

## Project title : MIOQUEIM - Study of the effect of fires on the Miombo ecosystem of Gilé National Park

Project place	Project cost	Role in the project	Technical and financial sponsors	Dates
Mozambique	50 000 €	Biodiversity expertise	Biofund, EU - European Union, Eduardo Mondlane University - UEM, ANAC - National Administration for Conservation Areas, Fondation François Sommer - Fondation Internationale pour la Gestion de la Faune (FFS-IGF), Instituto Superior de Agronomia - Universidade de Lisboa, Gilé National Park	January 2022 - January 2025

### Project's goals and results

#### Main goals

The main objective of this research is to contribute to the knowledge of the effects of forest fires on the biodiversity and ecosystem services provided by the Miombo forest to improve the performance of management and conservation operations in the Gilé National Park

#### Specific objectives

- SO1.** Draw up a fire risk map
- SO2.** Assess the effect of fire regime variation on vegetation (including orchids and cycads) and megafauna habitats
- SO3.** Determine the distribution and conservation status of orchid and cycad species
- SO4.** Determine the tolerance limits of biodiversity (flora and fauna) to uncontrolled fire
- SO5.** Support the establishment of a forest fire monitoring and management system

#### Beneficiaries

- PNAG technicians and guards will be trained in vegetation and fire monitoring and fire management
- The study will contribute to the training of master's and undergraduate students in the monitoring of vegetation and fires
- The project will contribute to research in Mozambique, through the publication of scientific articles and theses and through communications in congresses (national and international)

#### Results

- R1.** Fire risk map
- R2.** Assessment of fire impacts on the vegetation of the PNAG
- R3.** Preliminary characterization of orchid and cycad species
- R4.** Definition of tolerance levels for biodiversity fires
- R5.** Establishment of a long-term fire and vegetation monitoring system
- R6.** Training of master and undergraduate students
- R7.** Capacity building of PNAG technicians in the management and monitoring of vegetation and fires
- R8.** Scientific publications

#### Activities

- A1.** Development of a deforestation risk map from remote sensing data (MODIS images)
- A2.** Evaluation of the effects of fires on vegetation and wildlife habitats by carrying out inventories of woody vegetation
- A3.** Assessment of the conservation status of orchids and cycads by carrying out inventories
- A4.** Establishment of a fire monitoring system indicating priority areas, methods and indicators monitored