

CEPF FINAL PROJECT COMPLETION REPORT

I. BASIC DATA

Organization Legal Name: Danish Centre for Forest, Landscape and Planning, University of Copenhagen

Project Title: The Change from Central to Community-Based Forest Management in a Biodiversity Hotspot in Tanzania: Evaluating the Effect on Conservation and Poverty Alleviation

Implementation Partners for this Project: None

Project Dates: December 1, 2007 - December 31, 2008

Date of Report (month/year): March 2009

II. OPENING REMARKS

Tanzania's Forest Policy and Act promote devolution of ownership and management responsibilities over forest resources to local communities in Participatory Forest Management Agreements (PFM). The general expectations are that the delegated management responsibilities and rights to collect revenue from natural resource exploitation will contribute to poverty alleviation and thus generate long-term local incentives for sustainable use and protection of forest resources and biodiversity.

So far PFM has largely been implemented on an area or project basis but the Government of Tanzania is in the process of developing a program for scaling up and implementing PFM on a national basis. In consideration of these efforts there appears to be very limited hard evidence of the impact of PFM and particularly on to what extent it has been successful in delivering on its three policy objectives, conservation, improved livelihoods and good governance. Joint Forest Management (JFM) in forests classified as catchments forests in order to protect national and international valuable ecosystem services and biodiversity represent a particular problem in relation to generating sufficient benefits and income to maintain community interest and incentives for protection of forest resources and biodiversity. Capture or even sharing of benefits currently appears to be limited and the long term viability of JFM agreements in catchments forests has been considered questionable.

There is, however, general agreement that it is important to proceed in order to ensure the protection of Tanzania's natural habitats. Evaluating community-based forest management initiatives to determine best practices has therefore been identified as a priority in the Eastern Arc forests of the Eastern Afromontane biodiversity hotspot.

The aim of this project is therefore to evaluate to what extent JFM contributes to improved conservation and livelihoods and identify potential problems and specific requirements in order to provide input to the national strategy for implementation of JFM in areas characterized by high biodiversity conservation and catchments value and limited opportunities for exploitation. The evaluation is conducted as a case study in the Udzungwa Mountains of the Eastern Arc based on a temporal comparison with indicators of conservation and livelihoods assessed by the author in a study of bushmeat hunting in New Dabaga Ulongambi (NDUFR) and West Kilombero Scarp Forest Reserves (WKSFR) conducted in 2001. This study and additional aspects were repeated in 2008. Conservation outcomes are assessed as changes in wildlife densities and levels of bushmeat hunting compared to the Uzungwa Scarp Forest Reserve (USFR) where JFM has not

been implemented. Livelihoods outcomes are assessed as changes in assets, income and wealth ranks of the bushmeat hunters compared to non-hunters. The temporal comparison covers seven years of implementation of PFM and five years of community-based patrolling, which is considered sufficient time for effects to occur.

Planned outputs focus on developing recommendations for adjustments required to ensure the sustainability of management and resource exploitation in biodiversity rich areas in close collaboration with local authorities, NGOs and other PFM practitioners. Recommendations will be directed towards optimizing procedures for effective forest management and monitoring in the national implementation of PFM in Tanzania.

Since submission of the application for support to CEPF the project has evolved into a PhD project with a considerably different timeframe and data requirements. As a result some aspects of this project have been postponed.

III. ACHIEVEMENT OF PROJECT PURPOSE

Project Purpose: *The effect of PFM on conservation and poverty alleviation is evaluated and the results are presented and discussed with local authorities, research institutions, NGOs and other PFM practitioners. Best practices are identified and recommendations for improvements to PFM and input to the national strategy for implementing PFM are developed in close collaboration with these stakeholders.*

Planned vs. Actual Performance

Indicator	Actual at Completion
Purpose-level:	
<p><i>1. Seminars and discussions held with relevant local, regional and national authorities, research institutions, NGO's and other PFM practitioners. Results are presented in end of project report for CEPF.</i></p>	<p>Due to this one year project evolving into a three year PhD several aspects in the original timeframe have been postponed to accommodate requirements to the magnitude and quality of data etc. Analysis and discussion of the results with relevant research institutions and PFM practitioners is thus currently ongoing. Seminars and discussions with relevant authorities and other stakeholders to identify best practices and develop recommendations have been postponed until final results are available.</p>

Describe the success of the project in terms of achieving its intended impact objective and performance indicators.

All biophysical and socioeconomic surveys required in relation to the temporal comparison of this project have been conducted in accordance with plans. This include repeating transect surveys to assess relative wildlife densities and human disturbance in NDUFR, WKSFR and USFR as well as three regeneration and three target species surveys in NDUFR. Standardized socio-economic questionnaires to assess assets, income and catch have been conducted with hunters in the villages surrounding NDUFR and WKSFR and with non-hunters in two villages surrounding NDUFR. Semi-structured interviews on hunting and the perceived benefits and disadvantages of JFM as well as assessing the governance of the Village Natural Resource Councils (VNRC) have been conducted with hunters and non-hunters in villages surrounding NDUFR, WKSFR and USFR. In addition monthly monitoring reports of the Village Natural Resource Councils has been collected from the eight villages surrounding NDUFR and WKSFR as well a 15 woodland villages in Iringa Region.

Preliminary analysis of the biophysical and socio-economic data in order to evaluate the effect of implementation of JFM on conservation and livelihoods has been conducted. Results will be further analyzed to assess to what extent variations in conservation outcomes of the implementation of JFM between locations and between villages in the same location can be explained by variations in socio-economic and governance aspects. Based on the preliminary analysis interview guides for focus group discussions with hunters, patrol guards and VNRC's will be designed to further examine aspects that could not be explained by the quantitative data.

IV. PROJECT OUTPUTS

Project Outputs:

Planned vs. Actual Performance

Indicator	Actual at Completion
Output 1: The effect of Danida-facilitated PFM in the Udzungwa Mountains on conservation and poverty alleviation is documented, lessons learnt analyzed, and recommendations for improvements developed and disseminated to local and national authorities, NGO's and other PFM practitioners.	Preliminary analysis of the effect of PFM has been conducted and further analysis of lessons learned is ongoing. Results and recommendations for the way forward will be documented in a manuscript in a scientific journal and disseminated to stakeholders to the extent possible.
<i>1.1. End of project report.</i>	Pending and will be in the form of a manuscript to be published in a scientific journal.
Output 2: An analysis of costs, benefits and local attitudes towards incorporating Ndundulu and Nyumbanitu Forest Reserves into the Udzungwa Mountains National Park.	This aspect was canceled due to becoming irrelevant after WKSFR and two other forest reserves were gazetted as Nature Reserve in 2008. However, data was collected on the effect of and local attitudes towards TANAPAs presence in the area. This information will assist in achieving the primary output.
<i>2.1. End of project report.</i>	Pending and will be included in the end of project report of output 1.

Describe the success of the project in terms of delivering the intended outputs.

The preliminary analysis shows very interesting effects of implementation of JFM in relation to trends in hunting and animal populations in both locations. In NDUFR hunting has almost stopped in the southern end of the reserve. This has been accompanied by a tremendous increase in duikers and most noticeably the IUCN red listed Abbot's duiker. In the central and northern part of the forest, hunting has been reduced but there are still a high number of traps in the forest. Animal populations have increased but less so compared to the southern end of the reserve and not at all in the case of Abbot's duiker.

Also in WKSFR the preliminary results indicate that the number of active hunters has declined following implementation of JFM but apparently more as a result of the simultaneous construction of a TANAPA ranger station. However, preliminary results unfortunately also indicate that hunting inside the forests has increased. Contrary to 2001 traps, hunting camps with sticks for drying meat and people hunting with dogs were observed in the forest in 2008. Interview data support that a shift of remaining hunter's preference from hunting buffalo with rifles in the grass area between the forests to hunting with traps inside the forest has occurred as a result of the patrols and the increased attention on hunting. There are large variations in relative densities between transects but Abbot's duiker, bush pig and eastern tree hyrax has declined in the reserve overall and in particular transects in a way that can be explained by the changed hunting pattern. Trends in relative densities of other species may be explained by density compensation and competitive release.

Socio-economic data from the villages surrounding NDUFR indicate that hunters' meat consumption frequencies and particularly of bushmeat has decreased. The availability of meat in terms of number of domestic animals has, however, increased. Most other assets have also increased. Further analysis of the socioeconomic data and records of income and comparison between villages and with non-hunters as well as the pending analysis of VNRC monitoring reports providing information on number of arrests, fines, patrolling intensity etc. will hopefully assist in explaining differences between locations and between the two ends of the forest in NDUFR.

The botanical surveys, including tree species regeneration survey and assessment of tree growth rates, will furthermore assist in assessing vegetation changes as a potential explanation for observed changes in species relative densities. This information furthermore has large potential in assessing the value of the forest in terms of carbon storage.

Were any outputs unrealized? If so, how has this affected the overall impact of the project?

This project initially included an evaluation of transaction costs and benefits realized from JFM by different wealth groups. However, based on interviews with hunters, Village Natural Resource Council (VNRC), discussions with other researchers working in the focal area and review of village records it was evident that forest use was minimal to non-existent except for a few active hunters. This would effectively prevent collection of sufficient data to enable statistical analysis and this aspect of the project was therefore cancelled.

As a result of reviewer comments in the process in relation to the application for funds from CEPF an evaluating of the costs and benefits of including WKSFR in the Udzungwa Mts National Park was included in this project. However, this aspect seemed less relevant following subsequent developments and particularly Dr. Rovero's 2007 report and the gazettelement of the Kilombero Nature Reserve. Dr. Rovero's report on the Southern Forest Reserves in the Udzungwa Mts considers in some detail the legal and practical aspects of including the West Kilombero Scarp Forest Reserve (WKSFR) in the Udzungwa Mts National Park. Moreover, in August 2007 WKSFR, and two other forest reserves, were gazetted as the Kilombero Nature Reserve and substantial efforts are currently undertaken in order to develop a management regime for this reserve. According to members of the steering committee, the discussion of whether to include WKSFR in the National Park has thus been concluded with a negative outcome. As a result this aspect was canceled.

Instead, collecting and analyzing VNRC monitoring reports from the villages surrounding WKSFR and NDUFR and from 15 woodland villages was added as a new component or extension of the project. This will assist in achieving the primary output as described above by providing information on number of patrols, arrests, fines etc. It will also enable discussion of the functioning of the monitoring system and a comparison of the sustainability of the system in JFM and Community Based Forest Management areas in accordance with considerations described in the introduction.

V. SAFEGUARD POLICY ASSESSMENTS

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

Not applicable

VI. LESSONS LEARNED FROM THE PROJECT

Describe any lessons learned during the various phases of the project. Consider lessons both for future projects, as well as for CEPF's future performance.

Timing and particularly, delays in the order of years from application for funding until acceptance and disbursement are serious constraints in relation to planning for the execution of studies of this type. This has consequences for both donor and applicant as applicants eventually will pursue other opportunities and/or make other commitments in relation to the same project which may alter the timeframe in relation to the original plans as in this case.

Project Design Process: (aspects of the project design that contributed to its success/failure)

Studying illegal activities such as bushmeat hunting requires particular sensitivity and local knowledge on behalf of the researcher and research assistants. Access to information on bushmeat hunting in the 2008 surveys of this study was very difficult due to the increased attention on this issue by VNRC's and patrol guards. It was thus only possible to interview hunters because of the researcher and research assistants' previous experience and acquaintance with the hunters which, during the course of the past seven years in many instances, has evolved into a friendship. The fact that the research assistant was based in and known by the people in the area was furthermore probably essential for the initial contact with the hunters in 2001. Another aspect that was important for the initial contact was the coincidence with the MEMA projects' initiatives in the area in terms of awareness rising and acceptance of forest resource uses livelihoods importance.

Project Execution: (aspects of the project execution that contributed to its success/failure)

Fieldwork was greatly facilitated by the advice and assistance of the staff of the MEMA project and District Forest Office in Iringa without whom the project probably could not have been undertaken.

VII. ADDITIONAL FUNDING

Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	Type of Funding*	Amount	Date Received	Notes
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		

***Additional funding should be reported using the following categories:**

- A** Project co-financing (Other donors contribute to the direct costs of this CEPF project)

- B** *Complementary funding (Other donors contribute to partner organizations that are working on a project linked with this CEPF project)*
- C** *Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)*
- D** *Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

Provide details of whether this project will continue in the future and if so, how any additional funding already secured or fundraising plans will help ensure its sustainability.

Collection of data that will supplement the analysis in relation to this project will be conducted from April to June 2009 with funds from my PhD grant. Subsequently analysis of data and write up will be conducted with a final deadline for the PhD in August 2010.

VIII. ADDITIONAL COMMENTS AND RECOMMENDATIONS

None

VIII. INFORMATION SHARING

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. One way we do this is by making programmatic project documents available on our Web site, www.cepf.net, and by marketing these in our newsletter and other communications.

These documents are accessed frequently by other CEPF grantees, potential partners, and the wider conservation community.

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