

# Community-based Conservation of Flying Fox Roosts

## Preliminary Report

### Grantee

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### Project funders



British Embassy

Madagascaar

### Project partners



## **Background**

Madagasikara Voakajy is a Malagasy organization dedicated to conserving endemic and threatened vertebrates, specializing in bats, frogs and chameleons. It has been working in the Alaotra Mangoro Region in eastern Madagascar since 2003 and has ongoing projects to protect small fragments of rainforest that are essential for the survival of the Madagascar flying fox and some rare frogs. Aspects of this work have been supported in the past by the Darwin Initiative (DEFRA) and a DfID Small Grant from the former British Embassy in Antananarivo. This project continues to evolve and has major research, conservation and education components.

As part of the national effort to designate new protected areas in Madagascar, Madagasikara Voakajy conducted a field survey of forest fragments and flying foxes around the proposed Zahamena-Ankeniheny park in 2006 and identified 12 priority sites for conservation. The British High Commission in Mauritius granted us £4,850 towards our efforts to consolidate conservation in forest fragments where we have been active since 2003 and to stimulate conservation in some of the priority sites visited during the 2006 survey.

## **Goal**

Put in place effective community-based conservation of forest fragments that are high in biodiversity value

## **Objectives**

1. Raise awareness amongst the relevant stakeholders regarding the forests and the biodiversity value within
2. Develop an understanding on how the forest resources are used
3. Establish local management at flying fox colonies
4. Creation of social contracts to conserve/sustainably use the forest
5. Improve fire control
6. Produce conservation planning maps of each forest
7. Launch monitoring programmes for key habitats/biodiversity

## **Progress**

### **A. CONSOLIDATING COMMUNITY MANAGEMENT**

We organised a meeting on 28 January 2008 in the Commune Rural Morarano Gare, Fokontany Analabe, for villagers who live near flying fox roosts. These roosts were included in a social charter (*dina* in Malagasy) established in 2005 by commune leaders (mayors), other local government, Madagasikara Voakajy and its local NGO partner ACCE. Each participating commune received a new primary school as part of this project.

It became apparent however that the *dinas* were of limited use because they had been established mainly by mayors, and village leaders were not so familiar with the project. The objective of the meeting in January was therefore to seek the advice of the village leaders on how to reinforce the *dina* application and to encourage the local community to become more engaged in flying fox conservation.

Over 40 people participated in the meeting, including mayors, village leaders and the chief representative of the Ministry of Environment, Water, Forests and Tourism for the Moramanga District.

Madagasikara Voakajy biologists reminded the participants of the importance of flying foxes for environmental services (e.g. seed dispersal) and that the 2005 project to create *dinas* to protect roosting colonies was the first of its kind in Madagascar. Group discussions followed, each facilitated by Malagasy biologists, to determine the best way to improve local participation in protecting flying fox colonies. Signed minutes were later distributed to all participants (see supporting documents).

Major outcomes:

1. It was decided that five management committees were needed for the three roosts (Fanafana (1), Ambakaona (1) and Analabe(3)), each headed by the village leader (Chef de Fokontany).
2. Madagasikara Voakajy agreed to produce a small reference book in the Malagasy language for use by the village committees that summarises the rules of the *dina* and the importance of flying foxes.
3. Once the committees have been established, there should be two meetings per year with representatives from the government and conservation NGOs.
4. The responsibilities of the committees include :
  - i. Implementing the *dina*
  - ii. Raising awareness about the *dina*
  - iii. Organise fire patrols
  - iv. Report serious infringements to the local authority
5. The proposed committee members requested the following equipment :
  - i. Identification badge
  - ii. Bicycles (2 per committee)
  - iii. Torches (2 per committee)
  - iv. Water pumps for fire fighting (6 per committee)
  - v. Mobile telephone (1 per committee)
  - vi. Signs at the roosts about the *dina*

As a key aspect of this project is encouraging local engagement; the individual villages accepted responsibility to establish their own committees and the next stage of the project (e.g. meetings, donation of equipment) will proceed when the representative of the Ministry of Environment, Water, Forests and Tourism for the Moramanga District has received and endorsed the five village committees.

### **Next steps**

By May 2008, two committees have been established (Ambakaona and Ambohidray). We anticipate the remaining three to have been completed by the end of June this year.

## **B. PROMOTING COMMUNITY MANAGEMENT**

Four forest fragments that have large colonies of flying foxes were visited between the 8th and 11th of March 2008.

i) Analalava I (6 ha)

This fragment is 4.5 km from Zahamena National Park and is at 1,082 m above sea-level in the Commune Rural of Amparihintsokatra. There are between 800 and 1,000 flying foxes at this site and the forest fragment plays a vital role in maintaining ecosystem services to nearby agriculture.

ii) Analalava II (4 ha)

This fragment is located near to Analalava I and the flying foxes use both forests, often switching between them when disturbed.

iii) Ampananganandehibe (10 ha) / Beasina (1 ha)

This fragment of rainforest is located 6 km west of the new protected area at an elevation of 1,155 m in the Commune Rural of Andilanatoby. Over 1,000 flying foxes roost in this forest fragment.

iv) Mahialambo (20 ha)

This fragment of rainforest is located 12 km west of the new protected area at an elevation of 958 m in the Rural Commune of Andilanatoby. Over 1,000 flying foxes roost in this forest fragment.

At all four sites, bush fires and the conversion of land into agriculture threaten the forest and hunting for bushmeat threatens the bats.

A Malagasy conservation biologist (Daudet Andriafidison) from Madagasikara Voakajy with representatives from two local NGOs (ACCE and Association Mbarakaly) and the assistant district officer from the Ministry of the Environment, Water and Forests and Tourism, visited each of the four roosts and organized two village workshops to discuss the conservation of the remaining forest fragments.

The first part of the workshops consisted of presentations on flying foxes, their legal status, conservation status and ecological role as pollinators and seed dispersers. A series of group

discussions then followed in which the local stakeholders provided information and perspectives on conservation followed by the development of a strategic plan:

- i. The obstacles to conserving the forest fragments were discussed and listed
- ii. The specific origins and causes of the obstacles were identified
- iii. A plan was drafted to allocate activities and indicators to the appropriate obstacle

## Outputs

Common vision was agreed:-

Work towards sustainable management of natural resources in forest fragments for the benefit of flying foxes and local people

The following objectives were agreed:-

1. Create village based associations (Vondron'Olona Ifotony, VOI = community association) at three sites to manage the forest fragments

### Indicators:

Formulate structure, goal and internal rules of the association

Formal registration of the association with the Malagasy government

2. Protect the forest used by flying foxes

### Indicators:

Improved fire management

Reduced extraction of wood and non-timber products in areas used by bats

Flying fox colony remains stable or increases in size

3. Better understanding of flying foxes by local people

### Indicators:

Children participate in education projects about the bats

Adults are informed about the importance of bats

Members of the association are given training and reference material about bats

In addition, there were a number of recommendations adopted in the meeting:

- Encourage collaboration between all stakeholders
- Create local social contracts to govern resource use
- Integrate the conservation plans and future monitoring into a national framework

**Next steps**

Madagasikara Voakajy submitted the geographical coordinates plus supporting information to Conservation International for possible inclusion in a future protected area. At two of the sites (Ampananganandehibe/Beasina and Mahialambo) we have agreed to return and conduct community awareness raising activities before the villagers create the VOI. At Analalava I and II, the participants agreed to form their VOI and the return visit is scheduled for October 2008.

Maps of the study sites (B. PROMOTING COMMUNITY MANAGEMENT)

