

## Findings of GBO5 and advice on capacity development in taxonomy

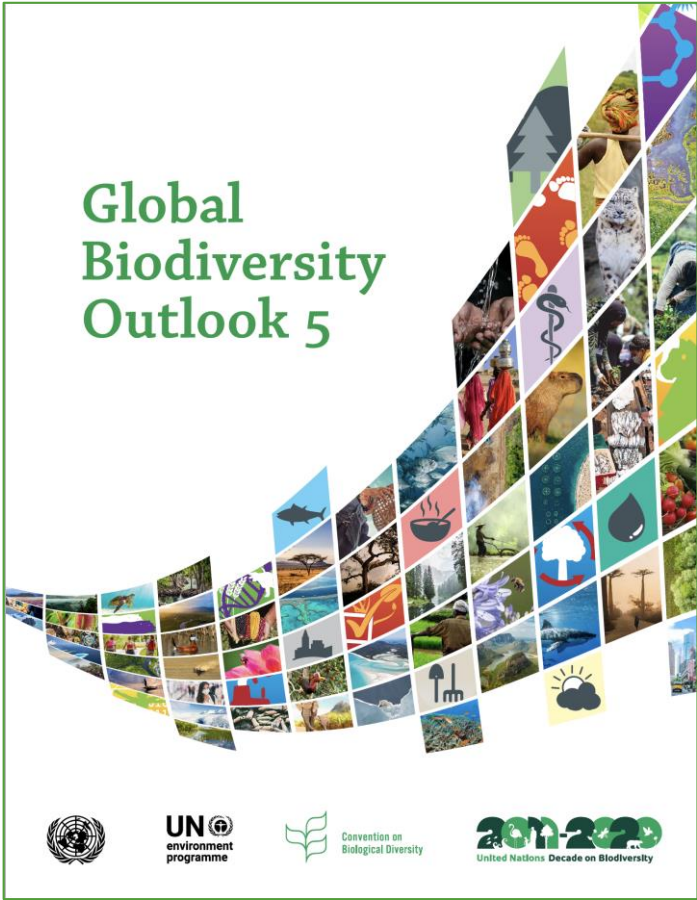
Tim Hirsch | Deputy Director



**GBIF**

Global Biodiversity  
Information Facility

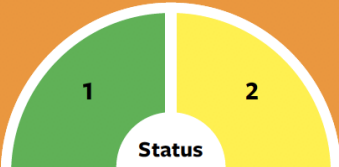
# 5<sup>TH</sup> GLOBAL BIODIVERSITY OUTLOOK



## SHARING INFORMATION AND KNOWLEDGE

### TARGET ELEMENTS

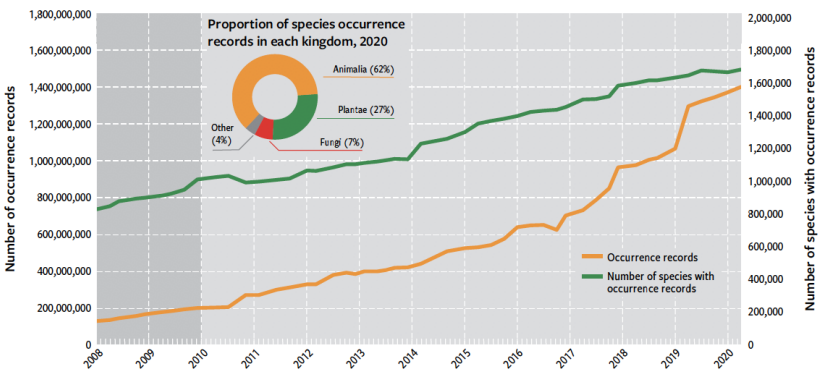
1. Biodiversity knowledge, science and technologies improved
2. Biodiversity knowledge, science and technologies shared



### Summary of target achievement

Significant progress has been made since 2010 in the generation, sharing and assessment of knowledge and data on biodiversity, with big-data aggregation, advances in modelling and artificial intelligence opening up new opportunities for improved understanding of the biosphere. However, major imbalances remain in the location and taxonomic focus of studies and monitoring. Information gaps remain in the consequences of biodiversity loss for people, and the application of biodiversity knowledge in decision making is limited. **The target has been partially achieved** (*medium confidence*).<sup>1</sup>

Figure 19.2. Growth in GBIF-mediated species occurrence records<sup>12</sup>



Mobilization of open-access data through the Global Biodiversity Information Facility (GBIF). The lines show the number of species occurrence records over time, and the number of species having occurrence records.



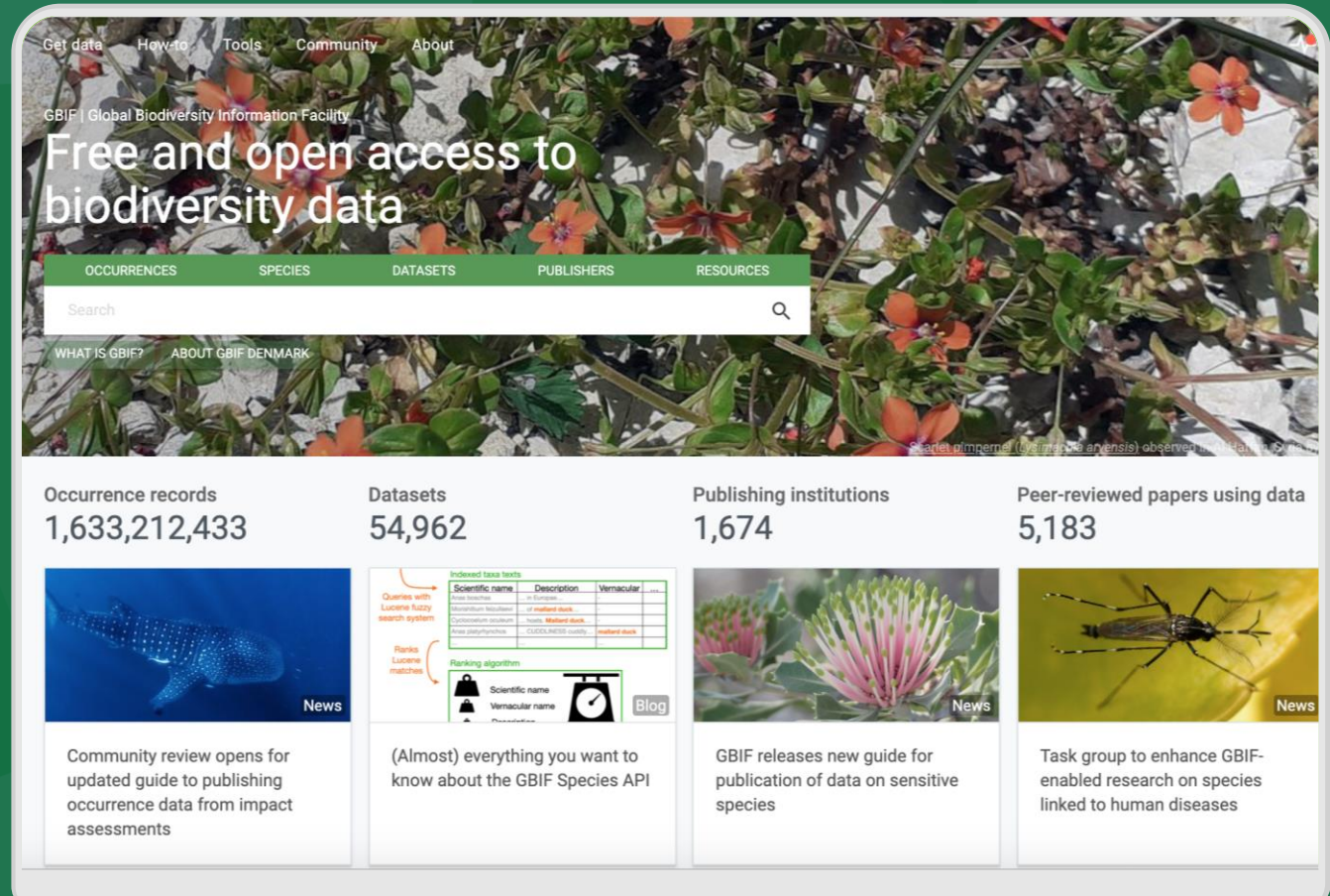
# WHAT IS GBIF?

Intergovernmental network  
and research infrastructure

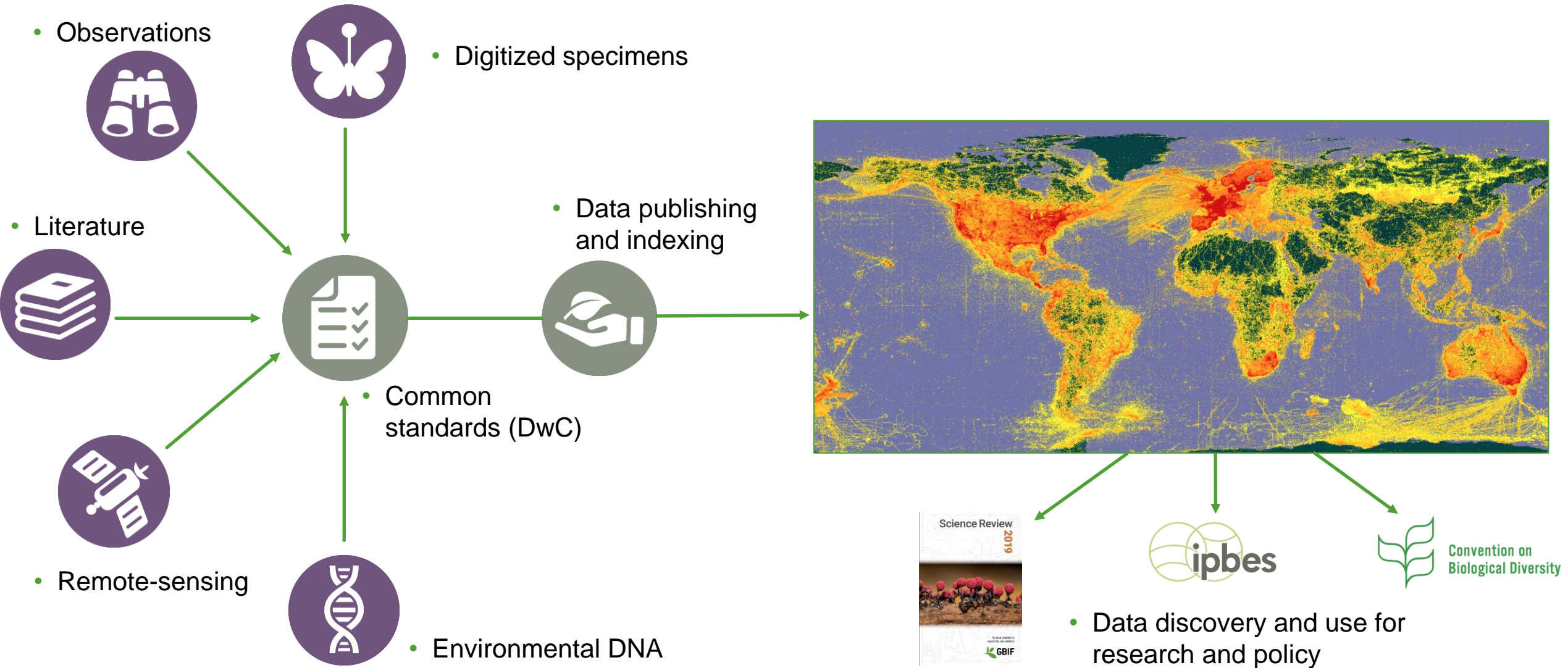
Provides anyone,  
anywhere, free and open  
access to data about all  
types of life on Earth

Voluntary collaboration  
through Memorandum of  
Understanding

Participant nodes,  
Secretariat in  
Copenhagen, DK



# A WINDOW ON EVIDENCE ABOUT WHERE SPECIES HAVE LIVED, AND WHEN



# DATA SOURCE FOR BIODIVERSITY INDICATORS



- Trend in invasive alien species introductions (through Global Register of Introduced and Invasive Species)



- Species Protection Index
- Protected Area Representativeness Index



- Comprehensiveness of conservation of socioeconomically/culturally valuable species
- Agrobiodiversity Index
- Crop Wild Relative Index



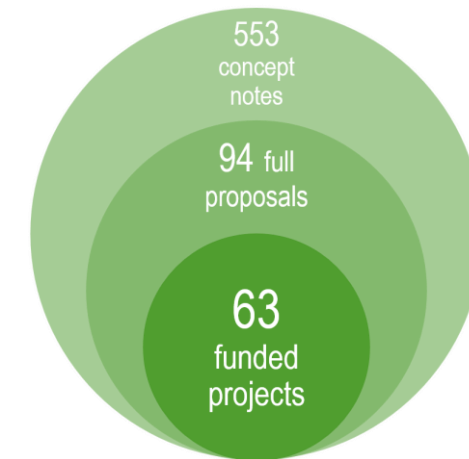
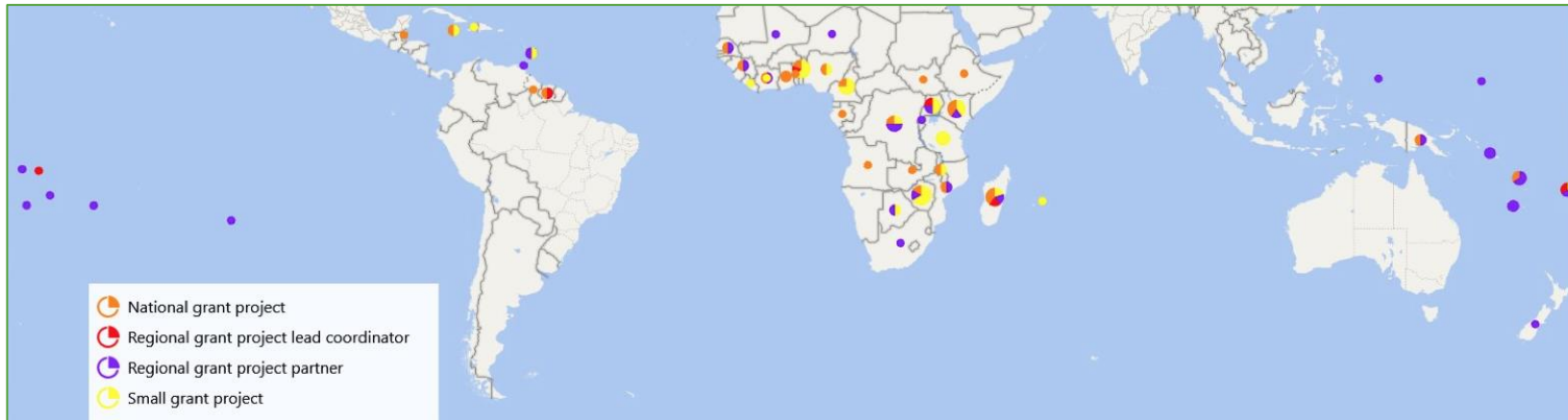
- Growth in species occurrence records accessible through GBIF
- Species Status Information Index



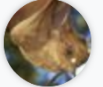



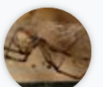

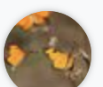
# BIODIVERSITY INFORMATION FOR DEVELOPMENT (BID) PROGRAMME

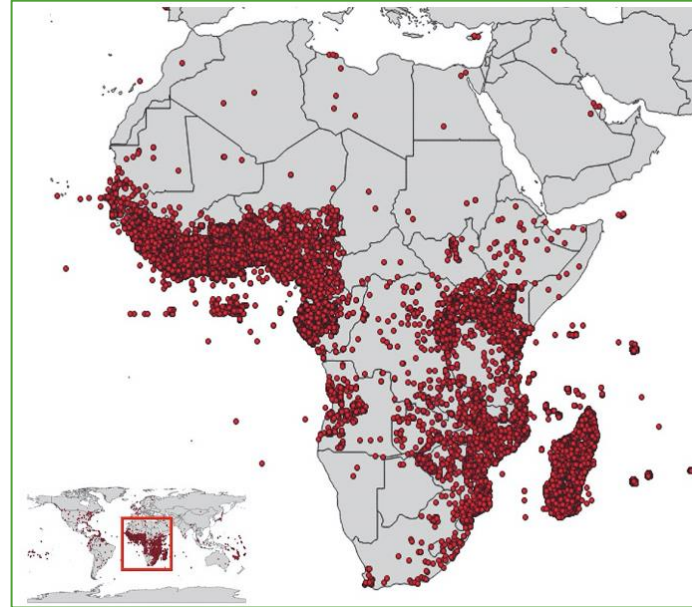
**Overall objective:** Improved management of natural capital for human well-being; through increased application of biodiversity information as evidence for decision making

- Initial €3,9 million grant under the EuropeAid Biodiversity for Life (B4Life) flagship umbrella programme, €1m in-kind contribution from GBIF
- First phase 2015-2019: Funded 63 projects in sub-Saharan Africa, Caribbean and Pacific (ACP) countries
- Regional capacity enhancement workshops trained project teams in biodiversity data mobilization and use
- Extension agreed to 2023, €1.6m budget top-up
- 3 calls for proposals in 2020 – Africa call attracted 215 concept notes!



# BID IN SUB-SAHARAN AFRICA: FIRST-PHASE OUTCOMES

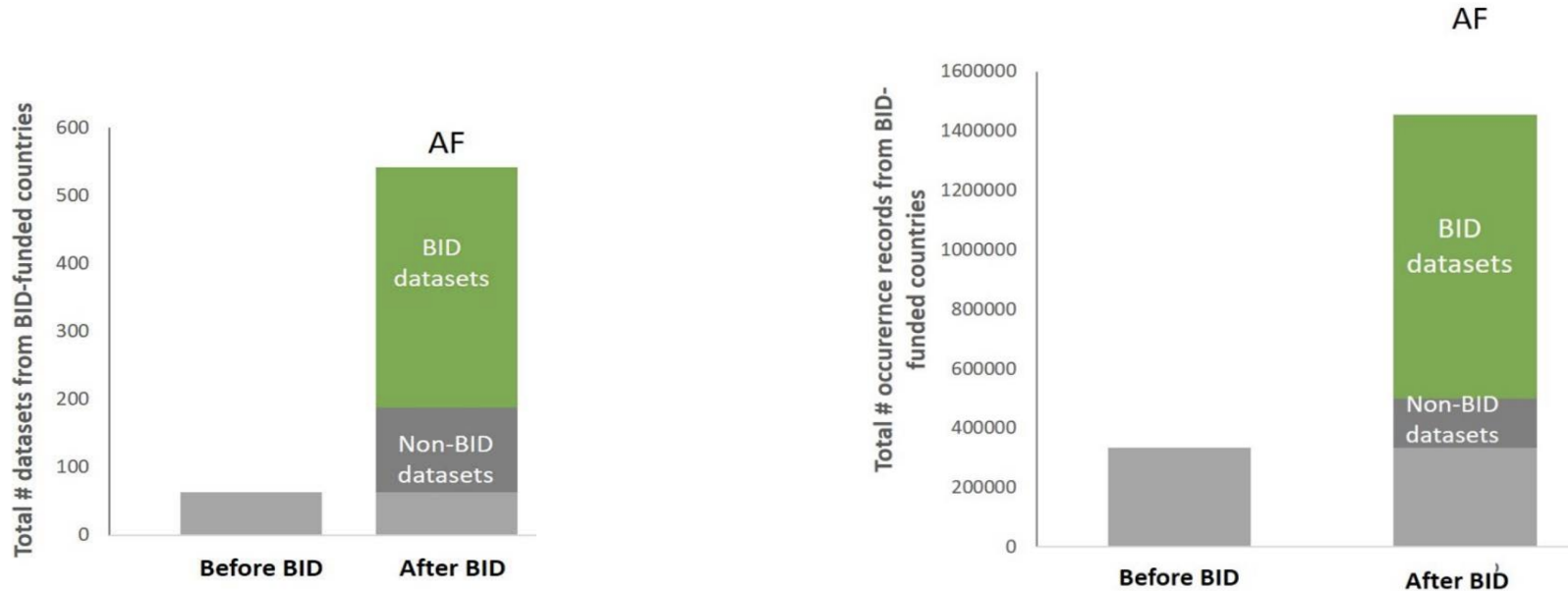
	Mobilizing bat occurrence data in Zambia	National grant
	Getting the plants to all: dissemination of information from the collection of The Mauritius Herbarium	Small grant
	Biodiversity Information for Development and Environmental Resilience in Southwestern Ethiopia (BIDERSE)	National grant
	Freshwater biodiversity of the Eastern Highlands of Zimbabwe: Assessing conservation priorities using primary species occurrence data	Small grant
	Digitizing the Matobo Hills Arachnid collections at the Natural History Museum of Zimbabwe	Small grant
	Mobilizing specimen data on bats and rodents from Zimbabwe	Small grant
	Strengthening Malawi's Biodiversity Information Facility	National grant



- 50 funded projects covering 27 African countries
- 354 datasets published in GBIF.org, 67 new data publishers
- 10 new GBIF participant countries in Africa
- Growing community of practice in biodiversity informatics
- Mentoring and training involving global GBIF community



# BID IN SUB-SAHARAN AFRICA: FIRST-PHASE OUTCOMES



- 321% increase in species occurrence records from target countries
- More than 80,000 different species, of which 27% were first records in GBIF for a country
- Over 2,000 distinct scientific names reported for the first time in GBIF
- Data on 1,100 threatened species, of which 22 were first records in GBIF





# BIODIVERSITY INFORMATION FUND FOR ASIA (BIFA)

Call for proposals promoting the mobilization and use of biodiversity data in Asia

*Biodiversity Information Fund for Asia (BIFA) programme invites new round of proposals from the region*



**32** Concept Notes from  
**13** countries in Asia

Requesting a total of  
€340,214

**13** proposals invited to  
submit a full proposals



Cleaning and digitizing plant specimen records  
from Helongjiang Province

Digitization of mycological collection in Nepal

Enriching the Bhutan Biodiversity Portal through digitization  
and mobilization of specimen collections

Digitizing and Databasing of bee specimens in Thailand

Supporting conservation through mobilizing ecological data from  
Kalimantan, Indonesia

**9 projects selected (total funding: € 117,829):**

Mobilizing invertebrate monitoring data in South-East Asia

Using citizen science to study whales and dolphins in  
Vietnamese waters

Digitization of specimens at the University of the Philippines  
Los Baños Museum of Natural History

Mobilizing Indonesian butterfly collections at the  
Museum Zoologi Bogor (II)

<https://www.gbif.org/programme/82629/bifa-biodiversity-information-fund-for-asia>



# TAXONOMIC DATA SUPPORTING GBO5 TRANSITIONS

## THE SUSTAINABLE AGRICULTURE TRANSITION



- Soil biodiversity data
- Pollinator species data
- In-farm biodiversity data

## THE SUSTAINABLE FRESHWATER TRANSITION



- Freshwater species data
- Invasive alien species data

## THE SUSTAINABLE CITIES AND INFRASTRUCTURE TRANSITION



- Urban biodiversity data
- Citizen science initiatives
- Data from impact assessments

## THE BIODIVERSITY-INCLUSIVE ONE HEALTH TRANSITION



- Data on disease vectors, hosts, reservoirs
- Medicinal plants data

# THANK YOU

[thirsch@gbif.org](mailto:thirsch@gbif.org)

