



The Conservation and Management of the Forests of the Eastern Arc Mountains of Tanzania

The forests of the Eastern Arc Mountains (EAM) in Northeastern Tanzania contain exceptional species richness of local and global importance. They are recognized by WWF as a Global 200 Ecoregion, and by Conservation International as a terrestrial biodiversity hotspot. The EAM forests are also acknowledged as important carbon stocks. A 2005/2006 study by the Edinburgh Centre for Carbon Management (ECCM), supported by GEF and implemented by UNDP, estimated that in 2000 the Eastern Arc



Mountains stored 151.7 million tons of carbon—91.7 million tons of which were found in the existing reserves.¹ These forests, however, have witnessed extensive deforestation and degradation caused by human activities. The same study found that over the last 20 years deforestation in the EAM forests has resulted in the loss of approximately 34 million tons of carbon. The study also revealed that undisturbed Eastern Arc Mountain forests store 100 to 400 tons of carbon per hectare (ha), whereas heavily disturbed forests store around 85 tons per ha. Thus improved management of existing reserves could result in the avoided loss of over 200 tons of carbon per ha.

This project financed by the GEF and implemented by UNDP aimed at conserving the biodiversity of the Eastern Arc Mountain forests at a level beyond what could be expected based on the prevailing management objectives of watershed protection. To address the threats facing the forests of the Eastern Arc Mountains—and the carbon they store—this project was designed with two main components: the “strategy” component that aimed to develop a holistic conservation strategy for the entire Eastern Arc Mountains ranging over 12 mountain blocks in

Tanzania and including a forested area of approximately 350,000 ha; and a site-based project in the Uluguru Mountains, one of the most important mountain blocks in the Eastern Arc Mountains in terms of global biodiversity values. A third component, funded by the German government’s International Climate Initiative (ICI) and added to the project in late 2008, sought to enhance carbon storage in the forests of the Eastern Arc Mountains by improving the management effectiveness of the protected area network.²



In its seven-year lifetime, the project yielded significant results, many of which are expected to have long-term impacts. Overall, protected area coverage in the Eastern Arc Mountains increased by over 500,000 ha as a result of the project’s interventions; coverage is expected to further increase in the near future as a direct result of the project.

¹ <http://www.eccm.uk.com/en/ukcasesstudyviewer.obyx?cs=easternarcmt.html>

² <http://www.bmu-klimaschutzinitiative.de/en/projects?d=197>

The project also supported the creation of protected forest corridors in sensitive areas, including in the Derema area and Bunduki Gap in the Ulugurus.

This work has been complemented by efforts to strengthen institutional capacity to manage the network of 150 PAs in the area. The Nature Reserves Unit was established within the Forestry and Beekeeping Department (FBD) of Government—strengthening the institutional capacity to manage Nature Reserves. The management effectiveness of the targeted forest sites improved from a mean score of 34.4 percent at the project’s start to 47 percent near the project’s end. The annual average percentage of forest loss dropped from 15.7 percent in 1990/2000—before the project’s work—to 2.8 percent in 2007/2008; forest is still being lost in the EAMs, but at a significantly decreasing rate. Additionally, repeated surveys in 2004 and 2009 showed that key threats have been reduced in all 26 forest sites where the assessments were conducted.



The project was designed to strengthen the protected area (PA) system in the EAMs in order to ensure a refuge for biodiversity; the importance of this strategy has been validated through work undertaken by the project—which has shown conclusively that: deforestation is occurring outside, not within PAs; and while forest degradation occurs within PAs, the levels of degradation are lower in the well-managed PAs.

The project has also contributed to building strong cooperation and capacity among its partners- CARE, Tanzania Forest Conservation Group, and Sokoine University, that will be sustained within other similar programmes. Given the general emphasis on REDD and forest carbon projects in Tanzania, there is a great need for people with knowledge in the field; inspired by the project’s results, many people are now working on activities that follow in the project’s footsteps. Thus, the project’s results are sustainable, and are mainstreamed within the push for operational forest carbon schemes in the country and all the work that it entails.

The project played an important role in assisting Tanzania in leveraging resources from UN REDD and the ICI. The project’s investment in the aforementioned ECCM carbon study and associated capacity building and advocacy was instrumental in Tanzania’s successful application to become a Quick Start country under the UN-REDD programme; without this investment, Tanzania likely would not have been invited to join Quick Start. The associated activities will significantly increase the funding available for forest conservation and is expected to improve sector governance—which will be critical to avoiding forest loss and to ensuring the long-term sustainability of the important conservation efforts spearheaded by the project in the Eastern Arc Mountains.

Project Details

Duration: 7 years (September 2003 – December 2010)

GEF Grant: US\$5.22 million

Co-financing: US\$14.3 million (committed); US\$4.48 million (leveraged resources)

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