

Project title : LAUREL - Land Use Planning for Enhanced Resilience of Landscapes in Mozambique

Project place	Project cost	Role in the project	Technical and financial sponsors	Dates
Mozambique	660 000 USD	Modeling expert	The World Bank, CIRAD - Agricultural Research for Development, University of Minas Gerais	May 2017 - December 2019

Project's goals and results

Main goals

The Land Use Planning for Enhanced Resilience of Landscapes (LAUREL) program led by the World Bank aims to support integrated decision making for landscape management in Mozambique, through improved spatial data on land degradation, and through the development of prototype platform (LANDSIM) for simulating, evaluating, and re-orienting as appropriate, land use and land use change processes

Specific objectives

O1. To develop a sound, consistent, up-to-date and evidence-based baseline of land degradation in Mozambique

O2. To develop a national-scale spatially explicit land use change simulation prototype for evaluating the impact of Mozambique policy and interventions incentives

Beneficiaries

Gouvernement of Mozambique

Results

R1. A nationally consistent database of land degradation maps and sound information of the underlying causes of the degradation indicators observed in Mozambique

R2. A spatial-explicit land use change simulation prototype that enable to estimate the impacts of government policy or interventions on household welfare as well as agricultural production and environmental impacts

Activities

A1. Development of the Land Degradation Baseline. For this objective we are following the latest guidance of international UN conventions and base our development on state-of-art earth observation technology (e.g. remote sensing times series analysis, Google Earth Engine)

A2. Development of the Land use change simulation Prototype (LandSIM). For this objective we are following several key steps: i) estimate population and population density; ii) describe household architecture, production practices and natural resource use, iii) link the households to the economy and markets, iv) incorporate climate change effects, v) design future scenarios, run the model and link to policy. Thoses modules are developped using an open-source modeling platform