



A PLATFORM FOR STAKEHOLDERS IN AFRICAN FORESTRY

ENHANCEMENT OF NATIONAL FOREST GOVERNANCE TO
RESPOND TO THE PARIS AGREEMENT AND RELATED GLOBAL
CHANGE POLICIES AND INITIATIVES IN EASTERN AND
SOUTHERN AFRICA



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Enhancement of national forest governance to respond to the Paris Agreement and related global change policies and initiatives in Eastern and Southern Africa

Cliff S. Dlamini

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ACRONYMS AND ABBREVIATIONS

| | |
|------------------|--|
| AfDB | African Development Bank |
| AFF | African Forest Forum |
| AIDS | Acquired Immune Deficiency Syndrome |
| C&I | Criteria and Indicators |
| CAADP | Comprehensive Africa Agricultural Development |
| CBD | Convention on Biological Diversity |
| CH ₄ | Methane |
| CITES | Convention on International Trade in Endangered Species of Fauna and flora |
| CO | Carbon Monoxide |
| CO ² | Carbon Dioxide |
| COFO | FAO Committee on Forestry |
| COMESA | Common Market for Eastern and Southern Africa |
| COPs | Conference of Parties |
| DLDD | Desertification, Land Degradation and the effects of Drought |
| EAC | East African Community |
| ES | Ecosystem Services |
| EU | European Union |
| FAO | Food and Agriculture Organization of the United Nations |
| FLEGT | Forest Law Enforcement, Governance and Trade |
| GEF | Global Environment Facility |
| GFG | Good Forest Governance |
| GHG | Greenhouse Gases |
| HIV | Human Immunodeficiency Virus |
| IGAD | Intergovernmental Authority on Development |
| INDCs | Intended Nationally Determined Contributions |
| IPCC | Intergovernmental Panel on Climate Change |
| ITTO | International Timber Trade Organization |
| LEDS | Low-emission development strategies |
| LULUCF | Land Use, Land Use and Forestry |
| MDGs | Millennium Developments Goals |
| N ₂ O | Nitrous Oxide |
| NAMAS | Nationally Appropriate Mitigation Actions |
| NAPA | National Adaptation Programmes of Action |
| NAPs | National Action Programmes |
| NBSAP | National Biodiversity Strategy and Action Plan |
| NDCs | Nationally Determined Contributions |
| NGOs | Non-Governmental Organizations |
| NLBI | Non-Legally Binding Instrument |
| NO _x | Nitrogen Oxide |
| NRA | Natural Resource Accounting |
| NTFPs | Non-Timber Forest Products |
| PROFOR | Programme on Forests |
| REDD+ | Reducing Emissions from Deforestation and Forest Degradation, and |

enhancement of Carbon stocks

| | |
|--------|---|
| SADC | Southern African Development Community |
| SDGs | Sustainable Development Goals |
| SFM | Sustainable Forest Management |
| UN | United Nations |
| UNCBD: | United Nations Convention on Biological Diversity |
| UNCCD | United Nations Convention to Combat Desertification |
| UNDP | United Nations Development Programme |
| UNEP | United Nations Environment Programme |
| UNFCCC | United Nations Framework Convention on Climate Change |
| USD | United States Dollar |
| WTO | World Trade Organization |

EXECUTIVE SUMMARY

Since climate change is one of the greatest threats to life on earth, it has become imperative that international forest and climate change dedicated instruments and cross-cutting issues instruments are integrated into regional and national policy and legislation frameworks. Such instruments include: (i) the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention on Biological Diversity (UNCBD), the United Nations Convention to Combat Desertification (UNCCD), the Convention on International Trade in Endangered Species of Fauna and Flora (CITES), the RAMSAR Convention on Wetlands, and the UN Forest Instrument. Under the Paris Agreement and associated NDCs, national forest-based solution to climate change could be enhanced through more effective implementation of (i) REDD+, and good practices of (ii) Land Use, Land Use Change and Forestry (LULUCF).

Despite a plethora of forest-related policies and legislation that need to synergize with contemporary regional and international frameworks, national forest governance is relatively weak in Southern and Eastern Africa. These regions have not adequately integrated policy and strategy implementation. Besides, there are poor technical capacities to direct policy and programme implementation among stakeholders. Issues of gender and vulnerable groups are not sufficiently mainstreamed to sustainable forest management. SADC and EAC lack financial support to effectively implement forest and climate change policies, strategies and programmes.

All the surveyed countries have indicated the need for financial support to effectively mainstream the Paris Agreement in their national policies. In addition to finances, the need for capacity building in support and technology development and transfer has been identified. All the eight (8) countries mentioned a need for capacity building or technical support for NDC implementation and the three main capacity needs identified by this survey are; mobilising resources for NDC implementation; 3 developing information base or monitoring systems; and; 4 building institutional structures and coordination mechanisms. All the countries did not have a problem with development of NDC implementation plans.

A capacity needs assessment amongst stakeholders had shown limited capacities in the alignment of forest related laws and regulations with new national policies, development and adjustment of action plans to support sustainable forest management and report effectively through national forest platforms (NFP). The regions should pay more attention to administrative and field level issues including proper management, planning, monitoring, and evaluation and budgeting. SADC and EAC need to strengthen climate change resilience, reduce vulnerability and ensure SMART adaptation response. There is need to improve cooperation, implementation, compliance, proper reporting and capacity to understand the complex polycentric forest and climate change instruments amongst stakeholders as highlighted in the articles of the Paris Agreement (PA Article 4, Article 5, Article 6, Article 7, Article 8, Article 9, Article 10, Article 11, Article 12, Article 13, Article 14, and Article 15).

As of June 2017, 148 countries have ratified the Paris Agreement and 48 African countries have submitted their first NDC including the surveyed countries (Eswatini, Botswana, Zambia, South Africa, Kenya, Tanzania, Ethiopia and Uganda). Only twenty-eight (28) African countries submitted costed NDCs adaptation plans with a combined cost of \$3.852 billion. Only three (3) of the surveyed countries (Kenya, Zambia and Tanzania) have submitted detailed NDCs with costs (four hundred (400), two hundred (200) and one hundred and twenty-one million five hundred thousand (121.5) USD respectively).

However, most of the SADC and EAC NDCs lack comprehensive LULUCF and REDD+. Development of NDCs for most countries do not have approval from the highest political office (head of state) and this contributes to lack of appropriate national forest policies, frameworks, legislation and sufficient budget. The insufficient capacity of stakeholders contributes towards poor integration of new and emerging sustainable forest management concepts and priorities including efficiency in the implementation of PA provisions.

1. INTRODUCTION

1.1 Background

Climate change poses serious risks to the environment and to the very survival of the human species with every sector of the government and the economy in the world likely to be affected. Parties to the UNFCCC have recognized the need to take urgent action to mitigate and adapt to climate change (FAO, 2018a). Climate change poses crucial challenges to the forest sector, but it may also create new opportunities. Decision-makers, policymakers, forest managers, the private sector, NGOs, local communities and other stakeholders of the forestry sector ought to consider both the challenges and the opportunities. Their responses to climate change should consider a broad spectrum of ecosystem goods and services that forests provide for a wide range of stakeholders (Turpie, Warr and Ingram, 2015; AfDB, 2016; Dlamini and Samboko, 2017; Dlamini 2019a; Dlamini, 2019b). FAO (2018a) stated that: *It is important that forest-based climate change mitigation and adaptation interventions are mainstreamed in forest and other sectoral policies that affects forests.* This harmonization can help to ensure that efforts to attain climate change goals and objectives are reconciled with efforts to accomplish forest sector goals and objectives, and that trade-offs are weighed, and synergies captured (FAO, 2018a).

Forests have considerable potential for climate change mitigation through carbon sequestration. According to FAO's *Global Forest Resources Assessment 2020*, the world's forests store an estimated 662 Gt (163 tonnes per ha), comprising 300 Gt in soil organic matter, 295 Gt in living biomass and 68.0 Gt in dead wood and litter (FAO, 2020). Soil organic matter constitutes the biggest pool, with 45.2 percent of the total carbon, followed by above-ground biomass, below-ground biomass, litter and dead wood. The global forest carbon stock decreased between 1990 and 2020, from 668 Gt to 662 Gt (FAO 2020), due to an overall decrease in forest area. There were considerable regional and sub-regional differences in the trend, however: for example, the carbon stock in forest biomass increased significantly in East Asia, Western and Central Asia, Europe and North America (where forest area increased) and decreased considerably in South America and Western and Central Africa (FAO 2020). Over the past 25 years the carbon stocks in forest biomass have decreased by almost 11.1 Gt, equivalent to a reduction of 442 million tonnes per year or about 1.6 Gt of carbon dioxide. The reduction is mainly driven by carbon stock changes as a result of converting forest lands to agriculture and settlements and degradation of forest land (FAO, 2018a; FAO, 2018c).

The alignment of national policy and legislative framework to regional and international agreements requires a critical understanding of the concept of sustainable forest management (SFM). In December 2007, the General Assembly of the United Nations adopted the most widely and intergovernmentally agreed upon definition of Sustainable Forest Management (SFM) i.e. "Sustainable forest management as a dynamic and evolving concept aims to maintain and enhance the economic, social and environmental value of all types of forests, for the benefit of present and future generations." (*UN 2008, Resolution 62/98 establishing the Non-legally Binding Instrument on All Types of Forests*). It is characterised by seven

elements (Criteria and Indicators), as follows: (i) extent of forest resources; (ii) forest biological diversity; (iii) forest health and vitality; (iv) productive functions of forest resources; (v) protective functions of forest resources; (vi) socio-economic functions of forests; and (vii) legal, policy and institutional framework. These include the regional criteria and indicators (C&I) for SFM processes (Wijewardana, 2008), good forest governance (GFG) pillars and principles, and a comprehension of the international regulatory context for SFM. Some of the international regulatory instruments include Forest law enforcement, governance and trade (FLEGT), where the EU FLEGT Scheme (Annex 1) is perceived to be the most active so far (Dlamini, 2015; Dlamini and Montouriy, 2017). In addition, reducing emissions from deforestation and forest degradation (REDD+) in developing countries is a form of instrument meant to promote conservation, sustainable management of forests and enhancement of forest carbon stocks ; and hence addressing sustainable development goals (SDGs) (Annex 2) and the role of forests in SDGs¹ (Annex 3) (including forest related targets for integration in SDGs²). Further, it is vital to have knowledge of the existing legal regime for GFG and linking FLEGT to REDD+ (UNFCCC, 2017; Dlamini and Samboko, 2017; Dlamini and Montouroy, 2017). Other essential concepts that are fundamental to the formulation and development of contemporary forest policy and legislation include: (i) the conceptual framework for forest and climate adaptation mitigation, (ii) the ecosystem services (ES) framework, (iii) the non-timber forest products (NTFPs) framework, and (iv) the natural resources accounting (NRA) framework (Cowling et. al, 2014; Dlamini, 2019b; Grassi et. al, 2017). Other key processes driven by the Food and Agriculture Organization of the United Nations that are essential for SFM are (i) the State of the World's Forests, and; (ii) the Forest Resource Assessment (FRA) (FAO, 2018b).

The key elements in the context of this study are: (i) Main Substantive Elements and Commitments and (ii) Reporting, Review and Compliance. The IPCC recognizes Land-Use, Land-Use Change and Forestry (LULUCF) hence its significant role in the NDCs . The study also highlights the challenges, opportunities and strategies for improving the implementation of nationally determined conditions in the Eastern and Southern Africa regions.

1.2 Description of objectives

The main objective of this study was to (1) assess the responsiveness of African national forest governance to the Paris Agreement (PA), related global climate change policies and initiatives and to (2) assess National Forest Sector (NFS) contributions to Nationally Determined Contributions (NDCs) to climate change mitigation and adaptation. The study targeted the following eight (8) countries;

¹ On 1 January 2016, the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development — adopted by world leaders in September 2015 at an historic UN Summit — officially came into force.

² Target 1: All the world's forests are managed sustainably; Target 2: The world's forests and tree resources improved; Target 3: Climate change mitigation benefits from forests increased; Target 4: Direct and indirect contributions of forests and trees to food security and nutrition increased; Target 5: Poverty reduced through increased income and employment from forests; Target 6: Forest-related biodiversity conserved and improved; Target 7: Fresh water supply from forest areas improved; Target 8: Resilience of people and forests against slow-onset and extreme events increased; Target 9: Contributions of forests to a green economy increased; and Target 10: Increased financial resources from all sources to sustainably manage forests.

Eswatini, Botswana, Zambia, South Africa from the Southern African Development Community (SADC) region and Kenya, Tanzania, Ethiopia, Uganda from the Eastern African Countries (EAC) region.

1.3 Terms of reference

The Terms of reference were informed by specific tasks/activities which addressed the two main objectives of the study;

1.3.1 Tasks under objective 1

- (i) Identification of areas of overlap and synergy in the national forestry sector and other relevant global and regional climate change related policies and initiatives.
- (ii) Identification of knowledge and skills required for mainstreaming global and regional climate change policies and initiatives into national forestry policies

1.3.2 Tasks under objective 2

- (i) Identification of gaps in the development of national forest sector contribution to current NDCs.
- (ii) Defining the role of REDD+³ in the national forestry sector contributions to NDCs⁴.
- (iii) Devising strategies towards improving representation and role of LULUCF⁵ in NDCs.
- (iv) Assess how to increase capacity for national forestry sector reporting to national, regional and international constituencies as well as strengthening development of second NDC in 2020.

³ Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.

⁴ Nationally Determined Contributions

⁵ Land Use, Land Use Change and Forestry.

2. METHODOLOGY

To achieve the objectives, a mixed methods approach was adopted. It involved a combination of literature review, harmonization workshop with relevant stakeholders, descriptive analysis, and interviews with key informants as described below.

2.1 Literature review

A desk review and analyses of relevant local, national, regional and international documents on policies, legislation action plans, strategies and programmes related to forests and climate change were undertaken for each of the eight selected countries. The reviewed documents included the following; the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention on Biological Diversity (UNCBD), the United Nations Convention to Combat Desertification (UNCCD), the Convention on International Trade in Endangered Species of Fauna and Flora (CITES), the RAMSAR Convention on Wetlands, and the UN Forest Instrument, REDD+ and Land Use, Land Use Change and Forestry (LULUCF). In addition, relevant national (countries in Southern and Eastern Africa), regional (SADC, COMESA, IGAD and EAC) and international/global (mainly from UN) frameworks, policies and strategies were accessed.

2.2 Empirical study

This aspect of the methodology entailed field missions to interview key stakeholders from the eight (8) participating countries. These included experts from relevant national government ministries, non-governmental organizations (NGOs) and the private sector (Table 1). Additionally, semi-structured questionnaires were distributed through e-mail to stakeholders in order to gather additional information. Prior to the start of the data collection exercise, a six (6) day harmonization workshop was conducted to enable all regional consultants to work on an agreed methodology

Table 1 Distribution of officials for data collection.

| Country | Government Officials | Private Sector/ Government Parastatals/NGOs |
|-------------------------|---|---|
| Southern African Region | | |
| Eswatini | Ministry of Tourism & Environmental Affairs | ENTC, Eswatini Environmental Authority (EEA), COSPE, Ecotone Africa, CANGO, CBOs |
| Botswana | Departments of Forestry (Public Forest Administration) | Forestry Research Institution |
| Zambia | Departments of Forestry (Public Forest Administration): (CIFOR & IAPRI) | Forest-related climate change projects: REDD Coordination Unit (RCU): Lower Zambezi REDD+ Project |
| South Africa | Departments of Forestry (Public Forest Administration): Department of Environment, Forestry and Fisheries | Forest-related climate change projects (SANBI) |
| East African Region | | |
| Kenya | Departments of Forestry (Public Forest Administration): Kenya Forest Service | Forestry Research Institution – KEFRI and ICRAF. Forest-related climate change |

| | | |
|----------|---|--|
| | | projects: UNDP Offices |
| Tanzania | Tanzania Forest Authority | Forestry Research Institution: TAFORI Forest-related climate change projects: Carbon Tanzania |
| Ethiopia | Departments of Forestry (Public Forest Administration): Ministry of Environment, Forest and Climate Change (Ethiopian Environment, Forest and climate change Commission). | Forestry Research Institution: - Ethiopian Forestry Society, Ethiopian Environment and Forest Research Institute (EEFRI) Forest-related climate change projects: REDD+ Ethiopia |
| Uganda | Departments of Forestry (Public Forest Administration) | Forestry Research Institution: NAFORRI Forest-related climate change projects: National Forestry Authority |

2.3 Data collection

Questionnaires were developed and validated before administering to the key informants listed on Table 1 above. Design and content: Subject matter specialist from the selected stakeholders were engaged as data collectors. They were briefed on the objectives and expected outcomes of the study and commissioned to administer the questionnaires.

2.4 Data analysis

The relevant national (countries in Southern and Eastern Africa), regional (SADC, COMESA, IGAD and EAC) and international/global (mainly from UN) frameworks, policies and strategies were analyzed, reviewed and assessed to establish if they fulfil the following articles of the Paris Agreement; Article 4, Article 5, Article 6, Article 7, Article 8, Article 9, Article 10, Article 11, Article 12, Article 13, Article 14, and Article 15. The PA implementation status for country was tested against each of the PA articles to see how far the countries are to achieving the desired PA implementation goal. Further, NDCs were analyzed for their heterogeneity and degree of coverage of LULUCF and REDD+. The adequacy of the policies in terms of sustainable forest management (SFM), good forest governance (GFG), forest law enforcement and trade (FLEGT) and forest-related climate change adaptation and mitigation was measured using a weighted scale ranging from 1 to 5 with 1 being insufficient and 5 being adequate. The following parameters were rated against each policy; accountability, effectiveness, efficiency, fairness and equity, participation of stakeholders and transparency. Adequacy of the policies was measured against the following aspects of the PA; governance/ management system established, development of legislative, regulatory and institutional frameworks, actions to strengthen capacities and knowledge.

2.5 Limitations of the study

A total of six (6) of the eight (8) participating countries returned the interview guides. The two (2) countries did not respond regardless of numerous follow-up effort made. Therefore, the study relied only on-site discussions and documents received during the site visits.

3. COUNTRY PROFILES FOR NATIONAL POLICY AND LEGISLATION FRAMEWORK

The review of the country profiles for forest and climate change relate legislation, policies, strategies, action plans, programmes and other initiatives in Southern African Development community (SADC) region has shown a common trend of the following eight (8) categories as presented on Table 2 below.

Table 2: Trends in the SADC forest and climate change related policies

| | |
|------------|--|
| Category 1 | Planning (national development plans and strategies that entail forests and climate change issues) |
| Category 2 | Environment (includes forestry and climate change policies, legislation, programmes, action plans, and forest and climate change other national initiatives) |
| Category 3 | Agriculture (including climate smart agriculture and conservation) |
| Category 4 | Water (water acts, policies, programmes, action plans, strategies, and other water related initiatives, with elements of climate change and forest ecosystems) |
| Category 5 | Forestry, Parks and Wildlife (mainly forest policies and legislation and parks and wildlife policies and legislation, with aspects/elements of climate change) |
| Category 6 | Land (land related policies and legislation) |
| Category 7 | Energy (which is a critical sector for forest and climate) |
| Category 8 | Disaster and Risk Management (including effects of drought, floods, extreme heat, and shorter rainy seasons) |

Angola

Angola has immense natural resources capable to contribute to the development of other sectors and is a signatory of UNCCD and UNCBD. Efforts are made to adhere to CITES. Despite various constraints faced by the forest sector, the country is trying to observe and implement international conventions and treaties related to the preservation of forest resources and environment as a whole. The National Forest, Wildlife, and Conservation Areas Policy (2010) and the new Forest and Wildlife Act (2017) provide an updated policy and legal framework for the sector. The laws are reinforced by strategic action plans. Forest policies, programmes, plans and climate change related policies and initiatives for Angola are presented on Table 3 below.

Table 3: Forest and climate change related legislation and policies in Angola.

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|-------------------|--|
| Planning | The National Development Plan (PND) (2013-2017), Strategy of Long-Term Development for Angola (2025), and Strategy to Fight Poverty (SFP). |

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|------------------------------|--|
| Environment | National Implementation Strategy for the UNFCCC and the Kyoto Protocol, (2008), National Strategy for Climate Change (2018–2030), Presidential Decree 85/14 which approves the Statute of the Ministry for Environment (MINAMB) (2014), Presidential Decree 17/14 which approves the Modernisation Programme of the National Institution of Meteorology and Geophysics (INAMET) (2014), National Adaptation Programme of Action (NAPA) (2011), Presidential Decree 88/13 which approves the Strategic Plan for New Environmental Technologies (2013), Presidential Decree 184/12 which creates and approves the Statute of the Centre of Tropical Ecology and Climate Change (CETAC) (2012), Presidential Order 10/12 which creates the National Committee on Climate Change and Biodiversity (2012), Resolution 52/08, establishing the National Strategy for the Implementation of UNFCCC and the Kyoto Protocol (2008), Basic Law of the Environment (1998), National Action Programme to fight Desertification (2014), and National Biodiversity Strategy and Action Plan (NBSAP). |
| Agriculture | Law No. 15/05 on Agricultural Development and Law 06/10 on sugar cane production for biofuel (2010). |
| Land | Land Law (Law 9-04). |
| Energy | Executive Decree 65/13 which approves the Regulation of the National Direction of Petroleum and Biofuel (2013), Executive Decree 161/10 which approves the Regulation of the National Direction for Renewable Energies (DNER) (2012), Law No. 27/15 amending Law No. 14-A/96 on the Basic Law on Electricity. |
| Disaster and Risk Management | Strategic Plan for Disaster Risk Management (2011), National Calamity and Natural Disaster Preparation, Contingency, Response and Recovery Plan. Strategic Plan for Disaster Risk Management (2011), National Calamity and Natural Disaster Preparation, Contingency, Response and Recovery Plan. |

Botswana

Botswana is endowed with a diversity of both herbaceous and woody vegetation. The country has a total land area of 582, 000 km² of which sixty % (60%) is comprised of forests and rangelands. Furthermore, out of the 60%, only 1% is made up of forest reserves. The vegetation provides a wide range of goods and services that satisfies the needs of the nation at large. Botswana has developed policies, strategies and plans that support the conservation and protection of finite natural resources; promotes use of renewable energy as alternatives; adopting and mainstreaming global multilateral environmental agreements and protocols in national legislative framework and policies. To achieve a long-term sustainability of the environment, Botswana recognizes the need for increased coordinated and

collaborative partnership between stakeholders including private sector, general public, civil society, public sector and rural communities (Government of Botswana, 2013). Policies, legislation, strategies, action plans and programmes relevant to climate change in Botswana are summarized on Table 4 below.

Table 4: Forest and climate change policies and legislation in Botswana

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|------------------------------|--|
| Planning | National Development Plan, National Policy for Rural Development of 2002, National Settlement Policy of 2004 National Strategy for Poverty Reduction of 2003, National gender strategy and policy is currently being drafted. |
| Environment | Natural Resources Conservation Policy, Community Based Natural Resources Management Policy 2007, Botswana climate change response policy (2016), Botswana National Action Programme to Combat Desertification (2006), National Biodiversity Strategy and Action Plan, National strategy, and action plan on climate change (2016). |
| Agriculture | National Policy on Agricultural Development (1991), National agricultural strategy, Tribal Grazing Land Policy (1975). |
| Water | Water Act (1968), New act being developed, IWRM and Water Efficiency Plan (2013). |
| Forestry, Parks and Wildlife | Botswana Forest Act:38:03 (1968), The National Forest Policy, National Forestry Action Plan, Wildlife Conservation Policy (1986), Wildlife Conservation and National Park Act, (1992), Tribal Grazing Land Policy (1975), Forest Conservation Strategy (2013 – 2020). |
| Land | National Policy on Land Tenure (1985). |
| Energy | National energy policy (2009) (MMEWR), National energy policy implementation strategy. |
| Disaster & Risk Management | Disaster risk reduction strategy (2013–2018). |

Malawi

The Government of Malawi recognizes the invaluable contribution of forests and trees in improving socio-economic and environmental benefits. In Malawi, both natural and man-made forests play an important role in providing basic human needs such as shelter, food, fodder, fibre, energy and pharmaceuticals. Forests also contribute to the national economy by supporting agriculture which is the mainstay of the national economy through controlling soil erosion, improving soil fertility and regulating water flow. Policies, legislation, strategies, action plans and programmes relevant to climate change in Malawi are presented on Table 5.

Table 5: Forest and climate change policies and legislation in Malawi

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|------------------------------|---|
| Planning | Vision (2020), Malawi Growth Development Strategies, United Nations Development Assistance Framework for Malawi (UNDAF), National Development Strategy 1997 -2020, Malawi Growth Development Strategy (MGDS III) - 2017-2022. |
| Environment | The National Climate Change Management Policy (NCCMP) (2016), National Strategy for Sustainable Development (2004), National Environmental Policy (NEP) (2004), National Environmental Action Plan (2002), Environment Management Act (1996), National Climate Change Investment Plan (2013). |
| Agriculture | Malawi Irrigation Policy and Development Strategy (2000), Food Security Policy (2006). |
| Water | National Water Policy (2005), Water Resources Act (2013), Waterworks Act (1995). |
| Forestry, Parks and Wildlife | National Forest Policy of Malawi (2016), Forestry Act (1997), Wildlife Policy (2000), National Parks and Wildlife Act (2004). |
| Land | National Land Policy (2002), National Land Resource Management Policy and Strategies (2000), National Land Use Planning and Management Policy, (2005). |
| Disaster and Risk Management | Disaster Preparedness and Relief Act (DPRA) (1991). |

Mauritius

The forests of Mauritius are small in area but perform vital functions, the most important of them being soil and water conservation. Where water is scarce, all major activities, be they agriculture, tourism or manufacturing, are seriously affected. The environmental functions of forests in small islands like Mauritius far outweigh their direct economic functions. In addition, it is generally recognised that forests in such islands have great ecological, social and cultural significance. When wisely managed, the forest resources of Mauritius can contribute to environmental rehabilitation, creation of job opportunities, supply of wood and non-wood products, food security, ecotourism, recreation and national wellbeing. Forests also play an important role in carbon sequestration and in the conservation of biodiversity and wildlife. Policies, legislation, strategies, action plans and programmes relevant to climate change in Mauritius are presented on Table 6.

Table 6: Forest and climate change related policies and legislation in Mauritius

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|-------------------|---|
| Environment | First Climate Change Action Plan (1998), Second National Communication (2010), National Climate Change Adaptation Policy Framework (2012), National Environment Policy, 2007, Environment Protection Act National Biodiversity Strategy and Action Plan, 2006 – 2016. |
| Agriculture | Blueprint for a Sustainable Diversified Agrifood Strategy for Mauritius, 2008 – 2015, Strategic Options in Crop Diversification |

| | |
|------------------------------|---|
| | and Livestock Sector 2007-2015. |
| Forestry, Parks and Wildlife | National Forestry Policy, 2006, Forests and Reserve Acts 1983, Wildlife and National Parks Act 1993, National Parks and Reserve regulations 1996, Wildlife Regulations, 1998. |
| Energy | Long-Term Energy Strategy 2009 – 2025. |
| Disaster and Risk Management | National Disaster Risk Reduction Strategic Framework and Action Plan, National Disasters Scheme (NDS) (2015), Local Government Act amendment (2018). |

Mozambique

Mozambique is one of the few countries in Southern Africa that still has extensive forest areas, mostly miombo woodlands, which occupy half of the land area, about 32 million hectares (ha). Forests are critical to the social, economic and environmental health of the country, supplying valuable timber species for export, fuelwood, non-timber forest products and ecosystem services like climate regulation, biodiversity and habitat. Despite the benefits to be realized, deforestation is high, with over 295,000 ha converted to other land uses annually (PROFOR, 2016). There is a Vision and Strategic Agenda for Mozambique's National Forest Program to guide the country's Forest Sector Agenda 2035 (PROFOR, 2017). Policies, legislation, strategies, action plans and programmes relevant to climate change in Mozambique are presented on Table 7 below.

Table 7: Climate change and forest related policies and legislation in Mozambique

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|------------------------------|---|
| Planning | Government's Five-year Plan (2015 -2019), The Poverty Reduction Action Plan (PARP) (2011- 2014). |
| Environment | National Environmental Policy (1995), The Environmental Act (Law 20/1997), Biological diversity Law 16 (2014), National Biodiversity Strategy and Action Plan 2035, National Climate Change Adaptation and Mitigation Strategy (NCCAMS) (2013-2025), First National Communication on climate change to the UNFCCC (2006), emphasizing coastal protection, agriculture and water resources, National Adaptation Programme of Action (NAPA) (2008). |
| Agriculture | Strategic Plan for Development of the Agriculture Sector (PEDSA), The Agricultural Policy 1995. |
| Forests and Wildlife | The Forest and Wildlife Law 1999, Forestry and Wildlife Policy 1997, Forestry and Wildlife Strategy 1997, National Forest and Wildlife Programme 1998, Forest and Wildlife Regulation 2002, A Vision and Strategic Agenda for Mozambique's National Forest Program (country's Forest Sector Agenda 2035). |
| Water | The new Water Policy. Land: Land Law of 1996. |
| Energy | Energy Policy. |
| Disaster and Risk Management | National Policy on Disaster Management 1999, Weather Disaster Management Policy. |

Namibia

According to the reports 8.9% of the total land area of Namibia is forests. Given State commitment to improving rural economic welfare, the forest sector will have to become productive in order to serve four basic aims flowing directly from the poverty

reduction strategy. (i) Reconcile rural development with biodiversity conservation by empowering farmers and local communities to manage forest resources on a sustainable basis. (ii) Increase the yield of benefits of the national woodlands through research and development, application of silvicultural practices, protection and promotion of requisite economic support projects. (iii) Create favorable conditions to attract investment in small and medium industry based on wood and non-wood forest raw materials. (iv) Implement innovative land-use strategies including multiple use conservation areas, protected areas, agro-forestry and a variety of other approaches designed to yield forestry global benefits (Aliba, 2008). Policies, legislation, strategies, action plans and programmes relevant to climate change in Namibia are presented on Table 8.

Table 8: Forest and climate change related policies and legislation in Namibia

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|---------------------------------------|--|
| Planning | Regional Planning and Development Policy (NPC, 1997), National Poverty Reduction Action Programme (NPC), National Development Plans Vision 2030. |
| Environment | Environment Assessment Policy (MET, 1995), Environmental Management Act (2007), Climate Change Strategy and Action Plan (2013), Third National Action Programme to Combat Desertification (2014), National Biodiversity Strategy and Action Plan (2013-2022), Land Use Planning Towards Sustainable Development policy (MET, 1994), Pollution control and Waste Management Bill. |
| Agriculture | National Agriculture Policy (MAWF, 1995), National Drought Policy and Strategy (MAWF, 1997), Green Scheme Policy (MAWF, 2004 & revised in 2008), National Rangeland Management Policy and Strategy. |
| Water | National Water Policy White Paper (MAWF, 2000), Water Resources Management Act (2004). |
| Forestry, Parks and Wildlife | Forestry Development Policy (MAWF, 2001), Forestry Act (2001), National Forest Strategy, The Forest Research Strategy (2011 - 2015), Wildlife Management, Utilization and Tourism in Communal Areas (MET, 1995), Promotion of Community Based Tourism Policy (MET, 1995), Amendment to the Nature Conservation Ordinance (1996), National Rangeland Policy and Strategy of 2012. |
| Land | National Land Policy (MLR, 1998), National Resettlement Policy (MLR, 2001), Commercial Land Reform Act (1995), Communal Land Reform Act (2002). |
| Energy | National Energy Policy (2017) |
| Disaster and Risk Management National | Policy For Disaster and Risk Management in Namibia (OPM, 2009). |

South Africa

A National Forestry Roadmap (2030) has been adopted as forestry continues to be one of the important sectors in South Africa, contributing both to the economy of the country, employment and improvement of livelihoods. The forest resources of South Africa consist of three main types, namely: woodlands (covering approximately 29-42

million hectares), natural forests (492 700 ha) and commercial plantations (cover approximately 1.26 million ha). Developments within the forestry sector have necessitated a stocktaking exercise with a view to review the relevance of policies which were adopted in that era. Following the adoption of the White Paper, a series of legislative and other policy documents to effect the provisions of the White Paper have been developed and implemented. Environmental-related legislation relevant to climate change in South Africa are presented on Table 9 below.

Table 9: Climate change and forest related policies and legislation in South Africa

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|---------------------------------|--|
| Planning | Spatial Planning and land Use Management Act (16 of 2013), Provincial Land Use Planning Ordinances. |
| Environmental Impact Assessment | : NEMA, EIA Regulations (NEMA), Sectoral Legislation: NWA, MLRA, MPRDA, DFA Regulations, ORV Regulations. |
| Protected Areas | NEM: Protected Areas Act (57 of 2003), National Forest Act (84 of 1998), World Heritage Convention Act (49 of 1999), MLRA, Maritime Zones Act (15 of 1994), NEM: Integrated Coastal Management Act (24 of 2008). |
| Water Resources | National Water Act (36 of 1998) (NWA), Water Services Act (108 of 1997). |
| Marine Living Resources | Marine Living Resources Act (18 of 1998) (MLRA). |
| Mineral Resources | Minerals and Petroleum Resources Development Act (25 of 2012). |
| Heritage Resources | National Heritage Resources Act (25 of 1999). |
| Biodiversity | NEM: Biodiversity Act (10 of 2004), National Forest Act (84 of 1998), GMO Act (15 of 1997), Conservation of Agricultural Resources Act (43 of 1989) (CARA), National Veld and Forest Fire Act (101 of 1998), Provincial Nature Conservation Ordinances. |
| Agricultural Resources | CARA, Fertilizers, Farm Feeds and Agricultural Stock Remedies Act (36 of 1947). |
| Freshwater Pollution | National Water Act. |
| Marine Pollution | Maritime Zones Act (15 of 1994), Marine Traffic Act (2 of 1981), Sea-Shore Act (21 of 1935), Merchant Shipping Act (57 of 1951), Marine Pollution (Prevention of Pollution from Ships) Act (2 of 1986), Marine Pollution (Intervention) Act (64 of 1987), Marine Pollution (Control and Civil Liability) Act (6 of 1981), Dumping at Sea Control Act (73 of 1980), Wreck and Salvage Act (94 of 1986). |
| Land Pollution | ECA, Hazardous Substances Act (15 of 1973), OHSA (85 of 1993), NEM: Waste Management Act (59 of 2008). |
| Air Pollution | NEM: Air Quality Act (39 of 2004). |

Eswatini

The people of Swaziland derive many direct and indirect benefits from their forests and woodland resources. In terms of forest cover Swaziland is endowed with eight main groups of vegetation strata (forest types) that are further stratified into 13 sub-groups. These are: Montane and Highland (Dense and Open); Riverine Forest; Mixed Woodland (Dense and Open); Acacia Woodland (Dense and Open); Dry Acacia Woodland (Dense and Open); Indigenous Bushveld (Dense and Open); Wattle Forest; and Plantations. The total forest area in 1999 was estimated at 789 000 ha (45% of the country) and more than 80% of forest area is indigenous forest. The latest forest statistics show that the forest coverage stands at natural forests-3.2%, natural woodlands-22%, natural bushveld-13.4%, wattle-1.4%, plantations-6.4% to make up 45% of the country's total land area (Dlamini, 2007). The country is party to the UNCCD, UNFCCC, CITES, Paris Agreement and many other international agreements. Further Eswatini is part of the African Union and SADC and COMESA. A massive number of national policies and legislation have been developed to respond to regional and international agreements and associated obligations. The country has a new National Development Roadmap (2019 – 2023) which recognizes the role of the environment and natural resources in national development. Environmental-related policies, strategies and legislation relevant to climate change in Eswatini are presented on Table 10 below.

Table 10: Forest and climate change policies and legislation in Eswatini

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|--------------------------------|---|
| Policies | Climate Change Policy, The Regional Development Policy, The Local Government and Decentralization Policy, National Disaster Management Policy 1999, National Agriculture Policy (New), Population Policy, National Gender Policy, National Youth Policy, Comprehensive Agriculture Sector Policy (2005), Food Security Policy (2005), Livestock Development Policy (1995), Irrigation Policy (2006), Draft Land Policy (1999), Resettlement Policy (2003), Seed Policy (2000), Water Policy (2017), National Energy Policy, The National Health and Social Welfare Policy, National Environmental Health Policy, National Forest Policy (2002), National Forestry Programme (2002), National Environmental Policy, National Biodiversity Management and Conservation Policy (2007 Draft), National Tourism Policy Fisheries Policy. |
| Strategy/Action Plan/Programme | Swaziland Environment Action Plan, National Development Strategy, Poverty Reduction Strategy and Action Plan, The National Physical Development Plan, National Biodiversity Strategy and Action Plan, National Disaster Management Action Plan 2000, National Waste Management Strategy, Swaziland Agriculture Development Project (2009), National Strategy for the Control and Management of Invasive Alien Plants (2010 Draft), Swaziland Biosafety Framework, National Biofuels Strategy (Draft), Renewable Energy Programme and Action Plan National Biofuels Action Plan, The National Multi-sectoral Bushfire Contingency Plan of 2007, Swaziland Disaster Risk Reduction National Action Plan |

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|-------------------|--|
| | (2008-2015), Integrated Water Resources Master Plan. |
| Legislation | The Constitution of the Kingdom of Swaziland (2005), National Environmental Act of 2002, Swaziland National Trust Commission Act, 1972, Swazi Administration Order (1998), Swaziland Environmental Authority Act, 1992, Swaziland Tourism Authority Act (2001), The Swazi Administration Act (1950), The Definition of Swazi Areas Act No.41/1916, The Physical Planning and Development Bill, The Energy Regulatory Authority Act (2007), National Disaster Management Act (2006), Waste Regulations of 2000, Natural Resources Act of 1972, Flora Protection Act of 2001, Forest Bill of 2010, Energy Regulatory Authority Act of 2005, Deeds and registry Act of 2010, The National Biosafety Bill, The Access and Benefit Sharing (ABS) Bill of 2006, Biodiversity Management Bill, Swaziland Water Act of 2003, Climate Bill (2019), CITES Bill (2019). |

Zambia

Forests cover 66% cent of Zambia's total land area that translates into approximately 49.97 million hectares. Gazetted forest reserves cover an estimated 9.6%. Out of the total area classified as forest reserves, 44% is set aside for production, 30% for both protection and production, and the remaining 26% cent is for protection only. Forests play vital roles in people's livelihoods as major sources of timber, traditional medicine, wood fuel, food and building materials. Furthermore, forests play major roles in both carbon and hydrological cycles. They are key factors in watershed and soil conservation, and are important for other landscape factors (e.g., soil erosion) (Turpie, Warr, and Ingram 2015; Dlamini and Samboko, 2017). The Nation Forest Policy is aligned within the framework of the Decentralization Policy, Zambia's Vision 2030 and the Revised Sixth National Development Plan. Further, the Policy recognizes regional and international opportunities and obligations or frameworks such as the SADC protocols on forestry and other natural resources, CITES, SDGs, and forest related MEAs (GoV, 2014). The issues addressed in the 2014 National Forestry Policy include an expanded protected area system, climate change, biofuels, and trans-boundary forest resource management. Policies, legislation, strategies, action plans and programmes relevant to climate change in Zambia are presented on Table 11 below.

Table 11: Forest and climate change policies and legislation in Zambia

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|-------------------|--|
| Planning | Sixth National Development Plan (RSDNP), Vision 2030, Urban and Regional Planning Act No. 3 of 2015, Zambia Development Agency Act No. 11 of 2006. |
| Environment | Second National Biodiversity Strategy and Action Plan (NBSAP2, 2015), National Policy on Environment (NPE, 2007), National Policy on Climate Change (NPCC, 2017), National Climate Change Response |

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|------------------------------|--|
| | Strategy (NCCRS, 2012), Environmental Management Act (EMA, 2011), National Heritage Conservation Commission Act, Cap 173 Environmental Protection and Pollution Control Act (EPPCA) of 1990. |
| Agriculture | National Agriculture Policy (NAP, 2016), Agriculture (Fertilizer and Feed) Act No. 13 (1994) Cap 226. |
| Water: | Water Resources Management Act No. 21 of 2011. |
| Forestry, Parks and Wildlife | National Forest Policy (2014), Zambia Forest Act (2015), National Parks and Wildlife 1998, Zambia Wildlife Act No. 15 of 2015. |
| Land | Draft Land Policy (under consideration), Lands Act Cap 184, and Agriculture Lands Act Cap 187. |
| Energy | National Energy Policy (NEP, 2008), Energy Regulations Act No. 23 of 2003. |
| Disaster and Risk Management | Disaster Management Act No. 13 of 2010. |

Zimbabwe

Zimbabwe does not have a documented National Forest Policy, notwithstanding the obvious social, cultural, economic, financial and ecological and environmental benefits that the people of Zimbabwe enjoy from their rich forest resources since time immemorial. Although FAO helped the country to establish a National Forest Programme Facility (NFPF) between 2009 and 2012. Currently, the forest sector is governed by two main pieces of legislation, i.e. (i) *The Forest Act*, and (ii) *The Communal Lands Forest Produce Act*. The Minister of Environment, Water and Climate, Saviour Kasukuwere noted that following developments in the international arena, Zimbabwe needs to re-align the forest legislation to the new and emerging issues and concepts on sustainable management of forests that are espoused in the three Rio environmental conventions. This initiative is also in sync with provisions of the SADC protocol on Forestry one of whose objectives is to promote the development, conservation, sustainable management and utilization of all types of forests and trees. However, there are numerous forest-related policies and legislation. It is hoped that the development of a National Forest Policy will support and enhance growth in Zimbabwe's forestry sector where most forest related activities occur in the informal sector, while commercial forestry contribute a meagre 3% to the GDP and is restricted to the private sector. Policies, legislation, strategies, action plans and programmes relevant to climate change in Zimbabwe are presented on Table 12 below.

Table 12: Forest and climate change related policies and legislation for Zimbabwe

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|-------------------|--|
| Planning | Zimbabwe Country Development Plan (2017 – 2021), Zimbabwe National Industrial Development Plan (2019-2023). |
| Environment | Environmental Management Act (Chapter 20:27), National Policy and Programme on Drought Mitigation, Environmental Management (Atmospheric Pollution Control) Regulations, Environmental and |

| Policy instrument | Objectives/Articles that pave way for mainstreaming the Paris Agreement and climate change policies |
|------------------------------|---|
| | Natural Resources Management (Prohibition and Control of Ozone Depleting Substances and Ozone-Depleting-Substance-Dependent Equipment) Regulations, National Climate Change Response Strategy 2014, National Climate Change Policy 2016 . |
| Agriculture | Comprehensive Agriculture Policy Framework (2012 – 2032), National Agriculture Policy Framework (2018 – 2030), Zimbabwe Agriculture Sector Policy, Agriculture Marketing and Pricing Policy. |
| Water | Water Policy 2012, Water Act 1998. Land: National Land Policy (draft), Communal Lands Forest Produce Act Chapter 19:04, Communal Lands' Act Chapter 20:04 |
| Forests and Wildlife | Forestry Act 19:05 Parks and Wild Life Act Chapter 20:14. |
| Energy | The Electricity Act, National Energy Policy, White Paper on Principles for Biofuels Development and Use (2007). |
| Disaster and Risk Management | Disaster Risk Management Policy and Strategy. |

Eastern Africa

A study conducted by Milimo (2014) on forest and climate change policies, strategies and programmes in the EAC and IGAD sub-regions highlighted as main findings that: all the EAC and IGAD member states have signed and ratified the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol on climate change and, as a requirement, do submit NAPA and NAMA reports; Although EAC and IGAD have achieved some success in developing climate change instruments, actual implementation lies with the partner states. Perhaps, one challenge faced by the EAC sub-region, regarding the climate change policy instruments it has developed, is how to translate their good intentions into sustainable and effective actions; and how resource investments for implementation of the programmes can be secured in order to reduce long-term vulnerability. Further the study identified key climate change needs as: (i) gender and youth mainstreaming into climate change risk reduction and management; (ii) increased financial support for climate change risk reduction initiatives; (iii) mainstreaming climate change risk reduction into development planning; (iv) improved identification, assessment, and awareness of climate change risks developing climate change programme management and coordination capacity; (v) enhanced knowledge management for climate change risk reduction; increased public awareness for climate change risk reduction; (vi) facilitating the strengthening of climate change risk reduction institutions; and (vii) integrating climate change risk reduction into disaster response management.

Country profiles for national policy and legislation framework

The response was not satisfactory in Eastern Africa region as only two (2) countries (Tanzania and Kenya) submitted their country profiles for this study. The most notable observation is that there are overlaps amongst the five categories, as well as synergies prompted by the integration or mainstreaming of relevant aspects of the UNCBD, UNCCD, UNFCCC, CITES, RAMSAR, MDGs, SDGs, and other international instruments into national policy and legislative framework. In most

country profiles the mainstreaming of SDGs and the Paris Agreement are still lacking as policies and legislation are older than 2015. Although aspects of the SDGs and the Paris Agreement are covered. The MDGs were the point of reference in most revise policies. Detailed country portfolios are presented in the next section.

Tanzania

Various forest policies, programmes and plans and climate change related policies and initiative

Tanzania has been undertaking various efforts towards addressing climate change in accordance with her national context. The National Forest Policy (2019 Revised) and its Implementation Strategy and initiatives provides clarity, focus and coordination mechanisms for different players in the implementation process and will be implemented for 10 years from 2018 to 2028. The Forest Sector will perform the following: Provide alternative energy sources; Ensure proper land use management plans; Oversee compliance of environmental impact assessment; Harmonize extension services, training and research; Participate in management of water catchment forests; Collaborate in climate change adaptation and mitigation and landscape restoration actions; Participate in enforcement of forest laws; and Promote sustainable agriculture practices. The National Environment Policy and Act (the umbrella policy and law that override all environmental issues in the country including forest policy and law, The National Climate Change Strategy (2012) and the Zanzibar Climate Change Strategy (2014) comprehensively elaborate adaptation and mitigation actions. The strategies aim to, among others, enhance adaptive capacity to climate change thereby ensuring long term resilience; resilience of ecosystems to climate change; and enhanced participation in climate change mitigation activities to contribute to international efforts while ensuring sustainable development.

In addition, Tanzania has adopted and implements various other policies, legislations, strategies, plans and programmes in the course of addressing climate change. Some of these are: the National Communications (2003 and 2015); the National Adaptation Programme of Action (2007); Natural Gas Policy (2013); the Renewable Energy Strategy (2014); the Natural Gas Act (2015); the National Transport Master Plan (2013); the National Environmental Action Plan (2012 – 2017); the National REDD+ Strategy and Action Plan (2013). The forest sector is also responsible in addressing other relevant global and regional climate change related policies and initiatives such as UN Forest Forum, Convention on Biological Diversity (CBD) and United Nations Convention on Combating Desertification (UNCCD).

Overlaps

- Forestry and agriculture have been identified as the main sectors with overlaps and synergies
- These overlaps include: carbon sequestration, prevention of soil erosion, sustainable livelihood and economic development.
- Global frameworks have overlapping mandates and statements that seek to address various aspects of forests and forestry and in part the climate.

- At national level there is a hierarchy of forest and climate related environmental policies and laws that address both forests and climate change.

Gaps in the development of NDCs

- LULUCF and REDD+ not included on the NDCs
- No detailed budget requirements for mitigation measures.
- Lack of appropriate forest and climate change policies and legislation at the development process.
- NDCs approvals are not done at the highest political office.
- Inadequate stakeholder involvement in NDC development.

Mechanisms and strategies on building synergies from global and regional climate change related policies into national forestry sector

The Mechanism and strategies in building synergies include the formulation of Inter-Ministerial National Task Forces and Steering Committees that oversee the implementation of global and regional policies e.g. Preparation of National FREL and Forest Definition. In most cases, National Task Force members are drawn from both sides of the Union. Other mechanism is to review, harmonize and mainstreaming of global and regional climate change related policies into national forestry sector policies, programmes and strategies. Knowledge and Skills required in the development and implementation of forest sector and climate change related policies in Tanzania are presented on Table 13 below.

Table 13: Forest and Climate change related policies in Tanzania

| Forest Sector | |
|--|--|
| Adaptation | Efficiency in wood fuel processing and utilization, Enhancing forest governance and protection including monitoring, Fire detection and management, Enhancing forest governance and protection of forest resources both marine and land-base, Climate change adaptation techniques in both marine and terrestrial ecosystems |
| Mitigation | Tree planting techniques, species and methods, Protection and conservation of natural forests to maintain ecological integrity, Conservation of forest carbon stocks, and REDD+ related knowledge and activities. |
| Livestock Sector | |
| Adaptation | Modern knowledge on sustainable pasture and range management systems, Livelihood diversification of livestock keepers and Development of livestock insurance strategies. |
| Mitigation | N/A. |
| Fisheries, Coastal and Marine Environment sector | |
| Adaptation | Management of coastal resources and beach and erosion/sea level rise control systems and Early warning systems of both sea level rise impacts and extreme weather events for building adaptive capacity, and Mangrove, Coral and sea weed & shoreline restoration |

| Forest Sector | |
|-------------------------|---|
| | techniques. |
| Mitigation | N/A. |
| Waste management sector | |
| Adaptation | Solid and liquid waste management and pollution control and Managing waste including the enhanced use of engineered landfills, and Energy diversification systems. Solid and liquid waste management and pollution control and Managing waste including the enhanced use of engineered landfills. |
| Mitigation: | Energy efficient technologies and behavior and Waste to energy techniques including recycling. |
| Energy sector | |
| Adaptation: | Energy diversification systems. |
| Mitigation: | Clean technologies. |

Kenya

An assessment of perceptions on overlaps and synergies in the national, regional and global forest-related climate change policies and initiatives.

A plethora of national, regional and international forest and climate policies and initiatives co-exist and there are overlaps, synergies and contradictions. For instances, there is Lack of stakeholders' understanding on forest and climate change instruments. Kenya faces institutional, technical and financial capacity gaps and needs with respect to the implementation of the adaptation and mitigation components. The forest and agriculture sectors have the main overlaps and synergies. These include carbon sequestration, prevention of soil erosion, sustainable livelihood and economic development. There is a hierarchy of forest and climate related environmental policies and laws that address both forests and climate change.

National, regional and international forest and climate related policies in Kenya are listed below.

National: National Forest policy (2014), New Forests Act (2005), National Climate Change Response Strategy 2010, National Climate Change Action Plan (2018-2022), National climate change framework policy (2017), Forestry Research Strategy on Climate Change, National Forest Programme, Kenya Vision 2030 (2008) and its Medium Term Plans, National Climate Change Response Strategy (2010), National Adaptation Plan (2015-2030), Kenya's Nationally Determined Contribution (NDC) (2016), Climate Change Act (No. 11 of 2016), Kenya Climate Smart Agriculture Strategy (2017-2026), Climate Risk Management Framework (2017), National Climate Change Framework Policy (2018), and National Climate Finance Policy (2018), and others.

Regional: African Union's Agenda 2063, EAC Regional climate change master plan 2011-2031 Lake Victoria Basin Commission Climate Change Adaptation Strategy and Action Plan (2018-2023), and African Forest Landscape Restoration Initiative (AFR100).

Global: UNFCCC, UNCCD, CBD & CITES-IPCC, 2006: Guidelines for National Greenhouse Gas Inventories Volume 4 Agriculture, Forestry and Other Land Use-IPCC, 2003; and Good Practice Guidance for Land Use, Land-Use Change and Forestry.

The common interventions/requirements in the implementation of the above regional and international forest and climate related initiatives:

- Signing of agreements and convention to enable the country be a member
- Formulation of policy and legal frameworks to support the processes in the country
- Mainstreaming of activities into strategic plans for respective public institution
- Sensitization and Capacity building for various stakeholders
- Adaptation and mitigation programmes & projects

Table 14 shows the mapping out actors involved in development and implementation of national forest and climate change policies as well as mainstreaming of relevant global initiatives and processes into forestry sector.

Table 14: Forest and climate change policy implementation stakeholders in Kenya

| | |
|---|--|
| List Public Sector actors | Ministry of Environment and Forestry, Kenya Forest Services, Kenya Forestry Research Institute, Kenya Wildlife services, The National Treasury and Planning, Office of the Attorney General and Department of Justice, Ministry of Agriculture Livestock, Fisheries, and Irrigation, County Governments, and Universities. |
| List Private Sector actors | Timber manufacturers association, Kenya Tea Development Authority, Forestry Society of Kenya, and Tree nurseries producers association. |
| List NGOs/Civil Society Organizations | Community Forest Associations, Vi Agroforestry, and Honey producers associations. |
| Leaders in policy formulation, development and implementation | Ministry of Environment and Forestry, the Kenya Forestry Service, the Kenya Forestry Research Institute, Kenya Wildlife Services, Universities, the Forestry Society of Kenya, Timber Manufacturers, NGOs and CFAs. Capacities to develop policies stands at 80%, and capacities to implement and mainstream remains at 60%. |

The Ministry of Environment and Forestry has mechanisms for reporting forest-based plans and activities that relate to SDGs and NDCs. This is reported on the contribution of forestry activities and interventions. This entails reporting on the level of progress made so far in realization of the various SDGs and Progress made in realization of reduction in emission on the NDCs. KEFRI being the technical arm of the Ministry of Environment and Forestry provide experts to prepare reports for implementing SDGs and NDCs. The Ministry participates in reporting on forest action plans, SDGs and NDCs at regional level. List of constraints and opportunities for effectively and efficiently reporting at national, regional and global level may include:

Constraints

- Lack of coordinating agencies at the National levels,
- Poorly formulated indicators
- Lack of technical capacity
- Lack of mechanisms of reporting to the regional and global levels

Opportunities

- Policy frameworks exists at the National, Regional and Global levels
- The country continue to develop capacity for relevant stakeholders
- The country is a signatory to the various treaties both regional and global
- There exists opportunities for information sharing

Evaluating the levels of measurement, reporting and verification (MRV) of forest-based mitigation, adaptation and finance in the NDCs and how this MRV is mainstreamed in the forest based national programmes and plans.

Forest-related mitigation and/or adaptation processes or measures to respond to global warming and climate change include the following;

- Development of technologies that contribute to increased forest cover nationally
- Rehabilitation of degraded landscapes
- Production of tree seed
- Building the capacity of various stakeholders in forestry related issues
- Working with communities in protection of forests

Challenges

- Inadequate financing
- Low adoption of technologies
- Inadequate capacity by staff

4. RESULTS AND DISCUSSION

4.1 Areas of overlap and synergies

Synergies can be defined as the interaction of adaptation and mitigation so that their combined effect is greater than the sum of their effects if implemented separately (Thornton and Comberti, 2013; UNFCCC, 2018). The synergy approach breaks down the traditional dichotomy of adaptation and mitigation as two separate domains and encourages integrated approaches at policy higher level. The study identified forestry, and agriculture as the main sectors with overlaps and synergies that can be integrated through proper policies. The overlaps in forestry, agriculture and economic development policies includes carbon sequestration, prevention of soil erosion as well as economic development. These two sectors use the same resources such as land, water and energy and must not be implemented in isolation. The synthesis of various forest policies, programmes, plans and climate change related policies and initiatives has revealed that UNFCCC, UNCBD, UNCCD, CITES and RAMSAR Convention, the UN Forest Instrument as well as other international and regional frameworks have overlapping mandates and statements that seek to address various aspects of forests and forestry and in part climate. Thus, the corresponding national policies and legislation are bound to have overlaps. In a previous study to identify key stakeholders implementing promising forest-based adaptation and mitigation policies, strategies and actions in Anglophone countries including the SADC region, it was shown that most of these policies indeed have cross cutting objectives and/or activities (Chirwa 2019). Indeed, at national level, there is a hierarchy of forest and climate related environmental policies and laws that address both forests and climate change. For instance, the national environmental policies, national biodiversity policies, national biodiversity acts, national forest policies, national forest acts, etc. In addition, the associated national environmental action plans, national climate change strategies and action plans (implementing the UNFCCC), national biodiversity strategy and action plans (implementing the UNCBD), national forest strategies/action plans or national forestry programmes, national action plans for the UNCCD, incorporate sub-strategies and priority actions on forests and climate change (section 3.0, Table 2-14). Most national and international policy and legislative frameworks (Annex 4, 5 & 6) are still rooted on MDGs, because they are older than 2015, but are still relevant to SDGs.

4.2 Knowledge/skills for mainstreaming climate change policies

Climate change mainstreaming is about integrating climate risks into development planning processes and decision-making (Olhoff & Schaer, 2010; UNDP, 2017a). It entails incorporating climate risk considerations into every aspect of the policy and project development process to all key government agencies and sectors (e.g. Finance, Planning, Health, Agriculture, and Environment), and all levels of government (i.e. national and sub-national). Mainstreaming climate change policies is a three-level process; (i) making development efforts aimed at reducing vulnerability (not necessarily to climate change) while avoiding maladaptation, (ii) ensuring that climate change is considered in the decision-making of relevant

government agencies, (iii) introducing specific adaptation policy measures targeting issues that the first two levels have not yet tackled.

Actors in the forestry and climate change sector include government ministries, government departments, executive agencies, the legislature, judiciary, the private sector, civil society organizations and local communities/the public. In terms of policy, mainstreaming global initiatives, government through public forest administration takes the lead (at ministry/department level). However, in practice all stakeholders, i.e. the private sector, NGOs and local communities have roles and responsibilities. Countries highlighted the following capacity needs; mobilising resources for NDC implementation; developing information base or monitoring systems; and building institutional structures and coordination mechanisms as highlighted in the country profiles above. The survey also identified capacity needs among stakeholders (including public forest administrations, private sector officials and NGOs staff) as they demonstrated inability to comprehend the logical connection between the various international processes in the UNCBD, UNCCD, and UNFCCC and CITES, etc. Further, the multiple resolutions made in the series of Conference of Parties under these international conventions that shape the discourse of the modern era forestry sector are rather too complex to follow. Thus, local communities are at the peripherals of all the regional and international dialogues and conferences and the IISD bulletins hardly ever reach them.

Whereas the Paris Agreement is regarded as a landmark for forest and climate change, stakeholders are not well versed with the relevant articles of the Paris Agreement listed above. This was evidenced by the turnaround period for returning interview guides. Some countries did not manage to deliver at all. Therefore, training on the strategies for resource mobilization, NDC mainstreaming and reporting capacity should be prioritized. Training of grassroots should always be based on theories and applications with practical case studies, success stories and lessons learnt. Capacity building on effective mainstreaming approaches of global and regional forest and climate change policies and initiatives need to be structured and arranged in the order presented in Table 15.

Table 15: Structure for effective mainstreaming approaches

| Step | Comment |
|--------|---|
| Step 1 | United Nations Framework Convention on Climate Change. Firstly, appreciating new forestry concepts and priorities from the convention and related protocols to national forest policies and plans. Secondly, integrating climate change concepts and priorities into forestry policies and plans. Thirdly, coordinating implementation of climate change activities. |
| Step 2 | United Nations Convention on Biological Diversity. Firstly, sharing experiences in implementing biodiversity activities in the forestry sector. Secondly, considering the value added of Convention on Biological Diversity to forestry policies and plans. Thirdly, integrating new and emerging biodiversity concepts and priorities into forestry policies and plans. Fourthly, coordinating implementation of biodiversity conservation activities. |
| Step 3 | United Nations Convention to Combat Drought and Desertification. Firstly, |

| Step | Comment |
|--------|---|
| | recognize new forestry concepts and priorities from the convention and related protocols to forest policies and plans. Secondly, integrating new concepts and priorities from the UNCCD convention into current forestry and related policies and plans. Thirdly, coordinating implementation of UNCCD convention activities. Fourthly, sharing Experiences in implementing the convention on combatting drought and desertification. |
| Step 3 | Convention on International Trade in Endangered Species. Firstly, recognizing new forestry concepts and priorities from the convention and related protocols to forest policies and plans. Secondly, integrating new concepts and priorities from the CITES convention into current forestry and related policies and plans. Thirdly, coordinating implementation of the CITES convention activities. Fourthly, sharing experiences in implementing the CITES convention activities in the forestry sector. |
| Step 5 | The UN Forest Instrument. Firstly, recognize new forestry concepts and priorities from the Forest Instrument to forest policies and plans. Secondly, integrating new concepts and priorities from the UN Forest Instrument into current forestry and related policies and plans. Thirdly, coordinating the implementation of The UN Forest Instrument. Fourthly, sharing experiences in implementing The UN Forest Instrument |
| Step 6 | <p>The Paris Agreement and NDCs. Firstly, recognize new forestry concepts and priorities from the Paris Agreement to forest policies and plans. Secondly, integrating new concepts and priorities from the Paris Agreement into current forestry and related policies and plans. Thirdly, coordinating implementation of the Paris Agreement. Fourthly, sharing experiences in implementing the Paris Agreement so far.</p> <p>Other international frameworks for consideration during training and capacity building include the RAMSAR Convention, and Criteria and Indicators for SFM.</p> |
| Step 7 | Build the capacity of grassroots on the following, but first recognizing new concepts, strategizing on how to integrate new concepts to the national and local contexts, strategizing on how to coordinate implementation of regional instruments , and sharing information on experiences in implementing these regional frameworks: Regional instruments for forests and climate change in SADC, EAC and IGAD agreements, policies, programs and strategies for forest and climate change, and COMESA instruments, programmes and policies for forests and climate change. |

4.3 Gaps in the development of national forest sector contribution to current NDCs.

Nationally Determined Contributions refer to countrys’ climate actions which are a stipulation from the Paris Agreement. The Paris agreement states that all countries are “to undertake and communicate ambitious efforts” to contribute holding the

increase in global average temperature below 2°C (and to pursue efforts to limit the increase to 1.5°C) above pre-industrial levels (UNDP, 2017b). As of June 2017, 148 countries have ratified the Paris Agreement and 142 have submitted their first NDC. All the eight (8) surveyed countries ratified the Paris Agreement and have submitted their NDCs (see Table 16). In addition, most other countries in East and southern Africa had also submitted their first NDCs.

Table 16: African countries that submitted NDCs

| No | Country | Date of Submission | No | country | Date of submission |
|----|---------------|--------------------|-----|-----------------------|--------------------|
| 1. | Algeria | 20 October 2016 | 25. | Liberia | 27 August 2018 |
| 2. | Benin | 11 October 2017 | 26. | Madagascar | 21 September 2016 |
| 3. | Botswana | 11 November 2016 | 27. | Malawi | 29 June 2017 |
| 4. | Burkina Faso | 11 November 2016 | 28. | Mali | 23 September 2016 |
| 5. | Burundi | 17 January 2018 | 29. | Mauritania | 27 February 2017 |
| 6. | Cape Verde | 21 September 2017 | 30. | Mauritius | 22 April 2016 |
| 7. | Cameroon | 29 July 2016 | 31. | Morocco | 19 September 2016 |
| 8. | CAR | 11 October 2016 | 32. | Mozambique | 04 June 2016 |
| 9. | Chad | 12 January 2017 | 33. | Namibia | 21 September 2016 |
| 10 | Comoros | 23 November 2016 | 34. | Niger | 21 September 2016 |
| 11 | Congo | 21 April 2017 | 35. | Nigeria | 16 May 2017 |
| 12 | Côte D'Ivoire | 25 October 2016 | 36. | Rwanda | 06 October 2016 |
| 13 | DRC | 13 December 2017 | 37. | Sao Tome and Principe | 02 November 2016 |
| 14 | Djibouti | 11 November 2017 | 38. | Seychelles | 29 April 2016 |
| 15 | Egypt | 29 June 2017 | 39. | Sierra Leone | 01 November 2016 |
| 16 | Eritrea | 19 June 2018 | 40. | Somalia | 22 April 2016 |
| 17 | Eswatini | 21 September 2016 | 41. | South Africa | 01 November 2016 |
| 18 | Ethiopia | 09 March 2017 | 42. | Sudan | 02 August 2017 |
| 19 | Gabon | 02 November 2016 | 43. | Tanzania | 18 May 2018 |
| 20 | Gambia | 07 November 2016 | 44. | Togo | 28 June 2017 |
| 21 | Ghana | 21 September 2016 | 45. | Tunisia | 10 February 2017 |
| 22 | Guinea | 21 September 2016 | 46. | Uganda | 21 September 2016 |
| 23 | Kenya | 28 December 2016 | 47. | Zambia | 09 December 2016 |

| No | Country | Date of Submission | No | country | Date of submission |
|----|---------|--------------------|-----|----------|--------------------|
| 24 | Lesotho | 22 June 2018 | 48. | Zimbabwe | 07 August 2017 |

Source: UNFCCC NDC registry

The lack of capacity to understand complex polycentric forest and climate change instruments necessitates training of stakeholders (government ministries and departments, executive agencies, the legislature, judiciary, the private sector, civil society organizations, and local communities/the public) has been identified as the main gap. This can be addressed through training on theories and applications of SFM, GFG, FLEGT and REDD+. The training should explain the role of the relevant sections and articles of the UNFCCC, UNCBD, UNCCD, CITES, RAMSAR Convention, and the UN Forest Instrument in achieving the long-term objectives of the UN Forest Instrument and the Paris Agreement. In addition to the UN instruments, the numerous articles of the Paris Agreement that are crucial for the forests and forestry are presented in Table 17.

Table 17: PA Articles for sustainable forest management

| Article | Main Substantive Elements and Commitments |
|------------|---|
| Article 4 | What are the forest related mitigation measures reflected in the policy/legislative framework/strategy/action plan/programme - so as to achieve a balance between anthropogenic emissions by sources and removals by sink? |
| Article 5 | Any list of the types of greenhouse gas sinks and reservoirs and REDD+ initiatives reflected in the policy/legislative framework/strategy/action/programme? |
| Article 6 | Are there any cooperative approaches to enhance voluntary cooperation in implementing NDCs reflected in the policy/legislative framework/strategy/action plan/programme? |
| Article 7 | Any adaptation initiatives are there to enhance the adaptive capacity, strengthen resilience and reduce vulnerability of forests and people to climate change mentioned in the policy/legislative framework/strategy/action plan/programme (Article 7.1)? |
| Article 8 | Any measures for compensation against forest loss and damage due to climate change reflected in the policy/legislative framework/strategy/action plan/programme? |
| Article 9 | Any proposed sustainable forest financing mechanisms for effective and efficient implementation of the PA in the policy/legislative framework/strategy/action plan/programme? |
| Article 10 | Any forest related technology development and transfer measures reflected in the policy/legislative framework/strategy/action plan/programme? |
| Article 11 | Any highlights of various forest and climate related capacity building programmes and strategies in the policy/legislative framework/strategy/action plan/programme. |
| Article 12 | Any mention of forest related climate change awareness and education programmes in the policy/legislative framework/strategy/action plan/programme? |

| Article | Main Substantive Elements and Commitments |
|----------------------------------|---|
| Reporting, Review and Compliance | |
| Article 13 | Any principle of transparency of action and support while implementing the actions under the PA reflected in the policy/legislative framework/strategy/action plan/programme? |
| Article 14 | Any highlights of possibilities to conduct stocktaking and progress reporting on the implementation of the PA in the policy/legislative framework/strategy/action plan/programme? |
| Article 15 | Any mechanisms are there to facilitate implementation of, and compliance with, provisions of the PA in the policy/legislative framework/strategy/action plan/programme? |

The study revealed that SADC and EAC region face institutional, technical and financial capacity gaps and needs with respect to implementation of the adaptation and mitigation components of their NDCs (refer to the country reports, section 3.0). The main findings of this study is that most countries have not included LULUCF and REDD+ on the NDCs and have not put forward detailed budget requirements for mitigation measures (section 3.0). These research findings are in line with Pham et. al., (2018) who reported that drivers of deforestation and forest degradation are not addressed properly in some countries. These also include associated policies and measures to tackle drivers of deforestation and forest degradation, as well as transparent monitoring and evaluation frameworks.

NDCs approvals are not done at the highest political office and there is lack of appropriate policies and legislation with the development process. For instance, Mauritius and Burundi are the only countries in the SADC and EAC region where NDCs were adopted at four levels (ministerial, parliament, inter-ministerial and head of state). None of the eight surveyed countries have a four level NDC approval. Countries such as Angola, Malawi, Lesotho Zimbabwe, Eritrea, Namibia and Comoros have adoption of NDCs in three levels. All the surveyed countries reported that time allocated to the process was not sufficient which could have resulted to some limitations with the deliverables and obtaining quality reports. . Such could affect the adoption of policies and allocation of finances for sustainable forest management in the regions in the countries.

The technical development of SADC and EAC NDCs was informed by either multi-stakeholders or multi-sector participation which underscores the importance of good governance in most of the countries. Only a few countries, such as Mozambique, involved both multi-stakeholder and multi-sector stakeholders in the development of NDCs. Interestingly in South Africa and Zambia, there was neither multisector nor multi-stakeholder participation, which could be attributed to the limited time allocation for the process. Overall, in most countries there were intentions to involve the private sector at implementation stage of NDCs which is a sign of good governance. All the surveyed countries did not submit budget estimates and in some cases, barriers to implementation were not assessed and considered yet they are crucial. According to the African Development Bank (AfDB) (2019), only twenty-eight (28) African countries submitted costed NDCs adaptation plans with a combined cost of \$3.852 billion. Three of the surveyed countries Kenya, Zambia and Tanzania have NDCs adaptation costs of four hundred (400), two hundred (200) and one hundred and twenty-one million five hundred thousand (121.5) USD respectively (Table 18).

Table 18: Cost of Adaptation by Country

| No | Country | Annual Adaptation Cost (Million USD) | No | Country | Annual Adaptation Cost (Million USD) |
|------------|---------------|--------------------------------------|-----|-----------------|--------------------------------------|
| 1. | Benin | 55.946 | 15. | Mauritania | 93.774 |
| 2. | Burkina Faso | 39.008 | 16. | Mauritius | 40 |
| 3. | Cameroon | 18.150 | 17. | Morocco | 350 |
| 4. | CAR | 15.539 | 18. | Namibia | 226 |
| 5. | Chad | 141.6 | 19. | Niger | 16.070 |
| 6. | Comoros 3 | 3 | 20. | Seychelles | 2.950 |
| 7. | Djibouti | 8.330 | 21. | Sierra Leone | 9 |
| 8. | Egypt | 730.4 | 22. | Somalia | 1.325 |
| 9. | Ghana | 127.9 | 23. | Tanzania | 121.5 |
| 10. | Guinea | 6.7 | 24. | Togo | 15.4 |
| 11. | Guinea Bissau | 420 | 25. | Sudan | 12 |
| 12. | Kenya | 400 | 26. | Uganda | 24 |
| 13. | Madagascar | 287.130 | 27. | Zambia | 200 |
| 14. | Mali | 136.860 | 28. | Zimbabwe | 350 |
| Total Cost | | | | \$3.852 billion | |

Based on the analyses of the NDCs, between negotiating the Paris Agreement and its implementation, governments should be undertaking the following urgent actions in the meantime;

- a) Addressing climate change involves long-term integrated strategies that simultaneously address management of forests, land and water resources. The Paris Agreement can play a central role in aligning NDC actions with new national policy priorities which include; (i). Strengthening global and national recognition of the role of forests in NDCs; (ii). Implementing effective policies and measures in addressing drivers of deforestation and degradation; (iii). Formulating and developing long-term resource mobilization strategies (including sustainable financing mechanisms) for the NDCs; securing adequate funding sources from both developed and developing countries; and (iv). Implementing accountable and transparent land-use accounting and measurement, reporting and verification, developing a comprehensive NDC implementation plans and appropriate monitoring and evaluation frameworks for the NDCs.
- b) Choosing a risk-based approach to mainstreaming regional and international frameworks into national policy and legislative context. Mainstreaming recommendations of this study are in line with risk based mainstreaming approach suggested by NEPAD (2017) which includes capacity-building, sharing of successful experiences and technology transfer. Additional approaches include; the provision of scientific support, awareness-raising, mobilization of resources and the provision of assistance to countries in implementing policies. This approach should continue the cross-cutting issues, as identified in this study (Figure 1).
- c) Refining and updating the analysis underpinning the NDCs.
- d) Improving the national regulatory frameworks and aligning them to international best practices.
- e) Improving institutional frameworks and institutional arrangements.

- f) Identifying and prioritizing policies and measures based on national circumstances, i.e. the needs, priorities and available resources.

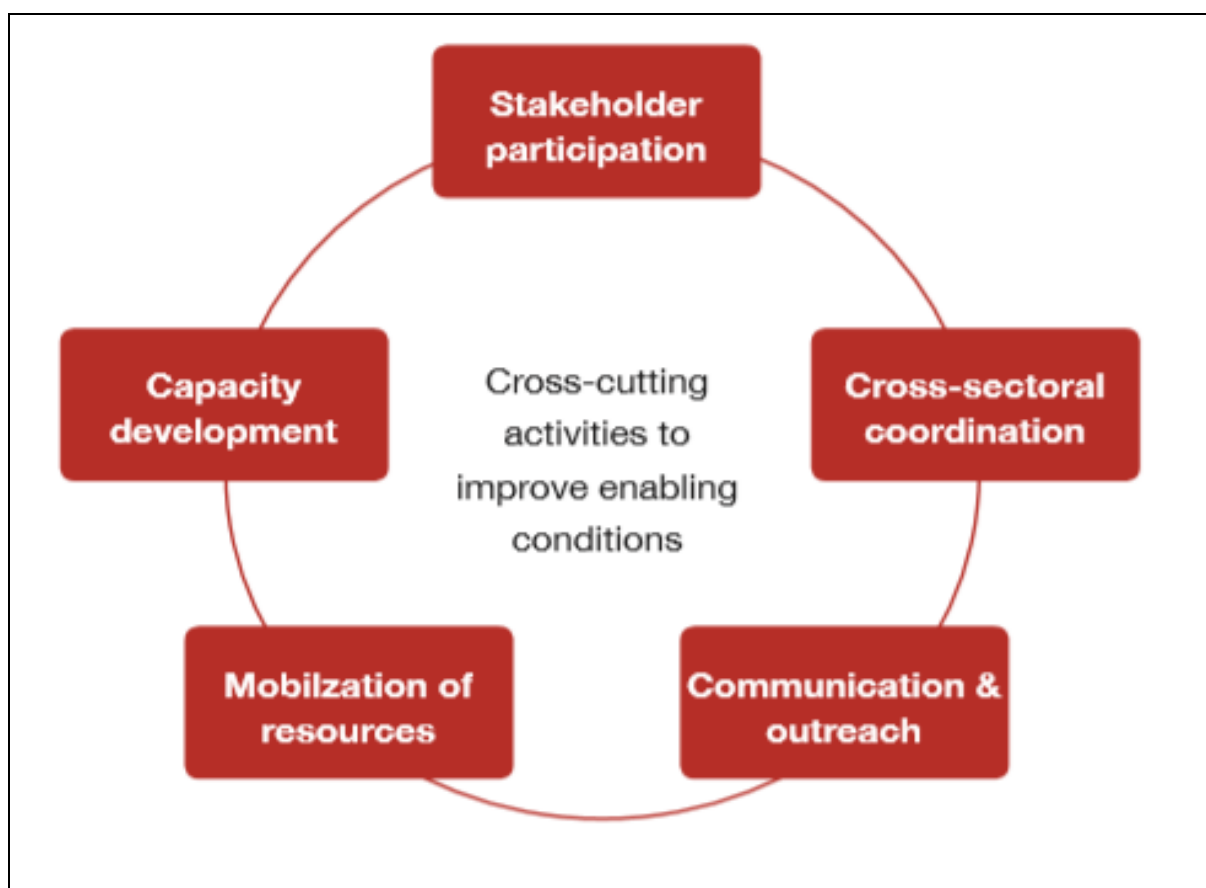


Figure 1: Cross-cutting issues. Source: Adapted from NEPAD (2017)

4.4 Role of REDD+ in the national forestry sector contributions to NDCs

REDD+ stands for countries' efforts to reduce emissions from deforestation and forest degradation and foster conservation, sustainable management of forests, and enhancement of forest carbon stocks. It was initially introduced at COP 11 (FAO, 2017; Sharma et al, 2016) as reducing emissions from deforestation⁶. The scope was later expanded, at COP 13, (Bali, 2007) to include consideration of degradation⁷. Additional consideration was given to the role of forest conservation, sustainable management of forests, and enhancement of forest carbon stocks⁸. The expansion enabled a more complete inclusion of developing countries including

⁶ See UNFCCC, Reducing Emissions from Deforestation in Developing Countries: Approaches to Stimulate Action, FCCC/CP/2005/MISC.1 (<http://unfccc.int/resource/docs/2005/cop11/eng/misc01.pdf>). Official support for including the issue on the COP's agenda was sent by Bolivia, the Central African Republic, Chile, Congo, the Democratic Republic of Congo, the Dominican Republic, and Nicaragua.

⁷ See Decision 2/CP.13.

⁸ See Decision 1/CP.13, paragraph 1(b)(iii).

those countries that were either heavily deforested or were in the process of increasing total forest area. These countries would not have been able to participate if REDD+ was limited to reducing emissions from deforestation. The scope of REDD+ activities was not finalized until 2010 at the COP 16 in Cancun, when five REDD+ activities were spelled out⁹. Activities, carbon pools and the greenhouse gases that countries may consider in the scope of their REDD+ programmes are highlighted in Table 19 below.

Table 19: Activities, carbon pools and greenhouse gases

| Activities | Carbon Pools | Greenhouse Gases |
|--|---------------------|-----------------------------------|
| Reducing emissions from deforestation | Aboveground biomass | Carbon dioxide (CO ₂) |
| Reducing emissions from forest degradation | Belowground biomass | Carbon monoxide (CO) |
| Conservation of forest carbon stocks | Dead wood | Methane (CH ₄) |
| Sustainable management of forests | Litter | Nitrous oxide (N ₂ O) |
| Enhancement of forest | Soil carbon | |

Source: FAO, 2018b

Countries are encouraged to undertake these activities “as deemed appropriate by each Party and in accordance with their respective capabilities and national circumstances” - i.e. countries can determine for themselves which activities to engage in and report on. However, the review process of REDD+ reference emission levels or reference levels¹⁰ submitted to the UNFCCC will require a country to justify why any pools or activities were omitted (i.e. deemed insignificant)¹¹, implying that significant activities and pools cannot be excluded¹². Iversen et. al., (2014) suggested the following REDD+ safeguards for the implementation of REDD+ activities, included in Cancun Decision 1/CP.16;

- Consistency with the objectives of national forest programs
- Consistency with relevant international conventions and agreements
- Transparent and effective national forest governance structures
- Respect for the knowledge and rights of indigenous peoples and members of local communities
- Full and effective participation of relevant stakeholders
- Consistency with conservation of natural forests and biological diversity
- Enhancing social and environmental benefits
- Addressing the risks of reversals

⁹ See 1/CP.16, paragraph 70.

¹⁰ For more information on REDD+ REL/RLs see Section 4.4.

¹¹ Warsaw COP Decision 13/CP.19, Annex paragraph 2(f).

¹² It is worth noting that Decision 12/CP.17 agreed on a stepwise approach to national forest reference (emissions) levels to enable developing countries to improve reference (emissions) levels over time by incorporating better data, improved methodologies and additional pools over time.

- Reducing displacement of emissions

The point of departure for contemporary trends in NDCs is based on the recent work of Pham Thu Thuy et al., (2018) on integrating REDD+ in NDCs and national climate policies in which three key messages emerged as follows; (i) Many developing countries' NDCs recognise the important role of forests and have put forward mitigation measures. However, these measures do not directly aim at reducing emissions. (ii) REDD+ is included in most developing countries' NDCs and climate change policies, but drivers of deforestation and forest degradation are not fully acknowledged. (iii) NDCs will be ineffective in achieving their intended outcomes unless they include clear policies and measures to tackle the drivers of deforestation and forest degradation, as well as a transparent monitoring and evaluation framework. Under this message, it is further mentioned that countries have made significant progress in these four (4) areas;

- Enhancing global and national recognition of the role of forests;
- Developing more detailed policies and measures to reduce emissions;
- Mapping out available funding resources; and
- Improving the monitoring and evaluation framework.

In addition, four (4) strategies on how countries can enhance the role of forests in climate policies are outlined as: (i) Strengthening global and national recognition of the role of forests in (I) NDCs; (ii) Implementing effective policies and measures in addressing drivers of deforestation and degradation; (iii) Securing adequate funding sources from both developed and developing countries; and (iv) Implementing accountable and transparent land-use accounting and measurement, reporting and verification.

Findings of this study are in line with key message number 1 as many countries have recognized the role of forests and forestry in their NDCs (section 3.0). However, in the Southern and Eastern Africa regions, REDD+ is not yet a common feature in the NDCs as opposed to key message number 2 above. Key message number 3 is logical (i.e. it's partly a governance issue) that the underlying causes or drivers of deforestation and forest degradation should be addressed for any meaningful progress in SFM to be realized.

4.5 Strategies for improving representation and role of LULUCF in NDCs

The signing of the Paris Agreement in November 2016, set a clear signal that all countries pledged to embark on NDCs, which entails ambitious actions towards addressing the impacts of climate. According to Fyson and Jeffrey (2018), the current total effort yielded by NDCs falls short of what is required to meet the Paris Agreement's temperature limits. Therefore, it is essential that countries track collective progress in raising ambition, including action in the Land Use, Land Use Change and Forestry (LULUCF) sector. Existing estimates suggest that about a quarter (25%) of mitigation under the NDCs would involve LULUCF. However, uncertainties in this contribution are substantial because there is no agreed method for including the LULUCF sector in mitigation targets under the Paris Agreement, which makes quantification of the LULUCF contribution challenging. Existing NDCs

vary substantially in how they incorporate LULUCF; for example, some NDCs include LULUCF under one umbrella mitigation target for all sectors, others have a separate target for LULUCF (based on emissions reductions, land area change or another metric), and others simply list policies and measures for the LULUCF sector. The survey revealed that most of the NDCs in the SADC and EAC regions lack comprehensive LULUCF and REDD+. Countries in these regions state their adaptation goals solely in qualitative, descriptive terms and fail to include details such as exact projects to be completed, target number of beneficiaries and detailed budget (section 3.0). Particularly concerning is the effect that including the LULUCF sector has on mitigation targets in other sectors (i.e. whether or not emissions reductions can be exchanged with other sectors), and thus the degree of transparency and verifiability (Fyson and Jeffrey, 2018).

4.6 Increasing capacity for national forestry sector reporting and strengthening NDC in 2020

Strengthening African capacity to monitor and report on compliance to international processes related to forests and climate change has become fundamental in order to utilize global frameworks optimally. FAO (2018a) and Giurca, and Jonsson (2015) made a key observation that there are several approaches to build the capacity of developing countries to comply with international processes related to forestry and climate change have been developed since the adoption of the Rio conventions. Notably, most of these approaches have been from the perspective of ensuring that the issues related to the agreements have been mainstreamed rather than from a perspective of the forest sector assessing, integrating and monitoring compliance with the forestry and climate change related agreements. Whereas the mainstreaming approach has helped to ensure that the issues from the relevant agreements are taken on board, they have tended to be narrowly focused on one attribute or function of forests rather than the full scope of functions or attributes.

Furthermore, this approach has tended to be a once-off exercise instead of being a process that allows for continuous tracking of developments and emerging issues relevant to the forestry sector and how these could improve sustainable forest management, monitoring compliance with the agreements and generating information for reporting on the agreements. In addition, the international regulatory context for sustainable management of forests appears really fragmented between multilateralism and cooperation, hard and soft law, norms and discourses and private self-regulation (Dlamini and Montouroy, 2017; Davis et. al, 2013). Further, fragmentation, polycentricity and complexity remain the primary characteristics of the regulation and governance of forests.

In order for African forestry stakeholders to fully benefit from the PA, the governments of African countries are expected to adopt appropriate measures to ensure that national forestry policies are mainstreaming PA and related initiatives. This study focused on the Paris Agreement and related global forest and climate change policies and initiatives. It examined how existing national forestry policies are mainstreaming PA and related initiatives. The surveyed countries have made an effort to integrate PA articles and other related initiatives (Annexure 5) in their national forestry policies. For instance, issues of good governance are being

addressed. Surveyed countries demonstrated the ability to engage diverse stakeholders in the development of policies and forest related frameworks (section 3.0). However, countries are still falling short in terms of securing climate and forest finance and monitoring and reporting to climate and reforest national and global platforms is not sufficient. Table 20 shows global forest and climate change instruments.

Table 20: Global forest related dedicated instruments and cross cutting issues

| Dedicated Instruments | |
|--|---|
| UN Agreements on forests and related issues | Un 2030 Agenda UNFF UNCED Framework (1992) UNCBD UNCCD UNFCCC RAMSAR Convention on Wetlands (1971) CITES (1979) World Heritage Convention (1972) Vienna Convention on the Protection of the Ozone Layer (1985) Indigenous and Tribal Peoples Convention (1989) |
| Multilateral Trade Agreements | ITTO (1994) WTO (1995) |
| Cross-cutting issues Instruments | |
| Forest principles, discourse and norms | Forest Principles (1992) The 2007 Forest Principles (The NLBI) The UN Forest Instrument The New-York Declaration on Forests (2014) UN Strategic Plan for Forests (2017 – 2030) Quadrennial Programme of Work of the UNFF for the period 2017-2020 |
| International Organizations' programmes | FAO-COFO National Forest Programs FAO Forest Assessment mechanisms: SFM tools World Bank Forest Strategy |
| Climate change related issues | UN REDD Paris Agreement and NDCs World Bank Forest Carbon Partnership Facility Green Climate Fund |
| Criteria and Indicators for Sustainable Forest Management (Nine eco-regional forestry processes) | Temperate and boreal forests are covered by the Pan-European and the Montreal processes; Arid zone forests by the Dry Zone Africa Process, the Near East Process and the Regional Initiative for Dry Forests in Asia; -Tropical moist forests are covered by the Lepaterique Process of Central America; -The Tarapoto Proposal, ITTO and the African Timber Organization (ATO). (Some of the regionally based processes cover also other forest types in the region.) Several countries are member of more than one process. |
| Market-related instruments | -Code of conduct -Normalization -Certification schemes |

Source: Modified from Dlamini and Montouroy (2017)

The observed lack of capacity to understand the complex polycentric forest and climate change instruments necessitates the training of stakeholders (government ministries and departments, executive agencies, the legislature, judiciary, the private sector, civil society organizations, and local communities/the public). Training and capacity building sessions should be based on theories and applications in SFM, GFG, FLEGT and REDD+. This training should explain the role of the relevant sections and articles of the UNFCCC, UNCBD, UNCCD, CITES, RAMSAR Convention, and the UN Forest Instrument in achieving the long-term objectives of the UN Forest Instrument and the Paris Agreement.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 General conclusions

The development and implementation of NDC in Africa has not received significant political commitment, financial resources and technical support. In most countries, NDC are not well integrated among sectors. That is, most countries have their instruments housed in separate government ministries and agencies (including government parastatals). Training and capacity building for both Government ministries and general stakeholders have not been adequate due to finance limitations. Training sessions should be based on theories and applications in SFM, GFG, FLEGT and REDD+ and explanation of the role of the relevant sections and articles of the UNFCCC, UNCBD, UNCCD, CITES, RAMSAR Convention, and the UN Forest Instrument in achieving the long-term objectives of the UN Forest Instrument and the Paris Agreement.

5.2 Specific conclusions

Stakeholder participation is imperative for the SADC and EAC regions to achieve sustainable forest management. However, the study revealed that stakeholder engagement was not sufficient. None of the surveyed countries involved multi-stakeholder and multi-sector commission in development of NDCs. Issues of gender mainstreaming are not adequately addressed in all the eight (8) surveyed countries (section 3.0). Additionally, countries do not produce sufficient budgetary estimations or requirements for implementation of programmes and this renders the NDCs inadequate. The exclusion or limited recognition of REDD+ in most NDCs is a massive disadvantage towards their effective and efficient implementation, as REDD+ could be a key aspect of the INDCs/NDCs considering its five 5 components ((a) Reducing emissions from deforestation; (b) Reducing emissions from forest degradation; (c) Conservation of forest carbon stocks; (d) Sustainable management of forests; (e) Enhancement of forest carbon stocks. The little or no attention given to LULUCF/Forestry is a glaring omission in some INDCs or NDCs; in most countries INDCs lack comprehensive information on the assumptions and methods applied in relation to LULUCF. To a great extent, this could be attributed to the uncertainty

surrounding approaches and methodologies used for estimating, projecting and accounting emissions and removals from the LULUCF Sector.

5.3 General recommendations

Governments need to prioritize sustainable forest management and climate change since this is a global problem. It is recommended that governments involve every stakeholder in all the stages of climate change policy development and implementation of sustainable forest management practices that reduce emissions from LULUCF, reduce deforestation while promoting economic development. Without the cooperation between government and stakeholders, initiatives for reducing emission will not be effective. The development of NDCs must be given adequate time and budget. This will ensure that each stakeholder submit their own versions of NDCs and the Government compile final versions for the countries based on the individual NDCs. Stakeholders, particularly the private sector, must make climate change-based commitments to ensure that these companies do not make profits by degrading the environment and contributing towards climate change. Such commitments must be verifiable, and their practices must be transparent. Capacity building (for Government's ministries, politicians, NGO, financial institutions and private sector) is necessary to put everyone into perspective about climate change mitigation and adaptation. Stakeholders need to be informed about the Paris agreement commitments.

5.4 Specific recommendations

The SADC and EAC regions should concentrate on achieving initial target and should only set higher goals upon successful implementation of the initial NDCs. Many countries within the SADC and EAC region's mitigation strategies have only recently gotten off the ground, therefore setting realistic targets would be challenging. Countries should only increase their NDC pledge when the strategies have produced measurable and reliable results. This makes sense given that countries do not have adequate budgets for implementing the NDC implying that the strategies will not be adequately implemented within the set timeframe. SADC and EAC region's credibility in meeting the Paris agreement commitment is at stake; so countries must ensure they use SMART (simple, measurable, attainable, reasonable, time bound) strategies. The regions must learn from other countries (such as Brazil) where success stories on NDCs implementation has been documented (UNDP, 2017b; UNFCCC, 2018). A strong and reasonable climate change mitigation and adaptation plan will inspire and attract potential climate change financiers.

Based on the analyses of the NDCs, between negotiating the Paris Agreement and its implementation, EAC and SADC Governments should be undertaking the following urgent actions in the meantime: Aligning NDC actions with new national policy priorities;

- (i) Strengthening global and national recognition of the role of forests in (I) NDCs;
- (ii) Implementing effective policies and measures in addressing drivers of deforestation and degradation;

- (iii) Formulating and developing long-term resource mobilization strategies (including sustainable financing mechanisms) for the NDCs; securing adequate funding sources from both developed and developing countries; and
- (iv) Implementing accountable and transparent land-use accounting and measurement, reporting and verification; developing a comprehensive NDC implementation plan and appropriate monitoring and evaluation frameworks for the NDCs. Choosing innovative and effective approaches for mainstreaming regional and international frameworks into national policy and legislative context. Refining and updating the analysis underpinning the NDCs. Improving the national regulatory framework and aligning it to international best practice. Improving institutional frameworks and institutional arrangements.

5.5 Future outlook

There is more action required by most African countries to achieve the set 2020 NDC targets. Some sectoral NDC targets, such as the energy target, could be met by 2020. Sustainable forest management will not be met given that countries have just finalized their NDC's and they have not had enough resources to implement NDCs adequately. Data management needs to be improved by integrating with other priority targets such as the SDGs in order to improve information sharing and reporting among stakeholders and forest platforms. The lack of available funding to implement proposed activities has hindered NDCs progress, therefore countries should consider long-term funding. Lastly, credible methodologies for measuring outcomes are crucial for NDC implementation in the near future.

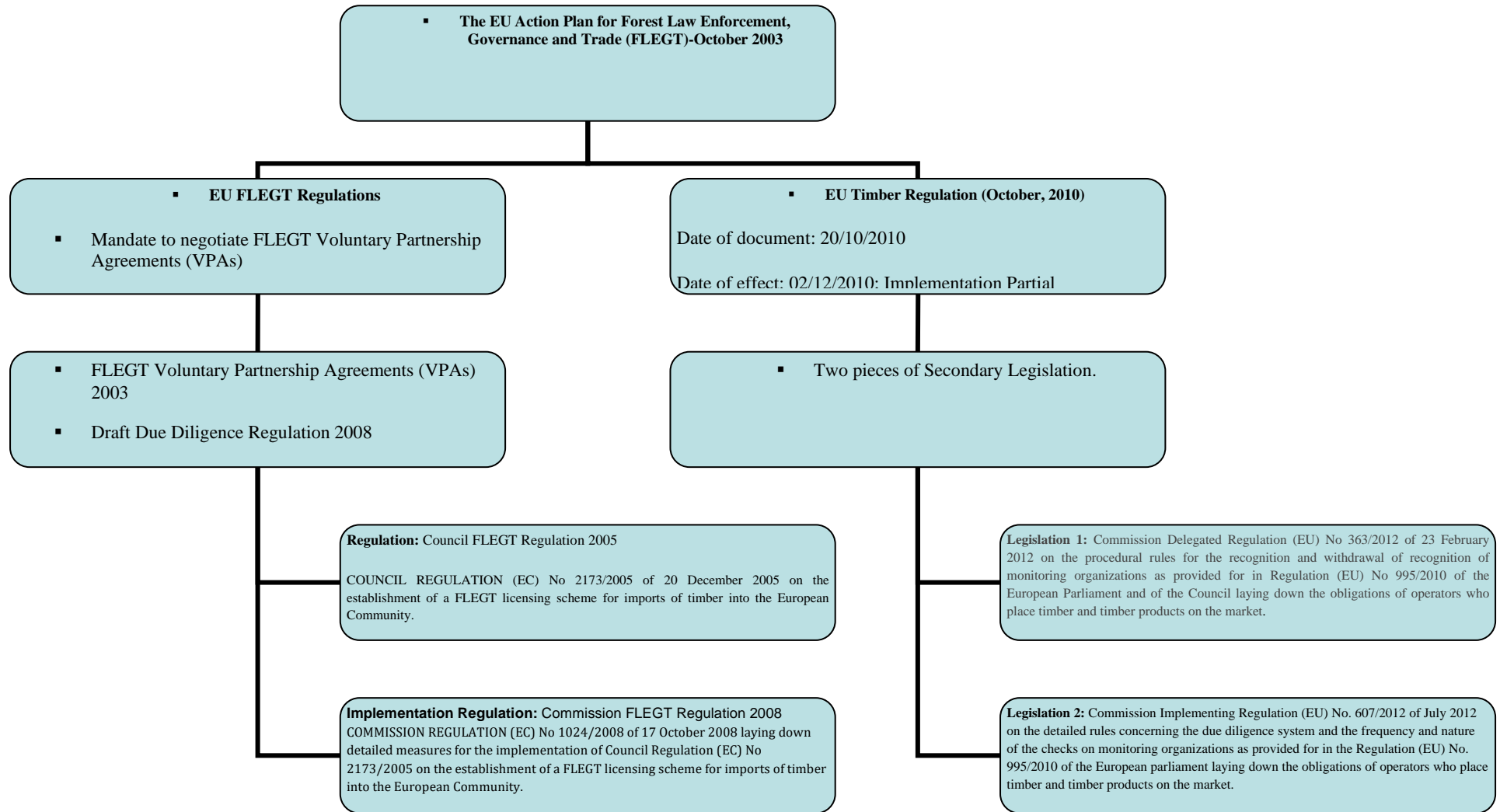
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Annexure 1: The EU FLEGT Scheme



Annexure 2: The 2015 UN Sustainable Development Goals (SDGs) - UN 2030 Agenda

| SDG 1 -17 | Brief Description |
|---------------|---|
| SDG 1 | End poverty in all its forms everywhere. |
| SDG 2 | End hunger, achieve food security and improved nutrition, and promote sustainable agriculture. |
| SDG 3 | Ensure healthy lives and promote well-being for all at all ages. |
| SDG 4 | Ensure inclusive and equitable quality education and promote life-long learning opportunities for all. |
| SDG 5 | Achieve gender equality and empower all women and girls. |
| SDG 6 | Ensure availability and sustainable management of water and sanitation for all. |
| SDG 7 | Ensure access to affordable, reliable, sustainable, and modern energy for all. |
| SDG 8 | Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. |
| SDG 9 | Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. |
| SDG 10 | Reduce inequality within and among countries |
| SDG 11 | Make cities and human settlements inclusive, safe, resilient and sustainable. |
| SDG 12 | Ensure sustainable consumption and production patterns. |
| SDG 13 | Take urgent action to combat climate change and its impacts. |
| SDG 14 | Conserve and sustainably use the oceans, seas and marine resources for sustainable development. |
| SDG 15 | Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. |
| SDG 16 | Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. |
| SDG 17 | Strengthen the means of implementation and revitalize the global partnership for sustainable development. |

Source: UN (2015)

Annexure 3: Role of forests and forestry towards the implementation SDGs

| Sustainable Development Goals | |
|---|---------------------|
| Forestry aspect | SDGs |
| Criteria & Indicators contributes to SDGs | 12, 15, 17 |
| Collaborative conflict management contributes to SDGs | 10, 15, 16 |
| Forest certification contributes to SDGs | 8, 12, 15 |
| Forest finance contributes to SDGs | 1, 2, 8, 9 |
| Forest governance contributes to SDGs | 1, 5, 15 |
| Forest law enforcement contributes to SDGs | 8, 15 |
| Forest policy contributes to SDGs | 8, 15, 16 |
| Forest tenure contributes to SDGs | 1, 2, |
| Gender in forestry contributes to SDGs | 5, 15 |
| Occupational health and safety in forestry contributes to SDGs | 8, 9, 15 |
| Participatory approaches and tools for SFM contributes to SDGs | 5, 10 |
| Public forestry institutions contribute to SDGs | 15, 16, 17 |
| Climate change adaptation and mitigation contributes to SDGs | 1, 2, 13, 15, |
| Market analysis and development of forest-based enterprises contributes to SDGs | 2, 8, 9, 10, 12, 15 |
| Drylands forests and agro silvopastoral systems contributes to SDGs | 1, 2, 12, 15 |
| Forest and water contribute to SDGs | 3, 6, 15 |
| Forest genetic resources contributes to SDGs | 1, 2, 15 |
| Forest inventory contributes to SDGs | 15, 17 |
| Forest management monitoring contributes to SDGs | 15, 17 |
| Forest management planning contributes to SDGs | 15, 17 |
| Forest pests contributes to SDGs | 11, 15 |
| Forest protected areas contributes to SDGs | 11, 12, 15 |
| Forest reproductive material contributes to SDGs | 2, 15 |
| Forest restoration and rehabilitation contributes to SDGs | 13, 15 |
| Forestry responses to natural and human-conflict disasters contributes to SDGs | 1, 2, 13, 15 |
| Forests, food security and nutrition contribute to SDGs | 2, 15 |
| Health benefits from forests contributes to SDGs | 3, 11, 15 |
| Land-use planning contributes to SDGs | 11, 13, 15 |
| Management of Non-Wood Forest Products contributes to SDGs | 2, 3, 12, 15 |
| Mangrove ecosystem restoration and management contributes to SDGs | 2, 6, 13, 14, 15 |
| Mountain forests contributes to SDGs | 6, 15 |
| REDD+ contributes to SDGs | 1, 2, 13, 15 |
| Silviculture and management of planted forests contributes to SDGs | 12, 15 |

| Sustainable Development Goals | |
|---|---------------|
| Forestry aspect | SDGs |
| Silviculture in natural forests contributes to SDGs | 12, 15 |
| Urban and peri-urban forestry contributes to SDGs | 3, 11, 13, 15 |
| Using treated wastewater in forestry and agroforestry in drylands contributes to SDGs | 6, 15 |
| Vegetation fire management contributes to SDGs | 13, 15 |
| Watershed management contributes to SDGs | 6, 15 |
| Wildlife management contributes to SDGs | 1, 2, 15 |
| Wood energy contributes to SDGs | 2, 7, 12, 15 |
| Wood harvesting contributes to SDGs | 8, 9, 12, 15 |

Source: FAO (2018d).

Annexure 4: Selected Climate change related policies for SADC and EAC Region

| Region Policy instrument | Relevant Objectives/Articles |
|--|---|
| Southern African region | |
| SADC Declaration on Agriculture and Food Security (SADC, 2004) | Conservation, management and sustainable utilization of forestry; Monitor and curtail illegal harvesting and export of natural resources; and harmonization of implementation of natural resources management policies, programmes and investment in processing of natural resources products. |
| SADC Protocol on Environmental Management for Sustainable Development (2014) | The objective of the Protocol is to promote sustainable utilization and trans-boundary management of the environment. |
| SADC Forest Protocol (2002) | To: a. promote the development, conservation, sustainable management and utilization of all types of forests and trees; b. promote trade in forest products throughout the Region in order to alleviate poverty and generate economic opportunities for the peoples of the Region; and c. achieve effective protection of the environment, and safeguard the interests of both the present and future generations. |
| The SADC Forestry Strategy (2010 – 2020) | The objectives of the forestry strategy are further reflected in 8 Strategic Programme Areas which are: 1) Climate Change Mitigation and Adaptation; 2) Protection of Key Water Catchment Forests; 3) Energy supply and rural poverty reduction; 4) Enhanced participatory forest management; 5) Enhanced intra-regional trade in forest products; 6) Cooperation in trans-boundary forest and fire management; 7) Forest assessments and information management; |

| | |
|---|---|
| | and 8) Capacity improvement in SADC. |
| The SADC Policy Paper on Climate Change | What climate change means for the SADC region, GHG emissions of SADC, Climate change impacts on the forestry sector in the SADC region, Deforestation in SADC, Challenges for the forestry sector towards climate change adaptation. |
| SADC support programme on Reducing Emissions from Deforestation and forest Degradation (REDD) | Management of trans-boundary and key forests; improvement of forest management for sustainability and reduction in deforestation and forest degradation. |
| East African Countries | |
| The EAC Climate Change Policy | <i>Pillars:</i> 1. adaptation; 2. mitigation; and 3. Research (monitoring, detection, attribution and prediction). <i>Identified support areas to policy pillars:</i> a. technology development, b. technology transfer, c. finance, d. knowledge management, e. education, f. public awareness, g. training and information. |
| The EAC Climate Change Strategy | Outlines a range of measures that ensure support and effective implementation of the policy at all levels. The strategy defines required actions and resources to achieve the set goal over a short timeframe. |
| The EAC Climate Change Master Plan, 2011-2031 | Provides a long-term vision and basis for an implementation framework for climate change adaptation and mitigation actions. It presents an overall picture and vision for the region's response by giving an estimation of all resources needed to become climate resilient. |
| EAC Trans boundary Environmental Assessment Guidelines for Shared Ecosystems in East Africa | These Guidelines are for all activities in or near shared ecosystems that are likely to cause significant ecological, environmental, health and social impacts. |
| NAPAs, Adaptation Strategies, CDM Projects and REDD+ | Partner states to EAC have identified urgent priority measures in the NAPAs. Four of the Partner States which are LDCs, namely Burundi, Rwanda, Uganda and Tanzania have developed NAPAs. |

Annexure 5: Country specific policies used for development of INDCs for SADC

| Country | Policies |
|--------------|--|
| Angola | Strategic Plan for Disaster Risk Management (2011), National Afforestation & Reforestation Strategy (2010), Strategy to fight Poverty (SFP), National Adaptation Programmes of Action for Climate Change (NAPA) (Angola, 2016) |
| Botswana | Climate Change and Institutional Framework, National Water Master Plans, Sustainable Land Management, The Second National Communication, and National Adaptation Plan (NAPA)(Botswana,016) |
| Eswatini | National Climate Change Policy and National Development Strategy, assuming that NAPA will be in place by 2020 (Eswatini, 2016) |
| South Africa | National Climate Change Adaptation Strategy, National Sustainable Development Strategy, National Climate Change Response Policy (NCCRP), National Development Plan (NDP) South Africa, 2016) |
| Zambia | Seventh National Development Plan (being drafted), National Action Plan (being drafted), Second National Communication (2015), Technology Needs Assessment (2013), National Action Programmes of Action for Climate Change (NAPA), National Climate Change Response Strategy (2010), National Policy on Environment (2007) (Zambia, 2016) |
| Mauritius | National Adaptation Plan (NAPA), Low-emission development strategies (LEDS), Nationally Appropriate Mitigation Actions (NAMAS) (Mauritius, 2016) |
| Zimbabwe | National Adaptation Plan (being drafted), First, Second and Third National Communication, National Climate Change Response Strategy (Zimbabwe, 2016). |
| Malawi | National Climate Change Investment Plan (2014), Malawi's Climate Change Learning Strategy (2012), National Environment and Climate Change Communication Strategy (2012), Malawi Growth and Development Strategy I and II, Malawi Economic Growth Strategy, Malawi Poverty Reduction Strategy Programme, NAPA (2006), Malawi Climate Change Management Policy (Malawiwi, 2016). |
| Lesotho | National Strategic Development Plan (2012-2017), National Adaptation Plan of Action (Lesotho, 2016). |
| Mozambique | Pilot Programme for Climate Resilience, National Adaptation Plan, Second National Communication, National Climate Change Adaptation and Mitigation Strategy (Mozambique, 2016). |
| Namibia | National Adaptation Plan (being drafted), National Climate Change and Action Plan, National Policy on Climate Change, National Development Plans (Namibia, 2016). |
| Comoros | Low-emission development strategies (LEDS) (Comoros, 2016) |
| Madagascar | National Adaptation Plan, National Adaptation Programmes of Action for |

| Country | Policies |
|------------------------------------|--|
| | Climate Change, Third National Communication (Madagascar, 2016) |
| Democratic Republic of Congo (DRC) | National Adaptation Programmes of Action for Climate Change (2006), National Adaptation Plan (DRC,2016) |
| Seychelles | Seychelles Sustainable Development Strategy (2012-2020), National Climate Change Strategy (2009), Second National Communication (Seychelles, 2016) |

Annexure 6: Country specific policies used for development of INDCs for EAC

| Country | Policies |
|----------|--|
| Tanzania | Tanzania Five Year Development Plan (2011/12 – 2015/16), Zanzibar (Vision 2020), Tanzania Development Vision (2025), Zanzibar Climate Change Strategy (2014), National Climate Change Strategy (2012) (Tanzania, 2016) |
| Kenya | National Adaptation Plan, National Climate Change Program (Kenya, 2016) |
| Ethiopia | National Adaptation Plan (NAPA), Low-emission development strategies (LEDS), Five sectoral adaptation plans, Nine Regional States and two City adaptations, Ethiopian Programme of Adaptation to Climate Change, National Adaptation Programmes of Action for Climate Change, Second Growth and Transformation, Climate Resilient Green Economy Strategy (Ethiopia, 2016). |
| Uganda | National Adaptation Plan, National Adaptation Programmes of Action for Climate Change, Second National Development Plan, National Climate Change Policy (2015) (Uganda, 2016). |
| Eritrea | Climate Resilient Sustainable Economy Development Policy, Ten Year Long-term Indicative Perspective Development Plan - GOE, The Five Year Indicative Development Plan - GOE, Interim – Poverty Reduction Strategy Paper – GOE, National Constitution – GOE, Macro Policy, National Action Program, Second National Communication, National Programme of Action for Climate Change (Eritrea, 2016). |
| Rwanda | Vision 2020, Economic Development and Poverty Reduction Strategy, Green Growth and Climate Resilience Strategy (2011), National Strategy for Climate Change and Low Carbon Development Strategy, National Adaptation Programmes of Action for Climate Change(Rwanda, 2016) |
| Djibouti | National Adaptation Plan, National Adaptation Programmes of Action for Climate Change(Djibouti, 2016) |
| Burundi | National Action Plan (NAP), Second National, First National Communications, National Strategy, Action Plan on Climate Change |

| Country | Policies |
|---------|--|
| | (2012), National Climate Policy (2012), National Adaptation Programmes of Action for Climate Change (2007) (Burundi, 2016) |
| Somalia | National Adaptation Programmes of Action for Climate Change (Somalia,2016) |
| Sudan | National Adaptation Plan (being drafted), Sustainable Development Goals, Millennium Development (Sudan, 2016) |



African Forest Forum
P.O. Box 30677-00100
Nairobi GPO KENYA
Tel: +254 20 722 4203 Fax: +254 20 722 4001
E-mail: exec.sec@afforum.org
Website: www.afforum.org

