# Terms of Reference for the Greater Katavi Mahale Gombe Ecosystem Conservation Technical Team

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1.

## Introduction

#### A LANDSCAPE AT RISK

he primary on-going threats to the biodiversity and remaining forest habitat in the Greater Katavi, Mahale and Gombe ecosystems and adjacent regions are the direct result of a rapidly growing local population and that population's continued reliance on destructive and unsustainable land use practices. The current National deforestation rate stands at 420,000 ha which is equivalent to 1.1% per annum (Source: REDD data base, 2005).

Local people do not have adequate information about more environmentally friendly and productive agricultural practices nor access to more sustainable alternative livelihood opportunities, and only a small minority of the population is even marginally engaged in stewardship of the natural resources their communities rely upon. Although rural village residents are often fully aware of the destructive impact their practices are having, the overwhelming poverty and the rapidly increasing population in the region lead to the prioritization of "short-term" strategies focused on producing enough food to survive and general disengagement from longer-term management and conservation strategies.

Vegetation is also predicted to be increasingly stressed with increasing temperatures and decreasing precipitation due to climate change. Soil fertility will decrease and what is now marginal agricultural land may be rendered unproductive. According to a recent Oxfam report, *suffering the Science: Climate Change, People and Poverty,* climate change is expected to lead to massive changes in crop selection and significant decreases in agricultural yields across the developing world, and Tanzania is predicted to be one of the three most deeply affected countries in all of Africa. Pressures on the region's ecosystem will be increased due to changes in climate and it is imperative that adaptation and resilience interventions be designed and implemented.

The topography of the landscape ranges from steep hillsides interspersed with densely populated valleys and hilltops in the areas around Gombe National Park to eroded canyons, cliffs and flat-topped hills around Mahale and Katavi National Parks, interspersed with vast tracts of intact forest and woodland. As part of the Eastern Afromontane Biodiversity Hotspot (identified by Conservation International), the area boasts a great diversity of wildlife, including a number of rare and endemic species.

## The main threats to the ecosystems

#### INCOMPATIBLE CONVERSION TO AGRICULTURE

In an ecosystem characterized by steep-sided hills, it is no wonder that agricultural expansion is the highest ranked threat to the landscape and the biodiversity, including humans, relying on it.

Indirect threats related to incompatible agriculture include:

- Lack of land-use planning on the village level, a threat which is already being abated through the democratic Village Land-Use Management Planning (VLUMP) process.
- Food crops which are farmed unsustainably and therefore contribute the exhaustion of the land. This is in part due to an inadequate availability of appropriate land, resources and training, combined with high human population growth.
- Cash crops which in some cases provide revenue for families which lack alternative incomegenerating activities or have low incomes.

The combination of population increase and scarcity of appropriate farmland have led many households to farm increasingly marginal land. As a result, families grow crops on steeper and steeper slopes, leading to erosion, landslides, sedimentation in rivers and a higher flood risk. Hillsides on the west side of the divide may be particularly prone to landslides; naturally smooth slopes indicate that current levels of landslides are likely unnatural (DeMeo and Purchase 2007).

The loss of topsoil through these processes degrades the seedbed and complicates restoration efforts. In addition, sedimentation may have detrimental effects on aquatic biodiversity in the shallows of Lake Tanganyika (Cohen 1993 and McIntyre 2006). The combined effects of increased sedimentation and overfishing are expected to degrade the integrity of coastal fisheries. There are related concerns that if fish populations decrease, additional land may be farmed and/or people may increasingly hunt wildlife to meet immediate needs.

Additionally, fire used to clear land for agriculture is often a serious threat to the ecosystem and efforts to promote the regeneration of natural vegetation. This is discussed in greater detail later in this suction under the heading "Incompatible Human-ignited Fires."

#### INCOMPATIBLE CONVERSION TO SETTLEMENTS AND INFRASTRUCTURE DEVELOPMENT

Settlements and agricultural expansion are inextricably linked, and together these two threats are the major contributors to habitat loss. Indirect threats include population growth and, until recent efforts, inadequate land-use planning.

In addition, it is feared that the presence of settlements and agriculture—and the associated presence of people and livestock—will disrupt forest connectivity and reduce forest cover.

While the road is an important contribution to development in the region, efforts are needed to protect certain stretches of the road—such as the portion to be constructed in village forest reserves—from settlements and infrastructure which could increase accessibility to forest resources.

#### INCOMPATIBLE EXTRACTION OF FIREWOOD

The local communities largely depend on firewood as the source household fuel. Charcoal is less frequently used in villages but has a greater market value due to its high demand among urban communities.

Household demand for firewood is exacerbated by high population growth combined with less-thansustainable management of remaining resources, a combination which may limit villagers' ability to meet their needs in the near future. There is extensive firewood harvesting for industrial consumption especial for salt processing (Uvinza Salt Mine)

#### **WILDLIFE POACHING**

The poaching of elephants, chimpanzees and other wildlife by humans is ranked as one of the highest stresses facing wildlife population, in part due to the irreversibility of those killings.

# LACK OF CONSERVATION AND LAND-USE PLANNING, AND INADEQUATE IMPLEMENTATION OF LAND-USE PLANS

The threat is instead recognizing the extent to which conservation efforts rely upon the democratic delineation of village forest reserves and the sustainable management of the forest reserves. Conservation-linked development benefits may be used to support initial and on-going conservation of those reserves.

#### INCOMPATIBLE HUMAN-IGNITED WILDFIRES

Fire poses a serious threat to the ecosystem. While natural fire regimes are not completely understood, the vast majority of the fires which occur are believed to be human-ignited and to far exceed natural levels in terms of both scope and severity.

While fires may be ignited for specific purposes, those fires often burn out of control and spread to unintended areas and may undermine efforts to improve the integrity of the watershed. In addition to inhibiting tree regeneration, frequent and intense fires disturb natural ecosystem processes, alter vegetation composition and cause soil erosion, among other unwanted results.

# Aim of establishing GKMG Ecosystem Conservation Technical Team

To improve supervision, coordination, communication and implementation of activities across the Ecosystems.

**4.** 

# Structure and composition of the GKMG Ecosystem Conservation Technical Team

The technical team will comprise two levels, firstly the 4 District Technical Teams from their respective council (Kigoma DC, Uvinza, Mpanda and Nsimbo), the second level will be inter district Technical Teams. Members of the Technical teams will be as follows:

#### COMPOSITION OF TECHNICAL TEAMS (ONE FOR EACH DISTRICT) TO INCLUDE:

Kigoma	Mpanda
District Lands, Natural Resources and Environment Officer	District Lands, Natural Resources and Environment Officer
District Livestock and fisheries Officer	District Livestock and fisheries Officer
District Planning Officer	District Planning Officer
District Legal Officer	District Legal Officer
District Community Development Officer	District Community Development Officer
District Water Engineer	District Water Engineer
District Land Officer	District Land Officer
District Forest Officer	District Forest Officer
District Agricultural Development Officer	District Agricultural Development Officer
District Wildlife officer	District Wildlife officer

#### **STRUCTURE** DCC RCC Mpanda Cons **District** CEWE Full Partners Council DED CMT Council Conservation Resc **Inter-district** Instn conservation technical team (ICCTT) CEWE Full CMT DED Other Counci **Kigoma District** nmm Gov Council Bodies Conservation, Other **Technical** RCC DCC NGO's

Figure 1. The chairperson of the Coordination Team will be elected from the team. The position will be rotating yearly between the respective Districts

#### EXPLANATION OF THE STRUCTURE

- DED—District Executive Director
- CMT—Council Management Team
- CEWE Committee—Councillors Infrastructure, Economic and Environment Committee
- DCC—District Consultative Committee
- RCC—Regional Consultative Committee
- Conservation partners—Main Conservation NGO working in the area e.g. FZS, TNC, JGI, WCS and others
- Research Institutions—This research institution local and internationals e.g. TAWIRI, TAFORI,
   TAFIRI and others
- Other government bodies—This are main government bodies with stake in the area e.g. Wildlife Department, TFS, FBD and others
- Other local NGO's—This are other local NGO's with interest in the area working at various levels e.g. TT
- All the above partners are allowed to attend the District Council Conservation Technical
  meetings as per specific invitations. The decision of who to be invited remains with the District
  Council Conservation Technical.

#### FREQUENCY OF SCHEDULED MEETINGS

Technical teams in each District will meet four times per year before the full council meeting (in Quarterly basis)

Integrated conservation technical team (CCTT) twice a year (bi annually)

#### **COSTS**

Initially Technical team meetings costs (e.g. Travel, Stationary and Per diems) will be covered by partners / donor support. Councils will facilitate meeting venues. It is expected that slowly the respective councils will start to plan and budget for this meetings with their own funds so that the sustainability of this activity can be guaranteed.

#### **ROLES OF TECHNICAL COMMITTEES**

 To review, assess and prioritize GKMG and other ecosystems priority conservation areas and to document the current condition of those areas

- a) To conduct technical meeting in order to review and prioritise GM and other ecosystems priority conservation areas.
- b) To conduct natural resources inventory (survey) in order to assess status and prioritise conservation areas.
- c) Document, interpret and use all research findings related to GKMG natural resources to a wider public.
- To contribute information and data and guide the GKMG and other ecosystems general management plan (GMP) initiatives, in order to identify and recommend suitable LU status for Greater Mahale and other ecosystems areas based on needs, threats, opportunities, National Policies, Regulations and Laws
  - a) To share with neighbouring districts and conservation partners new and existing information regarding challenges and opportunities in the GKMG and other ecosystems
  - b) To propose recommendations on appropriate conservation status for each priority areas in the GKMG and other ecosystems with regards to the resources, opportunities and challenges at each site
- To identify, prioritize and publicize priority areas for local and international researcher in order to increase awareness of all NR found in the area.
  - a) To collaborate with neighbouring districts in undertaking trans-boundary conservations initiatives (adopted)
  - b) To ensure coordination and integration of activities among conservation partners (adopted)
  - c) To interpret, and disseminate existing and new research findings to guide all the conservation activities in the area.

Through general management planning initiative to identify current and potential areas of land use and tenure conflicts within the GKMG and recommend solutions

- a) To develop General Management Plan of the GKMG and review the existing Conservation Action Plans (CAPs)
- b) To identify land tenure conflicts
- c) Recommend solutions for the identified and potential land tenure conflicts

To establish and maintain district NR data base including relevant resource maps. This includes

- a) To compile data, maps, recommendations and submit appropriate reports and channel them to a normal decision making process.
- b) Share relevant data with the joint technical committees and all the stakeholders as necessary
- c) In-collaboration with conservation partners to procure and install data storage equipment's

To increase knowledge and understanding on the importance of the GKMG to the Central Government, educate and involve communities and other stake holders in the conservation of natural resources within.

- a) To raise awareness through campaigns and social media to the public
- b) To educate and involve local communities and other key stakeholders in the conservation of natural resources within the GKMG
- c) To develop natural Resource communication strategy
- To work on the recommendations from the full council, and seek support from appropriate authorities if necessary and shall report issues related to environment within GKMG.
  - a) To receive and implement on the recommendations from district and regional advisory bodies
  - b) To identify issues and recommend solutions relating to environmental conservation and reporting to CMT
  - c) To make follow up to all the recommended activities for GKMG
- To promote partnership with local, national and international conservation stakeholders in advancing District Conservation goals and objectives
  - a) To conduct stakeholders' analysis
- To mobilize resources for advancing conservation in the respective councils
  - a) To establish district conservation Fund and fundraise for conservation activities
  - b) To identify resources required for implementation of conservation activities within GKMG
- Enhance District monitoring and evaluation capacity
  - a) Develop and implement District natural resource PMP
  - b) Build on Monitoring and Evaluation of Natural resource conservation initiatives presented in the respective councils
  - c) Develop strategic work plan and budget

To advocate that part of revenue accrued from NR should be retained to support natural resources conservation activities

#### **ROLES OF (ICCTT)**

- To review reports and recommendations from the council technical Teams and to provide relevant comments, suggestion and support.
- To oversee process of implementation requests for land use change and ensure legal and proper process is followed.

- To share new and existing information regarding challenges and opportunities in the GKMG, e.g. infrastructure development plans and planned commercial ventures
- To ensure coordination and integration of activities between partners.
- Through appropriate channels to raise awareness about the importance of the area to the central government.

## **APPENDIX**

Table 1. Threats with an Overall Rating of "High"

Threats Across Targets  Project-specific threats	Chimps	Elephants	Miombo Woodland Mosaic	Riverine Eco- systems	Wetlands	Lake Fish	Overall Threat Rating
Conversion of forests/riverine/wetland into agricultural land	Very High	High	High	Medium	Medium		High
Poaching (including with snares)	High	Very High		High			High
Global climate change			High	High	High	High	High
Incompatible wildfire	High	High	Medium	Medium			High
Settlement establishment and expansion, and human population increase (including along the periphery of the core conservation area)	Medium	High	High	Medium			High
Selective logging for timer and poles			High	High		Low	High
Threat Status for Targets and Project	High	Very High	High	High	High	High	Very High

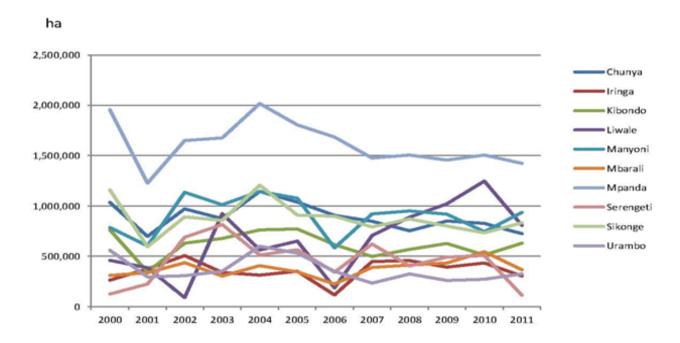


Figure 10: Burned area (ha) in the ten districts with the highest burned area 2000-2011

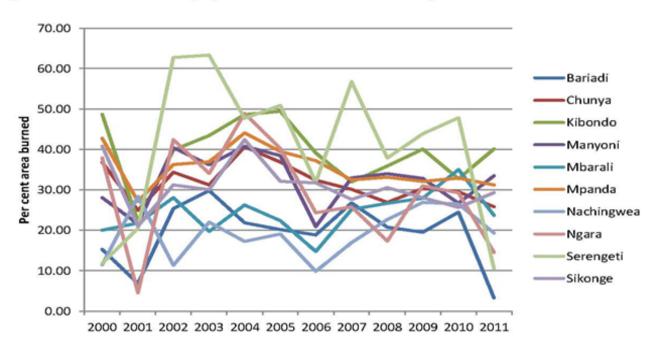


Figure 11: Per cent area burned in the ten districts with the highest proportion of district area burned

Figure 2. MODIS-derived 11 year burn area analysis in Tanzania. Courtesy ZEBRIS.com GIS and Colsulting.



Figure 3. Proposed areas for protection.

