EAST AFRICAN COMMUNITY

CLIMATE CHANGE STRATEGY (2011-2016)

FINAL DRAFT

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FOREWORD

Climate is the region's most valuable natural resource. It is the inextricable link between human welfare and socio-economic development, between man and nature, and between survival and extinction. Realizing the benefits of this critical resource, and sustaining them, requires the highest level of cooperation by everyone in the region, everyone in industry, in agriculture, in trade, in fisheries, every resource user and every resource manager.

Such cooperation can best be achieved only when all stakeholders share the same purpose and focus. This Strategy navigates all in the region towards the same and similar actions. The Strategy moves the EAC Climate Change Policy into action. Both the Policy and the Strategy are anchored into the EAC Treaty and the Protocol on Environment and Natural Resources Management. Under Article 6 of the Protocol, Partner States commit themselves to ensure sound environment and natural resources management in the Community and to cooperate among themselves in realizing this obligation. Specifically, in Chapter three, the Protocol guides Partner States on areas of cooperation, including on effects of climate change, environmental disaster preparedness and management, as well as several other related areas. These areas are the focus of this Strategy.

Combating desertification and mitigating effects of drought requires the development of early warning systems to predict drought in order to reduce the vulnerability of society and natural systems. It requires afforestation, reforestation, tree planting and conservation programmes to prevent desertification or mitigate the effects of drought. Sustainable agriculture requires promoting the use of drought-resistant, disease-tolerant crops for ensuring food security. Water security demands promoting strategies for harvesting and storage of rain water and increase of ground water by rainwater infiltration. All these and other proposed strategic actions call for promotion of awareness and facilitating the participation of local communities and civil society organizations; the development and implementation of education and training programmes, including strengthening of human and institutional capacities on climate change; and the transfer, acquisition and adaptation of relevant technologies.

This Strategy comes at a time when the necessary context for cooperation on the subject of climate change has been established at the Partner States level, the EAC level and at the Global level. This condition creates the opportunity for each level to learn and support the other level. The challenge is now for all stakeholders, in private and public sectors, national and international organizations, individuals and groups, to lend their sustained support to the implementation of the EAC Climate Change Strategy.

PREFACE

Climate change is a huge challenge. It is putting at risk both lives and livelihoods, whilst also threatening the very survival of many species of plants and animals in the region. Currently, Partner States of the EAC, like many other nations in Africa, are living well below their environmental limits. Although the region is heavily reliant on fossil fuels for its energy use, in comparative terms, it is consuming negligibly; the region's use of wider global resources, including emission levels of greenhouse gases into the atmosphere are nothing to tell. Climate change is a social justice issue. Globally, its impacts are disproportionately affecting those least able to manage them and who are, at the same time, least responsible for causing the problem.

The global challenge that humankind faces is real. Climate science shows clearly that, without immediate, radical and sustained reductions in global greenhouse gas emissions, there will be severe consequences for human society, as well as the biodiversity and ecosystems that provide essential services for human livelihoods. Urgent and sustained action to cut greenhouse gas emissions is needed globally to avoid the worst impacts of climate change in the future. Economic analysis suggests that action now will substantially reduce future costs of cutting emissions. In terms of adapting to future climate impacts too, the earlier we start to prepare, by understanding our vulnerability and building our capacity to adapt, the better equipped we will be to respond appropriately.

There is now an increasing understanding and appreciation of our inter-dependence with the other species we share the planet with.We need to make some big and urgent changes in how we travel, manage our land, and run our economy. A low carbon East Africa can be prosperous, bringing many benefits beyond tackling climate change. It can mean cheaper, more reliable energy, better air quality, improved public health and more comfortable homes. EAC has a clear role to play in tackling climate change. This Strategy, and the associated Policy on Climate Change, confirm our commitment and the areas where we will act, and where we will work with our partners, to enable effective adaptation in the region, reduce greenhouse gas (GHG) emissions through supported actions. The Strategy represents an important milestone in action on climate change in East Africa. It highlights the importance of the region's interventions to make clear the critical contribution that people, communities, organisations and businesses across East Africa will need to make to enable the region to deliver on the climate agenda.

The challenge of climate change also brings with it new opportunities. Electricity will remain an important energy carrier in the global economy in the future. While substantial improvements in efficiency can offset some of the anticipated growth in electricity demand, increasing electrification in the region, will require significant increases in electricity supply. Reducing GHG emissions from electricity supply could be achieved through further improvements in the efficiency of fossil-based electricity generation technologies and deployment of renewable technologies. The so-called "transition" technologies, such as high-efficiency natural-gas fired power plants, are not completely free of GHG emissions, but are capable of achieving significant reductions of GHG emissions in the near and mid terms by significantly improving or displacing higher GHG-emitting technologies in use. Ideally, transition technologies would also be compatible with more advanced GHG-free technologies that would follow in the future. A region-wide drive to improve energy efficiency is a win-win strategy, as this not only lowers their carbon emissions but renders economic sectors more cost-competitive in a high oil price environment. While processes in various economic sectors in the region are differentiated, there are common approaches to improving their energy efficiency. Improvements in methods and technologies to collect methane and detect leaks from various sources, such as landfills, coal mines, natural gas pipelines, and oil and gas exploration operations, can prevent this GHG from escaping to the atmosphere. These methods are often cost-effective, because the collected methane is a fuel that can be used directly or sold in natural gas markets. Critically significant for the region is that, efforts to mitigate and adapt to climate change must be held in context with the need to reduce poverty and achieve sustainable development. A strategy to combat poverty cannot be built without a clear strategy on climate change, as the key sectors for community livelihoods and the regional economy are precisely the

ones which will suffer the most from the impacts of global warming. These opportunities are in line with EAC and its Partner States' environmental, health and socio-economic objectives, including achievement of the MDGs.

Reaching this point, being able to clearly set out the actions that will contribute towards climate change is important, but the next stages are even more critical, and more challenging. In the Strategy, we have set out a framework to enable effective response to climate change in the region. Now we will endeavour to ensure that this is embedded in all our plans and enables organizations and communities to make themselves more resilient to the impacts of climate change and benefit from opportunities arising from this challenge. We know there are additional and significant challenges associated with many of the proposed actions in terms of resources necessary, and the sheer deliverability of change on the scale demanded. But, we also know that the costs of inaction are greater. These are challenges that we must confront to avoid a legacy of climate change on a scale that will fundamentally undermine the wellbeing of future generations and many more vulnerable groups in the region now.

This Strategy is a critical step on a journey to meeting that bigger challenge and we are determined to deliver and be accountable. We will monitor progress and update our delivery plans as we identify further action that we can take.

The EAC and its Partner States have the potential to respond to this threat and, with the support of its development partners, reduce its impact on livelihoods and on the economy. This Strategy is another milestone to enhance a coordinated regional response to climate change. A key element is the sustained ownership of the climate agenda at the highest political level within Partner States and at the EAC.

ABBREVIATIONS AND ACRONYMS

AR4	Fourth Assessment Report
AMCEN	African Ministerial Conference on the environment
ASAL	Arid and Semi Arid Lands
BAPA	Buenos Aires Plan of Action
CBD	Convention of Biological Diversity
CERs	Certified Emission Reductions
CDM	Clean Development Mechanism
CITIES	Convention on International Trade in Endangered Species of Wild Flora and Fauna
CH4	Methane
CO2	Carbon Dioxide
COM	Council of Ministers
CSO	Civil Society Organizations
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
ENSO	El Nino Southern Oscillation
EAC	East African Community
EACCCP	EAC Climate Change Policy
ECA	Economic Commission for Africa
EIA	Environmental Impact Assessment
EIT	Economy in Transition
ENSO	El Niño Southern Oscillation (climate pattern)
ET	Emissions Trading
EWS	Early Warning Systems
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gases
HFA	Hyogo Framework for Action
IPCC	Intergovernmental Panel on Climate Change
IPR	Intellectual Property Rights
JI	Joint Implementation
KP	The Kyoto Protocol to the UNFCCC
LDCs	Least Developed Countries
LULUCF	Land-Use Land-Use Change and Forestry
MEA	Multilateral Environmental Agreements
MDG	Millennium Development Goals
MRV	Measurable Reportable and Verifiable
NAPAs	National Adaptation Programmes of Action
NAPs	National Adaptation Plans
NCs	National Communications
NEPAD	New Partnership for Africa's Development
POPs	Persistent Organic Pollutants
REDD	Reducing Emission from Deforestation and Forest Degradation
SADC	Southern African Development Community
SCCF	Special Climate Change Fund
UNCC	United Nations Convention on Combating Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNISDR	United Nations International Strategy for Disaster Reduction
USAID	United States Agency for International Development
WWF	World Wide Fund for Nature

TERMINOLOGIES AND CONCEPTS

Adaptive capacity: ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences.

A1B scenario: one of three emission scenarios of the IPCC under the family of scenario describing a future with rapid economic growth and population peaks in mid century with a balance of fossil fuel intensive and non-fossil energy sources.

Climate: situation of a climate system, including the statistical description, taking into account averages and variations in temperature, rainfall, winds and other relevant meteorological factors in a given period.

Climate change: in the Intergovernmental Panel on Climate Change usage, refers to any change in climate over time, whether due to natural variability or as a result of human activity. This usage differs from that in the United Nations Framework Convention on Climate Change (UNFCCC) where Climate Change is defined as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods".

Climate variability: seasonal shifts in mean climatic conditions such as temperature and precipitation.

Climate change adaptation: adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. Such adjustment may be preventive or reactive, private or public, autonomous or planned.

Climate change mitigation: human interventions to reduce the sources or enhance sinks of greenhouse gases.

Carbon sink: any process, activity or mechanism that removes greenhouse gases, aerosols or precursors of greenhouse gases from the atmosphere.
Coping capacity: means by which people or organizations use available resources and abilities to deal with adverse consequences of disaster. The strengthening of coping capacities usually builds resilience to withstand the effects of natural and human-induced hazards.

Disaster risk management: the systematic process of using administrative decisions, organizations, operational skills and capacities to implement policies, strategies and coping capacities of communities to lessen the impacts of natural hazards.

Disaster risk reduction: is the conceptual framework of actions considered and taken with the possibilities of minimising social and economic vulnerabilities to hazards and disaster risks in a society, to avoid (prevention), or to limit the adverse impacts of hazards (mitigation), within the broad context of sustainable development.

Disaster mitigation: Structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards.

Early warning system: is a functional system for generation and provision of timely and effective information, through identified institutions, that allows individuals exposed to a hazard to take action to avoid or reduce their risk and prepare for effective response

Climate Impact Assessment: the practice of identifying and evaluating the detrimental and beneficial consequences of climate change on natural and human systems

El Niño Southern Oscillation: a complex interaction of the tropical Pacific Ocean and the global atmosphere that results in irregular episodes of changes in sea surface temperatures accompanied by either above or below average rainfall in the tropics and Pacific Rim countries resulting to La Nina and El Niño conditions associated with droughts and flooding respectively.

Greenhouse gases: gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infrared radiation.

Global warming: intensifying greenhouse effect resulting from anthropogenic actions, where the consequence is an increase in the concentration of greenhouse gases, aerosols or their predecessors in the atmosphere, which absorb part of the infrared radiation emitted by the Earth's surface, thus increasing the average temperature on the planet and causing adverse climatic phenomena.

Risk assessment: a methodology to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that could pose a potential threat or harm to people, property, livelihoods and the environment on which they depend on.

Resilience: the ability of a system to adapt to climate change, whether by taking advantage of the opportunities or by dealing with their consequences; the analysis of adaptation identifies and evaluates the different options, benefits and costs of the measures.

Sustainable Development: Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.

Vulnerability: The degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate change and variation to which a system is exposed, its sensitivity and its adaptive capacity.

(Adopted from IPCC, UNFCCC and UNISDR)

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EXECUTIVE SUMMARY

Climate change is contemporarily the most important global environmental, social and economic challenge, predicted to have severe impacts on a planetary scale. The adverse impacts of climate change on environment, human health, food security, human settlements, economic activities, natural resources, and physical infrastructure are already noticeable world-wide. Global warming is the most stricking indication of the pronounced Climate Change issue. It is the most direct effect of the increased trapping of heat radiation.

Climate science has a firm basis in physics and is supported by a wealth of evidence from real world observations. The Reports of IPCC represent the best consensus to-date on the Climate Change agenda. The Fourth Assessment Report (AR4) of the IPCC, completed in November 2007, finds with more than 90% probability that human action is implicated in today's climate change, and presents the already observed and projected impacts it will give rise to. It is certain that increased greenhouse gas emissions from the burning of fossil fuels and from land use change lead to a warming of climate, and it is very likely that these greenhouse gases are the dominant cause of the global warming that has been taking place since the industrial revolution.

Climate change primarily manifests itself in terms of temperature increase, variability of precipitation patterns, and change in the frequency and intensity of extreme events and sea level rise. Rainfall and temperature are the main driving forces that trigger productivity in agriculture and of ecosystems.

Climatic variability and extremes are a great concern for East African countries where the link between climate and livelihood is very strong. Several impacts are already observable and there is broad scientific consensus that further climate change impacts will occur. Adverse effects of climate change are threatening to undo decades of development efforts and frustrate poverty eradication programmes in the Partner States.

Several interventions have been undertaken by Partner States, and some are ongoing, ranging from reforestation and afforestation projects, rehabilitation of degraded areas, water harvesting, conservation of ecosystems to demonstration of cleaner production technologies and techniques (sustainable production, particularly in industries), and energy efficiency and energy conservation.

Environment and natural resources management are amongst the areas of cooperation identified under Articles 111 and 112 of the Treaty for the Establishment of the EAC. Article 100 of the Treaty on Meteorological Services seeks to promote collection, dissemination and of meteorological information to facilitate efficient early warning and extreme and adverse weather and climatic phenomenon including climate change. The EAC has developed a Protocol on Environment and Natural Resources Management which was signed in 2006. The aim of the Protocol is promote and enhance cooperation in the management of environmental and natural resources amongst the Partner States. The areas covered by the Protocol include; biodiversity, land, rangelands ,forests, wildlife, water, wetlands, coastal and marine, fisheries, mineral, energy, tourism, mountainous and genetic resources, climate change, desertification and droughts, depletion of ozone layer, biosafety and biotechnology, hazardous waste chemical and pollution control and environmental disaster preparedness and management.

The EAC Climate Change Policy was prepared in response to the growing concern about the increasing threats of the negative Climate Change impacts to the attainment of set targets and goals for sustainable development in the region. The Goal of the Policy is to contribute to sustainable development through harmonized and coordinated regional strategies, programmes and actions to address Climate Change and

guide Partner States and other stakeholders on the preparation and implementation of collective measures to address Climate Change in the region.

The EAC Ministerial Declaration on Climate Change and EAC Food Security and Climate Change Declaration (April 2011), EAC Common Negotiation Position on Climate Change (2009) have also been developed.

EAC Partner States have signed to several regional and Multilateral Environmental Agreements (MEAs) and their related Protocols and Treaties including the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol (KP). Partner States and Regional Economic Communities (RECs) have put in place strategies and plans, and are implementing them, as required by these instruments.

The United Nations Framework Convention on Climate Change (UNFCCC) provides overall framework for intergovernmental efforts to tackle the challenge posed by climate change. Article 2 of the Convention sets the ultimate objective of the Convention and its related legal instrument (the Kyoto Protocol) adopted by the Conference of Parties is "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system within a timeframe sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner". The Convention sets out a framework for action aimed at stabilizing atmospheric concentrations of greenhouse gases to avoid "dangerous anthropogenic interference'' with the climate system.

The Kyoto Protocol, provides the rules and operational modalities on how countries would reduce emissions and measure their emission reductions, a package of laid down detailed rules on: three flexible mechanisms (Emissions trading, Joint implementation and the Clean Development Mechanism); reporting and methodologies; land use, land use change and forestry (LULUCF); and compliance. The Protocol also addresses issues such as support for developing countries, including capacity building, technology transfer, and responding to the adverse impacts of climate change.

The Protocol recognizes that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity. The Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

The Kyoto Protocol (KP) is a legally binding international agreement/treaty committing developed countries and countries in transition and the European Community (EC) to a market economy to emission reduction targets. These countries, referred to in Convention as Annex 1 Parties, are required to reduce their overall emissions of six greenhouse gases by an average of 5.2% below 1990 levels between 2008 and 2012 (the first commitment period), with specific targets, varying by country.

The objective of the Kyoto Protocol is to reduce global greenhouse gas emissions by at least 5% in comparison to the base year of 1990, during the commitment period from 2008 to 2012. To reach this goal, Annex B of the Protocol sets binding targets for each of Annex1 Parties, for the first commitment period (2008-2012) in percentage of their base year emission, thus limiting their emissions of six greenhouse gases, given aggregated in carbon dioxide equivalent emissions. The Kyoto Protocol supplements the UNFCCC which did not set any limitations or enforcement mechanisms for the attainment of its objective.

Even though there are no binding targets for GHG emission reduction for non-Annex I Parties, these Parties share a common responsibility expressed in general obligations of all Parties to the Protocol (Article 10).

Annex 1 Parties that have commitments to reduce greenhouse gas emissions must meet their targets primarily through national measures. To supplement domestic action, the Protocol provides three so-called "flexible mechanisms" which allow Annex 1 Parties to meet their GHG targets by purchasing GHG emission reductions from elsewhere. These can be bought either from financial exchanges (such as EU Emissions Trading Scheme) or from projects which reduce emissions in non-Annex 1 Countries under the CDM), or in other Annex-1 countries under the JI, to achieve the objectives of the Convention in a cost-effective way. The purpose of the Clean Development Mechanism is to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3." The CDM is designed to encourage production of emission reductions in non-Annex I countries. It was designed to limit emissions in developing countries, in such a way that developing countries do not bear the costs for limiting emissions. All Partner States have set up Designated National Authorities to manage the Kyoto process, specifically the "CDM process", and are deciding which GHG Projects they do or do not wish to propose for accreditation by the CDM Executive Board. Three funds are established, namely: the LDC Fund, the Special Climate Change Fund and the Adaptation Fund.

The EAC Climate Change Policy prioritizes adaptation measures; regions, sectors and communities that are more vulnerable to climate change impacts; mainstreaming climate change into national development plans; social and economic development; as well as partnerships, collaboration and synergies among various stakeholders. This Strategy elaborates on these areas of distinctiveness with regard to environment and development of critical importance to the Partner States and the region in an integrated manner according to the EAC Climate Change Policy. These include, but are not limited to the following: Water resources; Agriculture (crop, livestock and fisheries production); Wildlife; Coastal and marine ecosystems; Land use and soil protection; Wetlands; Forestry; Health; Disaster risk management; Energy; Tourism; Industry; Gender and community development; Transport and Infrastructure; Education; and Human settlements.

The EAC Climate Change Strategy shall guide the implementation of the EAC Climate Change Policy over a five year period (2011-2015). The Strategy will provide a short to medium term framework for implementing elaborate and concrete climate change adaptation and mitigation programmes and projects to be implemented. Disaster risk reduction (DRR) measures in the various sectors (including early warning systems and emergency response) will be prioritized noting disaster risk reduction approaches as critical too towards climate change adaptation tool. A regional Climate Change Master Plan shall also be developed. The EAC Climate Change Master Plan will serve as regional blue print to guide regional climate change response measures in the long term.

The Goal for the Strategy is to contribute to successful implementation of EAC Climate Change Policy objectives.

The Vision is for an East Africa with a* prosperous population, *climate-proofed, climate resilient, and disaster resilient development.

The Mission is to enhance a coordinated regional response to climate change within East Africa for the achievement of sustainable development, *based on the climate change policy priorities for the region.*

The Strategy is based upon the following six broad strategic objectives:

(a) To enhance climate change adaptation through vulnerability reduction, building socio-economic resilience, disaster risk reduction and adaptation planning.
(b) To enhance sustainable development through climate change mitigation measures, including through green economy and low carbon development pathways.

(c) To strengthen climate change knowledge generation through research, monitoring, detection and prediction.
(d) To enhance climate change education and public awareness through communication, training, information and knowledge management and social empowerment including gender.
(e) To build climate change response capacity through institutional strengthening, technology transfer, resource mobilization and partnership building and stakeholder involvement.
(f) To ensure a Sustainable Financing Mechanism for climate change.

The Strategy sets out a range of measures, taking account of those already in place in the Partner States to ensure effective implementation of the EAC Climate Change Policy at all levels. It presents Strategic Actions for each of the Sectoral Objectives of the EAC Climate Change Policy, and scales the relative priority for each proposed action on the basis of opportunities available and capacity to implement, such that a short-term, medium-term and long-term action plan can be extracted.

In order to enhance EAC's capacity to implement the Policy and its instruments, establishment of a Climate Change Coordination Unit (CCCU) is proposed at the EAC Secretariat under the Department of Environment and Natural Resources. The Coordination Unit shall coordinate and oversee the effective implementation of programmes and projects emanating from the EAC Climate Change Strategy and Master Plan, in accordance with the EAC Climate Change Policy. It will work closely with other EAC organs and specialized institutions including the Lake Victoria Basin Commission (LVBC), Lake Victoria Fisheries Organization (LVFO), Inter-University Council of East Africa (IUCEA), East Africa Legislative Assembly (EALA), etc, and Partner States institutions and agencies across various relevant sectors as identified in the Policy. A Climate Change Programme Management Unit (PMU) shall be establishment at the EAC Secretariat with support from development and bilateral partners. The PMU shall be under the supervision of the Directorate of Productive and Social Sectors. The overall policy direction shall be provided by the Sectoral Council on Environment and Natural Resources (SCENR).

The Climate Change Working Group (CCWG) comprising of climate change experts from the Partner States established by the Sectoral Council on Environment and Natural Resources shall provide technical guidance on the implementation of the Strategy and the Master Plan. The Climate Change Coordination Unit shall also work in close liaison with Partner States institutions and agencies in all the relevant sectors adversely affected by the impacts of climate change and with potential to enhance adaptation and mitigate the causes of climate change.

The Strategy will be implemented in partnership and collaboration with other relevant stakeholders including non-governmental organisations, civil society, private sector and development partners. The EAC Climate Change Fund shall form a critical component of the resource mobilization strategy to be developed. The aim of the Fund is to mobilise financial resources from various existing and emerging sources of climate change finance. The Fund will also propose innovative ways of raising national resources towards the implementation of urgent and immediate activities in the short term while mechanisms for accessing international climate change finances are being put in place.

The EAC shall be responsible for tracking, coordinating and overseeing the implementation of this strategic plan in collaboration with the Partner States. The EAC Secretariat will develop a robust monitoring and evaluation framework with clear milestones and indicators for the efficient implementation of the regional climate change programmes and projects as prioritized by the Climate Change Policy and Strategy. Monitoring and evaluation of the national climate change projects will be the responsibility of Partner States.

This Strategy provides a framework for giving strategic direction to Partner States and other stakeholders in addressing regional challenges and opportunities arising from climate change in an integrated and coordinated manner. Its implementation is to be complemented by climate change strategies of Partner States whose institutional structures will implement it in accordance with their determined mandates at that level.

The institutional and management arrangements proposed are effectively integrated into existing EAC decision-making structures and dissemination mechanisms. Its implementation will seek to achieve effective and operational linkages with Partner States' decision-making systems at the appropriate levels. This will ensure that the overall implementation of the Strategy benefits from high level support and from supervision at the EAC and by Partner States. In this way, the Strategy implementation is poised to enjoy strong coordination, communications, partnership building, resource mobilization and monitoring capacity. The proposed institutional and management arrangements are structured reflect available resources, with the opportunity to grow with the available resources at the material time.

Capacity building and institutional strengthening to enhance the capacity of government ministries and agencies, civil society and the private sector to meet the challenge of climate change is a necessary component of the Strategy. The EAC will develop and implement a comprehensive communications strategy to raise awareness of climate change impacts and the advantages of early attention to adaptation, including partnerships with key national professional and interest groups to develop best practice networks. The Strategy implementation will need to benefit not only from a broad consultation and participatory process, but also have access to high quality expertise in the concerned technical areas, as well as reputable technical support and supervision. With a region-wide drive to improve energy efficiency there will be a demand for energy management capabilities and services and carbon consultancy services. The development and deployment, on a regional scale, of new and advanced climate change technologies will require a skilled workforce and an abundance of intellectual talent, well versed in associated concepts and disciplines of climate science and engineering. Workforce development and education are integral components of any sustained and successful scientific and technological undertaking of this scope and magnitude. The Strategy anticipates a future where such activities relevant for the commercial market for technologies that reduce, avoid, capture or sequester GHG emissions, will be of high demand and the need to nurture the careers, professional experience, skills and competencies required. The establishment of relevant training courses, accreditation schemes and institutes will help to build up a pool of such skills and expertise in the region. A strong and creative science programme is necessary to support and enable technical progress in this area.

The Strategy is designed to build on continued improvement in the understanding of the detailed effects and resulting impacts of climate change in the region, as climate change science continues to bring new knowledge about the potential effects of a changing climate system. It is expected that much will be learned through the early steps with the practical actions set out in this Strategy, its focus will continually be updated to reflect public awareness and action, as well as developments in technology and climate science. Regular monitoring and review of adaptation plans will be necessary as new and better information becomes available, and in light of experience.

Research and knowledge management is critical to predict the likely scale and timing of climate change impacts on different sectors of the economy and socioeconomic groups; to underpin future investment strategies; and to ensure that East Africa is networked into the latest global thinking on climate change. Promoting research and development to enhance the region's capability is of essence, particularly in climate change adaptation and mitigation technologies. The Strategy highlights strengthening basic research in public institutions' research facilities and academia by focusing efforts on key areas needed to develop

insights or breakthroughs relevant to climate-related technology R&D. However, public institutions' research is but one element of the overall strategy for development and adoption of advanced climate change technologies. Importantly, the Strategy lays a foundation for a sustained region-wide R&D initiative to strengthen the research enterprise for climate change, stimulate innovation on a broad scale, both inside and outside Government institutions in the region. Engagement in this process by private entities, including business, industry, agriculture, construction and other sectors in the region, as well as by non-central governmental entities, such as the local government authorities and non-governmental organizations, is essential to help guide R&D investments wisely and to expedite deployment and adoption of innovative and cost-effective approaches for climate change adaptation and mitigation. Public-private partnerships not only leverage Governments' resources, but also facilitate the transfer of technologies from national laboratories into commercial applications. Partnering can also advise on direction and improve the productivity of public research. Private partners also benefit, because those who are engaged in Government R&D gain rights to intellectual property and access to world-class scientists, engineers, and laboratory facilities. This can help motivate further investment in the commercialization of climate change technologies. Through implementation of this Strategy, innovations can be expected to change the ways in which the region produces and uses energy, performs industrial processes, grows crops and livestock, manages GHG, and uses land. In keeping with EAC climate change Policy, which is consistent with the United Nations' Framework Convention, adaptation and mitigation technologies could provide both the energy-related and other services needed to spur and sustain economic growth for the region, as they enable, facilitate and give rise to a gradual shift toward GHG emissions reduction.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Climate is East Africa's most valuable natural resource. It is a natural resource that is a key determinant of the status of other natural resources including water, land, plants and animals, on which the economic and social development of the region depends. Adverse effects of climate change are threatening to undo decades of development efforts and frustrate poverty eradication programmes in the Partner States. Climate change primarily manifests itself in terms of temperature increase, variability of precipitation patterns, and change in the frequency and intensity of extreme events and sea level rise. Rainfall and temperature are the main driving forces that trigger productivity in agriculture and of ecosystems. Climatic variability and extremes are a great concern for East African countries where the link between climate and livelihood is very strong. Climate change in the region is translated directly to the economic and social performance of the region. Depending heavily on rain-fed agriculture, rural livelihoods are highly vulnerable to climate variability such as shifts in growing season conditions. As rainfall and atmospheric temperatures change, land use potential and productivity will change mainly in response to changes in primary productivity. Several impacts are already observable in the Partner States and there is broad scientific consensus that further climate change impacts will occur. East Africa's climate is changing.

Climate change is contemporarily the most important global environmental, social and economic challenge, predicted to have severe impacts on a planetary scale. The adverse impacts of climate change on environment, human health, food security, human settlements, economic activities, natural resources, and physical infrastructure are already noticeable world-wide. The need to address the problem of climate change and respond to the priority needs of developing countries to achieve sustained economic growth and eradicate poverty is one of the guiding principles that govern the implementation of the UN Framework Convention on Climate Change (UNFCCC). Article 3.4 of the Convention states that Parties have a right to, and should, promote sustainable development. It further states that policies and measures to address climate change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change. This link between climate change and sustainable development is further emphasized in the guidelines for the preparation of national communications by Parties not included in Annex I to the Convention (non-Annex I Parties) which request these Parties to include programmes relating to sustainable development in their national communications.

It is now established that rising concentrations of anthropogenically-produced greenhouse gases in the Earth's atmosphere are leading to changes in the global climate. Increased concentration of small quantities of certain gases in the atmosphere is the cause of this concern. These gases are carbon-dioxide, methane, nitrous oxide, and several manufactured gases of which the most important are chloroflouro-carbons (CFCs). Ozone in the lower atmosphere, whose concentration is affected by human activities, is also an important trace gas in the global warming equation. Water vapor is intimately involved in the greenhouse question because its concentration is linked with those of other gases through a feedback mechanism. Warming bought about by other greenhouse gases increases evaporation, and allows the atmosphere to hold more water vapour, in turn enhancing warming. Carbon-dioxide is the most important greenhouse gas. Apart from cholorofloure-carbons, these gases also occur naturally in the atmosphere.

The extraordinarily high levels of energy consumption by the industrialized countries are the principal contributor to the build-up of greenhouse gases in the atmosphere. The extraction and combustion of coal, oil and natural gas releases carbon-dioxide and methane in the atmosphere. Carbon-dioxide is the most abundant green-house gas, currently contributing 55% of the total man-made annual additions to the greenhouse effect. Deforestation, which hastens the extinction of species and contributes to soil loss, also contributes to the build-up of heat-trapping gases through carbon-dioxide emissions (burning) and through reduction of its sinks. Expanding agricultural activities world-wide also contribute to the build-up of such gases as methane from paddy cultivation of rice, and nitrous oxide from breakdown of nitrogenous fertilizers. Waste disposal in landfills also emit relatively small but significant quantities of methane. Humankind has dramatically altered the chemical composition of the global atmosphere with substantial implications for the climate on a planetary scale. Global warming is the most stricking indication of the pronounced Climate Change issue. It is the most direct effect of the increased trapping of heat radiation.

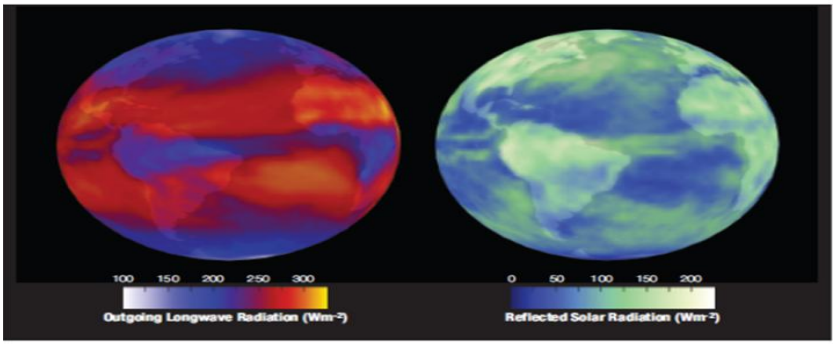


Figure 1: Depicting a warming Planet Earth

A major driving force on the global warming discussion derives from the work of the Inter-governmental Panel on Climate Change (IPCC), a scientific group set up by the United Nations in 1988 to investigate the science of human-induced climate change and to advice on how to deal with the problem and its impacts. The Reports of IPCC represent the best consensus to-date on the Climate Change agenda. The Fourth Assessment Report (AR4) of the IPCC, completed in November 2007, finds with more than 90% probability that human action is implicated in today's climate change, and presents the already observed and projected impacts it will give rise to.

The IPCC Report presents observational evidence of potential impacts of climate change on sectors and on regions, key vulnerability scenarios and risks, the potential for adaptation and the implications of impacts for sustainability. Substantial new evidence from studies on a wide range of species and communities suggests that the impacts of climate change is strongly related to projected increases in temperature, evaporation, sea level and precipitation variability. Projected changes in the frequency and severity of extreme climate events have significant consequences on agriculture and food security, freshwater availability for humans and ecosystems, human and animal health, biodiversity and ecosystems, as well as social and economic sectors including energy, forestry, wildlife, tourism, industry, human settlements, transport and infrastructure.

The Report highlights several concerns of potential impacts that could occur as a result of climate change in Africa. Africa is characterized by a wide variety of climate systems, ranging from humid equatorial systems, through seasonally-arid tropical, to sub-tropical Mediterranean-type climates. Because of multiple stresses and low adaptive capacity, Africa is the most vulnerable continent to climate change and variability. The key vulnerable sectors of concern relate to agriculture and food security; water resources; ecosystem degradation and depletion of biodiversity; prevalence of human diseases and plant pests; degradation of coastal areas; and the general insecurity occasioned by the incidence of extreme weather events such as floods and droughts.

1.2 EAC Policy Context and Achievements

Under the auspices of the East African Community, Partner States have put in place a number of cooperative instruments and measures which provide the common foundation for confronting the challenges of climate change jointly. Notable among these are:-

Treaty for Establishment of the East African Community

The Treaty for the establishment of the East African Community was signed on 30 November 1999 and entered into force on 7 July 2000 following its ratification by the Partner States. Environment and natural resources management is amongst the areas of cooperation identified under the Treaty. Article 112 of the Treaty endears the Partner States to cooperate in all issues of environment and natural resource management. The Treaty requires the Partner States to cooperate to preserve, protect and enhance the quality of the environment and to ensure sustainable utilization of shared natural resources. Article 100 of the Treaty on Meteorological Services seeks to promote collection, dissemination and of meteorological information to facilitate efficient early warning on extreme and adverse weather and climatic phenomenon including climate change. In their cooperation Partner States are required to develop common policies and strategies jointly to ensue sustenance and preservation of ecosystems, including terrestrial and aquatic resources and to prevent negative trans-boundary impacts. They are expected, iner alia, to integrate environmental management and conservation measures in all their national development plans and activities, institute measures to promote public awareness and education, harmonize their policies, regulations and adopt common environmental standards and exchange information.

EAC Protocol on Environment and Natural Resources Management

The Protocol on Environment and Natural Resources Management operationalizes the Treaty provisions for promoting and enhancing cooperation in the management of environmental and natural resources amongst the Partner States. The areas covered by the Protocol include; *biodiversity, land, rangelands ,forests, wildlife, water, wetlands, coastal and marine, fisheries, mineral, energy, tourism, mountainous and genetic resources, climate change, desertification and droughts, depletion of ozone layer, biosafety and biotechnology, hazardous waste chemical and pollution control* and *environmental disaster preparedness and management.*

EAC Development Strategy

The East African Community operates on the basis of a five-year Development Strategy, which, operationally, is rolled over through a consultative review process, to facilitate the implementation of the Treaty in a systematic manner. The first EAC Development Strategy (1997-2000) was succeeded by the second EAC Development Strategy (2001 – 2005), after the expiry of which the third EAC Development Strategy 2006-2010 was formulated. Currently, the fourth EAC Development Strategy 2011-2016 is being finalized. The Strategy document spells out the policy guidelines, priority programmes and implementation schedules.

EAC Climate Change Policy

The EAC Climate Change Policy was approved by the 9th Extra Ordinary Summit held on 19th April 2011, following a directive of the Heads of State Summit to develop a regional climate change policy and strategy in view of the adverse impacts of climate change in the region and harness any potential opportunities posed by climate change on basis of the principle of sustainable development. The overall objective of the Policy is to guide Partner States and other stakeholders on the preparation and implementation of collective measures to address Climate Change in the region, in the context of sustainable social and economic development. In

view of the high vulnerability of the region to the impacts of climate change, with the associated challenges especially for food security, adaptation to climate change is highlighted for first priority in the region.

Lake Victoria Basin Commission

The East African Community has designated Lake Victoria and its Basin as an "area of common economic interest" and a "regional economic growth zone" to be developed jointly by the Partner States. Lake Victoria is the focus of attention, following the declaration by the East African Community Heads of State that a joint programme be developed for the overall management and rational utilization of the shared resources of the Lake. The Lake Victoria Basin Commission was established by a Protocol under article 33 of the Treaty, as a specialized institution of the **East African Community (EAC)** that is responsible for coordinating the sustainable development agenda of the Lake Victoria Basin. The objectives and broad functions of the Commission is to promote, coordinate and facilitate development initiatives within the Lake Victoria basin. The Lake Victoria Basin Commission is a mechanism for coordinating the various interventions on the Lake and in the basin; and serving as a centre for promotion of investments and information sharing among the various stakeholders. The Protocol on Sustainable Development of Lake Victoria Basin gives the legal backing for all the intended interventions in the Lake Basin.

The Lake Victoria Fisheries Organization

The Lake Victoria Fisheries Organization (LVFO) was established through a Convention signed in 1994 by the Partner States as a result of the need to manage the fisheries resources of Lake Victoria in a coordinated manner. The Organisation is an institution of the EAC whose aim is to harmonise, develop and adopt conservation and management measures for the sustainable utilisation of living resources of Lake Victoria to optimise socio-economic benefits from the basin for the Partner States.

Figure 2: Nile perch - a source of local wealth and

Agriculture and Rural Development Policy and Strategy for the EAC (2005-2030)

The overall objective of the EAC Treaty regarding cooperation in agriculture and rural development is the achievement of food security and rational agricultural production. The EAC Agriculture and Rural Development Policy (EAC-ARDP) represents the initial step for implementing the provisions of the EAC Treaty set out in Articles 105-110, and provides a common pillar for food security and sustainable agriculture in the region. The EAC Agriculture and Rural Development Strategy sets out the roadmap for implementing the Agriculture and Rural Development Policy, for improvement of rural life in the region through increased productivity and production of food and raw materials, improved food security, provision of an enabling environment for facilitating trade, provision of social services such as education, health and water, as well as development of support infrastructure. It guides the Partner States in developing and implementing medium and long-term development plans, and provides a framework for the involvement of the private sector, Religious groups, NGOs, Rural communities, CBOs, and Development Partners in defining interventions for attaining the intended improvements in the rural economy.

The EAC Agriculture and Rural Development Policy recognizes the importance of eliminating hunger and ensuring sustainable food security within the region as a necessary first step to poverty eradication and consequently a stimulus for rational agricultural development and realization of the aspirations of the Treaty establishing the EAC. However, before and since the signing of the Treaty, the ability of the Partner States to achieve individual and collective durable food security status has been elusive. This has been further

compounded by the negative impacts of Climate Change. In this connection EAC Head of States directed that the EAC Food Security Action plan and EAC Climate Change Policy be developed to address food insecurity and adverse effects of climate change in the region. The EAC Food Security Action Plan (2011 – 2015) is already in place as well.

Transboundary Environmental Assessment Guidelines for Shared Ecosystems

The Partner States share borders including valuable terrestrial and aquatic ecosystems. These ecosystems are primary assets and a store of wealth- wildlife, flora and fauna, which if sustainably managed, can contribute to poverty alleviation as well as future incomes. The EAC Partner States recognize the contribution of ecosystems to economic growth, and of the strong link between their over-exploitation and poverty.They have put in place Transboundary Environmental Assessment Guidelines for their Shared Ecosystems. The Guidelines are a means to institute measures to harmonize implementation of the policies, laws, standards and programmes for promoting cooperation in the conservation and sustainable use of shared ecosystems.

CHAPTER TWO

2.0 SITUATIONAL ANALYSIS

Climate change is already a crude reality in the EAC Partner States, and will unfortunately continue deteriorating even after a global agreement to stabilize GHG in the atmosphere is reached. All Partner States have experienced an increase in average temperatures, hotter days, colder nights, successive crop failures and the spread of vector borne diseases such as malaria to non-endemic areas in the region. Droughts and floods, critical to the health and prosperity of the region, have become more frequent and more intense. Climate change scenarios for East Africa indicate that the climatic variability currently being experienced is likely to increase and intensify. Droughts, floods and storms are likely to increase in both frequency and intensity. Precipitation levels and patterns are likely to change. Temperatures are expected to increase across the board, exacerbating other climatic impacts. In coastal areas, sea level rise and rising sea temperatures will threaten coastal areas, ecosystems and investments. The prospective impacts on society and economies across the region are huge, potentially affecting all sectors and all groups of people in a negative way.

2.1 Partner States

In order to confront the challenges of climate change, and reduce the social, economic and environmental impacts of the expected climate change, Partner States have identified medium- and long-term measures in their National Communications to the United Nations Framework Convention on Climate change (UNFCCC). They have also identified urgent priority measures in the framework of their National Adaptation Programmes of Action (NAPAs).

Four of the Partner States which are LDCs, namely Burundi, Rwanda, Uganda and Tanzania have developed National Adaptation Programme of Actions (NAPAs). The NAPAs identify immediate, urgent and priority project activities that are necessary to enhance adaptation capacities to climate change adverse impacts. Implementation of these activities is in various stages. Kenya is not an LDC; it has put in place the Climate Change Response Strategy which spells out priority areas for climate change adaptation and mitigation. All the Partner States have prepared National Communications, detailing measures they are undertaking for the implementation of the UNFCCC. These two sets of documents, Partner States' NAPAs and National Commnuications have informed this brief situational analysis.

Burundi

The National Adaptation Programme of Action and National Communication reports for Burundi note that climate disturbance has been observed in various areas of the country, with adverse consequences on development and the environment. The reports present a wide range of adverse impacts experienced in the country in recent years, including prolonged droughts, changing rainfall seasons, floods and temperature rise. Torrential rains and extreme temperatures are climate phenomena that today reveal the ever-growing of Burundi's vulnerability to the impacts of climate change.

Prolonged drought has been identified as the cause of gradual reduction in water resources, contributing to the fall in the level of the waters of Lake Tanganyika, the drying up of water sources and the tendency of desertification in the area of Imbo and Bugesera; reduced water resources and a fall in agricultural production in the area of Mumirwa; and dry seasons extending up to 5-6 months in the central plateaus area. The irregularity and reduction in precipitations has caused the drying up of the shallow water sources and reduction in agricultural production in Burundi. On the other hand, floods have caused enormous losses in agricultural production in the marshes of Malagarasi and Kanyaru due to torrential heavy rains.

Generally, analysis of the temporal evolution of precipitations in Burundi during the last 30 years reveals a cyclic character, at intervals of more or less 10 years, of alternated periods of surplus with those of rainfall deficit compared to the normal. Conversely, analysis of changes in mean temperature shows a persistent rise of temperature compared to the normal. The average temperature increased from 0.7 - 0.9° C since the 1930s. Variability in rainfall shows a tendency towards prolonged dry seasons from May to October (6 months) since 1999, in the lower altitude areas and the central plateaus.

Figure 3: Threats of flood on the dwellings of the Buyenzi district in the major bed of Ntahangwa River: Ilustrating the impacts of the extreme climate events in Burundi (*Burundi NAPA)*

Kenya

The National Climate Change Response Strategy for Kenya (NCCRS) highlights potential impacts of climate change on Kenya's key sectors and land use systems, and provides evidence of Climate Change in Kenya over the last 50 years. Data from the Kenya Meteorological Department (KMD) for temperature and rainfall changes over the last fifty years reveals observational evidence of changing precipitation patterns, including shifts in the timing and duration of the rainy season over parts of Kenya.

Figure 4: Kenya Draught: East Africa in crisis (Pic: http://animalnewyork.com/, Posted on September 29th, 2009)

The trends in both minimum (night-time/early morning) and maximum (daytime) temperatures depict a *general warming* through time over inland areas. The increase in the minimum temperatures is steeper than in maximum temperatures. Generally, the combined effect of a steeper increase in minimum temperatures and a less steep increase in maximum temperatures is a lower daily (diurnal) temperature range.

The areas near large water bodies particularly the coastal strip indicate a different pattern. In these areas, the minimum (night/ early morning) temperatures show no change or decreasing trends while the maximum temperatures depict an increasing trend since the early 1960s. Consequently, an increase in the diurnal temperature range is evident over these areas because the days have become much hotter while the nights and early morning temperatures have either not changed or marginally reduced compared to the early 1960s. The annual average rainfall between 2070– 2099 is projected to increase to 2.19 mm/day (Obunde et.al. 2004). This is supported already by growing observational evidence. Precipitation gains are uneven across the country and future increases in temperature will also increase evaporation rates.

There is a general picture of continuing ice retreat on the mountains. On Mount Kenya, the Lewis and Gregory glaciers have shown recession since the late 19th century. Changes in climate could reduce the area and volume of seasonal snow, glacier, and periglacial belts with a corresponding shift in landscape processes. Continued retreat of glaciers on Kilimanjaro and Mt. Kenya would have significant impacts on downstream ecosystems, people, and their livelihoods because of moderation of the seasonal flow regimes of rivers upstream. Further reduction of snow cover and glaciers also could reduce the scenic appeal of these African high mountain landscapes for tourists, with negative impact on tourism.

These changing temperature and rainfall patterns have profound impacts on Kenya's socio-economic sectors which are climate-sensitive. The increase in the incidence and geographical spread of malaria as well as more frequent and more intense droughts, erratic rainfall patterns and others portend an increasingly worsening and worrying situation in the future of Kenya. These trends are also depicted in the time series of the Long Rains Season which contributes a significant amount of rainfall to annual totals over most parts of the country. A key finding of the assessment is that climate change is already ravaging Kenya.

Rwanda

Despite its proximity to the equator, the climate in Rwanda is cooled by the high altitude. It is warm throughout most of the country but cooler in the mountains. There are two rainy seasons: mid January to April and mid October to mid December. Rwanda has experienced disastrous floods linked with El-Nino episode in recent years resulting in the destruction of agricultural plantations and ecosystems occupying shallows and swamps of Nyabarongo and Akanyaru river basins; prolonged drought seriously affecting Bugesera, Umutara and Mayaga regions; landslides and landslips in the north (Gakenke, Cyeru, Rulindo, Butaro, and Kinihira) and the west (Nyamasheke, Karongi and Ngororero) of the country in 2001/2002;

irregular rainfall in September 2005 to February 2006 yielding no harvests during that farming season and occasioning a famine in the eastern and southern provinces of Rwanda. This situation gave rise to emergency intervention from the Government to the most vulnerable population of these regions (Umutara, Kibungo, Bugesera, Mayaga, and Butare). Floods, landslides, droughts episodes constitute the major repetitive natural disasters for Rwanda associated with climate change often linked with ENSO episodes. Since the year 1902, a series of big famines, following prolonged droughts episodes has been registered in Rwanda.

Particularly intense rains coupled with short droughts alternating with low precipitations in rainy seasons also presents a recurring risk with localized impacts. The occurrence tendency of these events is considered as average but of high frequency.

Figure 5: Floods in Rwanda: WFP, Published on 18 September 2007

The Republic of Rwanda, September 2007: Floods caused by torrential rain in the central African country of Rwanda have killed 15 people and destroyed hundreds of homes.

Major environmental and socioeconomic disturbances (deforestation, desertification, overexploitation of lands and natural resources, and high level of poverty) are already experienced in Rwanda; impacts of climate change of the last decade in Rwanda are deepening their severity.

The present strong dependency on natural resources in Rwanda makes economic activities directly dependent on climate conditions. Because of overuse of natural resources, the ecosystems are more and more fragmented. These two factors explain the vulnerability of Rwanda to the impacts of climate change.

Tanzania

Frequent and severe extreme climate events have been experienced in many parts of Tanzania. Droughts have become more recurrent and severe, particularly in the northern regions of the country. Due to prolonged droughts, water levels in most of the hydropower stations have progressively been declining in recent years. Tanzania has also experienced an increase in the frequency of high rainfall events leading to floods. Severe floods and landslides occurred in Kilosa and Same districts, respectively, in recent years, with adverse consequences on food production, water scarcity and infrastructure damage, inter alia.

Studies undertaken have showed that the ice cap of Mt. Kilimanjaro has decreased between 50-80% between 1993 and 2000 (TMA 2005). It is estimated that about 80% of the snow at Mt. Kilimanjaro has disappeared leading to reduced water flow at the feet of the mountain where the local community live. As a result of change in temperature and rainfall regimes, malaria epidemic has been observed to extend to malaria non-endemic highlands (non-traditional malaria areas), where the disease was not prevalent. Malaria is the single largest cause of loss of lives in Tanzania accounting for about 16% of all reported deaths.

Figure 6: Glacier extent at Mt. Kilimanjaro in 1993 and 2000- Shrinking ice caps of Mt. Kilimanjaro (Source: VPO NAPA, Tanzania, 2007)

Analysis of total annual rainfall for 21 meteorological stations in selected regions of Tanzania indicated that there is a decreasing trend for over 13 stations (61.9%) whereas an increasing rainfall trend was observed over 7 stations (33.33%) and 1 station had almost a constant pattern. The most affected stations were Pemba and Unguja(Zanzibar), Moshi and Arusha.

Uganda

Uganda has experienced an increase in the frequency and intensity of extreme weather events seriously affecting the socioeconomic development: with seven droughts experienced between 1991 and 2000. There has also been an increase in the intensity and frequency of heavy rains, resulting in floods and landslides in the highland areas as well as outbreaks of associated water borne diseases (NAPA, 2007).

The receding ice caps on Mountain Ruwenzori are a clear signal of climate change in Uganda. A comparison of satellite images from 1987 and 2005 shows a decrease in the extent of glaciers on Speke, Stanley, and Baker peaks in the Ruwenzori Mountains, which are a major source of water for the lower plains in the district of Kasese. Scientific findings from studies show that the glaciers at the tops of the Ruwenzori Mountains declined by 50 per cent between 1987 and 2003. This glacial recession is generally attributed to increased air temperature and decreased snow accumulation during the 20th century. A century ago the glaciers of the Ruwenzori Mountains covered nearly 6.5 square kilometers. If the glaciers continue to recede, as they have since 1906, researchers estimate they will be gone in the next 20 years. (UNEP, 2008)

More specific climate change indicators show that mean annual temperature has increased by 1.3°C since 1960, an average rate of 0.28°C per decade. Uganda's NAPA (2007) observes that climate change will increase the frequency and intensity of extreme weather events such as drought, floods, landslides and heat waves.

Studies show that human induced climate change is likely to increase average temperatures in Uganda by up to 1.5 ºC in the next 20 years and by up to 4.3 ºC by the 2080s. The climate of Uganda may become wetter on average and the increase in rainfall may be unevenly distributed and occur as more extreme or more frequent periods of intense rainfall. This will have significant implications for water resources, food security, natural resource management, human health, settlements and infrastructure.

The PRA findings conducted in the context of NAPA preparation revealed an increase in malaria prevalence in originally malaria-free belts, particularly in the highland ecosystems. Malaria, bloody diarrhea and dysentery, poor hygiene and sanitation (including cholera) accounts for 78.2% of the health issues. Water related disease outbreaks accounts for 47.4%, malnutrition (26.7%) and infrastructure damage. Malaria has been identified as the most serious killer disease in Uganda. Didacus Namanya in a study conducted in Uganda observes that the problem of malaria is on the increase in the country geographically and in terms of intensity.

Climate change will exacerbate water scarcity problems, particularly in the semi-arid areas as well as pollution of water supplies, particularly in urban centres.

Malaria is endemic in 95% of Uganda while the remaining 5% is epidemic-prone especially in the highlands of South West and Eastern Uganda. (MCP, 2001) Looking at specific districts especially those considered malaria-free zones it is clear that climate change characterized by increased temperatures and rainfall partly explains the emergence of malaria cases and epidemics. The NAPA report concludes that in Uganda climate change is no longer a far-fetched concept but a reality on the ground

2.2 Regional Context: Adverse Impacts and vulnerability

Figure 7: Residents of Kashaka, Kashari, Mbarara District inspecting their gardens after a 1 hr hail storm hit their area on the afternoon of 24th February 2007. A lot of crops were distroyed. (Uganda Atlas)

Adverse effects of climate change are threatening to undo decades of development efforts and frustrate poverty eradication programmes in the Partner States. Climate change primarily manifests itself in terms of temperature increase, sea level rise, variability of precipitation pattern, change in the frequency and intensity of extreme events. Other secondary changes along with primary manifestations of climate change act as the main force causing impacts. Rainfall and temperature are the main driving forces that trigger production. While all the other environmental conditions play part in determining the amount of productivity, it is the amount of rainfall and the atmospheric temperatures that determine the suitability of an area for a particular land use. Temperature and precipitation changes are the two climatic elements that have been widely studied globally to provide evidence of climate change. Rainfall and temperature are the main driving forces that trigger production.

According to AR4, it is very likely that all of Africa will warm up during this century and that, throughout Africa and in all seasons, the warming will be larger than the global annual mean warming. Temperature projections for East Africa indicate that the median near-surface temperature in the 2080 to 2099 period will increase by 3°C to 4°C compared to the 1980 to 1999 period. It has to be underlined that this increase is about 1.5 times the projected global mean response. Averages of precipitation projections for East Africa, however, quite clearly indicate an increase in rainfall for East Africa for the 2080 to 2090 period. The changes in precipitation are likely not to be uniform throughout the year, but will occur in sporadic and unpredictable events. It is estimated that the number of extreme wet seasons in East Africa in the 2080 to 2099 period will increase from about 5% to about 20%. As rainfall and atmospheric temperatures change, land use potential and productivity will change mainly in response to changes in primary productivity. The change may come in altered vegetation cover (less or more depending on the direction change in respect to the amount of precipitation or temperatures) or may come in altered plant species composition.

Several impacts are already observable and there is broad scientific consensus that further climate change impacts will occur. Even if the international community makes a significant reduction in greenhouse gas emissions now, the lag in the climate system means that the region is faced with decades of climate change impacts due to the emissions already put into the atmosphere. Climate change is likely to have a wide range of interrelated impacts for the environment, the economy and the well-being of the people of East Africa. Generally, emerging research findings to date, and the scientific conclusions of IPCC show that droughts are likely to increase in total area affected and that heavy precipitation events are likely to increase in the future in the region.(IPCC, Boko et al., 2007; Christensen et al., 2007).

As rainfall and atmospheric temperatures change, land use potential and productivity will change, mainly in response to changes in primary productivity. The change may come in altered vegetation cover (less or more depending on the direction of change on account of the amount of precipitation or temperatures) or may come in altered plant species composition. Given East Africa's reliance on rain-fed agriculture, even where increased rainfall is predicted in the region, additional recharge and run-off could be offset by the greater evaporative losses brought about by higher temperatures. Future changes in precipitation have the potential to bring heightened flood and landslide risks, increased soil erosion and crop damage. Mountain environments are among the most vulnerable ecosystems to the impacts of global warming. This vulnerability has important ramifications for a wide variety of social and economic sectors in the region, including energy, water resources, agriculture, tourism, nature conservation and mountain streams. The impacts of climate extremes such as droughts, floods and heat waves are measured not only by how much is lost but also by the effects on sustainable development and livelihoods.

There is no doubt that changes in the frequency and magnitude of drought will add to the complex risk management portfolios that many people use to sustain their livelihoods and that such changes will make recovery more difficult as periods between significant events will be shortened. Changes in variability (e.g. periods of extended dry spells, wet spells, pattern of rainfall including numbers of rain days, etc) are an additional and critical area of concern.

In East Africa, the link between climate and livelihood is very strong. As East Africa depends heavily on rain-fed agriculture, rural livelihoods are highly vulnerable to climate variability such as shifts in growing season conditions. Some specific studies and analysis on potential impacts of climate change on crops in East Africa indicate that a temperature increase of 1.2 °C and the resulting changes in precipitation, soil moisture and water irrigation could cause large areas of land that now support tea cultivation to be largely unusable. The economic impact could be disastrous. Agriculture is the main source of export earnings and raw materials for local agro-industry. The nature of East Africa's agriculture, that it is primarily rain-fed,

with a large number of agro-pastoralists and pastoralists, implies that production is highly sensitive to fluctuations in rainfall. Rainfall in many parts of East Africa falls in two seasons and shows high levels of variability.

Climatic variability and extremes are a great concern for East African countries where they may significantly affect GDP and employment. EAC countries are very agrarian nations as close to (26-45%) of GDP comes from agriculture and roughly 80% of the labour force works in the sector. For the most part export earnings are generated from agriculture, while agriculture remains a big supplier of raw materials and purchasing power for industry. The economies are dependent on rain-fed agriculture; about 95% of EAC's crop land is rain-fed. Besides, climate factors are not the only factors that stress subsistence systems. Issues of markets, subsidies, access and cultural norms add to the challenge of assuring food security and alleviating poverty for the Partner States.

2.3 Overview of Climate Change Response Measures

Climate change is a global challenge and requires a global solution; it is no longer considered a scientific myth or a phenomenon occurring in the distant future. Expert assessments published every five to six years since 1990 by the Intergovernmental Panel on Climate Change (IPCC), and most recently in 2007, demonstrate that climate change is already with us. EAC Partner States have signed to several regional and Multilateral Environmental Agreements (MEAs) and their related Protocols and Treaties including the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol (KP). Partner States and Regional Economic Communities (RECs) have put in place strategies and plans, and are implementing them, as required by these instruments. A selected list of MEAs and regional Treaties/Protocols and dates of ratification by Partner States is shown under **Annex 4**.

2.3.1 International Response, Commitments and Obligations

2.3.1.1 The United Nations Framework Convention on Climate Change (UNFCCC)

The United Nations Framework Convention on Climate Change (UNFCCC) was adopted at the United Nations Headquarters, New York on 9th May 1992 with an aim of setting an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. Article 2 of the Convention sets the ultimate objective of the Convention and its related legal instrument (the Kyoto Protocol) adopted by the Conference of Parties is "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner". The Convention recognizes that the climate system is a shared resource whose stability can be affected by greenhouse gases (GHGs), mainly carbon dioxide (CO2) and other industrial gaseous emissions and aerosols.

The UNFCCC was first opened up for signatories at the Rio Earth Summit on 4-14th June 1992 and thereafter from 20th June 1992 to June 1993 in accordance with Article 20. Pursuant to Article 22, the Convention is subject to ratification, acceptance and approval or accession by *States* and ***regional economic cooperation and integration organizations***. There is a provision for States and Regional Economic Communities (RECs) that have not signed the Convention to accede to it anytime. The Convention entered into force on 21 March 1994, in accordance with Article 23, that is on the ninetieth day after the date of deposition of the fiftieth instrument of ratification, acceptance, approval or accession. The Convention currently has 165 signatories and enjoys near universal membership with 194 Parties (193 States and 1 regional economic bloc- the European Union (UNFCCC website).

It is politically significant that all Governments of the world agreed to the conclusions of the scientists, signed and ratified the UNFCCC, making the IPCC assessment a solid foundation for sound decision-making.

The Convention sets out a framework for action aimed at stabilizing atmospheric concentrations of greenhouse gases to avoid "dangerous anthropogenic interference'' with the climate system.

Obligations

For the fulfillment of this objective, all Parties to the Convention, including Partner States, are subject to general commitments to respond to climate change. They are required to submit reports, known as national communications, on actions they are taking to implement the Convention. These reports provide the means to monitor progress made by Parties in meeting their commitments and in achieving the Convention's ultimate objective.

To focus their actions, Parties to the UNFCCC must prepare national programmes containing provisions for sustainably managing carbon sinks, preparations to adapt to climate change, plans for climate research, observation of the global climate system and data exchange, and plans to promote education, training and public awareness relating to climate change.

Non-Annex I Parties are developing countries. Within this group are subsets of countries recognized by the UNFCCC as being especially vulnerable to climate change or to the potential economic impacts of climate change response measures. The 48 Parties classified by the United Nations as least developed countries (LDCs) are given special consideration under the UNFCCC due to their limited capacity to respond to climate change and adapt to its adverse effects. Four of the Partner States belong to this category. The centerpiece of work with the LDCs is the preparation of national adaptation programmes of action (NAPAs) of priority activities for addressing urgent and immediate needs and concerns of LDCs relating to adaptation to the adverse effects of climate change. NAPAs are prepared in accordance with the *Guidelines for the Preparation of National Adaptation Programmes of Actions* adopted at COP 7. Non-Annex I Parties have no quantitative obligations under the UNFCCC. Submission of their national communications is tied to funding received to cover their reporting costs. LDCs can submit their national communications at their discretion.

Apart from preparation and submission of national communications, Non-Annex 1 Parties share with all Parties general commitments to:-

- Promote and cooperate in the conservation and enhancement of sinks and reservoirs of GHG not controlled by the Montreal Protocol;
- Cooperate in preparing for adaptation to the impacts of climate change,
- Take climate change considerations into account in relevant policies and actions, and to minimize the adverse effects.
- Promote climate research, observation of the global climate system and data exchange, and
- Promote education, training and public awareness relating to climate change.

Special funds, dedicated to support Non-Annex 1 Parties for financing climate change have been created under the UNFCCC.

Parties to the Convention are under obligation to;

- gather and share information on greenhouse gas emissions, national policies and best practices;
- launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries;
- cooperate in preparing for adaptation to the impacts of climate change.

2.3.1.2 The Kyoto Protocol to the UNFCCC

The Kyoto Protocol, provides the rules and operational modalities on how countries would reduce emissions and measure their emission reductions, a package of laid down detailed rules on: three flexible mechanisms (Emissions trading, Joint implementation and the Clean Development Mechanism); reporting and

methodologies; land use, land use change and forestry (LULUCF); and compliance. The Protocol also addresses issues such as support for developing countries, including capacity building, technology transfer, and responding to the adverse impacts of climate change. Three funds are established, namely: the LDC Fund, the Special Climate Change Fund and the Adaptation Fund.

The Kyoto Protocol (KP) is a legally binding international agreement/treaty committing developed countries and countries in transition and the European Community (EC) to a market economy to emission reduction targets. These countries, referred to in Convention as Annex 1 Parties, are required to reduce their overall emissions of six greenhouse gases by an average of 5.2% below 1990 levels between 2008 and 2012 (the first commitment period), with specific targets, varying by country. The Protocol recognizes that developed countries are principally responsible for climate change and the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity. The Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

Under the Treaty, countries are obligated to meet their targets primarily through national or domestic emission reduction measures. The Kyoto Protocol has a provision for countries to meet their emission reductions targets and commitments through three flexible market-based mechanisms. These are;

(i) Emissions Trading (ET) commonly referred to as "Carbon Market"
(ii) Clean Development Mechanism (CDM)
(iii) Joint Implementation (JI)

The objective of the Kyoto Protocol is to reduce global greenhouse gas emissions by at least 5% in comparison to the base year of 1990, during the commitment period from 2008 to 2012. To reach this goal, Annex B of the Protocol sets binding targets for each of Annex1 Parties, for the first commitment period (2008-2012) in percentage of their base year emission, thus limiting their emissions of six greenhouse gases, given aggregated in carbon dioxide equivalent emissions. The Protocol establishes a structure of rolling emission reduction commitment periods; review for the second commitment period is subsumed in the ongoing negotiations. Non-Annex 1 Parties to the Convention (developing countries) are not included in any numerical limitation of emission reduction specified under the Kyoto Protocol. Partner States belong to the category of Non-Annex 1 Parties. For this reason, Partner States do not have quantitative GHG emission reduction commitments, under the Kyoto Protocol.

The Kyoto Protocol supplements the UNFCCC which did not set any limitations or enforcement mechanisms for the attainment of its objective. The major distinction between the Protocol and the Convention is that while the Convention encourages industrialized countries to stabilize and reduce GHG emissions, the Protocol commits them to do so. The detailed rules for its implementation were adopted at COP 7 in Marrakesh in 2001, and are called the "Marrakesh Accords" and adopted by CMP1 in Montréal.

Kyoto Protocol Commitments

In the Convention, Parties are distinguished into two general categories: developed countries, referred to as Annex 1 Parties, and developing countries, referred to as Non-Annex 1 Parties. Developed countries listed in Annex B of the Kyoto Protocol are actually developed countries listed in Annex I of the UNFCCC.

Even though there are no binding targets for GHG emission reduction for non-Annex I Parties, these Parties share a common responsibility expressed in general obligations of all Parties to the Protocol (Article 10). These commitments are provided in Article 10 of the Protocol, and may be paraphrased as follows:-

- Formulation of cost-effective national and regional programmes to improve the quality of local emission factors, and/or models which reflect the socioeconomic conditions of each Party for the preparation and

periodic updating of national inventories of anthropogenic emission by sources and removals by sinks of all GHG not controlled by the Montreal Protocol, using comparable methodologies;

- Formulation and implementation national or regional programmes containing measures to mitigate climate change and measures to facilitate adequate adaptation to climate change, inter alia, programmes concerning energy, transport, industry, agriculture, forestry and waste management);
- Cooperation in scientific and technical research; maintenance and the development of systematic observation systems and development of data archives to reduce uncertainties relating to the climate system, the adverse impacts of climate change, and the economic and social consequences of various response strategies and promote the development and strengthening of endogenous capacities and capabilities to participate in international and intergovernmental initiatives;
- Cooperation and promotion at international level, the development and implementation of education and training programmes, strengthening of national capacity and facilitation at the national level, public awareness on climate change;
- Commitment to include in national communications information on the mentioned programmes and activities.

Annex 1 Parties that have commitments to reduce greenhouse gas emissions must meet their targets primarily through national measures. To supplement domestic action, the Protocol provides three so-called "flexible mechanisms" which allow Annex 1 Parties to meet their GHG targets by purchasing GHG emission reductions from elsewhere. These can be bought either from financial exchanges (such as EU Emissions Trading Scheme) or from projects which reduce emissions in non-Annex 1 Countries under the CDM), or in other Annex-1 countries under the JI, to achieve the objectives of the Convention in a cost-effective way.

2.3.1.3 The Clean Development Mechanism (CDM)

The Protocol states that "The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3." (Article 12)

CDM has the dual purpose of assisting non-Annex I countries in achieving sustainable development, and assisting Annex I countries to earn emissions credits through undertaking projects that reduce emissions or enhance removals by sinks in non-Annex I countries. This means that while non-Annex 1 countries have no GHG emission reduction commitments, in practice, when a GHG emission reduction project (a "GHG Project") is implemented in a developing country, that GHG Project will receive Carbon Credit which can be sold to Annex 1 buyers. Only CDM Executive Board-accredited Certified Emission Reductions (CER) can be bought and sold in this manner. The Executive Board of the Clean Development Mechanism was established to assess and approve projects ("CDM Projects") in non-Annex 1 countries prior to awarding CERs. (A similar scheme called "Joint Implementation" or "JI" applies in transitional economies mainly covering the former Soviet Union and Eastern Europe).

The CDM is designed to encourage production of emission reductions in non-Annex I countries. It was designed to limit emissions in developing countries, in such a way that developing countries do not bear the costs for limiting emissions. All Partner States have set up Designated National Authorities to manage the Kyoto process, specifically the "CDM process", and are deciding which GHG Projects they do or do not wish to propose for accreditation by the CDM Executive Board. Annex 1 are actively promoting government carbon funds and supporting multilateral carbon funds intent on purchasing Carbon Credits from Non-Annex 1 countries. They are working closely with their major utility, energy, oil & gas and chemicals conglomerates to acquire as many GHG Certificates as cheaply as possible, whilst Non-Annex 1 entities want to maximize the value of Carbon Credits generated from their domestic GHG Projects. The cost of

complying with Kyoto is prohibitive especially for Annex 1 countries with highly efficient, low GHG polluting industries, and high prevailing environmental standards. The Protocol offers these countries a cheaper opportunity to purchase Carbon Credits instead of reducing GHG emissions domestically.

2.3.1.4 Recent Developments under the UNFCCC Process

In the past two decades, the response of the governments of the world, at the highest political level, to the prospect of global and long-lasting climate change has taken the form of a universal treaty on climate change.

The Conference of the Parties to the Convention at its 13th session, concurrent with the 3rd Meeting of the Parties to the Protocol in Bali, Indonesia, from 3 to 15 December 2007, agreed on a two-year process (the ''Bali Roadmap''), to finalise a post-2012 regime, in time for the 15th session of the Conference of the Parties in December 2009 in Copenhagen, Denmark. It also established an Ad Hoc Working Group for Long-term Cooperative Action under the Convention (AWGLCA), with a view to launching a comprehensive process on long-term cooperative action. The Conference of the Parties identified four areas for enhanced action for the attention of the AWGLCA, namely: Mitigation, Adaptation, Finance and Technology. The relevant decision also addresses a non-exhaustive list of issues to be considered under each of these areas, as well as a shared vision for long-term cooperative action.
The Copenhagen Accord gives clear promises for both short- and long-term financial support by developed countries for developing countries, especially the most vulnerable, to deal with climate change. It pledges $10 billion per year from 2010-2012 with the promise to increase this to $100 billion per year starting in 2020. However, as the Accord is a non-binding political agreement, it raised questions about if and how these commitments can be fulfilled; concerns that these political pledges will follow the same path as earlier promises over aid – and will remain unmet.

The Cancun Agreements are a set of significant decisions by the international community to address the long-term challenge of climate change collectively and comprehensively over time and to take concrete action now to speed up the global response. The agreements, reached on 11 December 2010 in Cancun, Mexico, at the 16th United Nations Climate Change Conference of the Parties represent key steps forward in capturing plans to reduce greenhouse gas emissions and to help developing nations protect themselves from climate impacts and build their own sustainable future.

The main objectives of the agreements, "to establish clear objectives for reducing human-generated greenhouse gas emissions over time to keep the global average temperature rise below two degrees encourage the participation of all countries in reducing these emissions, in accordance with each country's different responsibilities and capabilities to do so ensure the international transparency of the actions which are taken by countries and ensure that global progress towards the long-term goal is reviewed in a timely way mobilize the development and transfer of clean technology to boost efforts to address climate change, getting it to the right place at the right time and for the best effect mobilize and provide scaled-up funds in the short and long term to enable developing countries to take greater and effective action assist the particularly vulnerable people in the world to adapt to the inevitable impacts of climate change protect the world's forests, which are a major repository of carbon build up global capacity, especially in developing countries, to meet the overall challenge establish effective institutions and systems which will ensure these objectives are implemented successfully.

2.3.1.5 An Overview of Climate Change Financial Mechanisms

The Global Environment Facility (GEF), is the entity that operates the financial mechanism, entrusted through decision 27/CP.7, subject to review every four years. At present, adaptation, mitigation and

technology cooperation activities under the Convention are funded under the GEF Trust Fund, the Special Climate Change Fund (SCCF), the Least Developed Countries Fund (LDCF) and the Adaptation Fund. The first three are operated by the GEF, and rely on voluntary contributions from developed countries. The Adaptation Fund is operated by its own Board, funded by a 2 per cent levy on the CDM. The current financial mechanisms of UNFCCC are insufficient. An overview of selected sources of Climate Change Financing Mechanisms is appended as **Annex 5**.

2.4 Climate Change Initiatives at Partner States Level

In recent years, there has been a remarkable increase in the number of new climate change related programmes and projects at the East African Community Region as a result of Partner States becoming contracting parties to a large number of international and regional agreements and protocols. Several interventions have been undertaken, and some are ongoing, ranging from reforestation and afforestation projects, rehabilitation of degraded areas, water harvesting, conservation of ecosystems to demonstration of cleaner production technologies and techniques (sustainable production, particularly in industries), and energy efficiency and conservation. With the incoming REDD+ opportunity, Partner States have lately focused on REDD+ readiness activities, including establishing institutional arrangements for monitoring, reporting and verification (MRV) functions; and filling the historical data gaps on forest cover.

Within the framework of EAC, Partner States have made important commitments towards sustainable development and achievement of the Millennium Development Goals. They have engaged in a series of social and economic reforms that promote economic dynamism for the people and communities to realize their full potential. Social and economic development in the region is also built upon an impressive natural resource base. This includes significant and unique forests, overall rich water supplies, fertile soils, mineral deposits, valuable marine resources, and unique beaches and coastal areas. However, the challenge of climate change is poised to undermine achievement of these commitments. While these efforts are important and deserve to be continued and supported, for diverse reasons it has become clear that a more effective and coordinated regional responses to climate change is necessary. A list of selected Initiatives by Partner States is appended as **Annex 3**.

CHAPTER THREE

3.0 STRATEGIC PRIORITIES

The Strategy is a framework for harmonized and coordinated regional and Partner States programmes and actions to address Climate Change and guide Partner States and other stakeholders on the preparation and implementation of collective measures to address Climate Change for the attainment of set targets and goals for sustainable development in the region. In view of the high vulnerability of the region to the impacts of climate change, with the emerging associated challenges especially food security, the Policy highlights adaptation to climate change as of first priority for the region. In order to confront the challenges spelled out clearly in the EAC Climate Change Policy, the Strategy will significantly scale up these activities to add more value, working with Partner States and stakeholders, to prepare for the consequences resulting from a changed climate, even as they cooperate with the international community in supported actions for reduction of emissions of greenhouse gases.

3.1 SWOT Analysis

Addressing climate change adaptation and mitigation priorities of the EAC and its Partner States is linked to the ability to implement actions through existing institutions as well as advancing practical

solutions. A strength, weakness, opportunities and threats (SWOT) analysis was undertaken with the aim of ensuring that the proposed interventions and existing capacities and abilities adequately target the identified gaps and challenges. The SWOT analysis was undertaken on the basis of information provided by regional and Partner States stakeholders through a series of consultative workshops.

The SWOT analysis revealed a number of existing opportunities in addressing climate change, and weaknesses in responding to its adverse impacts in the region and in Partner States. A number of critical weaknesses exist including inadequate capacities for climate change adaptation and mitigation, which inhibit the implementation of appropriate measures, and enhance the vulnerability to climate change. Capacity is critical in addressing both adaptation and mitigation. The issue of capacity has been identified in a number of Partner States documents, including during the consultative process for the preparation of this Strategy. The full SWOT Analysis is presented in **Annex 2.**

3.2 Strategic Approach

The strategic approach for the development of climate change adaptation and mitigation response measures is focused on: improving the knowledge and understanding of climate change science including through research and communication and public awareness; adapting to climate change by reducing vulnerability and building resilience; taking advantage of opportunities available in undertaking mitigation activities, including through green economy and low carbon development pathways for the region; and institutional capacity building and strengthening, and social empowerment.

The proposed Strategic Actions may be viewed through the following lenses:-

(i) The impacts of climate change cut across multiple economic sectors and disciplines, making climate change a multi-scale challenge that interacts with development efforts at different levels, from local, national, to regional level, and highlighting the need for mainstreaming adaptation and mitigation response measures, as well as disaster risk reduction in development planning.

(ii) Adaptation planning and climatic risk management supported by scientific information and realities of felt impacts of climate change are critical towards promoting effective environmental management and disaster risk reduction through preparedness, risk mitigation, prevention and emergency response as an effective tool for community and ecosystem-based adaptation in a cost effective manner.

(iii) Significant benefits can be realized from national and regional coordination and collaboration on several climate change and disaster management issues.

(iv) As climate change has implications for many sectors of the economy and society, meeting the challenge of climate change cannot be solely a Partner States' Government's initiative. Ensuring long-term sustainability against a background of a changing climate will depend on the active participation of all stakeholders across the region, understanding the impacts of the changing climate, taking timely action and preparing for future impacts. The EAC will pursue a collaborative approach by all relevant stakeholders including Partner States governments, inter-governmental organizations, communities, the private sector, non-governmental organizations and development partners in addressing climate change in the region.

(v) The risk and opportunities for different sectors and organisations will change over time. The EAC and its Partner States will ensure that appropriate actions are targeted at the right time. The strategic actions are therefore firmly grounded in the present, and link the near-term to the medium- and longer-terms. In order to effect this, three distinct time periods are identified for policy planning and decision making from 2011 onwards, into: short-term (2011-2015), medium-term (2016-2020), long-term: beyond 2020.

3.3 Scope

The coverage of EAC Climate Change Policy extends to all sectors and sub-sectors impacted by climate change; the Policy highlights sixteen such sectors and sub-sectors. The Policy also prioritizes adaptation measures; regions, sectors and communities that are more vulnerable to climate change impacts; mainstreaming climate change into national development plans; social and economic development; as well as partnerships, collaboration and synergies among various stakeholders in climate change concerns.

The EAC Climate Change Strategy shall elaborate on the areas of distinctiveness with regard to environment and development of critical importance to the Partner States and the region in an integrated manner according to the EAC Climate Change Policy. These include, but are not limited to the following: **Water resources; Agriculture (crop, livestock and fisheries production); Wildlife; Coastal and marine ecosystems; Land use and soil protection; Wetlands; Forestry; Health; Disaster risk management; Energy; Tourism; Industry; Gender and community development; Transport and Infrastructure; Education; and Human settlements.** The focus is on an integrated, harmonized and multi-sectoral framework for responding to Climate Change in the region.

The EAC Climate Change Strategy shall guide the implementation of the EAC Climate Change Policy over a five year period (2011-2016). The Strategy will provide a short to medium term framework for implementing elaborate and concrete climate change adaptation and mitigation programmes and projects to be implemented. Disaster risk reduction (DRR) measures in the various sectors (including early warning systems and emergency response) will be prioritized noting disaster risk reduction approaches as critical too towards climate change adaptation tool.

3.4 Strategic Goal, Vision and Mission

A highly resilient community is one in which there is sufficient capacity to monitor, anticipate and respond to the challenges of climate change and disaster risks in an efficient and cost-effective manner.

The Goal for the Strategy is to contribute to successful implementation of EAC Climate Change Policy objectives.

The Vision is for an East Africa with a **prosperous population,** ***climate-proofed, climate resilient, and disaster resilient development.***

The Mission is to enhance a coordinated regional response to climate change within East Africa for the achievement of sustainable development, ***based on the climate change policy priorities for the region.***

3.5 Strategic Objectives

The objective of the EAC Climate Change Strategy is the implementation of the EAC Climate Change Policy. The Strategy sets out a range of measures, taking account of those already in place in the Partner States to ensure effective implementation of the EAC Climate Change Policy at all levels.

The Strategy is based upon the following six broad objectives to address the priority areas identified by the EAC Climate Change Policy:

3.5.1 To enhance climate change adaptation through vulnerability reduction, building socio-economic resilience, disaster risk reduction and adaptation planning.

3.5.2 To enhance sustainable development through climate change mitigation measures, including through green economy and low carbon development pathways.

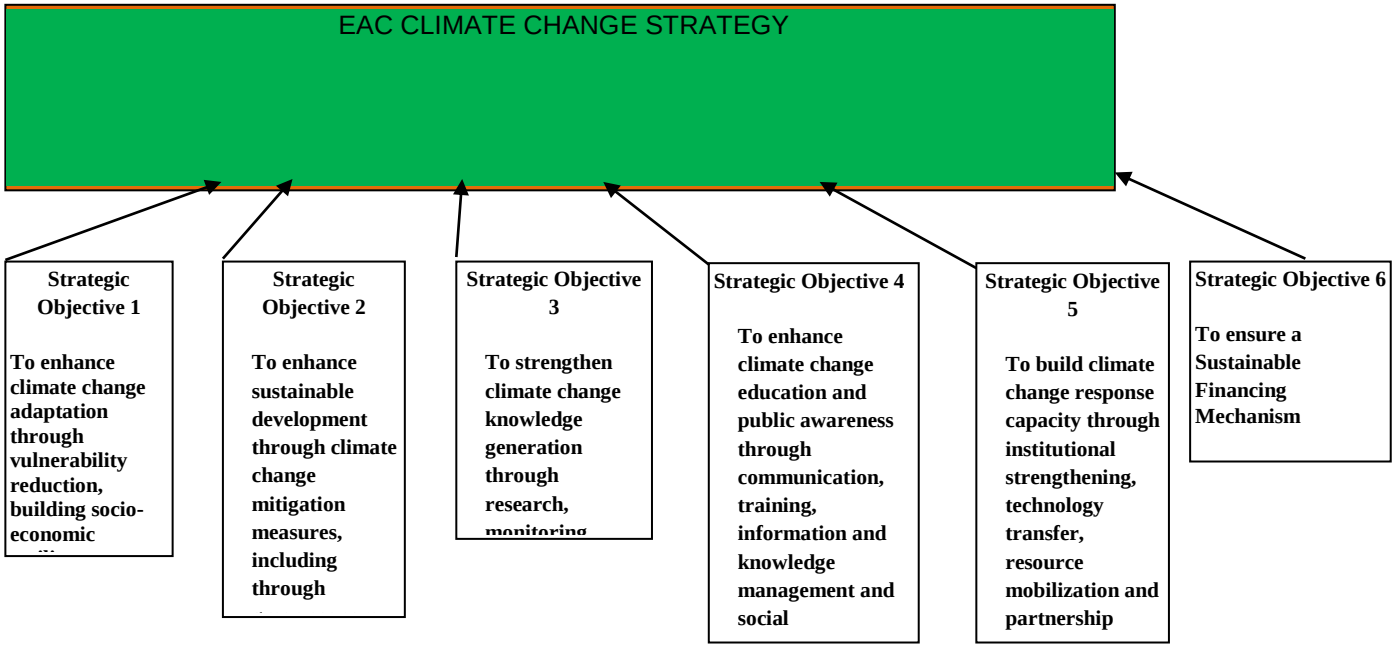
3.5.3 To strengthen climate change knowledge generation through research, monitoring, detection and prediction.

3.5.4 To enhance climate change education and public awareness through communication, training, information and knowledge management and social empowerment including gender.

3.5.5 To build climate change response capacity through institutional strengthening, technology transfer, resource mobilization and partnership building and stakeholder involvement.

3.5.6 To ensure a Sustainable Financing Mechanism for climate change.

Figure 8: Strategic Objectives



3.6 Strategic Interventions

The following section presents the proposed Strategic Actions for each of the Sectoral Objectives of the EAC Climate Change Policy. The relative priority scaling is shown for each proposed action on the basis of opportunities available and capacity to implement, such that a short-term, medium-term and long-term action plan can be extracted.

Strategic Objective 1: To enhance climate change adaptation through vulnerability reduction, building socio-economic resilience, disaster risk reduction and adaptation planning.

Adaptation to climate change means the adjustments of human and natural systems in response to present or expected stimuli and their effects which reduce the damages or exploit the opportunities favourable to development (IPCC-FAR). Adaptation involves doing what is possible to adjust to the changes, as well as doing the best to anticipate the future impacts, and putting plans in place to address them.

Adapting to climate change is essential since even the most stringent mitigation efforts cannot avoid impacts of a changing climate. Adaptation is therefore a survival strategy for the region. It is the principal way to cope with the unavoidable impacts of climate change. It is a mechanism to manage risks, adjust economic activity to reduce vulnerability and to improve business certainty. Adaptive capacity relates to a wide range of measures to increase the resilience of vulnerable ecosystems, communities and economic sectors.

These are undertaken at local, national and regional level and include autonomous and planned adaptation including disaster risk reduction (DRR).

Article 2 of the United Nations Framework Convention on Climate Change (UNFCCC) refers to "dangerous" human influences on climate in terms of whether they would "allow ecosystems to adapt, ensure food production is not threatened, and enable economic development to proceed in a sustainable manner." The extent to which ecosystems, food supplies, and sustainable development are vulnerable or "in danger" depends on their exposure to climate change effects and on the ability of impacted systems to adapt. The strategic adaptation actions are built around six major considerations:

- ✓ Adaptation to short-term climate variability and extreme events serving as a starting point for reducing vulnerability to longer-term climate change impacts;
- ✓ Adaptation occurring at different levels in Partner States, including at the local level;
- ✓ Adaptation options defined in a development context, such that they are nested within national socio-economic planning;
- ✓ Adaptation based on best practices that are known to reduce vulnerability in the most effective way;
- ✓ Climate change adaptation and disaster risk reduction and disaster prevention measures situated in the dual context of capacity building and the need for immediate response actions; and
- ✓ Adaptation measures and the stakeholder process by which they are implemented are equally important.

In order to achieve Strategic Objective 1, the Strategy aims at:

- ➢ Improving water conservation, efficiency and sustainable use and exploitation of regional water resources in view of the changing climate.

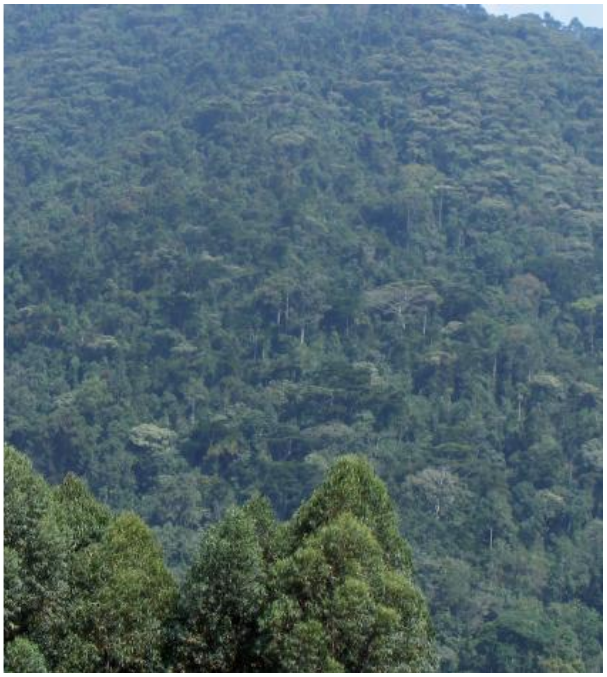
- ➢ Developing adaptation framework for agriculture to improve agricultural productivity and enhance food security.

- ➢ Developing, harmonizing and adopting common policies, laws and strategies for the conservation and sustainable utilization of wildlife resources in and outside protected areas in the region as part of ecosystem based adaptation.

- ➢ Enhancing the adaptive capacity and resilience of the coastal and marine ecosystems, coastal communities and infrastructure to the impacts of climate change as part of ecosystem based adaptation.
- ➢ Improving sustainable land use, land use change and soil management practices as an adaptation strategy.
- ➢ Promoting sustainable management of forestry and wetlands as part of ecosystem based adaptation.
- ➢ Reducing the vulnerability of populations to climatic sensitive diseases and enhance adaptive capacities within the health services.
- ➢ Ensuring resilience of tourism infrastructure through factoring climate change into their planning, as well as enhancing climate proofing of wildlife habitats to minimize environmental migrations of endangered species.
- ➢ Climate-proofing infrastructure through factoring climate change concerns in the development of social infrastructure to allow the infrastructure to withstand extreme weather conditions in the region.
- ➢ Ensuring development of human settlements that are robust enough to withstand Climate extremes.
- ➢ Reducing the vulnerability of socioeconomic systems to climatic related disasters through employing disaster risk reduction as tool for climate change adaptation.

Figure 9: Budongo forest at "Mailo kumi and Bwindi forest

Uganda: Budongo forest at "Mailo kumi", along the Masindi–Paraa Road via Kichumbanyobo Gate (2002) (Uganda Atlas)



Uganda: Part of Bwindi impenetrable forest in Kanungu District (2008).

- Cushioning the region's socioeconomic development from conventional sources of energy that are highly susceptible to climatic variability and change such as hydropower**.**

Strategic Objective 2: To enhance sustainable development through climate change mitigation measures, including through green economy and low carbon development pathways.

Although Partner States have no commitment under the Kyoto Protocol to implement emission reductions, it is nevertheless of strategic and economic importance that they reduce their dependence on fossil fuels and embraces low carbon and in particular renewable forms of energy, which are abundant in the region. A number of initiatives aimed at energy efficiency and energy conservation have been introduced with fixed success in the region. East Africa requires vigorous growth, and this growth can be directed increasingly towards carbon-saving investment and energy efficiency. Opportunities for growth in renewable energy are available in the region; seizing them depends on active EAC and its Partner States promotion.

Price signals can hasten innovation and implementation of energy efficiency and energy conservation in industry, transport and domestic sectors. End- users are conscious of the issues and wish to engage further in conservation or transfer of technology within the energy sector. Adoption of energy efficiency in buildings is also raised in the Partner States' reports.

In general, GHG emissions can be reduced in three ways:

- ✓ Increasing energy efficiency and conservation;
- ✓ Using less carbon-intensive fuels; and

✓ Increasing carbon 'sinks' such as forests.

In support of sustainable development through climate change mitigation measures, including through low carbon development pathways, the EAC and its Partner States aim to:

- Increase availability and accessibility of sustainable, reliable and affordable renewable energy resources.
- Reduce greenhouse emissions from the transport sector
- Ensure that the forest sector continues providing global services in mitigation of climate change while supporting sustainable development needs of the Partner States.
- Promote sustainable agricultural practices with agricultural-based emission reduction through land management, planning and optimal utilization of agricultural resources.
- Promote waste management for improved air and water quality; soil and mitigation of greenhouse gases.

(i) Energy Efficiency and Conservation

Energy efficiency and conservation can be achieved, *inter alia, by:-*

- promotion of renewable energy resources;
- fuel switching;
- domestic and industrial efficiency programmes;
- energy efficiency in built environment;
- promotion of non-motorised transport and mass transport; and
- agricultural and forestry schemes;

Figure 10: Solar energy

Being more energy efficient can translate into lower energy consumption for both businesses and households; this will lower production costs for industry and increase competitiveness, and lower energy bills for households. There are several other co-benefits to climate change mitigation actions of no-regrets measures whose implementation would benefit the region and target groups regardless of climate change. Mitigation of GHG emissions, most notably in the power generation, industry and transport sectors, can help to reduce air pollutants, resulting in cleaner air and healthier environment for all in the region. Reducing energy and resource consumption and increasing energy and resource efficiency in the domestic, public, business and industrial sectors, may be achieved through behaviour change initiatives, financial incentives, regulation and standards.
The reliability and affordability aspects of energy supply must be maintained as the central starting point.

(ii) The Clean Development Mechanism (CDM)

The EAC will work to exploit opportunuties through the CDM, under the Kyoto Protocol or any other future climate change agreements, to support development in the region. Under the Kyoto Protocol, a series of market mechanisms have been set up to allow countries to achieve cost-effective emission reductions. Annex1 Parties can meet their Kyoto Protocol commitments for the period 2008–2012 through a combination of domestic emission reduction and sink enhancement actions and purchases of various allowances and credits from other countries, through the three Kyoto mechanisms. Each of these mechanisms creates a market for specific units (allowances/credits). These markets are at different stages of development, with the CDM market being the most advanced. The CDM enables a project to mitigate climate change in a non-Annex I Party to generate CERs.

The EAC will ensure the necessary technical and reporting capacity is in place to participate in CDM**.** CDM projects must use an approved methodology and be validated by an accredited designated operational entity (DOE). CERs are issued by the CDM Executive Board only after the emission reductions achieved have been verified and certified by an accredited DOE. Thus a CDM project incurs costs (validation of the project) before it can be registered, and further costs (certification of the emission reductions) before CERs are issued.

The Clean Development Mechanism (CDM) is a market mechanism that allows an Annex I country to invest in emissions reduction projects in a non- Annex I country and to count the emission reductions (known as Certified Emission Reductions or CERs) towards their Kyoto Protocol emission targets. In exchange, the non-Annex I country can benefit not just from the revenue from the sale of CERs, but also from foreign investments with potential technology transfer. As non- Annex I Parties to the Kyoto Protocol, EAC Partner States are entitled to host CDM projects.

(iii) Reduced Emissions from Deforestation and Forest Degradation

To protect the many benefits from forests and ensure livelihoods for the people that live in and around forests, EAC will actively participate in the REDD+ programmes. Reducing Emissions from Deforestation and Forest Degradation (REDD) "plus" conservation is the sustainable management of forests and enhancement of forest carbon stocks. REDD+ is a suite of policies, institutional reforms and programmes that provide monetary incentives in developing countries to reduce greenhouse gas emissions and sustain economic growth by halting or preventing the destruction of their forests.

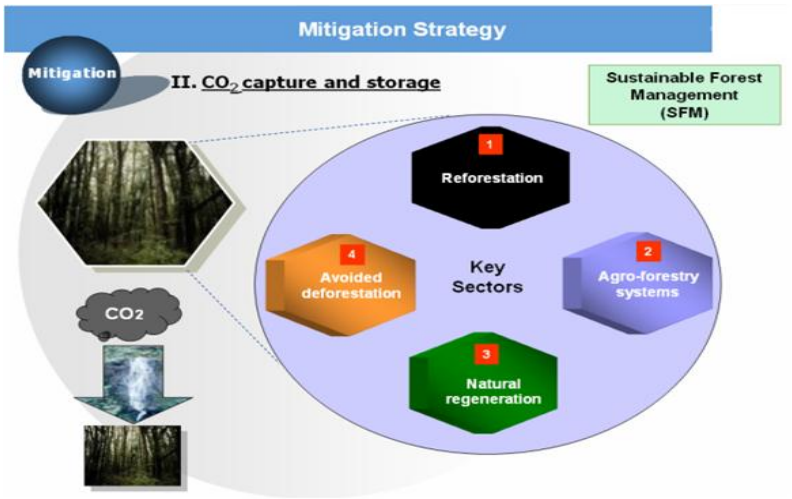


Figure 11: Potential sectors for REDD+ Opportunities

The livelihoods of rural communities in East Africa depend largely on access to land and natural resources. Ecosystem-based mitigation projects will have a direct impact on livelihoods and their adaptive capacity.

The EAC and its Partner States will develop capacity for forest protection and livelihood improvement programmes, as well as for measuring, reporting and verification in relation to REDD+, thereby enhancing access to REDD+ programmes and related climate finance. In undertaking REDD+ activities, a Party is required to develop a National Strategy or Action Plan, and establish a National Forest Reference Emission Level and/or Forest Reference Level. Credible reference levels, reflecting what would have happened without REDD+ interventions, are necessary to trigger carbon payments. As an interim measure, sub-national Forest Reference Emission Levels may be applied. A robust and transparent national forest

monitoring system for the monitoring and reporting of these activities is an essential requirement, with sub-national monitoring and reporting as an interim measure, if appropriate, and in accordance with national circumstances. A set of principles and safeguards in the implementation of the identified activities are part of this consensus agreement which call for a clear and workable system of providing information to track performance and facilitate Monitoring, Reporting and Verification. Addressing the risk of non-permanence and leakage is a necessary condition for any parties or entities to participate in a REDD+ mechanism and activities.

(iv) Nationally Appropriate Mitigation Actions

To help ensure eff3ective access to climate change related funds and other opportunities Partner States will endevour to have frequently updated NAMAs outlining a range of actions that may be supported.

Nationally Appropriate Mitigation Actions (NAMAs) emerged in 2007 under the Bali Action Plan, which called for

"Nationally Appropriate Mitigation Actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity building, in a measurable, reportable and verifiable manner".

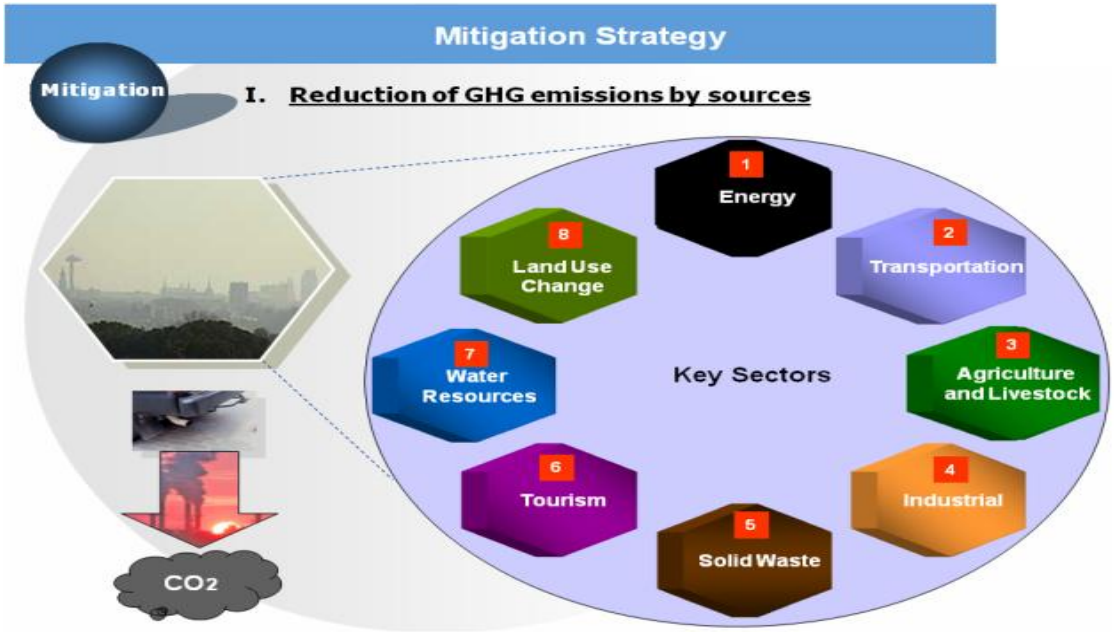


Figure 12: Potential sectors for NAMAs

Under the UNFCCC framework programmes for GHG mitigation can be developed and funded through *technology*, *financing* and *capacity building* under the post-Kyoto regime in energy, transport and other sectors. The Bali Action Plan envisages, under clause 1(b)(ii), enhanced national/international action on mitigation of climate change, including, *inter alia*, consideration of Nationally Appropriate Mitigation Actions by developing country parties in the context of sustainable development, supported and enabled by technology, financing and capacity building, in a measurable, reportable and verifiable manner. The NAMAs envisaged in the BAP do not include national actions by developing countries with their own resources and without external support. Para 1(b)(ii) of the BAP clearly refers only to NAMAs "supported and enabled by technology, financing and capacity building". NAMAs envisaged in the BAP are, therefore,

voluntary actions proposed by developing countries, that require to be supported and enabled by technology transfer, capacity building and financial transfers by developed countries.

COP 16 in Cancún laid the foundation for building the appropriate institutions and frameworks for financing, measurement, reporting and verification (MRV) of the actions. The COP took some crucial steps on the modalities and required institutions to raise and distribute funds; and procedures to measure, report and verify NAMAs. The COP provided a schedule for establishing guidelines for measuring, reporting and verification; established a registry for matching NAMAs and support; and created a fund for financing mitigation and adaptation actions, including new technology transfer mechanisms. *The Cancún Climate Summit of last December marks significant progress in the concept of Nationally Appropriate Mitigation Actions (NAMAs). By the next COP in Durban, South Africa, the creation of a fund, a central registry and guidelines for measuring, reporting and verification (MRV) are expected to boost the NAMAs framework for carbon emissions reduction actions in developing countries.* NAMAs promise to develop into a primary mechanism and serve as a bridge between developed and developing country parties, on the basis of the principle of, *'common but differentiated responsibilities'*.

(v) Low Carbon Decvelopment Pathway

Although Partner States are not required, under the Kyoto Protocol to implement emission reductions, it is nevertheless of strategic importance that they diversify their energy sources, by reducing their dependence on fossil fuels. The Strategy recommends energy diversification with special emphasis on reducing the use of fossil fuels in favour of renewable energy sources and climate-friendly fuels. This strategy is based on climate security, energy security, economic security and environmental security for the region. Use of renewable resources will increase the region's energy security and contribute to the mitigation of climate change. This will put the region on the path to a Green Economy. Many of the actions for mitigation of climate change or adaptation to impacts of climate change are related to EAC and Partner States' strategies or objectives in other areas, such as economic benefits, natural resource issues, industry, transport, fisheries, agriculture, environmental management, and others. In this way, reduced use of imported fossil fuels can promote beneficial objectives in other sectors, as well as increased energy security. A low carbon East Africa can be prosperous, bringing many benefits beyond tackling climate change. It can mean cheaper, more reliable energy, better air quality and more comfortable homes. There are also major opportunities for businesses to thrive and take advantage of the new opportunities from the transition to a greener society. There are benefits to be derived from adopting a strategy that is designed to move the economy towards a cleaner development path.

Decarbonising electricity and heat supply, using more energy from renewable sources; taking action to reduce resource use, energy use and waste avoidance and minimisation given priority (re-use and recycling vigorously encouraged); effective use of waste heat and energy efficiency opportunities, will move the region towards a cleaner development path. A number of potential green energy projects have been identified by Partner States in their national communications. By maximizing these potentials, the region can contribute significantly to reduce global GHGs as well as its unhealthy reliance on imported fossil fuels. These arrangements provide East Africa with a *regional greenhouse gas mitigation plan that furthers the process of sustainable development in the region through CDM, NAMAs, REDD+, technology transfer and capacity building* opportunities.

Strategic Objective 3: To strengthen climate change knowledge generation through research, monitoring, detection and prediction.

The focus of climate change knowledge generation through research, monitoring, detection and prediction will be on precise high resolution models to better understand the impacts of climate change. Uses of global averages are useful in guiding global or regional policy but limited in its use for decision-making and adaptation at local levels. Limited time series undermines the ability of appropriate models to determine future climate scenarios. Existing models in the region are at very low resolution.

To adapt to the impacts and consequences of climate change and increase resilience stakeholders will need to determine their vulnerability and assess associated risks. This will be achieved through research and evaluation of the effectiveness of action on the ground so that the results can inform future decisions on the region's adaptive response. Research and monitoring capability will need to be enhanced and reinforced in the implementation of this objective.

The EAC will seek to engage strategic partners to support knowledge generation and sharing relevant to climate change and development in the region. To strengthen climate change knowledge generation through research, monitoring, detection and prediction EAC and its Partner States will enhance the capacity of NMSs to effectively monitor, detect and predict climate change scenarios in the region to contribute to global assessments and facilitate development of adaptation options at the regional and national levels.

This will be achieved, among other activities, through:-

- Modernizing meteorological infrastructure in the Partner States by increasing weather observing stations, communication, processing systems, training and dissemination facilities;
- Supporting the downscaling of global climate model outputs to regional and national levels to address climate variability and change at Partner State level;
- Promoting digitization and historical climate data rescue;
- Strengthening early warning systems for monitoring, detection, attribution and prediction of extreme weather and climate events;
- Support development of joint research programs on drought, floods, pests and disease resistant crops and livestock, and foster cooperation with regional organizations to facilitate transfer of research developments from other regions.

Strategic Objective 4: To enhance climate change education and public awareness through communication, training, information and knowledge management and social empowerment including gender.

Providing better access to information is a critical means of empowerment. More can be done to promote transparency and accountability through access to information and stakeholder involvement. A critical aspect of the enabling environment and a foundation for knowledgeable decision making is to have access to relevant impacts, risks and vulnerability information. The responsibility of government to ensure a strong enabling environment is of critical importance to communities since this is where most climate change adaptation and disaster risk reduction activities are focused.

Decision-makers and citizens in the region need access to sound sources of information, assessment and advice concerning risks of climate change and natural systems. A variety of researches have been undertaken in the region, but their bearing on policy making has varied widely. The case of effective linkage between science and policy through communication could offer fruitful lessons for implementation of this Strategy.

To enhance climate change education and public awareness through communication, training, information and knowledge management and social empowerment including gender, the Strategy aims at:

- Promoting public awareness on climate change issues
- Promoting Education and Training in Climate change issues
- Enhancing Information and Knowledge Management Systems
- Promoting gender considerations in climate change issues

Strategic Objective 5: To build climate change response capacity through institutional strengthening, technology transfer, resource mobilization and partnership building and stakeholder involvement.

The Strategy recognizes that risks should be managed at the appropriate level and the clear need to build capacity at local and sub-national levels. Leadership by governments of the EAC and its Partner States is essential to understanding and responding to the impacts of climate change. Partner States' have differing and complementary roles in climate change adaptation both at the national and local governments' levels. They include:-

- Integrating climate change considerations into existing policies and strategies; developing, implementing and reviewing policies and strategies, including regulation, standards and economic instruments.
- Establishing and maintaining community and national-level essential services to deal with the impacts of climate change, including emergency management and health services;
- Building adaptive capacity, including providing tools and information, raising awareness of adaptation options, educating key professionals about adaptation and investing in climate change science as well as related social, ecological and economic studies; and
- Managing risks from climate change to their own programmes, activities and assets, including natural ecosystems for which governments have management responsibility (eg public lands, local government forests, national parks and infrastructure, including transport, electricity and water supply).

Effective participation enhances the integration of the three pillars of sustainable development. Strategy implementation is more than a wise allocation of resources and good stewardship; the process matters. Ultimately the success or failure of the EAC Policy and this Strategy on Climate Change rests on implementation at the national and local levels.

The Strategy will seek to mobilise and build capacity to address climate change at all levels and achieve the strategic objectives. Capacity mobilization and development is necessary to support both adaptation to, and mitigation of climate-induced impacts, as well as disaster risk reduction and building human resilience to all**.** Monitoring the effectiveness of measures taken is equally important to enable the sharing of knowledge. Clear and effective communication of climate change issues is critical in the implementation of actions outlined in this Strategy. There is a need to improve consumer communication on the real cost or impact of the consumer products, in terms of carbon footprint. Communicating will ensure that decision makers at all levels are aware of the impacts of climate change and equipped with the information and tools they need to apply that knowledge in planning and decision making processes. Communication of the

outcomes of climate research is also an important activity and is especially relevant to local communities and those operating in the private sector. Effective communication can also stimulate public discussions and action on climate change issues. Incorporation of climate change education into primary and secondary curriculum is a necessary approach to building long-term resilience and adaptation to climate change. The training of teachers and lecturers in the field of climate change is part of this Strategy.

To build climate change response capacity through institutional strengthening, technology transfer, resource mobilization and partnership building and stakeholder involvement, the Strategy aims at:

- Enhancing capacity of regional institutions to carry out climate change related research including climate change monitoring, detection, forecasting and the requisite response interventions;
- Promoting development of climate change tools, methods and technologies and supporting their application;
- Promoting technology transfer and development initiatives geared towards accelerating development, deployment, adoption, diffusion and transfer of environmentally sound technologies targeting adaptation and mitigation;
- Supporting the designing and development of integrated climate change knowledge sharing and management tools such as databanks, regional network for sharing lessons, experiences and best practices amongst Partner States and other countries;
- Promotion of harnessing and integration of indigenous technical knowledge in modern knowledge;
- Establishing and supporting relevant climate change national and regional institutions and centres of excellence;
- Collaboration in institutional assessments with the aim of strengthening and mobilizing the capacities of existing relevant facilities and institutions in the region and Africa;
- Supporting the development of human and technical resource and skills in climate change adaptation and mitigation (especially negotiation skills, CDM project design and development, carbon trading, REDD+, etc) through focused training, mentoring and learning by doing approaches, scholarships and fellowships, among other measures;
- Supporting the establishment of a regional climate change negotiation platform;
- Supporting capacity building for carbon financing mechanisms in order to take advantage of the existing global funding mechanisms;
- Encouraging and strengthening participatory and integrated approaches in planning and decision making, involving meaningful participation of all stakeholders including the civil society.

Strategic Objective 6: To ensure a sustainable Financing Mechanism for climate change.

Addressing climate change is intricately linked to the broad challenges of natural resources management, poverty reduction and sustainable growth.

Financing is key for effective climate change action by all players. There is general agreement that the cost of adaptation will be substantial and that a*vailable funds* within the UNFCCC system *to developing countries as a whole are insufficient*. Availability of funds for climate change within the UNFCCC system is currently limited, inequitably distributed, and with access constraints; and those outside of the UNFCCC system have so far been inadequate.

There is a need for a predictable level of financial resources and their most effective allocation. Ongoing and planned programmes by Partner States and development partners will contribute to the implementation of

this Strategy. The EAC Climate Change Fund shall form a critical component of this predictability. Operationalization of the EAC Fund for Climate Change is therefore of utmost urgency.

CHAPTER FOUR

4.0 IMPLEMENTATION PLAN AND COORDINATION

4.1 Institutional Arrangements and Governance Structure

The EAC Climate Change Policy highlights the prevailing unccordinated approach by various stakeholders in implementing climate change related initiatives at the Partner States and regional level, and the need for a defined coordination and management structure to enhance synergies and minimize duplication of efforts. The Policy directs that the institutional framework for implementing the policy shall include the EAC Secretariat working jointly with relevant government agencies in Partner States, EAC organs and institutions including Lake Victoria Basin Commission (LVBC), Lake Victoria Fisheries Organization (LVFO), Inter-University Council of East Africa (IUCEA) and any other institutions that may be established by relevant Sectoral and Coordination Committees. This will facilitate the creation of institutional arrangements at EAC level with clear linkages to institutions at the Partner States, EAC organs and institutions. A similar working relation with regional and international entities will also be established. The Policy further directs that the coordinating institution shall be vested, inter alia, with the following mandates:

a.Designing of climate change policies, strategies and plans;
b.Designing relevant projects;
c.Promoting introduction of climate change in education curriculum; and
d.Building the capacity of research institutions involved in climate change related issues.

The multi-sectoral meeting on food security and climate change directed the Secretariat to ensure that institutional arrangements are in place and implemented by September 2011, in view of the on-going institutional review, resources mobilization strategies and plans for mobilizing financial, human and technical resources and joint monitoring and evaluation of cross cutting issues including gender and youth as related to the EAC Food Security Action Plan and Climate Change Strategy and Master Plan.

Furthermore, the EAC Heads of State Summit Declaration signed on the 19th April 2011 called for the need to ***create special institutional arrangements in the short to medium term, flexible enough to coordinate climate change actions by different players***.

In view of the above directives, and in order to enhance EAC's capacity to implement the Policy and its instruments, **a Climate Change Coordination Unit (CCCU) shall be established at the EAC Secretariat, as a specialized Technical Unit dealing with climate change under the Department of Environment and Natural Resources.** The Department of Environment and Natural Resources is charged with the responsibility of coordinating the implementation of the EAC Protocol on Environment and Natural Resources Management including climate change in accordance with Article 24 of the Protocol. The Unit may evolve with time and report directly to the Directorate of Productive and Social Sectors (DPSS) under the Office of the Deputy Secretary General for Productive and Social Sectors (DSG-PSS). This will ensure effective mainstreaming of climate change within EAC to facilitate coordination across different EAC directorates, organs and specialized institutions.

The overall objective of the Unit shall be to provide technical and coordination support including monitoring and evaluation of climate change progammes and projects in accordance with the EAC Climate Change Policy, EAC Climate Change Strategy and Master Plan.

The overall mandate of the Climate Change Coordinating Unit shall be as follows:

a) providing overall technical and administrative guidance to the implementation of the Climate Change Policy, Strategy and Master Plan;
b) coordinating, monitoring and evaluating the implementation of the Climate Change Policy, Strategy and Master Plan, including developing implementation/work plans.

Specifically, the Unit shall be charged with the following duties and responsibilities:

a) formulating regional climate change response instruments and tools including policies, strategies and plans;
b) overseeing the overall coordination and implementation of the EAC Climate Change Policy and its instruments, the Climate Change Strategy and Master Plan;
c) providing technical backstopping to the implementation of climate change adaptation, mitigation and capacity building activities including joint programme and project activities;
d) coordinating resource mobilization activities to support regional climate change programmes and projects;
e) enhancing institutional linkages with and among relevant regional stakeholders, including Departments of the EAC Secretariat and EAC organs and institutions, as well as Lake Victoria Basin Commission (LVBC), Lake Victoria Fisheries Organization (LVFO), Inter-University Council for East Africa (IUCEA) and any other institutions that may be established by the Council of Ministers;
f) providing technical support to Partner States institutions including; Centres of Excellence, National Climate Change Secretariats and Committees, National Climate Change Units;
g) establishing and maintaining partnerships and collaborations with Development Partners, private sector and civil society actors;
h) developing joint monitoring and evaluation frameworks on climate change activities at the field and policy level and overseeing their implementation;
i) developing climate change communication tools and materials and ensuring effective dissemination of evidence-based policy options to all relevant stakeholders;
j) setting regional climate change agenda in view of the international climate change processes under the United Nations Framework Convention on Climate Change (UNFCCC);
k) providing technical advise to EAC and increasing EAC's visibility and participation in the global climate change negotiations under UNFCCC;
l) enhancing the capacity of regional stakeholders through capacity building programmes;
m) providing technical and policy backstopping to the Regional Climate Change Negotiators;
n) reviewing funding proposals from Partner States submitted to the EAC Climate Change Fund for funding;
o) coordinating climate change programme and project development activities;
p) providing technical support to the work of the Technical Climate Change Working Group;
q) implementing the decisions and directives of the Council and Summit relating to climate change;
r) any other functions as may be decided by the Council of Ministers in view of the EAC Treaty, Climate Change Policy, Strategy, and Master Plan, the Protocol for Environment and Natural Resources Management and the Heads of State Declaration on Food Security and Climate Change.

Linkages between the Climate Change Coordination Unit and other Institutions and Directorates and Departments of the EAC

The Unit shall establish and maintain close horizontal and vertical working relationships and linkages internally and externally. Internal linkages shall be established between the EAC organs (East African Legislative Assembly (EALA), specialized institutions (Lake Victoria Basin Commission (LVBC), Lake

Victoria Fisheries Organization (LVFO); Inter University Council for East Africa (IUCEA); directorates-mainly the Directorate of Productive and Social Sectors and their respective departments. The Unit shall also maintain linkages with other Productive and Social Sectors of the EAC Secretariat. External linkages shall include: Partner States institutions and agencies including the National Climate Change Coordinating Institutions; the Climate Change Programme Management Units proposed in COMESA and SADC through the COMESA-EAC-SADC Tripartite Programme on Climate Change; research and academic institutions; Development Partners etc.

A Climate Change Programme Management Unit (PMU) shall be establishment at the EAC Secretariat with support from development and bilateral partners. The PMU shall be under the supervision of the Directorate of Productive and Social Sectors.The Unit will also be linked to the EAC Climate Change Fund that shall serve as the financial mechanism for the climate change programmatic and project activities through development partners and donors etc.

Human Resource and Staff Requirements

The Unit shall require technical and administrative support comprising of the following professional with specialized skills in climate change and general staff to enable it meet the above functions as follows:

Established Positions (Professional Staff)

a) 1 Principal Climate Change Officer – Head of the Unit.
b) 1 Senior Climate Change Officer - responsible for adaptation (including disaster risk reduction)
c) 1 Senior Climate Change Officer - responsible for mitigation and carbon finance;

Other staff may be recruited on a needs-basis to comprise Programme Management Staff. The following Programme Management Staff are proposed in the 5 year COMESA-EAC-SADC Tripartite Programme on Climate Change Adaptation and Mitigation.

Climate Change Programme Management Staff (Professional and Support Staff):

Professional Staff

a) Climate Change Programme Coordinator (1)- responsible for overall programme management and coordination;
b) Climate Change Adaptation Expert (1)- responsible for the design and implementation of adaptation and disaster risk reduction projects
c) Climate Change Mitigation Expert (1) - responsible for designing and implementing mitigation and carbon trading projects.

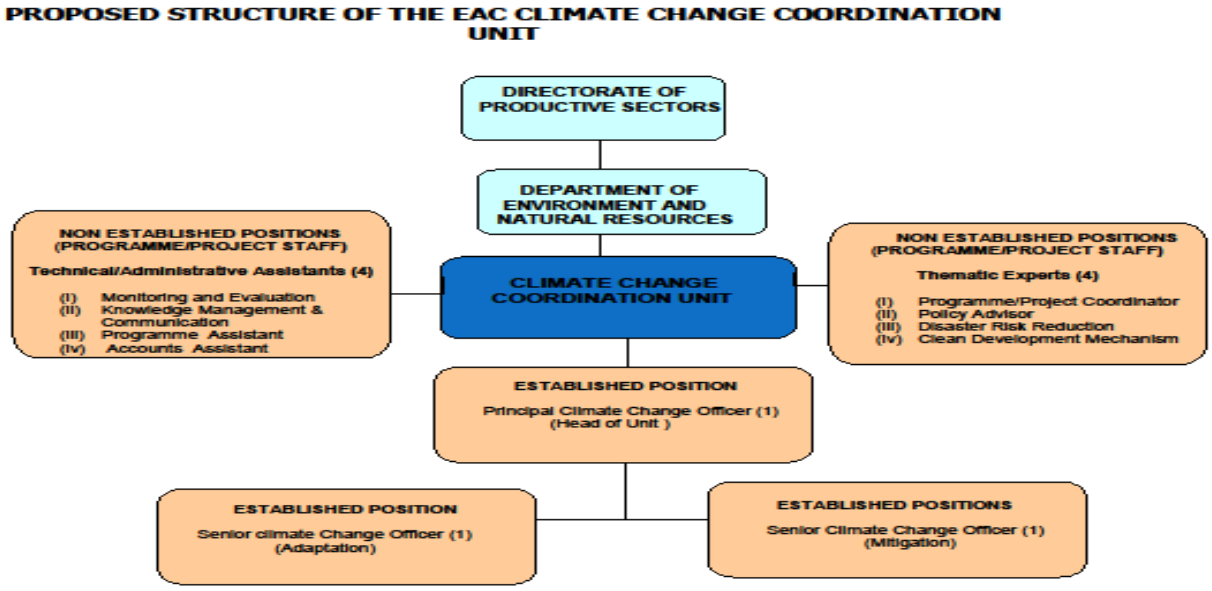
Technical Support Staff

a) Monitoring and evaluation Officer (1) – responsible for monitoring & evaluation, data collection, reporting.
b) Knowledge management and Communication Officer (1)
c) Procurement and Accounts Officer (1) – responsible for procurement, budget management and financial accounting;
d) Administrative Assistant (1) – responsible for administrative functions of the Unit.

The detailed responsibilities and duties of the proposed staff shall be developed.

The Sectoral Council on Environment and Natural Resources shall provide overall policy guidance to the activities of the Unit through the Climate Chnage Working Group established under the Sectoral Committee on Environment and Natural Resources. The Sectoral Council shall be responsible for reporting on the Unit's activities to the Council of Ministers and Summit in view of the implementation of the EAC Climate Change Policy and Declaration on Food Security and Climate Change. The Sectoral Council shall remain the highest decision making and advisory body on all matters regarding to climate change.

The proposed institutional structure indicating the linakages with the existing EAC Organization structure and the staffing requirements for the Unit is shown in the Diagram below.



Recommendations

a.immediate establishment of the EAC Climate Change Coordination Unit;
b.establish two new positions dedicated to Climate Chnage within the Department of Environment and Natural Resources ; and
c.mobilization of resources to support the operations of the Climate Change Coordination Unit.

4.2 Partnerships and Collaborations

The Strategy will be implemented in partnership and collaboration with other relevant stakeholders including non-governmental organisations, civil society, private sector and development partners. Climate change also presents opportunities for enhanced partnerships and increased international cooperation. As shown in Annex 3, Partner States participate in a variety of multilateral cooperative arrangements that provide a variety of benefits, including the prospect of climate change adaptation and reducing greenhouse gas emissions. Given the global nature of climate change, and in recognition of the contributions being made by others outside the region, the EAC will seek to engage other regional organizations and partners in large-scale cooperative climate change initiatives. Such cooperation can prove beneficial to the success of EAC climate change initiatives, through leveraging of resources;

partitioning of research activities addressing large-scale and multifaceted, complex climate change problems; and sharing of results and knowledge created. Even win-win options identified in this Strategy could require international collaboration. The EAC and its Partner States could expand international participation in key climate change activities by building on the cooperative international initiatives already underway. The Strategy envisages a broad partnership of the private sector, NGOs, CBOs, Faith-based Organizations, local communities, the East African Community and its Partner States, other Intergovernmental Organisations as well as the Development Partners.

4.3 Resource Mobilization

More financial resources need to be mobilized for the EAC and its Partner States. A resource mobilization strategy shall be developed. The major function of the EAC Climate Change Fund shall be resource mobilization. The Fund shall mobilise financial resources from various existing and emerging sources of climate change finance including funds established by bilateral partners and multilateral arrangements under the United Nations Framework Convention on Climate Change (UNFCCC) such as the Global Environment Facility (GEF), Adaptation Fund, the Clean Development Mechanism (CDM), and Reducing Emissions from Deforestation and forest Degradation (REDD) mechanism; and Multilateral Development Banks (MDB). The Fund will also propose innovative ways of raising national resources towards the implementation of urgent and immediate activities in the short term while mechanisms for accessing international climate change finances are being put in place.

Partner States allocate substantial human, physical and financial resources within available means to address the effects of climate change. The current financing mechanisms are not adequate in terms of capitalization and accessibility. Current sources of climate change funds range from:-

(a) Partner States' budgetary allocations through sector budgets and plans;
(b) Multilateral funding: grants, loans and concessional funding;
(c) Bilateral funding-grants;
(d) *Non-public sector resources*, directly and indirectly from non-state intervening agencies such as international NGOs, faith-based organizations; local NGOs and private sector resources;
(e) Market-based instruments, e.g., carbon finance.

4.4 Monitoring, Evaluation and Reporting

The EAC shall be responsible for tracking, coordinating and overseeing the implementation of this strategic plan in collaboration with the Partner States. The EAC Secretariat will develop a robust monitoring and evaluation framework with clear milestones and indicators for the efficient implementation of the regional climate change programmes and projects as prioritized by the Climate Change Policy and Strategy. Monitoring and evaluation of the national climate change projects will be the responsibility of Partner States. The monitoring plan will ensure collection of information for use by coordinating institutions and key stakeholders to measure progress of implementation of the activities and facilitate timely decision making.

4.5 Implementation Plan (Strategic Plan)

This Strategy provides a framework for giving strategic direction to Partner States and other stakeholders in addressing regional challenges and opportunities arising from climate change in an integrated and coordinated manner. Its implementation is to be complemented by climate change strategies of Partner States whose institutional structures will implement it in accordance with their determined mandates at that level. The EAC will implement identified regional level activities and perform an enabling, catalyzing and coordination role for overall implementation of the Strategy. The Strategy will be subject to review over time on the basis of evaluation and emerging issues for the region.

The Implementation Strategic Plan is shown in Annex 1 below.

ANNEX 1: IMPLEMENTATION STRATEGIC PLAN

The activities listed may be included, with further elaboration, in national development plans of Partner States in support of the EAC Climate Change Strategy, the strategic objectives and strategic interventions listed below.

Strategic Objective 1: To enhance climate change adaptation through vulnerability reduction, building socio-economic resilience, disaster risk reduction and adaptation planning.

Strategic Interventions	Outcome	Activities	Output	Actors	Estimated Costs (USD) Indicative	Timeframe
1.1 To improve water conservation, efficiency and sustainable use and exploitation of regional water resources in view of the changing climate.	Adequate and sustainable water resources in the region	(a) Enhance development and transfer of water- and climate- information and technology to support water conservation through natural resource planning, technology innovation and transfer, partnerships and joint ventures;	Water resources effectively conserved and efficiently utilized; Regional water resources sustainably exploited and utilized.	Partner States, EAC	**461,655.22** **1,154,138.04**	By 2016
		(b)Promote regional and international cooperation for better water management and conflict prevention through trust and confidence building;	Regional and International Protocols/Frameworks for transboundary water resources ratified and observed.	EAC, Partner States		By 2013
		(c) Promote transfer and dissemination of efficient water technologies including recycling of waste water;	Efficient water technologies availed and applied by a wide range of stakeholders in the region	Partner States, EAC. Private sector,		By 2013
		(d) Improve water security by promoting investment in water storage facilities;	Water storage facilities widely installed by a majority of consumers	Partner States, Private sector,		By 2013
		(e) Strengthen initiatives for conservation and management of lake and river basins;	A majority of Lake and river basins in the region sustainably managed and effectively conserved	Partner States, EAC, NGOs/CBOs		By 2016
		(f) Promote participation of the private sector, civil societies and women in management of water	Private sector, civil societies and women, participating in the	Partner States		By 2013

		resources;	management of water resources			
		(g) Promote rain water harvesting, protection of water wells and springs, and other water sources; ✓ Promote Intensification of water harvesting and recycling; the collection and storage of rainwater during the wet periods, and use for arable land irrigation, domestic use and for livestock; ✓ Promote Investment in appropriate and sustainable water harvesting, storage and utilization technologies; ✓ Reduce water pollution as an option for adapting to climate change; Improve water quality monitoring; ✓ Increased capture and retention of rainwater through the construction of waterways, strategic boreholes and other water harvesting structures to ensure availability of water during dry seasons; ✓ Construct solar desalination systems; undertake desalinization and defluoridation of water in areas with fluoride and saline content; ✓ Improve management and maintenance of existing water supply systems; reduction of leakage; ✓ Develop flood controls and drought monitoring; ✓ Decentrallize municipal water recycling facilities for	Water wells, springs and other water sources protected, rainwater harvested by a majority of water users	Partner States, communities, CBOs/NGOs		By 2013

		both domestic and industrial use to reduce wastage; ✓ Intensify and sustain afforestation and reforestation programmes to protect water sources; ✓ Promote efficient charcoal production and utilisation technologies to reduce biomass consumption.				
		(h) Promote bulky water supply to ensure adequate and reliable water for production;	Promotional programmes for bulky water supply undertaken targeting all consumers with high demand, bulky water needs for production	Partner States, private sector,		By 2013
		(i) Promote Public Private Sector partnership in regulated abstraction and distribution of water for domestic, industrial, agricultural production & energy ; and	Public-Private sector partnerships promoted in regulated abstraction & distribution of water	Partner States, private sector,		By 2013
		(j) Promote actions that reduce water pollution, including protection of water quality and aquatic habitats.	Actions to promote the reduction of water pollution, including protection of water quality and aquatic habitats, undertaken widely.	Partner States, communities, CBOs/NGOs, EAC		By 2013
1.2 Develop adaptation framework for agriculture to improve agricultural productivity and enhance food security.	Sustainable agricultural production and food security	(a) Promote sustainable land management practices, including conservation agriculture (CA) and improved production systems; ✓ Promote organic farming, e.g. using crop residues and cow-dung as manure, (renewable and part of the natural cycles) ✓ Promote high–yield, stress-resilient crops; drought and salt-tolerant/pests-vectors-insects and disease-resistant crop development;	Sustainable land management practices including conservation agriculture & improved production systems, promoted widely in the region;	Partner States, private sector, communities, CBOs/NGOs,	**1,650,459.1**	By 2013

		✓ Address land degradation through soil and stone bunds, grass strips and contour levelling as well as incorporating trees or hedgerows- some species are appropriate for the protection of banks of water bodies and ravines. ✓ Promote diversification and intensification of food and plantation crops; promote varieties performing in weak rainfall and poor soil fertility; drought-tolerant perennials and early maturing varieties and breeds of crops which are able to utilize the shortened seasoned rains; ✓ Promote diversification of rural economies, including through value addition to agricultural products and financial support for sericulture and apiculture to reduce reliance on climate-sensitive agricultural practices; ✓ Promote altering the timing of planting and harvesting periods to adapt to changing conditions, eg. crops most sensitive to fungic diseases are grown during seasons with low rainfall, or even during dry seasons, Crops resistant to diseases and plant pests are grown during seasons with heavy rain. Crops with long vegetative cycle are planted at the beginning of the rains, to be harvested at the end of the rains; ✓ Develop and promote appropriate				

		technological packages, eg-training of farmers/associations on seed production techniques; produce and avail grains in seedling centres;				
		(b) Promote development and implementation of irrigated agriculture through irrigation policies;	Irrigation policies developed & irrigation agriculture implemented	Partner States, private sector, communities,		By 2013
		(c) Promote water availability and sustainable use practices and technologies in agriculture, livestock and aquaculture for efficient utilization of water especially in arid and semi arid lands (ASALs); ✓ Construct dams to cater for pastoralists' water needs during the dry spells, with due consideration of a geological and hydrological parameters;	Promotion of water availability, sustainable use practices and technologies in agriculture, livestock and aquaculture, undertaken, for efficient utilization of water especially in ASALs	Partner States, private sector, communities,		By 2013
		(d) Promote agro processing and enhance food storage facilities; ✓ Develop and promote appropriate food storage facilities to cater for surplus harvest; ✓ Document, develop and disseminate indigenous technologies for food preservation such as drying and use of native preservatives; ✓ Establish food security programmes.	Promotional programmes developed and undertaken for agroprocessing & food storage facilities in the region	Partner States, private sector,		By 2013
		(e) Promote efficient livestock and aquaculture production systems including fodder and pasture storage and availability; ✓ Identify forage types that suits various agroecological zones; promote pasture production, harvesting	Promotional programmes developed and undertaken for livestock & aquaculture production systems, fodder and pasture storage;	Partner States, private sector,		By 2013

		and storage; ✓ Promote pasture production, harvesting and storage; nucleus multi-purpose trees suitable for improved livestock production and feeding as standing and perennial fodder banks and soil conservation pillars; ✓ Promote sustainable range management and Land use planning; ✓ Establish emergency fodder banks from crop residues, growing seasonal/ perennial fodder trees and grasses. Investing in programmes to harvest and store fodder for use during dry seasons. Fodder may also be sourced from distant areas in the region which usually receive good amounts of rainfall; ✓ Promote zero-grazing breeding techniques; reinforce animal husbandry in permanent stalling; ✓ Promote economic diversification among pastoral communities (e.g. cultivation of drought-tolerant crops such as millet); ✓ Undertake awareness campaigns among the pastoralist communities on the importance of balancing stocking rates with the carrying capacity of available land resources to ensure sustainable pastoralism.				
		(f) Increase use of integrated crop and livestock pests and disease management in the region; ✓ Strengthen integrated	Use of integrated crop and livestock pests and disease management increased in the region;	Partner States, private sector,		By 2013

		and environmentally friendly pest management systems to cope with increased threats from insects, pathogens, and weeds; ✓ Strengthen veterinary and phytosanitary services; and carry out cross-border disease surveillance to reduce transmission of infections by migrating animals; ✓ Ensure mass vaccination against major animal diseases; regular vaccination campaigns carried out, and a community based mechanism of vaccination and disease prevention established; ✓ Inventorize indigenous knowledge that has conventionally been used by local communities to cope with erratic climate, e.g. on rainfall prediction and use of conventional medicine in treatment of animal diseases, as well as supporting the improvement and dissemination of such technologies; ✓ Identify and popularise the breeding of species adapted to local climate conditions.				
		(g) Improve management of natural resources (land, water, fisheries and forest) in order to ensure sustainable production;	Management of natural resources improved for land, water, fisheries and Forestry;	Partner States, private sector,		By 2016
		(h) To improve on the food management and distribution systems to ensure access and affordability;	Food management & distribution systems improved; access & affordability for food enhanced;	Partner States, private sector,		By 2016
		(i) Strengthen agro-meteorological information generation for improved	Agro-meteorological information	Partner States, EAC		By 2016

		early warning systems for food security; ✓ Strengthen the capacities of Meteorology, Hydrology and Food Security services across the region to access, to store and to manage information in a coherent and synergistic manner.	generation strengthened for improved early warning systems for food security;			
		(j) Promote harmonization of policies, strategies and standards of Partner States agricultural, livestock and fisheries research institutions and organizations.	Harmonized policies, strategies and standards of Partner States agricultural, livestock and fisheries research institutions and organizations.	Partner States, EAC		By 2013
1.3 To develop, harmonize and adopt common policies, laws and strategies for the conservation and sustainable utilization of wildlife resources in and outside protected areas in the region as part of ecosystem based adaptation.	Harmonized actions arising from common policies, laws and strategies for the conservation and sustainable utilization of wildlife resources in and outside protected areas in the region	(a) Promote measures that preserve the ecosystem integrity of critical wildlife habitats and endangered species;	Programmes for promoting preservation of ecosystem integrity of critical wildlife habitats and endangered species undertaken across the region;	Partner States, EAC	**856,722.12**	By 2013
		(b) Establish, promote, and/or protect wildlife migration corridors; and	Wildlife migration corridors established, promoted, and/or protected;	Partner States, EAC		By 2013
		(c) Diversify livelihood for local communities in order to reduce their dependency on wildlife.	Livelihood for local communities diversified to reduce their dependency on wildlife.	Partner States, private sector		By 2013
1.4 To enhance the adaptive capacity and resilience of the coastal and marine ecosystems, coastal communities and infrastructure to the impacts of climate change as part of ecosystem based adaptation.	Enhanced adaptive capacity and resilience of the coastal and marine ecosystems, coastal communities and infrastructure to the impacts of	(a) Promote Integrated Coastal Zone Management (ICZM);	Implementation of Integrated Coastal Zone Management promoted	Partner States, EAC	**856,722.12**	By 2013

	climate change					
		(b) Support measures to control coastal erosion as result of rising sea water; ✓ Identify fragile and threatened coastal areas and support projects to protect coastal zones and infrastructure against sea level rise; ✓ Undertake sustainable management of floodplains around Lakes and rivers and the ocean, taking into account of the fluctuations of water levels related to the cyclic fluctuations of precipitations eg. planting mangrove belts to provide flood protection; ✓ Establish control measures to manage dynamics of watercourses and torrents in the region, including around cities and other human settlements of large population concentration; ✓ Protect coastal areas, through construction of retention walls and sand injections to counteract soil erosion; ✓ Regulate the development of infrastructure along or near coasts, restoring beach vegetation, controlling waste, and protection of infrastructure by constructing structures such as groynes, and/or by implementing other measures to counteract coastal erosion; ✓ Promote measures for adjusting to sea-level rise, including through land-use changes,	Coastal erosion control measures supported across the region	Partner States, communities, NGOs/CBOs		By 2013

		planning and investment and, more generally, through integrated coastal zone management; ✓ Establish a small grant fund for agencies and NGOs, preferably with a focus on the most vulnerable segments of society & areas in the region, to finance innovative grassroots adaption and develop models that could be replicable across the region.				
		(c) Mobilize funds to construct walls at vulnerable points to minimize adverse impacts of sea level rise;	Funds mobilized & defence walls constructed at vulnerable points to minimize adverse impacts of sea level rise;	Partner States, communities, EAC, private sector		By 2013
		(d) Conserve coastal and marine habitats to promote development of protected area management systems; and	Coastal and marine habitats conserved; development of protected area management systems promoted ;	Partner States, EAC, private sector		By 2013
		(e) Establish coastal ecosystem monitoring and surveillance systems ✓ Monitor coastal zones and sea level rise; ✓ Protect and conserve coral reefs, mangroves, sea grass and littoral vegetation.	Coastal ecosystem monitoring and surveillance systems established	Partner States, EAC,		By 2013
1.5 To improve sustainable land use, land use change and soil management practices as an adaptation strategy.	Improved sustainable land use, land use change and soil management practices	(a) Promote sustainable land use and land use change management practices;	Programmes for Sustainable land use and land use change management practices undertaken;	Partner States, private sector	**3,652,540.78**	By 2013
		(b) Improve land productivity and soil fertility, inter alia, through; integrated nutrient management, improving soil quality, enhancing soil and water conservation measures to enhance physical, chemical, biological or	Improved land productivity and soil fertility	Partner States, private sector		By 2016

		economic properties; ✓ Promote soil-and-water conservation farming practices (Soil fertility maintenance)- Soil and water management; ✓ Promote planting of multi-purpose trees for wind breaking, timber & fruits; ✓ Promote agricultural practices that are more flood-resistant; installation of mechanisms to control erosion in sensitive areas, for reduction of soil degradation; anti-erosion physical devices, such as ditches, radical terraces and stone alignments particularly on hilltops or lands with moderate slope; ✓ Popularise rainwater harvesting techniques for agricultural and domestic use; ✓ Establish and protect strategic buffer zones in floodplain and around lakes in the region; control sediment flows from the steep mountainous terrain surrounding lakes; ✓ Establish seed banks and identify least-cost measures, such as switching crops and/or cultivars, soil improvement, and rainwater management; ✓ Develop databases for resilience of crops; ✓ Enhance agricultural extension services to train farmers for coping with climate variability and change; ✓ Establish innovative				

		Insurance Schemes- low premium micro-insurance policy for low-interest loans to insure farmers against crop failure due to droughts, pests or floods.				
		(c) Reduce land degradation and soil erosion especially in the fragile ecosystems such as mountainous areas, lake shores and riverbanks; and	Land degradation and soil erosion reduced especially in the fragile ecosystems	Partner States, private sector		By 2016
		(d) Facilitate formulation of integrated sustainable land management investment frameworks and land use policies and plans.	Integrated sustainable land management investment frameworks and land use policies and plans facilitated.	Partner States, EAC,		By 2013
1.6 To promote sustainable management of forestry and wetlands as part of ecosystem based adaptation.	Forests and wetlands sustainably managed;	(a) Strengthen capacity to monitor and manage forests and forest-related activities;	Capacity to monitor and manage forests and forest-related activities strengthened;	Partner States, EAC, communities,	**856,722.12**	By 2016
		(b) Promote alternative energy sources in order to reduce dependency on biomass for energy needs in both urban and rural areas;	Alternative energy sources promoted for energy needs in both urban & rural areas to reduce dependency on biomass	Partner States, EAC, private sector		By 2013
		(c) Promote reforestation, afforestation and agroforestry practices;	Reforestation, afforestation and agroforestry practices promoted;	Partner States, private sector, communities,		By 2013
		(d) Strengthen enforcement of laws and good governance of forests and wetlands;	Enforcement of laws and good governance of forests and wetlands strengthened;	Partner States,		By 2013
		(e) Promote collaborative forest management practices;	Collaborative forest management practices promoted;	Partner States, communities, private sector,		By 2013
		(f) Promote improvement of agricultural productivity so as to avoid deforestation and encroachment on gazetted wetlands for agricultural expansion;	Agricultural productivity promoted; deforestation and encroachment on gazetted wetlands for agricultural	Partner States, communities, private sector,		By 2013

			expansion avoided;			
		(h) Promote and strengthen community based management practices;	Community based management practices promoted and strengthened;	Partner States, communities, private sector,		By 2013
		(i) Promote non-timber forest products;	Non-timber forest products promoted;	Partner States, communities, private sector,		By 2013
		(j) Promote biomass energy-efficiency technologies; and	Biomass energy-efficiency technologies promoted;	Partner States, communities, private sector,		By 2013
		(k) Promote participatory, integrated watershed management practices.	Participatory, integrated watershed management practices promoted.	Partner States, communities, private sector,		By 2013
1.7 To reduce the vulnerability of populations to climatic sensitive diseases and enhance adaptive capacities within the health services.	Reduced vulnerability of populations to climatic sensitive diseases and enhanced adaptive capacities	(a) Develop effective early warning systems and emergency health measures for climate change related diseases;	Effective early warning systems and emergency health measures for climate change related disease developed.	Partner States, EAC, private sector,	**3,370,955.07**	By 2013
		(b) Facilitate availability of health facilities, equipment and medicine to assist in early diagnosis and treatment in climate change related diseases;	Availability of health facilities, equipment and medicine to assist in early diagnosis and treatment in climate change related diseases facilitated;	Partner States, EAC, private sector,		By 2016
		(c) Enhance capacity of medical personnel on climate change, including traditional/indigenous knowledge;	Capacity of medical personnel on climate change, including traditional/indigenous knowledge enhanced ;	Partner States, private sector, communities,		By 2016
		(d) Promote awareness among populations on climate change related diseases and their prevention;	Awareness programmes among populations on climate change related diseases and their prevention undertaken;	Partner States, private sector, communities, CBOs/NGOs		By 2013

		(e) Provide access to healthcare services to vulnerable groups such as pregnant women, children, older persons and others; and	Access to healthcare services provided to vulnerable groups such as pregnant women, children, older persons and others;	Partner States, private sector,		By 2016
		(f) Promote measures for preventing the spread and mitigating impacts of HIV/AIDS on climate vulnerable populations	Measures for preventing the spread and mitigating impacts of HIV/AIDS on climate vulnerable populations, promoted	Partner States, private sector, communities, CBOs/NGOs		By 2013
1.8 To ensure resilience of tourism infrastructure through factoring climate change into their planning, as well as enhancing climate proofing of wildlife habitats to minimize environmental migrations of endangered species.	Resilience of tourism infrastructure ensured through factoring climate change into planning & enhancing climate proofing of wildlife habitats to minimize environmental migrations of endangered species.	(a) Develop all weather infrastructure to support tourism in the region while ensuring minimal damage to wildlife habitats	All weather infrastructure developed to support tourism in the region; minimal damage to wildlife habitats ensured.	Partner States,	**101,260.45**	By 2016
		(b) Develop and diversify tourism products less sensitive to climate change, as an adaptation and substitute for the many natural ones currently disappearing very fast;	Tourism products less sensitive to climate change developed, diversified and promoted.	Partner States, private sector, communities, CBOs/NGOs		devised
		(c) Devise mechanisms of improving local vulnerable population livelihoods from revenues generated from tourism industry;	Mechanisms of improving local vulnerable population livelihoods devised from revenues generated from tourism industry;	Partner States, private sector, communities, CBOs/NGOs		By 2013
		(d) Develop park management practices to enable wildlife to adapt to the changing climate.	Park management practices developed to enable wildlife to adapt to the changing climate.	Partner States,		By 2013

1.9 To climate- proof infrastructure through ensuring that climate change concerns is factored in the development of social infrastructure to allow the infrastructure to withstand extreme weather conditions in the region.	Infrastructures that withstand extreme weather conditions in the region.	(a) Promote climate change integration in all planning and design of infrastructure;	Climate change integration in all planning and design of infrastructure promoted;	Partner States,	**3,944,065.3**	By 2013
		(b) Build awareness and capacity of the architects and engineers to take into account Climate Change in their professional deliveries;	Awareness and capacity of architects and engineers built to take into account Climate Change in their professional deliveries;	Partner States,		By 2013
		(c) Revise and harmonize structural/building codes and standards taking into account the expected changes in climate.	Structural/building codes and standards revised and harmonized taking into account the expected changes in climate.	Partner States, EAC,		By 2013
1.10 To enable development of human settlements that are robust enough to withstand Climate extremes.	Human settlements which are robust enough to withstand climate extremes.	(a) Enforce physical planning principles in the design of human settlements;	Physical planning principles enforced in the design of human settlements;	Partner States,	**3,370,955.07**	By 2013
		(c) Strengthen housing development policies including subsidies for low income communities, households and individuals.	Housing development policies strengthened; subsidies for low income communities, households and individuals provided.	Partner States,		By 2016
1.11 To reduce the vulnerability of socioeconomic systems to climatic related disasters through employing disaster risk reduction as tool for climate change adaptation.	Resilient socio-economic systems to climate-related disasters	(a) Promote community-based approach to disaster risk reduction and Community-based adaptation	Community-based approach to disaster risk reduction and adaptation promoted	Partner States, private sector, communities, CBOs/NGOs	**370,650.00**	By 2013

		(b) Support development and implementation of climate related disaster risk reduction and management as a tool for adaptation;	Climate-related disaster risk reduction and management developed and implemented	Partner States, private sector, communities, CBOs/NGOs		By 2013
		(c) Promote climatic risk assessment and monitoring through vulnerability assessment, risk and hazard mapping in all sectors including social and economic impacts of climate change;	Climatic risk assessment and monitoring promoted; vulnerability assessment, risk and hazard mapping in all sectors undertaken, including social and economic impacts of climate change;	Partner States, CBOs/NGOs		By 2016
		(d) Enhance disaster risk preparedness through inter alia: production, acquisition and dissemination of weather and climate information services for improved early warning systems (EWS), and emergency response and post disaster recovery to avert or minimize the adverse impacts of climatic related disasters;	Disaster risk preparedness enhanced; production, acquisition and dissemination of weather and climate information services for improved early warning systems (EWS), and emergency undertaken	Partner States, EAC, communities, CBOs/NGOs		By 2013
		(e) Promote management of cross-border natural resource based conflict as a result of stress on water and pasture for pastoral communities;	Management of cross-border natural resource-based conflict as a result of stress on water and pasture for pastoral communities undertaken;	Partner States, EAC,		By 2013
		(f) Promote the Disaster Risk Reduction (DRR) concept through the five priorities areas of the Hyogo Framework for Action (HFA),	Disaster Risk Reduction (DRR) concept promoted; the five priorities areas of the Hyogo Framework for Action (HFA) addressed;	Partner States, EAC,		By 2013
		(g) Promote the implementation of the Africa Regional DRR Strategy and Programme of Action;	The Africa Regional DRR Strategy and Programme of Action promoted;	Partner States, EAC,		By 2013

		(h) Prioritize the special needs of vulnerable groups such as children, women, youth, elderly and other specific groups.	Special needs of vulnerable groups such as children, women, youth, elderly and other specific groups prioritized.	Partner States, EAC,		By 2013
1.12 To cushion the region's socioeconomic development from conventional sources of energy that are highly susceptible to climatic variability and change such as hydropower.	Socio-economic development less dependent on conventional sources of energy that are highly susceptible to climatic variability	(a) Promote diversification of sources of energy;	Diversification of sources of energy promoted;	Partner States, EAC,	**1,826,270.4**	By 2013
		(b) Promote renewable energy technologies (geothermal, solar, wind) through research;	Renewable energy technologies (geothermal, solar, wind) promoted in the region through research;	Partner States, EAC,		By 2013
		(c) Introduce economic and financial measures such as zero-rating of taxes and other financial measures on some renewable energy;	Economic and financial measures such as zero-rating of taxes and other financial measures introduced on some renewable energy;	Partner States, EAC,		By 2013
		(d) Develop energy infrastructure such as hydroelectric dams and power plans;	Energy infrastructure such as hydroelectric dams and power plans developed;	Partner States, EAC,		By 2016
		(e) Protect watersheds that supply major hydroelectricity generating water sources through afforestation and reforestation measures;	Watersheds that supply major hydroelectricity generating water sources protected through afforestation and reforestation measures;	Partner States, EAC,		By 2013
		(f) Enhance energy efficiency and saving;	Energy efficiency and saving enhanced;	Partner States, EAC, Private sector		By 2013

Strategic Objective 2: To enhance sustainable development through climate change mitigation measures, including through green economy and low carbon development pathways.

Strategic Intervention	Outcome	Activities	Output	Actors	Estimated Costs USD (indicative)	Timeframe
2.1Increase availability and accessibility of sustainable, reliable and affordable renewable energy resources.	Sustainable, reliable and affordable renewable energy resources availed and accessed	(a) Identify and Develop renewable energy sources; ✓ Implement sustainable use of biofuels, and enhanced harvesting and utilization of waste as biofuel (e.g. sawdust);Waste-to-energy programmes for converting municipal solid waste (MSW) into energy with the added benefits of improving health and lowering demand for both land filling waste and fossil fuels; ✓ Develop regional sustainability standards for the production of biofuels; ✓ Promote decentralized, small-scale local energy supply systems; ✓ Utilize agricultural waste including the use of manure to produce biogas; using waste to produce biogas, also reduces the direct release of methane emissions into the atmosphere. Reducing methane emissions from uncontrolled anaerobic decomposition are potential CDM opportunities**.** ✓ Promote solar & wind power generation, particularly in the arid and semi arid areas with long hours of sunshine and abundant wind energy throughout the year; ✓ Provide information to the financial sector to mobilize financing for renewable energy investments, e.g. Photovoltaic (solar) panels, wind and solar thermal systems to breakdown the financial and information barriers that prevent a larger up-take of renewable energy	Renewable energy sources identified & developed	Partners States, CSO, Private sector	**1,826,270.4**	By 2013

		technologies; ✓ Promote the development of ggeothermal energy generation in proven geothermal steam reserves in the region.				
		(b) Apply subsidies and other tax incentives	Subsidies and other tax incentives applied	Partners States		By 2016
		(c) Promote the use of energy saving bulbs	The use of energy saving bulbs promoted.	Partners States, EAC		By 2013
		(d) Conduct relevant studies and research	Relevant studies and research undertaken- Publications eg. Wind atlas	EAC, Partner States		By 2013 .
		(e) Develop and promote energy efficient jikos/stoves/kiln	Energy efficient jikos/stoves/kilns developed & promoted	Partner States, NGOs, CBOs..		By 2013
		(f) Undertake awareness creation	Awareness creation on energy use and efficiency undertaken	Partner States, EAC		By 2013
		(g) Formulate appropriate alternative energy sources, policies and strategies	Appropriate alternative energy sources, policies and strategies formulated	Partner States		By 2013
		(h) Conduct EIA/SEA	EIA/SEA, conducted	Partner States, EAC,		By 2013
		(i) Prepare land use plans	Land use Plans prepared to guide physical development	Partner States,		By 2013
		(j) Mobilize funds	Funds mobilized	EAC, Dev. partners		By 2013
		(k) Develop solar, wind, geothermal sources of energy	Solar, wind, geothermal sources of energy developed	Partner States, EAC,		By 2013

2.2 To reduce greenhouse emissions from the transport sector	Clean air; Efficient public transport system	(a) Develop plans and strategies to improve public transport and infrastructure	Plans and strategies to improve public transport and infrastructure developed	Partner States	**3,944,065.3**	By 2016
		(b) Develop low-carbon transport modes eg bus rapid transit and light rail	Efficient low-carbon transport modes developed	Partner States		By 2016
		(c) Improve existing railway system	Improved railway system	Partner States, EAC		By 2016
		(d) Develop non-motorized modes of transport	Non-motorized modes of transport developed	Partner States, Private sector		By 2013
		(e) Phase out old and inefficient motor vehicles	Old, inefficient motor vehicles phased out	Partner States		By 2016
		(f) Enforce vehicle rules to ensure emission reduction	Vehicular emissions reduced	Partner States		By 2013
2.3 To ensure that the forest sector continues providing global services in mitigation of climate change while supporting sustainable development needs of the Partner States.	Sustainably managed forests	(a) Increase public awareness on opportunities and development of guidelines for accessing carbon financing facilities	Public awareness increased on opportunities;; Guidelines for carbon financing facilities developed and disseminated	Partner States; EAC	**856722.12**	By 2013
		(b) Promote alternative energy sources and efficient biomass energy	Alternative energy sources and efficient biomass energy promoted	Partner States, Private sector, NGOs		By 2013

		(c) Promote Afforestation and reforestation with appropriate tree species, including agroforestry and incentive measures; ✓ Undertake Intensified and sustained afforestation and reforestation programmes throughout the region; reforest the already naked zones with adapted species; ✓ Provide financial incentives to rural communities to encourage the sustainable use of forest resources through a REDD+ mechanism; ✓ Involve forest-dependent rural communities in forests management through institutional frameworks recognising and defining their roles, to enable them benefit from REDD+ activities; ✓ Promote forest protection by firewalls; maintenance of lower tree densities; develop community forest fire prevention plans and programmes; ✓ Rehabilitate highly degraded areas with species adapted to the ecosystems; halt and reverse land degradation in climate change vulnerable and resource-constrained communities, reforest the degraded zones of the watershed areas; ✓ Reinforce the management of existing forest reserves and include in protected areas the natural ecosystems identified as being threatened and vulnerable; ✓ Enhance the development of buffer zones and wildlife migratory routes; ✓ Monitor and control the spread of plant invasive and alien species, parasites and diseases;	Afforestation and reforestation with appropriate tree species promoted, including agroforestry and incentive measures;	Partner States, Communities		By 2013
		(d) Promote research and information exchange	Research and information exchange promoted	Partner states EAC secretariat		By 2013

2.4 To promote sustainable agricultural practices with agricultural-based emission reduction through land management, planning and optimal utilization of agricultural resources.	Reduced agricultural based emissions through sustainable agricultural practices and optimal utilization of agricultural resources	(a) Promote conservation agriculture and agroforestry	Conservation agriculture and agroforestry promoted	Partner States, NGOs Communities	**1,650,459.1**	By 2013
		(b) Enhance research programs and facilitate exchanges	Enhanced research and exchange	EAC, Partner States		By 2013
		(c) Promote efficient crop and livestock production systems	Efficient crop production systems promoted	Partner States, CSO, NGOs		By 2013
		(d) Develop projects in agriculture for international carbon markets	Projects developed and registered for carbon markets	Partner States, Private sector, NGOs, CBOs		By 2013
2.5 Promote waste management for improved air and water quality; soil and mitigation of greenhouse gases.	Improved air and water quality; productive soils	(a) Develop environmentally- friendly solid and liquid waste management facilities	Environmentally friendly solid and liquid waste management facilities developed	Partner States; Private sector	**1,154,138.04**	By 2013
		(b) Undertake awareness creation	Awareness creation programmes undertaken	Communities, CSOs/NGOs Partner States		By 2013
		(c) Enforce standards and regulations	Standards and regulations enforced	Partner States		By 2013
		(d) Develop CDM projects in the waste sector	CDM projects developed and registered	Partner States, Private sector		By 2013
		(e) Promote adoption of cleaner production technologies	Cleaner production technologies promoted	Private sector, Partner States		By 2013

Strategic Objective 3: To strengthen climate change knowledge generation through research, monitoring, detection and prediction.

Strategic Intervention	Outcome	Activity	Output	Actors	Estimated Costs USD (indicative)	Timeframe
3.1 To enhance the capacity of NMSs to effectively monitor, detect and predict climate change scenarios in the region to contribute to global assessments and development of adaptation options at the regional and national levels.	Competent and equipped NMSs to effectively monitor, detect and predict climate change scenarios in the region; influencing global assessments and development of adaptation options at the regional and national levels.	(a) Modernize meteorological infrastructure in the Partner States by increasing weather observing stations, communication, processing systems, training and dissemination facilities for communicating weather and climate information for adaptation measures in all the climate sensitive socio- economic sectors; ✓ Provide training and equipment to strengthen the regional research and technical institutes and the network involved in the observation, storage and collection of data, information management and in modeling & forecasting related to climate change;	Modern meteorological infrastructure in the Partner States; increased weather observing stations, communication, processing systems, training and dissemination facilities	Partner States, EAC	**74,133,140.00**	By 2016
		(b) Promote digitization and historical climate data rescue;	Digitized and historical climate data rescue promoted;	Partner States, EAC		By 2016
		(c) Strengthen early warning systems for monitoring, detection, attribution and prediction of extreme weather and climate events;	Early warning systems strengthened for monitoring, detection, attribution and prediction of extreme weather and climate events;	Partner States, EAC		By 2016
		(d) Support development of joint research programs on drought, floods, pests and disease resistant crops and livestock, and foster cooperation with regional organizations to facilitate transfer of research developments from other regions; ✓ Strengthen agricultural research and development for crop varieties that can withstand projected climate variability.	Development of joint research programs on drought, floods, pests and disease resistant crops and livestock supported; cooperation with regional organizations and fostered to facilitate transfer of research	Partner States, EAC		By 2016

			developments from other regions;			
	In-depth vulnerability assessments for identified priority sectors in the region available	(e) Strengthen research and promote data and information exchange for all sectors impacted on by climate change including forests and wetlands in the community;	Strengthened research; data and information exchange promoted for all impacted sectors, including forests and wetlands in the community; the spatial distribution of interacting risk factors and other critical data for all priority sectors of the EAC Policy, mapped (Use of Geographic Information Systems (GIS).	Partner States, EAC		By 2016
		(f) Promote periodic climate change related research and exchange of information in conservation and sustainable use of wildlife;	Periodic climate change related research promoted; periodic exchange of information in conservation and sustainable use of wildlife also promoted;	Partner States, EAC		By 2013
		(g) Promote research on coastal and marine systems;	Research on coastal and marine systems promoted;	Partner States, EAC		By 2013
		(h) Promote research in the area of Climate Change and human health;	Research in the area of Climate Change and human health promoted; data collection and monitoring for vector distribution in the region, in particular mosquito species improved; trends and relationships of disease outbreaks or vector distributions assessed; health risk plans based upon climate change scenarios developed.	Partner States, EAC		By 2013

		(i) Undertake in-depth vulnerability assessments for identified priority sectors in the region.	In-depth vulnerability assessments undertaken for identified priority sectors in the region.	Partner States, EAC		By 2016
		(j) Promote implementation of research findings and its linkages with policy formulation and practice research that promote modern agriculture technology;	Implementation of research findings and its linkages with policy formulation and practice research that promote modern agriculture technology promoted;	Partner States, EAC		By 2016
		(j) Support the downscaling of global climate model outputs to regional and national levels to address climate variability and change at Partner State level; and	Downscaling of Global climate model outputs to regional and national levels supported, to address climate variability and change at Partner State level;	Partner States, EAC		By 2016
		(k) Develop modalities of disseminating and sharing research findings with an emphasis on research into use to inform policy and practice.	Modalities of disseminating and sharing research findings developed, with an emphasis on research into use to inform policy and practice.	Partner States, EAC		By 2016

Strategic Objective 4: To enhance climate change education and public awareness through communication, training, information and knowledge management and social empowerment including gender.

Strategic Intervention	Outcome	Activity	Output	Actors	Estimated Costs USD	Time frame
4.1To promote public awareness on climate change issues	An informed public	(a) Undertake public awareness on the importance of ecosystems such as forests, wetlands and marine ecosystems in climate change mitigation and the well-being of the region's environment;	Public awareness on the importance of ecosystems such as forests, wetlands and marine ecosystems undertaken, in climate change mitigation and the well-being of the region's	Partner States, EAC, NGOs/CBOs	**1,315,738.8**	By 2013

			environment;			
		(b) Create awareness on linkages between climate change and key socio-economic sectors including health;	Programmes for awareness creation on linkages between climate change and key socio-economic sectors undertaken, including on health;	Partner States, EAC, NGOs/CBOs		By 2013
4.2 To promote Education and Training in Climate change issues	A critical mass of the region's population educated and trained	(a) Support the development, integration and training of climate change adaptation and Disaster Risk Reduction (DRR) issues in educational institutions and curricular at (lower, tertiary education, higher levels);	The development, integration and training of climate change adaptation and Disaster Risk Reduction (DRR) issues in educational institutions and curricular at (lower, tertiary education, higher levels), supported;	Partner States, EAC private sector,	**1,315,738.8**	By 2016
		(b) Support development of relevant training models within the Partner States training institutions that will address climate change challenges and opportunities from a more informed perspective and in a harmonized manner;	Development of relevant training models within the Partner States training institutions to address climate change challenges and opportunities from a more informed perspective and in a harmonized manner, supported;	Partner States, EAC, private sector,		By 2016
		(c) Support the establishment/enhancement of climate change training institutions/programmes and centres of excellence for increased capacity of the region to address climate change including the capacity to access and use of financial and technological resources available, regionally and internationally;	Establishment/enhancement of climate change training institutions/programmes and centres of excellence, supported, for increased capacity of the region to address climate change including the capacity to access and use of financial and technological resources available, regionally and	Partner States, EAC, private sector,		By 2016

			internationally;			
		(d) Support training opportunities and institutions including those related to negotiation skills, adaptation and mitigation science and technology, international climate change politics and international environmental governance. Establish coordination unit at the EAC. ✓ Establish a Regional climate change negotiation platform; ✓ Organize a series of preparatory meetings/workshops for Focal Points and negotiators to develop a common position for COP sessions; ✓ Strengthen the Focal Points, the Focal Point structure, and the inter-sectoral climate change teams/committees in Partner States; ✓ Develop climate change communication plan; identify the targeted audiences; design climate change messages; ✓ Develop and implement a regional communication campaign – with clearly identified targets and messages; ✓ Support and strengthen the development of networks of Partner States' & regional NGOs and scientists working on climate change; ✓ Strengthen communication and networking capacity and infrastructure amongst the regional organizations and institutes working on climate change.	Training opportunities and institutions supported, including those related to negotiation skills, adaptation and mitigation science and technology, international climate change politics and international environmental governance.	Partner States, EAC, private sector,		By 2016
4. 3To enhance Information and Knowledge Management Systems	Effective Information and Knowledge Management Systems in the region	(a) Develop a database for repository of research findings, and sectoral information sharing including knowledge management in the region.	Database for repository of research findings, and sectoral information sharing developed, including knowledge	Partner States, EAC,	**1,315,738.8**	By 2013

			management in the region.			
4.4 To promote gender considerations in climate change issues	Gender considerations in climate change issues incorporated in socio-economic life within the region	(a) Integrate gender considerations in assessing vulnerability, impacts and risks of climate change at local, national and regional levels; (b) Promote involvement of women in climate change monitoring, adaptation and decision-making processes; ✓ Sensitize women & gender groups to actively participate in climate-related decision making processes	Gender considerations integrated in assessing vulnerability, impacts and risks of climate change at local, national and regional levels; Involvement of women in climate change monitoring, adaptation and decision-making processes promoted; *EAC developing gender sensitive climate investment frameworks at Partner States and regional level.*	Partner States, EAC, communities, CBOs/NGOs Partner States, EAC, communities	**2,631,477.65**	By 2013 By 2013
		(c) Promote social protection programmes for vulnerable communities, households and individuals including women, children, youth and others.	Social protection programmes for vulnerable communities, households and individuals promoted, including women, children, youth and others.	Partner States, EAC, communities		By 2013

Strategic Objective 5: To build climate change response capacity through institutional strengthening, technology transfer, resource mobilization and partnership building and stakeholder involvement.

Strategic Intervention	Outcome	Activity	Output	Actors	Estimated Costs USD (indicative)	Time frame
5.1 To Enhance capacity of regional institutions to carry out climate change related research including climate change monitoring, detection, forecasting and the requisite response of interventions;	Competent regional institutions to carry out climate change-related research, including climate change monitoring, detection, forecasting and the requisite response of interventions;	Strengthen capacity of regional institutions to carry out climate change related research and the requisite response of interventions;	Capacity of regional institutions to carry out climate change related research strengthened, including the requisite response of interventions	Partner States, EAC,	**11,119,971.0**	By 2016
5.2 To promote development of climate change tools, methods and technologies and support their application;	State-of-the –art climate change tools, methods and technologies available and applied in the region	Targeting opportunities in CDM (or its successor) activities, REDD+,	Opportunities in CDM (or its successor) activities, REDD+, eg. climate change tools, methods and technologies developed, available and applied in the region	Partner States, EAC,	**11,119,971.00**	By 2013
5.3 To promote technology transfer and development initiatives geared towards accelerating development, deployment, adoption, diffusion and transfer of environmentally sound technologies targeting mitigation and adaptation;	Adequate capacity for development, deployment, adoption, diffusion and transfer of environmentally sound technologies targeting mitigation and adaptation;	(a) Target opportunities through South-South Technology transfer, North-South Technology transfer through FDI; (b) *Develop financing strategies to support implementation of transfer of Climate change technologies*;	Opportunities through South-South Technology transfer, North-South Technology transfer through FDI, tapped, climate change technologies acquired, adopted/adapted and deployed in the region. Financing strategies developed	Partner States, EAC, private sector Partner States, EAC, private sector	**232,787.50**	By 2016 By 2013

5.4 To support the designing and development of integrated climate change knowledge sharing and management tools such as databanks, regional network for sharing lessons, experiences and best practices amongst Partner States and other countries;	Numerous & effective regional network for sharing lessons, experiences and best practices amongst Partner States and with other countries, available;	*Promote Climate Change knowledge base and working knowledge networks in the region. are generating usable data and analyses*	*Climate Change knowledge base and working knowledge networks promoted in the region, generating usable data and analyses, and sharing lessons, experiences and best practices*	Partner States, EAC,	**11,119,971.00**	By 2013
5.5 To promote harnessing and integration of indigenous technical knowledge in modern knowledge;	Indigenous technical knowledge adopted in the region	Identify and integrate indigenous technical knowledge in modern knowledge	Indigenous technical knowledge identified and integrated in modern knowledge;	Partner States, EAC,	**11,119,971.00**	By 2016
5.6 Establish and support relevant climate change national and regional institutions and centres of excellence;	National and Regional institutions and centres of excellence on climate change available;	Establish coordination mechanisms for joint or coordinated programming of climate change activities in the region.	Coordination mechanisms for joint or coordinated programming of climate change activities in the region established.	Partner States, EAC,		By 2013
5.7 To Collaborate in institutional assessments with an aim of strengthing and mobilizing the capacities of existing relevant facilities and institutions in the region and Africa;	Capacities of existing relevant facilities and institutions in the region strengthened	Assess institutional capacities of facilities and institutions in the and Africa.	Institutional capacities of facilities and institutions in the region and Africa assessed .	Partner States, EAC,	**11,119,971.00**	By 2013
5.8 To Support development of human and technical resource and skills in climate change adaptation and mitiagtion (mainly negotiation skills, CDM project design and development, carbon trading, REDD etc) through focused training, mentoring and learning by doing approaches, scholarships and fellowships among other measures;	Developed human and technical resource and skills in climate change adaptation and mitiagtion (mainly negotiation skills, CDM project design and development, carbon trading, REDD etc)	Undertake policy analysis of global climate change issues and mechanisms in relation to the priorities of the region.	Policy analysis of global climate change issues and mechanisms undertaken in relation to the priorities of the region.	Partner States, EAC,	**11,119,971.00**	By 2013
5.9 To Support the establishment of a regional climate change negotiation platform;	Adequate capacity in the region to influence Global climate change negotaition	Build common positions around global climate issues of key relevance for the region, including for the post-2012 global agreement on climate change.	Common positions built around global climate issues of key relevance for the region, *adopted, reflected in global Climate Change*	Partner States, EAC,	**1,000,000.00**	By 2013

	platform;		*Agreements;* regional climate change negotiation platform established.			
5.10To Support capacity building on carbon financing mechanisms in order to take advantage of the existing global funding mechanisms;	Existing global carbon financing mechanisms utilised adequately in the region;	Develop capacity for carbon market and carbon management for CDM, NAMAs, REDD+ and other facilities/mechanisms. ✓ Establish institutional arrangements with credible monitoring, reporting and verification (MRV) functions for REDD+; ✓ Strengthen legal & regulatory frameworks governing land use and forestry, including establishing monitoring and verification systems, developing payment structures (national to local), and running participatory consultation processes; ✓ Technical training, e.g. GHG inventories, vulnerability and adaptation assessments, mitigation assessments, short- and long-term training abroad, country visits for experts/technical staff; ✓ Develop & test standardized tools for examining and modelling greenhouse gas emissions and carbon stocks, quantification and assessment of Carbon and GHG benefits, and associated pilot studies and capacity building on the REDD+ portfolio of deforestation, forest degradation and climate change activities; ✓ Train personnel in carbon markets; offsets mechanisms; documentation (e.g. developing Project Idea Notes (PINs) and Project Design Documents (PDDs) for CDM; Monitoring, Reporting and Verification (MRV); forest mapping, and participatory forest management for REDD+; ✓ Strengthen relevant institutions such as the Designated National Authority (DNA) and removing barriers to carbon trading arising from high initial transaction costs and low level of awareness of CDM potential on the part of private sector, including investment and financial organizations; ✓ Empower the private sector and investors to increase their knowledge of GHG reduction project development and markets, e.g. developing a handbook for CDM Project Activities detailing the roles of government and the UNFCCC, CDM cycle, types of projects, eligibility criteria, CDM	Capacity for carbon market and carbon management for CDM, NAMAs, REDD+ and other facilities/mechanisms developed.	Partner States, EAC,	**1,000,000.00**	By 2013

		transaction costs and how to sell Certified Emission Reductions (CERs); ✓ Identify potential Centres of excellence on climate change issues in the region; ✓ Working with education and research institutes, develop a comprehensive set of regional training programmes, include distance learning programmes, course modules, etc.				
5.11 To Encourage and strengthen participatory and integrated approaches in planning and decision making including meanigful participation of all stakeholders including the civil society;	Adequate public involvement in decision making, including meanigful participation of all stakeholders including the civil society;	Undertake participatory and integrated approaches in planning and decision-making	Participatory and integrated approaches in planning and decision-making undertaken.	Partner States, EAC,	**1,000,000.00**	By 2013

Strategic Objective 6: To ensure a sustainable Financing Mechanism for climate change.

Strategic Intervention	Outcome	Activity	Output	Actors	Estimated Costs USD (indicative	Time frame
6.1 To operationalize the EAC Climate Fund	Sustainable financial resources for climate change	a) Finalise & adopt operational modality for the Fund, sstreamlining bureaucratic procedures and reduce transaction costs.	Operational modality for the Fund finalized & adopted, streamlining bureaucratic procedures and reducing transaction costs.	EAC	100,000	By Dec. 2011
		b) Develop effective systems to ensure transparency and accountability in the utilization of funds mobilized for Climate Change.	Effective systems developed to ensure transparency and accountability in the utilization of funds mobilized for Climate Change.	EAC	100,000	By Dec. 2011
		c) Assess and determine the financial needs for implementation of Strategy interventions	Financial needs for implementation of the Strategic interventions assessed and	EAC, Partner States	10,000,000.	By 2013

			determined			
		d) Strengthen capacity to access funds, and manage funds.	Capacity to access funds, and manage funds strengthened	EAC, Partner States	10,000,000.	By 2013

ANNEX 2: SWOT ANALYSIS

Strengths	Weakness
• Reliable and good quality education system in place. • Major improvements in communication. • Strong community and extended family linkages. • Strong participation of Partner States in MEAs • EAC Policy on Climate Change is in place. • EAC Climate Change Fund has been established. • A number of existing laws, regulations & policies invoke adaptation approaches • Reliable institutional structures in place • Emerging community-based structures • NGO and civil society involvement in climate change issues growing • Level of public awareness on climate issues growing • Availability of several media at all levels. • Availability of Research institutions • Strong health and education systems in place • High level Partner States' commitment for renewable energy options • Moderate level of awareness on mitigation measures • Availability of an educated workforce in Partner States' institutions • Private sector participation to reduce greenhouse gas emissions • High reliability from small scale technologies • International financing can have an immediate and positive impact. REDD+ to enhance conservation of East Africa's forest resources • Potential for export of agricultural products. • Availability of water resources	• Inadequate focus on climate change issues in the education system. • Mobility of capacity is very high despite training efforts • Inertia to adopt new approaches and technologies • Inadequate representation in Forums/ • Inadequate enabling resources for implementation • Institutional strengthening is required for overseeing its implementation in the Region. • Weak enforcement of implementation of policies and laws • Limited financial resources for adaptation • Inadequate coordination and communication among stakeholders • Inadequate involvement of the private sector in adaptation activities • Insufficient training and capacity building initiatives • Inadequate funding for adaptation and research • Lack of financial incentives for industry to implement mitigation • Poor access to technologies appropriate for mitigation • Inadequate awareness at policy level • Resistance to adopt other technologies by industry • No incentives to stimulate early adaptors • Inadequate awareness programmes on mitigation • Incomplete data on forest resources • Low productivity farming methods; predominantly smallholder agriculture • Limited agro-processing • Inefficient management of water resources and water towers • Underdeveloped water infrastructure • Minimal rain water harvesting
Opportunities	**Threats**
• Mainstream climate change issues into national development policies ongoing • University Education available • Focus on capacity building • Increased number of training and capacity building for adaptation from international resources • Availability of the media in building awareness and action for adaptation in the region • Increased involvement of CBOs and NGOs in adaptation activities • Greater involvement of the community • Involve the private sector in adaptation planning and financing • Increased donor funding. • Availability of renewable energy sources • Improvements in public transport underway • Earn from a suitable development Carbon finance framework • Potential for increased agricultural productivity • Potential for greater investment in renewable energy sources	• High mobility and brain drain • Insufficient resources to address the capacity gap • Perpetuation of the reliance on government services • Loss of employment and economic returns as a result of damaged facilities • Continued inappropriate development in high risk areas (from sea level rise, floods and landslides) eg. Valleys and low-lying areas. • **Weak coordination of stakeholders' activities, duplication of effort, waste of resources and low efficacy of interventions;** • Ignoring policies, and guidelines • Loss of human resource capacity • Risk of global crises, e.g energy, financial) undermining adaptation efforts. • Persistence or recurrence of financial and oil crisis • Maintain reliance on fossil fuel only • Poorly implemented renewable energy technologies • Inappropriate energy conservation technologies and practices • Lack of financial resources to implement mitigation

	activities • Low irrigation infrastructure • Recurrent drought; natural disasters and crop failure • Deforestation, forest degradation, unsustainable charcoal production and declining forest reserves

ANNEX 3: Climate Change Initiatives at Partner States

Burundi

Burundi has put in place a number of tools for the management of environment relevant for addressing climate change. An Environment Code. a Forestry Code, a Land management code, a Mining and Petroleum Code, and a Health Code have been promulgated. The Ministry of Water, Environment Land Planning has the overall coordination role for environmental management in Burundi and is responsible for ensuring the implementation of international conventions in the field of environment. The Environment policy administered by the Ministry makes provision for coordinated management of the environment, management of lands, water, forests and air;

The Ministry implements its mandate on environment through the following structures:-

Directorate of Forestry and Environment was created in 1998, responsible for coordinating national activities of GHG inventories and preparation of national communications, among other duties;

Geographical Institute of Burundi, responsible for, among other duties, collection of data on climate, and is the operational focal point of the UNFCCC;

A Steering Committee, which is multisectoral, guides and approves project activities on climate change.

The Ministry consists of the following four Directorates in central administration:-

The Directorate of Forestry and Environment;

The Directorate of Water Resources and Sanitation;

The Directorate of Land Management;

The Directorate of Housing and Urban Development

In addition there are the following institutions which also support the Ministry in climate change:-

Geographical Institute of Burundi (IGEBU)

National Institute for Environment and Conservation (INECN).

The following documents relevant for addressing climate change and disaster risk management have been prepared:-

NAPA (PANA 2007), in which a number of project ideas were identified and for funding:

National Action Plan for Adaptation to Climate Change.

Handbook of information and awareness on Climate Change (2009);

Inventor ies of Greenhouse Gases (2000, 2008);

A National Capacity Self-Assessment for implementation of MEAs (NCSA, 2007);

The First National Communication Communication on Climate Change(2001);

The Second National Communication Communication on Climate Change (2010);

A Law to facilitate the collection, storage and management of data, including those relating to climate change is in place (I*nstitute of Burundi Economic Statistics*-ISTEEBU). (Law No. 1/17 of 26 September 2007);
The National Biodiversity Strategy and Action Plan;
The National Strategy for the Environment, (2008);
National Water Policy (2010);
Letter of Land Policy (2010);
Draft National Strategy for Sustainable Land Management (2011);

National Strategy for Environmental Education and Awareness;

The National Profiles on Chemicals Management(2005, 2009);

Integrated Management Document of Water Resources (IMDWR);

Burundi's NAPA draws up the following 12 priority projects:-
1. Improvement of seasonal early warning climate forecasts: Improve the seasonal early warning climate forecasts;
2. Rehabilitation of degraded areas: (a) Safeguard existing woodlots and reforest stripped areas,
(b) Identify and popularize dryness resistant forest species
3. Safeguarding of the natural environments: Enhance the management of existing protected areas and transform into protected areas the natural ecosystems identified as threatened or vulnerable.
4. Rainwater Valorization: Popularize the rainwater harvesting techniques for agricultural or domestic use.
5. Erosion control in the region of Mumirwa: Set up erosion control mechanisms in sensitive areas.
6. Protection of buffer zones in Lake Tanganyika floodplain and around the lakes of Bugesera: Establish and protect strategic buffer zones in Lake Tanganyika floodplain and around the lakes of Bugesera.
7. Popularization of short cycle and dryness resistant food crops: Popularize short cycle and dryness resistant food crops.
8. Zero grazing technique: (a) Popularize zero grazing techniques (b) Identify and popularize the breeding of species adapted to local climate conditions.
9. Capacity building to promote energy-wood saving techniques: Identify and popularize improved techniques of use of wood and renewable new energies.
10. Stabilization of river dynamics of watercourses and torrents in Mumirwa, including the city of Bujumbura: Control the river dynamics of watercourses and torrents in Mumirwa, including the city of Bujumbura.
11. Education on climate change adaptation: Train and inform decision makers and other actors, including local communities, on the methods of adaptation to climate variability.
12. Increase hydropower micro stations: Increase hydropower micro stations.
The second National communication identifies a number of priority projects for mitigation, including the following:-

1. Reforestation of the hillsides in order to contribute to the restoration of Burundi's eco-climatic system
2. Supplying drinking water tanks using photovoltaic solar energy.
3. Reforestation and management of existing forests.
4. Setting up a lasting management program for traditional forms of energy by promoting techniques of saving wood energy.
5. Promoting new renewable forms of energy (photovoltaic solar energy and biogas) in public interest centers and in rural households.
6. Reinforcing the capacity of hydroelectric power production.

7. Educating to climate changes.
8. Preserving natural ecosystems.
9. Rehabilitating degraded areas.
10. Reforestation of degraded mountains and hills in Burundi.

Some of the above-mentioned projects have been implemented, some are under implementation while others are planned for implementation. For example, PRASAB for agroforestry and reforestation/afforestation and PABV for watershed management have been implemented.

The Government has initiated a programme to promote r*estoration of existing woodlots , addressing reforestation, a fforestation and* agroforestry at the amount of 2 billions of Burundi Francs in 2009, 4 billion in 2010 and 2 billion in 2011.

The Government has also initiated a programme to promote energy efficiency through replacement of high energy-consuming light bulbs by energy-saving bulbs and the renewable energy, such as solar. Todate more than hundred solar units have been installed in heath centres, schools and colleges.

The second phase of the Lake Victoria Environment Programme will address some aspects of adaptation to the impacts of climate change.

Kenya

Kenya has put in place a number of tools for the management of environment relevant for addressing climate change as highlighted in the National Climate Change Response Strategy (NCCRS, GoK 2010). The NCCRS provides a framework for addressing the threats of climate change as well as taking advantage of any opportunities that may arise. It also provides the means to actively engage in innovative processes necessary to address climate change. The Strategy has become the key government climate change agenda guide and will inform nationwide Climate Change programme development and activities, including efforts towards the attainment of Kenya Vision 2030 and the Millenium Developmen Goals (MDGs).

The Ministry of Environment and Mineral Resources (MEMR) has the overall coordination role for environmental management in Kenya and is responsible for ensuring the implementation of international conventions in the field of environment and climate change. The Ministry is the policy making institution responsible for international negotiations and the focal point of the UNFCCC. MEMR has developed structures to enable it to fulfil this mission under the Directorate of Environment (DoE), consisting of the Departments covering:-

a) Policy Formulation, Interpretation and Implementation;
b) Programmes, Projects and Strategic Initiatives; and
c) Multilateral Environmental Agreements (MEAs).

A National Climate Change Secretariat Office is part of the DoE, and it coordinates climate change issues in the country. The Climate Change Secretariat is currently being strengthened to be a department within DOE for effective and efficient coordination.

In addition, under MEMR:

d) Kenya Meteorological Department (KMD) is mandated to undertake Climate monitoring, prediction and application including research. The Department also provides meteorological and climatological services to all sectors of economy and general public;
e) Department of Resource Surveys and Remote Sensing (DRSRS) conducts mapping of environmental resources to ensure sustainable use and climate change mitigation. DRSRS is envisaged as a climate change resource Centre (CCRC) to accommodate centralized climate change data bank management system, innovative technologies, soft and hard copy climate change information/literature; and

f) National Environment Management Authority (NEMA), Designated National Authority (DNA), responsible for approving CDM projects.

The Office of the Prime Minister has a Climate Change Coordination Unit responsible for providing high-level political support on climate change issues. Climate change desk offices also exist within line ministries and institutions to mainstream climate change programmes, projects and activities into respective sectoral development plans.

The Government of Kenya, in partnership with other stakeholders, is in the process of developing a National Climate Change Action Plan for the implementation of the National Climate Change Response Strategy. There are nine (9) priority areas in the Climate Change Action Plan:

a) Long-term National Low Carbon Development Pathway to facilitate the mainstreaming of climate change in Vision 2030 and Medium Term Plans (MTP). The vision will seek to identify key elements of the country's low-carbon and climate resilient growth;
b) Enabling Policy and Regulatory Framework to promote coherence, coordination and cooperative governance of climate change issues. This will culminate into policy recommendations that are to be further developed into a specific legislative framework;
c) National Adaptation Plan (NAP) to identify immediate, medium and long-term adaptation actions at different levels;
d) Nationally Appropriate Mitigations Actions (NAMAs) in the context of national goals and sustainable development;
e) National Technology Action Plan in support of adaptation and mitigation efforts;
f) National Performance and Benefit Measurement in support of national climate change monitoring, reporting and verification guidelines and performance indicators;
g) Knowledge Management and Capacity Development to inform the design of appropriate adaptation and mitigation actions, planning, and the choice of strategies for risk assessment and early warning;
h) Financial Mechanism to position the country to access funding from various sources through innovative financial mechanisms including a Climate Fund, investment strategy/framework and a carbon trading platform;
i) Coordination and Management to ensure effective and efficient delivery of the Action Plan.

CDM Projects:
As at 25 August 2011, there were five registered CDM projects.

Rwanda
Rwanda has put in place a number of tools for the management of environment relevant for addressing climate change. At the institutional level, the Ministry of Lands and Environment (MINELA) is the Ministry responsible for designing the state policy related to climate change management, environment protection, conservation and management, while REMA (Rwanda Environment Management Authority) is the official organ in charge of implementing this policy. A successful outcome of this policy requires the collaboration between REMA and all potential stakeholders: departments in ministries, public institutions, schools and research institutions, international bodies and nongovernment organizations.
REMA is the Authority in Rwanda in charge of supervision, following up and ensuring that issues relating to environment and Climate change receive attention in all national plans. REMA has responsibility to implement the Environment and climate change policy within Economic Development and Poverty

Reduction Strategy (EDPRS) framework. REMA is also designated as the National Competent Authority for all international environmental treaties and agreements on environment.

In 2009, a Department of Climate Change and International Environmental Obligation (CCIO) was created under REMA.

The Rwanda Development Board-RDB (Environmental Compliance and cleaner production Unit) provides environmental impact assessment (EIA) advice and ensures compliance, as part of investor facilitation. In addition, RDB is responsible for wildlife conservation and tourism.

A national biodiversity conservation and management policy is in draft form. When approved, this policy will, inter alia, address the following issues: conservation of biodiversity outside protected areas; access to genetic resources and benefits sharing; agro-biodiversity; bio-prospecting and biodiversity business; and managing biodiversity knowledge, including from research and indigenous knowledge.

As part of the operationalisation of the organic law on environment, a number of subsidiary legislations have been enacted.

The Rwanda Environment Management Authority (REMA) has established itself as a strong coordination, regulatory, educational, and knowledge organization in Rwanda for all environmental management. At the decentralized level, all 30 districts have, since 2006, an Environment Officer responsible for ensuring that environmental issues are integrated into the district development plans, and providing technical guidance to district sector units to prioritize and address environmental issues. At the local level, environmental committees have been formed, in accordance with the provisions of the Organic Law on Environment,
The strategy for adequate response to this situation reached by NAPA Rwanda is articulated on six (6)-priority adaptation options to climate change which include:
An Integrated Water Resource Management – IWRM;
Setting up information systems to early warning of hydro-agro meteorological system and rapid intervention mechanisms;
Promotion of non agricultural income generating activities;
Promotion of intensive agro-pastoral activities;
Introduction of species resisting to environmental conditions;
Development of firewood alternative sources of energy.
From these priority options, 7 high priority projects, hence urgent and immediate, were selected and their profiles developed. They are centered on:
1. Land conservation and protection against erosion and floods at the level of Districts of vulnerable regions to climate change;
2. Establish the mastering hydro meteorological information and early warning systems to control extreme phenomena due to climate change: - Installation and rehabilitation of hydrological and meteorological stations;
3. Development of irrigated areas by gravity water systems from perennial streams and rivers in often vulnerable zones to prolonged droughts;
4. Support Districts of vulnerable regions to climate change in planning and implementing measures and techniques related to conservation and water harvesting and intensive agriculture, and promoting existing and new resistant varieties of crops adapted to different bioclimatic soil.
5. Increase adaptive capacity of grouped habitat “Imidugudu” located in vulnerable regions to climate change by the improvement of drinking water, sanitation and alternative energy services, and the promotion of non agricultural jobs.

6. Increase food and medicine modes of distribution to respond to extreme climate change and sensitize to stocking and conservation of agriculture products;
7. Preparation and implementation of woody combustible substitution national strategy to combat the deforestation and erosion as well.

There is a policy for managing disasters (2003) which is administered by the Prime Minister's Office. The Policy was put in place following the natural catastrophes and extreme events of climate change: prolonged floods and droughts and their effects of famine, loss of human and animal lives and reduction of food production. The overall aim of the national policy on disaster management is to put in place systems, structures, programmes, necessary resources and capacities in order to reduce the risks of catastrophes and therefore find solutions to the threats of catastrophes in Rwanda in order to save human lives, limit loss of goods, economy and environment to ensure sustainable development.

Rwanda has developed an Environment subsector Strategic Plan of relevance to climate change issues, in the context of the national priorities and emerging global challenges, designed to achieve the following specific objectives:-
1. To ensure that the productive and regulatory functioning of ecosystems in Rwanda is restored, maintained or enhanced by rehabilitating, conserving and sustainably managing all critical ecosystems;
2. To ensure that Rwanda is protected from the effects of climate change by putting in place and implementing appropriate mechanisms for mitigation and adaptation, through mobilization of and collaboration with stakeholders;
3. To ensure that environmental sustainability principles are effectively mainstreamed into all national development policies, programmes, plans and budgets;
4. To ensure that Rwanda has adequate and sustained capacity for effective environmental governance and decentralized service delivery;
5. To ensure pollution control & management.

CDM registered projects in Rwanda are the following:-

1. Rwanda Electrogaz Compact Fluorescent Lamp (CFL) distribution project" which benefits customers providing by them high quality, low price CFLs, thereby reducing their electricity consumption and their bills. The project is implemented by the Rwanda Electricity Corporation (RECO) with assistance from the World Bank. The project will result in emissions reductions of approximately 18,500 tonnes of CO2 per year resulting in extra revenue of $150,000 - $220,000 per year.
2. Rwanda Natural Energy Project: "Water Treatment Systems for Rural Rwanda (Shyira and Fawe)" was officially registered on 25 March 2011 by the UNFCCC. This project is implemented by Manna Energy Ltd. Average estimated Certified Emissions Reduction (CERs) volume (tCO2e/yr): 6,000 Crediting period (years):10
3. Rwanda Natural Energy Project: Water Treatment Systems for Rural Rwanda (Mugonero Esepan, Rwesero, Nyagasambu)(4799)

Tanzania

Tanzania has put in place a number of tools for the management of environment relevant for addressing climate change. The Vice President's Office (VPO) has the overall coordination role for environmental management at the level of giving policy guidelines and directives necessary for the promotion, protection and sustainable management of environment in Tanzania. The Division of Environment is the technical arm of the Vice President's Office on its environment mandate. Under the oversight of the Vice President's

Office is the National Environment Management Council (NEMC), established to undertake enforcement, compliance, review and monitoring of environmental impact assessment and in that regard, facilitate public participation in environmental decision making, exercise general supervision and coordination over all matters relating to the environment assigned to it.
The Environmental Management Act (EMA, 2004) establishes an advisory committee, the National Environment Advisory Committee (NEAC) for high level advisory services on all issues related to environment. Specifically for climate change, the Vice President's Office has established the National Climate Change Technical Committee as well as the National Climate Change Steering Committee, both of which are cross-sectional and multistakeholder.

Tanzania Meteorological Agency (TMA) is mandated to make observations on weather and climate, process the data to derive forecasts, and disseminate these to end-users. The climatological and rainfall stations are operated in conjunction with other government agencies, research institutions, private companies and schools. However the number of stations is insufficient, and many are in disrepair, the collection of data is irregular, depending on telephone and radio. There has been a gradual reduction in the number of stations with large gaps, especially in the south and west of Tanzania. TMA has handwritten records going back to 1872, but computerisation of these only began in 1992, and the vast majority is unanalysed. TMA's ability to provide early warning and to contribute to historic climate analysis is therefore currently far below its potential; has undeveloped potential in downscaling global circulation modelling to the local level. Data collection on different parameters such as river discharges, forest coverage, and agricultural yields is regularly collected. TMA is the national focal point for IPCC, and has two scientific experts from universities involved in IPCC working groups.

The National Strategy for Growth and Reduction of Poverty (NSGRP) is the centrepiece of development policy for Tanzania and has specific goals on environmental sustainability. It includes 15 environmental targets out of 108. Implementation of various environmental strategies and action plans are among the cluster strategies in the NSGRP. MTEF component for the VPO on environment draws its targets and activities from the NSGRP. Environment is reported in the Performance Assessment Framework (PAF). The National Environmental Policy (1997), EMA, National Plans and Strategies are mainstreamed in the NSGRP and PAF for General Budget Support.

The Vice President's Office, has also established the Environment Working Group (EWG), a forum through which development initiatives in the sector are discussed by the sector's stakeholders. It is chaired by the VPO and is comprised of members from line Ministries, Ministry responsible for Regional Administration and Local Government Authorities, Representatives of Development Partners, Representatives of Civil Society Organisations, and a Representative of Academic and Research Institutions. The Environment Working Group (EWG) is a forum where the environment stakeholders discuss various development processes. This arrangement allows environment stakeholders to influence government decisions for environment and related sectors.
A broad-based capacity needs assessment which culminated in preparation of EMA-Implementation Support Programme (EMA-ISP) was undertaken, and the programme is under implementation.
VPO is the leading Government Ministry for Environment in this programme. The partners include MDAs, LGAs. The National budget is directed mainly in implementation of the NSGRP. Mainstreaming Environment into Sector and Local Governments Plans and Budgets allows environmental interventions at all levels to be funded through the National Budget.

CDM Project Status in Tanzania is as follows:-

a. Mtoni Electricity Project, Dar es Salaam City Council, status- operational;
b. Singida Wind Electricity Project, Wind-e-Tanzania, Singida, status- PIN approved;
c. Sisal Waste Electricity Project, Katani LTD, Hale – Tanga, status- PIN approved;

d. Improved Stoves, TaTEDO, Arusha and Kilimanjaro, status- PIN approved;
e. Arusha Biogas, CARMATEC, Arusha, status- PIN approved;
f. Mwenga Hydropower Project, Mwenga Hydro LTD, Iringa, status- PIN approved;
g. Ruhudji Hydropower Project, Aldwych International LTD, Iringa, status- PIN approved;
h. Mafia Biomass Electricity Project, Ng'ombeni Power LTD, Mafia, status- PIN approved;
i. Mapembasi Small Hydropower Project, Natural Resources Development LTD, Ihanga Village, status- PIN approved;
j. Ngombezi Small Hydropower Project, Mkonge Energy systems LTD, Korogwe, status- PIN approved;
k. Mbeya Cement Fuel Switch Project, Mbeya Cement Company, Mbeya, status- PIN in progress;
l. Tanga Cement Fuel Switching, Tanga Cement Company, Tanga, status- PIN in progress;
m. Sagera Sisal Waste Biogas Project, Sagera LTD, Tanga, status- PIN in progress;
n. Mtwara Energy Project, Artumas, Mtwara, status- PIN in progress;

Below are some of the other projects relevant to climate change adaptation and mitigation:-

1. Project Title; Integrating Vulnerability and Adaptation to Climate Change into Sustainable Development Policy Planning and Implementation in Southern and Eastern Africa
Category; Climate Change
Themes; Climate Change
Financiers; Commitment (US million); 1
Project Status; CEO Approved

2. Project Title; Expedited Financing for (Interim) Measures for Capacity Building in Priority Areas (Phase II)
Category; Climate Change
Agency; UNEP
Implementation Agency; Centre for Energy, Environment, Science and Technology (CEEST)
Amount; 100,000 US$
Objective; The project is being implemented as an interim capacity-building activity between the Initial and the Second Communications. Hence it is intended to complement activities of the Phase 1 project, related to the Initial Communication, while at the same time forming basis for initiation of the Second National Communication to the UNFCCC.
Themes; Climate Change
Financiers; GEF
Commitment (US million); 100,000 US$
Project Status; IA Approved (CEO approved)
3. Project Title; Joint Programs on Environment and Climate Change – DEPI, DEWA, PEI, Risoe Centre
Category; Climate Change

4. Project Title; Coastal Resilience to Climate Change: Developing a Generalizable Method for Assessing Vulnerability and Adaptation of Mangroves and Associated Ecosystems
Category; Climate Change
Themes; Biodiversity
Financiers; Commitment (US million); 1
Project Status; CEO Approved

5. Project Title; Developing Core Capacity to Address Adaptation to Climate Change in Productive Coastal Zones
Category; Climate Change
Agency; UNEP
Implementation Agency; Vice President's Office, Environment Division
Amount; 10,850,000 US$
Objective; To develop institutional capacities to manage climate change impacts through improved climate information, technical capacity, the establishment of demonstration projects to reduce vulnerability in key vulnerable areas, and learning. This project seeks to implement priorities of the National Adaptation Programme of Action (NAPA) in addition to barriers to implementation as identified in the NAPA report and terminal evaluation of the preparation phase of this project.
Themes; Climate Change
Financiers; GEF
Commitment (US million); 3,200,000 US$
Project Status; Council Approved
Project Title; Reducing Greenhouse Gas Emissions with Bus Rapid Transit
Category; Climate Change
Themes; Climate Change
Financiers; Commitment (US million); 0.75
Project Status; CEO Approved

6. **Project Title;** National Adaptation Plan (NAPA) for United Republic of Tanzania
Category; Documenting
Agency; UNEP
Implementation Agency; Division of Environment, Vice President's Office
Amount; 200,000 US$
Objective; The objective of the proposed NAPA project for Tanzania is to develop a country-wide programme of immediate and urgent project-based adaptation activities that address the current and anticipated adverse effects of climate change, including extreme events.
Themes; Climate Change
Financiers; GEF
Commitment (US million); 200,000 US$
Project Status; IA Approved

7. Project Title; TZ-GEF Energy Dvpt and Access Expansion
Category; Energy
Implementation Agency; Ministry of Energy and Minerals
Amount; 59.6 million
Objective; Millenium Development goal: Ensure environmental sustainability
Main Sector; Energy and mining (Renewable energy) (57%) Public Administration, Law, and Justice (Central government administration) (31%) Energy and mining (Power) (12%)
Themes; Climate change (40%) Other urban development (20%) Rural services and infrastructure (40%)
Financiers; Global Environment Facility (Gef), Bilateral Agencies (Unidentified), Foreign Private Commercial Sources (Unidentified), Local Sources Of Borrowing, Country Global Environment - Associated Ida Fund

Commitment (US million); 6.5, 3.2, 13.55, 13.55, 16, 6.8

8. Project Title; Additional Financing - Energy Development and Access Expansion Project
Category; Energy
Implementation Agency; Ministry of Energy and Minerals
Amount; 25 million
Objective; The objective of the Additional Financing to the Energy Development and Access Expansion Project is to improve the quality and efficiency of the electricity service provision in the main three growth centers of Dares Salaam, Arusha, and Kilimanjaro and to establish a sustainable basis for energy access expansion and renewable energy development in Tanzania. Additional Financing will be used to: (i) complete original project activities by filling an unanticipated financing gap; and (ii) implement additional activities that scale up project impact and development effectiveness. In particular, additional financing will establish a credit line for
rural and renewable energy, which will contribute to achieving and scaling up project targets for renewable energy generation. Additional Financing will entail minor restructuring of project sub-components and implementation arrangements and extending the project closing date by three years.
Main Sector; Energy and mining (Renewable energy) (100%)
Themes; Rural services and infrastructure (54%) Other financial and private sector development (46%)
Financiers; IDA
Commitment (US million); 25

9. Project Title; African Rift Geothermal Development Facility (ARGeo)
Category; Energy
Themes; Climate Change
Financiers; Global Environment Facility (Gef), Bilateral Agencies (Unidentified), Foreign Private Commercial Sources (Unidentified), Local Sources Of Borrowing, Country Global Environment - Associated Ida Fund
Commitment (US million); 18.450
Project Status; Council Approved

10. Project Title; Building Sustainable Commercial Dissemination Networks for Household PV Systems in Eastern Africa
Category; Energy
Themes; Climate Change
Financiers; Commitment (US million); 0.718
Project Status; CEO Approved

11. Project Title; Cogen for Africa
Category; Energy
Themes; Climate Change
Financiers; GEF
Commitment (US million); 5.666
Project Status; Council Approved

12. Project Title; Mini-Grids Based on Small Hydropower Sources to Augment Rural Electrification

Category; Energy
Agency; UNIDO
Implementation Agency; Ministry of Energy and Minerals, Rural Energy Agency
Amount; 10,610,000 US$
Objective; To promote market-based approaches to small hydropower based mini grids in Tanzania to augment rural electrification.
Themes; Climate Change
Financiers; GEF
Commitment (US million); 3,410,000 US$
Project Status; Council Approved

13. Project Title; Songo Songo Gas Development and Power Generation Project
Category; Energy
Implementation Agency; SONGAS, GOT
Amount; 296 million
Objective; The Songo Songo Gas Development and Power Generation Project aims at developing Tanzania's natural gas reserves, to produce least-cost power generation for domestic, and industrial use, in an environmentally sustainable manner. Components include: 1) developing the Songo Songo natural gas field, to supply gas to about 112MW at the Ubungo Power Plant - to be converted to gas firing under the project - and, to the Twiga cement plant. Works include construction of facilities at three offshore marine platforms, a marine pipeline, and related infrastructure works, to transport gas to the processing plant. The gas processing plant will incorporate gas dehydration, dew point control, and liquids stabilization in storage facilities, and, the marine pipeline will extend in a northwesterly direction, based on oceanographic reviews, seismic surveys, and environmental regulations. The Ubungo power plant will undergo turbine rehabilitation, comprising upgraded gas turbines, including expanded air chillers capacity, for conversion to gas operation (configured to both liquid, and gas fuel); 2) an environmental management plan, and monitoring criteria, to comply with environmental, and social safeguard policies; this includes training, and capacity building. Resettlement, and compensation will be assessed to comply with legal policies, and Bank guidelines; in addition, solar energy, and extension of the power grid will benefit affected populations; and, 3) technical assistance, training, and equipment to assist the Ministry of Energy and Minerals strengthen the gas institutional, and regulatory framework, the energy management information systems, and, review a possible private sector participation.
Main Sector; Energy and mining (Power) (49%) Energy and mining (Oil and gas) (44%) Public Administration, Law, and Justice (Central government administration) (5%) Health and other social services (Other social services) (2%)
Themes; Climate change (20%) Other social development (20%) Rural services and infrastructure (20%) State enterprise/bank restructuring and privatization (20%) Infrastructure services for private sector development (20%)
Financiers; Commonwealth Development Corporation, EU. Investment Bank, IDA' Foreign Private Commercial Sources
Commitment (US million); 22, 41, 183, 50
CATEGORY; Energy

14. Project Title; Tanzania Energy Development and Access Project (TEDAP)
Agency; IBRD
Implementation Agency; Tanzania's Ministry of Energy and Minerals

Amount; 59,600,000 US$
Objective; The development objective of that program is to improve the quality of life of rural and peri-urban households and to raise the incomes generated/jobs created by enterprises in those areas - by means of increased access of households, enterprises and social facilities to electricity and ITC services. 50,000 new connections will be implemented annually, at a cost of about 30 m per year. The global environment objective is to remove the barriers to and cost of renewable energy technologies.
Themes; Climate Change
Financiers; GEF
Commitment (US million); 6,500,000 US$
Project Status; IA Approved

15. Project Title; Transformation of the Rural Photovoltaic (PV) Market
Category; Energy
Agency; UNDP
Implementation Agency; National Execution (NEX), Ministry of Energy and Minerals
Amount; 7,304,071 US$
Objective; The project aims at reducing Tanzania's energy-related CO2 emissions by introducing photovoltaic (PV) as a substitute for fossil fuel (kerosene) utilized for lighting in the rural areas remote from the electricity grid and at slowing down the rate of additional diesel-based captive generation or grid extension schemes for providing basic electricity services to the unelectrified rural household and addressing rural poverty.
Themes; Climate Change
Financiers; GEF
Commitment (US million); 2,250,000 US$
Project Status; IA Approved

16. Project Title; Mainstreaming Climate Change in Integrated Water Resources Management in Pangani River Basin
Category; Water
Agency; UNDP
Implementation Agency; Ministry of Water, and Pangani Basin Water Board, Tanzania
Amount; 2,574,875 US$
Objective; This project will initiate Integrated Water Resource Management (IWRM) frameworks in the Pangani River Basin of Northern Tanzania.
These frameworks will address climate change and pilot adaptation measures.
It is one of the first field-based climate change preparation projects in Eastern Africawith strong links to basin and national planning and policy, and as such will build national and regional capacity, provide lessons and serve as a national and regional demonstration site.
Themes; Climate Change
Financiers; GEF
Commitment (US million); 1,000,000 US$
Project Status; IA Approved

Uganda
Uganda has put in place a number of tools for the management of environment relevant for addressing climate change. The Ministry of Water and Environment has the overall coordination role for environmental

management in Uganda and is responsible for ensuring the implementation of international conventions in the field of environment, and has developed structures to enable it to fulfil this mission. A Climate Change Unit (CCU) was established in 2008 directly answerable to the Office of the Permanent Secretary of the Ministry. The Unit is responsible, among other duties, for:-

- providing technical support to Government on Climate change;
- Coordinating climate change actions by different sectors, Institutions, CSOs/NGOs, Private Sector and other stakeholders;
- the role of climate change focal point for the UNFCCC;
- the Secretariat to Uganda's Designated National Authority (of the Clean Development Mechanism (CDM);
- Spearheading and creating awareness on climate change for various stakeholders and sectors at National, sub-national and Community level.

There is a Climate change policy committee established in 2009 drawn from key sectors to give policy guide on climate change as well as an Inter Institutional Climate change technical committee. This is a sectoral committee consisting of Climate Change desk officers of various sectors. It links those sectors to the Climate change focal institution which is the Ministry of Water and Environment.
Several documents have been prepared on climate change, including:-

- The National Communication to the UNFCCC (NC, 2002);
- The National Adaptation Programme of Action (NAPA, 2007);
- State of Environment Report for Uganda (2008);
- Environmental Sensitivity Atlas for the Albertine Graben, (Second Edition 2010);
- Uganda, Atlas of Our Changing Environment, the Republic of Uganda;

Uganda's current National Development Plan-NDP (2010/11 to 2014/15) defines four strategic objectives for addressing climate change:
◦ strengthening institutional capacity to coordinate implementation of the UNFCCC and its Kyoto Protocol;
◦ Climate proofing national development;
◦ Promotion of a low carbon development path
◦ Participation in the international climate change process;

The current climate change priorities consistent with the NDP include;
◦ Awareness on the impacts, interventions and roles;
◦ Relevant and harmonized Policy development;
◦ Implementation of the NAPA;
◦ Institutional and manpower development;
◦ Strengthening weather and climate monitoring for improved data generation;
◦ Climate Change research (Adaptation and mitigation) and technology development; and
◦ Mainstreaming Climate Change into national planning (sector, institutional, local governments, ecosystems, community and household levels).

Climate change has been integrated into the National development Plan under the enabling sectors, which shows governments commitment to address Climate change issues

The National Adaptation Programme of Action (NAPA) prioritizes 9 climate change intervention areas with total estimated cost of US$ 39 million. The intervention areas include but not limited to:

- Community tree growing
- Land degradation management
- Strengthening Meteorological services
- Community water and sanitation

- Water for production
- Drought adaptation
- Vectors, pests and disease control
- Indigenous knowledge and Natural resources management
- Climate Change in development planning

A National Climate Change Forum has been established by Ministry of Water and environment comprising of various CC stake holders and partners as a platform for all stakeholders working on climate change to discuss climate related issues and share experiences and lessons learnt.
A parliamentary forum on CC is in place. A Climate Change Sub-national awareness campaign is ongoing at local government and community level.
The Ministry has entered into an MoU with the National Curriculum Development Centre to review curriculum for incorporation in education institutions (primary and secondary schools). The process of integrating CC into national Primary and secondary Education Curriculum has commenced. The Climate Change Unit (CCU/MWE) and National Curriculum Development Centre, Ministry of Education and Sports are taking the lead.
Research related to Climate change being undertaken by Institutions including Climate Change Unit/MWE, Department of Meteorology/MWE, Makerere University, and NARO.

Potential areas for CDM include transport, energy, forestry, agriculture (Crop, Livestock & Fisheries), waste management, manufacturing industry, and water resources.
So far, four CDM Projects have been registered by the CDM-Executive Board while 9 others have been issued with Letters of Approval (LoA) and are at various stages of the CDM regulatory process.
Several others are at various phases of development by the Project Participants.

Current Registered CDM Projects are:-

a. The Nyagak Mini-hydropower Project, West Nile.
b. The Uganda Nile Basin Reforestation Project by NFA focussing western Uganda.
c. The Uganda Municipal Waste Compost Programme in 9 Municipalities, coordinated by NEMA.
d. Bugoye Mini-hydropower Project in Kasese District.

CDM Projects issued with LoAs:-

a. Kakira Bagasse Co-generation Project in Jinja.
b. Kikagati Mini-hydropower Project in Kasese.
c. Georg Loeding Enterprises Forestry Project in Kasese.
d. Kinyara Bagasse Co-generation Project in Masindi.
e. Ishasha Mini-Hydropower Project in Kanungu.
f. Buseruka Mini-hydropower Project in Hoima.
g. Bujagali Hydropower Project in Jinja.
h. Mpererwe Landfill Gas Project in Kampala/Wakiso.
i. Kachung Forest Project in Dokolo District.

CDM Projects with LoA pending:-

Program of Activities (PoAs)/CDM Projects issued with No Objection Letters:

a. Energy-Efficient Cooking Stoves PoA, Multi –Country by Uganda Carbon Bureau and Care

international and Danish Energy Agency.

b. Cook-Stoves PoA by CO2 Balance of Kenya.
c. Jatropha Bio-fuel Project in Masaka by Hydromax Ltd.
d. Namwasa Reforestation Initiative by the New Forests Company Ltd.in Mubende District.

CDM Projects in the Pipeline (Project Design Document preparation, Environmental Impact Assessment Clearance):-

a. Bagasse Cogeneration Project by Sugar Corporation of Uganda (SCOUL).
b. Jatropha energy (biofuel) project in Northern Uganda

ANNEX 4: Ratification Dates of Related Multilateral Environmental Agreements (MEAs)

Convention/Protocol	Burundi	Kenya	Tanzania	Rwanda	Uganda
United Nations Framework Convention on Climate Change	6 Jan 1997	30 Aug 1994	17 April 1996	18 Aug 1998	8 Sept 1993
Kyoto Protocol	18 Oct 2001	25 Feb 2005	26 Aug 2002	22 July 2005	25 Mar 2002
Convention on Biological Diversity	15 April 1997	27 Jul1994	8 Mar 1996	29 May 1996	8 Sept 1993
Cartagena Protocol		24 Jan 2002	24 April 2003	22 Jul 2004	30 Nov 2001
United Nations Convention to Combat Desertification	6 Jan 1997	24 Jan 1997	19 Jun 1997	22 Oct 1998	25 Jun 1997
Basel Convention	6 Jan1997	1 Jun 2000	7 April 1993	7 Jan 2004	11 Mar 1999
Rotterdam Convention on the Prior Informed Consent Procedure for certain Hazardous Chemicals and Pesticides in	23 Sep 2004	3 Feb 2005	26 Aug 2002	7 Jan 2004	

International Trade					
Bamako Convention on the Ban of the Import into Africa and the Control of Transbounady movements of Hazardous wastes within Africa	22 Jul 1996	17 Dec 2003 (signed)	15 Feb 1993	26 Aug 1991 (signed)	1 Oct 1998
Stockholm Convention on Persistent Organic Pollutants(POPs)	2 Aug 2005	24 Sept 2004	30 April 2004	5 Jun 2002	20 Jul 2004
Vienna Convention for the Protection of the Ozone Layer	6 Jan 1997	9 Nov 1988	7 April 1993	11 Oct 2001	24 Jun 1998
Montreal Protocol on Substances that Deplete the Ozone Layer	6 Jan 1997	9 Nov 1988	16 April 1993	11 Oct 2001	15 Sept 1988
Ramsar Convention	2002	1990	2000	2006	1988
CITES Convention	8 Aug 1988	13 Dec 1978	29 Nov 1979	20 Oct 1980	18 Jul 1991

ANNEX 5: Selected Sources of Global Climate Change Financing

1. The GEF trust fund's Climate Change focal area supports the following activities:

Renewable Energies

The GEF helps countries remove barriers to developing markets for renewable energies wherever these are cost-effective. Such opportunities can be found in on-grid and off-grid situations, as well as in the area of renewably generated heat for industrial and other applications. In these cases, GEF support helps create enabling policy frameworks, build the capacity for understanding and using the technologies, and establish financial mechanisms to make renewables more affordable.

Energy Efficiency

The GEF promotes energy efficiency by removing barriers to the large-scale application, implementation, and dissemination of cost-effective, energy-efficient technologies and practices. Such barriers lie in the lack of conducive policies, inadequate information and awareness, and insufficient access to financing. GEF supports market transformation of energy-efficiency appliances and widespread adoption of energy-efficient technologies in industry and building sectors.

New Low-GHG Energy Technologies

In addition to renewable energies and energy efficiency, new technologies are critical to help prevent dangerous levels of greenhouse gas emissions, while allowing for economic development. The GEF provides support for such new technologies that are not yet cost effective. The current portfolio ranges from large-scale solar power plants, to distributed power generation in fuel cells, to building-integrated solar photovoltaics. Future interventions will focus on global and regional market integration and aggregation efforts, and foster national innovation.

Sustainable Transportation

Throughout the world, the transportation sector is the fastest growing source of greenhouse gas emissions. GEF supports projects that promote a long-term shift towards low emission and sustainable forms of transportation. Eligible activities include the following: public rapid transit, which encompasses bus rapid transit, light rail transit, and trolley electric buses; transport- and traffic-demand management; non-motorized transport, and land-use planning.

Adaptation

The Climate Convention guidance to the GEF on adaptation has evolved through a series of staged approaches. Originally, the GEF supported initial studies, vulnerability and adaptation assessments, and capacity building. More recently, the UNFCCC asked the GEF to support pilot and demonstration projects in the field of adaptation. Under its strategic priority Piloting an Operational Approach to Adaptation, the GEF supports projects that provide benefits and may be integrated into national policies and sustainable development planning. In addition, the GEF supports adaptation activities through the Least Developed

Country Fund and the Special Climate Change Fund.

Enabling Activities, National Communications and other obligations under the UNFCCC

The GEF helps developing countries submit national communications to the UNFCCC, including a report on national inventories of greenhouse gases. The largest part of GEF support for the national communications is delivered through an umbrella and support program administered by the UNDP and the UNEP. Through this umbrella program, countries can also receive support for vulnerability and adaptation assessments, capacity building, and technology needs assessments.

GEF funding is in accordance with the following eligibility criteria:

(a) GEF grants made available within the framework of the financial mechanisms of the UNFCCC should be in conformity with the eligibility criteria decided by the Conference of the Parties.

(b) A country is an eligible recipient of GEF grants if it is eligible to borrow from the World Bank or if it is an eligible recipient of UNDP technical assistance through its country Indicative Planning Figure (IPF).

(c) GEF concessional financing in a form other than grants that is made available within the framework of the financial mechanism of the conventions shall be in conformity with eligibility criteria decided by the Conference of the Parties of each convention. GEF concessional financing in a form other than grants may also be made available outside those frameworks on terms to be determined by the Council.

United Nations Framework Convention on Climate Change Funds

2. The Special Climate Change Fund

The Special Climate Change Fund (SCCF) established under the Convention in 2001 to complement other funding mechanisms for the implementation of the Convention (decision 7/CP.7) for financing projects relating to: Capacity-building; Adaptation; Technology transfer; Climate change mitigation: energy, transport, industry, agriculture, forestry and waste management; and Economic diversification for countries highly dependent on income from fossil fuels.

3. The Least Developed Country Fund (LDCF)

The Least Developed Countries Fund established to support a work programme to assist Least Developed Country Parties (LDCs) carry out, inter alia, the preparation and implementation of national adaptation programmes of action (NAPAs).

4. Adaptation Fund (AF)

This is a financial instrument under the UNFCCC and its Kyoto Protocol (KP) and has been established to finance concrete adaptation projects and programs in developing countries that are Parties to the KP in an effort to reduce the adverse effects of climate change facing communities, countries and sectors. The Fund is to be financed with a share of proceeds from clean development mechanism (CDM) project activities as well as through voluntary pledge of donor governments. The share of proceeds from the CDM amounts to 2% of certified emission reductions (CERs) that are issued for a CDM project activity.

Activities that will be supported by the adaptation fund include the following:
(a) Adaptation activities, where sufficient information is available to warrant such activities, in the areas of water resources management, land management, agriculture, health, infrastructure development, fragile ecosystems, including mountainous ecosystems, and integrated coastal zone management.
(b) Improving the monitoring of diseases and vectors affected by climate change, and related forecasting and early-warning systems, and in this context improving disease control and prevention;
(c) Supporting capacity building, including institutional capacity, for preventive measures, planning, preparedness and management of disasters relating to climate change, including contingency planning, in particular, for droughts and floods in areas prone to extreme weather events;
(d) Strengthening existing and, where needed, establishing national and regional centres and information networks for rapid response to extreme weather events, utilizing information technology as much as possible.
Conditions and eligibility requirements:

Eligible Parties to receive funding from the Adaptation Fund are understood as developing country Parties to the Kyoto Protocol that are particularly vulnerable to the adverse effects of climate change including low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems.

Decisions on the allocation of resources of the Fund shall take into account the criteria outlined in the Strategic Priorities, Policies and Guidelines of the Adaptation Fund document, specifically:

(a) Level of vulnerability;
(b) Level of urgency and risks arising from delay;
(c) Ensuring access to the fund in a balanced and equitable manner;
(d) Lessons learned in project and programme design and implementation to be captured;
(e) Securing regional co-benefits to the extent possible, where applicable;
(f) Maximizing multi-sectoral or cross-sectoral benefits;
(g) Adaptive capacity to the adverse effects of climate change.

At the 12th AF Board meeting, it was decided that LDCs which cannot access the Least Developed Countries Fund (LDCF) will be given priority over those that can.
An Adaptation Fund became operational with the first commitment period of the Kyoto Protocol in 2008. The aim is to finance practical adaptation projects and programmes in developing countries and support capacity-building activities. Funded from an adaptation levy (2%) on Clean Development Mechanism (CDM) projects. The GEF is at the centre of the existing system of financing programs and projects to protect the global environment.

5. Fast Start Finance
The Copenhagen Accord outlines a pledge by many developed countries "to provide new and additional resources, including forestry and investments through international institutions, approaching $30 billion for the period 2010 to 2012 with balanced allocation between adaptation and mitigation."

The objective of the funds, referred to as 'fast start finance' is to help developing countries adapt to the impact of climate change and to pursue actions that put them on a low-carbon development pathway. These pledges have the potential to build trust between developed and developing countries in the international climate arena, which will enhance progress towards a comprehensive post-2012 international climate agreement

6. The Green Climate Fund

In order to scale up the provision of long-term financing for developing countries, COP 16 established a Green Climate Fund, to be designated as an operating entity of the financial mechanism of the Convention under Article 11, with arrangements to be concluded between the COP and the Green Climate Fund to ensure that it is accountable to and functions under the guidance of the COP. The Green Climate Fund will support projects, programmes, policies and other activities in developing country Parties using thematic funding windows. Industrialized countries committed themselves to jointly mobilize USD 100 billion per year by 2020 through a mix of public and private finance sources. The Fund will be governed by the Green Climate Board.

Multilateral Development Banks (MDBs)

7. World Bank Carbon Funds and Facilities

Financing Mechanisms	Carbon Finance
Qualifying Projects	Adaptation , Mitigation, Agriculture , Climate-Resilient , Energy , Energy Efficiency , Forestry , Fuel Switching , Fugitive Methane , Low-Carbon , Natural Resource Management , Renewable Energy , Sustainable Land Management , Transport , Urban , Waste Management
Eligibility	IBRD/IDA member countries; CDM or JI-eligible project activities (also voluntary window mainly for forestry and agriculture-based projects) and AAU transactions (through GIS); Project with at least 200,000 MtCO2e emission reductions by 2012; Host country approval

The Carbon Finance Unit (CFU) has established two new facilities: the Forest Carbon Partnership Facility (FCPF) and the Carbon Partnership Facility (CPF). The FCPF tackles deforestation by providing technical assistance to tropical and sub-tropical developing countries to support them in their efforts to reduce emissions from deforestation and forest degradation (REDD). The CPF uses carbon finance to support the implementation of a post-2012 regulatory framework through long-term investments and cutting-edge technologies that will be catalytic in the transition toward low-carbon economic development (see specific information sheets for the CPF and FCPF).

Project proponents must submit a Project Idea Note (PIN), a short form that provides the basic information about the project, to demonstrate, for example, the viability of technology, sound financing, credible baseline and adequate volume of emission reductions. Furthermore, a financial analysis model is mandatory when submitting a PIN. The PIN is used as an initial screening instrument and provides the proponents with feedback. At this stage it is purely the exchange of an idea and neither party has legal obligations to proceed further.

The following World Banks support developing countries to pilot lowemissionsand climate resilient development:

- Clean Development Fund;
- Strategic Climate Fund;
  - ✓ Forest Investment Program;
  - ✓ The Pilot Program for climate Resilience;

- ✓ Program for Scaling-up Renewable Energy in Low income countries.

For more information: **http://www.climateinvestmentfunds.org.cif**

8. World Bank's BioCarbon + Fund

Supports technical assistance related to pioneering projects that sequester or conserve carbon in ecosystems and land-based agricultural activities.

The Fund aims to deliver cost-effective emission reductions, while promoting better understanding of how to manage soil carbon and supporting poverty alleviation

9. African Development Bank (AfDB)

Bilateral Funding Initiatives

10. Nordic Climate Facility

Financing Mechanisms	Grant
Qualifying Projects	Adaptation , Mitigation, Agriculture , Carbon Capture & Storage (CCS) , Climate-Resilient , Energy , Energy Efficiency , Forestry , Fuel Switching , Low-Carbon , Renewable Energy , Transport , Waste Management , Water
Eligibility	Financing may be provided to one or several active institutions, organisations, companies, and authorities with relevant experience holding a registered place of operations in Denmark, Finland, Iceland, Norway or Sweden ("Applicant"). The Applicant shall have Local Partner(s) in an Eligible Country (see list) where the Project is proposed to be implemented. The projects should have an implementation period of 24 months or less, and focus on one of the two climate themes announced in the call for proposals.

The Nordic Climate Facility (NCF) promotes the transfer of technology, know-how and innovative ideas between the Nordic countries and low-income countries on climate change. This exchange is expected to increase low-income countries' abilities to mitigate and adapt to climate change and contribute to sustainable development and the reduction of poverty.NCF encourages and promotes technological innovation in areas susceptible to climate change such as: energy, transport, water and sanitation, health, agriculture, forestry as well as other areas related to natural resource management. Once every year, NCF calls for innovative proposals comprising specific themes related to climate change.

Selected proposals may receive grant financing amounting from EUR 250,000 to 500,000 or, in exceptional cases, amounting between EUR 150,000 and 250,000. The grant funding may cover up to 90% of the proposed costs. However, proposals indicating more co-financing will score higher. Funding may be used to cover real costs relating to technical assistance, equipment, and small works. Proposals are evaluated in two phases: Concept Phase (i.e. prequalification phase) and Final Phase. The current invitation requests prequalification proposals for the Concept Phase. Applicants of Projects selected in the Concept Phase will be asked to submit a full Final Application.

11. The International Climate Initiative (ICI)

This is an innovative, international mechanism for financing climate protection projects. It receives funding from the sale of tradable emission certificates. The overall objective of the fund is to provide financial support to international projects supporting climate change mitigation, adaptation and biodiversity projects with climate relevance. The International Climate Initiative (ICI) of the German Government was known as

the International Climate Protection Initiative until December 2008. It is administered by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) of the German Government. The German ICI provides financial support to international projects supporting climate change mitigation, adaptation and biodiversity projects with climate relevance. It aims to ensure that such investments will trigger private investments of a greater magnitude. It also aims to ensure that financed projects will strategically support the post-2012 climate change negotiations. For this purpose, it will support multilateral activities and funds focusing on adaptation and forest management.

The ICI supports mitigation (mainly sustainable energy systems), adaptation and preservation and sustainable use of natural carbon sinks/ REDD. The criteria on which projects will be selected include those projects that: can demonstrate a mitigation effect; are anchored in partner countries' national strategies; are innovative and impact beyond the individual project itself and are transferable; build on the strengths of German climate policy and have synergies with the conservation of other global environmental goods.

The ICI has initially focused on a number of countries that have a high potential for emissions reduction in view of their significant and sharply rising greenhouse gas emissions. Innovative projects are also being supported in other selected countries and regions. Furthermore, projects targeting valuable carbon sinks with high levels of biodiversity (such as in the Amazon region, the Congo Basin and South-East Asia) will receive support.

Existing structures of development cooperation will be used for the implementation of projects, with GTZ and KfW playing a key role in project identification and implementation. Projects will complement existing development cooperation with respect to climate change and energy policies, without being limited to certain sectoral or regional focuses or priorities.

Projects are selected in a two stage procedure. In the first stage, project outlines submitted by applicants are appraised. In the second stage, applicants who have submitted promising project outlines are requested to submit a formal application for funding. The funding decision is taken on the basis of the final assessment of that application by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

Project proposals can be submitted by implementing organisations of German development cooperation, and by non-governmental and governmental organisations, universities and research institutes, private-sector companies, multilateral development banks, and organisations and programmes of the United Nations.

All funding decisions on projects are made by the BMU.

The ICI works closely with the two organisations contracted by the German government to perform development cooperation tasks: namely Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ – German Technical Cooperation) and Kreditanstalt für Wiederaufbau (KfW development bank). The administration of the International Climate Initiative is carried out by a programme office located at GTZ, supported by additional personnel capacity provided by KfW.

12. The Global Climate Change Alliance (GCCA)

This is an initiative of the European Union. Its overall objective is to build a new alliance on climate change between the European Union and the poor developing countries that are most affected and that have the least capacity to deal with climate change. The GCCA does not intend to set up a new fund or governance structure, but will work through the European Commission's established channels for political dialogue and cooperation at national and international level.

The purpose of the Global Climate Change Alliance (GCCA) is to deepen dialogue and step up cooperation with partners on Climate Change (CC). The specific objectives are:

- To provide a platform for dialogue and exchange that will help countries to integrate development strategies and climate change and provide a basis for a converged post-2012 climate change agreement.
- Help countries participate in global climate change mitigation activities that contribute to poverty reduction.
- Provide technical and financial support that targets five priority areas and related actions: (a) adaptation to climate change, (b) reducing emissions from deforestation, (c) enhancing the participation of poor countries in the CDM, (d) promoting disaster risk reduction, and (e) integrating climate change into poverty reduction efforts.

(a) Adaptation to Climate Change - Development of adaptation plans in vulnerable countries other than LDCs; supporting implementation of NAPAs developed with GEF support; financing pilot adaptation projects in the water and agricultural sectors and on sustainable natural resource management (NRM).
(b) Reducing Emissions from Deforestation (REDD) - Building reporting systems and national capacity to monitor deforestation; strengthening institutions and developing national strategies to combat deforestation; supporting innovative performance-based mechanisms to provide positive incentives for REDD; expanding programmes like Forest Law Enforcement, Governance and Trade (FLEGT) that improve sustainable NR governance and reduce emissions.

(c) Enhancing participation in CDM - Building capacity for participation and providing technical assistance for cost-effective project development; showcasing projects that are better suited to LDCs and SIDS and developing appropriate methodologies.

(d) Promoting Disaster Risk Reduction (DRR) - Improving and extending climate monitoring, forecasting and information systems and converting data into effective preparedness measures; identifying measures to implement the Hyogo Framework for Action.

(e) Integrating CC into Poverty Reduction Efforts - Integrating adaptation plans into poverty reduction strategies and development strategies; developing institutional capacity in LDCs and SIDS for mainstreaming; climate proofing EU funded programmes and projects.

Starting in 2011, 10 training workshops on climate change will be organised in the different regions (Asia, Caribbean, Pacific and Africa).

The workshops will contribute to the:

- Better understanding of the participants vis-à-vis the importance and role of regional downscaled climate models;
- Ability of the participants to integrate and mainstream climate considerations into development planning;
- Ability of the participants to develop adaptation and mainstreaming (policy) targets and country specific progress indicators;
- Ability of the participants to develop experience with costing adaptation and mainstreaming measures;
- Ability of the participants to apply the provided tools and methodology to integrate and mainstream climate change into development planning and budgeting.

The GCCA provides support to poor developing countries, particularly the Least Developed Countries (LDCs) and Small Island Development States (SIDS). There are more than seventy countries in these categories.

To maximise the impact of initial resources available, the European Commission has operated through the selection of number of pilot countries with whom practical cooperation will start with funds from the budget year 2008. The following broad criteria were established to select these countries:

- The country is a LDC and/or SIDS, i.e. the primary target group of the GCCA.
- The country should have national and/or sectoral climate change policies in place or has expressed its intention of preparing them to ensure the integration of climate change into development strategies, plans and budgets.
- The government is keen to enhance policy dialogue and cooperation on climate change with the EU.
- The country has ideally already received, or is in the process of preparing for receiving, (General/Sectoral) Budget Support through the European Commission and/or other donors. Whilst the idea of the GCCA is to add adaptation-related funding to existing budget support programmes, the existence thereof is not a precondition for support under the GCCA. Where this aid modality is not used (or where its use in the area of climate change adaptation is not possible or beneficial in the short term), other means of support can be identified with the partner government.
- There is an EC Delegation with sufficient capacity to prepare and follow up implementation of the GCCA programme. Ideally, the country has already established dialogue on environmental/climate issues with the European Commission or donors more widely.
- The country should preferably be involved and be politically active in the negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) and in this sense serve as a model for other countries in its group/region.
- Further elements to identify countries and priority areas of intervention could be of a more technical nature, e.g. the hazard profile of the country (exposure to risk, adaptive capacity, climate data availability and projected climate changes).

13. The Global Energy Efficiency and Renewable Energy Fund (GEEREF)

This was proposed in 2006 by the European Commission. It is a Public-Private Partnership (PPP) designed to maximise the leverage of public funds. Structured as a Fund-of-Funds, GEEREF invests in private equity funds (sub-funds) that specialise in providing equity finance to small and medium-sized project developers and enterprises (SMEs). Energy efficiency and renewable energy projects will be implemented in developing countries and economies in transition.

The fund is administered by the European Investment Bank (EIB) through a fund management team from the European Investment Fund (EIF).

Objectives:

- Obtain benefits from accelerated deployment of energy efficiency and renewable energy technologies.
- Achieve high leverage of public finance by offering preferential returns to private funds.
- Achieve high degree of financial sustainability.

The majority of the Fund will be used to provide risk capital to different types of sub-fund investments. In addition, the fund will include a technical assistance facility. This will amount to 10%-20% of the total fund

size depending on the actual needs for capacity building which is likely to be larger in less developed economies.
The investment will include a broad mix of project types promoting energy efficiency and renewable energy technologies. Given the focus on developing countries and transitions economies, the emphasis will be placed on deploying technologies with a proven technical track record. Part of investment comprises:

- Small hydro and biomass with on-shore wind also offering significant potential.
- Cofiring solutions (e.g. co-firing coal and bagasse)
- Manufacturing, energy service, trading and micro finance ventures
- Photovoltaics only for middle and high-income contexts because too costly.

Conditions and eligibility requirements:
Focus on project funding in countries that have private sector engagement in their national policies. Furthermore projects that have a budget under EUR10 million are prioritized since these are often disregarded by private investors.
Sub-funds that are eligible for GEEREF financing could be envisaged for the African, Caribbean and Pacific (ACP) region, North Africa, non-EU Eastern Europe, Latin America and Asia, with a prevailing geographical focus on ACP countries.
The projects have to be placed in a country eligible for Overseas Development Assistance (ODA).

14. The Hatoyama Initiative
This is a national carbon-regulation scheme, announced at the Copenhagen Summit in December 2009 (COP15) by the former Prime Minister of Japan Yukio Hatoyama, that targets a 25 percent cut in global warming emissions below 1990 levels by 2020. It replaces the Cool Earth Partnership, a previous (2008-2010) initiative of the government of Japan. The Hatoyama Initiative aims to provide assistance to developing countries that are already making efforts to reduce greenhouse gas emissions to enable them to achieve economic growth in ways that will contribute to climate stability, on the basis of policy consultations between Japan and those countries.
Hatoyama Initiative (replacing the previous Cool Earth Partnership)

The Hatoyama Initiative is not a fund. Rather, it is an initiative which covers all of Japan's activities relating to climate change. The Initiative is comprised of several agencies across both public and private investors:

- JICA - the Japanese International Cooperation Agency
- JBIC - the Japanese Bank for International Cooperation
- NEXI - the Nippon Export and Investment Insurance agency, which provides trade insurance
- Private sector financial institutions and investors

As such it is often difficult to gather complete information regarding the Initiative.

15. The International Climate Fund (ICF)
This is a UK initiative. It is an across-departmental fund established by the UK 2010 Comprehensive Spending Review. It follows on from the Environmental Transformation Fund – International window (ETF-IW) to provide climate change related aid over the period 2011-12 to 2014-15. It is planned that the International Climate Fund will account for 7.5 per cent of UK Official Development Assistance (ODA) by the end of the Spending Review period (2014-15).
The International Climate Fund will be managed by a high level across-departmental project team with representation from the Department for International Development (DFID), the Department for Environment and Climate Change (DECC) and the finance ministry (Her Majesty's Treasury). The Department for

Environment, Food and Rural Affairs (DEFRA) will also be involved in decisions on the use of the International Climate Fund for forestry.

The International Climate Fund follows on from the Environmental Transformation Fund – International window (ETF-IW) and is set up on the same basis. The ETF-IW supported development and poverty reduction through environmental protection, and helped poor countries respond to climate change. The ETF-IW objectives were to Contribute to a successful global deal on climate change:

- By generating experience to inform, support and influence the development and implementation of an efficient, effective and equitable financing framework as part of a new global deal.
- By raising ambition, capacity and confidence in developing countries.

The objective is to:

- Transform the way in which developing countries approach climate change, by piloting financial approaches which demonstrate how low carbon growth and climate resilience are compatible with countries' overall development paths.
- Contribute to the international institutional reform agenda by putting climate resilient development and low carbon growth at the heart of the work of the multilateral development banks.
- Support strategic coordination and coherence across the international financing system for climate change by providing a forum for discussions between donors and recipients about appropriate financing mechanisms and tools for low carbon and climate resilient development.
- Leverage additional finance from other donors and the private sector for climate change.
- Maximise co-benefits in poverty reduction and sustainable management of natural resources.
- The ICF is intended to drive urgent action to tackle climate change by supporting low carbon growth and adaptation in developing countries.

16. The International Forest Carbon Initiative

This is an initiative of the Australian Government. It supports international efforts on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD) through the United Nations Framework Convention on Climate Change (UNFCCC). It is jointly administered by the Australian Department of Climate Change and AusAID. The Australian Government does not intend to set up a new fund or governance structure through IFCI, but will work through established channels of bilateral dialogue and cooperation at the international level.

ANNEX 6: TERMS OF REFERENCE

EAST AFRICAN COMMUNITY (EAC)

TERMS OF REFERENCE (TOR) FOR A SHORT TERM CONSULTANCY TO DEVELOP

THE EAC CLIMATE CHANGE STRATEGY

INTRODUCTION

The Eleventh Ordinary Summit of Heads of States of the East African Community held in Arusha in November 2009, directed the **urgent development of a Climate Change Policy and strategies** to address the adverse impact of climate change, including determining how surplus food in one country can be shared in countries that are worse off. The summit further directed that a special Food Security and Climate Change Summit be organized quickly and should involve key stakeholders.

To implement the above directive, the EAC Secretariat has developed an EAC Climate Change Policy. The purpose of the CC Policy is to set up mechanisms for adapting to, and mitigating against climate change in EAC region in line with the EAC Protocol on Environment and Natural Resource Management and International Climate Change Agreements. With support from the German Government, the EAC Secretariat is now developing an EAC Climate Change Strategy to address the impacts of Climate Change in the region.

1.0 OBJECTIVES OF THE CONSULTANCY

The overall objective of the Consultancy is to develop a regional Climate Change Strategy for the EAC.

2.0 SCOPE OF WORK FOR THE CONSULTANCY

In carrying out the assignment, the Consultant shall:

i) Conduct literature review on existing climate change response initiatives (strategies, policies, programmes and projects) in the EAC region and at Partner State level based on the EAC Climate Change Policy; to identify regional priorities and strategies to guide the preparation of the Strategy.

ii) Review national, regional and global initiatives on climate change impact, vulnerability, adaptation and mitigation (which should include best practices and lessons learnt) so as to guide the preparation of Climate Change Strategy;

iii) Conduct a SWOT analysis of the national and regional preparedness to address climate change issues in consultation with relevant actors in the Partner States with a view to developing current status of climate change in the region;

iv) Identify and interact with key stakeholders in order to analyze and propose the most appropriate climate change response measures for EAC including participation in national stakeholder consultative workshops for developing the EAC Master Plan.

v) Undertake a capacity needs assessments with the aim of identify the crucial capacity, knowledge and financial gaps for the successful implementation of the EAC Climate Change Strategy and propose measures to address them;

vi) Propose appropriate legal and institutional frameworks required for the successful implementation of the Strategy.

vii) Propose potential sources of financing climate change activities at Partner States (with a strong emphasis on domestic sources/funds), regional and international level

viii) Present the draft EAC Climate Change Strategy at strategic Partner States meetings and regional validation workshop

ix) Prepare a final draft of the EAC Climate Change Strategy

3.0 DELIVERABLES

The following constitute the desirable deliverables:

(i) Inception report demonstrating the consultant's comprehension of the assignment and his/her methodology to be applied. The report should, among others include:

a) Background information on the preparation of the CC Strategy;
b) The review of the existing national strategies on CC in Partner States;
c) Tentative work plan for the activities to be undertaken;

(ii) A Mid-Term Report which contains a first draft of the EAC Climate Change Strategy; and

(iii) A final draft Climate Change Strategy incorporating the views of the stakeholders and Partner States experts. The consultant shall submit 3 hard copies and a soft copy CD-Rom of the final draft of the EAC Climate Change Strategy.

4.0 REPORTING

The consultant shall report to the EAC Secretariat.

5.0 DURATION

The Consultant should complete the assignment within thirty five (35) days

(i) The inception report will be submitted within 10 days of the commencement of the assignment;

(ii) A first draft EAC Climate Change Strategy will be submitted within 25 days of the commencement of the assignment;

(iii) The final draft Climate Change Strategy shall be submitted after a validation workshop to be convened by the Secretariat.

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