

IMPROVING FOREST GOVERNANCE IN EAST AFRICA'S EASTERN ARC MOUNTAINS

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EXECUTIVE SUMMARY

The Eastern Arc Mountains in Tanzania and Kenya are an ecoregion of great ecological and socio-economic importance. The global significance of this ecoregion is manifested through its role as a carbon sink and as a habitat for a number of endemic and endangered flora and fauna. Despite their importance, the Eastern Arc Mountains are facing significant threats, with an estimated 70% of original forest cover already lost to deforestation and degradation. This briefing explores the threats, policy responses and governance challenges of the Eastern Arc Mountains with a particular focus on Tanzania, where the greater part of this ecoregion is situated.

INTRODUCTION

Natural forests play a central role in the conservation of flora and fauna. They also provide a range of ecosystem services that are important for both local livelihoods and broader human welfare, for example, acting as sinks for carbon dioxide. The critical role of natural forests in carbon sequestration has long been recognised in global efforts to address climate change. However, natural forests continue to suffer degradation as a result of anthropogenic activities. Although Africa's share of historical carbon emissions is relatively small on a global scale, it does contribute significantly to carbon emissions

RECOMMENDATIONS

- 1 Greater focus is required to combat key drivers of deforestation, for example, through providing alternatives to the reliance on biomass as a primary energy source.
- 2 Participatory forest management efforts should be strengthened. This is contingent on improved capacity and increased resource allocation for state agencies responsible for forest governance.
- 3 Research capacity should be improved in order to support evidence-based interventions. Greater emphasis should also be placed on the science-policy interface, and the involvement of local communities in the generation and dissemination of research findings.

emanating specifically from changing land-use patterns and deforestation. During 2000–05, the Africa region accounted for 17% of total carbon emissions relating to changing land-use patterns and deforestation, a period during which the continent lost an average of four million hectares of forests a year, second only to South America.² Investments in conserving and managing Africa's forests sustainably, adequately managing fires, and tackling proximate and underlying causes in adjacent sectors – particularly agriculture, energy and infrastructure – will contribute significantly to curbing global climate change, while providing significant livelihood opportunities at the local level.

The Tanzanian forestry sector contributes approximately 3.5% of the country's GDP, and provides employment opportunities through forest industries, forest management employment and other forest initiatives.³ Despite this contribution, socio-economic and environmental dynamics and needs have taken precedence over forest conservation in Tanzania. Increased pressure on forest resource use for human needs has put a strain on the forestry sector. It is against this backdrop of changing environmental conditions and governance failures that the briefing examines the challenges facing the Eastern Arc Mountains, a forest area of particular national and global significance.

THE EASTERN ARC MOUNTAINS

The Eastern Arc Mountains fall largely within Tanzania, but also extend into Kenya. They form part of the Eastern Afromontane Biodiversity Hotspot, one of 35 areas identified around the globe as being both extremely rich in biodiversity while also facing significant threats (such hotspots have lost at least 70% of their primary vegetation). The Eastern Arc Mountains are also included in the World Wide Fund for Nature's priority ecoregions. They contain approximately 100 endemic vertebrates (10 mammals, 20 birds, 29 reptiles, 38 amphibians) and approximately 1 500 plant species, including 68 endemic tree species.⁴ But despite their global significance, they have been exposed to a series of human threats. These include overexploitation of timber and non-timber forest products; and the encroachment of farming activities into forest habitats, leading to habitat degradation and fragmentation.

Tanzania currently loses about 373 000 hectares of forest a year; a significant share of which is accounted for by deforestation and land-use change in the Eastern Arc

Mountains. The UN's Food and Agriculture Organization estimates that Tanzania lost about 5.86 million hectares of forest cover to deforestation and degradation from 2000–15, approximately 10% of the country's forest cover.⁵ A relatively high population growth rate of 3% and a heavy reliance on wood and charcoal for energy production are key drivers of this trend. More than two-thirds of Tanzania's population live in rural areas, where just 17% of households have access to electricity. However, even the country's rapidly expanding urban population rely heavily on biomass, with a 2009 study finding that Dar es Salaam residents use over 1 900 tonnes of charcoal a day.⁶

FORESTRY GOVERNANCE IN TANZANIA

The Tanzanian government launched the first National Forest Policy in 1953. This was followed by the Tanzania Forestry Action Plan in 1988, which was revised in 1994 to assist in the establishment of forest guidelines, legislation and other policy-related needs governing the forestry sector. An updated [National Forest Policy](#) was promulgated in 1998, followed by a [Forest Act in 2002](#) and [Community Based Forest Management Guidelines in 2007](#).

Forests may be protected through a range of institutional mechanisms, including national parks, game reserves, nature reserves, marine reserves, National Forest Reserves (administered by central government), Local Authority Forest Reserves (LAFRs) and Village Land Forest Reserves (VLFRs). During the 1990s, with significant support from the donor community, there was an increased emphasis on participatory forest management, particularly through the establishment of LAFRs and VLFRs. This shift saw an emphasis on empowering local communities – through Village Natural Resources Committees – to play an active role in forest governance activities; and permitting local access to forest resources, rather than banning exploitation in protected areas entirely.

In spite of Tanzania's relatively well-developed policy and legislative framework for forest governance, there has been ineffective management of the sector. During the 1980s and 1990s, Tanzania implemented an International Monetary Fund structural adjustment programme. This resulted in the heavy curtailment of funding for forestry governance. Little or no funding was allocated to the management of National Forest Reserves during much of this time, which has had a lasting impact on the sector. A recent assessment identified central

government-administered National Forest Reserves as having the lowest level of management effectiveness among the various types of forest reserves in Tanzania.⁷ This is particularly concerning as, despite a significant expansion of LAFRs and VLFRs, central government-administered protected areas still constitute the largest proportion of protected forest areas in the country.

From 2009–14, forestry governance efforts in Tanzania were shaped by donor support for reducing emissions from deforestation and forest degradation in developing countries (REDD+). REDD+ is a mechanism developed by parties to the UN Framework Convention on Climate Change to establish financial incentives to limit carbon emissions resulting from deforestation and forest degradation, while also supporting conservation and the sustainable management of forests. About \$75 million was disbursed to support REDD+ activities in Tanzania between 2009 and 2014. Direct contributions from the Tanzanian government over this time amounted to only \$2 million, or, when accounting for in-kind contributions, to just over \$6 million.⁸ Despite improved research, governance and community engagement activities, and the establishment of several pilot projects, support for Tanzania's REDD+ programme declined after 2014. This has significantly affected progress in this domain, although it has not halted entirely. Research to measure carbon and track a variety of trends in the forestry sector continues; and in 2016 the National Carbon Monitoring Center was established.

Researchers have argued that Tanzanian forestry stakeholders missed significant opportunities by not linking REDD+ activities more closely with the past focus on participatory forest management; and that REDD+ funding has largely benefited government departments, academia, consultants and conservation NGOs, rather than local communities.⁹ 'Despite the massive financial support, taken overall the [REDD+] projects appear to have been unable to resolve the key challenges of deforestation and forest degradation that also hampered the achievement of ambitions under the previous PFM [participatory forest management] model.'¹⁰

These findings are also evident in the Eastern Arc Mountains. In 2001 the Tanzanian government partnered with donor countries and multilateral funding agencies to establish the Eastern Arc Mountains Endowment Fund. The fund's objective has been to support projects focusing on community development and conservation, applied research and the management of forest reserves

and protected areas. Despite these efforts, a recent study of selected forest reserves in the Eastern Arc Mountains found limited government support and weak enforcement of local forestry by-laws by Village Natural Resources Committees. Compliance with local forest-use rules was highly variable and, in the case of Kimboza Forest Reserve, 'collective choice and constitutional rules at village level had collapsed and [this had] also made operational rules ineffective'.¹¹

ADDRESSING GOVERNANCE CHALLENGES

Significant progress has been made in developing the institutional and policy mechanisms required for effective forest governance in Tanzania. The shift towards participatory forest management and the expansion of locally managed forest reserves has been an important development that holds significant promise for improving local agency and governance outcomes. However, measured against the fundamental criteria of stemming deforestation and forest degradation, it is clear that outcomes are variable at best. Effective forest governance is constrained by poorly defined land tenure and use rights, lack of economic incentives to promote alternatives to forestry products (for example, alternatives to charcoal production using forest timber), and capacity constraints within governance institutions. Poor enforcement of forest laws and regulations by both government and community stakeholders undermine sustainable forest practices.

Forest governance efforts in Tanzania remain largely dependent on donor support. Local communities and related institutions, such as Village Natural Resources Committees, should play a central role in driving participatory forest management. However, it is pivotal that these efforts be supported by effective administrative and management capacity in government agencies. This requires increased financial and human resource commitments. Broader issues of community resilience and development must of course be taken into consideration. Improved infrastructure and access to economic opportunities have the potential to lessen dependence on forest resources. At the same time, however, these processes may facilitate greater access for unsustainable resource exploitation – for example, through the expansion of commercial logging and medium- to large-scale agriculture. Addressing poverty and broader development challenges is therefore an imperative both for direct human wellbeing and wider environmental sustainability, but this must be paired with effective governance and compliance.

Greater emphasis on sustainable agricultural practice is also required. In this respect, strengthening of extension services to support innovations drawn from climate-smart agriculture, conservation agriculture and agroforestry can have a significant impact on the relationship between agriculture-dependent communities and adjacent forest areas.

Finally, while progress has been made in recent years in improving biological, meteorological and socio-ecological research to support effective forest governance in Tanzania, these efforts must be further strengthened and expanded. It is essential that policy, development and conservation interventions are supported by a strong evidence base. This relates not only to the production of knowledge but also to effective partnerships, dissemination and engagement. For example, focusing on the science–policy interface; and collaborating with local communities to generate and share insights from research activities.

CONCLUSION

To date an estimated 70% of original forest cover in the Eastern Arc Mountains has been lost to deforestation and degradation. Despite a swathe of policy instruments and significant donor support, the decline of the Eastern Arc Mountains forest ecosystem continues. This has significant livelihood and conservation implications, and far-reaching impacts in undermining the ecosystem's carbon sequestration potential. As concerning as these trends are, the decline of the Eastern Arc Mountains forest ecosystem is not inevitable. Many of the necessary policy instruments are in place. The expansion of LAFRs and VLFRs has given local communities a greater stake in forest conservation and sustainable utilisation. Research and innovations in agricultural practices and approaches are assisting role players in developing more effective models for the governance of the broader socio-ecological system. If these gains are to be leveraged to reverse existing trends, however, it will require greater investment in resources and human capital, establishing greater cooperation between role players (particularly government agencies and local communities), and strengthening evidence-based interventions.

ACKNOWLEDGEMENT

The Governance of Africa's Resources Programme is funded by the Norwegian Ministry of Foreign Affairs.

ENDNOTES

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