

Supporting the social, economic and environmental aspects of community-based conservation of greater bamboo lemurs, black-and-white ruffed lemurs and indri

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The Aspinall Foundation works in Madagascar to protect endangered lemurs and their habitats, with a particular focus since 2008 in eastern Madagascar on greater bamboo lemurs, black-and-white ruffed lemurs and indri (King & Chamberlan, 2010; King *et al.*, 2013). Having identified several priority sites for the conservation of these species through collaborative surveys in and around the Ankeniheny-Zahamena rainforest corridor (Ravaloharimanitra *et al.*, 2011), conservation strategies have been developed for many of the sites based on supporting the transfer of management responsibility for the sites to local community associations known as Vondron'Olona Ifotony in Malagasy, or VOIs, and subsequently supporting the VOIs to implement their management contracts (King *et al.*, 2013; Ravaloharimanitra *et al.*, 2015). Long-term participatory monitoring shows that the greater bamboo lemur populations are increasing across our conservation intervention sites (Mihaminekena *et al.*, 2012; Randriahaingo *et al.*, 2014).

Between 2011 and 2013 the Foundation supported the creation or renewal of three management transfer agreements (Ravaloharimanitra & King, 2012; King *et al.*, 2013), with a fourth completed in 2014, that of the Dimbiazan-jafy VOI in relation to part of the Andriantately lowland rainforest in the Brickaville District (Ravaloharimanitra *et al.*, 2015). Further agreements are in development. Technical and financial supports are provided to these communities before, during and after the signature of the contract with the Ministry responsible for forests, to increase their capacity within the social, economic and environmental aspects of conservation (Chamberlan 2012; Chamberlan *et al.*, 2013; King *et al.*, 2013; Ravaloharimanitra *et al.*, 2013, 2015).

During 2014 and 2015 within the social aspect, we have stressed the value of each focal species and their conservation status. In previous years we have distributed to school children and other local people living around our conservation sites a total of approximately 15,000 writing books featuring photos of greater bamboo lemurs or black-and-white ruffed lemurs on the front cover, and other lemurs on the back cover. At the beginning of the 2014-2015 school year we produced another 5,000 writing books, this time featuring indri on the front cover, and distributed them to 15 public primary schools (EPP) and six private primary schools (FKL) surrounding the Ankeniheny-Zahamena rainforest corridor. We also printed and distributed 1,150 calendars to various local authorities, VOI members, parents and schools, providing conservation images and information, and we organised two class trips to Andasibe for primary school children from the Brickaville District (Mangabe EEP 14/11/2014 to 17/11/2014 and Lanonana EEP 23/01/2015 to 26/01/2015), where Association Mitsinjo provided environmental education and forest visits.



Fig. 1: Indri notebook distribution.



Fig. 2: Community ginger project.



Fig. 3: Reforestation activities.

For the economic aspect, during 2014 we have emphasized the reciprocal links between biodiversity, human action and wellbeing. We have based our support of livelihood improvement on the motivation of each VOI member to take part voluntarily in conservation activities. According to the requests we received from local communities, the Mamelontsoa VOI of Morarano-Gare commune were provided with funding for cooperative rice storage, a loan to improve rice crops, and the improvement of study conditions for the Nanganana primary school by providing a metal roof for the new building. In the Brickaville District, the Ainga vao VOI and Dimbiazan-jafy VOI have benefited from the distribution of 725 kg and 500 kg of ginger seeds respectively.

For the environmental aspect, we have supported the implementation of the local site management plans (PAGS or Plan d'Aménagement et de Gestion Simplifié). Since the end of 2014 our efforts have been concentrated on reforestation activities. In collaboration with Association Mitsinjo from Andasibe, we have trained the four VOIs with completed management transfer contracts, and therefore with their PAGS already approved by the Ministry responsible for forests, in tree nursery management and reforestation. 12,000 seedlings of native species were grown across the four VOI tree nurseries, and they are currently being planted within VOI management zones designated for the recovery of previously deforested areas. Participation of primary school children in the reforestation activities occurred during the celebration of "Journée des écoles" for the Sakalava fokontany and during the World Environment Day celebration for the Mangabe and Lanonana fokontany.

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