Direct Payments for Conservation in Madagascar

Location
Tsitongambarika, Anosy Region, Madagascar

Rio Tinto companies
QIT Madagascar Minerals (QMM) and Rio Tinto HSE

Partner organisations
Asity Madagascar

Key people
Manon Vincelette and Jean Baptiste Ramanamanjato (QMM); Vony Raminaoaisoa, Rivo Rabarisoa and Roberto Andriamparany (Asity Madagascar)

Habitats
Lowland and lower montane humid forest

BIRDS
Brown Mesite, Short-legged Ground-roller, Scaly Ground-roller, Red-tailed Newtonia

Outcomes
Habitat conservation; maintenance of essential ecosystem services; improved local livelihoods

Rio Tinto’s Health, Safety and Environment Centre of Excellence is currently supporting Asity Madagascar to implement a project to conserve Tsitongambarika forest in south-eastern Madagascar. This project is employing an innovative approach to conservation – direct payments – which delivers direct benefits to local communities in return for improved forest protection. The project is assisting QIT Madagascar Minerals (QMM) to achieve Net Positive Impact (NPI) with regard to biodiversity for its nearby ilmenite mining operation.

Project background and history
QMM has received a permit from the government of Madagascar to mine ilmenite (a source of titanium dioxide) from the coastal plain of Anosy Region in the extreme south-east of the country. A large part of the mineral-rich coastal area supports littoral forest, which is of global significance for biodiversity conservation, particularly with regard to plants. The littoral forest is, therefore, the principal focus of QMM’s efforts to achieve NPI with regard to biodiversity. However, there are a number of natural ecosystems outside of the QMM lease that are also of interest to the company, because of both the contribution they make to regional sustainable development and the potential they hold to offset unavoidable, residual impacts on biodiversity within the littoral forest. One of these ecosystems is Tsitongambarika forest, which lies along the Vohimena mountain chain, to the north and west of the QMM lease.

Tsitongambarika includes the most extensive area of lowland humid forest remaining in southern Madagascar. This forest harbours a wealth of biodiversity, including a number of newly discovered plant and animal species, known from nowhere else on earth. The forest also provides a number of essential ecosystem services, which underpin both the livelihoods of local communities and wider regional sustainable development. In particular, the forest protects the catchments of the main water sources for Fort Dauphin town (the main settlement in the region), and the QMM ilmenite mining operation, located in the coastal plain below Tsitongambarika forest. Unfortunately, like many other forests in Madagascar, Tsitongambarika is gradually being degraded and cleared through timber cutting and clearance for shifting cultivation.

Project details
The direct payments project aims to strengthen the conservation of Tsitongambarika’s unique and threatened biodiversity, enhance water security for QMM’s mining operations and Fort Dauphin town, and maintain ecosystem services essential for regional development. To this end, the project is piloting a community-based conservation approach, originally developed elsewhere in Madagascar. After an initial period of awareness raising to sensitisise them to the need for the project, local villagers are trained to monitor selected biodiversity and threat indicators (such as forest cover, sightings of lemurs, frequency of forest fire, etc.). Each year, villagers monitor these indicators twice, in order to evaluate changes. At the end of the year, the villagers present their findings at a community festival, and each village receives a prize, with the biggest prizes going to those villages that demonstrate the greatest improvements in forest conservation. The project is being implemented by Asity Madagascar (the BirdLife Affiliate in Madagascar) and supported by Rio Tinto HSE and QMM.
The project is empowering local communities with the necessary skills, information and incentives to make more sustainable decisions regarding use of forests. As well as providing them with the necessary motivation, incentives and capacity to manage forest and forest resources more sustainably, the project is also providing communities with livelihood alternatives to shifting cultivation, by giving them opportunities to generate sustainable income from forest protection and sustainable use. For instance, local communities involved in the pilot phase of the project have requested that their prizes be in the form of fertilizer, so that they are able to boost productivity on their existing agricultural land, and do not need to clear more forest for shifting cultivation.

The future
In parallel to the direct payments project, Asity Madagascar is collaborating with the local forestry service (DREEFT) and other stakeholders to promote the designation of a new protected area, encompassing key areas of Tsitongambarika forest. This initiative, which is supported by Rio Tinto HSE and QMM, forms part of the Government of Madagascar’s ‘Durban Vision’ process, to expand the country’s protected area coverage from 1.7 to 6 million ha. It is envisioned that temporary protection status will be secured for the new protected area in 2008, with final protection status following in 2009. Asity, BirdLife and Rio Tinto are currently engaging with a range of stakeholders to plan and realise an integrated programme of conservation and sustainable development for Tsitongambarika forest, to build on the foundation established by the new protected area. It is intended that this programme will help establish Tsitongambarika as a ‘biodiversity offset’ for the QMM operation.