

Project Update: March 2010

Abstract

The second phase of this project aimed at sustaining the output of the first phase. It focused on influencing the communities around Uluguru Mountains to value and conserve primates. Specifically, the project shall: i) promote the use of non-lethal techniques for monkeys' control against crop damage, in 50 villages surrounding Uluguru Mountains; ii) provide conservation education/awareness programme. The project aimed to provide an opportunity to farmers, policy makers and interested parties to get informed on the best practices for monkeys' control, and the need to conserve them; and iii) form partnership with local and international institutions working in the area to influence change of behaviour of local population toward primates. Various methods were used to participatory implement the project. They include village meetings, public forums and mass media. The project succeeded to achieve most of its objective, and the results will be shared through scientific meetings and publications.

1.0 Introduction

1.1 Project background

The Uluguru Mountains forests provide numerous habitats for primates. The forests are in five patches, with 65% of their original forest cover lost due to seasonal fire, agriculture and logging, charcoal making and human settlements (Newmark, 1998; Lulandala, 1998). Forests fragmentation pose risk challenges to primates as they pass through human residents or farms, while trying to move between forests. Monkeys form large population of primates found in Uluguru Mountains. The monkey species include *Galago crassicaudatus* (Greater Galago), *G. zanzibaricus* in the IUCN red list (Uluguru Bushbaby), *Cercopithecus mitis kibonotensis* (Blue Monkey) and *Colobus (polycomos) angolensis palliatus* (Black and White Colobus). Studies have shown that these monkeys are forest specialists and less tolerant to disturbed forests (Burgess et al, 1998; Schiotz, 1976).

This implies that monkeys in Uluguru Mountains, which are sometimes confined in small shrub patches with exotic tree species as they fail to migrate between "islands" of forests. Monkeys which are fortunate to be in undisturbed forest reserves are also blocked in there (Newmark, 1998; Nyinondi, preliminary study, 2005). According to Futuyma (1998) inference the situation ulugurus forests may cause genetic drift. Worse still, monkeys especially blue monkeys are harassed and killed by farmers, using wire snares, poison bait and man traps, because they are considered to be pests (SUA, Pest Management Centre, 2006). It is against that background Rufford Small Grants (for Nature Conservation) in 2007 approved the grant toward the first phase of this project, which concentrated on human-monkeys conflict management. The results of a first RSG supported project proved that it is possible to reduce human-monkeys' conflicts around Ulugurus, and thus achieve conservation goal. Therefore, the second important steps with the same goal was to dissemination the results to other 46 villages bordering Uluguru Mountains and create the value of primates in the mountains through environmental education awareness programme.

1.2 Project objective

The second project focuses on influencing the communities around Uluguru Mountains to value and conserve primates. Specifically, the project:

- Promoted the use of non-lethal techniques for monkeys' control against crop damage, in 50 villages surrounding Uluguru Mountains;
- ii. Provided conservation education/awareness programme through popular local radio stations; and
- iii. Form partnership with various institutions working in the area to influence change of behaviour of local population toward primates.

2.0 Methodology

2.1 Location

Uluguru Mountains are located in Morogoro region; the mountains are about 46km long and rise out of the coastal plain at approximately 300m above sea level to a peak of 2638m (Bhatia and Ringia, 1996). The Mountains are at 07°00' South and 37°40' East (Lovett and Wasser, 1993). On the main Uluguru range, 50 villages touch the forest boundary and over 151,000 people are found within the mountain area.

The climate of the Ulugurus is very much influenced by the Indian Ocean from where wind laden with moisture arrives on the eastern slopes. In general, these slopes receive 2000-4000mm per year, with a decrease from East to West. The amount of rainfall increases and becomes more predictable with altitude (Lovett *et al.*, 1995). Rainfall is bimodal with dry season between May to late October, a short rainy season between October to the end of December and a long rainy season between March and May. Temperature also changes with altitude, ranging from below 0oC to 26°C at the higher and lower altitudes, respectively. In Morogoro town the average air temperature is 24°C with the coolest month being July (21°C) and the warmest being December with 26°C (Masawe, 1992).

The vegetation of the Uluguru main ridge and the outlying blocks is extremely variable. It ranges from dry lowland coastal forest habitats, to transitional rainforests, to sub-montane, montane and upper montane forest types. It also includes an area of afro-montane grasslands on the Lukwangule plateau. All these habitats are rich in endemic species and are all of high conservation priority. The forests of the main ridge are quite well known biologically, although each new survey continues to find additional species. The outlying blocks are poorly known, with some having almost no biological investigation.

The Ulugurus have very high species richness like other Eastern Arc Mountains and their share of endemic species include; six globally threatened birds including the Uluguru Bush Shrike, two globally near- threatened birds including Love ridge's Sunbird and six other forest birds of extremely restricted range (Bhatia and Ringia, 1996). Two shrew species, three mammal species all in 1994 IUCN Red list of threatened animals (Lyamuya *et al.*,

1994). Of the 22 reptile species known to occur in the Ulugurus, six species are endemic. Levels of endemism are also high in plants (Lyamuya *et al.*, 1994).

The farming system in the surrounding villages is a peasantry, producing crops for food and sale. Main crops are banana, maize, cassava, rice, cocoyam, oranges and pineapples, Farming methods commonly practised are mixed cropping, as well as intercropping. Mixed cropping and intercropping are preferred as they save time, and more efficient land utilization. Intercropping also helps in reducing heavy run off caused by heavy rainfall and the steep slopes (Hymas, 2000). More agricultural land is required every year, because of continued population growth since the Luguru people arrived in the area about 200 years ago.

Population density on the slopes of the Uluguru is as high as 150persons/km², with over 3.0 rate of a population increasing. The high density is mostly a result of favourable microclimate of the mountains, which favours agriculture, since relative low temperatures, reduced water loss, and lack of pronounced dry season, lower the risks of crop failure.

2.2 Project implementation design

2.2. 1 Village meetings

Requested and organise one meeting per village for 50 villages, which are directly bordered with forest in Uluguru Mountains. The purposes of the meetings were to promote the use of farm guarding dogs and demarcation of migratory corridors for wildlife. The village meeting involved distribution of educative brochures, explaining the techniques.

2.2.2 Conservation education/awareness/advocacy programme

The village meetings apart from serving as the forum for discussing the best monkey's control practices also were used to choose the media for mass conservation education. Initially, the researcher had the idea of using local radio stations. However, during the meeting farmers were asked to choose a media of their preference, they were also requested to mention two local radios which they normally tuned on. The idea was to facilitate the broadcast of conservation programme. The education programme was to involve a number of key actors in conservation.

2.2.3 Establish network and alliance for advocacy

Lobby for support from different groups of people and institutions working in Morogoro region. We planned to work with mass media personnel who play big roles in information dissemination and creating political debate on a topic, and other institutions which will show interests.

3.0 Implementation

The project provided direct opportunities to local people to ask questions to researchers and access extension services in their villages. The project was educative and researching, and participatory implemented. The conservation education/awareness programme anticipated to change people's negative perception on primates. Consequently, achieve monkeys' conservation goal in Uluguru Mountains.

4. Results and Discussion

4.1 Village meeting

The village meeting was success in 41 villages. In 5 villages the meeting was not held because of start of farming seasons, and probably less interest on the project. In villages where the meeting was held, villages where asked to choose two local radios to act as media for communication. There was an obvious different preference among the youth, middle age, elders and sex. However, finally Radio Aboud and Ukweli were chosen. Village meeting was not organised on four villages where the pilot studies were carried out.

4.2 Conservation education/awareness/advocacy programme

Newspapers, TV and radio provide broad reach and have so far proven to be effective in increasing awareness of relevant issues amongst specific segments of the population. These mass media channels provide an easy, accessible and cheap means of communicating information to the end user and soliciting feedback. Radio remains the most popular, viable, accessible and cost-effective means of communication for rural people in Tanzania (URT 2005). It overcomes barriers of distance, illiteracy and language diversity better than any other media (Ibid, 2005). Ultimately, the local radios were used to create a dialogue with policy makers, extension workers, and farmers amongst listeners in this project. Conservation advocators actively invite people to contribute to the radio's programmes on conservation. In this project a monthly recorded conservation programme was aired for seven months. The response was not as a good as expected, this might be attributed to the fact that very few resource-poor farmers in Uluguru's own mobile phone, further to that one may be interested on dialogue but cannot afford the costs to make a call and contribute to the dialogue. Other options which were provided to listeners are to write us email or and post mail to the project leader, which all requires one to be literate and able to afford posting costs and/or pay for internet use fee.

The project philosophy was that farmers must have access to information about new technologies before they can consider adopting them. Therefore, we designed brochures, and printed 6400 copies, which were distributed during village meetings and national agricultural exhibition (i.e. popular known as Nane Nane Agricultural shows) to ensure farmers access to information. The village meetings provide the change of reaching an average of 60 people per village, which we considered to be a good response.

The major means of information sharing in rural areas of Tanzania is through mouth to mouth story telling (URT 2005). In this context, the use of village meeting forums, local radios and brochures, meant to trigger resource-poor farmers around Uluguru Mountain forests, to get information on primates and share among themselves. Furthermore, the project provided the means for interested farmers to seek more information on the best practice of primate control without harming them.

4.3 Establish network and alliance for advocacy

Two stakeholder's conservation meeting were successfully organised and one audio conferencing to seek support from various conservation and non-conservation organisation. Twelve NGOs agreed to promote primate conservation in their programmes and invite one

of our project team to give a talk whenever they have audiences with farmers. In addition five agricultural focusing associations and farmers' networks wanted the project to produce more advocacy materials like posters and leaflets, brochures and pamphlets and they will assist on distribution through their members and meetings.

General, the project won the support of 17 organisations and will be working with them in the near future in most of primate targeting conservation programmes.

4.4 What remains to be done?

There two important studies, which are very important to be carried out, although not part of this study. These are:

- Evaluating the impacts of this project conservation education and awareness programme in villages of Uluguru's Mountains, Morogoro, Tanzania.
- Assessment of the diffusion of innovations of primate control from small farms in Uluguru's Mountains, Morogoro, Tanzania.

5. Conclusion

We strong believe that this project has impacts to the people around Ulugurus Mountains, although the study is required to establish the farmers' level of awareness of on on-lethal techniques of monkeys control and analyse the diffusions of the techniques around the mountains. Networking and partnerships established, which shall also be consolidated in the future activities will increase the buzz for the need of saving Ulugurus primate.

6. Remarks

Thanks to RSG Foundation for supporting us and financing all activities. I am also very grateful to all actors, partners and village leaders who cooperated with us. Finally, I welcome all other interested individuals and/or organisations interested to work with us.

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Plate 1: maize farm on the adjacent monkey corridor. Plate 2: Free range farm guarding dog



Plate 3: Tied dog on along bush-farm border. Plate 4: Health maize farm near the bush



Plate 5: Health bean farm near on the forest vicinity. Plate 6: Training of villages influential people



Plate 7 & 8: Various documents including monkey control technique pamphlets at Nanenane grounds



Plate 9 & 10: People of different social aspects asking questions and picking pamphlet from PI of this project





At pest management venue, everyone irrespective of age, gender, and economic activities has a question to the team and wanted to know more on how to control wild animals and their associate vectors.