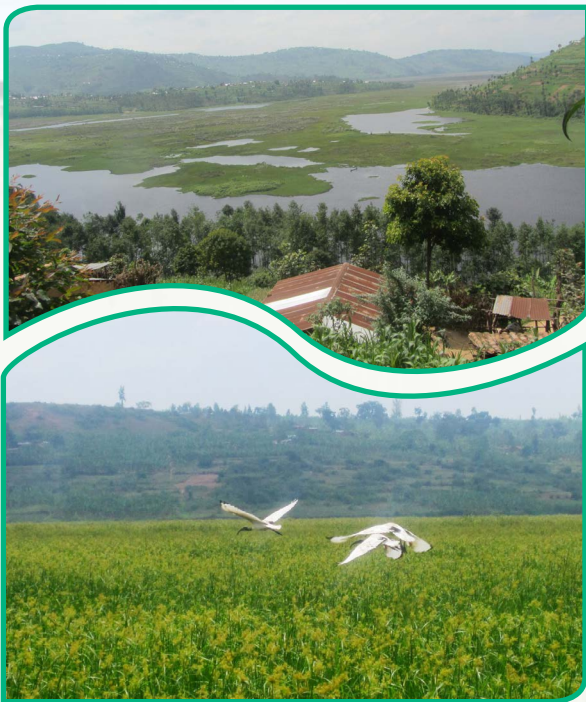


# Using Ecological Integrity Assessment and Advanced Information Management to Guide Wetland Management and Decision-Making in Rwanda

## Preparing a Collaborative Project Proposal to the JRS Biodiversity Foundation

KIGALI, July 2018



Flooding Rugezi wetland and birds flying over Akanyaru wetland.

**If well conserved, Rwanda's wetlands can contribute much in the achievement of the country's green growth objectives.**

Wetlands constitute the backbone of Rwanda's economy. They provide various goods and services that millions of Rwandans depend on for their livelihoods and they are crucial to water, energy, and agriculture sectors, the three main sectors of the national economy.

Rapid urbanization, industrial development and the intensification of agriculture are the main drivers of change in wetlands in Rwanda. The threats linked with these drivers such as pollution, biodiversity loss and habitat degradation have led to many of the wetlands in the country lose their ecological character thus hampering their capacity to continue effectively playing their role.

In order for Rwanda to stay on the green development path, accurate and updated information on wetlands is needed so that development plans are based on sound data and adequate compromises are made consciously and responsibly.

A discussion held between REMA and ARCOS in 2017 concluded that there is need for the establishment of a baseline on the status of wetlands in Rwanda. Such a study would aim to collect information: 1) on the state of wetland biodiversity by focusing on species diversity and occurrence data for a representative set of wetlands in Rwanda, 2) on the threats affecting biodiversity and 3) on ongoing efforts to conserve biodiversity in these wetlands.

ARCOS has received seed money to develop such a project by bringing stakeholders together to participate in the identification of the project methods and approaches. This project planning process will also allow for the development and formalization of partnerships that are required for the successful implementation of the project.

### Contacts

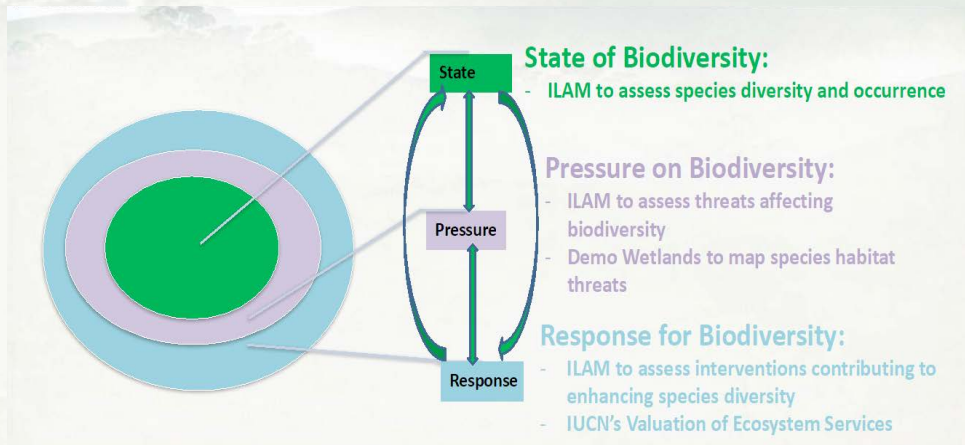
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## Development of Wetlands Ecological Integrity Assessment Methodology

This project will build on the Integrated Landscape Assessment and Monitoring (ILAM) framework applied by ARCOS in its focal landscapes as well as the DeMo Wetlands project's methodology of wetlands' assessment using GIS and Remote Sensing.

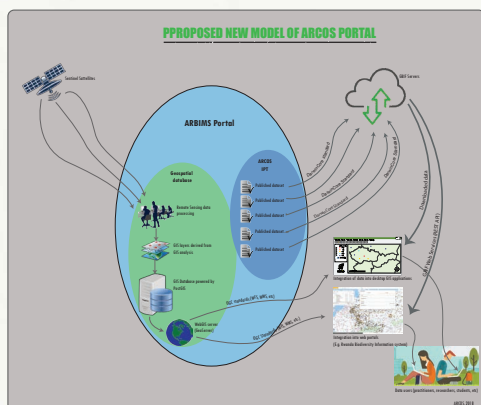
The project will also use IUCN's Integrated Wetlands Assessment Toolkit to conduct an ecosystem services economic valuation for key selected wetlands in different catchments.

These three tools will be combined to deliver a complete set of data on Rwanda's wetlands, the status of their biodiversity and ecosystem services, the threats affecting them and the responses that are being applied to address these threats.



## Development of Data Sharing Platform

Data collection and compilation only represents one side of the coin. Data access is also an important aspect in the promotion of evidence-based decision-making. This project will have a strong data sharing component where ARCOS' existing portal will be upgraded to increase availability and promote open access to accurate and good quality data to researchers, conservation practitioners, planners and decision makers.



This planning phase will therefore support the collaborative development of the specifications of the data access facility to be established.

## Capacity Building on Wetlands Assessment and Mapping

Wetlands are dynamic and complex ecosystems which are affected by the activities of various stakeholders in different sectors. In that regard, there is a need for a mechanism to keep the data and information that will be made available during this baseline establishment stage updated.

To achieve this, one of the project objectives will be to build the capacity of key stakeholders in wetlands management in Rwanda on the generation, management, and analysis of wetlands data to support their planning processes.

This capacity building programme will consist of training on topics regarding biodiversity assessment, wetlands mapping using GIS and remote sensing, as well as wetlands Ecosystem Services economic valuation.

This planning phase will thus allow project partners to assess the stakeholders capacity needs and develop a capacity building plan that responds to the actual needs expressed by the beneficiaries themselves.

## Project Partners and Beneficiaries

The Project will be coordinated by ARCOS and REMA with funding and technical support from JRS Biodiversity Foundation. Other implementing partners include IUCN's Forest Landscape Restoration (FLR) Hub, Demo-Wetlands (University of Bonn), the Centre of Excellence in Biodiversity and Natural Resources Management (CoEB) at University of Rwanda, and Association pour la Conservation de la Nature au Rwanda (ACNR). Finally, the project will work closely with the following partners as direct beneficiaries (data users):

### Ministry of Environment and REMA

REMA is the national Agency in charge of overall environmental monitoring. It is the de-facto regulatory authority for wetlands and it is the national implementing agency for various international agreements related to freshwater ecosystems such as the CBD and the Ramsar Convention. REMA has also in its mandate the obligation to regularly produce national State of the Environment reports; a task that inherently requires availability of data on key ecosystems such as wetlands. In this sense, the agency will benefit from this project by having a reliable source of data on wetlands status and trends in the country which will allow it to better fulfil its mandate.

### MINILAF and the Rwanda Water and Forestry Authority (RWFA)

RWFA is the government agency in charge of monitoring both the quality and quantity of national water resources and ensures its allocation is done in a way that is conducive to sustainable development of all sectors that seek concurrent (competitive) use of these resources. RWFA will thus be one of the key beneficiaries of the project since it will be able to use data produced by the project to produce its regular national water quality reports.

### MINAGRI and the Rwanda Agricultural Board (RAB)

RAB is the technical arm of the ministry of agriculture in charge of research in agriculture sector across the country. It provides the required scientific and technical backdrop to agricultural programmes and policies across the country. Working with RAB, this project's recommendations will be incorporated into agricultural decision making processes and thus will help improve the sector while minimizing its impact on the freshwater ecosystems.

### Rwanda Development Board (RDB)

RDB is the Rwanda's national agency in charge of evaluation of Environmental Impact Assessments (EIAs). In this capacity, RDB will benefit from the improved availability of data and information on the status of wetlands in the country since this information will be used to guide decision-making on where investment projects could be implemented without harming the environment.