

C.4. Mahale Ecosystem Management Project

Project Area: Mahale Mountains National Park (MMNP) and surrounding ecosystem, administered by Tanzanian National Parks

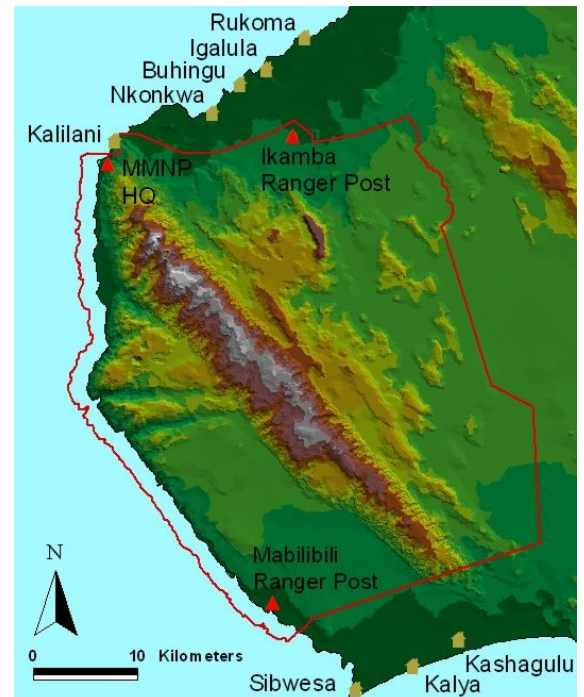
Status: National Park (1985) IUCN Category II.

Geographical Location: On Lake Tanganyika in western Tanzania, 120 km south of Kigoma; 6°10'S, 29°50'E

Size: 1613 km²

Description:

The Mahale Mountains run in a 50 km chain parallel to Lake Tanganyika, rising steeply from an altitude of 780m asl from the lake's waters and shores. A mosaic of lowland evergreen Kasoge forest covers these slopes, changing to mountain forest, grassland and bamboo brush on the mountain ridge and Mount Nkungwe at 2,462m. Miombo woodland in the eastern slopes and north and south of the Kasoge forest cover 75% of the



park and extends across a remote and relatively inaccessible area eastwards to the Game Reserve and eventually Katavi National Park.

Project Partners: TANAPA, district and village authorities

Additional Funding: European Union for Mahale Mountains Ecosystem Management Project

Justification in terms of FZS Global Strategy:

A true wilderness with virtually no human interference, away from the lake shore.

FZS priority biomes: savanna, tropical forest

Globally threatened and rare species

Chimpanzees (700-1000 of 2000 in Tz)
Sable, Lichtenstein's hartebeest, African wild dog
Crested malimbe *Malimbus rubricollis* and white-spotted pygmy crane *Coturnicops pulchra*,

Centre for endemism: Albertine rift centre
90% of 193 lake fish species are endemic
52% of endemic lake species are found in MMNP
9 primate species

International recognition

CI Eastern Afrotropical Hotspot



History of Project:

Mahale for many years has been protected by its extremely remote location in western Tanzania, and even today, there is still no road access to the area. The area was first brought to international attention when researchers from Kyoto University of Japan started a long-term project on the chimpanzees in 1965. Their efforts led to the gazettement of the National Park in 1985. FZS has supported the development of this park since the early 1990s, concentrating on infrastructure and equipment. Tourism has grown through this period, focussed on the chimpanzee population. In 2003, FZS, in partnership with TANAPA, were awarded European Union funds for 5 years, implementing the ecosystem management approach to engage local communities in active conservation in the greater Mahale Ecosystem as well as the National Park, which contains several areas of important forest habitat and chimp populations. The remoteness of this area has protected Mahale from substantial human pressure up to now, but this is changing, with improved road connections, immigration from more degraded areas and human population growth. There had also been immigration of refugees from Congo, although some more recent arrivals are now being repatriated. The project has the unusual and fortunate position to be working with communities before the conservation threats have been realised in full. It is hoped through the project's ecosystem management planning activities connectivity and conservation of these areas can be enhanced.



Goal of Project:

Conservation of the Mahale ecosystem's outstanding tropical forest biodiversity and the livelihood and environmental security of communities mutually strengthened

Project logframe 2003-2008:

FZS-Africa Objective 1: Protected area operations

FZS Outputs	MEMP Activities
1.3 Resource protection operations effective and management feedback provided	i. Training provided to protection warden in GIS/mapping, patrol route plotting, entry of data on illegal activity , observations etc onto maps
1.4 Tourism management supported	i. Technical assistance provided to set up electronic tourism booking system

1.5 Infrastructure in support of effective operations improved	<ul style="list-style-type: none"> i. Upgrade and maintain MMNP VHF radio communications, including repeater on mountain ii. Boundary demarcation carried out in areas where required iii. 2 ranger posts built, including site planning and provide solar power to existing posts iv. New slipway for boat access built v. New outboards provided for boats vi. Two large high speed long distance boat provided for travel to Kigoma vii Three small patrol boats provided and maintained viii. GPS units and night vision equipment provided ix. Upgrade communications systems, including satellite internet link x. MMNP offices and stores upgraded xi. Feasibility study for relocating research support staff outside park boundaries carried out xii. Construct new research support staff accommodation and remove old buildings
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FZS-Africa Objective 2: Policies, plans and awareness

FZS Outputs	MEMP Activities
2.3 Public awareness activities conducted	<ul style="list-style-type: none"> i. Project presented to all communities, general public and local leaders up to regional level ii. National radio, TV, and newspaper coverage of the Community Conservation Banks (COCOBA) launch iii. Project awareness materials designed and produced iv. Training on environmental education and national resource policy and laws provided to village environmental committees and councils v. Website designed and made available
2.5 Site-specific participative planning supported	<ul style="list-style-type: none"> i. General Management Plan for MMNP produced 2005 ii. Ecosystem management planning carried out

FZS-Africa Objective 3: Community Conservation

FZS Outputs	MEMP Activities
3.1 Support for developing policy and procedures for community based natural resource management (CBNRM)	<ul style="list-style-type: none"> i. Existing community reserved lands identified and working with communities to formalize these areas into Tanzania community protected areas policy and procedure ii. Construction of a field office in Divisional Headquarters to better facilitate community work and interactions iii. Consult with Kigoma Rural District and NGOs to devise packages of appropriate support to community based groups for the implementation of environmental action plans iv. Provide technical support for community-initiatives to improve security of land tenure
3.2 Natural resource use and needs understood and community management plans development	<ul style="list-style-type: none"> i. Conducted participatory socioeconomic surveys focused on natural resource use in all project communities, 5 to north and 3 to south of park ii. Participatory GPS mapping of land use in Kashagulu village carried out with district staff to provide the framework for the establishment of bylaws for gazettement of Village Forest Reserve iii. Hold community meetings to develop actions and responsibilities for addressing natural resource issues iv. Prepare appropriate environmental action plan documents

3.3 Target communities supported in establishing CBNRM institutions	<ul style="list-style-type: none"> i. Participatory monitoring system for biodiversity, natural functions, resource use and livelihood impacts designed, piloted and reviewed ii. Supply cost-price or subsidised equipment for improved NRM
3.5 Conservation-compatible development activities supported	<ul style="list-style-type: none"> i. Provided technical training for 14 Community Conservation Bank (COCOBA) groups on savings and credit and conservation compatible small business selection and management ii. Work with communities to establish 14 COCOBA groups of 30 members each iii. Links between tour operators and local handicraft and vegetable producers initiated iv. Training in the use and construction of fuel-efficient stoves in local communities provided v. Tree nursery established, in collaboration with communities, in target areas to mitigate natural resource extraction
3.6 Costs and benefits to communities from wildlife better understood and mitigated/enhanced	<ul style="list-style-type: none"> i. Assess realistic MMNP-community benefit sharing opportunities
3.7 MMNP community outreach programme strengthened	<ul style="list-style-type: none"> i. Identify human resource and training needs for strengthening MMNP's Community Outreach section ii. Communities surveyed on the effectiveness of TANAPA MMNP's community outreach programme iii. Develop MMNP-Community outreach programme in consultation iv. Assist with implementation of MMNP Outreach programme v. Establish mandate, mode of operation and guidelines for park-community forums in consultation with park and communities vi. Launch park-community forums with selected area vii. Monitor performance and modify cooperation mechanisms according to lesson learnt viii. Assist with implementation of actions identified in GMP

FZS-Africa Objective 4: Knowledge.

FZS Outputs	MEMP Activities
4.1 Strategic ecosystem monitoring plan development	<ul style="list-style-type: none"> i. Ecosystem health monitoring plans developed for both National Park and ecosystem, as part of GMP and Ecosystem Management plans ii. Resource based inventory produced for GMP
4.2 Surveys	<ul style="list-style-type: none"> i. Systematic birds surveys conducted throughout the park ii. Water bird survey on lakeshore iii. Small mammal surveys iv. Large scale biodiversity study carried out, including small mammals, reptiles, amphibians, etc
4.3 GIS-based monitoring tools developed for adaptive management	<ul style="list-style-type: none"> i. Develop a GIS database and layering system for habitat, land-use, key resources, and human impacts.
4.4 Applied research on priority issues	<ul style="list-style-type: none"> i. Eco-hydrology project established
4.5 Ranger-based monitoring developed	<ul style="list-style-type: none"> i. Ranger-based monitoring system developed, including GPS training, data recording sheets ii. 2 Rangers involved in carnivore and Bird Atlas studies iii. Park Ecologist and rangers trained on water monitoring and avifauna survey methods iv. GIS and mapping training provided to Ecologist and rangers

FZS-Africa Objective 5: Sustainable financing

No activities

FZS-Africa Objective 6: Special programmes

FZS Outputs	MEMP Activities
6.2 Invasive species	i. <i>Senna spectabilis</i> (kassia) eradication scheme designed and implemented
6.6 Tourism development	i. Opportunities for diversification of tourism and ecotourism identified and assessed ii. Glass bottomed boat provided for tourism iii. Develop procedures for tourist ascent of Mt Nkungwe iv. Design a dual purpose map/brochure of MMNP for tourism promotion and use v. Produce and distribute map/brochure to appropriate outlets

FZS-Africa Objective 7: Human resources

FZS Outputs	MEMP Activities
7.1 Short and long term training opportunities	i. TANAPA, FZS, Government, and local community members training of trainers on Community Conservation Banks and Small Business Selection and Management
7.2 <i>In situ</i> training opportunities	i. MMNP human resource development on the job carried out for community outreach warden. ii. TANAPA and FZS staff trained on participatory socioeconomic survey methods iii. TANAPA and FZS staff trained on participatory GPS use and mapping

