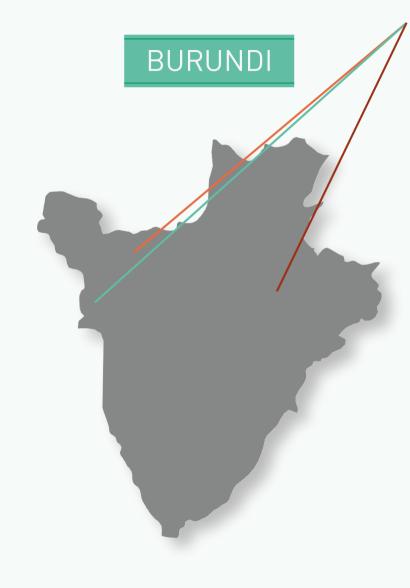
### **CEBIOS ACTIVITIES**



#### → Kibira, Rusizi & Ruvubu National Parks





- Habitat monitoring
- Lexicons
- Research on Ecosystem Services
- Workshops and training sessions
- Grants from the Global Taxonomy Initiative
- Clearing-House Mechanism
- Awareness raising
- Measurement, Reporting and Verification
- Training on the Nagoya Protocol
- Biodiversity monitoring indicators (+ policy briefs)
- Quality scientific knowledge produced & put into use
- External project: South Initiative Lake Tanganyika





# Ecosystem services in Burundi's protected areas

Longin NDAYIKEZA

Biodiversity for development, a way forward to the SDGs

May 28<sup>th</sup> 2018

#### **In Memoriam**

#### NZIGIDAHERA Benoît (1964-2018)

Head of Biodiversity Research Service at Burundi Environment Protection Authority (OBPE) and National Focal Point of CHM-Burundi

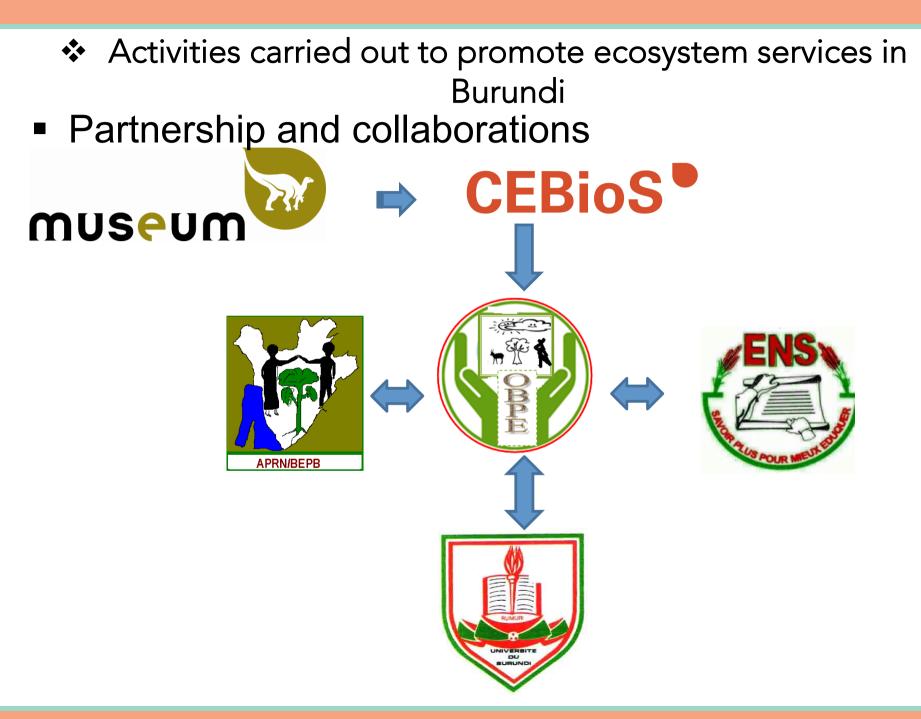


Since 2003, **Benoît Nzigidahera** (1964-2018) has built partnership between the Royal Belgian Institute of Natural Sciences (RBINS) and Burundi Environment Protection Authority (OBPE) through Clearing House Mechanism (CHM). He has contributed enormously to the progress of research on biodiversity, and the protection of flora and fauna in Burundi.



# Introduction

- In Burundi and everywhere else, ecosystem services play an important role in:
  - Crop production;
  - •Good health and other areas of life;
  - •Sustainable development.
- ➢ Loss of natural ecosystem services leads to costly options.
- If we do not act now to stop extinction of species, we will have to pay a high price in the future.



# Assessing the cost of inaction to protect the natural ecosystem

# Mountain forest of Kibira: Hydroelectric dam





- The inaction would result in the loss of expected earnings of US \$7,926,042.93 per year :
  - forest would not provide water for rice irrigation in the Imbo plain
  - Rwegura dam would no longer produce electricity.

#### ► Ruvubu National Park : tourism based on buffaloes



- Loss of expected earnings of US \$ 33,240 per year.
- Annual income losses if this park disappears or is completely destroyed.

# II. Scientific research II. 1. Research on pollinators

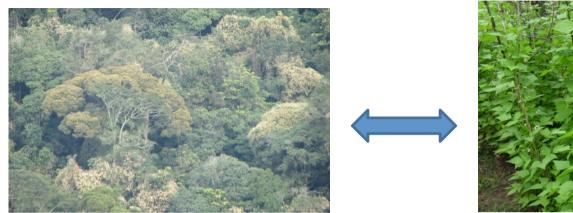


# Capacity building with the help of experts

- Training on the methods of collection and management of pollinating insects in Burundi
- Training at RBINS on taxonomy and access to Belgian collections through GTI calls



# A study of the interrelationship between pollinators from natural and agricultural areas has been conducted



A study of the contribution of pollinators to the productivity of beans has been carried out



Plot left in open pollination



**Covered plot** 

## II. 2. Research on mushrooms



#### **II.3.** Research on bamboo







# ➢ Results from the studies:

#### ✓ Establishment of reference collections



Collection of mushrooms (around 6000 samples)



Collection of pollinators (around 25,000 samples conserved)

- ✓ 15 dissertations including 2 of Masters in Environmental Sciences have been produced.
- ✓ 5 undergraduate training reports produced.

- ✓ Publication of 7 scientific articles: 4 published in the OBPE's journal, 2 in the Belgian journal of entomology and 1 in press in the TROPICULTURA Journal.
- ✓ Awareness raising of local community on the importance of pollinators in crop production.
- ✓ A business plan on the commercialization of mushrooms was developed.
- ✓ Burundi participates in the network of Mycologists of the Great Lakes Region of Africa.

## Way forward

develop strategic plan to protect pollinators in Burundi

> Install and popularize insect hives in natural areas.

Mycorhization test and produce mycelium of edible mushrooms species to create symbiotic trees forest.

Make policymakers and the public sensitive to the economic value of the ecosystem services.

# Thank you for your attention