

Project title : LUCCIA - Co-development of a simulation and decision support tool for land use planning and impact assessment in the context of climate change

Project place	Project cost	Role in the project	Technical and financial sponsors	Dates
Mozambique	996 000 €	Coordination and modelling expertise	AFD - French Development Agency, Ministério da Agricultura e Desenvolvimento Rural de Moçambique, CIRAD - Agricultural Research for Development, Fundo Nacional de Desenvolvimento Sustentavel - FNDS, Eduardo Mondlane University - UEM	November 2021 - December 2023

Project's goals and results

Main goals

Provide technical assistance to the FNDS (Fundo Nacional de Desenvolvimento Sustentavel) and in particular to the MRV (Monitoring-Reporting-Verification) unit in its monitoring-evaluation missions by developing a spatialized decision support tool in order to simulate and Assess the impact of national development scenarios and project interventions in the agriculture and forestry sector.

Specific objectives

- OS1.** From the LANDSIM prototype platform, develop an operational spatio-temporal simulation tool for the assessment of the future impact of land development scenarios and project interventions in the agriculture and forest sector.
- SO2.** Apply and test the simulation tool in a national case study on climate change mitigation and/or adaptation scenarios and a regional case study on *ex-ante* impact assessment conservation and development project.
- SO3.** Develop national capacities to: i) operationally apply the simulation tool for different interventions on the territory, ii) provide dashboards of indicators based on simulation results, and iii) understand and modify the internal processes of the simulation tool for future platform improvements.

Beneficiaries

MRV (Monitoring-Reporting-Verification) Unit of the Fundo Nacional de Desenvolvimento Sustentavel (FNDS)

Results

- R1.** Kick-off meeting including stakeholder mapping
- R2.** Progress report after nine months of project and presentations to the committee
- R3.** Progress report after 16 months of project and presentations to the committee
- R4.** Final report and presentations: delivery of the tool, source code, user manual and training documents

Activities

- A1.** Conducting workshops to assess the needs of future users and review the main land cover change modeling tools in order to determine the improvements to be made to the existing version of the tool simulation prototype.
- A2.** Development and operationalization of the simulation tool through (i) the construction of its central source code from the prototype, (ii) the development of new modules, and (iii) the design of tables of edge for offline/online display of outputs.
- A3.** Realization of regional and national case studies then reinforcement of the capacities of the stakeholders, in particular on the construction, the execution and the analysis of the results of scenarios.
- A4.** Coordination, governance and communication.