The role of forest and wildlife conservation policies on implementation of REDD+ initiatives in Tanzania

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Abstract

Climate change is the greatest global challenge of our time. It is posing challenges to sustainable livelihoods and economic development, particularly in developing countries like Tanzania. One of the mitigation measures to address climate change impacts is to implement Reduced Emissions from Deforestation and Forest Degradation (REDD) policy. The Government of the United Republic of Tanzania (URT) is currently voluntarily implementing REDD+. REDD+ implementation in the country is supported by a number of policies including conservation policies namely the National Forest Policy of 1998 and Wildlife Policy of Tanzania of 2007. These policies support implementation of REDD+ though a number of initiatives. This paper shows that the while National Forest Policy supports REDD+ through Participatory Forest Management (PFM) and trust funds, the Wildlife Policy of Tanzania supports REDD+ through Wildlife Management Areas (WMAs)

1.0 Introduction

Climate change is the greatest global challenge of our time. It is posing challenges to sustainable livelihoods and economic development, particularly for developing countries like Tanzania. The adverse impacts of climate change on environment, human health, food security, human settlements, economic activities, natural resources and physical infrastructure are already noticeable in many countries including Tanzania. In order to address climate change, a number of global and national mitigation and adaptation measures have been initiated. The Intergovernmental Panel on Climate Change (IPCC) (2007) estimates that 18-20% of current global annual carbon emissions which are responsible for causing climate change result from loss of tropical forests. The rate of deforestation in Tanzania is estimated at 400,000 ha per annum (Mgoo 2013). There is unprecedented global recognition of the urgent need to sharply reduce deforestation and forest degradation to help avert dangerous levels of climate change (Harvey et al 2010). Reduced Emissions from Deforestation and Forest Degradation (REDD) is among mitigation

measures to address climate change impacts. REDD is an effort to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. Countries that demonstrate emissions reductions may be able to sell those carbon credits on the international carbon market or elsewhere. This measure is envisaged not only to play a significant role in climate change mitigation, but also generate new financial stream and enhance livelihoods. REDD+ is a term used to expand the scope of REDD activities beyond avoided deforestation and degradation activities to include conservation forest carbon stocks, sustainable management of forests and enhancement of forest carbon stocks. The Government of the United Republic of Tanzania (URT) considers the REDD+ initiative a viable option that can provide opportunities for the country to meet its obligations of managing her forests and woodlands on a sustainable basis and at the same time respond to poverty reduction and climate change mitigation and adaptation initiatives accordingly.

Currently, there are initiatives in Tanzania to voluntarily implement REDD as one of measures to mitigate climate change (URT 2009). The potential of the country to participate in climate change mitigation measures is high. To this effect, the government has developed a National REDD Framework (URT 2009), a National Strategy and Action Plan for REDD (URT 2013).

REDD is supported by a number of policies such as the National Land Policy of 1995 which aims at promoting and ensuring wise use of land, guiding allocations, preventing degradation and resolving conflicts and the National Environmental Management Policy of 1997 which recognises the importance of forests in climate change mitigation (URT 2009). Other policies which support REDD are conservation policies namely the National Forest Policy of 1998 and Wildlife Policy of Tanzania of 2007. These policies support implementation of REDD+ in Tanzania though a number of initiatives. The objective of this paper is to show how National Forest Policy and Wildlife policies' initiatives support implementation of REDD+ in the country.

2.0 Therole of Conservation policies initiatives in supporting REDD+

2.1 National Forest Policy of 1998

In 1998, the government of the United Republic of Tanzania approved a new National Forest Policy (URT 1998). The overall goal of the Policy is to enhance the contribution of the forest sector to the sustainable development of Tanzania and the conservation and management of her natural resources for the benefit of present and future generations. The policy is under review since 2008.

2.1.1 National Forest Policy Initiatives supporting REDD+ implementation

2.1.1.1Participatory Forest Management

The National Forest Policy of 1998 (URT 1998) advocates for participation of other stakeholders in conservation and management of forest resources in the country through participatory forest management (PFM) in the form of joint forest management (JFM) and community forest based management (CBFM). There are 12 policy statements (Nos 2, 3, 4, 5, 6, 7, 9, 12, 16, 20, 29 and 39) in the Policy which support PFM. PFM is promoted all over the country to improve management forest resources, livelihoods governance. JFM takes place on reserved land owned and managed by either the government (central or local) or private sector. In this approach, forest adjacent communities enter into joint management agreements to share responsibilities, costs and benefits with the owner. In CBFM, the local communities are the owners as well as the rights holders and duty bearers. Most of the CBFM areas are demarcated as village general land. Thus, they are also called village land forest reserves (VLFRs).

As a result of this policy initiative, a total of 7,758,788 hectares (ha) countrywide are under PFM (Mgoo 2013). Out of this area, 5,392,095 ha are under JFM and 2,366,693 ha are under CBFM. It is reported (MNRT 2009, Ngaga *et al.*, 2013) that JFM and CBFM have led to improvements in forest conditions including regeneration, increased water flow and reduced illegal activities such as encroachment and illegal harvesting.

As already pointed out, the National Forest Policy is under review since 2008. One of the policy approaches emphasized in the draft national forest policy strategies is the use of PFM implemented through JFM and CBFM as one of the main ways to address deforestation and degradation drivers through REDD+ in Tanzania (Blomley *et al.*, 2011).

These authors argue that REDD+ funding would be used to speed up the rate of expansion of land area under PFM (currently only 16% of the country's forests are under PFM) and as a potentially new finance stream within community forestry systems. Carbon financing, especially REDD, provides a unique opportunity to support communitybased natural resources management in Tanzania (Katoomba 2009). Malimbwi and Zahabu (2010) argue that PFM projects are currently being established very slowly. Access to REDD funds could potentially facilitate and speed up this process and possibly, reduce the high levels deforestation and forest degradation. Kajembe et al (2012) found that JFM and CBFM seemed to be good models for REDD+ in addressing climate change mitigation and livelihood security as opposed to the ordinary state forest management regime. The JFM and CBFM are offer more incentive options to communities' livelihood. Munishi (2013) analysed the suitability of different forest management practices, approaches and forest types for the implementation of REDD+ initiatives in Tanzania based on seven criteria namely forest extent/area covered (ha). carbon potential (total & t/ha), biodiversity values and other ecosystem services, forest condition and threats, deforestation and forest degradation trends, governance (role and potential for community participation in deforestation), reducing and potential contribution to livelihoods. He found that Central Government Forest Reserves rank the highest in the suitability for REDD+ followed closely by CBFM, PFM (general). All these have well defined legal setting and ownership rights with potential for community participation. Further, Tanzania is currently piloting REDD+ implementation. According to URT (2009), one of the criteria for selection of REDD+ pilot sites is existence of PFM at the potential site.

2.1.1.2 Establishment of the Eastern Arc Mountains Conservation Endowment Fund

The Eastern Arc Mountains Conservation Endowment Fund (EAMCEF) is a Trust Fund established as a mechanism to provide longterm and reliable funding support for Community Development, **Biodiversity** Conservation and Applied Research Projects, promote biological diversity, which ecological functions and sustainable use of natural resources in the Eastern Arc Mountains of Tanzania (EAMCEF 2009). Activities which contribute to the promotion of economic development and social welfare of the local communities in the target areas are given high priority for funding. The Eastern Arc Mountains together with the Southern Rift, the Albertine Rift and the Ethiopian Highlands form the Eastern Afromontane region which is recognized globally as one of the 34 biodiversity hotspots characterized by high concentrations of endemic species now under serious threat. The mountain blocks of the Eastern Arc cover about 5.350 km (535,000 ha) and spread over fifteen districts in five regions of Tanzania namely, Tanga (East and West Usambara and Nguu Mountains), Kilimanjaro (North and South Pare Mountains), Morogoro (Nguru, Uluguru, Ukaguru, Malundwe, Udzungwa, Mahenge and Rubeho Mountains), Dodoma (Rubeho Mountains) and Iringa (Udzungwa Mountains) (EAMCEF 2009).

In order to attain the financial sustainability required for EAMCEF over the longer term, and in order to realize effective conservation and sustainable outcomes for the Eastern Arc Mountains, the Royal Government of Norway, in May 2011, agreed to make available adequate financial resources to EAMCEF for the next five years (June 2011-May 2016), totalling US\$ 5, 947,700.00 (EAMCEF 2011). This funding is being made available for providing support to among others, the establishment and management of 8 Nature Reserves and the Udzungwa

Mountains National Park, which form the core of the proposed Eastern Arc Mountains World Heritage Site. Establishment of Nature Reserves is implementation of Policy statement No. 15 of the National Forest Policy of 1998 which in part reads "Forest reserves with protection objectives of national strategic importance may be declared as nature reserves" (URT 1998). EAMCEF operations and programme activities for the first year of Norwegian funding (June 2011to May 2012) also included supporting the enhanced mitigation and adaptation to climate change through on farm and forest gaps tree planting and research on carbon storage potential of natural forests and managing the Eastern Arc Mountains for carbon credits and emission trading. Munishi (2013) reports that on the basis of Forest Management categories, Government Forest Reserves followed closely by Forests on General Land and Nature Reserves ranked the top most in suitability for REDD+ However, ownership rights for carbon would need to be clarified.

EAMCEF was established as part of implementation of Policy statement No. 40 which states that "new and innovative sectoral financing mechanisms will be developed and directed to the key functions and stakeholders of the forest sector" (URT 1998).

2.1.1.3 Establishment of Tanzania Forest Fund

The Tanzania Forest Fund (TaFF) is a conservation Fund established under Sections 79 – 83 of the Forest Act Cap. 323 [R.E. 2002] (URT 2002) as a mechanism to provide long term reliable and sustainable financial support to Forest Conservation Sustainable Forest Management (SFM) in the country. The Fund is a Public Fund which was operationalised in July 2010 as a Not-for-Profit organization governed by a Board of Trustees. The main intent of establishing TaFF is to mobilize and provide stable and long term sources of funding for conservation

and sustainable management of natural resources in Tanzania. The major roles of the Fund include Mobilizing financial resources Fundraising, Investments through Services; Funding Programmes and/or Projects through award of grants; and supervising and administering Fund resources and operations as stipulated under the provision which established by the Act. The objectives of TaFF are to (URT 2002): (i)Promote awareness of the importance of the protection, development and sustainable use of forest resources through public education and training; (ii) Promote and assist in the development of community forestry directed towards the conservation and protection of the forest resources; (iii) Promote and fund research into forestry; (iv) Assist in enabling Tanzania to benefit from international initiatives and International funds directed towards the conservation and protection of biological diversity and the promotion of sustainable development of forest resources; (v) Assist groups of persons and individuals to ensure compliance with the Forest Act; (vi) Assist groups of persons and individuals to participate in any public debates and discussions on forestry; and

(vii) Promote such other activities of a like nature to those set out in this section as will advance the purposes of the Act (URT 2002).

TaFF operates throughout Mainland Tanzania and provides financial support to its beneficiaries committed to interventions geared towards sustainable conservation and management of forest resources improving livelihood of forest adjacent communities (Ngaga 2014). Thus, TaFF can be source of financing for CBFM in which forests could managed for REDD+. TaFF was also established as part of implementation of Policy statement No. 40 which states that "new and innovative sectoral financing mechanisms will be developed and directed to the key functions and stakeholders of the forest sector" (URT 1998).

2.2 The Wildlife Policy of Tanzania initiatives

2.2.1 The Policy

In March 2007, the Government of the United republic of Tanzania approved a revised wildlife policy (URT 2007). The policy's objective are (i) Protection and conservation of wildlife and wetlands; (ii) Sustainable utilization wildlife and wetlands of Management and development of wildlife and wetlands resources; (iii) to Strengthen Resource Monitoring; and (iv) To carry out Enhance Communication, Research, Education and Public Awareness sustainable wildlife management.

2.2.2Initiative that supports REDD+ implementation

2.2.2.1 Establishment of Wildlife Management Areas

The Wildlife Policy calls for the creation of Wildlife Management Areas (WMAs) which give local communities some control over wildlife resources utilization on their lands and enable them to benefit directly from these resources. Policy statement number (c) under objective 3.2.1 of the Wildlife Policy of Tanzania (URT 2007) on loss of wildlife habitat and wetlands degradation states that village communities living adjacent to protected areas, wetlands or in wildlife corridors will be encouraged to establish WMAs in order to secure habitat for wildlife and halt wetlands degradation.

WMAs provide communities with the enticement of employment opportunities, easier access to natural resources and economic profit from business ventures through the devolvement of power and authority over wildlife.

Currently, there are 38 WMAs (Mwina 2013) which are managed by the local communities with some backup support from the wildlife experts from the district councils and the Wildlife Division. The WMAs are estimated to cover over 30,000 km (3,000,000 ha)

(Wildlife Division 2012). Nineteen of the WMAs have been gazetted and their respective Community-Based Organizations (CBOs) have attained Authorized Association (AAs) status. Another 19 WMAs are at different stages of establishment. A total of 333 villages benefit from WMA activities. The main income generating activities conducted in WMAs are tourist hunting; photographic tourism; live animal sale; forestry and beekeeping and fisheries (Mwina 2013). According to Katoomba Group (2009), WMAs areas have high potential for REDD+ in miombo or acacia savanna regions since they occur in large blocks (typically 250,000 ha) and in areas with relatively high poverty levels. Munishi (2013) analysed the suitability of different forest management practices, approaches and forest types for the implementation of REDD+ initiatives in Tanzania based on seven criteria namely forest extent/area covered (ha), carbon potential (total & t/ha), biodiversity values and other ecosystem services, forest condition deforestation threats. and degradation trends, governance -role and potential for community participation in reducing deforestation. and potential contribution to livelihoods. He found that WMAs have high suitability for REDD+ projects. There is therefore potential for the WMAs to get income from sale of carbon credits if managed under REDD+.

3.0 Challenges 3.1 PFM

Implementation of REDD+ under PFM faces a number of challenges. Abdallah *et al.*, (2012) report the following challenges for Mgori Village Land Forest reserve (managed under CBFM) as identified by communities living around the forest:

(i) Changes in land tenure and land compensation

The communities adjacent to Mgori forest feel that their land will be grabbed by whoever is going to implement REDD+

project in their land. This is due to the fact that awareness on the benefits and costs arising from REDD+ are not well known to them. Further, the communities are not aware of the implementation mechanism to be involved.

- (ii) Threat from wild animals Mgori Forest has a number of animals which pose threat to both human life and their properties, in particular crops and livestock. This is an issue of concern to the communities and one control mechanism has been to clear some parts of the forest. The number of elephants is likely going to increase and damage to field crops is likely going to increase and may lead to hunger. Other crop damaging animals mentioned to be a threat to the communities livelihoods include monkeys, wild pigs and birds including *qualea qualea* because their habitat will be improved as a result of CBFM.
- (iii)Limited access to forest products The communities believe that accessibility to different forest products will not be easy because of restrictions that may be imposed under REDD+. However, this may not be the case because under REDD+, there is a room for sustainable use of natural resources.
- (iv)**Increased poaching** Communities feel that REDD+ will lead to an increase in the number of wild animals in Mgori forest. Due to an increase in the number of different wild animals, poaching is likely to increase and this will add a burden to the local authorities in controlling poaching

Nzunda and Mahuve (2011) also contend that success in REDD may result in unintended effects such as increased human-wildlife conflicts as a result of increase in abundance of animals due to better conserved habitat and more severe accidental fires due to accumulated fuel loads as a result of fire prevention. Poor governance may lead to inequity in distribution of benefits and costs of REDD. According to Malimbwi and Zahabu (2010), one of the challenges in PFM,

particularly in JFM is the lack of/ unclear benefit sharing mechanism between parties to forest management agreements. ioint Important gaps in the legislation regarding the ratio and mechanism for sharing forest management benefits under JFM have meant that many JMAs have not been signed by government and have therefore stalled, frustrating local efforts to manage these forest resources sustainably. Blomley et al (2011) also argue that PFM in Tanzania (and elsewhere in the world) appears to work best (for both people and forests) when clear, binding and mutually enforceable agreements are made regarding how the benefits of forest management are shared between stakeholders at different levels. In CBFM, all forest management benefits are transferred to local actors, in return for the transfer of all corresponding forest management costs and duties. In JFM, no clear agreement has been reached on how much forest management benefits are transferrable to local actors (from, for example, licensed forest harvesting in jointly managed production forests). The matter is further complicated by the fact that JFM potential in high biodiversity catchment forests is further limited by restrictions on the use or harvest of forest products as a result of higher levels of protection. Consequently, the viability of JFM at the local level is questionable due to the disproportionate transfer of management costs to local managers and minimal transfer of benefits. In the absence of legal clarifications regarding benefit sharing arrangements in JFM, many observers are beginning to question its long term future (Pfliegner and Moshi, 2007 in Blomley et al. 2011).

Kajembe *et al* (2012) explored the practical challenges of the REDD architecture in addressing climate change mitigation and improving local communities livelihoods to draw early lessons from two REDD+ pilot projects in Kondoa and Rungwe districts in Dodoma and Mbeya regions respectively. Generally, REDD+ is facing challenges in most of its important aspects with regards to

climate change mitigation and securing community livelihoods. One of the challenges is lack of clear land tenure and land-use plans have been a critical barrier for the REDD+ initiatives despite the fact that about half of the studied communities were aware of the initiatives.

3.2 WMAs

For REDD projects in WMAs it will be necessary to clarify the legal arrangements for managing forest resources. The procedures for establishing WMAs on village land are similar in some ways to those required for CBFM, but differ in other important respects and Blomley 2006). (Nelson wildlife importantly, management responsibility is vested in a CBO called an "Authorized Association" (AA). The AA operates at the WMA level and draws its membership from the various villages covered. This differs from CBFM or JFM in which management authority is vested in the village council and its sub-committee, the VNRC. According to the Wildlife Management Regulations, the legal basis for forest management in WMAs can be established through the Forest Act. The most common route taken for villages to obtain legal and exclusive authority to manage forest resources on village land, is through the establishment of a VLFR. To do this however means establishing two potentially conflicting natural resource management bodies - the VNRC, operating at the village level and managing forest resources in accordance with the Forest Act, and an AA, operating at the ecosystem level and managing wildlife resources under the wildlife legislation. This arrangement would result in conflict and duplication. For REDD to function effectively in the context of WMAs, there are two options: a written and legally binding statement from the MNRT allowing the AA to manage and oversee forest management, including carbon monitoring and sales; establishment of a Community Forest Reserve (CFR) covering the same area as the WMA, and which vests management responsibility in

the AA. It is critical to introduce transparent mechanisms that facilitate equitable and transparent sharing of revenues obtained from REDD projects. A concern with the AA, which is separated from local government structures and therefore beyond the reach of village or district leadership, is the potential for conflict between competing local power bases. According to Katoomba Group (2009), WMAs are found in areas with lower deforestation pressures, so there may be problems in demonstrating additionality, especially if they are already benefiting from hunting or game viewing fees.

4.0 Conclusions and recommendations 4.1 Conclusions

Both the National Forest Policy of 1998 and Wildlife Policy of Tanzania of 2007 support REDD+ initiatives though PFM and WMAs. Implementation of REDD+ in PFM forests and WMAs offer many incentive options to communities' livelihood.

There is no benefit sharing mechanism in JFM

There are no clear legal arrangements for managing forest resources in WMAs and therefore no carbon benefit sharing mechanism in these areas.

There is low awareness among stakeholders, especially communities on REDD+ initiatives

4.2 Recommendations

It is important to ensure that legally binding agreements are made regarding the allocation and/or sharing of carbon benefits from forest management in JFM and WMAs and that any system developed to transfer benefits from one level to another is effective, transparent and creates positive incentives for performance.

There is need for awareness raising among communities on REDD+ initiatives in order for the to participate effectively and efficiently.

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