

## Project title : BIOSCENEMADA - Scenarios of biodiversity evolution under the combined effect of climate change and deforestation in Madagascar

Project place	Project cost	Role in the project	Technical and financial sponsors	Dates
Madagascar	265 000 €	Coordination	CIRAD - Agricultural Research for Development, ONE - National Office of the Environment (Madagascar), WCS - Wildlife Conservation Society, MNP - Madagascar National Parks, FFEM - French Global Environment Fund , The Foundation for Research on Biodiversity	May 2014 - November 2019

### Project's goals and results

#### Main goals

Separated from Africa and then from India, respectively 165 and 88 million years ago, the fauna and flora of Madagascar evolved in isolation. The island is known worldwide for its incredible biodiversity, characterized by high rates of endemism, significant diversity of species and the complete absence of other groups. This biodiversity is mainly concentrated in the tropical forests and is highly threatened by deforestation and climate change.

Visit the website for more information: <https://bioscenemada.cirad.fr/>

#### Specific objectives

#### Beneficiaries

#### Results

- R1.** Improve the effectiveness of the protected area network and ensure that REDD + National Program maximizes co-benefits of carbon projects for biodiversity
- R2.** Provide tools to assess co-benefits in terms of projects biodiversity implemented in the field
- R3.** Identify refuge areas for biodiversity in the face of climate changes and prioritize conservation efforts in the field (eg identifying refuge areas at high risk of deforestation)

#### Activities

Using biodiversity maps from data collected by the project [REBIOMA](#), as well as [demographic and deforestation models](#), proposes to estimate the loss of biodiversity associated with:

- Different scenarios of population growth and deforestation at the national level,
- Different climate change scenarios (eg GIECC scenarios A2a and B2a) by producing future biodiversity maps (obtained from climate niche models) and identifying refuge areas and areas at high risk of biodiversity loss,
- The joint effect of climate and deforestation.

*In fine*, by comparing current and future biodiversity maps, BioScene Mada aims to identify priority areas for the conservation of biodiversity (eg refuge areas at high risk of deforestation).