



**UNITED REPUBLIC OF TANZANIA**

**VICE PRESIDENT'S OFFICE**

**NATIONAL CAPACITY SELF ASSESSMENT  
REPORT AND ACTION PLAN FOR THE  
IMPLEMENTATION OF POST RIO  
CONVENTIONS**

*Division of Environment*

*September 2007*

## **Executive Summary**

The National Capacity Self Assessment (NCSA) process was initiated by the Global Environment Facility (GEF), in collaboration with United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP), aiming at assisting countries with capacity development in global environmental management. The NCSA specifically deals with the Post Rio Conventions. These are the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention to Combat Desertification (UNCCD) and the Convention on Biological Diversity (CBD) of which Tanzania is a signatory. Capacity development is the main challenge to the implementation of these conventions. Inadequate information on capacity needs and priorities in building capacity for global environmental governance makes it difficult for different developmental agencies to target resources to areas that will strengthen capacity of countries to effectively implement the same.

Tanzania's NCSA process started way back in 2002 with scoping of sectors and stakeholders for participation in the assessment. The process for identification of capacity needs started in June 2006 under the coordination of the Vice President's Office-Division of Environment which is the focal point of the Post Rio Conventions. NCSA process in Tanzania was participatory, involving all key actors including representatives from government sectors, non governmental actors, research and academic institutions as reflected in the composition of the team of experts.

This study reveals that Tanzania has made considerable progress in achieving sustainable environmental management through putting in place Environmental Management Act No. 20 of 2004 (EMA, 2004) and the National Strategy for Growth and Reduction of Poverty (NSGRP, 2005) in which environmental issues have been mainstreamed. In addition, the National Environmental Action Plan (NEAP, 1994); the National Environmental Policy (NEP, 1997); Local Government Reforms Programme, 2001; National Development Vision 2025; and sector specific policies, pieces of legislation, programmes and strategies all do reflect important environmental management issues. Furthermore, various sectors are implementing environmental related programmes while several academic and research institutions are conducting research and training in areas related to climate change, biodiversity, sustainable land management and also involved in several programmes and projects. Non-governmental organisations and Community Based Organisation are undertaking activities geared towards implementation of the Post Rio Conventions. However, inadequate capacity at all levels (individual, institutional and systemic) is a major stumbling block that constrains effective implementation of Post Rio Conventions. Other constraints are the weak integrated natural resource management among relevant sectors; inadequate gender mainstreaming in implementation of Convention obligations; inadequate research in the areas relevant to the Post Rio Conventions; inadequate incentives for the private sector participation in implementing the Conventions; inadequate use of locally available technologies and indigenous knowledge, weak enforcement of laws, policies and by-laws relating to management of natural resources, inadequate financial resources for implementation of Rio Conventions; diseases, particularly malaria and HIV/AIDS, undermine human capacity; and

unsustainable human activities such as small scale mining, shifting cultivation and uncontrolled bush fires.

The broadly identified key capacity needs encompass national education, training and public awareness programmes; resources mobilization; research; collaboration and networking; national database management and information dissemination systems; stakeholders participation and empowerment; appropriate technology acquisition and transfer; financial and resource mobilization. Other areas of capacity needs include the development of capacity to minimise natural resource use related conflicts, comprehensive plans and integrated implementation strategies and specialised skills and expertise on Post Rio Conventions issues. Furthermore, review of legal framework to reflect emerging issues on the Post Rio Conventions; development and participation in adaptation research programmes with regard to climate change; biodiversity conservation and land degradation; mainstream gender into development plans, strategies and programmes; develop comprehensive mechanism for private sector participation in the implementation of Post Rio Conventions still remain as priority areas of capacity needs.

The major cross-cutting issues identified in this study are on education, training and awareness; financial resources; data management and monitoring; research and development; appropriate technology acquisition and transfer; malaria and HIV/AIDS; gender; stakeholders participation and empowerment; collaboration and networking; policy and legal framework.

Capacity Development Action Plan has been developed and designed to raise awareness, leverage support for its implementation and address key individual, institutional and systemic capacity needs identified at the local, regional and national level through targeted priority interventions. Also recognition is given to cross-cutting priorities, including decentralization by devolution and the natural resources use and conservation. The Action Plan emphasizes capacity building in support of environment management in Tanzania. The sector ministries/agencies will spearhead the implementation of this action plan in their respective sectors while the Vice President's Office will continue to coordinate these efforts as the National Focal point of Post Rio Conventions in Tanzania.

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## List of Abbreviations and Acronyms

AfDB	African Development Bank
ASDP	Agricultural Sector Support Development Programme
CBD	Convention on Biological Diversity
CEEST	Centre for Energy, Environment, Science and Technology
CBOs	Community Based Organizations
CDM	Clean Development Mechanism
COP/MOP	Conference of the Parties/Meeting of the Parties
COSTECH	National Commission for Science and Technology
CSOs	Civil Society Organizations
CST	Conservation Society of Tanzania
DoE	Division of Environment
DNA	Designated National Authority
EMA	Environmental Management Act, 2004
EPMS	Environmental Protection and Management Services
FAO	Food and Agriculture Organization
GEF	Global Environment Facility
GDP	Gross Domestic Product
HIV/AIDS	Human Immune Virus/Acquired Immune Deficiency Syndrome
IRA	Institute of Resource Assessment-University of Dar es Salaam
IFAD	International Fund for Agricultural Development
IPCC	Intergovernmental Panel on Climate Change
JET	Journalists Environmental Association of Tanzania
JFM	Joint Forestry Management
MACEMP	Marine and Coastal Environment Management Programme
MAFSC	Ministry of Agriculture, Food Security and Cooperatives
MALE	Ministry of Agriculture, Livestock and Environment (Zanzibar)
MEAs	Multilateral Environmental Agreements
MEM	Ministry of Energy and Minerals
NFMP	National Forestry Management Programme
MHEST	Ministry of Higher Education, Science and Technology
MITM	Ministry of Industry, Trade and Marketing
MLD	Ministry of Livestock Development
MLHHS	Ministry of Lands, Housing and Human Settlement Development
MNRT	Ministry of Natural Resources and Tourism
MoW	Ministry of Water
MUCHS	Muhimbili University College of Health Sciences
NAP	National Action Programme to Combat Desertification
NAPA	National Adaptation Programme of Action
NBSAP	National Bio-safety Strategic Action Plan
NCCC	National Convention Coordination Committee
NEAP	National Environmental Action Plan
NEMC	National Environmental Management Council
NEP	National Environmental Policy
NERA	National Environment Research Agenda

PFM	Participatory Forestry Management
NGOs	Non-Governmental Organizations
NSGRP	The National Strategy for Growth and Reduction of Poverty
O &OD	Opportunities and Obstacles to Development
PDD	Project Design Document
PIN	Project Idea Note
PMO-RALG	Prime Minister's Office-Regional Administration and Local Governments
PO – TASAF	President's Office-Tanzania Social Action Fund
SBSTA	Subsidiary Body for Scientific and Technological Advise
TAFORI	Tanzania Forest Research Institute
TAWIRI	Tanzania Wildlife Research Institute
TCCIA,	Tanzania Chamber of Commerce, Industries and Agriculture
TFA	Tanzania Farmers Association
TK	Traditional Knowledge
TMA	Tanzania Meteorological Agency
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNEP	United Nations Environment Programme
VPO	Vice President's Office
WB	World Bank
WMA	Wildlife Management Areas

## **Preface**

The world has experienced various environmental concerns and challenges overtime. Human wellbeing and progress toward sustainable development are vitally dependent upon the management of the Earth's ecosystems to ensure their conservation and sustainable use. However, while demands for ecosystem services such as food and clean water are growing, human actions are at the same time diminishing the capability of many ecosystems to meet these demands. This in turn leads to loss of biological resources on earth. Deforestation and land degradation is also one of the serious environmental concerns the world experiences to date. Over and above loss of biological resources and desertification and land degradation, climate change is seriously threatening the world's sustainable development and survival of mankind. Levels of carbon dioxide and other greenhouse gases in the atmosphere have risen steeply during the industrial era owing to human activities such as heavy fossil fuel use, spurred on by economic and population growth. While climate change is a global problem, its adverse impacts are felt differently by different countries and people and the poor people in the poor countries are more vulnerable.

One of the landmark outcomes of the 1992 Earth Summit was the adoption of the commonly known as the Rio Conventions namely the Convention on Biological Diversity (CBD), the United Nations Convention to Combat Desertification in areas seriously affected by drought and/or desertification particularly in Africa and the United Nations Framework Convention on Climate Change. The "Rio Conventions" reflect the commitment of all countries to preserve the global environment, on the basis of common but differentiated responsibilities and respective capabilities. They provide a framework to the international community on addressing land degradation, climate change and loss of biological diversity with collective efforts. Successful implementation of the conventions by the international community is meant to improve living conditions, and reduce poverty, while also helping to alleviate related problems such as migration, social conflict, loss of plant and animal species and climate change impacts. Tanzania is a Party to all the three Post Rio Conventions and thus has to meet her commitments by implementing the conventions' obligations effectively and efficiently. However, effective



implementation of these obligations calls for the existence of the needed capacity. The National Capacity Self Assessment (NCSA) process which was supported financially by the GEF aimed at undertaking an assessment of the available capacity, establishing capacity gaps and identifying capacity priorities for Tanzania to effectively implement the Rio Conventions. NCSA process has revealed that Tanzania has made considerable progress in achieving sustainable environmental management through putting in place the National Development Vision 2025; National Strategy for Growth and Reduction of Poverty (NSGRP, 2005); National Environmental Policy (NEP, 1997); Environmental Management Act No. 20 of 2004 (EMA, 2004). There are also a number of Local Government Reforms Programmes and sector specific policies, legislation, programmes and strategies in which environmental issues have been mainstreamed.

The NCSA process is therefore timely because, while Tanzania has been implementing the Rio Conventions for decades now, and much has been achieved out of the implementation of these conventions, inadequate capacity at all levels (individual, institutional and systemic) has remained a major stumbling block. Through the NCSA process, Capacity Development Action Plan has been developed in which key capacity needs, capacity development interventions, major cross-cutting issues, key strength and key constraints have been identified.

Through the Capacity Development Action Plan, development partners, donor agencies and the international community are all envisaged to provide financing for the implementation of the identified capacity development interventions to enable Tanzania to effectively contribute to the global efforts of achieving sustainable development through implementation of these Conventions.

**Hon. Dr. Batilda S. Burian (MP)**

**Minister of State, Vice President's Office-Environment**

## **Acknowledgement**

The successful preparation of the National Capacity Self Assessment Report and Action Plan is a result of commitment and hard-work by many individuals and institutions who deserve a vote of appreciation. I would like to take this opportunity to assure them all of my heartfelt appreciation and I indeed value their cooperation and support.

I am particularly indebted to the team of experts that undertook the assessment and compiled the report. Members of the team were Dr. S. R. Mwinjaka, Dr. C. M. Shayo, Mr. G. R. Kafumu, Mr. F. Ngerageza, Mr. F. K. Manyika, and Mr. L. Kyaruzi (VPO–DOE); Dr. F. Kilahama (MNRT); Mr. R. Muheto (NEMC); Prof. P. Yanda (IRA-UDSM); Mr. C. Rweyemamu (JET); and Ms. R. Mero (EPMS).

Gratitude should also be extended to the coordinating team headed by Mr. R. S. Muyungi (Assistant Director-Environmental Impact Assessment) assisted by Mr. Patrick Ndaki and Mr. Johansen Rukambaiga.

I also wish to thank members of the National Steering Committee and the National Technical Committee of the project for the guidance and technical assistance as well as valuable comments in accomplishing the process.

Finally I am thankful to Mr. E. K. Mugurusi, the Director of Environment, who provided the overall guidance and coordination of the process.

**R. H. Mollel**

**Permanent Secretary-Vice President's Office**

## **Introduction**

### **1.1 Background**

The United Republic of Tanzania is the largest country in East Africa with a total area of 945,087 Sq. km comprising land area of 883,749 sq. km (881,289sq.km Mainland and 2,460sq.km Zanzibar), plus 59,050 sq. km of inland water bodies. It is located between 1<sup>0</sup> South and 12<sup>0</sup> South and 30<sup>0</sup> East and 40<sup>0</sup> East (See Annex 1). It shares borders with eight countries namely Kenya and Uganda in the North, Rwanda, Burundi and Democratic Republic of Congo in the West, Zambia and Malawi in the South West and Mozambique in the South. Tanzania borders the main water bodies of Africa; to the East is the Indian Ocean, to the North Lake Victoria, to the West Lake Tanganyika and to the South-West Lake Nyasa. Mainland Tanzania also has the highest point in Africa; the snow capped Mount Kilimanjaro with an elevation of 5,950 metres above sea level. The country's climate varies from place to place in accordance with geographical location, altitude, relief and vegetation cover.

Tanzania's economy is largely dependent on, and dominated by agriculture (including livestock), providing livelihood, income and employment to over 80% of the population. The sector accounted for 56 percent of GDP and about 60 percent of export earnings in the past three years making a significant contribution to the National GDP compared to other sectors (NSGRP, 2005). The sector is the main source of employment and livelihood for more than two-thirds of the population. It is an important economic sector in terms of food production, employment generation, production of raw materials for industries and generation of foreign exchange. Other economic sectors accounting for substantial amount of revenue in Tanzania include: mining, tourism, industry, fisheries and forestry.

Sustainable development in Tanzania is highly dependent on her natural endowment in the form of biodiversity resources such as forests and woodlands, wildlife, fisheries and other land resources. The challenge is how best such

unique natural ecosystems and biodiversity are being exploited to meet the needs of present users without losing the ability to regenerate and be able to supply the same goods and services to future generations. The issue is what could be done to optimize benefits from tourism, fisheries, wildlife, forestry and beekeeping as well as increased agricultural productivity without causing harm to the environment and the entire ecological base. In most cases the priority is to conserve Tanzania's unique biodiversity and the natural ecosystems of forests/woodlands; rangelands/grasslands; savannah, wetlands, rivers, lakes and the ocean to ensure provision of ecological services on sustainable basis. Thus, the aim is to ensure that the valuable biodiversity resources within the country will continue to contribute significantly to socio-economic development in Tanzania and also towards attaining the National Vision 2025, which calls for better life for all Tanzanians. On the other hand, Tanzania's biodiversity in terms of ecosystem types, species richness and high levels of endemism indicate that the country is rich in natural resources. Globally, Tanzania is categorised as one of the 34 biodiversity hotspots in the world. About 25% of the land area of mainland Tanzania is occupied by crucial ecosystem such as national parks, game and forest reserves as well as key wetlands that are designated as Ramsar sites (NBSAP, 2000). Due to increased population coupled with widespread poverty and ignorance, human pressure on biodiversity continues to increase over the years, thus the need to conserve, manage and utilize biodiversity resources on a sustainable basis cannot be over-emphasized. Conservation of the country's unique ecosystems and biodiversity requires not only good understanding and knowledge of the resource base but also the relevant capacity to do so. Thus capacity should be developed and continuously improved to meet various development challenges.

## **1.2 The NCSA process**

In 1992, the United Nations Conference on Environment and Development (UNCED), popularly known as the Earth Summit, held in Rio de Janeiro, Brazil came up with United Nations Framework Convention on Climate Change

(UNFCCC), United Nations Convention to Combat Desertification (UNCCD) and the Convention on Biological Diversity (CBD), collectively known as the Post Rio Conventions. These Conventions contain the key obligations that the signatory countries have committed themselves to by ratifying the respective agreements. Tanzania ratified the UNFCCC and CBD in 1996 and the UNCCD in 1997. Therefore, Tanzania is obliged to implement the provisions of the Conventions within her respective capacity in support of sustainable development. In order to implement these Conventions, adequate capacity is required. Tanzania, like many other developing countries, does not have sufficient capacity to implement the Post Rio Conventions and other MEAs.

Limited information on capacity needs and priorities for capacity building for global environmental governance makes it difficult for different development partners and agencies to solicit and target resources where they are needed. In order to address this problem and related challenges, a National Capacity Self Assessment (NCSA) in developing countries was initiated and funded by GEF. The aim of NCSA is to identify capacity needs for the implementation of Post Rio Conventions. In Tanzania, the NCSA process started in 2002 with scoping of sectors and stakeholders for participation in the assessment. In 2006, the process to identify capacity needs started. The assessment was undertaken at national, regional and district levels taking into account specific local issues related to desertification, climate change and biodiversity loss. This was done through assessment of existing capacities, identifying needs and priorities for capacity building to meet global environmental obligations. Through this process Tanzania was able to determine her capacity needs and priorities. Finally, an action plan for capacity building to implement Post Rio Conventions and agreements was developed. This report is thus an outcome of NCSA process in Tanzania in which capacity needs are articulated followed by an outline of priorities and capacity development action plan.

### **1.3 Institutional Arrangement**

In order to undertake the process, the Vice President's Office-Division of Environment (VPO-DoE) in collaboration with UNDP, formulated the National Steering Committee (NSC), the National Technical Committee (NTC) and the Coordinating Team, which also served as the Secretariat. A team of experts for undertaking the assessment was also put in place.

The National Steering Committee comprised 13 principal officers from various sector ministries. The members included: the Permanent Secretary-Vice President's Office (Chair); the Director of Environment-Vice President's Office; Prime Minister's Office-Regional Administration and Local Governments; Ministry of Natural Resource and Tourism; Ministry of Water; Ministry of Livestock Development; Ministry of Energy and Minerals; Ministry of Industry, Trade and Marketing; Ministry of Agriculture, Food Security and Cooperatives; Ministry of Science, Technology and Higher Education; Ministry of Infrastructure Development; Ministry of Lands, Housing and Human Settlement Development; and the Ministry of Agriculture, Livestock and Environment (Zanzibar). The major role of the Committee was to provide administrative guidance on the NCSA process.

The National Technical Committee comprised the following members: the Director of Environment (Chair); NCSA project Coordinator; one technical officer from the Vice President's Office-Environment; Prime Minister's Office (Regional Administration and Local Governments); Ministry of Energy and Minerals; Ministry of Natural Resources and Tourism; Ministry of Water; Ministry of Livestock Development; Ministry of Industry, Trade and Marketing; Ministry of Agriculture, Food Security and Cooperatives; Ministry of Higher Education, Science and Technology; Ministry of Infrastructure Development; Ministry of Lands, Housing and Human Settlement Development and the Ministry of Agriculture, Livestock and Environment (Zanzibar). Members from

sectors were technical officers at senior level. The Committee played a technical advisory role in the process.

The team of experts was composed of 15 members from the Vice President's Office; the Ministry of Natural Resources and Tourism; the National Environment Management Council (NEMC); the Journalists Environmental Association of Tanzania (JET); the Institute of Resource Assessment-University of Dar es Salaam; Centre for Energy, Environment, Science and Technology (CEEST); and the Environmental Protection and Management Services (EPMS). The members worked in four groups of CBD, UNCCD and UNFCCC as well as Peer Review Group.

#### **1.4 The role of the Implementing Agencies and the Post Rio Conventions'**

##### **Secretariats in the NCSA process**

United Nations Development Programme (UNDP) was the Implementing Agency during the NCSA process in Tanzania. However, for the purpose of implementing the identified capacity development initiatives in the country, various implementing agencies may be involved. These include UNDP, FAO, WB, UNEP, IFAD, AfDB, etc. The role of these agencies and the Conventions secretariats will therefore be to:

- a) Provide technical support and guidance on the development and implementation of the identified capacity development project activities;
- b) Provide financial as well as technical support for the implementation of the project activities; and
- c) Solicit and mobilise funds for the implementation of the identified project activities.

In this context, the Government of Tanzania expects that the secretariats of the three conventions and these agencies have and will continue to play the role of providing technical guidance in all matters under each specific convention; mobilize funds; coordination of various matters at global level and technical

support for development and implementation of the identified project activities and initiatives.

### **1.5 Goals and objectives of the NCSA process in Tanzania**

The primary goal of the NCSA is to identify, through a country-driven consultative process, priorities and needs for capacity building to contribute towards the protection of the global environment through the implementation of Post Rio Conventions.

Specific objectives of the NCSA in Tanzania were to;

- a) Identify, confirm or review priority needs for action within the thematic areas of biodiversity, climate change and desertification/land degradation, respectively;
- b) Explore related capacity needs within and across the three thematic areas;
- c) Catalyse targeted and co-ordinated action and requests for future external funding and assistance; and
- d) Link country action to the broader national environmental management and sustainable development framework.

The expected outcomes of this process include increased integration of environmental concerns into national policies, laws, programmes, plans and strategies. It is also presumed that mechanisms for better management of the environment will be developed and adopted by sectors, local government authorities, non-governmental organisation, community based groups and private sector. Furthermore, awareness and understanding on poverty environment linkages will be promoted while environment indicators for poverty monitoring system will be developed. It is anticipated that tools for sustainable management of natural resources will be in place, whereas mechanism and resources to foster awareness and advocacy for better environment and natural resources management will be available.



## **2.0 Methodology**

The team of experts conducted literature review and analysis as well as consultation with both governmental and non governmental actors. The process involved:

- a) Consulting relevant documents, including but not limited to the National Biodiversity Strategy and Action Plan; Technological Needs Assessment; Ministry of Natural Resources and Tourism Strategic Plan; District Biodiversity Strategic Plan and Action Plan for Bagamoyo and Pangani; Strategy for Urgent Actions on Land Degradation and Water Catchments; UNCCD reports; NAP; UNFCCC and its Kyoto Protocol reports; NAPA, CBD and the Cartagena protocol reports; the National Strategy for Growth and Reduction of Poverty (NSGRP), AGENDA 21, Millennium Development Goals, National Development Vision 2025, EMA 2004, and National Policies (Environment, Beekeeping, Forestry, Lands, Water, Agriculture and Livestock, Technology Development, Education and Training, etc); and
- b) Conducting the capacity needs assessment from the respective stakeholders (government and non-government actors) and assessing existing capacity building initiatives. The key stakeholders consulted include:
  - i. Sectors such as Agriculture, Natural Resources, Water, Livestock, Energy and Minerals, Lands, Education, Science, Health and institutions such as TMA; and
  - ii. Non-government organisations, private sector and individuals.

In assessing the existing capacity requirements; gaps; achievements/challenges; and capacity building priorities, SWOT (S– Strengths, W– Weaknesses, O– Opportunities and T– Threats) analysis was used.

## **3.0 Thematic Assessments and Key Findings**

The thematic assessments provide current situation and identified priority capacity needs for sustainable environmental management. The assessments

started with preparation of profiles for the thematic areas. The process involved a review of various reports related to land degradation, biodiversity loss and climate change. The objectives were to:-

- a) develop a clear understanding of the requirements under each of the conventions as well as opportunities available at national level;
- b) review what has been undertaken by the country to address its obligations and to take advantage of convention-related opportunities;
- c) assess country performance, strengths and constraints in implementing Post Rio Conventions and benefiting from participation; and
- d) identify priority needs and opportunities for capacity development for each thematic area, at the individual, institutional and systemic levels.

### **3.1 Capacity Assessment**

The key findings were as follows:

#### **3.1.1 National level**

The government has made considerable progress by putting in place policies, legislation and strategies for achieving sustainable environmental management. These include NEP (1997), EMA (2004), NSGRP (2005), the Strategy for Urgent Actions on Land Degradation and Water Catchments (2006), NEAP (1994), Local Government Reforms Programme and Tanzania Development Vision 2025 (2001).

Tanzania has been actively participating in global environmental fora such as Conference of the Parties for the CBD, UNCCD and UNFCCC as well as meeting of the Commission on Sustainable Development (CSD). Through this participation, Tanzania has been able to formulate and implement programmes such as NAPA (2006), NBSAP (2001) and NAP (1999).

### **3.1.2 Sector ministries**

A number of sectors are implementing environmental related programmes e.g. the Catchment Forestry Programme under MNRT, Soil and Water Conservation programme under MAFSC. EMA, 2004 requires sector ministries to put in place environmental sections for coordination and implementation of among others, the Post Rio Conventions.

### **3.1.3 Regional and district levels**

EMA 2004 designates city, municipal and district environmental management committees to coordinate environmental management issues in their respective areas of jurisdiction. It also designates regional environmental management experts and district environmental officers for similar purposes.

Apart from the implementation of EMA 2004, there are a number of programmes that are being implemented at district level. These include the Participatory Environment and Resource Management (PERM), Tanzania Coastal Management Partnership (TCMP), Marine and Coastal Environment Management Programme (MACEMP), Participatory Forest Management Programme (PFMP) and Wildlife Management Areas (WMAs).

### **3.1.4 Academic and Research institutions**

Several academic and research institutions, particularly the University of Dar es Salaam (IRA and MUCHS), Ardhi University and Sokoine University of Agriculture (SUA) and other sectoral research institutions such as Tanzania Wildlife Research Institute (TAWIRI), Tanzania Forest Research Institute (TAFORI), Uyoile Agricultural Research Institute and Tanzania Coffee Research Institute undertake research and training in areas related to climate change, biodiversity and sustainable land management. Some of the programmes and projects undertaken include: analysis of vulnerability and adaptation to climate change in Tanzania (IRA) and soil and conservation programme (SUA). These institutions also offer environmental related courses which are relevant for the implementation of the Post Rio Conventions.

### **3.1.5 Non Governmental organizations**

A number of NGOs/CBOs are undertaking activities related to implementation of the Post Rio Conventions. In collaboration with the government and international organizations, NGOs and CBOs undertake awareness creation of Post Rio Conventions, implementation of environmental conservation programmes and full participation in the global environmental fora as representatives of non governmental actors. Such programmes include capacity building for participation of the non-governmental actors in climate change related issues, awareness raising on CDM, GMOs, best environmental management practices and the implementation of the small grant programmes related to Post Rio Conventions.

### **3.1.6 Community level**

EMA 2004 designates standing committees of economic affairs, works and environment for municipalities, wards, villages and sub-ward to coordinate environment management at these levels. Some communities have been implementing Post Rio Conventions by using indigenous knowledge, for example soil and water conservation, forest conservation, water harvesting, the use of medicinal plants etc.

There has also been increased awareness, involvement and participation by the communities on the Post Rio Conventions through implementation of synergetic activities of the same.

## **3.2 Priority Capacity Needs**

During the assessment, key capacity needs for each thematic area were identified. These needs include: education, awareness and training; resources mobilization; research; collaboration and networking; data management and monitoring; stakeholder participation and empowerment; and appropriate technology acquisition and transfer. A list of the priority capacity needs is provided in Table 1.

**Table 1. Priority capacity needs**

<b>No.</b>	<b>Identified priority capacity needs</b>
1.	Develop national communication, education, training and public awareness programmes
2.	Develop specialised skills and expertise on Post Rio Conventions through, inter alia mainstreaming climate change, biodiversity and desertification into school curricular.
3.	Develop capacity for financial and resource mobilization.
4.	Assessment of adaptation and mitigation options to address climate change, biodiversity loss and desertification.
5.	Strengthen adaptive research programmes with regard to climate change, biodiversity conservation and land degradation.
6.	Strengthen systematic observations and early warning systems.
7.	Strengthen capacity for participation in the conventions processes (negotiations, reporting, etc).
8.	Enhance capacity to develop and implement comprehensive plans and integrated Strategies for Post Rio Conventions.
9.	Strengthen national database, information dissemination systems and networking among various stakeholders.
10.	Develop comprehensive mechanisms for private sector and other non governmental actors participation in the implementation of Post Rio Conventions.
11.	Provide infrastructure and technical support for research and development institutions
12.	Strengthen relevant capacities to enforce law, regulations and other conflict resolution mechanisms.
13.	Mainstream gender into development plans, strategies and programmes.
14.	Strengthen national coordination, monitoring and evaluation systems.
15.	Review policies and legal frameworks to reflect on emerging issues related to Post Rio Conventions.

### **3.3 Possible capacity development interventions**

In addressing the identified capacity needs, several capacity development interventions have been proposed as reflected in the Capacity Development Action Plan. This is provided in Part six of this document.

#### 4.0 Cross-Cutting Issues

The main objective of the cross-cutting analysis was to identify opportunities for synergistic implementation of the Post Rio Conventions. The cross-cutting issues fall under the following areas:

- a) Communication, education, training and public awareness;
- b) Financial resources;
- c) Data and information management;
- d) Monitoring and evaluation;
- e) Research and development;
- f) Appropriate technology acquisition and transfer;
- g) Health;
- h) Gender;
- i) Stakeholders participation and empowerment;
- j) Collaboration and networking;
- k) Policy and legal frameworks; and
- l) Land use planning.

#### 5.0 Key Strengths

The Government has been implementing various activities to fulfill obligations under Post Rio Conventions at various levels. Such activities and initiatives include putting in place an institutional framework for environmental management which provides Tanzania with key strengths to meet the Conventions' obligations. Some of these key strengths are provided in Table 2.

**Table 2. Key strengths**

S.No	Key Strengths
1.	There are a number of government institutions, Non Governmental Organisations, Community Based Organisations, Private sector organizations and firms and individual groups that are involved in the implementation of the Conventions and related issues.
2.	Environmental issues have been mainstreamed into the National Strategy for Growth and Reduction of Poverty (NSGRP), as well as Sector and Local Government plans and budgets.
3.	Some research institutions are involved in environmental related research

	activities.
4.	A number of policies, legislations, programmes, strategies and plans providing for the context to implement national obligations under the conventions are in place.
5.	The Environmental Management Act, (EMA, 2004) is in place. The Act requires the formulation of regulations, guidelines, strategies and plans for the implementation of the Post Rio Conventions.
6.	There are already a number of key strategies to implement the Post Rio Conventions, such as the National Strategy for Growth and Reduction of Poverty, Strategy for Urgent Actions on Land Degradation and Water Catchments, Agricultural Sector Development Strategy and the Integrated Coastal Management Strategy.
7.	Tanzania is effectively participating and taking a lead role in a number of international, regional, sub-regional negotiations and programmes aimed at meeting obligations under these conventions.
8.	The coordination of the implementation of Post Rio Conventions has been placed in one of the highest government offices; i.e. The Vice President's Office.

## 6.0 Key Constraints

Despite the fact that Tanzania has in place some key strengths which provide conducive environment for the implementation of the Post Rio Conventions, the analysis and assessment indicate that there are several key constraints that hamper successful implementation of the obligations at various levels. Table 3 highlights some of the key constraints in this regard.

**Table 3. Key constraints**

S.No	Key Constraints
1.	Weak integrated natural resource management amongst relevant sectors.
2.	Inadequate number of professional actors to implement the Conventions' obligations.
3.	Limited affordable alternative energy technologies and renewable energy services.
4.	Inadequate institutional capacities to collect, monitor, analyse and disseminate information/data relevant to the implementation of Post Rio Conventions.
5.	Inadequate local capacity to implement Sustainable Land Management practices.
6.	Inadequate incentives for the private sector participation in implementing the Conventions.

7.	Limited capacity to explore and engage in alternative livelihoods leading to unsustainable human activities such as small scale mining, shifting cultivation and uncontrolled bush fires.
8.	Inadequate capacity to develop and implement management plans for various ecosystems.
9.	Inadequate use of local technologies and indigenous knowledge.
10.	Weak enforcement of laws, policies and by-laws relating to management of natural resources.
11.	Inadequate financial resources for implementation of Post Rio Conventions.
12.	Diseases, particularly malaria and HIV/AIDS, undermine human capacity.
13.	Insufficient application of modern biotechnology.
14.	Environmental degradation due to influx of refugees and urbanization.
15.	Inadequate collaboration and networking among relevant institutions within and outside the country.
16.	Inadequate public awareness on issues related to Post Rio Conventions.
17.	Invasive alien species into aquatic and terrestrial systems e.g. Nile perch ( <i>Lates niloticus</i> ) and Water hyacinth ( <i>Eichhornia crassipes</i> ) in Lake Victoria.
18.	In some cases, different development partners' policies conflict with national priorities in implementation of the Conventions.
19.	Inadequate appropriate infrastructure, facilities and extension services.

## 7.0 Capacity Development Action Plan

Capacity Development Action Plan which is one of the major outputs of the NCSA process, is provided in Table 4. The Action Plan is designed to address key capacity needs identified through a series of self-assessments in a systematic manner at various levels. Existing opportunities and lead institutions are also given. While the actual timeframe and monitoring plan might need to be revised, the NCSA Action Plan proposes a tentative timeframe required for implementation. The key recommendations (possible actions) are integrated in the development of the NCSA Action Plan. The key objectives of this Action Plan are to:

- a) Provide a concise, well-researched summary of capacity development goals and objectives, strategies and priority actions that will lead to measurable improvements in the management of global and national environmental issues.



- b) Ensure follow-up to the NCSA, by specifying implementation frameworks and strategies for the Action Plan, including monitoring and evaluation.
- c) Mobilise and leverage support for environmental capacity development from domestic and international sources. The support includes financial assistance and non-financial support, such as sponsorship, equipment, infrastructure, technical assistance and training.
- d) Catalyse targeted and co-ordinated action and requests for future external funding and assistance
- e) Raise awareness on the NCSA objectives and findings
- f) Address key individual, institutional and systemic capacity needs identified at the local, regional and national level through targeted priority interventions.

The Action Plan emphasizes the need for decentralized actions in support of environmental management in Tanzania. While the sector ministries/agencies will spearhead the implementation of this action plan in their respective sectors, the Vice President's Office-Division of Environment continues to play a coordinating role in the implementation of NCSA Action Plan in Tanzania.

**Table 4. Capacity Development Action Plan**

Capacity Development Actions	Capacity building interventions	Existing opportunities	Lead and Supporting Institution	Level of intervention	Timeframe
Develop national communication, education, training and public awareness programmes	<b>Education:</b> <ul style="list-style-type: none"> <li>Integrate Post Rio Conventions' issues into school curricula at all levels</li> <li>Prepare relevant teaching materials for various groups.</li> <li>develop programmes to educate refugees on sustainable management of natural resources</li> </ul>	<ul style="list-style-type: none"> <li>The National Environmental Policy, 1997 calls for the integration of environment into schools, colleges and institutions of higher learning</li> <li>EMA,2004 requires for integration of environmental matters in schools, colleges and institutions of higher learning</li> </ul>	<ul style="list-style-type: none"> <li>VPO – DoE, NEMC,</li> <li>DoE Zanzibar</li> <li>Ministry of Higher Education, Science &amp; Technology</li> <li>Ministry of Education and Vocational Training</li> </ul>	<ul style="list-style-type: none"> <li>Systemic</li> <li>Institutional</li> </ul>	1 year
	<b>Public awareness, communication and sensitization:</b> <ul style="list-style-type: none"> <li>Develop an interdisciplinary approach to sensitization on Post Rio Conventions</li> <li>Hold sensitization programmes through mass media, drama, etc.</li> <li>Promote publications and advertisements on public and private media regarding awareness creation on environmental issues.</li> <li>Establish a countrywide campaign on dissemination of information on biotechnology, biosafety, CDM projects, land management, early warning systems, disaster management, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Existence of Central Environmental Information System</li> <li>Existence of various environmental education and awareness programmes through mass media, NGOs, CBOs and other initiatives</li> <li>Existence of local publications, Scientific journals and newsletters on environmental issues</li> <li>Established African Environmental Information Network</li> <li>Existence of awards</li> </ul>	<ul style="list-style-type: none"> <li>VPO-DoE</li> <li>NEMC</li> <li>Ministry of Education and Vocational Training</li> <li>CBOs and CSOs</li> </ul>		

Capacity Development Actions	Capacity building interventions	Existing opportunities	Lead and Supporting Institution	Level of intervention	Timeframe
		<p>programmes for environmental related issues</p> <ul style="list-style-type: none"> <li>▪ Existence of on farm research activities and Farmer field schools</li> <li>▪ Existence of farmers' day and other exhibitions</li> <li>▪ Established environment related websites.</li> </ul>			
<p>Develop specialised skills and expertise on Post Rio Conventions issues through, inter alia, mainstreaming climate change, biodiversity and desertification into school curricular.</p>	<p><b>Specialized educational programmes</b></p> <ul style="list-style-type: none"> <li>▪ Develop and implement education and training programmes for specialized skills and expertise on climate change, Biodiversity and sustainable land management including GIS EIA, modern biotechnology, modelling, and taxonomy</li> </ul> <p><b>On-job training</b></p> <ul style="list-style-type: none"> <li>▪ Provide specialised training on development and implementation of climate adaptation and mitigation programmes, including preparation and implementation of CDM projects.</li> <li>▪ Provide specialised training for development and implementation of programmes addressing biodiversity management including biotechnology</li> </ul>	<ul style="list-style-type: none"> <li>▪ Existence of local experts in environmental related issues</li> <li>▪ Existence of local publications, Scientific journals and newsletters on environmental issues</li> <li>▪ Existence of universities and higher learning institutions offering such specialised programmes</li> <li>▪ Existence of ongoing studies, programmes and projects addressing energy related technologies including solar, wind, geothermal and biogas</li> <li>▪ Existence of guidelines on project preparation including CDM activities and GEF funded projects</li> <li>▪ Existence of local training</li> </ul>	<ul style="list-style-type: none"> <li>▪ VPO – DoE, NEMC</li> <li>▪ DoE - Zanzibar</li> <li>▪ Ministry of Natural Resources and Tourism</li> <li>▪ Ministry of Higher Education, Science &amp; Technology</li> <li>▪ Ministry of Energy &amp; Minerals</li> <li>▪ NGOs and other Non governmental actors</li> </ul>	<ul style="list-style-type: none"> <li>▪ Systemic</li> <li>▪ Institutional</li> <li>▪ Individual</li> </ul>	1 - 4 years

Capacity Development Actions	Capacity building interventions	Existing opportunities	Lead and Supporting Institution	Level of intervention	Timeframe
	<p>issues</p> <ul style="list-style-type: none"> <li>Provide specialised training addressing land management including research for drought resistant crops and water harvesting techniques.</li> <li>Develop training programmes on International environmental diplomacy and negotiation skills.</li> <li>Develop programmes for training of trainers on energy related issues, including affordable alternative energy technologies, renewable energy, and integrated water resource management.</li> </ul>	<p>institutions for tailor-made courses such as Vocational Training Centres</p>			
Develop capacity for financial and resource mobilization.	<p><b>National initiatives</b></p> <ul style="list-style-type: none"> <li>Develop environmental economic instruments to leverage available financial resources for the implementation of these Conventions.</li> <li>Establish a funding window for the Post Rio Conventions within the National Environment Fund as per EMA (2004)</li> <li>Develop other innovative interventions for financial and resource mobilization (e.g. Administrative fees for CDM projects and EIA approval).</li> </ul> <p><b>International initiatives</b></p>	<ul style="list-style-type: none"> <li>Existence of EMA (2004) which requires for the development of economic instruments for environmental management as well as establishment of Environmental Management Fund.</li> <li>Community participation in natural resources management (e.g. Community Forest, Wildlife Management Areas)</li> </ul>	<ul style="list-style-type: none"> <li>VPO – DoE, NEMC</li> <li>DoE - Zanzibar</li> <li>Ministry of Finance</li> <li>PMO - RALG</li> <li>CSOs</li> </ul>	<ul style="list-style-type: none"> <li>Systemic</li> <li>Institutional</li> </ul>	1 – 2 years

Capacity Development Actions	Capacity building interventions	Existing opportunities	Lead and Supporting Institution	Level of intervention	Timeframe
	<ul style="list-style-type: none"> <li>Develop skills to access International financial resources (e.g. skills to develop proposals for GEF fundable projects, Global Mechanism under CCD, and other bi-lateral and multi-lateral funds).</li> </ul>	<ul style="list-style-type: none"> <li>Existence of Microfinance outreach activities and micro-grant programmes</li> <li>Presence of the income generation and sustainable livelihood programs (e.g. TASAF, GEF-Small Grant Programme, and MEAs-Micro-Grant programme)</li> <li>Existence of on-going projects under GEF and CDM</li> </ul>			
Assessment and implementation of adaptation and mitigation options to address climate change, biodiversity loss and desertification	<p><b>Assessment</b></p> <ul style="list-style-type: none"> <li>Enhance capacity to undertake technological needs assessment for the implementation of the Conventions</li> <li>Develop and enhance the technical capacities and skills of experts on integrated assessment</li> </ul> <p><b>Implementation</b></p> <ul style="list-style-type: none"> <li>Enhance implementation of priority adaptation and mitigation projects identified such as those in NAPA, NAP and NBSAP.</li> </ul>	<ul style="list-style-type: none"> <li>National Capacity Self Assessment (NCSA) in place</li> <li>Existence of the national reports on the implementation of Post Rio Conventions</li> <li>Existence of on-going GEF projects under biodiversity, climate change and sustainable land management focal areas</li> <li>Existence of indigenous technical knowledge (ITK)</li> </ul>	<ul style="list-style-type: none"> <li>VPO – DoE, NEMC</li> <li>DoE - Zanzibar</li> <li>Ministry of Agriculture, Food Security &amp; Cooperatives</li> <li>Ministry of Livestock Development</li> <li>Ministry of Natural Resources &amp; Tourism</li> <li>Ministry of Energy &amp; Minerals</li> <li>PMO - RALG</li> </ul>	<ul style="list-style-type: none"> <li>Systemic</li> <li>Institutional</li> <li>Individual</li> </ul>	2 – 4 years

Capacity Development Actions	Capacity building interventions	Existing opportunities	Lead and Supporting Institution	Level of intervention	Timeframe
			Ministry of Infrastructure Development (Tanzania Meteorological Agency)		
Strengthen adaptive research programmes with regard to climate change, biodiversity conservation and land degradation	<b>Resources</b> <ul style="list-style-type: none"> <li>Strengthen the capacity of Research institutions in terms of human, physical and financial resources</li> <li>Provide incentives to young scientists and other innovators to undertake adaptive research</li> </ul> <b>Implementation and dissemination</b> <ul style="list-style-type: none"> <li>Facilitate dissemination of research results to various stakeholders</li> <li>Facilitate undertaking of adaptation research to address vulnerability to climate change, biodiversity loss and land degradation</li> </ul> Enhance participatory research programmes	<ul style="list-style-type: none"> <li>Existence of research and training institutions</li> <li>Existence of a National Policy on Science and Technology</li> <li>Establishment of National Environment Research Agenda (NERA)</li> <li>Existence of institutional and international collaboration networks</li> </ul>	<ul style="list-style-type: none"> <li>VPO – DoE, NEMC</li> <li>DoE - Zanzibar</li> <li>Ministry of Higher Education, Science &amp; Tech.</li> <li>Min. of Agriculture, Food Security &amp; Cooperatives</li> <li>Ministry of Livestock Development</li> <li>Ministry of Natural Resources &amp; Tourism</li> <li>Ministry of Infrastructure and Development (TMA)</li> </ul>	<ul style="list-style-type: none"> <li>Institutional</li> <li>Individual</li> </ul>	2 – 5 years
Strengthen systematic	<ul style="list-style-type: none"> <li>Review, harmonise and strengthen the National Early Warning Systems</li> </ul>	<ul style="list-style-type: none"> <li>Existence of Early Warning and Disaster Preparedness</li> </ul>	<ul style="list-style-type: none"> <li>VPO – DoE, NEMC</li> <li>DoE - Zanzibar</li> </ul>	<ul style="list-style-type: none"> <li>Institutional</li> <li>Individual</li> </ul>	2 - 4 year

Capacity Development Actions	Capacity building interventions	Existing opportunities	Lead and Supporting Institution	Level of intervention	Timeframe
observations and early warning systems.	including the disaster management Services. <ul style="list-style-type: none"> <li>Strengthening forecasting and meteorological data collection programmes</li> <li>Identify and disseminate appropriate indigenous technical knowledge related to early warning systems.</li> <li>Development of skills and capacity for systematic observations</li> </ul>	Systems <ul style="list-style-type: none"> <li>Existence of national and international early warning and disaster preparedness networks.</li> <li>Existence of indigenous technical knowledge related to early warning systems</li> </ul>	<ul style="list-style-type: none"> <li>Ministry of Infrastructure Development (TMA)</li> <li>Ministry of Agric., Food Security &amp; Cooperatives</li> <li>PMO – RALG</li> <li>Institute of Resource Assessment</li> <li>Ministry of Livestock Development</li> </ul>		
Strengthen capacity for participation in the conventions process (negotiations, reporting)	<b>Training</b> <ul style="list-style-type: none"> <li>Enhance negotiation skills in Multilateral Environmental Agreements (MEAs) at individual level through training.</li> <li>Develop scientific and technical capacities of scientists and technicians for effective and efficient participation in Conventions and Protocols negotiations.</li> <li>Train technocrats and policy makers at all levels on the processes of the Conventions and Protocols.</li> <li>Develop and strengthen human capacity for UNFCCC, CBD and UNCCD focal points staff for effective implementation.</li> </ul>	<ul style="list-style-type: none"> <li>Existence of Centre for Foreign Relations (CFR) that impacts negotiation skills.</li> <li>Existence of a National Conventions Coordination Committee (NCCC).</li> <li>Establishment of a National Environmental Advisory Committee (NEAC).</li> <li>Existence of a National Commission for Science and Technology (COSTECH)</li> <li>Existence of Tanzania Meteorological Agency (TMA).</li> <li>Existence of some trained legal experts.</li> </ul>	<ul style="list-style-type: none"> <li>VPO – DoE, NEMC</li> <li>Ministry of Foreign Affairs and International Cooperation</li> <li>Ministry of Higher Education, Science and Technology.</li> <li>Ministry of Justice and Constitutional Affairs.</li> <li>NGOs.</li> <li>Parliament.</li> </ul>	<ul style="list-style-type: none"> <li>Institutional</li> <li>Individual</li> </ul>	Continuous

Capacity Development Actions	Capacity building interventions	Existing opportunities	Lead and Supporting Institution	Level of intervention	Timeframe
	<b>Awareness creation</b> <ul style="list-style-type: none"> <li>Promote participation of private sector and community at large; NGOs and CBOs in Post Rio Conventions processes (COP, COP/MOP and SBSTA/SBSTTA).</li> </ul>	Public consultation in MEAs national report preparations.			
Enhance the capacity to develop and implement comprehensive plans and integrated strategies of the Post Rio Conventions.	<b>Good governance</b> <ul style="list-style-type: none"> <li>Promote good governance and transparency in the implementation of Post Rio Conventions.</li> </ul> <b>Training</b> <ul style="list-style-type: none"> <li>Provide training to Designated National Authority (DNA) staff to handle CDM issues; National Biosafety Committee (NBC) to handle biosafety matters; National Technical Committee (NTC) on Desertification and National Steering Committees (NSC) on Post Rio Conventions.</li> <li>Train actors at national and local levels in integrative and participatory planning approaches.</li> <li>Provide training as motivation to existing staff dealing with environmental extension services.</li> <li>Mainstream climate change,</li> </ul>	<ul style="list-style-type: none"> <li>Existence of the portfolio charged with good governance and established agency (Prevention of Corruption Bureau-PCB).</li> <li>Established DNA, NBC, NTC, NSC to oversee the implementation of Post Rio Conventions.</li> <li>Existence of NEAP, NBSAP, NAPA and NAP.</li> <li>Presence of the NSGRP, Strategy on Urgent Action to Combat land degradation and water catchment Conservation.</li> <li>Synergies among Post Rio-Conventions are being demonstrated through MEAs project.</li> <li>Existence of the guidelines to</li> </ul>	<ul style="list-style-type: none"> <li>President's Office – Good Governance</li> <li>VPO – DoE, NEMC.</li> <li>Ministry of Higher Education, Science and Technology.</li> <li>Ministry of Justice and Constitutional Affairs.</li> <li>Ministry of Foreign Affairs and International Cooperation.</li> <li>Ministry of Internal Security.</li> <li>Prime Minister's</li> </ul>	<ul style="list-style-type: none"> <li>Institutional</li> <li>Individual</li> </ul>	Continuous.  1 – 3 years



Capacity Development Actions	Capacity building interventions	Existing opportunities	Lead and Supporting Institution	Level of intervention	Timeframe
	biodiversity and desertification issues into District development planning and budgeting processes.	mainstream environmental issues into sector and local authority planning and budgeting processes.	Office.		
Strengthen national database, information dissemination systems and networking among various stakeholders.	<p><b>Coordination</b></p> <ul style="list-style-type: none"> <li>Strengthen countrywide coordination of both government and non government actors on environmental issues.</li> <li>Strengthen networking system between researchers within and outside the country for more effective research output on Post Rio Conventions issues.</li> <li>Establish and strengthen inter-institutional collaboration.</li> <li>Promote coordination of research information.</li> </ul> <p><b>Dissemination</b></p> <ul style="list-style-type: none"> <li>Strengthen environmental management database, information exchange network and dissemination.</li> <li>Strengthen documentation of feasible and effective technologies and best practices.</li> <li>Translation of relevant documents with regard to Post Bio Conventions into <i>Kiswahili</i> and preparation of popular versions.</li> </ul>	<ul style="list-style-type: none"> <li>Existence of Environmental Working Group(s).</li> <li>International collaboration (e.g. universities, ILRI, CST, SBSTA, SBT TA, APCC).</li> <li>Existence of a National Commission for Science and Technology (COSTECH).</li> </ul> <ul style="list-style-type: none"> <li>Existence of Central Environmental Information System (CEIS).</li> <li>Existence of local publications, scientific journals and newsletters on environmental issues.</li> <li>Established African Environmental Information Network (AEIN).</li> </ul>	<ul style="list-style-type: none"> <li>VPO – DoE, NEMC.</li> <li>Ministry of Higher Education, Science and Technology.</li> <li>NGOs, CBOs.</li> <li>Private sector associations e.g. TCCIA.</li> </ul>	<ul style="list-style-type: none"> <li>Institutional.</li> <li>Individual.</li> </ul>	Continuous.

Capacity Development Actions	Capacity building interventions	Existing opportunities	Lead and Supporting Institution	Level of intervention	Timeframe
	<ul style="list-style-type: none"> <li>Set up technology development and dissemination centres.</li> <li>Provide facilities to enhance national database, information dissemination and networking.</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>Provide training on environment information management system.</li> </ul>	<ul style="list-style-type: none"> <li>Existence of farmers' day and other exhibitions.</li> <li>Established environment related websites.</li> <li>Availability of telecommunication systems and various local, and international print and electronic media.</li> <li>Existence of training institutions in various disciplines (environment and information technology).</li> </ul>	University of Dar-es Salaam Computer Centre		
Develop comprehensive mechanism for private sector and other non-governmental actors participation in the implementation of Post Rio Conventions.	<p><b>Public awareness and sensitization</b></p> <ul style="list-style-type: none"> <li>Develop sensitization programme on Post Rio Conventions.</li> <li>Promote incentive schemes to encourage private sector to invest in environmental related projects.</li> <li>Sensitize and create awareness among financial institutions on opportunities regarding investments on environmental related projects.</li> <li>Strengthen local private sector umbrella organizations to effectively link investors to markets.</li> <li>Undertake sensitization programmes through mass and community media.</li> <li>Promote publications and</li> </ul>	<ul style="list-style-type: none"> <li>Community participation in natural resources management (e.g. Participatory Community Forest Management, Wildlife Management Areas).</li> <li>Presence of private sector associations (e.g. TIC, TCCIA, TFA).</li> <li>Existence of mass media environmental programmes.</li> <li>Existence of national frameworks on environmental related programmes (e.g. CDM national guide).</li> <li>Existence of public-private</li> </ul>	<ul style="list-style-type: none"> <li>VPO – DoE, NEMC.</li> <li>Ministry of Finance.</li> <li>PMO – RALG.</li> <li>Ministry of Planning, Economy and Empowerment.</li> <li>NGOs, CBOs.</li> </ul>	<ul style="list-style-type: none"> <li>Systemic.</li> <li>Institutional.</li> <li>Individual.</li> </ul>	<p>1 year</p> <p>Continuous.</p>

Capacity Development Actions	Capacity building interventions	Existing opportunities	Lead and Supporting Institution	Level of intervention	Timeframe
	advertisements on public and private media for awareness creation on environmental issues.	partnership (PPP).			
Strengthen infrastructure and technical support for research and development institutions.	<b>Infrastructure and Facilities</b> <ul style="list-style-type: none"> <li>Strengthening scientific institutions with the necessary infrastructure, facilities and technologies such as specialized computer software and models.</li> </ul> <b>Training</b> <ul style="list-style-type: none"> <li>Development of a critical mass of scientists and technicians to be involved in political and scientific debates on mitigation and adaptation to climate change, biotechnology, and desertification and drought.</li> </ul>	<ul style="list-style-type: none"> <li>Existence of research and training institutions.</li> <li>Existence of national, regional and international collaboration in environmental scientific research.</li> <li>Existence of Post-Rio Conventions scientific bodies (IPCC, SCT, SBSTTA).</li> </ul>	<ul style="list-style-type: none"> <li>VPO – DoE, NEMC</li> <li>Ministry of Finance</li> <li>Ministry of Higher Education, Science and Technology.</li> <li>Ministry of Infrastructure Development.</li> </ul>	<ul style="list-style-type: none"> <li>Systemic</li> <li>Institutional</li> <li>Individual</li> </ul>	2 years
Strengthen relevant capacities to enforce laws, regulations and conflict resolution mechanisms.	<b>Enforcement of laws and regulations</b> <ul style="list-style-type: none"> <li>Integrate and ensure community participation in enforcement of laws, regulations and by-laws.</li> <li>Promote capacity of sectors, local government authorities and institutions in enforcing laws, regulations and by-laws at all levels.</li> </ul>	<ul style="list-style-type: none"> <li>Existence of environmental management committees at all levels</li> <li>EMA Implementation Support Programme in place</li> </ul>	<ul style="list-style-type: none"> <li>VPO – DoE,</li> <li>NEMC</li> <li>Sector ministries</li> <li>Local government authorities</li> <li>CBOs and CSOs</li> </ul>	<ul style="list-style-type: none"> <li>Systemic</li> <li>Institutional</li> <li>Individual</li> </ul>	2-3 years
	<b>Conflict resolution mechanisms</b> <ul style="list-style-type: none"> <li>Strengthen mechanism for provision of property rights</li> <li>Develop training programmes in natural resources related conflict</li> </ul>	<ul style="list-style-type: none"> <li>Presence of income generation and sustainable livelihood programs (e.g. under TASAF)</li> <li>Reforms in the Land Act and</li> </ul>	<ul style="list-style-type: none"> <li>VPO – DoE,</li> <li>NEMC</li> <li>Sector ministries</li> <li>Local government</li> </ul>		2-3 years

Capacity Development Actions	Capacity building interventions	Existing opportunities	Lead and Supporting Institution	Level of intervention	Timeframe
	<p>resolution skills</p> <ul style="list-style-type: none"> <li>Promote alternative livelihoods and resource mobilization to minimize natural resource use related conflicts</li> <li>Support Community initiatives on processing and value addition to increase marketing access and opportunities</li> </ul>	<p>the Village land act provides potential for conflict resolution e.g. land tribunal</p> <ul style="list-style-type: none"> <li>Presence of Water basins Boards and Authorities</li> <li>Preparation of village land use plans within the context of the Strategy for Urgent Actions on Land Degradation and Water Catchments</li> <li>Establishment of local government environmental management committees under EMA, 2004</li> <li>Community based natural resources management programmes , e.g. Participatory forest management</li> </ul>	<p>authorities CBOs and CSOs</p>		
Strengthen national coordination, monitoring and evaluation systems	<ul style="list-style-type: none"> <li>Develop training materials to facilitate monitoring and evaluation</li> <li>Promote training in coordination, monitoring and evaluation skills</li> <li>Strengthen and support monitoring and evaluation at all levels</li> <li>Improve data management mechanism</li> <li>Develop mechanism for networking and information sharing system between coordinating institutions</li> </ul>	<ul style="list-style-type: none"> <li>Established CEIS</li> <li>EMA, 2004 provides for administration and institutional arrangement for environmental management in Tanzania</li> <li>Existence of network system amongst NGOs, CSOs and private sectors.</li> <li>Existence of link between national and international and regional environmental</li> </ul>	<ul style="list-style-type: none"> <li>VPO-DoE</li> <li>NEMC</li> <li>Local Government Authorities</li> <li>TIC,</li> <li>CBOs and CSOs</li> </ul>	<ul style="list-style-type: none"> <li>Systemic</li> <li>Institutional</li> </ul>	2-3 years

Capacity Development Actions	Capacity building interventions	Existing opportunities	Lead and Supporting Institution	Level of intervention	Timeframe
	and other stakeholders	institutions.			
Mainstream gender into development plans, strategies and programmes.	<b>Gender Mainstreaming</b> <ul style="list-style-type: none"> <li>▪ Sensitize Post Rio Conventions at all levels in gender perspectives</li> <li>▪ Promote equity and recognition of gender roles in Post Rio Conventions issues.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Some initiatives to sensitize the public on gender issues at all levels in place.</li> <li>▪ Existence of a Gender Policy</li> <li>▪ Reforms in various laws to take into consideration gender issues e.g. Land Act(2001), Village Land Act(2001) etc.</li> </ul>	<ul style="list-style-type: none"> <li>▪ VPO – DoE</li> <li>▪ NEMC</li> <li>▪ Ministry of Community Development, Gender &amp; Children</li> <li>▪ CBOs and CSOs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Institutional</li> <li>▪ Individual</li> </ul>	2-3 years
Review of policies and legal framework to reflect on emerging issues on the Post Rio Conventions.	<b>Policies and legal framework Review</b> <ul style="list-style-type: none"> <li>▪ Review or develop national policies, strategies and regulatory measures to adequately take Post Rio Conventions into consideration.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Existence of EMA, 2004 as a principle act for environmental management and other sector specific laws e.g. Land Act (2001), and Village Land Act (2001).</li> <li>▪ The National Environmental Policy (1997) and other sector policies such as Wildlife Policy (1998), Forestry Policy (1998) in place</li> <li>▪ Some environmental issues already mainstreamed into NSGRP, sector and local government plans and budgets.</li> </ul>	<ul style="list-style-type: none"> <li>▪ VPO-DoE</li> <li>▪ Sector ministries</li> <li>▪ NEMC</li> <li>▪ DoE Zanzibar</li> </ul>	<ul style="list-style-type: none"> <li>▪ Systemic</li> <li>▪ Institutional</li> </ul>	5 years

## 8.0 Conclusion

The preparation of the NCSA has been an important process not only for the identification of capacity needs, but as a capacity building process in itself. This exercise has also strengthened the understanding of the synergies across the Conventions, leading to the proposed integrated and cost effective strategies and plans to address the capacity needs for the implementation of these sister conventions.

Through the process the government has been able: to identify, confirm or review priority issues for action within the thematic areas of biodiversity, climate change and desertification/land degradation, respectively; to explore related capacity needs within and across the three thematic areas; and to link country action to the broader national environmental management and sustainable development framework.

As noted from the stocktaking exercise, since ratification of the three post Rio Conventions, Tanzania has taken several initiatives to implement its obligations under these Conventions at various levels. These include formulation of various strategies, programmes and projects.

Under the UNCCD, a National Action Programme (NAP) to Combat Desertification was formulated in 1999 and is currently under implementation. Catalytic support is being extended to Non Governmental Organisations to facilitate the implementation of the NAP in various regions.

Among the initiatives that have been taken to implement obligations of the UNFCCC include the preparation of: the Initial National Communication, National Action Programme on Climate Change; and the National Adaptation Programme of Action on climate change (NAPA). The preparation of the Second national communication is well underway.

Under CBD, several projects and programmes have been undertaken at national and local levels. The Government prepared the National Biodiversity Country Study report; the National Biodiversity Strategy and Action Plan; and three National reports for implementation of the CBD have been prepared.

In addition, several key macro and sectoral policies have been reviewed to reflect increasing demand towards environmental conservation and quality objectives. These policies include:- the Mineral Sector Policy; Wildlife Policy; Fisheries Policy; Forest Policy; Water Policy; Agriculture Policy; Sustainable Industrial Development Policy; Energy Policy; and the National Land Policy. The most remarkable effort in this regard has been the formulation of the National Environmental Management Act (EMA, 2004).

From the assessment of the capacity needs it is clear that despite these initiatives, institutional and human resources capacity for addressing issues relevant to the implementation of the Conventions remains inadequate. Capacity building interventions in-terms of policy, legislative, implementation and administrative measures as well as institutional and human resources development have been identified and they do remain necessary for fulfilling the Conventions objectives.

From the analysis key lessons that have been learnt include the need to ensure the sustainability of the capacity building actions; the need to synergize the approach for capacity interventions; and the need to mainstream these post Rio Convention into National development processes and plans both at central and local level. With the NCSA in place, the Government has paced itself on the course for the implementation of the actions and proposed interventions for the global environmental governance within the context of the three sister Conventions. Through this process, the Government has been able to identify targeted and coordinated actions based on which external funding from the international community can now be solicited and availed.

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**Annex 1: Map of Tanzania Showing Geographical Location and Political Boundaries**

