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## EDITORIAL

# The Forests of Madagascar do matter

Madagascar had a rough start into the year 2007. After cyclones Anita, Bondo and Clovis in December, Gamede and Favio in February, Indlala cut across Madagascar just two weeks before Jaya came ashore at the northern tip of Madagascar at the beginning of April. They caused flooding, displacement, crop and forest damage, as well as other detrimental short-term effects. The cumulative impacts of these seven cyclones will be immense and hard to quantify. On average, there was more precipitation per day during these four months in 2007 than averaged over the last ten years. While the northern part of the island was suffering from flooding, an extended drought created struggle amongst the Malagasy people in the south, once more demonstrating how diverse the climatic influence can be even on a single island. In total, around half a million people were directly affected by these erratic weather events.

In June 2007, the Antsinanana rainforests were inscribed to the UNESCO's World Heritage List comprising of six national parks distributed along the eastern part of the island. These rainforests harbor more than 80% of endemic species, which is important to be under best possible national and international protection, since threats are omnipresent. The IUCN / SSC Primate Specialist Group just recently published an updated list of the 25 most endangered primate species for 2006-2008. The 'representatives' for Madagascar are four lemur species of which the Greater bamboo lemur, the White-collared lemur, and the Silky sifaka were reconfirmed on the list, and the Sahamalaza sportive lemur, a recently described species, replaced the Perriers sifaka. These lemurs share a common tragedy: they live in more and more isolated and patchy forest habitats.

The forests of Madagascar cover about 20% of the island's surface, presenting a variety of ecosystems, hosting the majority of terrestrial faunal and floral species. These forests are characterized by a high degree of endemism, and, as Goodman and Benstead (2005) consequently point out, they contribute a "critical component of the global biological diversity." Forests also function as a 'seemingly endless' resource of energy and food for a majority of the Malagasy population, with its timber being appreciated beyond Malagasy borders. The list of forest processes like water or nutrient cycling, carbon sequestration, decompositions, etc. seems almost endless. However, these forests are faced with a fast growing human population, needing more and more fuel wood (just to name one major human need), and must cope with enormous impacts from natural disturbances like cyclones and droughts. Together, there are incredible accumulative pressures, both human and natural, which continuously affect and reshape these ecosystems. However, forests in Madagascar "were not just born yesterday," as Lucienne Wilmé points out in the foreword for this issue, and they are probably more resilient than we can assume. Nevertheless, if we want to maintain this broad array of forest values to meet present needs without compromising the ability of future generations to meet their own needs, we have to understand

how forest ecosystems work, to properly implement sustainable forest management policies and applications. We should try to achieve deeper understanding of how structures and compositions affect ecological functions and processes and how the latter interact with and react to biotic and abiotic forces and dynamics, especially in times of rapid global climatic changes.

Hence, the Editorial Board of the journal Madagascar Conservation & Development is happy to present an issue focused on forests, with articles dealing with the past 100 years of Malagasy forest use, development and management. Articles include discussion of recovery after a cyclone (e.g., Hudah), and disclosure of illegal extraction of precious wood in the Marojeje forest. For the future, we hope to be able to present a great variety of studies about forest related issues in this journal aiming at encouragement of more discussions and exchanges of ideas about this overarching resource termed 'forest'.

Thanks to the broad scope of the journal, it has the potential to move far beyond forest issues. Forests are an important component of Madagascar's diverse landscape, and the more we understand about the subject the more we can appreciate its range of values. However, there are far more aspects the island of Madagascar covers in terms of conservation and developmental realms. The UN declared the year 2008 campaign as the "International Year of the Reef." Coupled with the fact that Madagascar has a coastline of more than 4,800 km, we hope that the perspectives of oceanographers will induce some interesting projects about ocean initiatives reflecting conservation, developmental challenges and appropriate solutions in Madagascar.

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Patrick O. Waeber, Founder Editor

## FOREWORD BY MERVYN BROWN

# The wealth of trees and the pressures of population

It is a pleasure to introduce the second in what promises, and deserves, to be a long series of this journal on the important areas of conservation and development in Madagascar.

The first edition was impressive both in its breadth of subjects and in its depth of detail. This edition has more of a focus, and the subject is principally trees. The richness of the forests in Madagascar and the wealth of remarkable creatures they support are well-known. The pressures on the forests are equally well-known, and lie at the heart of the issues that dominate debate on the balance of development and conservation. It is now increasingly evident that the need to conserve natural assets is not only compatible with economic and social development but is to a large extent dependent on it: people desperate for resources to live cannot be expected to be as sparing of precious trees and the like as others would want them to be. But it is also clear that the potential drivers of economic development in Madagascar can bring their own pressures on the environment, in areas such as mining (due to increase its contribution from 4% of GDP now to 30% by 2012), road-building and even tourism, even though sensible eco-tourism is the type of development that seems well-suited to satisfy the interests of all parties. The proposals in President Ravalomanana's Madagascar Action Plan do at least reflect his concern to protect the natural resources of the country, and he has made substantial steps in increasing protected areas of the natural environment while promoting a better business environment to encourage investment.

The pressure of population growth is of critical importance. When I was first in Madagascar in 1967 the country's population was 6 million. Now it is estimated to be some 19 million and is forecast to grow to more than 50 million by the year 2030. Substantial economic growth is needed just to match that growth in population, let alone to improve living standards, and the impact of such large numbers of people on natural resources is considerable. It is of crucial importance that the Malagasy government is able to make good progress towards its target of reducing the average size of families to 3-4 children from the present figure of 5.4.

I would like to mention the issue of funding, and to finish with a request for some assistance. The running costs of the journal are remarkably low: the articles that are submitted are done so freely; the editors contribute their time for no charge; and the fact that the journal is distributed online keeps publishing costs down. However, there are still lay-out charges that amount to several thousand Euros. The editors would also like, with good reason, to be able to distribute the journal more widely in Madagascar itself and they believe that they can best achieve this by offering there a paper as well as an electronic version, which would entail printing costs of a similar amount. If you are able to contribute in any way, or if you have any suggestions on the raising of funds, then please do get in touch with the editors.

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