

United Republic of Tanzania

National Strategy for Reduced Emissions from Deforestation and Forest Degradation (REDD+)

EXECUTIVE SUMMARY



December 2010

1.0 Introduction

1.1 Background to REDD+

Although the role of forests in sequestering carbon and helping to mitigate climate change was recognized in the Kyoto Protocol, reducing emissions from deforestation was excluded as an emissions reduction strategy - until its reintroduction into UNFCCC negotiations at CoP 11 in Montreal. REDD+ and forests were formally proposed for inclusion in the official negotiation agenda for a post-2012 regime at the CoP 13 of the UNFCCC in December 2007 in Bali. Discussions continued at CoP 14 in Poznan, Poland, in December 2008.

At the CoP 15 held in Copenhagen, Denmark, in December 2009, the CoP noted consensus among the Parties with the Copenhagen Accord, which agreed on the need to provide positive incentives to such actions through the immediate establishment of a mechanism, including REDD+, to enable the mobilization of financial resources from developed countries. The adoption of REDD+ extended the allowed activities to include reduction of emissions from deforestation; reduction of emissions from forest degradation; conservation of forest carbon stocks; pursuance of sustainable management of forests, and enhancement of forest carbon stocks.

The Copenhagen Accord and the large scale of recent international funding pledges have served as the political and financial spring board for REDD+ plans, policies and projects to proceed in selected developing countries, including Tanzania, where climate change is the biggest problem posing challenges to sustainable livelihoods and economic development.

1.2 Forests as carbon sinks

Forests do not only have very important and critical ecological values, they are also sources of livelihoods and vital services such as conserving soils and water sources, harbouring rich biodiversity and important genetic resources. They also play an important role in climate change mitigation as sinks of CO_2 .

Tanzania Mainland has a total of 35.3 million ha of forest land out of which 16 million ha comprise of reserved forests, 2 million ha are forests in national parks and 17.3 million ha are unprotected forests in General Land. Forests in General Land are characterized by unsecured land tenure and high rates of deforestation due to heavy pressure for conversion to other competing land uses.

Forest vegetation in Zanzibar covers about 63,908ha, equivalent to 23.7% of the total land area. Zanzibar's forests form part of the East Africa Coastal Forests Eco-region, one of the world's 200 biodiversity hotspots. Deforestation rates are estimated to be at least 1% per annum.

2.0 Forest Carbon Trading Mechanisms

Sound forest management practices can improve generation of a number of environmental services, which can be valued and paid for by various consumers of the services. The adoption and implementation of REDD+ provides another opportunity for Tanzania to open up a growing market for forest carbon trading.

Carbon trading involves the sale of carbon credits. The trade is a market-based mechanism for helping mitigate the increase of CO_2 in the atmosphere. There are two main types of Carbon Trading Schemes that are operating globally to-date. These are Voluntary Carbon Trading (VCT), which is not operated under the Kyoto Protocol and the official Kyoto Protocol Carbon Trading Mechanisms.

The VCT involves companies offsetting GHG emissions from their activities and products on a voluntary basis as part of their corporate responsibility. The conditions to participate in the VCT are relatively less stiff, and have no international legal binding requirements.

The official forest carbon trading is possible through the CDM of the Kyoto Protocol of the UNFCCC. Under the Kyoto Protocol, developed countries are required to reduce their emissions of GHG by 5% of their 1990 levels by the years 2008 - 2012. These countries can meet their reduction targets for CO₂ emissions through improved energy efficiency, by substituting fuels that produce less CO₂, and by using renewable energy sources. By undertaking project activities, developed countries can also generate carbon credits which can then be used to offset their reduction commitments.

Investment in certain kind of tropical forests is also a possibility through CDM. This enables them to invest also in projects in developing countries and to use these to offset their reduction commitments. The CDM essentially provides a market mechanism for the sale of carbon credits or CERs, from developing countries. It has been agreed that in the first commitment period (2008-2012), CDM project activities will be limited to *afforestation* and *reforestation* only. Improved forest management and avoided deforestation are not eligible under CDM at present.

The potential for REDD+ in climate change mitigation and adaptation has prompted renegotiation of climate change policy for the post-2012 period to include REDD+. This new policy is currently under discussion by Parties to the UNFCCC regarding crediting or otherwise rewarding reductions in carbon emission by reducing rates of deforestation and forest degradation. Under REDD+, developing countries would, on a voluntary basis, aim to reduce the rate at which their forests are being lost, and receive compensation in proportion to carbon emissions saved compared to a baseline which would represent the 'without intervention' case or some other agreed target.

3.0 Research, Capacity Building and Infrastructure Development

Given that available capacity and infrastructure for effective implementation of the carbon accounting system are still limited, especially in the areas of modelling, GIS simulation, monitoring and evaluation, and carbon stock assessments, this Strategy has put a considerable emphasis on capacity building and infrastructure development at the national and sub-national levels.

A four year research and training programme on Climate Change, Impacts, Adaptation and Mitigation in Tanzania (CCIAM) has been initiated to support the REDD+ implementation capacity in the country. By the end of the programme, a comprehensive research and methodology tool kit for climate change adaptation and mitigation will have been put in place to

enable Tanzania implement the post-2012 climate mitigation and adaptation regimes successfully. Meanwhile, human capacity building to address adaptation and mitigation to climate change will have been accomplished, while a database to pool all information generated by the programme will be in place.

4.0 Information Knowledge Dissemination and Networking

Communication and information sharing mechanism in Tanzania is currently poor. The period from now to when the implementation of REDD+ starts will involve a number of different pilot activities which will generate a lot of lessons and experiences. There is need to put in place an efficient communication and information sharing mechanism for communities and various stakeholders to benefit from these lessons and experiences.

A modality to coordinate horizontally across sectors and vertically between parastatal, central or local government institutions is desirable and feasible. A problem solving approach encompassing multi-sectoral collaboration through the formation of an expanded partnership in management of REDD+ knowledge, information networking and communication is recommended as a way forward.

5.0 Vision, Mission and Objectives of this Strategy

5.1 Vision

The Vision of this Strategy is that:

Tanzania implements a National REDD+ Strategy that ensures conservation and/or enhancements of its unique biodiversity values and forest ecosystems and the corresponding benefits, goods and services are equitably shared by all stakeholders for adaptation, mitigation and adoption of a low carbon development pathway under all processes as required by the UNFCCC.

5.2 Mission

The Mission of this Strategy is that: *Tanzania actively and beneficially participates in REDD+ initiatives during the readiness phase, negotiation processes under the UNFCCC and the Post Kyoto agreements.*

5.3 Goal

The main goal of the National REDD+ Strategy is: to facilitate effective and coordinated implementation of REDD+ related policies, processes and activities so as to contribute to climate change agenda and overall sustainable development.

5.4 Objectives

Generally, the Strategy is expected to guide the implementation and coordination of mechanisms required for Tanzania to benefit from a post-2012 internationally-approved system for forest carbon trading, based on demonstrated emission reductions from deforestation and forest degradation.

The specific objectives are:

- to establish a national reference scenario, i.e. baseline condition, against which carbon changes can be assessed and monitored to determine carbon benefits;
- to provide guidelines on how to assess, monitor and determine carbon benefits from such carbon changes;
- to provide incentives for the effective participation of the stakeholders in the REDD+ policy and implementation of the National REDD+ Strategy options;
- to establish a fair and transparent payment mechanism so as to enable the state to account in for gains and losses and to reward stakeholders who are responsible for reductions in carbon losses;
- to provide Tanzania with a robust system of verification of its carbon benefits to ensure that it does not claim international carbon credits which it has not in fact realized;
- to build capacity in terms of research, training, infrastructure and equipment to support the REDD+ policy;
- to put in place effective communication and information sharing mechanisms which will allow the stakeholders to exchange lessons learnt and experiences gained; and
- to provide guidance on how best to address the identified drivers, underlining causes and impacts of uncontrolled deforestation and forest degradation in the various agro-ecological zones.

6.0 The Strategy Development Context

6.1 Tanzania Mainland

The Strategy has been developed based on the National Framework for REDD+ developed in 2009. The framework is based on the objectives of reducing emissions related to deforestation and forest degradation as well as reducing poverty of forest dependent communities. The Strategy is thus closely linked to the current national growth and development policies, strategies and commensurate legislation such as Vision 2025, the National Growth and Poverty Reduction Strategy Programme (MKUKUTA), the National Environmental Policy (1997), the Forest Policy (1998) which encourages participatory forest management and seeks to integrate biodiversity values in forest management, and the Land Policy (1995). Others are the National Agriculture and Livestock Policy (1997), the National Forest Programme and strategies which contribute to effective conservation of Tanzania's natural resources while improving the livelihoods of its people.

6.2 Zanzibar Islands

In Zanzibar the Zanzibar National Forest Policy sets forth the interest of the government and the people of Zanzibar in the conservation and development of forest resources. The general goal of the policy derives from the principles of sustainability and welfare of the people. The policy is legislatively supported by the Forest Resources Conservation and Management Act (No. 10 of 1996) which provides legal room for communities to participate and engage in forest management programmes in the islands. Formulation of Community Forest Management Agreements is a result of this Act.

This policy is supported by the Environmental Policy (1992), which aims at conservation and protection of environment and efficient utilization of natural resource assets for sustainable development, the Agricultural Sector Policy (ASP) and Strategic Plan (SP) that recognize the

importance of forests in agricultural productivity, and the National Tourism Policy which underlines the importance of environmental conservation in tourism development, especially conservation of ecologically sensitive areas for development of eco-tourism activities. The latter calls for the enforcement of Environmental Management and Sustainable Development Act pertaining to Environmental Impact Assessment (EIA) in all tourism development activities.

Other policies and legislations that are relevant to sustainable forest management include the National Land Use Policy and Plan that provides planning recommendations for different sectors such as forestry, agriculture, tourism, coastal and marine resources management, the Fisheries Policy that recognizes the importance of mangroves to the productivity of the fishing, and the Energy Policy that recognizes the contribution of the forest sector in support of sustainable energy production for the people of Zanzibar.

7.0 The Strategy Development Process

The process has undergone three phases: i.e. a preliminary analytical phase which involved scoping studies to identify potentials for REDD+ in Tanzania, access capacities for REDD+ implementation, and to identify gaps and issues to be addressed, a strategic analysis and piloting phase where a number of in-depth studies and pilot projects were commissioned, and a consolidation phase of the Strategy. This draft Strategy has been produced for Stakeholders' Consultations and engagement for its consolidation. A test implementation phase is ongoing, which will make it possible to verify the hypotheses and assumptions under the proposed REDD+ interventions.

8.0 Drivers of Deforestation and Forest Degradation

Major direct causes of uncontrolled deforestation and degradation in the forests are: settlement and agricultural expansion, overgrazing, firewood and charcoal production, uncontrolled fires, timber extraction, development of infrastructure/industry, refugees and the introduction of large scale agriculture of bio-fuel production. These direct causes of uncontrolled deforestation and thus land degradation are indirectly driven by market and policy failures, rapid (and uncontrolled) population growth and rural poverty, and the state of economy.

9.0 Governance of Forest Resources for REDD+

Centralized forest management and PFM are the main strategies used by the FBD to ensure the sustainable management and conservation of Tanzania's forests. However, SFM is not being fully realized due to poor governance at local as well as district, regional and national levels. At the local level, key governance issues concern (i) corruption, (ii) elite capture, (iii) minority marginalization in terms of access to forest resources, (iv) low accountability, (v) lack of transparency, (vi) low participation, and (vii) weak law enforcement. At higher levels, the main issues are corruption, weak law enforcement, and lack of accountability.

To improve governance at local level that will eventually facilitate sustainable PFM, the village institutions need capacity building in planning, mobilization, finance management, good governance, and lobbying. The central government needs to provide the different skills through various training programmes done at village level. At the district and regional levels, protection of the FRs against the various threats they face is key to ensure maintenance of habitat cover and quality.

10. Institutional Structure and Coordination for REDD+ Activities

At the national level the Environmental Management Act, 2004, mandate the Division of Environment in the VPO to coordinate all climate change issues, including their adaptation and mitigation. Furthermore, the government has put in place a National Climate Change Steering Committee (NCCSC) and National Climate Change Technical Committee to oversee and guide the implementation of climate change activities in the country.

The NCCSC is an inter-ministerial committee which comprises Permanent Secretaries (PS) from 13 ministries, i.e. the Prime Minister's Office (PMO), the Ministry of Energy and Minerals (MEM), the Ministry of Finance and Economic Affairs (MFEA), the Ministry of Industry, Trade and Cooperatives (MITC), the Ministry of Natural Resources and Tourism (MNRT), the Ministry of Justice and Constitutional Affairs (MJC), the Ministry of Lands Housing and Settlements (MLHC), the Ministry of Agriculture and Food Security (MAFS), the Ministry of Fisheries and Livestock Development (MFLD), the Ministry of Foreign Affairs and International Cooperation (MFIC), and the Ministry of Agriculture, Livestock and Environment of the Government of Zanzibar (MALE). The NCCSC reports to the VPO.

The National Climate Change Technical Committee (NCCTC) is made up of Directors of the various Ministries in the NCCSC. Its function is to oversee all technical issues related to the implementation of climate change issues, including the implementation of this National REDD+ Strategy. The NCCTC reports to the NCCSC.

At the operational level a National Carbon Monitoring Centre (NCMC) will provide technical services on measuring, reporting and verification of REDD+ activities across the country. It will be a depository of all data and information concerning REDD+, including the NCAS. The NCMC will report to the NCCTC. The Centre will be manned by competent national professionals. Modalities for establishment of the Centre are currently on-going.

The existing composition of members of the above committees may be broadened as the need arises. However, FBD will have an important role in implementing, supervising and operationalizing the REDD+ initiative. This is based on the already existing initiatives in the forestry sector, such as PFM that includes JFM and CBFM. Likewise, Local Government will ensure smooth implementation of REDD+ related activities in their areas of jurisdiction.

A REDD+ Task Force (TF) has also been appointed by the Government to oversee implementation of technical and operational issues in relation to REDD+ readiness. The TF is an interim arrangement which will eventually be replaced by more permanent structures such as the NCCTC.

Currently, the TF consists of 8 technical officers drawn from the DoE and FBD, and Zanzibar, with the provision to co-opt members from other sectoral organizations as needed. It is chaired by the DoE. The TF is charged with identifying critical challenges and opportunities as well as addressing all issues at national and sub-national levels leading to the development of a suitable REDD+ Strategy for the country.

The TF is also involved in the coordination of all REDD+ related interventions such as the FCPF National Carbon Accounting System (NCAS) through support by the Clinton Foundation Climate Change Initiative and UN-REDD+, development of a REDD+ fund mechanism, and the testing of MARV methods and technologies.

Due to the temporal nature of the TF, its membership has been limited. However, for effective implementation of the REDD+ readiness, as it involves cross sectoral issues, membership of the TF will need to be increased to include other sectors such as Ministry of Agriculture, NGOs, Forest Dependent People's Organisations and the private sector. The permanent institution that will follow the TF will reflect this expanded nature of the structure.

Currently, activities of the TF are facilitated by a Secretariat based at the Institute of Resource Assessment (IRA) of the University of Dar es Salaam. The IRA was commissioned in March 2009 to facilitate for 18 months the consultation process leading to the development of this Strategy, and to facilitate the initial stages of quick start activities of REDD+ implementation to mid-2010. The Project was subsequently extended to December 2010. After that time, a more permanent structure for the follow up of REDD+ related activities would be put in place.

The facilitator assists the TF in preparing the country for the REDD+ process as well as promoting a diversified set of activities aimed at testing mechanisms to improve the incentives for sustainable forest management and to assist in developing capacities at all levels for the national processes for making Tanzania ready for the international markets for environmental services, in particular the carbon markets.

The coordination of REDD+ activities at the regional and district levels adheres to the existing government local government institutional structure. The Regional Administrative Secretariat serves as the link between the Ministries and the District Councils. At the district and municipal levels, Environmental Committees as established by EMA, 2004, will serve as coordinators for REDD+ activities in their respective areas.

11. Baseline Establishment, Monitoring, Verification and Reporting

Monitoring and reporting for REDD+ entails developing the Monitoring, Assessment, Reporting and Verification (MRV) system which will provide the required set of systems to understand carbon and ecosystem services related data such as carbon stock changes, water quantity and quality, biodiversity and ecotourism. Monitoring is also essential for keeping track of co-benefits and the degrees of equity in managing resources under REDD+, including changes over time as the frameworks mature and settle.

In addition, a robust monitoring system will provide social and economic information on impacts and benefits of REDD+ at community levels. The design and implementation of MRV frameworks relevant for REDD+ will require especially careful attention and involvement of various actors at national, sub-national and local revels.

Tanzania intends to establish a participatory and functional MRV system to monitor deforestation and degradation and respond to the needs for data collection, synthesis and analysis of data and information and provision of information on all aspects of REDD+. The MRV

system will also monitor rural livelihoods, conservation of biodiversity, key governance factors related to REDD+ implementation and assess the impacts of the Strategy in the forest sector in the context of the National REDD+ Framework's vision of a Low Carbon Development Strategy.

12.0 The Strategic Implementation Options

This Strategy identifies 10 strategic interventions and key result areas for the REDD+ implementation in Tanzania as derived from key issues identified earlier on, and from the drivers of deforestation and forest degradation and their underlying causes. The matrix provides strategic goals, objectives, expected outputs and key performance indicators for monitoring.

Key Result Area 1: REDD+ baseline scenario, monitoring, reporting and verification framework established

Goal: To set baseline scenario and reference emission levels for future monitoring, reporting and verification.

Strategic Objectives

- 1. To determine a national baseline scenario and reference emission levels by December, 2011.
- 2. To establish a national monitoring, reporting and verification system by December 2011.
- 3. To establish an integrated methodology to quantify REDD+ and other forest benefits such as biodiversity, ecotourism, and water catchment related to payment for environmental services by December, 2012.

Strategic Activities

- 1. Training national experts on preparation of baseline scenario and reference emission levels.
- 2. Acquiring, designing and maintaining the necessary infrastructure (both soft ware and hard ware) and equipment for determining baseline scenario and reference emission levels, and for MRV.
- 3. Determining model national baseline scenario and reference emission levels.
- 4. Training on preparation of MRV.
- 5. Determining MRV system.
- 6. Operationalizing National Forest Resource Monitoring and Assessment (NAFORMA) methodology and system.
- 7. Operationalizing National Carbon Accounting System for Tanzania (NCAST).
- 8. Operationalizing MRV system for Tanzania.
- 9. Developing integrated methods to quantify REDD+ and other forest benefits such as biodiversity, ecotourism, and water catchment related payment for environmental services.

- 200 national experts fully trained by June, 2011.
- Functional National Baseline Scenario (REL and REF), MRV system and framework established by June 2011.
- A functioning model for determining national baseline scenario and reference emission levels in place by December 2012.
- 200 national experts fully trained by June 2011.
- A functioning national MRV system and framework established by June 2011.

- A functional national MRV system set by December 2012.
- IPCC compliant NAFORMA data sets available and in use through the National Forest and Beekeeping Database (NAFOBEDA) by 2012.
- A functioning NCAST in operation by 2012.
- A functioning MRV system for Tanzania in place by December 2012.
- A toolkit of integrated methods for quantifying REDD+ and other forest benefits in place by 2012.
- A database of manuals of integrated methods in NAFOBEDA in place by 2012.

Key Result Area 2: Financial mechanisms and incentive schemes established

Goal: To set sustainable financing mechanisms and incentive schemes for REDD+.

Strategic Objectives

1. To develop a clear and transparent financial mechanism by December, 2012.

- 2. To develop a clear and transparent incentive/compensation scheme by December, 2012.
- 3. To establish a clear social safeguard policy by December 2012.

Strategic Activities

- 1. Training on management of REDD+ Funds.
- 2. Designing and establishing a functional National REDD+ Trust Fund.
- 3. Developing a financial accounting system for National REDD+ Fund.
- 4. Training of national experts on development of REDD+ incentives/compensation schemes.
- 5. Designing and establishing National REDD+ Trust Fund incentive/compensation schemes.
- 6. Developing a performance based scheme of payment of funds.
- 7. Building national capacities for conducting or undertaking SESA at national and local levels.
- 8. Undertaking an initial SESA (diagnostic work and analysis of the environmental and social context of the legal, institutional and biophysical activities) under REDD+ scheme.
- 9. Implementing measures to address disincentives of REDD+ schemes.

- Number of national experts fully trained on management of REDD+ funds by June, 2012.
- A functional National REDD+ Trust Fund in place by 2012.
- A functioning financial accounting system for National REDD+ Fund established by 2012.
- Training of 200 national experts on development of REDD+ incentive/compensation schemes accomplished by June, 2012.
- Functioning incentive/compensation schemes established by June, 2012.
- A functioning performance based scheme of payment of funds established by December 2012.
- Number of trainings done to build nationals' capacities for conducting or undertaking SESA at national and local levels by 2012.
- SESA reports in place by 2010.

- Number of national and sub-national SESA project reports accessible and utilized by 2010.
- An action plan for addressing disincentives of REDD+ schemes prepared and the disincentives themselves being addressed by 2012.

Key Results Area 3: All stakeholders are engaged in the REDD+ implementation process

Goal: To engage all stakeholders in the implementation of REDD+ schemes.

Strategic Objectives

1. To employ a participatory forest management regime so as to ensure engagement of all stakeholders in implementation of REDD+ schemes by December 2012.

2. To engage the private sector in the implementation of REDD+ schemes.

3. To engage Civil Society Organizations in the implementation of REDD+ schemes.

Strategic Activities

1. Training of forest adjacent/dependent communities on participatory management in the context of REDD+.

2. Adapting in the REDD+ scheme best practices and lessons learnt in engagement of all stakeholders under pilot REDD+ and CSOs project implementation arrangements.

3. Promoting active private sector engagement and support of REDD+ schemes promoted by 2010.

- 4. Training of private sector stakeholders in REDD+ schemes.
- 5. Assessing practices and lessons learnt from private sector engagement under pilot REDD+ projects implementation arrangements.
- 6. Adopting practices and lessons learnt from private sector engagement.
- 7. Training of Civil Society Organizations (CSOs) stakeholders in REDD+ schemes.
- 8. Active Civil Society Organizations engagement and support of REDD+ schemes.

- Number of forest adjacent/dependent communities trained by 2012.
- Number of forest adjacent/dependent communities active in participatory management by 2012.
- Number of best practices and lessons learnt from engagement of all stakeholders under pilot REDD+ projects adopted in the REDD+ scheme by 2012.
- Number of best practices and lessons learnt from CSOs projects adopted in the REDD+ scheme by 2012.
- Number of private sector institutions engaged and supporting REDD+ schemes by 2010.
- Number of private sector executives and staff trained in REDD+ schemes by 2012.
- Number of practices and lessons learnt assessed by 2010.
- Number of practices and lessons learnt adopted in the REDD+ schemes by 2012.
- Number of CSOs executives and staff trained by 2012.
- Number of CSOs engaged and supporting REDD+ schemes by 2012.

Key Result Area 4: All REDD+ schemes are well coordinated

Goal: To coordinate all stakeholders in the implementation of REDD+ related activities.

Strategic Objectives

1. To develop a national framework for coordination of all REDD+ schemes so as to ensure effective implementation of REDD+ related activities by 2012.

Strategic Activities

1. Developing a national REDD+ coordination framework in line with existing structures and based on results of the in-depth studies (legal and institutional).

2. Building a REDD+ coordination capacity at all levels.

3. Supporting the existing and functioning conflict resolution mechanisms.

Outputs and Key Performance Indicators

- A functioning National REDD+ Coordination Framework developed by 2012.
- An effective national REDD+ coordination capacity building programme developed by 2012.
- Number of REDD+ related conflicts resolved by supported conflict resolution mechanisms by 2012.

Key Result Area 5: All carbon market options are well understood

Goal: Exploration, Analysis and Negotiation for Carbon Market and Fund Based Options.

Strategic Objectives

1. To explore, analyze and negotiate for fund based options by 2012.

- 2. To explore, analyze and negotiate for market based options by 2012.
- 3. To explore, analyze and negotiate for voluntary market based options by 2012.
- 4. To explore, analyze and negotiate afforestation and reforestation market options by 2012.

Strategic Activities

- 1. Exploring and analyzing all market based options.
- 2. Engaging in market based options negotiations process.
- 3. Exploring and analyzing all voluntary market based options.
- 4. Engaging in voluntary based options negotiations process.
- 5. Exploring and analyzing all afforestation and reforestation options.
- 6. Engaging in negotiations process.

- Number of fund based options documented (i.e. website) by 2012.
- Number of viable fund based options negotiated, accessible and utilized by 2012.
- Number of market based options documented (i.e. website) by 2011.
- Number of viable market based options negotiated, accessible and utilized by 2013.
- Number of voluntary market based options documented by 2011.
- Number of viable voluntary based options negotiated, accessible and utilized by 2012.

- Number of afforestation and reforestation market options documented by 2011.
- Number of viable afforestation and reforestation market options negotiated, accessible and utilized by 2013.

Key Result Area 6: Governance mechanism for REDD+ in place

Goals

1. To study and develop a robust institutional arrangement for REDD+ governance.

2. To review relevant policy and legal frameworks in the context of REDD+.

3. To undertake in-depth study on land tenure for enhancing security in land ownership in the context of REDD+.

Strategic Objectives

1. To develop a national institutional framework for REDD+ governance to ensure effective implementation of REDD+ and equity in co-benefit sharing by 2012.

2. To review, develop and have the government endorse policy and legal frameworks for REDD+ implementation by 2013.

3. To review and develop a viable national land tenure system so as to ensure security in land ownership for REDD+ schemes by 2012.

Strategic Activities

1. Undertaking in-depth study on institutional and legal framework in the context of REDD+.

- 2. Reviewing and/or developing a legal and institutional framework based on the in-depth studies.
- 3. To review all REDD+ related policies.
- 4. Reviewing REDD+ related legal frameworks.
- 5. Subjecting the endorsed REDD+ related policies and legal frameworks to SEA/SESA.
- 6. Commissioning in-depth studies to explore and analyse land tenure, security and ownership.

7. Creating a country wide awareness on REDD+ related land tenure reforms and associated benefits.

- SWOT analysis of existing institutional arrangements in the context of REDD+ accomplished by 2011.
- A robust institutional framework for REDD+ governance in place and operational by 2012.
- Number of REDD+ related policies reviewed, developed and endorsed by the government by 2013.
- Number of endorsed REDD+ related policies and legal frameworks subjected to SEA/SESA.
- Number of SEA/SESA reports available and disclosed to the public.
- Number of REDD+ related legal frameworks reviewed, developed and endorsed by the government and ready for use in REDD+ implementation by 2013.
- Number of in-depth studies reports ready by 2012.
- REDD+ related land tenure system in place and operational by 2012.
- Cost curves for REDD+ in Tanzania established by 2012.

- Number of land tenure issues addressed in the REDD+ related policy and legal frameworks by 2013.
- Number of hectares of land under REDD+ schemes by 2013.
- Number of actors involved in the REDD+ schemes by 2013.

Key Results Area 7: Training programme and Infrastructure for REDD+ developed

Goals

1. To develop a comprehensive national training programme for REDD+.

2. To develop and put in place infrastructure for REDD+.

3. To build a national capacity for financial management and compensation/ incentive administration for REDD+.

Strategic Objectives

1. To develop an implementable national training programme for REDD+ by 2013.

2. To put in place and operationalize a national infrastructure for REDD+ implementation by 2013.

3. To build a sustainable REDD+ financing mechanism and compensation/ incentive schemes at all levels by 2012.

Strategic Activities

1. Undertaking a training needs assessment for REDD+.

- 2. Developing appropriate training modules for REDD+.
- 3. Supporting REDD+ training based on training needs assessment report.
- 4. Conducting a needs assessment of infrastructure requirement for REDD+.
- 5. Establishing and equipping appropriate REDD+ infrastructure.
- 6. Supporting development of REDD+ infrastructure/facility.
- 7. Undertaking an analysis of the sustainable REDD+ financing mechanisms.
- 8. Creating awareness programme to private sectors on REDD+ financing.

9. Linking financing mechanisms of REDD+ and other climate change financing sources (e.g. Payment for Environmental Services (PES)).

- A training needs assessment report produced by 2012.
- Available capacity, gaps and proposed interventions identified by 2012.
- Number of training modules on REDD+ developed and operational by 2012.
- 50% of national capacity to undertake implementation of REDD+ projects built by 2013.
- An infrastructure needs assessment report produced by 2012.
- Available infrastructure, gaps and proposed interventions identified by 2012.
- Number of REDD+ infrastructure and facilities established and operational by 2012.
- 50% of the required REDD+ infrastructure/facility operational by 2013.
- Sustainable REDD+ financing mechanisms in place and operational by 2013.
- Awareness creation programme in place and operational by 2012.
- Number of REDD+ and other climate change financial links established by 2013.

Key Result Area 8: Current knowledge and scientific understanding of the target forests and adjacent communities improved through research

Goals

1. To develop a comprehensive a well-funded national research programme for REDD+.

2. To develop and put in place the necessary research infrastructure for REDD+.

Strategic Objectives

1. To develop and implement a well-funded national research programme for REDD+ by 2013.

2. To put in place the necessary national research infrastructure for REDD+ by 2013.

Strategic Activities

1. Supporting a research needs assessment for REDD+.

2. Establishing and equipping appropriate research infrastructure for REDD+.

3. Supporting research aimed at developing improved methods of measuring carbon stored in forests and miombo woodlands, current and prospective deforestation rates and their impact on carbon, biodiversity and community benefits of improved forest management.

4. Supporting research aimed at developing efficient participatory assessment and monitoring procedures.

5. Supporting assessments of community-based projects aimed at alleviating poverty through different approaches to climate change adaptation and mitigation in REDD+ pilot areas.

6. Supporting REDD+ related demonstration projects at community level on biofuel technologies and options to facilitate REDD+ implementation.

7. Supporting research aimed at introduction of technologies/innovations for increasing carbon sink capacity, including afforestation and reforestation activities; promotion of agroforestry farming systems; protection of existing natural forests; strengthening forest fire prevention programs; and impact of afforestation on health of humans, farm animals and wildlife.

8. Supporting research aimed at introducing alternative energy sources and efficient utilization of biomass aimed at avoiding deforestation and forest degradation.

9. Supporting research undertakings to assess the social and environmental impacts of the introduced interventions.

Outputs and Key Performance Indicators

- Research needs assessment report produced by 2012.
- Available capacity, gaps and proposed interventions identified by 2012.
- Research infrastructure needs assessment report produced by 2012.
- Available infrastructure, gaps and proposed interventions identified by 2012.
- 50% of the required REDD+ research infrastructure/ facility operationalized and functional by 2013.
- Number of REDD+ related research projects supported by 2012.

Key Result Area 9: An effective information and knowledge communication system on REDD+ issues developed

Goal: To establish a national REDD+ education, information communication and networking system.

Strategic Objective

1. To establish a national REDD+ education, information communication and networking system by 2013.

Strategic Activities

- 1. Developing a REDD+ education and information communication strategy (RICS).
- 2. Reviewing National Environmental Education and Communication Strategy (NEECS) to include issues related to REDD+.
- 3. Supporting implementation of RICS and NEECS.

Outputs and Key Performance Indicators

- REDD+ education and information communication strategy developed and operational by 2013.
- National environmental education and communication strategy reviewed and operationalized by 2012.
- Implementation of RICS and NEECS supported and operational by 2013.

Key Result Area 10: REDD+ strategy options for addressing drivers of D&D developed

Goal: To develop strategic options for addressing drivers of D & D.

Strategic Objective

To develop strategic options for addressing drivers of deforestation and forest degradation by 2010.

Strategic Activities

A. Poor farming systems

1. Supporting the introduction/promotion of innovations that contribute to reducing carbon emissions from productive activities, such as best agronomic practices; better range management practices; off-farm employment activities.

2. Supporting the enhancement of human resource capacity for mitigating climate change impacts including REDD+ related farmer field schools; strengthening field stations to serve students, farmers, extension officers and other stakeholders.

3. Supporting interventions that ensure communities have appropriate crops in terms of better yields, environmental friendliness, and high value that will generate higher income on smaller pieces of land.

4. Encourage agro-ecosystems that sponsor their own soil fertility, productivity and crop protection.

B. Expansion of commercial farming (e.g. tobacco, bio-fuels, etc.)

1. Advocate for formulation of adequate government policy on bio-fuel production.

2. Supporting Land Use Planning Commission to develop and implement proper land use planning and monitoring of activities of bio fuel companies.

3. Supporting village level awareness raising on land tenure issues.

4. Awareness raising to EPZ practitioners on REDD+ activities.

5. Enhancing green labelling systems.

6. Supporting TIC to develop REDD+ investment guidelines.

C. High demand of forest products

1. Creating normal forests structure to meet demand.

- 2. Promoting use of alternatives to wood products.
- 3. Approving management plans of natural forests with harvesting coups.
- 4. Promoting efficient use of forest products.
- 5. Promoting technologies to increase durability of wood products.
- 6. Promoting the use of lesser known timber species.

7. Promoting planting of indigenous tree species (plantations and on farms).

D. Poverty and lack of livelihood alternatives

1. Scaling up investment in non-forestry sector employment programmes targeting to rural areas to reduce forest dependency.

2. Investing in sustainable forest based enterprises to create more employment opportunities in the forestry sector (for both timber and NTFPs).

3. Providing vocational education to create skill-based training opportunity for economically poor and marginalized peoples.

4. Establishing environmental tax mechanism and using revenues to generate employment alternatives.

5. Channelling local government resources (i.e., matching funds and resource leverage) to forest-dependent communities to promote livelihood shifts and/or improvements.

6. Promoting PES mechanisms for income generation.

7. Promoting biomass conservation initiatives.

E. Limited access to cheap alternatives sources other than biomass

1. Promoting peri-urban plantations, village and institutions woodlots.

2. Increasing investment and access to technologies that enhance wood fuel efficiency and promoting wood fuel substitution.

3. Promoting cost-effective wood technologies.

4. Promoting greater access of alternative energy subsidies.

5. Promoting energy mix.

6. Promoting and subsidising modern charcoal production kilns.

7. Encourage establishment of woodlots for tobacco, fish curing and burned brick making.

F. Inefficient biomass energy use

1. Promoting use of wood fuel efficient technologies and wood wastes.

2. Promoting and supporting private investment in efficient and alternative wood technologies.

3. Piloting and promoting use of more efficient wood technologies.

4. Exploring and piloting environmentally sound alternatives to wood use (including wood recycling and recovery).

5. Adopting and building capacity in improved and cost-efficient forest product utilization technologies.

6. Accelerating participatory land use planning and establishment of VLFRs in general lands or JFM for villages adjacent to FRs.

7. Encourage establishment of trees on farm (ToF) and/or woodlots for firewood and charcoal.

8. Assisting communities to access firewood and/or charcoal energy saving stoves in order to reduce pressure on forests and reduce workload of fuelwood collectors.

9. Lobby for tax reduction on other sources of energy to encourage energy switch by poor rural and urban communities.

10. Promoting and encouraging the use of efficient technologies in charcoal production (Cf. Sustainable charcoal).

G. Weak law enforcement

1. Scaling – up participatory forest management regime.

2. Strengthening incentive packages for both government officials and community-based forest management groups.

3. Creating awareness on forest law enforcement issues.

4. Enforcing interregional forest and environmental laws and protocols.

5. Implementing effective, participatory M and E mechanisms at different levels.

H. Weak forest governance

1. Defining forest related property rights and accelerating participatory land use planning so that forests do not remain as open access resources.

2. Ensuring adequate financial, technical and managerial capacity for efficient centralized and decentralized management of FRs at all levels.

3. Supporting forestry sector institutional reform to increase accountability and transparency.

4. Strengthening inter-sectoral coordination and NGO/private sector coordination in order to harmonise approaches, avoid duplication, competition and conflict in implementation of interventions and ensure effective use of resources.

5. Harmonizing of policies and legislative instruments related to forest resources.

6. Monitoring of all forest investments and development projects to ensure adherence to the sector specific Environmental Impact Assessment (EIA) guidelines.

6. Promoting integrated planning, monitoring and evaluation of all forest development projects.

7. Developing policies that encourage private plantations, woodlots and ToF.

I. Addressing market failure

1. Moving from administrative to competitive stumpage markets.

2. Operationalizing payment for environmental services (PES) as a poverty reduction strategy for communities involved in protection of forest resources.

3. Promoting economic market pricing of wood products.

4. Studying the forest product (timber and wood fuel) value chains to identify weaknesses and "leakage" and assessing opportunities for tackling them.

5. Developing a mechanism to engage the private sector in the forest sector for the entire value chain of forest products, from planting to end-product development.

6. Carrying out studies to identify alternatives to the current tax and royalty systems for forest products and implementing recommendations to foster a more competitive market.

7. Promoting sales and export of value added forest products.

J. High cross-border demand for forest products

1. Sensitizing border authorities and collaborating with them for effective forest law enforcement – especially at border crossings.

2. Studying potential for involvement of local bodies in forest law enforcement and regulating the movement of forest products.

3. Promoting large-scale private plantations to meet both domestic and cross-border market demands.

4. Developing law enforcement strategies and inter-country negotiations under the East African Common Market.

4. Promoting exchange visits to strengthen sub-regional and regional cooperation on forests and environmental management.

K. Insecure land and forest tenure

1. Supporting participatory land use planning.

2. Supporting implementation of land reforms.

L. Inadequate funding for forest resources management

1. Enhancing mechanisms for ploughing back of forest royalties to the managing authorities.

2. Harmonizing forest administrative line of commands (local government V^s central government).

3. Exploring other potential financing options, including the proposed National REDD+ Fund.

4. Promoting PES to support sustainable forest management.

5. Approving cost-benefit sharing systems between the government and forest adjacent communities under Joint Forest Management (JFM).

M. Wood species preferences for timber

1. Promoting the use of lesser valued timber species.

2. Promoting environmentally-friendly wood utilization technologies.

3. Promoting awareness raising on timber species.

N. Low levels of awareness on the effects of fire to the forest ecosystems

1. Enhancing community participation and awareness raising in forest fires management

2. Developing institutional and technical capability of the publicity and extension unit/section, local community based institutions, private sectors, media and CSOs for awareness raising on forest fires.

3. Promoting awareness raising on forest fires to religious leaders.

- 4. Including awareness raising about forest fire management in school curricula.
- 5. Disseminating REDD+ information and communication strategy.
- 6. Supporting implementation of REDD+ information and Communication strategy.

O. Dealing with Fires

Dealing with forest fires is critical to reducing GHG emissions from forests. Besides releasing carbon from burning trees, such fires can have other destructive impacts resulting in more fires and emissions. First, smoke from fires is thought to decrease rainfall. Second, fires are believed to reduce regional evapotranspiration, which in turn contributes to the severity of droughts. Third, prolonged droughts can make forests less healthy and may lead to the death of the largest

trees in the canopy. Then, as the canopy becomes more open and the accumulated litter dries, the forest becomes even more susceptible to fire.

• Dealing with arsonic fires

1. Improving relationship between forest management practitioners and forest adjacent communities.

2. Developing effective mechanism for forest fire monitoring and control.

3. Supporting implementation of existing strategies on forest fire management (e.g. Eastern Arc mountains fires strategy)

4. Developing forest fire strategy and local authorities to enact by-laws for forest fires management.

5. Training prosecutors and raising awareness to magistrates.

6. Establishing environmental friendly activities in the forests (e.g. Beekeeping).

• Lack of early warning systems for wild fires

1. Supporting access of remote sensing forest fires detection system.

2. Developing forest fire hazard models.

3. Developing a fire detection and response network.

• Weak forest fire management

1. Implementing plans for sustainable management of forest that enhance forest productivity under different forest management regimes.

2. Promoting cross-border forest fires management.

3. Enhancing forest fires management.

4. Periodically developing and implementing community based forest fire management plans based on risk assessment.

5. Promoting community participation in forest fire management and fire control.

6. Developing technical capacity among all stakeholders.

7. Establishing a forest fire surveillance and response department in the FBD.

P. Detrimental cultural practices

1. Educating and advocating abandoning environmentally, socially and economically unfriendly traditions and cultural beliefs.

2. Enhancing awareness raising of forest fires.

3. Intervening on bad cultural practices.

4. Enforcement of laws, regulations and by-laws.

5. Supporting implementation of National Environmental Education and Communication Strategy (NEECS).

Q. The Refugees Factor

1. Promoting peace and conflict resolution in the region.

- 2. Promoting democracy and good governance.
- 3. Proper land use planning and monitoring of activities by refugees.

R Rapid population growth

1. Supporting family planning programmes.

S. Lack of land use plans and land use conflicts

- 1. Promoting integrated sectoral planning, monitoring and evaluation of land use planning
- 2. Developing and implementing participatory land use plans.
- 3. Promoting the use of GIS technology in planning.
- 4. Supporting land use planning commission to develop and implement national land use plans
- in the context of REDD+.
- 5. Documenting experience from the surveyed villages.
- 6. Supporting demarcation and mapping of village lands.
- 7. Developing clear engendered guidelines for land tenure.
- 8. Promoting land tenure reform at both national and local levels.
- 9. Reviewing and promoting land tenure reforms at all levels.
- 10. Develop and enforcing by-laws.
- 11. Developing buffer zones and clear forest boundaries.
- 12. Promoting cost-benefit sharing among various land users.

T. Dry season fodder shortage

1. Developing and executing plans to promote fodder production on private and general lands.

2. Implementing effective plans for sustainable management of forest that enhances forage productivity under different forest management regimes.

3. Promoting technologies for and access to concentrated feed at local level.

4. Scaling up fodder reserve system, especially silage and hay, for use during slack periods.

U. Introduction of alien and invasive species

- 1. Conducting detailed studies before introducing exotic species.
- 2. Increasing monitoring of importing and planting of exotic species.

13.0 Strategic Environmental and Social Impacts Assessment

REDD+ induced changes to policy and legal frameworks that regulate incentives, rights, financing options (including taxation) and practices do not necessarily ensure environmental safeguards and possible impacts on the environment as well as livelihoods and rights of communities. A monitoring system should thus be set in place to ensure that unforeseen impacts are detected, and a process to address negative impacts put in place before any strategies, policies and development programmes commence.

Strategic Environmental and Social Impact Assessment (SESA) is a tool that seeks to integrate both social and environmental impact issues into the policy-making process, leading to sustainable strategies, policies and development programmes as required by the Environmental Policy and the Environmental Management Act.

The development of SESA for this Strategy will be informed by an analysis of the current environment policies and regulations (especially EMA, 2004), the World Bank Safeguards and any foreseen social and environmental impacts resulting from the implementation of this Strategy.

14.0 Potential Risks

Certain risks are prone to face the country as it implements the National REDD+ Strategy. These risks, which may be from the external and internal environments, will have to be constantly monitored and relevant mitigation measures taken.