



WWF Project Technical Progress Report

Project No/Activity No	TZ 0853 (WWF-TPO) or 623-A-00-98-00064-00 (USAID)
Project Title	WWF Tarangire Project
Activity Title(if different)	
Reporting Period	1 st July -31 st December,2001

1. Introduction:

Tarangire National Park (TNP) is situated in northern Tanzania and covers an area of more than 2,600 square kilometers. It is home to one of the largest elephant populations in East Africa. The park is also rich in other mammals, many of which move out of the park during the rainy season. The Tarangire River flows through the entire park, and with its associated wetlands, provides a year round source of fresh water. TNP serves as a critical dry season (July – December) refuge for wildlife in the 20,000 square kilometer Maasai Steppes.

Though the park's importance is unquestioned, it has been faced with several constraints that have hindered the development of a comprehensive management strategy. TNP managers have come to understand that they urgently need reliable information concerning the natural resources base, patterns of human and wildlife utilization of the resources and the extent of pressures on the wetlands.

This project aims to address the above constraints and to help TNP and TANAPA integrate existing and new information into the management decision making process. The main focus of this project however is conservation of the Tarangire River wetlands. Also included is capacity building in ecological monitoring, vegetation and participatory land use mapping, and large mammal surveys in the whole Tarangire ecosystem.

2. Objectives:

The overall objective of this project is to sustainably conserve the Tarangire wetland system. The aim is to achieve this through increased capacity in ecological monitoring including establishment of a GIS center at TNP for the production of ecological information that will be integrated into park management decisions. Aim is also to establish a desk top publishing unit at TANAPA headquarters for the production of information materials like newsletters, brochures, guide books maps, and post cards on Tarangire and Lake Manyara NP.

This project aims to achieve the following:

- Tarangire/Lake Manyara wetlands sustainably conserved

- Increased knowledge of population dynamics of large mammals in the ecosystem.
- Migratory routes and dispersal areas of elephants and other large mammals in the Tarangire Ecosystem described and mapped.
- Vegetation and land – use pattern of the Tarangire ecosystem mapped.
- GIS center established; relevant TANAPA staff trained and capable of gathering, storing, retrieving, analyzing and interpreting ecological data which in-turn could be used for enhancing the park's conservation and management.
- Capacity for desktop publishing at TANAPA headquarters established.
- Two postgraduate students trained; dissertations on Wildlife ecology and Land-use produced at MSc level.
- Overall management of Tarangire National Park and its natural resources improved.

3. Progress:

The following has been accomplished during the six months period July-Dec 2001:

Sustainable conservation of Tarangire river and its associated wetlands

Selected local NGOs and Institutions are working towards this objective in collaboration with WWF. The selected local NGOs include Mazingira Bora Karatu and FIDE. The local institutions are Monduli Development Council (MDC) and Tanzania National Park's (TANAPA) ecological monitoring department.

The following activities were implemented under this objective during the six month period:

- ◆ Rehabilitation of eroded catchment slopes of Lake Babati was facilitated by a sub-contracted local NGO called FIDE. Tree seedlings were raised and planted on the eroded areas and gullies and awareness of good farming practices was raised within local communities. During the period FIDE has raised 31,000 tree seedlings that are now ready for transplantation by local communities on the eroded slopes of Lake Babati. Besides establishment and management of tree nurseries, local communities in four villages have also been provided with training in good farming practices and environmental conservation. This project activity continues.
- ◆ TANAPA's ecological monitoring unit continued monitoring water quality within the Tarangire/Lake Manyara catchment basin. Data analysis is in progress.
- ◆ An agreement with Kondoa District Council for conservation of Tarangire river and its associated wetlands has been drawn up and signed.

Vegetation and Participatory land-use mapping

The following activities have been carried out during the reporting period:

- ◆ Preparation of vegetation maps for the Tarangire Eco-system has been completed. This activity was sub-contracted to OIKOS.
- ◆ Production of land use-maps for selected villages with high potential as Wildlife Management Areas (WMAs) within the Tarangire ecosystem has been completed.
- ◆ Monduli Development Council (MDC) has facilitated the preparation of participatory land use maps for Selela, Losirwa and Esilalei villages. The local communities in these

three villages have started using the maps.

- ◆ Hands on training of relevant TNP staff on vegetation and land use mapping has continued.

Ecological Monitoring

During the period the following activities were implemented under this objective:

- ◆ Construction of a GIS center at Tarangire National Park was completed in October 2001. Equipping the Center with the required hardware and software is expected to be completed by January 2002.
- ◆ Data processing, analysis and report writing on the wet season inventory of large mammals in the Tarangire ecosystem is at its last stages of completion.
- ◆ The inventory of plants in TNP by the National Herbarium of Tanzania is nearly completed. So far around 200 plant collecting exercises have been made and the majority was analyzed. Here, plants from about 50 different families were found. Completion of a Plant guidebook for Tarangire NP and its ecosystem is expected in the next six months.
- ◆ The inventory of Birds, reptiles & amphibians in Tarangire NP has continued, with the Zoology Department of the University of Dar Es Salaam carrying out the survey. Completion of a guidebook is expected in the next six months.
- ◆ The inventory of Butterflies in Tarangire NP and the drafting of a guidebook was continued.
- ◆ Training of Ms Msoffe, a graduate student in wildlife ecology continued. Data collection and analysis for her Masters thesis has been completed, with the dissertation being at the final stage.
- ◆ The exercise of elephant radio tracking by OIKOS has been completed and the preparation of a final report is underway.
- ◆ OIKOS continued to provide hands on training for ecological monitoring to park ecologists and other relevant TNP staff.

Establish and train Desktop publishing Unit at TANAPA headquarters

The following activities were implemented during the reporting period:

- ◆ Criteria for the selection of TANAPA staff for Desk top publishing training course was prepared by WWF in collaboration with TANAPA and three staff members were selected.
- ◆ A contract with Africa Vision was prepared and signed for providing training in desktop publishing to TANAPA staff and training is expected to start in January 2002.

4. Outputs this reporting period:

The following Reports and Minutes have been produced during the reporting period:

- Draft participatory land use maps for Esilalei and Losirwa villages.
- A draft manuscript for a guidebook on Butterflies for Tarangire and Lake Manyara National Parks.

5. Describe the targets attained and the important developments during the reporting period:

The following important developments were attained:

- The performance of the sub-contracted local NGOs FIDE and MBK was carried out. Performance was found to be satisfactory.
- Construction of a GIS center for Tarangire Park was completed in October, 2001.
- The Project Executant participated in a workshop for the preparation of a General Management Plan (GMP) for Tarangire NP.
- Three other new partners on wetland conservation have been identified. These are Kondo District Council (for the conservation of the Tarangire river catchment area), Mbulu District Council and Karatu District Councils (both for the preparation of participatory land use maps and the rehabilitation of catchment slopes of Lake Manyara). Contract agreements with the three Councils were prepared and signed.
- Night time road transect counts of nocturnal animals were carried out in the northern part of Tarangire NP.
- Preparation of land use maps, vegetation cover maps, large mammal dispersal areas and migration corridor maps in the Tarangire ecosystem was completed.
- Collection of data on the distribution and population structure of buffalo in northern Tarangire NP and in the northern sector of Tarangire-Manyara ecosystem was undertaken.
- Road transect counts of large mammals and livestock in the corridor between Tarangire NP and the eastern shore of L. Manyara was carried out and reports were filed.

6. Targets not attained:

The following planned targets were not attained during the reporting period:

- Preparation of the guide book on plants in Tarangire NP by the National Herbarium of Tanzania (NHT) did not progress as planned due to the breakdown of the NHT field vehicle, coupled with the resignation of a key staff member and the maternity leave of another.
- The planned raising of 81,000 tree seedlings by both FIDE and MBK for planting on the slopes of Lake Babati and Lake Manyara was not achieved due to drought during the short rainy season.

7. Action(s) taken to overcome constraints and obstacles:

- WWF provided transport to the National Herbarium of Tanzania (NHT) in order to complete the inventory of plant species in the Tarangire NP and ecosystem. NHT has recruited two new staff to actively participate in the preparation of the guidebook of plant in Tarangire NP.
- Raising of the tree seedlings by FIDE and MBK has been rescheduled to start during the next long rainy season.

8. Prospects for the accomplishment of the project's objectives:

Implementation of project activities is progressing well. Therefore, the prospect of accomplishing all project objectives is high.

9. Lesson learned during the period under review:

Organizational capacity building is the key to achieving sustainable nature conservation in TNP.

10. Planned targets and activities for the next reporting period:

- Finalize plant inventory and prepare the guidebook of plants in Tarangire NP.
- Procure and install hardware and software for the GIS center and start training.
- Start training of selected TANAPA staff in desk top publishing.
- Continue with data collection for water quality analysis of Tarangire River and related wetlands in Tarangire National Park.
- Continue providing technical and scientific supervision to the MSc candidate (Ms Fortunata Msofe) on wildlife ecology.
- Continue with road transect counts of large mammals and livestock in the corridor between Tarangire NP and the eastern shore of L. Manyara.
- Finalize preparation of a guidebook on Butterflies of Tarangire and Lake Manyara National Parks.
- Finalize organization and arrangement of data for GIS center and its training program.
- Continue with inventory of birds, reptiles & amphibians.
- Carry out mid-term evaluation of the project.
- Prepare a final report on vegetation mapping, Participatory land use planning and wildlife monitoring.
- Continue with training of relevant TNP staff on ecological monitoring.
- Facilitate preparation of participatory land use maps in selected villages of Pahi ward in Kondoia , Endamarariek ward in Karatu and Hassama villages in Mbulu districts.
- Plant 31,000 tree seedlings on the degraded slopes of Lake Babati and 50,000 tree seedlings on the slopes of Lake Manyara respectively.
- Raise 100,000 tree seedlings for planting on the degraded slopes of both Lake Babata and Lake Manyara.

11. Other comments:

None

12. Acronyms:

AOP Annual Operation Plan (Plan showing activities of all partners)

CA	Co-operation Agreement
DOI	Department of Interior (USA)
GIS	Geographical Information System
LMNP	Lake Manyara National Park
NHT	National Herbarium of Tanzania
SRF	Systematic reconnaissance Flight
TANAPA	Tanzania National Parks
TCP (OIKOS)	Tarangire Conservation Program
TNP	Tarangire National Park
TPO	Tanzania Program Office (WWF)
USAID	United States Agency for International Development
WWF	World Wildlife Fund

13. Acknowledgements:

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