental actions in curbing environmental deterioration at all levels namely, district, provincial and national (DEAPs, PEAPs and NEAP) respectively. This is in response to the global environment action plan contained in Agenda 21 for spearheading the implementation of sustainable development.

The development and implementation of the first NEAP in 1994 provided the entry point for the domestication of Agenda 21 in Kenya. The NEAP document provided a comprehensive recommendation on the legal and institutional framework to spearhead environmental management in the country as well as a comprehensive plan to address the environmental issues. This led to the enactment of the Environmental Management and Coordination Act (EMCA) of 1999 as the framework legislation governing environment and natural resources to attain sustainable development. The enactment of EMCA (1999) led to the establishment of NEMA with the mandate of coordinating and supervising all matters relating to the environment in the country. NEMA is in the process of preparing the second NEAP under the Act to guide environmental activities for the next five years.

The ESD strategy will therefore complement other national initiatives and embrace all stakeholders. The strategy will influence peoples' views and attitudes towards sustainable development. The strategic objectives of the document will guide specific sectoral activities towards enhancing the attainment of sustainable development. It also emphasises partnerships and the need for concerted efforts by all stakeholders. The need to educate and train all the Kenyan people is crucial to build capacity, create awareness and help change their attitudes towards the environment and sustainable development in general.

The development of the ESD strategy assumed a participatory process involving key stakeholders, including government agencies, the private sector, civil society

organisations (CSOs) and the media. This has given the ESD strategy high acceptability and ownership, which is a good indicator for a successful integration of ESD across all sectors. In addition, the ESD strategy provides a very crucial nexus with the Ministry of Environment and Mineral Resources that spearheads protection and conservation of natural resources in the country. Given that the Kenyan economy is driven by agriculture and natural resources, the sustainable use of resources is therefore very important to ensure economic growth and development that is sensitive to the environment.

The Ministry of Environment and Mineral Resources, therefore, welcomes the ESD strategy as it will improve education through formal, informal and non-formal learning to enhance implementation of sustained development across sectors. As such the ESD strategy will create an overall re-orientation of education in the country and greatly enrich the current education policy. I urge all stakeholders to develop and implement their specific sector ESD strategies in order to pull together towards enhancing sustainable development for Kenya.

Hon. John N. Michuki, EGH, MP
Ministry of Environment and Mineral Resources

CHAPTER ONE

Introduction

Kenya like other countries is in the process of implementing the objectives of the DESD (2005-2014). In this regard, several activities have been undertaken since 2003, which have culminated in the development of this Strategy. Some of these include several multi-sectoral consultative forums involving government, civil society, private sector and development partners.

Since independence Kenya has developed various policies and strategies to address diverse sectoral needs. A baseline survey on existing policies and ESD-related initiatives has also been undertaken whose findings informed the development of this document. This Strategy takes cognisance of the ongoing review of the education legal framework and the newly formulated Vision 2030 for Kenya. The strategy provides an avenue for the realisation of the DESD and Vision 2030, as it embraces the participation of a broad spectrum of stakeholders involved in sustainable development and the core values of Vision 2030. In addition, the Strategy seeks to improve the interventions by diverse stakeholders in education through emphasis on improving quality of education, reorienting education towards sustainable development, enhancing public awareness and capacity-building. In this regard, the Strategy will inform the ongoing review of the legal framework on education.

A national ESD Steering Committee with membership drawn from government, civil society and private sector has since been formed to spearhead the process with UNESCO-Nairobi providing leadership and technical support. This strategy is meant to guide the implementation of ESD programmes, projects and activities within the Decade by all stakeholders. The stakeholders are expected to mainstream ESD concerns into their respective plans and activities. More resources will be sourced across the board to facilitate implementation of ESD-specific activities.

1.1 Country profile

Kenya has a surface area of 587,000 km^2 of which 576,000 km^2 comprise land surface and 11,000 km^2 water. It is located between latitude 4°21 and 4°21 S and longitudes 34° and 42° E with the equator passing almost along the middle with an altitude between sea level and 5,230M at the peak of Mount Kenya. Between this topography are diverse landforms such as plains, plateaus, mountain ranges, hills and glaciated Mount Kenya peak (State of Environment Report, 2003). Rainfall distribution varies between 200 mm in arid lands and up to 2,000 mm and is usually bimodal, highest amount received in March to April and lower amounts in September to October.

About 88 per cent of the country lies in the Arid and Semi-Arid Lands (ASALs) mainly in the northern and eastern regions. The country has a population of approximately 32

million people, 68 per cent of them live in rural areas and depend mainly on subsistence agriculture.[1] The population growth rate was estimated at 2.9 per cent in 1999 and is projected to be about 36.5 million in 2010.[2] It was further estimated that 50 per cent of the current population comprise persons below 15 years of age.

Most of the population is concentrated around the high potential areas, which are characterised by adequate rainfall and mild temperatures mainly in central, south-western parts of the Rift Valley, plateau regions and metropolitan Nairobi. About 97 per cent of the population consists of 42 indigenous communities, with defined languages and cultures. Kiswahili and English are the official languages of communication. Kenya has a representative type of government with a legislature comprising representatives from constituencies, a Judiciary and the Executive headed by a President.

1.2 Socio-economic and ecological contexts

Kenya has a diverse socio-cultural context with some 42 ethnic groups belonging to Bantu, Nilotic and Cushitic main language groups. The diversity of these ethnic groups brings with it diverse cultural beliefs and practices which influence ways of life, economic activities and environmental management.

Kenya's Gross Domestic Product (GDP) per capita is approximately Kenyan Shilling (KES) 1,244.445 billion[3] per annum. The economy and people's livelihoods are mainly dependent on natural resources. For instance, agriculture has continuously played a dominant role in the economy. Service and industrial sectors have for years played a key role in the economy due to enabling government policies.

The country has seven ecological zones with varying climatic conditions that determine their biodiversity, carrying capacities and land use suitability (State of Environment Report, 2004). These zones determine the major ecosystems in the country mainly grasslands, forests, wetlands/water bodies (fresh or marine), and ASALs among others. The country is therefore rich in biodiversity specifically adapted to the various ecosystems.

1.3 Definition of terms

Sustainable development

Sustainable development was a key agenda at the Earth Summit that was held in Rio de Janeiro in 1992 and further reinforced at the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002, where a new paradigm of sustainable development was endorsed. It was declared that sustainable development is built on

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[1] State of Environment Report Kenya, 2004: Land Use and Environment.
[2] Republic of Kenya, CBS, 1999.
[3] Republic of Kenya, Kenya National Bureau of Statistics. Economic Survey, 2007. Nairobi.

three interdependent and mutually reinforcing pillars, namely social development, economic development and environmental protection. This was based on the premise that pressure on the environment and natural resources has kept the state of the world's environment fragile thereby resulting in increased poverty, unsustainable production and consumption patterns.

Sustainable development is defined as 'the development that meets the needs of the present generation without compromising the ability of future generations to meet their needs.[4] The concept of sustainable development emerged in the 1980s in response to a growing realisation that economic and social activities have potential to compromise environmental quality as well as lower the productive potential of natural resources. Sustainable development takes into account society, environment and economic factors conceptualised as pillars in order to ensure a more balanced form of development. However, it is an evolving concept embracing emerging challenges and concerns.

The society pillar provides space for people to understand social institutions and their role in change and development. It aims to uphold peaceful co-existence among communities, equitable access and sharing of resources and respect for the rights and dignity of others. The environment pillar evokes awareness on resources and fragility of the physical environment and the effects on it arising from human activity and decisions with a commitment to factoring environmental concerns into social and economic policy development. The economic pillar revolves around the potential and limits of economic growth, and their impact on the society and the quality of the environment. It calls for a commitment to assess personal and societal levels of consumption out of concern for the environment and social well-being.

Various scholars have conceptualised sustainable development and elaborated different models. Hattingh (2005) has developed a three-sphere model (Figure 1). The three pillars represented as spheres, are intertwined thereby embracing a holistic approach in the process of sustainable development. This illustration further implies that activities in one sphere may have a negative or positive impact on the other. The most important implication of the relationship between the three embedded spheres is that economic, social and environmental considerations do not each have their own logic and values separate from the other spheres.

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[4] Our Common Future. World Commission on Environment and Development (WEC), 1987.
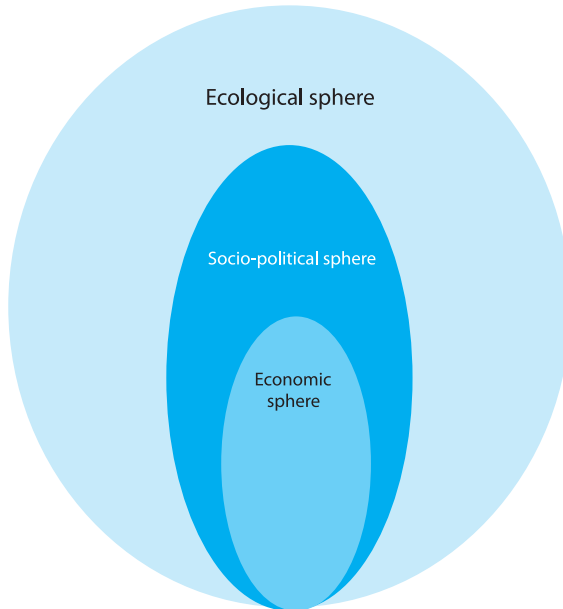
Figure 1: Graphical representation of sustainable development (Adapted from Johan Hattingh, 2005).

In Kenya, communities have generally relied on their vast indigenous knowledge and technology to interact with the environment. The traditional knowledge and technology has enabled communities a stable coexistence with their immediate environment thus maintaining the ecological equilibrium. However, industrialisation, globalisation and population increase (growth rate of 2.9 per cent[5]) present new challenges in sustainable utilisation of the country's resources. This has resulted in the disruption of natural and cultural systems. It is imperative, therefore, that capacity is built to ensure sustainable use of national resources.

Education is at the heart of sustainable development and is, therefore, a key means to achieving sustainable utilisation of the country's resources. Among other things education is a vessel to achieving the Millennium Development Goals (MDGs) – refer to text box below. Human security and economic prosperity depend on the ability of a country to educate and prepare its people to thrive in a rapidly changing world. An innovative and dynamic society not only embraces change but also influences it. Education enriches cultures, creates mutual understanding and underpins peaceful societies.

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[5] Op. cit., 2004

What are the Millenium Development Goals (MDGs)?
MDGs are goals to be achieved by 2015 that respond to the world's main development challenges.They were adopted by 189 nations and signed by 147 heads of state and governments during the UN Millenium Summit in September 2000.
Goal 1: Eradicate extreme poverty and hunger.
Goal 2: Achieve universal primary education.
Goal 3: Promote gender equality and empower women.
Goal 4: Reduce child mortality.
Goal 5: Improve maternal health.
Goal 6: Combat HIV / AIDS, malaria and other diseases.
Goal 7: Ensure environmental sustainability.
Goal 8: Develop a Global Partnership for Development.

Education for Sustainable Development (ESD)

Education is the process of imparting intellectual, moral, social skills and values to learners for a particular purpose. Education and training, both formal and non-formal, are key processes by which human beings and societies can reach their full potential. Education is key to sustainable development. Educating people for sustainable development should provide the skills, perspectives, values and knowledge to live sustainability. It must be interdisciplinary - integrating concepts and analytical tools from a variety of disciplines and be reoriented to include the changes needed to promote sustainable development.

The role of ESD was first highlighted in Chapter 36 of Agenda 21 (refer to text box below) that identified four major thrusts namely; the improvement of basic education, reorientation of existing education, developing public understanding and awareness as well as training to address sustainable development. ESD is therefore an emerging but dynamic concept that seeks to empower people of all ages to assume responsibility for creating, maintaining and enjoying a sustainable future. It is not so much education about sustainable development but education for sustainable development, which makes the concept more participatory and comprehensive.

What is Agenda 21?
Agenda 21 is a comprehensive plan of action to be taken globally, nationally and locally by governments, UN and major groups in every area in which humans impact on the environment. It was adopted by more than 178 governments at the UNCED held in Rio de Janeiro in 1992. Chapter 36 focuses on promoting education, public awareness and training.

The aim is not only for the educator and the learner to understand the issues of sustainable development but also to cope with and act upon the interdisciplinarity of

the issue. ESD is also a process of achieving sustainable development encompassing the three pillars namely; society, economy and environment. Thus, it includes, education for poverty alleviation, human rights, gender equity, cultural diversity, international understanding and peace.

The overall aim of ESD is to empower citizens to act for positive environmental and social change by giving people knowledge and skills to help them find new solutions to their social, economic and environmental issues. It is against this background that nations sought to embrace the DESD from 2005–2014, as a commitment towards educating the global populace for sustainable development.

CHAPTER TWO

Decade of Education for Sustainable Development and ESD in Kenya

2.1 Global perspective

In December 2002, the United Nations General Assembly adopted Resolution 57/254 declaring the United Nations Decade (2005-2014) of Education for Sustainable Development (DESD). The declaration calls on Member States to integrate ESD into their education plans at all levels and across all sectors of education.

Education is humanity's best hope and most effective means in the quest to achieve sustainable development. However, the quality of education is of paramount importance. Much of current education falls far short of what is required to impart skills, knowledge and values that recognise the importance of sustainable development.

DESD is a far-reaching undertaking that provides an opportunity for Kenya to develop and implement an education system and programme, which develop values that promote viable, alternative approaches to sustainable development. Its conceptual basis, socio-economic implications, and environmental and cultural connections make it an enterprise, which potentially touches on every aspect of life. This translates into objectives of the Decade, to:

- Improve quality of education at all levels for sustainable development;
- Reorient education at all levels for sustainable development;
- Enhance public understanding and awareness of sustainable development; and
- Build capacity for sustainable development.

In pursuing ESD, therefore, there must be some clarity in what sustainable development means and what it aims to achieve. Sustainable development seeks to promote social values, which aim to balance economic development needs and ecological sustainability.

Global vision

The vision of the Decade is a world where everyone has the opportunity to benefit from quality education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation.

This vision sets 'a sustainable future' at the heart of our common human endeavour, but the vision will find expression in varied socio-cultural contexts – where 'positive societal transformation' will be articulated in different ways. An international decade such as the

DESD serves as a framework within which diverse and multiple actors pursue a shared agenda based on their commitment to the central vision.

An International Implementation Scheme[6] for the DESD sets out a broad framework for all partners to contribute to its implementation. It is not prescriptive but provides overall guidance on why, how, when, and where contributions may be made within the context of prevailing circumstances. The Decade provides context and relevance for learning and addresses all levels and modalities of education, including technical, industrial, vocational and entrepreneurship training (TIVET), higher education, communication and media and corporate training programmes. Moreover, it promotes the societal goal of sustainable development, which results from quality education programmes. By engaging in the global commitments (EFA, MDGs, DESD) actively and simultaneously, and by cooperating closely, all regions and countries will be able to move, through better education, towards sustainable development.

ESD must integrate all levels: global, regional, national and local because sustainable development cannot be pursued at only one level. Cooperation is recommended because it enhances sharing and exchange of policies, experiences, challenges and opportunities for providing mutual support among stakeholders.

Goal of DESD

The goal of DESD is to integrate the values inherent in sustainable development into all aspects of learning to encourage changes in behaviour that promote a more sustainable, economically viable and just society for all. It aims to provide opportunities for all people to benefit from education and learn the values, behaviours and lifestyles that ensure a sustainable future.

The DESD calls on governments to consider the inclusion of "measures to implement the Decade in their respective education systems and strategies and, where appropriate, into national development plans". The call has two broad objectives:

- To provide, refine and promote the vision of, and transition to, sustainable development through all forms of education, public awareness and training; and
- To give an enhanced profile to the important role of education and learning in sustainable development.

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[6] International Implementation Scheme describes pathways to stimulate imagination, creativity, and energy to make DESD a success. It is predicated on the need for regions and countries to develop plans, strategic approaches and timetables along the lines proposed by the International Implementation Scheme. [Ref: http://www.unesco.org]

Objectives of ESD

The objectives of ESD in the context of DESD are:

- To promote and improve basic education, including literacy and lifelong learning for sustainable livelihoods, with emphasis on access, opportunity and quality outcomes for children and youth in and out-of-school, and adult literacy;
- To orient existing education programmes at all levels (content and processes) to promote the social, environmental, cultural and economic knowledge, skills, perspectives and values inherent to sustainability;
- To create public awareness and build understanding of, the principles of sustainable development, with emphasis on the roles of the media and civil society;
- To develop training programmes for imparting skills to promote sustainability practices; and
- To develop strategies at every level to enhance capacity for ESD.

To realise the objectives, the Decade has proposed seven strategies. These are advocacy and vision-building; consultation and ownership; partnership and networks; capacity-building and training; research and innovation; use of information and communication technologies; and monitoring and evaluation. These strategies are discussed in greater detail in Chapter 5.

Why ESD as global drive?[7]

Education should shape our future by providing knowledge, skills, perspectives and values for sustainable living. It should be provided at all levels from early childhood to adult and continuing education. It should promote economic development with respect for our natural resources and cultural heritage. Therefore, it should be dynamic and evolving while empowering people to promote and engage in positive social, economic and environmental change.

The WSSD that took place in Johannesburg, South Africa, in 2002, recognised two key aspects of education in relation to sustainable development. First, education is the foundation for sustainable development and much of the work on ESD is closely linked to the pursuit of EFA (refer to text box below). Second, education is a key instrument for bringing about changes in values and attitudes, skills, behaviour and lifestyles consistent with sustainable development. Thus, it is a tool for addressing issues around the three pillars of sustainable development - society, environment and economy.

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[7] Adapted from draft *International Implementation Scheme for the Decade of Education for Sustainable Development* (January 2005).

What is EFA?

Education for All is a movement with a global committment to provide quality basic education for all children, youth and adults. It was launched at the World Conference on EFA in 1990. It is committed to achieve Education for All by 2015. It is guided by 6 key education goals;

Goal 1: Expand early childhood care and education
Goal 2: Provide free and compulsory primary education for all
Goal 3: Promote learning and lifeskills for young people and adults
Goal 4: Increase adult literacy by 50 per cent
Goal 5: Achieve gender parity by 2005, gender equality by 2015
Goal 6: Improve the quality of education

ESD is for everyone, within a perspective of lifelong learning and engaging all possible spaces of learning (formal, non-formal and informal). It calls for a reorientation of educational approaches – curriculum and content, pedagogy and examinations. ESD addresses key areas of sustainable development with culture as an underlying dimension. The vision underscores certain values in each pillar as follows:

- **Society:** understanding social institutions and their role in change and development,as well as the democratic and participatory systems, which give opportunity for the expression of opinion, the selection of governments, the forging of consensus and the resolution of differences.
- **Environment:** awareness of the resources and fragility of the physical environment and the effects of human decisions and activities with the commitment to integrate environmental concerns into social and economic policy development.
- **Economy:** sensitivity to the limits and potential of economic growth and their impact on society and quality of the environment, with a commitment to assess personal and societal levels of consumption for concerns of the environment and social justice.

ESD further seeks to promote and advocate:

- Interdisciplinary and holistic learning embedded in the whole curriculum, not just as a separate subject;
- Sharing of values and principles underpinning sustainable development;
- Critical thinking and problem-solving leading to confidence in addressing the dilemmas and challenges of sustainable development;
- Different pedagogies;
- Learner-centred environment; and
- Addressing local as well as global issues in appropriate means of communication to learners.

Culture predetermines the way issues of ESD are dealt with in specific national contexts. In this sense, culture is a way of being, relating, behaving, believing and acting.

ESD is about values, with respect at the centre: respect for others, including those of present and future generations, respect for difference and diversity, respect for the environment, and respect for the resources of the planet we inhabit. Education enables us to understand ourselves and others and our links with the wider natural and social environment, and this understanding serves as a durable basis for building respect. Along with a sense of justice, responsibility, exploration and dialogue, ESD aims to promote the adoption of positive behaviour and practices, which enable all to live a full life without being deprived of the basics.

2.2 National perspective: ESD in Kenya

Kenya's education vision to have 'quality education and training for development' should provide for the development of an individual that is productive and socially responsible. The mission of education and training is to provide, promote and co-ordinate quality lifelong education, training and research. To meet national goals of education, the education sector should promote strong partnership with all stakeholders, as Kenya strives to address the challenges of sustainable development.

This ESD Implementation Strategy proposes modalities that will contribute to the attainment of sustainable development. The strategy calls for all sectors in Kenya to embrace ESD. The strategy is in line with the Decade and calls for the following:

1) Improving quality of education

In regard to improving the quality of education, it is imperative to:
  i)   Inculcate the values of sustainable development;
  ii) Create public awareness and understanding on sustainability; and
  iii) Build capacity on sustainable development.

This can be achieved through:

■ Reorientation of teaching and learning processes to make them locally relevant, culturally appropriate, age and gender-sensitive, inclusive of all learners. In regard to teaching and learning, ESD should address needs in context (like geographical location, socio-cultural and structural situation), perspectives and conditions in the pillar areas of ESD - society, environment and economy. It should be presented through action-inquiry strategies[8] with a problem-solving orientation. ESD content should be interdisciplinary, holistic and embedded in the curriculum. It should be values-driven and promote critical and creative thinking. Research on emerging issues of concern to ESD should inform curriculum relevance, content and context.

[8] Action inquiry strategies include action learning specifically active learning, action research, participatory action research, action science (Ellis and Kiely, 2000).

■ Development of different teaching and learning methods, which promote problem-solving learning and participatory techniques and research aimed at improving teaching and learning, to address sustainability.

■ Continuous professional development of teachers/educators in content and pedagogy from pre-service to continuing education, which should redefine the role of the teacher/educator towards sustainability goals.

■ Development of relevant teaching and learning resources (materials) reflecting issues and perspectives under the three ESD pillars and for use in the different educational settings – formal, non-formal and informal. Research should inform the development of new teaching and learning resources.

■ EFA by providing opportunities to all to access quality basic education. It should provide adequate learning facilities and appropriate learning environments according to age, gender, special needs and geographical lines.

2)   Orientation of education towards sustainable development

ESD should include principles, skills, perspectives and values related to sustainability (such as in social, environmental and economic realms). This can be achieved through development or promotion of:

a) **Curriculum framework:** The curriculum should accommodate ESD perspectives informed by a critical approach/paradigm shift to curriculum development as opposed to a technocratic approach.[9]

b) **Transdisciplinarity:** ESD should encourage theme teaching and team teaching in different educational settings. Themes should be derived from the three ESD pillars and may include: poverty, wasteful consumption, gender inequality, violation of human rights, environmental degradation, conflict and waste management among others.

> Theme teaching using locally relevant issues can make learning more meaningful within a localised curriculum. It can be used to address local problems and promote sustainable development.

c) **Skills development for creating a sustainable future:** ESD should promote decision-making, problem-solving, critical and creative thinking, communication (oral and written), computation skills, inquiry/research skills.

d) **Knowledge imparted:** ESD should draw knowledge from society, environment and economy. The knowledge base should support

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[9] Curriculum should be considered from a critical view looking at curriculum as a contextualised social process and not a product or document.

sustainability goals as identified in the national ESD priorities and should capture the major issues of concern in the curriculum at different levels in formal and non-formal settings.

e) **Values and ethics:** ESD should promote values and ethics such as:
- Respect and care for the 'community of life';
- Social and economic justice;
- Ecological integrity; and
- Democracy, non-violence and peace.

f) **Perspectives:** ESD should consider history and the future, as well as accommodate the needs of different stakeholders, while promoting consensus and vision-building.

> Perspectives create an opportunity for ESD to link with 'Futures Education' whereby learners reflect on the past, present and the future. Learners can visualise possible, probable and desired futures and work towards their desired futures.

g) **Lifelong learning:** ESD should strengthen and sustain lifelong learning by empowering people to improve their livelihoods and well-being through informed decisions that are culturally appropriate and relevant.

3) Public understanding and awareness of sustainability

ESD helps individual communities and governments to promote sustainability measures, by encouraging people to participate, belong and contribute to collective decision-making on sustainability issues. It also helps to socialise people and enhance a clear understanding of sustainable development.

4) Capacity-building

Capacity-building for ESD encompasses all stakeholders and seeks to be appropriate, relevant and timely by providing opportunities for knowledge and skills development for all. The underlying values of ESD include: respect for the dignity and rights of all people; commitment to social and economic justice for all; respect for inter and intra-generational equity; respect and care for life in all its diversity including protection and restoration of the earth's ecosystems; respect for cultural diversity and a commitment to a culture of tolerance, non-violence and peace.

2.2.1 Vision for ESD in Kenya

Education that enhances sustainable development in Kenya.

2.2.2 Mission of the Kenya ESD Strategy

To provide an enabling environment and capacity for all sectors and stakeholders to effectively contribute towards the achievement of sustainable development.

2.2.3 Strategic objectives of ESD in Kenya:

The following strategic objectives are guided by the four thrusts of ESD (as mentioned in Section 2.2):

- To enhance the role of education and learning for equitable, efficient and sustainable utilisation of the country's resources;
- To promote quality education through diverse learning and public awareness for improved quality of life and productive livelihoods; and
- To promote teaching and learning that inculcates appropriate values, behaviour and lifestyles for good governance and sustainability.

CHAPTER THREE

Situational analysis and rationale for ESD in Kenya

3.1 Sustainable development challenges in Kenya

Sustainable development issues to be addressed through education in Kenya are complex and interlinked. The issues can be classified as societal, economic and envionmental. Societal issues include: concerns of poor governance[10], corruption, bigotry towards cultural diversity, ethnic animosity, gender inequality[11], HIV/AIDS[12], incidence of malaria, tuberculosis (TB) and other communicable and non-communicable diseases, human rights abuse, all forms of violence and increased insecurity[13], scolded lifestyles and behaviour, drug and substance abuse, and erosion of cultural values and morals, among others.

The economic issues revolve around systems of production, consumption, investments and service delivery towards an enhanced GDP. However, several challenges such as high levels of poverty and related issues impede optimal performance of the economy. The current projections indicate that 56 per cent of the Kenyan population live below the poverty line earning less than US $1.00 per day.[14] Further, the gap between the rich and the poor has continued to widen with a per capita income of about KES 1,239 per month in the rural areas and KES 2,648 in urban areas.[15] As such there are predominantly more poor members of society.

The other challenges affecting economic growth and performance include inadequate investment infrastructure leading to rising levels of unemployment, rural/urban migrations, corporate irresponsibility and lack of accountability and corruption. Additionally, the inefficient and wasteful production systems lead to unsustainable utilisation of natural resources resulting in their degradation. Further, the poor enforcement of policies and regulations governing production and marketing hinder economic growth and the attainment of its optimal performance.

The environment sector has not been spared either. The country has experienced severe environmental challenges including droughts, natural disasters, acute water shortage, climate change and variability, loss of biodiversity and poor waste management systems. This has resulted in land degradation and loss of forest cover which currently

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[10] NEPAD African Peer Report, 2005.
[11] Girls' and Women's Education in Kenya, UNESCO, Nairobi, 2006; EFA Global Monitoring Report 2006, UNESCO, Paris.
[12] Public Sector Workplace Policy on HIV and AIDS, April 2005.
[13] Economic Survey, 2005, Central Bureau of Statistics.
[14] Economic Recovery Strategy for Wealth and Employment Creation, 2003-2007.
[15] Welfare and Monitoring Survey, 1997.

stands at a mere 1.7 per cent of the total territorial surface area falling far below the globally recommended 10 per cent minimum cover.[16] Moreover, about 88 per cent[17] of the country's total surface area is comprised of ASALs while desertification is on the rise as a result of fragility of the ecosystems.

Negative impacts on the environment have been as a result of the robust industrial development experienced in the country over the last four decades. This has resulted in increased waste generation leading to unsustainable waste management systems.

It is therefore imperative that national resources be utilised sustainably to meet the needs of the present generation without compromising the ability of the resource base to continue providing the same services and goods in the future. Although the Kenyan education philosophy embraces the principles of sustainable development, the above challenges persist hindering its realisation. Consequently, the concept of ESD is timely and is expected to provide the modalities for attaining sustainable development.

3.2 Responses to sustainable development challenges by the GoK, CSOs and private sector

The government, CSOs and the private sector have been involved in formal, non-formal as well as informal education for quite some time now. The government has been the key player in formal education. However, some CSOs, the private sector, organised groups such as youth, women, trade unions and political parties have also made notable contributions to formal and non-formal education.

The government, CSOs and private sector have made notable ESD-related responses in relation to society, environment and economic spheres of sustainable development. These include policy formulation, advocacy and public awareness, resource material development, research and innovations, capacity building, networking, partnerships and vision-building. A synopsis of some of the notable ESD-related responses made by these sectors includes:

• Policy formulation

The government has involved CSOs and the private sector in the formulation and development of national policy documents hinging on sustainable development. These include Sessional Paper No. 1 of 2005, A Policy Framework for Education, Training and Research; Kenya Education Sector Support Programme (KESSP); Sessional Paper No. 2 of 1997 on Industrial Transformation to the Year 2020; Poverty Reduction Strategy Paper (PRSP) for the period 2001-2004; Economic Recovery Strategy for Wealth and Employment Creation (2003-2007); Sessional Paper No.2 of 2005 on Development of Micro and Small Enterprises for Wealth and Employment Creation for Poverty Reduction;

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[16] Department of Resource Surveys and Remote Sensing (DRSRS), 2005-2006.
[17] State of Environment Report, 2004.

National AIDS Control Strategic Plan, (1999); Forest Act (2006); Anti-corruption and Economic Crimes Act (2003); and the Vision 2030.[18]

• Public awareness and advocacy

Civil society organisations have been in the frontline of public awareness and advocacy campaigns for social justice, environmental management, economic recovery and development. In this regard, several programmes have been initiated and community participation enhanced. Government ministries/departments and the private sector have also been involved in public awareness and advocacy. In spite of these efforts there is an awareness gap, which needs to be filled.

• Resource material development

The government and CSOs have developed several resource materials for public awareness as well as education on sustainable development themes such as anti-corruption, gender equity, HIV and AIDS, governance, poverty reduction, environmental management, among others. The materials developed are in form of posters, banners, brochures, badges, booklets, fliers, books, symbols and audiovisuals among others. Some private sector players have also supported the material development processes.

• Research and innovations

Institutions of higher learning, CSOs and government departments have undertaken research projects aimed at identifying sustainable development issues and risks. They have also been actively involved in developing new and better approaches and models for environmental sustainability, economic development and social justice. Some private sector players have undertaken research projects aimed at identifying impediments to economic growth as well as developing new and better models for economic growth.

• Capacity-building

The government, CSOs, institutions of higher learning and the private sector have undertaken capacity-building projects for communities as well as institutions for the sake of economic development, social justice and better environmental management. Capacity-building has mainly been through infrastructure development, training, workshops, seminars, micro-grants, micro-credit facilities and demonstration projects.

• Networking, partnerships and vision-building

Government, institutions of higher learning, CSOs and the private sector have established partnerships and networks to enhance social justice, environmental protection and

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[18] The Vision 2030 is the latest Government's strategy aimed at transforming national development. The over-arching vision is a globally competitive and prosperous nation with a high quality of life by 2030. The Vision identifies priority areas, namely: 1) maintaining a sustained economic growth of 10 per cent annually over the next 25 years; 2) a just and cohesive society enjoying equitable social development in a clean and secure environment; and 3) an issue-based, people-centred, result-oriented and accountable democratic political system.

economic development. Visions and strategies for sustainable development have also been developed to direct sustainable development programmes and activities.

3.3 Education, training and research in Kenya

The government and the entire population perceive education, training and research as factors that influence national development. These factors are seen as tools to address local challenges and provide possible practical solutions and options. An efficient and effective education system provides the necessary modalities and infrastructure to facilitate learning, training and research that take cognisance of local issues. It is on this basis that appropriate policies have been developed to guide education, training and research in the country.

Kenya is signatory to international commitments and conventions related to education such as Education For All (EFA) Dakar Framework of Action, MDGs, United Nations Literacy Decade (UNLD), Convention on the Rights of the Child (CRC) - see text box below. Sessional Paper No. 10 of 1965, Board of Adult Education Act, Education Act (1968) and Sessional Paper No. 6 of 1988 on Education and Manpower Training for the Next Decade and Beyond, among others, are the laws and policies that have guided the philosophy and provision of education in the country since independence. The Children's Act (2001) highlights the right of every child to free compulsory basic education.

> **What is the United Nations Literacy Decade?**
>
> The UN Literacy Decade 2003-2012 was adopted by the UN General Assembly as a resolution in December 2001. The Decade intends to extend literacy to both adults and children that do not have access to it. It especially intends to achieve this among the poorest and most marginalised groups of people.

UN Convention on the Rights of the Child

Adopted by the United Nations General Assembly on November 20, 1989, the UN Convention on the Rights of the Child spells out standards that governments are obligated to keep. In the Convention child refers to anyone under the age of 18.

The Convention has 54 Articles which are guided by four basic principles:
1. The right to non–discrimination.
2. The right to have the child's best interest considered in all actions concerning children.
3. A child's right to life, survival and development.
4. A child's right to be heard.

The most recent policy step is the passing of the Sessional Paper No. 1 of 2005, A Policy Framework for Education, Training and Research. This policy paper recognises the integral role of education and training in promoting national development and re-affirms the government's commitment in the provision of quality education and training for national development. To operationalise Sessional Paper No. 1 of 2005, the government developed the Kenya Education Sector Support Programme (KESSP) to provide a comprehensive understanding of the issues and reform priorities in education, training and research. The Sessional Paper and KESSP, among others, embrace EFA and MDGs.

The policy framework is based on the philosophy of 'education and training for social cohesion, human and economic development'. It is further guided by nine national goals of education (ref. Sessional Paper No.10 of 1965) based on the principles of national unity, social responsibility, unity of purpose, moral and ethical values, lifelong learning, science and technology, equity, quality of education as well as environmental conservation and management. The Sessional Paper upholds the need to address global issues such as environmental concerns, technology, gender disparities, among others, through education. It also recognises the need to offer Kenyans education and training that promotes sustainable development, peace and social justice.

The existing policy on education, training and research aims at enhancing national development and recognises the role of education in sustainable development. Ideally, if fully and properly implemented, the policy would ensure education that contributes

to sustainable development. Over time, the education system has infused aspects of environmental education (EE) in most subjects as a response to teaching about environmental sustainability. This is just but a subset of ESD although it does not adequately address issues on society and economy. On the other hand, if the existing education curricula, both formal and non-formal, embraced appropriate modalities to fully implement the national goals of education, sustainable development would be attained.

Whereas, education delivery through the KESSP is pegged on policies as provided for in the Sessional Paper No.1 of 2005, there is a gap in that not all concerns in that Sessional Paper are addressed by KESSP. The reason for this may be due to the fact that for implementation purposes, the focus in KESSP is on 23 specific investment programmes.

It is worth noting that KESSP[19] is reviewed annually by the Ministry of Education and development partners. Therefore, new developments such as ESD may find accommodation in all the 23 programmes including Information, Communication and Technology (ICT) in education, teacher training, school infrastructure, adult and continuing education, monitoring and evaluation, capacity-building and training, expanding educational opportunities in ASALs, and others. This will bring about new dimensions in the delivery and outcomes of education and hence opportunity to realise the national goals of education. Curriculum reviews for Kenya have also incorporated sustainable development concerns as emerging issues. These include HIV & AIDS, environment, gender, governance, drugs and substance abuse, disaster preparedness.

If fully embraced, ESD will curb the prevailing challenges manifested in a non-performing economy such as environmental degradation and social injustices, which are major impediments to the realisation of sustainable development.

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[19] Kenya Education Sector Support Programme (KESSP), 2005-2010.

CHAPTER FOUR

Stakeholder participation and coordination for ESD

4.1 Stakeholder participation

ESD is a multi-sectoral process that calls for the participation from government, CSOs, private sector, the media and development partners. The success of ESD calls for collaboration and synergy among stakeholders. This ESD strategy categorises stakeholders into government, civil society, private sector, the media and development partners. Each of these categories consists of several actors as indicated below:

a) Government
- Parliament
- Ministries and departments
- Parastatals (state corporations)
- Local authorities
- Learning and research institutions

b) Civil society
- NGO Councils and NGOs
- FBOs and institutions
- Professional associations and trade unions
- CBOs

c) Private sector
- Corporate companies
- Business community (formal and informal)
- Business associations
- Cooperative societies

d) Media
- Electronic
- Print

e) Development partners
- Bilateral partners
- Multilateral partners
- Inter-governmental organisations
- Foundations

4.2 Roles and responsibilities of stakeholders

There is need for synergies within and between the stakeholders to attain sustainable development through education. Each of these actors has a specific role to play as exemplified below:

- Government sector has a central role in bringing together stakeholders and laying the infrastructure for the realisation of ESD.
- Private sector, which is profit-oriented, will have to collaborate with other stakeholders to come up with programmes and practices that enhance realisation of ESD.
- Civil society, through its wide network, will collaborate with other stakeholders to complement attainment of ESD objectives.
- Development partners, working with other stakeholders, will support the implementation of the ESD process.

Stakeholders will guide the ESD process through popular participatory processes at all levels. These consultative popular participatory processes will ensure ownership, resolution of divergent views and approaches and promote sustainable development. They will also ensure linkages to relevant national and international commitments including the New Economic Partnership for Africa's Development (NEPAD), Africa Union (AU), EFA, MDGs and UNLD, among others.

The stakeholder consultative processes will focus on:

- Development of modalities for strengthening existing educational plans to reflect commitment to ESD including identification of key national issues in sustainable development and messages for raising public awareness.
- Identifying the financial needs and resources for implementing ESD during the DESD, including existing programmes and new initiatives. Additionally, set up financial mechanisms to support governmental, private sector and civil society initiatives.

Government

Government will play a vital role in the infusion of ESD concerns into the existing sectoral policies. This will directly or indirectly steer change in instructional practices at all levels in the development of knowledge, skills, attitudes and behaviours related to sustainable development. Thus, the role of the government is to:

- Facilitate development of a national policy framework for ESD.
- Provide and mobilise resources.
- Support ESD interventions in all sectors.
- Foster public awareness, participation and capacity building on ESD at all levels
- Mainstream/integrate ESD into the curricula.
- Domesticate relevant international agreements that relate to ESD.
- Strengthen networking on ESD.

- Promote research and development.
- Monitor and evaluate of ESD implementation.

Civil society

The civil society will play a central role in advocacy and lobbying for ESD by linking communities with existing policies. In particular, civil society shall play a catalytic role in promoting ESD through:

- Advocacy for policy reform and legislation that recognises the importance of public engagement in ESD.
- Adoption of popular participatory learning and action.
- Promotion of community involvement at all levels through awareness and education programmes and use of ICT materials as a means of sharing information relating to ESD.
- Capacity-building by providing training, materials and information at both the national and local levels.
- Research activities to improve the understanding of the relationship between society and sustainable development.
- Networking and partnerships to enhance sharing of information and good practices on ESD.
- Monitoring and evaluation of ESD implementation.

Private sector

The role of the private sector in promoting ESD is to provide opportunities for practical demonstrations of sustainable development. The private sector has associations that are expected to facilitate rapid adoption of ESD principles, programmes and implementation. In this regard, the private sector should be fully engaged at all levels, and more importantly in:

- Promoting sustainable consumption and espousing sustainable production.
- Imparting knowledge, both through its advertisements and capacity-building programmes.

The industrial and service sectors will provide platforms for identifying challenges in sustainable development. They will also design and facilitate the development and testing of intervention measures. The contribution of the private sector will, therefore, be at the following phases of their respective activities:

- Entrepreneurial initiatives and training.
- Management models and approaches that enhance corporate responsibility.
- Implementation of ESD.
- Development and sharing of practices of sustainable production and consumption.
- Provision of forums to identify inherent challenges in the implementation of ESD.

- ■ Identification of necessary learning needs to embrace ESD.
- ■ Encouraging individual business practitioners to adopt practices that will enhance ESD.
- ■ Monitoring and evaluation of ESD implementation.

Media

The media will integrate ESD and sustainable development awareness building into communication strategies. It can run programmes that promote, inform and entertain in line with ESD. Private sector, public sector, civil society or individuals shall be encouraged to sponsor such programmes and hence, play a pivotal role in shaping change of attitudes towards sustainable development.

Development partners

In liaison with other stakeholders, development partners will foster partnerships in the spirit of enhancing the DESD in Kenya. Specifically, development partners will offer technical and financial support, as well as undertake monitoring and evaluation of ESD implementation.

4.3 Stakeholder participation action plan

For effective participation of all stakeholders in ESD programme implementation, there is need for a programme-based action plan. Stakeholder participation is solicited in areas such as research and innovation, advocacy and public awareness, capacity-building and training, resource material development, curriculum reorientation towards ESD and in networking and information dissemination. Annex II explains in greater detail the stakeholder participation action plan and the proposed timeframe.

4.4 Proposed ESD coordination

ESD will be coordinated by the Head of Civil Service in the Office of the President (Figure 2). An intersectoral committee of permanent secretaries will steer the ESD process. An advisory council will be constituted with membership drawn from National Environment Council (NEC)[20] members and other co-opted individuals and institutions to oversee the implementation of ESD. A National Steering Committee drawn from representation from government sector, civil society and private sector will spearhead the process of ESD implementation. Sectoral ESD committees will be established to address specific key sustainable development issues. Regional/provincial ESD advisers and district ESD coordinators will coordinate ESD activities at the grassroots level. A secretariat will be formed to coordinate the ESD activities.

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[20] The National Environment Council is established by EMCA (1999) Section 4 and is mandated with;
• Policy formulation and directions on environmental management and coordination
• Setting national goals and objectives and determination of policies and priorities for the protection of the environment
• Promoting cooperation among public departments, local authorities, private sector and civil society organisations and such other organisations engaged in environmental protection programmes

Head of Civil Service

ESD Advisory Body

To be constituted by the National Environment Council from its members. Other members to be co-opted when necessary.

ESD National Steering Committee

Sectoral ESD Steering Committees

Field ESD Committees

Figure 1: Diagrammatic representation of ESD coordination

4.5 Resource mobilisation

The ESD strategy requires financial resources for its implementation. There is need for all implementing institutions to fund raise through the national budget, development partners and the private sector. Further, the higher institutions and research bodies are urged to undertake transformative research to shape education throughout the Decade.

Human and financial resources are required for all the six programme areas namely; research and innovation, advocacy and public awareness, capacity-building and training, partnership and networks, resource material development, curriculum review and orientation towards ESD.

CHAPTER FIVE

Implementation framework

5.1 Introduction

The implementation and coordination of ESD will be carried out through seven strategies namely; advocacy and vision-building, consultation and ownership, partnership and networks, capacity-building and training, research and innovation, use of ICT and monitoring and evaluation. It is also proposed that Regional Centres of Expertise[21] be established to enhance this process.

5.2 Strategies of implementation

The Decade proposes seven interlinked strategies to promote and implement ESD. These are: advocacy and vision-building; consultation and ownership; partnership and network; capacity-building and training; research and innovation; information and communication technologies; and monitoring and evaluation. These strategies will ensure that change in public attitudes and more so that educational approaches keep pace with the evolving challenges of sustainable development.

• Advocacy and vision-building

In pursuit of sustainable development, the Kenyan populace requires an aggressive awareness campaign transformed into understanding root causes of unsustainable outcomes in social, environmental, cultural and economic ventures of development. This requires that local, regional and national visions of living and working sustainably are developed by various stakeholders to capture local realities and enrich the propagated national commitment through unity across diverse contexts. In vision-building, awareness will reflect a sense of social responsibility and consciousness of individual actions and how they affect social interaction and production in the endeavour of development.

Advocacy will be central at all levels and by all stakeholders, making it an educational process for thinking critically of the current and future circumstances. Stakeholders will in that spirit, need to maintain a permanent dialogue as part of ESD for a common agenda and in lobbying for particular issues of sustainable development through responsible media and other learning processes committed to encouraging informed and active citizenry.

• Consultation and ownership

Consultation among stakeholders is extremely essential in all the undertakings of ESD at every level so as to own the vision. Ownership per se depends on consultation and

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[21] An RCE is a network of existing formal, non-formal and informal education organisations mobilised to deliver ESD to local and regional communities. RCEs aspire to achieve the goals of the DESD by translating it's global objectives into the context of the local communities in which they operate (ref see: www.ias.unu.edu).

participation in the formulation processes and planning of local and national initiatives and activities. Consultation will, therefore, include:

■ Transparent and timely dispensations of information on policy proposals and budgetary provisions by the various sectors.
■ Processes to solicit inputs from stakeholders into local, regional and national plans and initiatives.
■ Legislative affirmation and commitment towards the ESD process.
■ Public awareness campaigns that invite feedback to the process and other ESD initiatives.
■ Commissioning of research.

Partnerships and network

The effectiveness of the Decade in Kenya will depend on the strength and inclusiveness of the partnerships, networks and alliances formed by the stakeholders at all levels. The ESD process through the Decade will be too great and too complex an undertaking for any single institution to promote on its own. Therefore, the governments' central coordinating role and resource mobilisation need to be embedded by the private sector and development partners and supported by civil society networks and connections to enable the benefits of ESD to trickle down to local and grassroot levels.

Partnerships must, therefore, be established to come up with new initiatives or identify and build on existing work and projects through building synergy and cooperation between diverse partners. A key aspect of partnerships and networking will be the regular and systematic exchange of experience and information regarding ESD. This will be a motivational force of learning across the country.

Capacity-building and training

This strategy aims at ensuring that the ESD partners and stakeholders acquire and constantly improve their capacity and skills. Therefore, capacity-building and training approaches will be tailored to local needs and geared to provide knowledge and durable skills of social environmental concerns for economic development. Vital areas of capacity-building and training include:

■ Communication and public awareness that will provide avenues for networking and establishing partnership towards ESD.
■ Planning, management, evaluation and analysing skills are developed in ESD initiatives for focused partnerships that are built on clarity of purpose through assessments and feedback for effective progress.
■ Training and refresher courses for educators to promote values, attitudes and behaviours to stimulate learning that embraces issues of sustainable development.
■ Instructional content and materials that are suitable and relevant to ESD are developed in all forms (written, electronic, and audio-visual) to stimulate concerns and offer knowledge in each context.

- Instructional methodologies and facilitation techniques that reflect common concerns of ESD and show a commitment towards learner-centred engagement and participation modes of instruction to open up learners to issues of sustainability.

Research and innovation

For better understanding of issues of ESD and its progress, research forms a basis of assembling information for evaluation and for seeking innovative solutions towards meeting the objectives of the Decade in Kenya. Baseline studies; situational analysis; longitudinal studies and other sector specific/institutional demonstrations will identify and further delineate key issues to be addressed as ESD is implemented in thousands of local situations across the country. Research will also foster ways of integrating ESD into multitude of different learning situations, geographical divides, socio-cultural contexts and ranges of development programmes to bring possible strategies for meeting the various challenges.

Use of ICTs

This is the lifeline of networking by linking partners, storing data and sharing of information among ESD stakeholders. ICTs offers new modes of communication and learning spaces thus magnifying opportunity to explore global grounds for dialogue and experience sharing for mutual support in building consensus towards sustainable development.

Monitoring and evaluation

Monitoring and evaluation will be used to assess progress of implementing the ESD implementation strategy and the attainment of its objectives. This is expected to be an in-built exercise that ascertains the impact of the ESD process.

5.3 Regional Centres of Expertise (RCE)

The ESD strategy proposes the establishment of several RCEs to address local issues. Stakeholders in RCEs will be drawn from government, private sector, civil society organisations and development partners. These include:

- Actors in the formal, non-formal and informal education sectors (teachers, trainers at all levels of learning, researchers, NGOs, CSOs, FBOs, communities, media).
- Providers of content for ESD (scientists, researchers, educators, museums, zoos, botanical gardens among others).
- Students and learners at all levels.
- Supporters of the delivery of ESD such as local government officials, representatives of private enterprises.
- Volunteers, media, foundations, and development partners.

Functions of RCEs

RCEs will bring together organisations at the regional/local level to jointly promote ESD. They will build innovative platforms to share information and experiences and promote dialogue among regional/local stakeholders through partnerships for sustainable development. This will lead to the creation of a local/regional knowledge base to support ESD, namely:

- Reorient education towards sustainable development, designing an integrated sustainable development curricula tailored to address issues relevant to the local context;
- Increase access to quality basic education that is most needed in the regional context;
- Deliver training programmes for all levels of society as well as develop methodologies and learning materials; and
- Lead advocacy and awareness raising efforts focusing on educators and the essential role of ESD in achieving a sustainable future.

RCEs will also promote the long-term goals of ESD, such as environmental stewardship, social justice, and improvement of the quality of life. RCEs and the stakeholders will employ the seven interlinked strategies discussed above.

5.4 Strategic objectives and strategies of implementation

The ESD strategy implementation framework comprise the strategic objectives, activities, outputs, objectively verifiable indicators, means of verification and actors involved. Each of the strategic objectives will be operationalised through the seven strategies earlier outlined.

5.4.1 To enhance the role of education and learning for equitable, efficient and sustainable utilisation of the country's resources

Advocacy and vision-building

Under this strategy, the public need to be sensitised on equitable, efficient and sustainable utilisation of natural, social, human and economic resources. This will be done through awareness campaigns supported by IEC materials.

Consultation and ownership

Actors are encouraged to conduct consultative meetings and endeavour to build consensus for a shared vision in order to realise sustainability in the utilisation of the country's resources.

Partnership and networks

Partners and stakeholders involved in educating for equitable, efficient and sustainable utilisation of natural, social, human and economic resources have to be identified and working modalities outlined.

Capacity building and training

Orient curricula at all levels to mainstream ESD values in all aspects of resource utilisation activities and, in particular, for equitable, efficient and sustainable utilisation of the natural, social, human and economic resources. Develop resource materials for use in the promotion of participatory learning processes geared towards the efficient and equitable utilisation of resources. Induct educators at all levels and in all sectors establish relevant infrastructure including resource centres for the implementation of ESD.

Research and innovation

Conduct research to determine the various needs to realise sustainable use of the country's resources. Document and disseminate research findings and innovations.

Use of ICT

Develop ESD ICT programmes like e-learning, resource materials, ICT infrastructure and training.

Monitoring and evaluation

Develop appropriate monitoring and evaluation tools; build capacity on the procedures and conduct monitoring and evaluation.

5.4.2 To promote quality education through diverse learning and public awareness for improved quality of life and productive livelihoods

Advocacy and vision-building

Develop IEC materials for sensitisation and awareness-raising among the general public, including opinion leaders, professionals and communities at all levels on the need for improved quality of life and productive livelihoods through participatory learning processes.

Consultation and ownership

Identify and sensitise stakeholders on the need for improved quality of life. Hold consultative meetings and build consensus on the desired initiatives for improving quality of life.

Partnership and networks

Identify partners and hold consultative meetings to formulate modalities for partnership.

Capacity-building and training

Orient and develop training programmes towards promoting quality of life at all levels. Develop ESD infrastructure and conduct training on alternative livelihoods for improving the quality of life.

Research and innovation

Carry out needs assessment and develop mechanisms to utilise appropriate aspects of indigenous knowledge in research and innovation with a view to improve livelihoods.

Use of ICT

Develop ESD ICT action plans, programmes, resource materials, infrastructure and conduct training.

Monitoring and evaluation

Develop appropriate monitoring and evaluation tools; build capacity on the procedures and conduct monitoring and evaluation.

5.4.3 To promote teaching and learning that inculcates appropriate values, behaviour and lifestyles for good governance and sustainability

Advocacy, vision-building, consultation and ownership

Develop and disseminate IEC materials to sensitise stakeholders on values, behaviour and lifestyles for good governance and sustainability so as to build consensus on desired pedagogies and lobby for their adoption at all levels through peer review mechanisms.

Partnership and networks

Identify partners, hold consultative meetings and formulate modalities for partnership with an aim of establishing mechanisms for networking.

Capacity-building and training

Develop institutional policies, frameworks and establish relevant infrastructure for promoting good governance and sustainability. Resource materials be developed and educators trained at all levels on good governance for sustainable development.

Research and innovation

Carry out needs assessment on values, behaviour and lifestyles for good governance and sustainability. Partnerships be established in order to facilitate ownership in research findings and patenting innovation whilst tapping on indigenous knowledge.

Use of ICT

Develop ESD ICT action plans, programmes, resource materials, infrastructure and conduct training.

Monitoring and evaluation

Develop appropriate monitoring and evaluation tools, build capacity on the procedures and conduct monitoring and evaluation.

Table 1: Implementation Matrix

Objectives	Strategy	Activities	Output	OVIs	MOV	Actors
1. To enhance the role of education and learning for equitable, efficient and sustainable utilisation of the country's resources	Advocacy and vision-building	• Sensitise the public • Produce materials for sensitisation • Conduct awareness campaigns • Identify priorities for action	• Informed public • Sensitisation materials produced • Campaigns conducted • Priorities identified	• Attitude and behaviour change • Different types of materials produced • Number of campaigns held • List of priorities	• Reports and list of attendants • No. and types of materials (print and electronic) • Report on campaigns • Documentation on priority areas	• GoK • CSOs • Private sector • Media • Development partners
	Consultation and ownership	• Hold consultative meetings • Draft policy discussion papers and MOUs	• Programmes identified • Policy discussion papers/ MoUs	• Action plans/ programmes • Proceedings/minutes/ Resolutions	• No. of published proceedings and reports /minutes/ Resolutions • No. of published action plans/ programmes	
	Partnership and networks	• Identify partners and stakeholders • Outline working mechanisms	• Partners /Stakeholders identified • Working mechanisms established for various activities	• No. of partners/ Stakeholders • No. of MoUs	• Database on networks and partnerships	
	Capacity building and training	• Review/reorient curricula at all levels to address ESD (formal and non formal) • Training of trainers/educators at all levels and in all sectors • Develop relevant infrastructure e.g. resource centres • Produce ESD resource materials.	• Curricula reviewed/ re – oriented • Trainers/ educators trained • Manuals and resource materials • Infrastructure for ESD developed • ESD resource materials produced	• ESD concerns incorporated/enhanced in the curricula at all levels • No. of trainers/educators in-serviced • No. and types of resource/training materials produced • No. of ESD resource centres developed • No. of ESD resource materials produced	• ESD compliant curricula • ESD training manuals • Training reports • Database of resource centres • ESD resource materials	

Table 1: Implementation Matrix continued

Objectives	Strategy	Activities	Output	OVIs	MOV	Actors
	Research and innovation	• ESD needs assessment with regard to resource utilisation. • Document and disseminate research findings and innovations • Mainstream research and innovation in ESD	• ESD needs identified in various sectors • Research and innovations in ESD documented • Research and innovation in ESD mainstreamed • Research based activities implemented	• No. of ESD needs in various sectors • No. of documentations • No. of research and innovation in ESD mainstreamed • No of activities, programmes innovations	• Reports • Publications • Journal • Articles	
	Use of ICTs	• Develop action plans on ICT • Develop ESD ICT programmes e.g. E-learning • Training on ICT • Production of ESD ICT resource materials • Develop ICT infrastructure	• Action plans developed • ICT training materials for ESD developed • Capacity in ICT built • ICT infrastructure for ESD developed	• No. of action plans • No. and types of training materials • No. of ICT users trained • No. of institutions/centres enhanced/built with functional ICT infrastructure for ESD • No of ESD Websites/pages established	• Action plans • ICT training materials • Infrastructure developed • Databases on ICT • ESD websites	
	Monitoring and evaluation	• Develop appropriate M&E tools • Build capacity on M&E • Undertake M&E	• M&E tools developed • Capacity on M&E built • M&E undertaken	• No. of tools for M & E developed • No. and types of training manuals developed • No of people trained on M&E • No. of M & E reports	• M & E tools • Reports • Register of people trained in ESD	

Table 1: Implementation Matrix continued

Objectives	Strategy	Activities	Output	OMs	MOV	Actors
2. To promote quality education through diverse learning and public awareness for improved quality of life and productive livelihoods	Advocacy and vision-building	• Develop ESD materials • Disseminate the ESD materials • Conduct ToT at all levels • Conduct public fora on ESD at all levels • Conduct awareness seminars for opinion leaders, professionals and communities at all levels	• ESD materials developed • ESD materials disseminated • ToT conducted at all levels • Public fora on ESD conducted at all levels • Awareness seminars conducted for opinion leaders, professionals	• No. and types of ESD materials developed and disseminated • No. of ToTs conducted • No. of public fora held/conducted • No. of campaigns/fora held • No. of awareness seminars conducted	• Reports • Records • ESD materials	• GoK • CSOs • Private sector • Media • Development partners
	Consultation and ownership	• Identify stakeholders • Hold consultative meetings to sensitise stakeholders	• Stakeholders identified • Consultative meetings held • Stakeholders sensitised	• Category and number of stakeholders identified • No. of consultative meetings held • Category and no. of stakeholders sensitised	• List of stakeholders • Meeting minutes • Reports	
	Partnership and networks	• Identify partners • Hold consultative meetings • Formulate modalities for partnership	• Partners identified • Consultative meetings held • Networks established • Working modalities developed	• No. of partners identified • No. of consultative meetings held • No. of networks established • No. MoUs/agreements signed and implemented • No. of joint running programmes	• MOUs/agreements • Reports • Meeting minutes	

Table 1: Implementation Matrix continued

Objectives	Strategy	Activities	Output	OVIs	MOV	Actors
	Capacity building and training	• Orient and/or develop training programmes • Establish/develop ESD infrastructure at all levels • Conduct trainings	• Training programmes developed • Infrastructure for ESD in place • Trainings conducted at all levels	• No. and categories of training programmes developed • Types of infrastructure for ESD in place • No of training conducted at all levels	• Reports • Training programmes	
	Research and innovation	• Carry out a needs assessment • Develop mechanism to utilise appropriate aspects of indigenous knowledge in research and innovation	• Needs assessment • Reports • Regulatory framework • Indigenous knowledge (IK) repackaged and used in research and innovation	• No. of reports produced • Ethics upheld in research and innovation • Categories of stakeholders involved in research and innovation • Categories of indigenous knowledge repackaged and used in research and innovation	• Reports • Regulatory framework for research • Repackaged IK	
	Use of ICTs	• Develop action plans on ICT • Develop ESD ICT programmes e.g. E-learning • Conduct training on ICT • Produce ESD ICT resource materials • Develop ICT infrastructure	• Action plans developed • ICT training materials for ESD developed • Capacity in ICT built • ICT infrastructure for ESD developed	• No. of action plans • No. and types of training materials • No. of ICT users trained • No. of institutions/centres enhanced/built with functional ICT infrastructure for ESD • No of ESD Websites/pages established	• Action plans • ICT training material • Infrastructure developed • Databases on ICT • ESD websites	
	Monitoring and evaluation	• Develop appropriate M&E tools	• M&E tools developed	• No. of tools for M&E developed	• M&E tools • Reports	

Table 1: Implementation Matrix continued

Objectives	Strategy	Activities	Output	OVIs	MOV	Actors
		• Build capacity on M&E • Undertake M & E	• Capacity on M & E built • M & E undertaken	• No. and types of M&E training manuals developed • No of people trained on M&E • No. of M&E reports	• Register of people trained in ESD	
3. To promote teaching and learning that inculcates appropriate values, behaviour and lifestyles for good governance and sustainability	Advocacy and vision-building Consultation and ownership	• Identify and build consensus on desired pedagogies • Sensitse the stakeholders on ESD • Develop mechanisms to instill issues of governance and sustainability • Lobby for adoption of the appropriate pedagogies at all levels • Develop and disseminate IEC materials • Develop peer review mechanisms	• Consensus on desired pedagogies • Stakeholders sensitised • Appropriate mechanisms developed • Position papers presented to relevant policy-makers • IEC materials • Awareness campaigns on values, behaviour and lifestyles for good governance and sustainability conducted • Peer review mechanisms developed	• No. of dialogue meetings held • No. of issues identified and documented for dialogue • No. of meetings/workshops on awareness held • Position papers presented • No. and types of IEC materials developed and disseminated • Awareness campaigns conducted • Peer review mechanisms adopted	• Minutes of meetings • Reports • IEC materials • Position papers • Peer review tools	• GoK • CSOs • Private sector • Media • Development partners

Table 1: Implementation Matrix continued

Objectives	Strategy	Activities	Output	OVIs	MOV	Actors
	Partnership and networks	• Identify partners • Hold consultative meetings • Formulate modalities for partnership • Establish media for networking	• Partners identified • Consultative meetings held • MoUs established • Media network established	• Directories • No. of consultative meetings held • No. of MoUs signed • No. of media networks	• Directories • Reports • MoUs • Records	
	Capacity-building and training	• Orient curricula towards values of sustainability • Develop resource materials • Induct educators at all levels	• Curricula with the desired values of ESD in place • Induction materials developed • Educators inducted	• Curricula with the desired values of ESD in place • No. and categories of induction materials developed • No. of induction sessions conducted	• Curricula materials • Types and categories of induction materials • Reports	
	Research and innovation	• Carry out needs assessment on values related to sustainability • Establish partnership with stakeholders in research and innovation for ownership and patenting • Develop mechanism to tap indigenous knowledge in innovation	• Needs assessment reports • Stakeholders involvement in research and innovation • Indigenous knowledge repackaged and used in research and innovation	• No. of reports produced • Categories and number of stakeholders involved in research and innovation • No. of innovations built from indigenous knowledge	• Reports • Records • Documentations	

Table 1: Implementation Matrix continued

Objectives	Strategy	Activities	Output	OVIs	MOV	Actors
	Use of ICTs	• Develop action plans on ICT • Develop ESD ICT programmes e.g. E-learning • Training on ICT • Production of ESD ICT resource materials • Develop ICT infrastructure	• Action plans developed • ICT training materials for ESD developed • Capacity in ICT built • ESD ICT resource materials developed • ICT infrastructure for ESD developed	• No. of action plans • No. and types of training materials • No. of ICT users trained • No. and types ESD ICT resource materials • No. of institutions/centres enhanced/built with functional ICT infrastructure for ESD • No of ESD Web sites/pages established	• Action plans • ICT training material • Infrastructure developed • Databases on ICT • ESD web sites	
	Monitoring and evaluation	• Develop appropriate M & E tools • Build capacity on M & E • Undertake M & E	• M & E developed • Capacity on M & E built • M & E undertaken	• No. of tools for M & E developed • No. and types of training manuals developed • No of people trained on M & E • No. of M & E reports	• M & E tools • Reports • Register of people trained in ESD	

ANNEX I: NATIONAL GOALS OF EDUCATION

Education in Kenya should:

1. **Foster nationalism, patriotism and promote national unity**

   Kenya's people belong to different ethnic groups, races and religions, but these differences need not divide them. They must be able to live and interact as Kenyans. It is a paramount duty of education to help youth acquire this sense of nationhood, by removing conflicts and by promoting positive attitudes of mutual respect, which enable them to live together in harmony, and foster patriotism in order to make a positive contribution to the life of the nation.

2. **Promote the social economic, technological and industrial needs for national development**

   Education should prepare the youth of the country to play an effective and productive role in the life of the nation.

   a) **Social needs**

   Education in Kenya must prepare children for the changes in attitudes and relationships, which are necessary for the smooth process of rapidly developing modern economy. There is bound to be a silent social revolution following in the wake of rapid modernisation. Education should assist our youth to adapt to this change.

   b) **Economic needs**

   Education should produce citizens with skills, knowledge, expertise and personal qualities that are required to support a growing economy. Kenya is building up a modern and independent economy, which is in need of adequate domestic manpower.

   c) **Technological and industrial needs**

   Education in Kenya should provide the learners with the necessary skills and attitudes for industrial development. Kenya recognises the rapid industrial and technological changes taking place, especially in the developed world.

3. **Promote individual development and self-fulfilment**

   Education should provide opportunities for the fullest development of individual talents and personality. It should help children to develop their potential, interests and abilities. A vital aspect of individual development is character building.

4. Promote sound moral and religious values

Education should provide for the development of knowledge, skills and attitudes that will enhance acquisition of sound moral values and help children to grow up into self-disciplined, self-reliant and integrated citizens.

5. Promote social equality and responsibility

Education should promote social equality and foster a sense of social responsibility within an education system, which provides equal education opportunities for all. It should give all children varied and challenging opportunities for collective creative and corporate social service, irrespective of gender, ability or geographical environment.

6. Promote respect for and development of Kenya's rich and varied cultures

Education should instil in the youth an understanding of past and present cultures and their valid place in contemporary society. The children should be able to blend the best of traditional values with the changed requirements that must follow rapid development in order to build a stable and modern society.

7. Promote international consciousness and foster positive attitudes towards other nations

Kenya is part of the international community. It is part of the complicated and interdependent network of peoples and nations. Education should, therefore, lead the youth to accept membership in this international community with all the obligations and responsibilities, rights and benefits that membership entails.

8. Promote positive attitudes towards good health and environmental protection

Education should inculcate in the youth the value of good health in order to avoid indulging in activities that will lead to physical or mental ill-health. It should foster positive attitudes towards environmental development and conservation. It should lead the youth to appreciate the need for a healthy environment.

ANNEX II: STAKEHOLDER PARTICIPATION ACTION PLAN

Table 2: Stakeholder Participation Action Plan

Program Area	Activity	Reason/ Objective	Actors (Organisation/department/ Institution/ sector)	Time Frame
Research and Innovation	Conduct baseline survey	Needs assessment	Institutions of higher learning, research institutions, Government, CSOs, private sector, National ESD steering committee, development partners	**2008**
	Research design	To develop appropriate and contextualised socially critical (tranformative) research programmes		**2008-2010**
	Research Implementation	To develop appropriate ESD innovations		**2008-2014**
	Research reporting/ documentation	Knowledge building, positive socio-economic transformation, ecological sustainability and piloting innovations		**2008-2014**
	Monitor and evaluate	To disseminate knowledge, innovations, research findings, best practices and success stories to a wider audience for probable replication		**2008-2014**
		To asses the impact of the research programmes and activities as well as to inform future research		**2008-2014**
Advocacy and public awareness	Advocacy and public awareness campaigns for sustainable development	Promote understanding and raise awareness of ESD and enhance active participation by stakeholders	Institutions of higher learning, Government, CSOs, private sector, National ESD steering committee, media, development partners	**2008-2014**
	Production of advocacy and public awareness materials	Promote understanding and raise awareness of sustainable development challenges and the need to address them through appropriate innovations		**2008-2010**
		To aid/ facilitate advocacy and public awareness campaigns		

Table 2: Stakeholder Participation Action Plan continued

Capacity building and training	Conduct capacity building and training needs assessment	To establish the actual capacity building needs for ESD stakeholders	Institutions of higher learning, Government, CSOs, private sector, National ESD steering committee, development partners	**2008**
	Design capacity building and training programmes for ESD stakeholders	To develop appropriate, needs-specific and contextualised training programmes for ESD stakeholders		**2008-2009**
	Develop capacity building and training materials for ESD	To aid/ facilitate capacity building and training programmes		**2008-2010**
	Implement a training of trainers programme in ESD for stakeholder organizations	To build the capacity and increase the number of ESD trainers in the country		**2008**
	Initiate process-based professional development programmes for ESD for educators and curriculum developers (i.e. where the process is as important as the product)	To build the capacity of ESD practitioners in a manner that enhances applied competence and transformative orientations to professional development.		**2008-2014**
Resource material development	To conduct an ESD resource materials audit	To establish the different kinds of resources available and how they are used	Institutions of higher learning, Government, CSOs, private sector, National ESD steering committee, development partners	**2008-2009**
	To develop ESD materials/ guidelines for excellence	To guide the process of ESD resource materials development and ensure quality and compliance with ESD objectives and guiding principles		**2008-2009**
	Critical review of ESD resource materials	To enhance ESD in line with the objectives and underlying principles		**2008-2010**
	To develop ESD resource materials aligned to the existing curricula at all levels	To enhance and facilitate ESD processes		**2008-2012**
	Develop strategies for the integration of ESD approaches and materials into curricula at all levels	To support educators to use the ESD resource materials		**2008-2010**
Curricula orientation/ review towards ESD	ESD curricula needs assessment in the country	To establish sustainable development issues and concerns in the country that need to be incorporated into the curricula at all levels	Institutions of higher learning, Government, CSOs, private sector, National ESD steering committee, development partners	**2008 -2009**

Table 2: Stakeholder Participation Action Plan continued

	Critical review of the curricula at all levels in view of the objectives and principles of ESD	To establish missing links/gaps in the curricula in view of the ESD objectives and guiding principles		**2008-2010**
	Critical review of the approach to curriculum	To identify opportunities for integration and infusion of sustainable development concerns/ issues into the curricula		**2008-2010**
	Make curriculum policy recommendations to curriculum developers for consideration	To establish the strengths and weaknesses of the prevailing view of curricula in Kenya		**2008-2009**
	Create learning spaces for curriculum support staff and educators at all levels.	To influence a change of view to curriculum so as to fully accommodate ESD objectives, principles and processes		**2008-2010**
		To attain applied competence for ESD		**2008- 2012**
Networking and information dissemination	Share ESD best practices and experiences	To disseminate ESD knowledge and innovations to a wider audience for adoption	Institutions of higher learning, Government, CSOs, private sector, National ESD steering committee, development partners	**2008-2014**
		To gain knowledge and learn about innovations from other contexts with a view to improving ESD processes		**2008-2014**
	Develop appropriate infrastructure/media for networking	Promote effective and efficient networking		**2008-2010**

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