





# **Annual report 2019**

## **Operational document for staff and partners**



Lake Tanganyika, Uvira, RDCongo@LucJdB

### Annual report for the budget of 1 January 2019-31 December 2019

Implementation: 1 January 2019-30 May 2020

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06-06-2020



Tree nursery at Bujumbura arboretum (courtesy JP Froidebise)

#### **ACRONYMS**

ABS Access and Benefit Sharing

ACARE African Center for aquatic research and education

ACC Accord-Cadre de Coopération

APN African Parks

BES Biodiversity and Ecosystem Services
CBD Convention on Biological Diversity

CBD NFP National Focal Point to the Convention on Biological Diversity

CBFP Congo Basin Forest Partnership

CENAGREF Centre National de Gestion des Réserves de Faune (Benin)

CHM Clearing House Mechanism

CIFOR Center for International Forestry Research

CITES Convention on International Trade in Endangered Species of wild fauna and flora
CNEDD Conseil National de l'Environnement pour un Développement Durable, Niger

COHERENS Coupled Hydrodynamic Ecological Model for Regional Shelf Seas

COP Conference of the Parties

COPBH Belgian Community of Practice on Biodiversity & Health
CRH Centre de Recherche en Hydrobiologie, D.R. Congo
CSB Centre de Surveillance de la Biodiversité, D.R. Congo
DDD Direction de Développement Durable, D.R. Congo

DGD Belgian Development Cooperation

DRC D.R. Congo

GBIF Global Biodiversity Information Facility

GTI Global Taxonomy Initiative

ICCN Institut Congolais pour la Conservation de la Nature, D.R. Congo

ICT Information and Computer Technology

IEBR Institute of Ecology and Biological Resources, Vietnam

IFS International Foundation for Science, Sweden

INECN Institut National pour l'Environnement et la Conservation de la Nature, Burundi

(maintenant OBPE)

IPBES Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

IRD Institut de Recherche pour le Développement, France

KULeuven Universiteit Leuven, Belgium

MAB UNESCO Man and Biosphere programme

MEDD Ministère de l'Environnement de Développement Durable, R.D. Congo

MBG Meise Botanic Garden, Belgium

MRV Measuring, Reporting and Verification
NGO Non-Governmental Organisation

NP Nagoya Protocol

NBSAP National Biodiversity Strategy and Action Plan

NM-AIST Nelson Mandela African Institution of Science and Technology, Tanzania

OBPE Office Burundais pour la Protection de l'Environnement (avant : INECN), Burundi

PNKB Parc National de Kahuzi-Biega, D.R. Congo

PN Parc National PTK Portal Toolkit

RBINS Royal Belgian Institute of Natural Sciences, Belgium
RMCA Royal Museum for Central Africa (now AfricaMuseum)
SANBI South African National Biodiversity Institute, South Africa

SBSTTA Subsidiary Body on Scientific, Technical and Technological Advice

SSC South-South Cooperation

UAC Université d'Abomey- Calavi, Benin
UA Universiteit Antwerpen, Belgium
UB Université du Burundi, Burundi

UCL Université catholique de Louvain, Belgium
ULB Université Libre de Bruxelles, Belgium

ULg-Gblx Université de Liège - Gembloux Agro-Bio Tech, Belgium

UNEP UN Environment Program

UNIGOM Université de Goma, D.R. Congo
UNIKIS Université de Kisangani, D.R. Congo
UNILU Université de Lubumbashi, D.R. Congo
UOB Université Officielle de Bukavu, D.R. Congo

VLIR-IUC VLIR Inter-university Cooperation

VLIR-SI VLIR South Initiative

VLIR-UOS Flemish Interuniversity Council, Development Cooperation, Belgium

VUB Vrije Universiteit Brussel, Belgium

VVOB Vlaamse Vereniging voor Ontwikkelingssamenwerking en technische Bijstand, Belgium

WCMC UNEP World Conservation Monitoring Centre

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Traditional chief participating to a Q-survey, Pendjari National Park (courtesy Iliana Janssens)

### **IDENTITY SHEETS**

# **General data**

ID	Name	Abbreviatio	Country	Address	Tel.	Fa	Email address	Website	Status	Activity	Project account
Head office		-									
Secretariat	Royal Belgian Institute of Natural Sciences, CEBioS	RBINS	Belgium	Vautierstraa t 21, 1000, Brussels			ljanssens@naturalsciences.be	http://ww w.biodiv.b e/cebios2/	scientific	Research and outreach in natural sciences	
Manager	Luc Janssens de Bisthoven		Belgium	CEBioS, RBINS	+32(0)26 27 45 87		ljanssens@naturalsciences.be				
Contact person	Luc Janssens de Bisthoven										
Local partner	Université Abomay-Calavi	UAC	Benin						Public university	Academic	
	Office Burundais pour la Protection de l'Environnement	ОВРЕ	Burundi						Agency of the Ministry	Managment of protected areas	
	Centre de Surveillance de la Biodiversité	CSB	DR Congo						Research Institute	Monitoring & research biodiversity	
	Université de Kisangani, Université de Kinshasa, Université de Lubumbashi, Université de Goma, Université Officielle de Bukavu	UNIKIS UNIKIN UNILU UNIGOM UOB	DR Congo						Public universities	Academic	
	Institut Congolais pour la Conservation de la Nature	ICCN	DR Congo						State agency	Management o the National Parks	

	Institut de Recherches Halieutiques et Océanologiques du Bénin	IRHOB	Bénin			Institute	Protection of coastal systems	
	Ministries of Environment of Benin, Burundi, DR Congo, Togo, Niger, Morocco, Palestinian Territories, Uganda, Tanzania and their agencies		Various countries in Sahel, Palestina, Maghreb and West and East Africa				Collaboration national Clearing House Mechanism, NBSAP	
Secretariats	Various							
Managers	On demand							
Contact persons	Various, no office in the South							
Target group	Researchers, civil servants							

# **Programme presentation**

DATA	
Project number	
Original title	CEBioS-'Building capacities for Biodiversity and Sustainable development'
French title	CEBioS-'Renforcer les capacités pour la Biodiversité et le Développement durable'
Dutch title	
English title	CEBioS-'Building capacities for Biodiversity and Sustainable development'
Contact person	Dr. Luc Janssens de Bisthoven
Service	
Intervention number	
Basic contribution	
Budget heading	
Executing body	Royal Belgian Institute of Natural Sciences
Project code of executing body	
Executing body: other	
Subcontractor	none
Local partners	Universities, research institutes, ministries and their agencies, development actors in developing countries

Implementation period (months)	2019-2023
Country of implementation	Priority in Benin, Burundi, and DR Congo. 25 other countries eligible for certain interventions, in Africa, and SE Asia
Region of implementation	Africa, SE Asia
Province/Department	Benin: coast and North/ Burundi: entire country/ DR Congo: entire country with focus on Kisangani, Goma, Bukavu and Lubumbashi
Local situation	fragile
Type of funding	
Bilateral/Multilateral/NSA	
Info (ODA, PBA, etc.)	
Group/Programme	

TO BE COMPLETED BY THE DGD TO BE COMPLETED BY THE PARTNER



Workshop on the fisheries of Lake Tanganyika, Centre de Recherche en Hydrobiologie, Uvira, RD Congo@LJDB

#### INTRODUCTION

The first phase 2014-2018 of the CEBioS program was successfully concluded after an external mid-term evaluation and audit. The annual reports 2014, 2015, 2016 and 2017 are accessible online. The annual report 2018 was integrated in the final report for the first phase, and is also available online (see <a href="http://www.biodiv.be/cebios2/docs/reports">http://www.biodiv.be/cebios2/docs/reports</a>).

During 2018, the plan of the second phase (2019-2023) was formulated with the partners of CEBioS, based on the Theory of Change (annex 3) (<a href="http://www.biodiv.be/cebios2/docs/planning">http://www.biodiv.be/cebios2/docs/planning</a>). The plan 2019 was approved in March 2019, together with a first version of the log frame for 2019-2023 (annex 1), on condition of further improvement and reduction of the number of indicators for 2020 and onwards. As a consequence, the plan for the year 2019 was based on this first log frame, containing ca. 120 indicators. The present document reports on these indicators.

With the fall of the government in January 2019 and the general elections in May 2019, the entire pluri-annual budget of phase II, 2019-2023, could not be approved at the level of the cabinet in current affair. Therefore, for the time being, the programme cycle follows an annual frequency.

Due to the late start of the implementation of the plan 2019, it was agreed with DGD that CEBioS could implement the 2019 activities until the end of May 2020.

At the time of writing this report (April-May 2020), the country was in lock-down, due to the Coronavirus pandemic, meaning that planned missions for the period March-May could no longer take place.

#### **EXECUTIVE SUMMARY**

#### Institutional cooperation

The detailed annual reports of our institutional partners in Benin, Burundi and DR Congo are accessible on demand.

Our cooperation in **Burundi** with the 'Office Burundais pour la Protection de l'Environnement' (OBPE) was pursued along several axes: research, Global Taxonomy Initiative (GTI), Measurement-Reporting-Verification (MRV), Clearing House Mechanism (CHM) and habitat monitoring. Bamboo stands were analysed for sustainable use. Hoverflies were studied as forest-based pollinators for agricultural crops. Some small material was purchased. Staff members participated in MRV workshops in Benin and Bukavu (DR Congo). Several meetings were organised to maintain and update the national CHM. Several activities and missions took place to monitor the habitats of Ruvubu, Kibira and Rusizi National Parks, while a lexicon about the Ruvubu National Park is in press. OBPE and CEBioS supported the arboretum of Bujumbura, managed by the private sector (PROCOBU), with awareness activities with local schools and fishermen.

In **Benin** we continued our collaboration with the 'Université d'Abomey-Calavi' (UAC) and the 'Institut de Recherches Halieutiques et Océanologiques du Bénin' (IRHOB). Three PhDs are being supported at UAC about respectively human-wildlife conflicts, impact of fires and termite-wildfire interactions in Pendjari National Park. Some small equipment was purchased. A regional workshop was organized on the impact of fire, involving colleagues from Burundi and DR Congo. With IRHOB the cooperation focused on data collection to construct a hydrodynamic model in support of the sustainable exploitation of shrimps. Two students were trained in modelling in Belgium. They also made an awareness video. This cooperation is also supported by the CBD-financed 'Biobridge' project on the production of cheap water sensors.

In the **DR Congo** our cooperation supported students at the 'Université Officielle de Bukavu' (UOB) on the invasive liana Sericostachis in Kahuzi Biega National Park. At the 'Université de Lubumbashi' (UNILU) two students were supported for their work respectively on soil indicators in peri-urban environment and on soil macrofauna as indicator of degradation and pollution by heavy metals. At the 'Centre de Surveillance de la Biodiversité' (CSB) in Kisangani, several trainings were organized on habitat monitoring, data management and socio-economic surveying. The CSB team did multidisciplinary monitoring work in the Bekeni-Kondolole sector along the Kisangani-Ituri axis. A staff member was supported to attend an African Small Mammals Symposium in Mekelle, Ethiopia. The CSB continued contributing to updating the national CHM. Several young scientists were coached for theses and grant applications. A series of managerial meetings were organised concerning reporting, financial management (support by ENABEL) and the future organisation of a second Biodiversity Conference of the Congo Basin (special focus on zoonoses and One Health). CEBioS supported the Ministry of Environment (MEDD) on several fronts: Nagoya permits for research, submitting a project proposal for the CONNECT (https://www.connectbiodiversity.com/) upscaling phase, providing the opportunity to present the National Biodiversity Strategy and Action Plan (NBSAP) and discuss this during the MRV workshop in Bukavu and further improvement of the national CHM.

Concerning **Vietnam**, the BELSPO-funded CLIMDIS project has been approved, as a spin-off of earlier CEBioS work with the Institute of Marine Environmental Research (IMER). It will further explore climate mitigation and adaptation with the support of marine modelling tools.

#### Capacity building through calls for projects

Global Taxonomy Initiative (GTI): 15 out of 55 projects were selected to support researchers for a scientific training in Belgium; they were coming from Morocco (2), Benin (5), DR Congo (2), Vietnam (1), Tanzania (1), Rwanda (2), Burundi (1) and Ivory Coast (1). The themes range from training in genetics, molecular biology to taxonomy of e.g. fishes, molluscs, crabs, rodents, insect pollinators, mushrooms, coffee. Four researchers of RBINS received a GTI grant to carry out field work combined with capacity building in respectively Benin and Morocco (indicators of aquifers), Mozambique (marine biodiversity), Vietnam (insect biodiversity of hotspots) and Tanzania (pollinators).

Monitoring-Reporting-Verification (MRV): 2 MRV training and formulation workshops were organised in the framework of calls for projects, one in FR in Benin and one in EN in Uganda. Selected MRV projects were from DR Congo (5), Benin (2), Burundi (1), Uganda (2), Palestine (1) and Tanzania (2), topics ranging from forest cover, bushmeat, medicinal plants to human wildlife conflicts, land use planning, sustainable fisheries and sustainable use of shea nut. All projects will develop indicators for the NBSAP or local action plans of their respective countries. A third MRV workshop was organised in Bukavu, to provide training on several relevant topics for the biologists of East-DRC. MRV workshops mostly called on South experts (Benin, South Africa, DR Congo) in this regard.

Clearing House Mechanism (CHM): civil unrest, the Covid crisis and late notifications by the CBD secretariat about transfer from the CMS 'PTK' to 'Bioland' prevented a training session in Guinea and Benin respectively. A call to transfer 'PTK' sites to 'Bioland' resulted in 3 accepted projects which are now being executed (Benin, Niger, DRC). CEBioS organised a CHM networking training event in Brussels with 14 participants from 13 countries (+some funding by GBIF).

Awareness was further promoted with policy briefs and a series of 5 articles in GLO.Be. The CHM call supported national focal points of Ivory Coast, Morocco, Uganda and Niger. The awareness call selected 7 projects out of 18 submitted, in Benin (3), DR Congo (1), Morocco (1), Niger (1) and Rwanda (1). Topics ranged from environmental education, comparative study of awareness about conservation to e.g. awareness about sustainable use of edible mushrooms or medicinal plants.

#### Capacity building through manuals

The **lexicon** on habitat monitoring of Ruvubu National Park (Burundi) was finalised and is now in press. One volume of **AbcTaxa** (Nr. 19) on sea and basket stars (indicators of degradation of marine environment) of South Africa was produced by RBINS conservator Yves Samyn and co-authors, with wide dissemination locally. Another volume (Nr. 20) about Rubiaceae of Central Africa (medicinal properties and useful dyes) is in press. We improved the management of the stock available at RBINS and organised an online survey with end users to rationalise the dissemination of the volumes worldwide. Several policy briefs were produced in 2019, presenting recommendations from the MRV workshop in Uganda, about human-wildlife conflicts in Rusizi Protected Area (RD

Congo) and on the invasive water hyacinth of Lake Tana (in framework of EVAMAB). A flyer was produced to announce the preparation of the EVAMAB manual for Unesco-MAB managers and widely disseminated at AfriMab in Abidjan. A workshop in Uvira with the 'Centre de Recherche en Hydrobiogie' (CRH), DRC, will result in the production of a policy brief on sardine fisheries of Lake Tanganyika in 2020.

#### **Policy support**

More than 50 items (meetings, outputs, advice, revisions, conferences, accreditations, presentations, etc...) are reported for 2019 to support biodiversity policy worldwide (see chapter 4), and CEBioS was mentioned online in 7 national and international platforms or fora related to CBD and OECD. Related to the CBD secretariat, Han de Koeijer was selected as expert in 4 Informal Advisory Committees and participated to the Open-Ended Working Group on the post-2020 Global Biodiversity Framework in Rome (2020). Further he co-represented Belgium at WG 8J and SBSTTA 23. Marie-Lucie Susini and Lucie Ongena have contributed to the EDUCAID platform (contents and lay-out). CEBioS organised an EKLIPSE workshop in Gent about 'development cooperation and biodiversity for sustainable development', which resulted in a 'Conservation News' in the international conservation journal 'Oryx'. Hilde Keunen and Anne-Julie Rochette are members of the expert group for the UNEP CONNECT project (mainstreaming biodiversity into the heart of government).

In 2019 the last regional workshop for EVAMAB (coordinated by CEBioS, financed by BELSPO) took place at Lake Tana, Ethiopia. Several staff members organized this important event (summarizing the work done in Benin, Uganda, Tanzania and Ethiopia) and worked on several outputs such as policy briefs, scientific publications and a manual on the evaluation of ecosystem services for the Unesco Man and the Biosphere Programme.

#### **CEBioS' activities and outputs**

CEBioS staff made a compilation of activities related to zoonoses and one health on demand of DGD in the context of the actual Covid-19 crisis. Staff participated in 7 international conferences and executed 19 missions. CEBioS staff and co-workers co-authored over 12 conference abstracts and over 15 peer reviewed publications. More than 12 items on press and public awareness were reported. CEBioS became present and visible in the social media and produced and posted several videos on a CEBioS Youtube channel. A more performant log frame for 2020-2023 was established by staff with the support of an external consultant, following the recommendations by DGD & BELSPO. Several administrative and financial processes were streamlined and resulted in a Vademecum for financial reporting for our partners. In 2019 and in the first months of 2020, 4 collaborators left after more than 10 years of excellent service to CEBioS and/or the National Focal Point CBD, for a statutory job in the public sector. Replacement recruitments are almost finalised. CEBioS would like to express a special thanks to Mariam Agarad and Yassine Loufa (secretariat), Marie-Lucie Susini-Ondafe (GTI, Educaid, CHM and Policy) and Katrijn Baetens (marine modelling) and wishes them lots of success in their new jobs.

The report is structured across the 4 SOs of the programme (see Annex 2), depending on the target public of the activities:



#### 1- INSTITUTIONAL COOPERATION PER COUNTRY

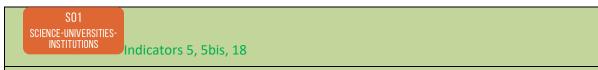
CEBioS focuses primarily on Burundi, Benin and the DRC, and to a lesser extent on Vietnam.

### Burundi

#### INSTITUTIONAL PARTNERS AND COOPERATION IN BURUNDI

- Institutional partner: 'Office Burundais pour la protection de l'Environnement' (OBPE)
- Description: the cooperation with the 'Office Burundais pour la Protection de l'Environnement' (OBPE, formerly INECN) focuses on developing guidance for habitat monitoring and applied biodiversity research with focus on the development of value chains for rural populations around protected areas, with the cooperation of the University of Burundi. An MoU has been signed for the period 2014-2018 with OBPE. A new MoU was developed in 2019 based on the ToC workshop held in 2018. More focus will be dedicated to the development of ecotourism for increased local revenues and mobilisation of the private sector (e.g. the arboretum at Rusizi NP). Synergies will be developed with NGOs in the field of agro-ecology. CEBioS will also provide capacity building for the OBPE staff: support to the national CHM focal point and awareness raising in Burundi. Cooperation will start with Broederlijk Delen or other ACNGs, such as Join for water on the creation of sustainable ecological systems in Burundi (rural populations). Follow-up of the (now finished) external VLIR-UOS South Initiative on the biomonitoring of Lake Tanganyika will be implemented with eventually other funding.

#### **ACTIVITIES 2019 WITH OBPE**



- 5. More researchers in the South are empowered to conduct more applied research on biodiversity and development (1) to consolidate the knowledge on habitats and biodiversity, (2) to understand and valorise ecosystem services and their value chains of the protected areas and surrounding rural landscapes in DRC, Burundi and in Benin and (3) to understand water currents having an influence on coastal erosion and dispersal of organisms such as shrimp or fish in Benin and Vietnam (if external funding). see indicator 145bis. Annual number of interventions integrating different calls in the institutional cooperation, hence allowing cross-fertilization between science, awareness, MRV and CHM in the science-policy-development interface.
- 18. Number of students in Burundi supported by CEBioS for their field work

Indicator 18 refers to the cooperation with OBPE for co-supervising students of the Université du Burundi on research on ecosystem services such as rattan, mushrooms, pollinators.

A Master thesis on the « Distribution, évaluation du stock et établissement du statut de conservation d'*Oxystenanthera abyssinica* dans la province de Cankuzo et Ruyigi » was finalised, supervised by Dr Jacques Nkengurutse and Mr Lameck Niyokwizigira (UB).

OBPE worked in the three national parks Kibira, Ruvubu and Rusizi, as managing agency mandated for these protected areas as well as natural reserves.

Computers were purchased in 2019, as well as some small material for habitat monitoring.

#### GTI

OBPE receives one GTI grant per year : in 2019, Eugène Sinzika was supported to work on "L'étude des interrelations entre les Syrphidae (Insectes: Diptères) et les écosystèmes forestiers et agricoles du Burundi »

#### **MRV**

'Etude des tendances de la biodiversité, des espèces et des écosystèmes fournissant les services écosystémiques' presented at the MRV training workshop in Bukavu (5-7 March 2020).

#### CHM

A CHM project, was carried out by OBPE, they organised one training workshop and meetings of the inter-institutional focal points from different ministries and NGOs, during three quarterly meetings to ensure that their work on biodiversity is added as information on the CHM and is tailored towards the implementation of the National Biodiversity Strategy and Action Plan (NBSAP) and the SDGs.

. The CHM project coordinator at OBPE was invited at the CHM/GBIF network and training workshop in Brussels in September 2019.



#### **Indicator 41**

41. Number and skills of staff of implementing agencies, incorporating issues of management, habitat monitoring, stakeholder engagement and valorisation of ecosystem services for local communities. They apply this through participative conservation

#### Training eco-guards to record LEM Habitats observations in PNRu

During an RBINS mission in **Ruvubu National park** (02 - 17.06.2019), revisions were made to address inaccuracies that were identified from the report obtained from the OBPE on observations on the dynamics of habitats, as recorded previously from the field. At the same occasion, 15 eco-guards practised, under our supervision, to designate habitats on the basis of formulas that synthesize the physiognomic descriptors of the vegetation and with reference to plant dominant in each vegetation on 31 permanent plots (Figs. 1 & 2).





Fig. 1&2. Exercises for recording LEM Habitat observations in Mabara (left) and Mashenyo (right)

#### Collecting LEM observations - Database - Monitoring fire - Lexicon in PNRu

Three campaigns were organized, involving 31 members of the field staff. Observations were recorded on 222 files to feed the database that was thus updated at OBPE general directorate. 120 new specimens of dominant plants were collected and 2000 specimens of the OBPE herbarium were rechecked and classified.

In addition, data collected by 8 rangers on criminal fires in the PNRu, "Rive gauche I" (Gasave) and "Rive droite I" (Muremera) sectors were also inserted into the database at OBPE headquarters.

Lexicon on Ruvubu National Park: the manuscript of the manual titled " « Habitats du Parc National de la Ruvubu (Burundi) - Aide au suivi de la dynamique à l'aide d'un lexique des Plantes observées dans ces milieux » was completed and is being edited ; 200 illustrations were included.

Concerning the planned regional workshop, it was decided in autumn 2019 to organise a colloquium dedicated to the memory of Benoit Nzigidahera on the thematic of biodiversity research and in cooperation with ARES. Unfortunately, the corona pandemic prevented the organisation of the event which was postponed to autumn 2020.

SO4

BELGIAN DEVELOPMENT
COOPERATION, ACNGS,
CIVIL SOCIETY AND
PRIVATE SECTOR

indicator 102

102. Number of activities that promote effective public, public-private and civil society partnerships for a sustainable use of ecosystem services in rural landscapes

OBPE with PROCOBU received funding to organise information sessions in 2 schools and for local fishermen around the Rusizi National Park on the importance of biodiversity in general and the national park in particular, followed by a field visit to the Park and the arboretum managed by PROCOBU. In total 200 scholars and 30 fishermen were reached by the project.

### Benin

#### INSTITUTIONAL PARTNERS AND COOPERATION IN BENIN

Institutional partner 1: 'Université d'Abomey Calavi' (UAC)

**Description**: the cooperation on habitat monitoring and applied biodiversity research focuses on the development of best practices around the use of fire by populations in the vicinity of protected areas (Pendjari NP) and also involves the civil society (especially AVIGREF<sup>1</sup>). The **University of Parakou** is involved as well. Special attention is devoted to cooperation with the private organisation 'African Parks' (APN), now responsible for the management of Pendjari National Park. With the UAC, CHM, MRV projects, assistance for representing CEBioS at the Cadre Stratégique Commun and the Benin part of the Belspo financed EVAMAB project were implemented.

Institutional partner 2: 'Institut de Recherches Halieutiques et Océanologiques au Bénin' (IRHOB)

**Description**: the cooperation with IRHOB and its French partner 'Institut de Recherche pour le Développement' (**IRD**) on marine modelling and the protection of the coastal systems, as well as capacity building of port authorities is implemented in phase II (2019-2023).

 Institutional partner 3: 'Ministère de l'Environnement et de la Protection de la Nature' (MEPN)

**Description**: support to the Clearing House Mechanism (CHM) national focal point and awareness raising in Benin with local NGO partners such as 'Nature tropicale' and others.

### **ACTIVITIES 2019 WITH UAC**

SO1 SCIENCE-UNIVERSITIES-INSTITUTIONS

Indicators 5, 5 bis, 19, 20.

5. More researchers in the South are empowered to conduct more applied research on biodiversity and development (1) to consolidate the knowledge on habitats and biodiversity, (2) to understand and valorise ecosystem services and their value chains of the protected areas and surrounding rural landscapes in DRC, Burundi and in Benin and (3) to understand water currents having an influence on coastal erosion and dispersal of organisms such as shrimp or fish in Benin and Vietnam (if external funding). see indicator 14

5bis. Annual number of interventions integrating different calls in the institutional cooperation, hence allowing cross-fertilization between science, awareness, MRV and CHM in the science-policy-development interface.

20. Number of students in Marine modelling

With the Laboratoire d'Ecologie Appliquée of Prof. Sinsin and Prof. Houinatou (UAC), CEBioS focused on applied research in the Pendjari National Park and the 'W' National Park, where contacts were made with Niger and Burkina Faso as well.

3 PhD students in **Benin** were supported for field work (UAC, in Pendjari NP).

<sup>&</sup>lt;sup>1</sup> AVIGREF: Associations Villageoises de Gestion des Réserves de Faune de la Pendjari, see <a href="https://avigref-pendjari.jimdo.com/">https://avigref-pendjari.jimdo.com/</a>

#### Preparation of doctoral theses with CEBioS support

EFIO Sylvain has started an investigation on "Perception of risks and the vulnerabilities of agricultural households to human-wildlife conflicts around the Pendjari Biosphere Reserve in North Benin". The field data collection took place between July and December 2019 (Fig. 3).



Fig. 3. Survey in the riverine village Pouri near Porga (survey by doctoral student EFIO Sylvain) HOUINDOTE Elodiade is working on "Impact of fires on the conservation of the flora diversity of the Pendjari Biosphere Reserve (West Africa)".

ADATIN Adèle is studying the "Impact of termite-wildfire interaction on ecosystem services in the Pendjari Biosphere Reserve"



41. Number and skills of staff of implementing agencies, incorporating issues of management, habitat monitoring, stakeholder engagement and valorisation of ecosystem services for local communities. They apply this through participative conservation

The transfer of applied science towards the management of protected areas was facilitated with CEBioS' support from UAC to "Centre National de Gestion des Réserves de Faune" (CENAGREF) ('W' NP) and APN, as well as the association of villages AVIGREF by organising a workshop in Pendjari (15-22 Dec 2019). To ensure the research in Pendjari NPThis regional workshop, with 39 participants (3 Burundians, 3 Congolese and 32 Beninese) focused on fire management in protected areas (PA) in tropical Africa in order to help mitigate the negative impacts of fires in PA, based on the experiences of the CEBioS-UAC partnership in Benin, Burundi and DRC (Fig.. 4).



Fig. 4. Gate of the Pendjari NP, december 2019

Dr. Jean-Didier Akpona of LABEF represented CEBioS in 2019 at several meetings of the Common Strategic Framework Benin (SO4)

#### **ACTIVITIES 2019 WITH IRHOB**

The main planned activities, and their level of achievement are as follows:

#### **Data collection**

1. Purchase of 3 computers

**Achieved**, one computer still stored in Belgium. Also three hard drives of 8 TB were bought. One in Belgium to have a backup in case of theft or loss.

1. Analysis of data needs

#### Achieved

2. Retrieval of existing data

**Achieved**: all data for input hydrodynamic model are available, all scientific articles regarding shrimp in the gulf of Guinée are collected and sorted out for relevance for the situation in lake Nokoué

3. Data collection. The budget provided for field trips, purchase of commercial data (e.g. remote sensing), data analysis, equipment. The Biobridge project will be implemented in synergy with the CEBioS components in 2019. Data collection is to validate the hydrodynamics model (data about salinity, temperature and current velocity are necessary). Data are needed to investigate the life cycle of the studied shrimp and their distribution patterns along the lake-ocean system during several seasons.

**Achieved:** and ongoing: see activity report of IRHOB and activity plan for shrimp sampling. Biobridge project contributes to that.

#### **Training**

- 1. Two students were staying in Belgium. The first phase in the set-up of the hydrodynamic model is done, meaning that all factors influencing sea circulation are included.
- 2. A selection procedure was set up and after analysis of the CV's Wilfried Sintondji for life cycle development and Sylvain Gozingan for hydrodynamic model development were selected. Sylvain Gozingan developed a working plan during his internship in Belgium.
- 3. Wilfried Sintondji developed a working plan for the next 4 years.
- 4. Training of the person who will set up the particle tracking module. The selected persons are encouraged to take on MSc thesis students and train them in marine modelling.

#### Communication.

- Wilfried Sintondji has engaged several fishermen to collaborate in the project and provide sampling sites. While doing this he explained our project and made people aware.
- 4. Wilfried Sintondji had an interview about shrimp aquaculture on local television: <a href="https://www.youtube.com/watch?v=Sm4P8Y3yBcE">https://www.youtube.com/watch?v=Sm4P8Y3yBcE</a>
- 5. Wilfried Sintondji and Sylvain Gozingan persons submitted an abstract to the VLIZ marine science day that was accepted. Due to the COVID-19 crisis this conference was cancelled. As an alternative, they presented their results in a short video: <a href="http://www.biodiv.be/cebios2/news/students-benin-lake-nokoue">http://www.biodiv.be/cebios2/news/students-benin-lake-nokoue</a>

One spin-off of the CEBioS marine modelling activities is the **Bio Bridge project**, see blog: https://odnaturenews.naturalsciences.be/post/category/odnature/cebios/marine-sensor-benin

## **DR** Congo

#### INSTITUTIONAL PARTNERS AND COOPERATION IN DR CONGO

Institutional partners 1: 'Institut Congolais pour la Conservation de la Nature' (ICCN) and universities (e.g.: Université Officielle de Bukavu (UOB), Université de Goma (UNIGOM), Université de Kisangani (UNIKIS), Université de Lubumbashi (UNILU), Université de Kinshasa (UNIKIN)

**Description:** the cooperation with the 'Institut Congolais pour la Conservation de la Nature' (ICCN) focuses on developing guidance for habitat monitoring in its protected areas.

Institutional partner 2 : 'Centre de Surveillance de la Biodiversité' (CSB)

**Description**: The institutional cooperation with CSB in Kisangani is continuing on several fronts: the support of the CSB as 'secondary CHM' in cooperation with the national CHM in Kinshasa; the support of CSB to fulfil its role and mandate in biodiversity research through a comprehensive programme of monitoring of non-, or partially protected areas; awareness activities with contribution to other CEBioS activities in Congo (e.g. awareness raising of Kinshasa's school children by **Kadima's Pride of Africa wildlife park)** as well as the continued professional reinforcement of the CSB staff.

 Institutional partner 3: 'Ministère de l'Environnement et de Développement Durable' (MEDD)

**Description**: integrating transversal themes such as Clearing House Mechanism, awareness raising and MRV is continuing in cooperation with the 'Direction de Développement Durable' (DDD) of MEDD. The implementation of procedures and legislation for the Nagoya Protocol is also a field in which CEBioS continues to play a facilitating role together with the CSB and the Congolese universities.

#### **ACTIVITIES 2019 WITH ICCN AND UNIVERSITIES**



#### Indicators 5, 5bis, 17

5. More researchers in the South are empowered to conduct more applied research on biodiversity and development (1) to consolidate the knowledge on habitats and biodiversity, (2) to understand and valorise ecosystem services and their value chains of the protected areas and surrounding rural lanscapes in DRC, Burundi and in Benin and (3) to understand water currents having an influence on coastal erosion and dispersal of organisms such as shrimp or fish in Benin and Vietnam (if external funding). see indicator 14

5bis. Annual number of interventions integrating different calls in the institutional cooperation, hence allowing cross-fertilization between science, awareness, MRV and CHM in the science-policy-development interface.

17. Number of students in RDC (universities, CSB) supported by CEBioS for their field work

The mission from 16.02 - 01.03 2020 in the Southern sector of Parc National de Virunga (PNVi) was devoted to the collection of diachronic data on 5 permanent plots which have been established since 2017

With the support of CEBioS, the UOB team reassessed the impact of the *Sericostachys scandens* creeper in the Parc National de Kahuzi Biega (PNKB). Data on forest dynamics and the cover of shrub and herbaceous strata, were collected on 8 permanent plots installed since 2008. The data recorded are being processed in order to publish them.

CEBioS support to UNILU has contributed significantly to the identification and assessment of the biomass, diversity and abundance of soil macrofauna based on a gradient of ecosystem degradation. Two doctoral students are working on this general topic:

- -MASHAGIRO Grace Queen has undertaken "the evaluation of ecosystem services of (peri-) urban green spaces in Lubumbashi (DR Congo) by biological and physico-chemical soil indicators.
- -MUGANGUZIuganguzi Ntale Trésor is studying the "Influence of anthropogenic activities on the soil macrofauna in Haut-Katanga province (DR Congo).

### ACTIVITIES 2019 WITH THE 'CENTRE DE SURVEILLANCE DE LA BIODIVERSITÉ'



5. More researchers in the South are empowered to conduct more applied research on biodiversity and development (1) to consolidate the knowledge on habitats and biodiversity, (2) to understand and valorise ecosystem services and their value chains of the protected areas and surrounding rural landscapes in DRC, Burundi and in Benin and (3) to understand water currents having an influence on coastal erosion and dispersal of organisms such as shrimp or fish in Benin and Vietnam (if external funding). see indicator 14

5bis. Annual number of interventions integrating different calls in the institutional cooperation, hence allowing cross-fertilization between science, awareness, MRV and CHM in the science-policy-development interface.

- 12. Number of scientists able to use MRV-related methodologies to transfer their data towards indicator based systems of reporting
- 14. Number of students from the south coached on biodiversity and ecosystem services in the framework of a thesis in the South
- 48. Number of scientists involved in the production of lexica, policy briefs and scientific papers, showing their involvement in the science-policy interface
- 49. Number of authorities, decision makers, local organisations and NGO's on having benefited from awareness raising activities and converting it in their professional lives at level of policies or management

For 2019 the studied zone was located at the sector Bekeni-Kondolole, PK 172 on the Kisangani-Ituri axis.

#### To prepare for this type of activity, several types of training were provided for the CSB:

- This activity can be considered as an institutional MRV-activity. Therefor members of the CSB-staff have been invited to the MRV training-, and formulation workshops in Benin (1 staff member - October 2019) and Bukavu (2 CSB- project coordinators – March 2020).
- Based on CEBioS' experience in Burundi and with ICCN in the National Parks, training on habitat monitoring was organised in 17-18 September 2019 with the participation of a

- park manager of Kahuzi-Biega NP as representative of ICCN and a representative of OBPE Burundi.
- This training was extended with several days of training and follow-up on the
  adaptation of the available data-sets to ensure their suitability for uptake in GBIF or
  other facilities, provided by Congolese data-experts trained by the UCL and CIFOR.
- Theoretical and hands-on training in politico-economical surveys was provided for a small team of CSB staff members by the VLIR-UOS Joint project of UNIKIS and IOB in June 2019.
- A taxonomy grant (GTI) was provided for Pascal Baelo to come and study the squirrels of the area in Belgium. Mr Baelo's visit was planned for September-October 2019, but his travels were interrupted by an administrative problem related to the newly developed Nagoya Protocol procedures in the DRC. His stay in Belgium in February-March 2020 was abruptly ended by the COVID pandemic.

#### This series of training sessions allowed to follow a three step approach for the studied zone :

- 1. Politico-economical study of the area by a small team (November 2019)
- 2. Based on the results of this survey, a multidisciplinary biomonitoring field visit took place in December 2019
- 3. A third visit was organised to discuss the preliminary results of both studies with '1 chef de secteur, 4 chefs de groupements, 12 sages, 1 responsable de la Police territoriale, 4 pasteurs, 3 directeurs d'écoles, 1 agent du Ministère de l'Environnement et Développement Durable'.

#### Outcome:

- The different sub-teams have produced data-sets: political-economic data, small Mammals, big Mammals, pests and plant diseases, reptiles, Myriapods, Coleoptera, fish, botany
- Data sets are being studied to publish scientific articles or other documents (tbd)
- The 'Journal Karibu' (DR Congo) recently published an article about the partnership between CEBioS and the CSB, together with an MP3 audio-file, broadcasted several times on local radio chains (<a href="http://tiny.cc/5070nz">http://tiny.cc/5070nz</a>)

As an unexpected outcome of the above activities, the CSB and two Faculties on the same campus (Faculty of Science, Faculty of Sustainable Management of Renewable Natural Resources) are following up on the studied area with several smaller interventions (advice, improving certain techniques, mobilisation of local legislators etc) and have developed a project for the sustainable development of the area, submitted to the FED-International Union for Conservation of Nature (IUCN) call in May 2020.

Part of the provided budget was intended to participate at the yearly edition of the 'Semaine de la Science et des Technologies'. This event did not take place. The budget was mainly reallocated to the training in politico-economical surveys and the participation of one CSB staff (Prof Gambalemoke) at the African Small Mammals Workshop in Mekelle, Ethiopia, September 2019, together with 3 colleagues for whom the participation was paid for by the VLIR-UOS Inter-University Cooperation (IUC) with UNIKIS and by grants provided by the conference organisers.

The CSB, as **secondary CHM** for the DR Congo, has continued to contribute to the national CHM-site and to offer assistance and training to colleagues at other locations when posting to the site.

A contribution to the financing of the internet connexion of the institute was absolutely necessary, as the CSB still has no proper funds for functioning. Unfortunately, Olivier Basa, responsible for the CHM activities, has not been able to travel to Kinshasa for training on Bioland/CHM in March due to Covid19. A digitalisation project has started but due to administrative constraints, it has not yet been finished.

A **detailed report** about the institutional cooperation CEBioS-CSB is available and will be posted to the DRC's CHM website shortly (<a href="http://cd.chm-cbd.net/">http://cd.chm-cbd.net/</a>).

Despite the enthusiast support of many institutions and individual researchers and relentless efforts of CEBioS staff to secure funding, a second 'International Conference on Biodiversity in the Congo Basin' planned for 2020 had to be postponed.

#### Examples of coaching by CEBioS and other outcomes of the CSB-CEBioS collaboration:

- Gaby Badjejea (CSB): amphibians, International Foundation for Science (IFS) grant proposal and proposal for the Witherford foundation, VLIR-CUI grantee
- Bruno Modenga (CSB): shrimps, put in contact with Museum National Histoire Naturelle de Paris and with YIAKIS (daughter of International Institute of Tropical Agriculture (IITA))
- Jeannot Akuboy (CSB): herpetology, IFS grant proposal, he accompanied the biomonitoring team (see above) to find and identify plants used by pygmies to cure snake bites
- Ndjoku Bienfait (UNIKIS, collaborator of CSB): Primatology, work with TL2 and Max Planck Gesellschaft
- Prescott Musaba (UNIKIS, collaborator of CSB): bats, has finished his D.E.S.
- Franck Masudi (CSB): amphibians, IFS grant proposal), Rufford grant proposal (granted), GTI grant proposal, has become assistant of the Head of Delegation for GBIF, Prof Corneille Ewango.
- Pascal Baelo (CSB): squirrels and their pathologies, has finished his D.E.S., IFS grant proposal,
   GTI grantee 2019
- Jean Bakondongama (UNIKIS, collaborator of CSB): joined the biomonitoring team (see above) to do a survey for his PhD sur 'Connaissance, perceptions sur les infestations et les moyens de contrôle de Zonocerus variegatus dans la zone forestière de Kisangani.'
- 2 more students of the Faculty of Sciences joined the biomonitoring team (see above) to collect data for their Master theses in zoology
- Taylor Mambo (CSB) defended his D.E.S., mainly with support from the AfricaMuseum, though also with regular interventions of CEBioS staff
- The intention exists to set up the CSB as the office for GBIF DRC
- Cooperation with ENABEL staff in Kisangani (voluntary): reorganization of CSB's accounting system, seminar on financial management, reinforcement of internal financial control, assistance with the implementation of proposed measures.
- CSB regularly employs as a consultant, Mr Bob Utshudi, responsible for ICT at the 'FORET' project (EU) and at ENABEL Kisangani

#### **ACTIVITIES 2019 WITH MEDD**

 Regular contacts and visits with the Secretary General of MEDD and with its Direction de Développement Durable (DDD), the agency harbouring the National Focal Point for the

- CBD, CHM and for the Nagoya Protocol (NP), have taken place. As a result several NP permits were delivered to GTI students from DR Congo to take material with them to Belgium for further studies.
- MEDD has co-edited a project proposal for its implication in the upscaling phase of the UNEP CONNECT project (<a href="https://www.connectbiodiversity.com/about-connect">https://www.connectbiodiversity.com/about-connect</a> ) which aims at streamlining and reinforcing the uptake of biodiversity indicators in national development plans.
- A representative of MEDD participated at the MRV training workshop in Bukavu, March 2020, to present DRC'sNBSAP and represent biodiversity national decision-makers in group discussions.
- MEDD received funding for a project on the transfer of information of the PTK site to the new Bioland tool. At the edition of this report the project wasn't finished yet due to the COVID pandemic.

### **Vietnam**

Vietnam is not anymore part of the Belgian official bilateral cooperation, but remains important for the indirect cooperation. The Belgian embassy in Hanoi encourages synergies between Belgian actors and welcomes the continuation of the CEBioS work in one or another way. CEBioS decided to exit from the marine work with IMER in Vietnam with the core funding to concentrate better on Benin. However, Dr. K. Baetens (marine modeler CEBioS) was instrumental for winning a Belspo project (CLIMDIS) to continue the cooperation with IMER. The second aspect, the exploration of biodiversity hotspots in cooperation with the Vietnamese Academy of Sciences, remains a GTI intervention of CEBioS in Vietnam in the coming years, given the extremely rapid degradation of natural ecosystems and their services in Vietnam, but also the opportunities risen by the prospect of a more responsible tourism, based on knowledge and respect of the remaining biodiversity hotspots. The very high number of endemic (only living there) species of animals and plants in its rain forests and coral reefs can be sustainably exploited as an asset for the future.

#### INSTITUTIONAL PARTNERS AND COOPERATION IN VIETNAM

- Institutional partner 1 (exit): 'Institute of Marine Environmental Research' (IMER)
  Description: the marine modelling cooperation with the 'Institute of Marine
  Environmental Research' (IMER) will continue on external competitive funding
  (funding decision by BELSPO and VLIR-UOS pending) and will thus no longer be part
  of the core funding of the CEBioS programme phase II. The local scientists are very
  much motivated to apply for other fundings in cooperation with CEBioS in order to
  work on the threats on Halong Bay and its tourism industry.
- Institutional partner 2: 'Vietnam National Museum of Nature' (Vietnamese National Museum for Nature (VNMN) (under 'Vietnam Academy of Science and Technology')

  Description: the large effort on the biodiversity research of protected biodiversity hotspot areas during phase I was very successful and culminated in many scientific publications, adapted and vulgarized to decision makers in a policy brief (<a href="http://www.biodiv.be/cebios2/news/launch-of-a-policy-brief-dedicated-to-insect-biodiversity-in-vietnam">http://www.biodiv.be/cebios2/news/launch-of-a-policy-brief-dedicated-to-insect-biodiversity-in-vietnam</a>). This effort will continue in cooperation with the VNMN.

Extensions of this type of capacity building towards Cambodia, Laos or Thailand are in the making.

#### **ACTIVITIES 2019 WITH VIETNAM**



#### Indicators 5, 5bis

5. More researchers in the South are empowered to conduct more applied research on biodiversity and development (1) to consolidate the knowledge on habitats and biodiversity, (2) to understand and valorise ecosystem services and their value chains of the protected areas and surrounding rural landscapes in DRC, Burundi and in Benin and (3) to understand water currents having an influence on coastal erosion and dispersal of organisms such as shrimp or fish in Benin and Vietnam (if external funding). see indicator 14

5bis. Annual number of interventions integrating different calls in the institutional cooperation, hence allowing cross-fertilization between science, awareness, MRV and CHM in the science-policy-development interface.

No activities were undertaken with Viet Nam in 2019 as it was decided to have an exit strategy in 2018. A project proposal was approved by BELSPO to continue the work on the use of COHERENS for climate change adaptation and mitigation (CLIMDIS), which is a spin-off of earlier CEBioS work.

#### 2- CAPACITY BUILDING THROUGH PROJECT CALLS AND MANUALS

CEBioS performs capacity building in many ways, especially (1) by implementing several types of competitive calls linked to individuals and institutional cooperation and (2) with the co-production of technical manuals and policy briefs through dedicated workshops.

#### CALLS FOR PROJECTS

### Calls for Global Taxonomy Initiative (GTI)



#### INDICATOR 5, 5BIS AND GTI ACTIVITY INDICATORS 15 AND 16

5. More researchers in the South are empowered to conduct more applied research on biodiversity and development (1) to consolidate the knowledge on habitats and biodiversity, (2) to understand and valorise ecosystem services and their value chains of the protected areas and surrounding rural landscapes in DRC, Burundi and in Benin and (3) to understand water currents having an influence on coastal erosion and dispersal of organisms such as shrimp or fish in Benin and Vietnam (if external funding). see indicator 14

5bis. Annual number of interventions integrating different calls in the institutional cooperation, hence allowing cross-fertilization between science, awareness, MRV and CHM in the science-policy-development interface.

- 15. Number of GTI grants to young researchers to come to Belgium and alumni database
- 16. Number of GTI projects supporting RBINS scientists performing capacity building in the South

#### Funding for:

 individual short-term trainings in Belgium for researchers/students from Belgian partner countries, with an emphasis on CEBioS partner institutions (UAC, OBPE,...) and

main partner countries (Benin, DR Congo and Burundi). These trainings enable access to the rich collections based in Belgian institutions (RBINS, RMCA, MBG) and to Belgian expertise.

For the 2019 call 51 projects were submitted (Table 1). 3 of these projects weren't eligible under the conditions of the call. Of the 48 eligible projects the jury selected 15 projects. Most of the students have done their short-term stays at RBINS or MBG in 2019 – 2020. A student had to stop his stay in Belgium and was repatriated to his/their country due to the COVID pandemic. One student could not come to Belgium for the same reason. An additional training session on scientific writing and awareness was organised for some of the students in collaboration with Isabel Gerard (RBINS/RMCA).

• *in situ* group trainings facilitated by Belgian researchers/technicians in the South.

7 projects were submitted under the 2019 annual call, of which the jury selected four. (Table 2). Not all projects have been completed yet. The project in Mozambique was hampered by the security situation in the field as well as the COVID pandemic. It still needs be decided how the investment in the preparation can be used for future training. Best way forward would be to grant this project an extension for 2020 call.

Table 1: selected GTI projects through the annual call 2019

Family name:	First name(s):	Country	Gender	Name of applicant organisation/institution:	Title of the project:	Tutor
AZIRAR	MARYAM	Morocco	Female	FACULTE DES SCIENCES ET TECHNIQUES/ UNIVERSITE MOULAY ISMAIL	Formation aux techniques moléculaires d'un modèle biologique (Crustacés Sténasellides)	G Sonnet
BADOU	Akotchayé Sylvestre	Benin	Male	Laboratoire d'Ecologie, Botanique et de Biologie Végétale	Taxonomie et phylogénie moléculaire des genres Sutorius, Boletellus, Tylopilus et Gyroporus (Boletale, Basidiomycota, Fungi) du Bénin.	A De Kesel
BAELO	PASCAL LIKANGALELE	DR Congo	Male	Université de Kisangani/ Centre de Surveillance de la Biodiversité	Taxonomie et dynamique des populations des Sciuridae (Rodentia, mammalia) potentiellement porteur des germes pathogènes à Kisangani (RDC)	Erik Verheyen
BENYAHIA	Yousra	Morocco	Female	Faculté des Sciences El jadida, Université Chouaib Doukkali	Taxonomie des Hyménoptères de la sapinière du Parc National de Talassemtane (Rif, Maroc).	Wouter Dekonink
BOUKARY	Abdoul-Azize	Benin	Male	Laboratoire d'Ecologie, de botanique et de Biologie végétale (LEB)/Université de Parakou	Stage de perfectionnement pour la domestication et production de quatre souches de champignons saprotrophes d'importance socio-économique au Bénin	private company
Do	Van Tu	Vietnam	Male	Institute of Ecology and Biological Resources (IEBR), Vietnam Academy of Science and Technology (VAST)	Species composition, distribution and status of freshwater crabs of Vietnam	Thierry Backeljau
НОТЕКРО	Sourou Joseph	Benin	Male	Laboratory of Parasitology and Parasitic Ecology/University of Abomey-Calavi	Taxonomy, systematics, water quality and use of ostracods (Crustacea, Ostracoda) in fish farming in Benin	Koen Martens
KAMBALE KATEMBO	Jean-Léon	DR Congo	Male	CENTRE DE SURVEILLANCE DE LA BIODIVERSITE	Distribution, diversité et taxonomie des caféiers sauvages (Coffea sp.) en RD Congo	Piet Stoffelen
KOUDENOUKPO	Zinsou Cosme	Beninese	Male	Université d'Abomey-Calavi	Taxonomie et systématique des Mollusques (Gastéropode) dulcicoles du Bénin.	Thierry Backeljau

MPONDO	Faith Thomas	Tanzania	Female	The Nelson Mandela African Institution of Science and Technology	The Current Status and Role of Rangeland Insect Pollinators for Pastoralist Livelihood Diversification in Northern Tanzania.	Alain Pauly
NSENGIMANA	Venuste	Rwanda	Male	University of Rwanda, Colege of Education	Use of soil and litter arthropods as biological indicators of soil quality in Southern Rwanda	Wouter Deconinck
PELEBE	Edéya Orobiyi Rodrigue	Benin	Male	Laboratoire de Recherche en Aquaculture et Ecotoxicologie Aquatique de la Faculté d'Agronomie de l'Université de Parakou	Sarotherodon melanotheron melanotheron ou une espèce cryptique isolée et plus abondante dans la retenue d'eau douce d'Atchakpa au centre du Bénin : apport du barcoding moléculaire	Erik Verheyen
SINZINKAYO	Eugène	Burundi	Male	Office Burundais pour la Protection de l'Environnement (OBPE)	Etude des interrelations entre les Syrphidae (Insectes: Diptères) et les écosystèmes forestiers et agricoles du Burundi	Kurt Jordaens
SORO	Nicodénin Angèle	Côte d'Ivoire	Female	Station d'Ecologie de Lamto	Building a bee reference collection for Côte d'Ivoire: Identification of bees collected in various ecosystems using the RBINS's collection.	Alain Pauly
UMUNTUNUNDI	Prosper	Rwanda	Male	Center of Excellence in Biodiversity and Natural Resource Management, University of Rwanda.	Semi-slugs and Slugs of Rwanda	JV Goethem / Thierry Backeljau

Table 2: GTI North – South projects selected under the 2019 call

Titre du projet	Nom promoteur(s) RBINS	Pays impliqué(s)	Institution(s) partenaire(s) au sud
Taxonomie des invertébrés des eaux souterraines du Bénin : ouvrir la voie aux outils d'évaluation et de biomonitoring de la qualité de l'eau	Patrick Martin	Bénin et Maroc	UAC (Bénin) et Université de Marrakech (Maroc)
Increasing Marine Taxonomic Knowledge in Mozambique: the Case of Two Neglected Taxa, part Two	Yves Samyn	Mozambique	Universidade Eduarde Mondlane (Maputo): Departamente Estação de Biologia Marítima da Inhaca (Inhaca), Musea de Historia Natural (Maputo), Escola Superior de Ciencias Marinhas e Costeiras (Quelimane); Lúrio Universidade (Pemba).
A step further in the Entomodiversity of Vietnam (part X)	Jérôme Constant	Vietnam	Vietnam National Museum of Nature, Vietnam Academy of Science and Technology, Hanoi, Vietnam (VNMN)
Training course on Hymenoptera and other pollinators in Tanzania	Jean-Luc Boevé & Alain Pauly	Tanzania	College of African Wildlife Management in Mweka (CAWM)

### Calls for Monitoring-Reporting-Verification (MRV) projects

S01
SCIENCE-UNIVERSITIES-INSTITUTIONS
Indicator 12

12. Number of scientists able to use MRV-related methodologies to transfer their data towards indicator based systems of reporting

Two MRV formulation and training workshops were organized in 2019 and early 2020 for the MRV program: one in Benin (October 2019) for French-speaking partner countries and one in Uganda for English-speaking countries (February 2020). Alumni from MRV projects in phase I were invited as well as other participants ( scientists of partner institutions, new institutions and authorities of respective countries focused on GBIF, CBD, etc). The two workshops were preceded by **calls** for participation based on MRV pre-project proposals (one for French- and one for English- speaking countries). For each selected pre-project, two participants were invited to attend the workshop during which presentations and coaching were provided to improve their proposals. Another selection was then organized after the workshops, among the improved projects. The workshops participants, their project title and the results of the selection are summarized in the Tables below.

Table 3: participants of the workshop for French-speaking partner countries, Benin (2019), and projects selection results

	Name of participants at workshop Ouidah, Benin, October 2019	Affiliation	Project title	Selected
	BASHONGA BISHOBIBIRI Alexis	Centre de Recherche en Hydrobiologie (CRH) d'Uvira, Province du Sud-Kivu, République Démocratique du Congo (RDC)	Protection de l'avifaune du Delta de Ruzizi: République Démocratique du Congo & Burundi	no
1	NEBESSE MOLOLO Casimir	Centre de Surveillance de la Biodiversité, Kisangani, RDC	Apport du commerce des gibiers petits Mammifères dans le vécu quotidien des ménages des vendeuses des gibiers de la ville de Kisangani et de ses environs : cas des Rongeurs et carnivores	yes
2	MASABO Onesphore	L'Office Burundi pour la Protection de l'environnement (OBPE), Burundi	Indicateurs sur les conflits entre les Buffles du PN de la Ruvubu et des hippopotames du PN de la	yes
	NKENGURUTSE Jacques	Université du Burundi	Rusizi et les communautés locales riveraines	
	AKPONA Jean Didier	Laboratoire de Biomathématiques et d'Estimations Forestières (LABEF), Cotonou, Bénin		
3	DJAGOUN CHABI Sylvestre	Laboratoire d'Ecologie Appliquée (LEA), UAC, Bénin	Etat du couvert forestier national : Tendances, Efficacité des interventions et implications pour la prise de décision	yes
	KOUTON Meryas	Centre d'Etude et d'Initiatives pour la Préservation de la Biodiversité et la Sécurité Alimentaire (CEIBA-ONG), Cotonou, Bénin	prise de decision	
	LEGBA S. Ingride	Département de Biologie Végétale (FAST) - Université d'Abomey-Calavi, Bénin		
4	ADOMOU Aristide Cossi	Herbier National du Bénin (HNB)	Biodiversité et conservation des plantes médicinales commercialisées au Bénin	yes
	TOYI Mireille	Laboratoire d'Ecologie Appliquée (LEA) - Université d'Abomey-Calavi, Bénin		

	MALUELO MBATSHI Dorcas	Supervision de l'environnement du Territoire de Muanda, Province du Kongo Central, RD Congo	PROJET D'APPUI A LA FABRICATION ET	no
	KIALUNGILA TSIANGANI Richard	Unité de Coordination du Projet d'entreprenariat des Jeunes dans l'Agriculture et l'Agro-Business, Ville de Kinshasa, RD Congo	L'UTILISATION DES FOYERS AMELIORES PAR LES MENAGES DE LA VILLE DE MUANDA	
	BELLAKA Mhammed	Centre de Recherche Forestière, Maroc	Conception et mettre en application un indicateur de la biodiversité et des services écosystémiques	did not want to
	TALEB Mohammed Sghir	Institut Scientifique, Université Mohammed V de Rabat, Maroc	dans le cadre de l'Evaluation Nationale de la Biodiversité et des Services Ecosystémique du Maroc	submit final proposal
	AKONKWA BALAGIZI Désiré	Université Officielle de Bukavu, RD Congo	VALORISATION DES DONNEES ET MISE AU POINT	
5	BAYUBASIRE Innocent	Coordination Provinciale de l'Environnement, Conservation de la Nature / Province du Sud-Kivu, RDCongo	D'INDICATEURS DE SUIVI DE LA BIODIVERSITE EN R.D. CONGO	yes
6	MULIMBWA N'SIBULA Théophile	Centre de Recherche en Hydrobiologie d'Uvira (R.D.Congo)	Sensibilisation de l'autorité locale, la communauté des pêcheurs et le public sur la cogestion de la pêche du lac Tanganyika en vue	yes
	MULALA BAHATI Paul	ONG « ALT asbl » Amis du lac Tanganyika, RDC	de l'aménagement de la pêche durable	
7	NYEMBO KABEMBA Faustin	Université Officielle de Mbujimayi, RDC	Identification des espèces halieutiques locales commercialisées sur le marché de Mbujimayi.	yes
8	No participation at workshop	Actions Sociales pour la promotion Agricole et la Défense des droits des Animaux (ASPADA ONG), Uvira, RDC Centre de Recherche en Hydrobiologie d'Uvira (R.D.Congo)	Monitoring des animaux menacés par des actes dégradants à Uvira et dans la plaine de la Ruzizi, Province du Sud-Kivu, République Démocratique du Congo.	yes
	AKPONA Hugues, expert	African Parks, Benin		
	GBEMAVO Charlemagne, expert	Université d'Abomey-Calavi, Bénin		
	EWANGO Corneille, expert	Université de Kisangani, RDC		

### Table 4: participants of the workshop for English-speaking countries, Uganda (2020)

Selected projects	MRV Participants at the workshop in Entebbe, Feb 2020	Affiliation	Country	Project title
	BAHINDWA Abigail, expert	South African National Biodiversity Institute (SANBI)	South-Africa	
1	BASSA Samuel	National Fisheries Resources Research Institute (NAFIRRI)	Uganda	Expanding spatial coverage of freshwater biodiversity monitoring indicators in the Lake Edward System, Uganda
	MATSIKO Vincent	Nugsoft Technologies	Uganda	
	EILU Gerald, expert	Makerere University	Uganda	
	ENURU Thomas, expert	Makerere University	Uganda	
2	HANDAL Elias Nabil	Palestine Museum of Natural History (PMNH); Palestine Institute for Biodiversity and Sustainability (PIBS); Bethlehem University	Palestine	Academic Cooperation with the Environment Quality Authority to Refine Strategies for Biodiversity Conservation in Protected Areas in Palestine

3	HUSSEIN HASSAN Idi	Lands in Zanzibar	Tanzania	Integrated Land Use Management to Enhance Biodiversity Conservation in Zanzibar
	MAKAME Makame Kitwana	Central District Council Zanzibar	Tanzania	
4	KINGAZI Nanyika Emmanuel	Nelson Mandela African Institute of Science and Technology	Tanzania	Addressing data gaps and uncertainty in fisheries resources in lake Manyara basin (LMB)
	MUNISHI Linus Kasian	Nelson Mandela African Institute of Science and Technology	Tanzania	
5	MUWANIKA Fred	National Environment Management Authority (NEMA)	Uganda	Impact of domestic and international demand of Shea products and its implication for the conservation of the Shea nut tree species in Uganda
	COLLINS Koire	National Environment Management Authority (NEMA)	Uganda	
	NZIMANDE Mthobisi, expert	South African National Biodiversity Institute (SANBI)	South-Africa	
	OKIRIA-ATEKER James, expert	National Environment Management Authority (NEMA)	Uganda	

During both workshops, an apparent lack of knowledge was pointed out by the participants, even among MRV project leaders, about key MRV-related topics such as: biodiversity indicators, the science-policy interface, the governance of biodiversity and database management and development. CEBioS staff decided to organise a third MRV training workshop with the remaining funds supplemented by surpluses from the MRV project budget and other activities of the CEBioS program. This third workshop, with 45 participants, was held in Bukavu, DRC on 5-7 March 2020, in collaboration with the CRH (Centre de Recherche en Hydrobiologie) in Uvira and the CRSN (Centre de recherche en sciences naturelles) in Lwiro. The objective of the workshop was to provide MRV training to a group of mainly biology professors previously excluded from participation at MRV workshops since they had never acquired an MRV project. With Beninese, Belgian and Congolese experts on the different topics and practitioners presenting ongoing or older MRV projects, animated discussions led to a joint workshop report which will be published. The MRV approach proofed to be novel to most of the scientists present and generated a dynamic and interesting interaction among all participants. A representative of MEDD and several representatives of the 'Coordination Provinciale pour l'Environnement' of Nord-Kivu and South-Kivu as well as national parks staff participated actively in the discussions.

### Calls for Clearing House Mechanism and awareness

# SO1 SCIENCE-UNIVERSITIES-INSTITUTIONS Indicator 8

8. Number of interventions of grey literature digitalisation, including amount of contents scanned, showing a higher accessibility and usage of this information to the wider expert community and public (stats on nr. of readers)

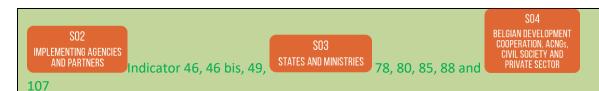
To valorise work previously done by VLIR-UOS and occasionally by CEBioS with UNIKIS and the CSB in Kisangani in this regard, a follow-up digitalisation project was initiated with the CSB, assuring the further disclosure of the remaining grey literature on campus. Due to administrative constraints the project could not start in time. Execution of the activities had to be postponed to the second part of 2020.



45. Number of annual training/awareness raising on the use of the CHM workshops in partner countries and Belgium

The Secretariat of the CBD only informed in September 2019 that countries that were interested could start using the Bioland tool. A training was foreseen in Guinea in December 2019 however due to civil unrest and elections this was postponed till March 2020 on the advice of the Belgian Embassy. Due to the COVID crisis this training was cancelled. No other country was ready yet to receive training due to the late announcement by the Secretariat of the CBD. It is proposed to transfer these funds to 2020 budget.

In order to use some of the available funds a call was organised for projects to stimulate the transfer from PTK sites to the new Bioland Tool. 3 projects were accepted under this call (Benin, Niger and DRC). Due to the COVID pandemic the projects, end foreseen 30 April 2020, haven't been finalised yet.



46. Number of postings on the CHM about activities under SO2 financed by CEBioS

The Secretariat of the CBD only informed in September 2019 that countries that were interested could start using the Bioland tool. Therefor (see below) a first introductory training could only be organised towards the end of September 2019. Therefor the funds available under this indicator were going to be used to organise an in-depth training (for the participants of the September meeting) in Benin in March 2020. Due to the COVID pandemic this meeting was cancelled.

46. Number of postings on the CHM about activities under SO2 financed by CEBioS, providing access to valuable information about biodiversity and development

46bis Number of visits by authorities and large public of dedicated web sites such as CHM, showing the increasing demand and use by interested stakeholders of the information posted on the CHM

A networking meeting was organised in September 2019 in Brussels in cooperation with MNHN Paris. This was done in a joint project with GBIF funding with CEBioS paying for the participation of partner countries. GBIF paid for participants from Madagascar and Cameroon as well as the French tutors. The workshop focussed on a first training in the sTable version of the Bioland tool as well as the incorporation of a GBIF module in the Bioland tool. 14 participants from 13 countries participated in the workshop.

A follow up workshop was supposed to be organised in March 2020 in Benin. However, due to the COVID pandemic this workshop had to be cancelled.

49. Number of authorities, decision makers, local organisations and NGO's on having benefited from awareness raising activities and converting it in their professional lives at level of policies or management

Based on the results from the different activities under SO1 and SO2: production and dissemination of awareness materials (brochures, policy briefs, posters, videos, etc.).

- A number of policy briefs developed in the framework of the MRV projects and followup awareness projects, and for the EVAMAB project, were translated into five GLO.Be articles, about traditional medicine, bushmeat, charcoal, fisheries, and invasive alien species.
- A policy brief about crocodiles and hippo's (human-wildlife conflicts) in the Ruzizi
  plains, DRC, was developed by a Congelese partner with CEBioS support- and
  disseminated locally.

78. Number of people enabled to train contributors to the CHM in partner countries, showing the sustainability of train the trainer approach by CEBioS

The 2019 call had 7 submitted projects. Taking into account the available funding the projects in Table 5 were selected by the jury.

The project with Morocco encountered problems with the bank transfer and will be implemented in 2020. The South – South Cooperation project between Morocco and Chad was foreseen for the beginning of April 2019. Due to the COVID pandemic the training had to be cancelled.

The projects from Côte d'Ivoire, Niger and Uganda managed to finalise their activities before the COVID pandemic however due to travel restrictions people weren't able to get to their offices to prepare the financial reports. All activities reports are finalised.

Table 5: projects selected under the 2019 CHM call

Pays	Personne(s) en charge du projet	Institution	Titre du projet
Côte d'Ivoire	Marie-Solange Tiébré, Djakalia OUATTARA, N'GUESSAN Kouakou Edouard	Centre National de Floristique, UFR Biosciences, Université Félix HOUPHOUET BOIGNY	Mobilisation des données sur la flore et la végétation du nord de la Côte d'Ivoire, évaluation du potentiel de conservation de la biodiversité et numérisation des données et enrichissement du site web CHM de Côte d'Ivoire
Maroc	Mostafa Madbouhi	Division de la Diversité Biologique, Direction des Changements Climatiques, de la Diversité Biologique et de l'Economie Verte, Secrétariat d'Etat chargé du Développement Durable du Royaume du Maroc	Renforcement du Centre d'Echange d'Information sur la Diversité Biologique national et territorial
Uganda	Richard Waiswa	National Environment Management Authority (NEMA)	Reinforcement Uganda National Clearing House Mechanism
Maroc	Mostafa Madbouhi	Division de la Diversité Biologique, Direction des Changements Climatiques, de la Diversité Biologique et de l'Economie Verte, Secrétariat d'Etat chargé du Développement Durable du Royaume du Maroc	Renforcement du CHM du Tchad
Niger	Maman Sani	Secrétariat exécutif du Conseil national de l'Environnement pour un Développement Durable (SE/CNEDD) du Cabinet du Premier Ministre du Niger	Atelier de formation des contributeurs nationaux sur l'utilisation des données mobilisées par le GBIF Niger et transfert des données vers le site CHM.

80. Participation in CHM-related activities such as juries, contests, prices by partner countries, showing value the CBD or D4D price is attributing to CEBioS and partners

Han de Koeijer participated in several IAC meetings, SBSTTA 23, WG 8j, OEWG 2 and 2 thematic consultations.

Due the COVID pandemic several meetings were postponed or had a venue change (the OEWG 2 and other meetings) and therefore we weren't able to provide funding for our partners on time to participate in these meetings.

85 Number of national and sub-national deciders attending meetings for awareness raising, showing proactivity and willingness to do outreach and understand the policies at stake

The 2019 awareness call got 18 submissions. Taking into account the available funding the jury selected 7 projects presented in Table 6. The project with Morocco didn't receive the funds due to problems with finding a bank account for the transfer of the funds. Most projects encountered some delays due to the administrative process in RBINS for the signing of contracts, bank transfers and only intermediate reports are available. Some activities foreseen in February/March 2020 couldn't take place due to COVID pandemic and received an extension of their contract till July/August 2020.

Table 6: projects selected under the 2019 awareness call

Pays	Personne(s) en charge du projet	Institution/ structure	Titre du projet	Durée
Benin	AKPONA Adéloui Hugues	Centre d'Etudes et d'Initiatives pour la Biodiversité et la Sécurité Alimentaire (CEIBA) - ONG	Evaluation comparative des Connaissances, Attitudes et Pratiques de la population béninoise en matière de conservation et gestion durable de la biodiversité	6 mois
Benin	Didier Forestières (LABEF), au sein de la Faculté des Sciences Agronomiques de l'Université d'Abomey-Calavi (FSA/UAC) Education environnementale et sauvega		Connaissance et conservation durable des services écosystémiques dans la Réserve de Biosphère de la Pendjari	6 mois
Benin			Education environnementale et sauvegarde des espèces marines migratrices le long du littoral du Bénin	
DR Congo	Dr Héritier MILENGE KAMALEBO	Centre des Recherches Universitaires du Kivu (CERUKI), ISP-Bukavu	Sensibilisation et partage d'information pour la promotion des champignons utiles et la gestion durable des habitats naturels à l'Est de la République Démocratique du Congo	4 mois
Maroc	Mostafa Madbouhi	Division de la Diversité Biologique, Direction des Changements Climatiques, de la Diversité Biologique et de l'Economie Verte, Secrétariat d'Etat chargé du Développement Durable, Royaume du Maroc	Etude de base des indicateurs de sensibilisation, de communication et d'engagement pour mesurer la perception du public à l'égard de la Biodiversité au Maroc	6 mois
Niger	Issaka Maman Sani	Secrétariat exécutif du Conseil national de l'Environnement pour un Développement Durable (SE/CNEDD) du Niger	Projet de réalisation d'une étude base sur la perception de la biodiversité par les communautés locales à travers l'utilisation alimentaire et médicinales des espèces végétales	6 mois
Rwanda	Djuma Nsanzimana	Nature Rwanda (ONG)	Assessing and establishing suiTable indicators to track the progress of the country towards target 1 as in the revised NBASP	6 mois

#### 88 Number of international policy meetings attended by CEBioS staff and partners

See also chapter 4 on policy

As part of capacity building on the preparation for CBD events (COP) and other large international policy events, several meetings took place:

In the institutional cooperation with OBPE, training sessions and meetings were organised involving several Ministries, NGOs and also the private sector.

Through the awareness and CHM calls several meetings and discussions were organised around themes such as Awareness on biodiversity, information sharing, importance of biodiversity for ecosystem services and more with different actors. See the different reports available at CEBioS for more information.

MRV workshops were also an opportunity to gather representatives of decision-makers at different levels, together with NGOs and scientists, to discuss about NBSAP implementation and follow-up, through the development of policy-relevant biodiversity indicators.

# 107. Number of training sessions to increase capacity on awareness in North (CEBioS) and South for the partners of the Belgian development cooperation, civil society

Training session on Nagoya Protocol was given to VLIR specialists dealing with genetic resources at Flemish Universities by Han de Koeijer and Hendrik Segers. As mentioned under indicator 15 an awareness training session was organised for GTI students in collaboration with the AfricaMuseum.

Participation in several Joint Strategic Frameworks (JSF) and Strategic Dialogues in Brussels, Burundi, Bénin and DR Congo provided opportunities to focus on the importance and governance of biodiversity (presentations, field visits,...)

OBPE and CEBioS supported the arboretum of Bujumbura, managed by the private sector (PROCOBU), with awareness activities with local schools and fishermen.

Contribution to the 'note éditoriale' of the Bulletin of OBPE in memoriam of Benoit Nzigidahera, which will be organised in cooperation with ARES.

Meeting with JP Froidebise (PROCOBU), August 2019 to talk about synergies in Burundi.

## **CAPACITY BUILDING THROUGH MANUALS**

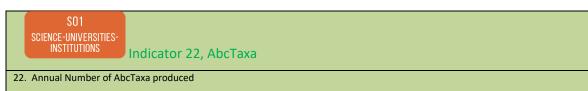
## The lexica



44. Increasing use of tools (lexica) that facilitate the application of scientific knowledge to ensure the monitoring of habitats and of ecosystem health. (related to indicator 50)

In 2019 the editing of the lexicon on Ruvubu National Park in Burundi was continued. Some delay was provoked by the passing of Benoit Ndizigahera who had collected habitats photos of the park. The publication of this lexicon is planned for the first half of 2020.

# **AbcTaxa**



# One volume was published in 2019:

- Ophiuroidea of S. Africa (brittle stars). A better knowledge of brittle stars in South Africa will promote a better sustainable diving industry and set benchmarks for studies elsewhere along the African coast (Vol. 19).



Field guide to the brittle and basket stars (Echinodermata: Ophiuroidea) of South Africa

> J.M. Olbers C.L. Griffiths T.D. O'Hara Y. Samyn



Volume 19 (2019)

# Volume to be published in 2020:

- Revision of the genus Cratispermum of Central Africa. Belonging to the Rubiaceae, this group of plants provide useful dyes and medicinal properties. One co-author is GTI alumni Hermann Taedoumg (Cameroun) (Vol. 20).

# **Summary of distribution of volumes in 2019:**

Volume N°	Gratuits ponctuels	Gratuits	Payants	Total distribué	Remarque
2			1	1	
4			1	1	
5	1			1	
6	2			2	
7			2	2	
8	2			2	
13	1			1	
14	3		3	6	
15	5			5	
16	2			2	
18	26	84	34	144	
19		397		397	343 copies send for distribution to Marine Science Institutions in South Africa

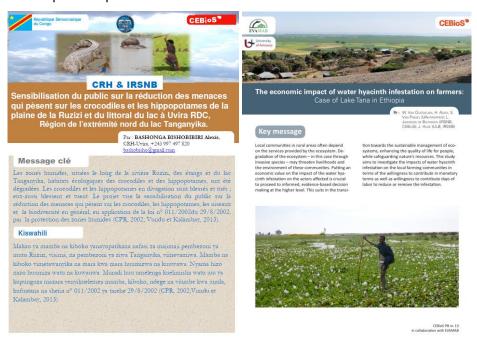
# Policy briefs

#### Indicators 48, 49, policy briefs

- 48. Number of scientists involved in the production of lexica, policy briefs and scientific papers, showing their involvment in the science-policy interface
- 49. Number of authorities, decision makers, local organisations and NGO's on having benefited from awareness raising activities and converting it in their professional lives at level of policies or management

In 2019, the following PB were produced, distributed and discussed on several levels with authorities, decision makers, local organisations and NGO's:

- ° 'Monitoring natural resources in protected areas: developing biodiversity indicators in and around protected areas in East- and West Africa and the Middle East' a policy brief created during the MRV closing workshop 2018, finalized, printed and disseminated in 2019. It was announced in BES-NET <a href="https://mailchi.mp/ca2458f61197/bes-net-newsletter-no-20-november-2019?e=55ddee8233">https://mailchi.mp/ca2458f61197/bes-net-newsletter-no-20-november-2019?e=55ddee8233</a>:
- ° Policy brief, created by a partner, about results and recommendations from an MRV project on reducing the risks for hippo's and crocodiles in the Ruzizi plains (left picture below)
- ° Policy Brief on invasive Hyacinths of Lake Tana (in the framework of EVAMAB project) (right picture below)
- <sup>°</sup>During a workshop at the Centre de Recherche en Hydrobiologie (CRH) in Uvira, DRC in the framework of a South Initiative (VLIR-UOS) of the KU Leuven and a VLADOC PhD (Els Dekeyser) the socio-economics of the sardine fisheries of Lake Tanganyika were discussed. A policy Brief from this workshop will be produced in 2020.



#### Evamab manual

The Evamab project, financed by BELSPO, with CEBioS as promotor, is producing a guidebook for the rapid assessment of ecosystem services in Man and The Biosphere Reserves of UNESCO, translating scientific work into recommendations and guidance for African Man and Biosphere Reserves managers.. Its' writing started early in 2019, it is almost finished (May 2020),.



A leaflet was produced to announce this at AfriMab in Abidjan (October 2019,

https://en.unesco.org/news/african-countries-boost-their-network-biosphere-reserves-during-regional-

summit?fbclid=IwAR0LggqrBEz9m31tHLWN9xI75klYYMWL3Rxp5e6WUzOllKveC-w5GVkNToo).

See http://www.biodiv.be/evamab/docs/other-output/afrimab-manual-announcement.pdf

# 3. CEBIOS' STAFF ACTIVITIES, PARTICIPATION TO RESEARCH, OTHER PROJECTS & SOCIAL MEDIA

#### CEBioS and One Health

In the context of the current Covid-19 pandemic, CEBioS made, on demand of DGD, a compilation of activities and documents related to healthy ecosystems and One Health, see <a href="http://www.biodiv.be/cebios2/news/activities-one-health-zoonoses">http://www.biodiv.be/cebios2/news/activities-one-health-zoonoses</a>. This lead also to a recommendation by UNEP to review a document about this thematic.

#### Here some important milestones:

- SBSTTA-23: presentation by Han de Koeijer about research on Bush meat trade in Brussels and species identification during the Consortium of Scintific Partners meeting during SBSTTA -23
- Conference Dead or alive: Towards a sustainable wildlife trade. One World One Health
  recommendations; 3-4 December Brussels, Belgium.
   The aim of the conference was to launch an interdisciplinary discussion on sustainable
  wildlife trade through two specific experiences recently gained by Belgium in the field of
  bushmeat trade (day one) and trade in reptiles and amphibians (day two). It will allow a
  discussion on the risks posed by this trade at the interface between human health, animal
- 03/12/2019: Interview on Illegal bushmeat trade at the occasion of the 'One World One Health Conference on wildlife trade', organised by The Federal Public Service Health, Food

health and environmental health. Erik Verheyen was member of the panel.

Chain Safety and Environment and the Belgian Biodiversity Platform, 3-4 December 2019, Brussels, Belgium- Erik Verheyen <a href="https://www.biodiversity.be/4854">https://www.biodiversity.be/4854</a>

- 25/10/2019: Interview by the VLIR-UOS communication service of Pierre Van Damme, Jean-Pierre van Geertruyden and Erik Verheyen for articles for their 20-year VLIR UOS publication and 'impact stories' for the VLIR UOS website/social media on the "topic infectious diseases" and the EBOVAC3 project in DR Congo
- 03/04/2020: Is het coronavirus de schuld van vleermuizen? Door Herwig Leirs, Frederik Van de Perre en Erik Verheyen, <a href="https://blog.uantwerpen.be/corona/coronavirus-vleermuizen/">https://blog.uantwerpen.be/corona/coronavirus-vleermuizen/</a>
- Nov. 2020, CSP side event during SBSTTA-23: BOPCO: A Barcoding Facility for Organisms and Tissues of Policy Concern, presentation by Han de Koeijer and Sophie Gombeers.
- In press: Wat zijn zoönoses en waar komen ze vandaan? https://blog.uantwerpen.be/corona (not yet online)
- in press: Wat kunnen we doen om zoonoses in de toekomst te vermijden? https://blog.uantwerpen.be/corona (not yet online)

#### Publications related to zoonoses:

Gaubert P, Antunes A, Meng, Lin M, Peigné S, Justy F, Njiokou F, Dufour S, Danqua E, Verheyen E, Stanley W. T, Johnson W. E, O'brien S. J, Luod S-J. 2017. The complete phylogeny of extant pangolins: scaling up the molecular tracing of the most trafficked mammals on earth. Journal of Heredity, 2017, 1–1 - <a href="https://doi:10.1093/jhered/esx097">https://doi:10.1093/jhered/esx097</a>

Olayemi A, Obadare A, Oyeyiola, Fasogbon S, Igbokwe J, Owolabi M, Igbahenah F, Ortsega D, Gunther S, Verheyen E, Elisabeth Fichet-Calvet. 2017. Diversity and Population Dynamics of Small Mammals within Nigeri, with Emphasis on Reservoirs of the Lassa Virus. Systematics and Biodiversity Systematics and Biodiversity - <a href="https://DOI.10.1080/14772000.2017.1358220">https://DOI.10.1080/14772000.2017.1358220</a>

Van Caeckenberghe V, Gembu G-C, Musaba P, Seamark E, Verheyen E. 2017. The bats of the Congo and of Rwanda and Burundi Revisited (Mammalia: Chiroptera). European Journal of Taxonomy 382: 1–32 - <a href="https://doi.org/10.5852/ejt.2017.382">https://doi.org/10.5852/ejt.2017.382</a>

# **Accepted**

Gryseels S, Mbala-Kingebeni P, Akonda I, Angoyo R, Ayoyuba A, Baelo P, Bugentho E, Bushmaker T, Butel C, Calvignec-Spencer S, Delaporte E, De Smet B, Düx A, Fischer R, Kahandi C, Kapetschi J, Kimbondja S, Kouadio L, Malekani Bendeke A, Mande C, Mdingi G, Moudimba J, Mpoudi Ngole E, Mukadi D, Musa ba P, Mutombo P, Ndong Bass I, Nebesse C, Ngoy S, Ndibu S P, Seifert S, Tanzito J, Dudu A, Amundala N, Ariën K, Gembu G C, Leendertz F, Leirs H, Mukinzi J-C, Munster V, Muyemebe-Tamfum J-J, Peeters M, Verheyen E, Ahuka-Mundeke S. (). Zoonotic investigations of Ebolavirus in Likati, Democratic Republic of Congo, 2017. Emerging Infectious Diseases (accepted)

# **External projects**

In 2019, CEBioS was partner/promotor/involved in the following external projects:

- **CONNECT**: the UNEP-WCMC CONNECT project focuses on "mainstreaming biodiversity information into the heart of government decision making"; CEBioS is part of the International Technical Advisory and Up-scaling Group (ITAUG)
- **CESP: CHM/GBIF project** with MNHN, Paris, France. The project focusses on training CHM national focal points on the Bioland tool for national CHMs, integrate a module GBIF data in the national instances and inform the CHM focal points on the use of GBIF data.
- **Leopold III fund** CEBioS organised the scanning of slides for the Leopold III fund of their slide collection with a focus on the national parks of the DRC.
- **EVAMAB** (funded by BELSPO), year 3.. See <a href="http://www.biodiv.be/evamab">http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/man-and-biosphere-programme/networks/afrimab/evamab/:</a>
  - multi-stakeholder workshop in **Ethiopia**, funded by UNESCO, Belspo & Unesco look for funding for Evamab II
  - CEBioS & Evamab presentation + survey on draft manual at 6<sup>th</sup> Afrimab,
     Abidjan
  - 3 stagiaires and recruitement of Dr. Jean Hugé on Evamab
  - Presentation of EVAMAB results at ESP Africa and World Conferences (Togo, June and Hannover, October)
- BioBridge project on marine sensors in Benin: mission combining capacity building and application of sensors in lagoons, blog:
   https://odnaturenews.naturalsciences.be/post/category/odnature/cebios/marine-sensor-benin
- ARES- project on regional network mushrooms (DRC, Burundi): 3 PhDs have started at ULB, UCL, ULiége (Gembloux)
- **BIODIVERSA-project**) approved: relationship between biodiversity erosion and zoonotic outbreaks (DRC and Ivory Coast), in cooperation with CSB

# Conferences

In 2019, staff members of CEBioS participated to the following conferences:

- Luc attended the Vilm seminar on « Biodiversity and Development Cooperation « , funded by GIZ in Autumn 2019.
- UNESCO AfriMAB meeting, Abidjan, September 2019 (Luc JDB)
- Katrijn attended VLIZ organised 'Coastal Treasures', 6 December 2019, Oostende.
- Luc attended 'Biodiversity and Health, RAOS, Brussels, 6th December 2019.
- Capacity Building for Conservation Conference, London, August 2019 (Hilde + Anne-Julie)
- CONNECT All Hands Meeting, Durban, South-Africa, November 2019 (Hilde)
- Ecosystem Services Partnership World Conference, Hannover, October 2019 (Jean Hugé and Iliana Janssens, intern)

# Missions by CEBioS staff in 2019

- 1. **DRC** (2x) -cooperation with the CSB (Hilde, Erik)
- DRC- Habitat monitoring and GIS training and relational databases in Kisangani (CSB), combined with the follow up of research on the forests dynamics in the "Réserve et Domaine de Chasse de Bombo-Lumene" (François)
- 3. **DRC** workshop on policy brief about L. Tang. Fisheries, Uvira (Luc)
- 4. **Saudi-Arabia, Morocco** -participation in CHM regional and national workshops as trainer, external funding(Han)
- 5. **Training for the national CHM focal point** of The Netherlands and Switzerland on the Bioland tool (Han)
- 6. **Training for ABS/Nagoya Protocol focal point** of the Flemish Region on the Nagoya Protocol (Han)
- 7. Burundi (2x): CHM, cooperation with OBPE, strategic dialogue ACNGs (Han, Luc)
- 8. **Burundi**: habitat monitoring Ruvubu + preparing lexicon (François)
- 9. **Benin**: Formulation & training workshop MRV call (Anne-Julie, Hilde)
- 10. Benin: GTI alumni workshop and outreach+ strategic Dialogue Benin (Marie-Lucie, Lucie),
- 11. **Benin**: organization of a regional workshop on the management of wildfires in tropical Africa, Pendjari National Park(François)
- 12. DRC: strategic dialogue + CSB (Hilde)
- 13. **South Africa** (financed by CONNECT): all Hands meeting of the UNEP Connect project (Hilde)
- 14. **Uganda: MRV** Formulation & training workshop (Anne-Julie, Hilde)
- 15. DRC: MRV training workshop, Bukavu (Anne-Julie, Hilde)
- 16. **Montreal, Canada**: several missions to participate in CHM-IAC, ABS-capacity building IAC, SBSTTA 22 and WG8J (Han)
- 17. **Paris, France**: "Synthesis" workshop on training materials at the MNHN, Paris, France (Han)
- 18. **Rome, Italy**: Participation in Thematic consultations on Implementation of the CBD and capacity building, technical and scientific cooperation for the Global Biodiversity Framework post 2020 (GBF). Participation in the Open-Ended Working Group 2 for the GBF
- 19. **Belgium**: 1 week CHM Bioland (+translation into French) and communication training in cooperation with GBIF and BBPf (Han, Marie-Lucie & Lucie). Partners: MNHN (France), CBD Secretariat, GBIF France and Belgium

#### Posters & abstracts

- Anne-Julie Rochette, Hilde Keunen, Luc Janssens de Bisthoven, Maarten P.M. Vanhove.
   Capacity development for monitoring biodiversity policies in Africa: Joining Science and Policy. Fourth Capacity Building for Conservation (CBC) conference, London.
- Erik Verheyen, Hilde Keunen, Luc Janssens de Bisthoven, Anne-Julie Rochette, Han de Koeijer. Working together to develop biodiversity research and monitoring related capacities in the DR Congo. Fourth Capacity Building for Conservation (CBC) conference, London.

- Janssens de Bisthoven, L., Vanhove, M.P.M, Wynant, M., Rochette, A-J, Hugé, J., Muishi, L., Komakech, H., Brendonck, L., 2019. Lake Manyara basin, assessment of a complex socio-ecological system through a multistakeholder approach. ESP Congress, Togo
- Tèwogbadé Jean Didier Akpona, Rodrigue Castro Gbedomon, Anne-Julie Rochette, Luc Janssens de Bisthoven, Jean Hugé, Han de Koeijer, Maarten P.M. Vanhove, Romain Glele Kakaï, 2019. A systematic review of ecosystem services research on the Pendjari Biosphere Reserve: current state and the way forward. ESP Congress, Togo
- Devonne Goad, Anne-Julie Rochette, Luc Janssens de Bisthoven, Jean-Didier Akpona, Maarten Vanhove, Farid Dahdouh-Guebas, Jean Hugé, 2019. Rapid ecosystem services assessment & conceptualization of conservation effectiveness in the Pendjari Biosphere Reserve, Benin. VILZ day, March, 2019.
- Jean Hugé, Anne-Julie Rochette, Bruno Verbist, Jean-Didier Akpona, Koen Vanderhaegen, Steven van Passel, Iliana Janssens, Farid Dahdouh-Guebas, Luc Janssens de Bisthoven, 2019. Selecting and applying ecosystem services assessment tools in African Man & Biosphere reserves. ESP Hannover, Germany
- Luc Janssens de Bisthoven, Anne-Julie Rochette, Katrijn Baetens, Marie-Lucie Susini Ondafe, Maarten Vanhove, Jean Hugé, Steven Van Passel, Berihun Daregot, Luc Brendonck, Ludwig Triest, Linus Munishi, Zacharie Sohou, Hans Komakech, Joël Ndayishimiye, Benoit Ndizigahera+, Hamed Odountan, Moïssou Lagnika, Patrick Martin, Bruno Verbist, Maarten Wynants, Els Dekeyzer, 2019. Supporting ecosystem services in African aquatic systems through development cooperation: CEBioS-related projects. Poster presented at the conference 'water without borders', Brussels
- I. Janssens, J. Hugé, J. Hagan, A. J. Rochette, L. Janssens de Bisthoven, J. D. Akpona and
   F. Dahdouh-Guebas, 2019. Conservation conflict after management shift in Pendjari NP:
   a Q methodological study. Conference KAOW: Biodiversity and Health, 6 December 2019
- A.J. Rochette, J. Hugé, K. Vanderhaegen, S. Van Passel, B. Verbist, L. Janssens de Bisthoven: Assessing ecosystem services in African Biosphere Reserves: A review and user-informed classification of existing tools. Abstract for a Poster at the GEOBON virtual Conference 2020
- A.J. Rochette, J. Hugé, K. Vanderhaegen, S. Van Passel, B. Verbist, L. Janssens de Bisthoven: African Man and Biosphere Reserves: guidance to assess ecosystem services. A manual for African BR managers. Abstract for a Flash presentation (5min) at the GEOBON virtual Conference 2020
- Rochette, Anne-Julie; Keunen, Hilde. The MRV capacity-building approach: promoting the use of biodiversity data for decision-making in Africa. Abstract for an oral presentation at the GEOBON virtual Conference 2020

## **Publications**

In 2019 and 2020, staff members of CEBioS published the following papers (situation May 2020):

## 2019

Antoine-Moussiaux Nicolas, Janssens de Bisthoven Luc, Leyens Stéphane, Assmuth Timo, Keune Hans, Hugé Jean, Vanhove Maarten, 2019. The good, the bad and the ugly: Framing debates on Nature in a One Health community. Sustainability Science, 1-10.

- OH Odountan, L Janssens de Bisthoven, CZ Koudenoukpo & Y Abou, 2019. Spatiotemporal variation of environmental variables and aquatic macroinvertebrate assemblages in Lake Nokoué, a RAMSAR site of Benin. African Journal of Aquatic Science, 44:3, 219-231, DOI: 10.2989/16085914.2019.1629272
- Luc Janssens de Bisthoven, Anne-Julie Rochette, Jean-Didier Akpona, Bruno Verbist, Naturinda Zerubabeeli, Koen Vanderhaegen, Steven Van Passel, Daregot Berihun, Linus Munishi, Erik Verheyen, Jean Hugé, 2019. Conserving African Biosphere Reserves: managers & scientists exchange on ecosystem services & beyond Highlights from a recent UNESCO workshop in Ethiopia. Conservation News. Oryx (October 2019).
- Anne-Julie Rochette, Jean Didier T Akpona, Hugues Adeloui Akpona, Gaston S Akouehou, Blanchard Mayundo Kwezi, Chabi A M S Djagoun, Bernadette Habonimana, Rodrigue Idohou, Ingride S Legba, Benoît Nzigidahera, Augustin Orou Matilo, Mohammed Sghir Taleb, Benjamin Toirambe Bamoninga, Sarah Ivory, Luc Janssens de Bisthoven and Maarten P M Vanhove. Developing policy-relevant biodiversity indicators: lessons learnt from case studies in Africa. Environmental Research Letters, Volume 14, Number 3 (March 2019).

#### 2020

- Hugé, Jean; Vanhove, Maarten; Verbist, Bruno; Verheyen, Erik; De Keyzer, Els; Vertriest, Isabelle; Keunen, Hilde; Stoffelen, Piet; Leemans, Ingrid; Sjölund, Jennifer; Rochette, Anne-Julie; Janssens de Bisthoven, Luc, 2020. Mainstreaming biodiversity conservation into development cooperation Highlights from a recent ALTER-NET EKLIPSE workshop. Conservation News in Oryx 54-1, pp 14-15.
- Jean Hugé, Luc Janssens de Bisthoven, Mathilda Mushiete, Soraya Candido, Anne-Julie Rochette, Hilde Keunen, Farid Dahdouh-Guebas, Nico Koedam, Maarten P.M. Vanhove, 2019. EIA-driven biodiversity mainstreaming in development cooperation: confronting expectations and practice in the DR Congo. Environmental Science & Policy, 104, 107-120.
- Janssens de Bisthoven, L., Vanhove, M.P.M., Rochette, A.-J., Hugé J., Verbesselt, S, Machunda, R., Munishi, L., Wynants, M., Steensels, A., Malan-Meerkotter, M., Henok, S., Nhiwatiwa, T., Casier, B., Kiwango, Y.A., Kaitila R., Komakech, H., Brendonck, L., 2020.
   Social-ecological assessment of Lake Manyara basin, Tanzania: a mixed method approach. Journal of Environmental Management, 267, 110594.
- Jean Hugé, Anne-Julie Rochette, Stef de Béthune, Claudia Parra Paitan, Koen Vanderhaegen, Thibaut Vandervelden, Steven Van Passel, Maarten Vanhove, Bruno Verbist, Dorien Verheyen, Luc Janssens de Bisthoven, 2020. Ecosystem services assessment tools for African Biosphere Reserves: a review and user-informed categorization. Ecosystem Services 42, 101079.
- Habiyaremye Muhashy, F. & Ruremesha Kinyata, S. 2020 Environnement et piliers endogènes de la valorisation de la biodiversité dans les secteurs sud et Centre du parc national des Virunga, RD Congo. Geo-Eco-Trop., 2020, 44, 1:15-41
- Efio, S.; Sogbohossou, E. A.; Magnon, Z. Y.; Houinato, M. R. B.; Habiyaremye Muhashy, F.; Sinsin, B. A.; Tossou, C. R. 2020— Human wildlife conflicts and mitigation mesures in Pendjari Biosphère Reserve, Northern Benin. Annales des Sciences Agronomiques, Université d'Abomey -Calavi 22(1): 15-31

Ndamiyehe Ncutirakiza, J.- B.; Lejeune, P.; Gourlet – Fleury, S.; Fayolle, A.; Ndjele, Mianda – Bungi, L.; Ligot, G. 2020 – Quantifier les dimensions des houppiers à l'aide d'images aériennes à haute résolution pour estimer l'accroissement diamétrique des arbres dans les forêts d'Afrique centrale. Bois et Forêts des Tropiques 343:67-81 https://doi.org/10.19182/bft2020.343.a31848

# Publications related to research on Lake Tanganyika associated to CEBioS:

- De Keyzer et al., 2019. First genomic study on Lake Tanganyika sprat Stolothrissa tanganicae: a lack of population structure calls for integrated management of this important fisheries target speciesBMC Evolutionary Biology (2019) 19:6. https://doi.org/10.1186/s12862-018-1325-8
- Mention of Els Dekeyser in: Juliska Wijsman about Lake Tanganyika in National Geographic (2019).

## Publications by Erik Verheyen (associated to CEBioS):

- Mizerovská D, Nicolas D, Demos T C, Dudu A, Colyn M, Denys C, Kaleme P K, Katuala P, Kennis J, Kerbis-Peterhans J C, Laudisoit A, Missoup A -D, Šumbera R, Verheyen E, Bryja J. 2019. Genetic variation of the most abundant forest-dwelling rodents in Central Africa (Praomys jacksoni complex): Evidence for Pleistocene refugia in both montane and lowland forests. Journal of Biogeography. 2019;46:1466–1478 https://doi.org/10.1111/jbi.13604
- Nicolas V, Fabre P-H, Denys C, Missoup A-D, Olayemi A, Colyn M, Bryja J, Verheyen E, Katuala P, Akaibe D, Kerbis-Peterhans J, Demos T. 2019. The phylogeny of the wood mouse (Muridae, Hylomyscus) based on complete mitochondrial genomes and five nuclear genes reveals cryptic diversity. Molecular Phylogenetics and Evolution https://doi.org/10.1016/j.ympev.2019.106703
- Soto D X, Decru E, Snoeks J, Verheyen E, Van de Walle L, Bamps J, Mambo T, Bouillon S.
   2019. Terrestrial input contributions to Afrotropical aquatic food webs: the Congo River Case. Ecology and Evolution https://doi:10.1002/ece3.5594
- Van de Perre F, Leirs H, Cigar J, Gambalemoke S, Mukinzi J-C, Verheyen E. 2019. Shrews (Soricidae) of the Congo basin lowland forests (Kisangani, DR Congo). Biodiversity Data Journal 7: e46948 https://doi:10.3897/BDJ.7.e46948
- Van de Perre F, Leirs H, Verheyen E. 2019. Paleoclimate, area size, and degree of isolation explain regional biodiversity differences among terrestrial vertebrates within the Congo basin. Belgian Journal of Zoology - <a href="https://doi.org/10.26496/bjz.2019.28">https://doi.org/10.26496/bjz.2019.28</a>
- Van de Perre F, Willig MR, Presley SJ, Mukinzi J-C, Gambalemoke S, Leirs H, Verheyen E.
   2020 Functional volumes, niche packing and species richness: biogeographic legacies in the
   Congo Basin. R. Soc. open sci. 7: 191582 http://dx.doi.org/10.1098/rsos.191582

# Press & public awareness

Participation à appel médiatique, 2019 : <a href="https://www.lalibre.be/debats/opinions/270-scientifiques-belges-appellent-notre-gouvernement-a-sauvegarder-la-biodiversite-opinion-5ab4df15cd702f0c1a79ef7b">https://www.lalibre.be/debats/opinions/270-scientifiques-belges-appellent-notre-gouvernement-a-sauvegarder-la-biodiversite-opinion-5ab4df15cd702f0c1a79ef7b</a>

- Co-signatory in: Open letter: Advocacy for our universities to become committed
  players in the ecological and social transition, distributed to the Belgian media, April
  2019, see also <a href="https://wechangeforlife.org/2018/12/18/luc-janssens-de-bisthoven-coordinator-of-cebios-programme/">https://wechangeforlife.org/2018/12/18/luc-janssens-de-bisthoven-coordinator-of-cebios-programme/</a>
- Press article in Benin about work on water quality in framework of GTI in Benin & public conference in Parakou University
- <a href="https://plus.lesoir.be/221281/article/2019-04-30/pour-que-nos-universites-deviennent-des-actrices-engagees-de-la-transition">https://plus.lesoir.be/221281/article/2019-04-30/pour-que-nos-universites-deviennent-des-actrices-engagees-de-la-transition</a>
- MO\* zoektocht naar Ebola
- TV and radio broadcasting of MRV opening workshop in Benin: https://www.youtube.com/watch?v=DxE1mF2j1r8&t=151s
- The 'Journal Karibu' (DR Congo) recently published an article about the partnership between CEBioS and the CSB (Centre de Surveillance de la Biodiversité), together with an MP3, broadcasted several times on local radio chains (http://tiny.cc/5070nz)
- Song about growing mushrooms, made by GTI grantee Heriter Milenge, has been broadcasted multiple times on radio chains in East-Congo
- Series about Policy Briefs in GLO.Be!
- Le Programme CEBiOS promeut la science taxonomique blog béninois : <a href="https://scienceofgiro.blogspot.com/2019/11/le-programme-cebios-promeut-la-science.html">https://scienceofgiro.blogspot.com/2019/11/le-programme-cebios-promeut-la-science.html</a>
- Le Programme CEBioS pour la préservation de la biodiversité Atelier de formulation des Projets MRV 2019-2021 <a href="https://scienceofgiro.blogspot.com/2019/11/le-programme-cebios-pour-la.html">https://scienceofgiro.blogspot.com/2019/11/le-programme-cebios-pour-la.html</a>
- Several post on Facebook accounts of national CHMs in relation to projects, missions and more.

See Mention in Vivafrik about first CHM Price for Burundi:

https://www.vivafrik.com/2019/01/08/la-phase-2-du-projet-de-regeneration-des-paysages-bientot-acte-au-burundi-a21920.html

#### Le Burundi récolte des lauriers de ces efforts en faveur de l'environnement

Depuis le 25 novembre 2018, le Burundi est détenteur de la médaille d'or du meilleur CHM (Clearing House Mechanism). Le prix lui a été décerné à Sharm El Cheikh, en Égypte, à l'occasion de la 14e conférence des parties sur la biodiversité (COP14). Et plus récemment Leonidas Nzigiyimpa, responsable des aires protégées à l'Office burundais pour la protection de l'environnement, a été lauréat du prix National Geographic / Buffett 2018, qui lui a décerné le « Leadership » pour la protection de l'environnement.

Des récompenses qui démontrent à suffisance, l'engagement du Burundi pour une économie durable, respectueuse de l'environnement. C'est fort de cela que la Banque mondiale a récemment exprimé son désir d'accompagner à nouveau le Burundi dans son œuvre écologique. La prochaine opération devra contribuer à la restauration de 90 000 hectares de terres et bénéficiera à 80 000 ménages avec à la clé des gains de productivité des terres de 20 % dans les zones rurales.

#### Social media

CEBioS is active on Facebook, LinkedIn and Youtube

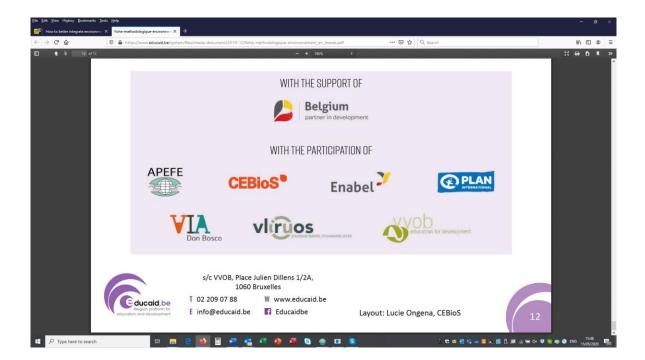
- A summary of our Facebook statistics for 2019 is provided in annex 4.
- Youtube: CEBioS Videos from the EVAMAB workshop in Ethiopia https://www.youtube.com/channel/UCp9IYI9IsQjYugUFddS9O4Q

# 4. CAPACITY BUILDING IN NORTH AND SOUTH THROUGH POLICY SUPPORT

# **Activities & events**

- Han de Koeijer participated in the Open-Ended Working Group on the Post-2020 Global Biodiversity Framework (GBF), the Thematic consultation on Capacity building strategic Framework and the Thematic consultation on implementation of the GBF, originally scheduled for 24 to 29 February 2020, Kunming, PR China, but due to the Corona crisis, held in Rome.
- Han de Koeijer is selected as expert for 4 Informal Advisory Committees to the Secretariat
  of the CBD on "Access and Benefit Sharing Clearing House (ABS-CH)", "capacity building
  for the Nagoya Protocol", CHM and "CEPA"
- Hilde Keunen, Erik Verheyen, outlining and testing procedure to export biological samples
  of research by collaboration CSB-MEDD-CEBioS (DRC) under the Nagoya Protocol
- Han de Koeijer, representing Belgium in WG 8J, SBSTTA 23.
- Han de Koeijer, participation to Belgium's 6th National Report to the CBD
- Luc Janssens de Bisthoven, Hilde Keunen, participation to the creation of a thematic Joint Framework Strategy on Environmental resilience with WWF, Join for Water and Bos+ (several meetings)
- Hilde Keunen, presentation 'biodiversity governance' during Strategic Dialogue in DRC
- Hilde Keunen, organisation of excursion to Kadima's Pride of Africa Safari Park and its educational activities supported by CEBioS during the Strategic Dialogue in DRC
- Excellent review received on Diatoms ABC taxa: <a href="https://www.tandfonline.com/doi/abs/10.2989/16085914.2019.1628702">https://www.tandfonline.com/doi/abs/10.2989/16085914.2019.1628702</a>
- Han de Koeijer, lead author on capacity building for the EU to prepare for the Thematic consultation on Capacity building strategic Framework, Rome, Italy Mars 2020.
- Han de Koeijer, facilitator during the Thematic consultation on Capacity building strategic Framework, Rome, Italy Mars 2020.
- Han de Koeijer, facilitator during the Thematic consultation on implementation of the GBF, Rome, Italy Mars 2020.
- Han de Koeijer, Marie-Lucie Susini-Ondafe, accepted GBIF proposal: GBIF Capacity Enhancement Support Programme 2019 – CESP2019-010
- Han de Koeijer, Hendrik Segers (NFP CBD), explain the Nagoya Protocol to VLIR-UOS stakeholders, Brussels and advice to MBG.
- Han de Koeijer, CBD questionnaire about capacity building

- Marie-Lucie Susini-Ondafe, selected and invited to the 3rd WABES workshop in Ouagadougou, to discuss the IPBES recommendations for West Africa., Participation cancelled because of terrorist attacks in Burkina Faso. It was
- Marie-Lucie Susini Ondafe (contents) and Lucie Ongena (lay-out) contributed to the new EDUCAID methodological sheet for capacity building in the South see <a href="https://www.educaid.be/system/files/media-document/2019-12/fiche-methodologique-environnement">https://www.educaid.be/system/files/media-document/2019-12/fiche-methodologique-environnement</a> en lowres.pdf



- Erik Verheyen, member of the panel at the Conference "Dead or Alive", Brussels https://www.biodiversity.be/4854
- Erik Verheyen, Hilde Keunen, Luc Janssens de Bisthoven, compilation of publications and activities linked directly or indirectly to the risk of pandemics in relation to biodiversity loss, see <a href="http://www.biodiv.be/cebios2/news/activities-one-health-zoonoses">http://www.biodiv.be/cebios2/news/activities-one-health-zoonoses</a>
- Luc Janssens de Bisthoven was admitted as a member of two IUCN commissions:
  - a. commission on Education and Communication (CEC)
  - b. Commission on Environmental, Economic and Social Policy (CEESP) (2019-2020).
- Luc Janssens de Bisthoven is member of CLIMSEC steering committee, the advisory organ for policy support concerning climate change and security
- Luc Janssens de Bisthoven was admitted to participate to the GIZ-funded seminar in Vilm, Germany on Biodiversity and development. Anne-Julie Rochette is admitted to participate in this seminar in 2020 (2021 due to Corona).
- Luc Janssens de Bisthoven, Anne-Julie Rochette, Hilde Keunen organised a workshop on Development cooperation and biodiversity for sustainable development at the EKLIPSE workshop in Gent: <a href="http://www.alter-net.info/outputs/alter-net-eklipse-conf-2019/conference-workshops-1">http://www.alter-net.info/outputs/alter-net-eklipse-conf-2019/conference-workshops-1</a>

- This resulted in the publication Hugé et al. (2019) in ORYX, 'conservation news'.
- Luc Janssens de Bisthoven, attendance to « Water without Border » linking Belgian stakeholders, programs, and policies in the context of international cooperation, see <a href="https://waternexusbelgium.wixsite.com/waterwithoutborders">https://waternexusbelgium.wixsite.com/waterwithoutborders</a>
- All staff, Congo Basin Partnership: round Table discussions and presentation of fliers, stand and video booth.
- Han de Koeijer: Active involvement in mapping RBINS and CEBioS activities related to the SDGs and the Aichi targets in the CBD Consortium of Scientific Partners, see <a href="https://www.cbd.int/cooperation/csp/">https://www.cbd.int/cooperation/csp/</a>
- Luc Janssens de Bisthoven, Hilde Keunen, meetings at FIABEL (member)
- Lucie Ongena, participation of meetings to prepare 'Together for Biodiversity' Campaign of 22 May 2020 (contents, communication);
- Luc JDB: Participation to DGD survey about perception of UNEP;
- Luc JDB: Participation to 'Expansion' workshop about the image of ENABEL (Nov. 2019);
- Participation to review of Global Outlook 5 of the CBD;
- Mention of CEBioS in the « OECD Environmental Performance review for Belgium ».
- Luc Janssens de Bisthoven, Hilde Keunen, attendance to seminar about civil society in Burundi organised by UGent,;
- Luc Janssens de Bisthoven, Hilde Keunen, meeting with Join for water & WWF about possible synergies;
- Luc JDB participated to BIOPOLS and Business Reviews of OD Nature and replaced Hendrik segers at some LSO meetings of P. Roose;
- CEBioS (Luc, Han, Marie-Lucie) participated to the national 'groupes directeur Nature and CBD', organised by the National Focal Point CBD;
- 20 year Enabel networking event, Bozar, April 2019;
- CEBioS submitted a FEDtWIN proposal on the Science-Policy interface. This proposal was not retained.
- Contribution to « Global South » questionnaire centralised by RBINS direction for National History Musea.
- Luc Janssens de Bisthoven, feedback on « zero draft on agroecological and other innovative approaches for sustainable food systems that ensure food security and nutrition » by Committee on World Food Security, on demand of DGD
- Luc Janssens de Bisthoven nominated as Belgian expert for the Global Taxonomy Initiative Forum, Berlin, Germany, postponed. Meeting with coordinator, Ms Junko (CBD), Brussels;
- Hilde Keunen, François Muhashi, meetings with CAFRINAT, Luc JDB attended seminar and debate about Kahuzi Biega National Park;
- Hilde Keunen, meeting with VVOB DRC, Katrien Spruyt, on possible synergies regarding mushroom growing
- Luc JDB, Han de Koeijer, overview of the CEBioS interventions related to the Belgian obligations to the CBD convention to DGD;
- CEBioS is a member of CAFRINAT (UGENT)

# Occurrence of CEBioS in official documents, fora

- 6th National report of Belgium to the CBD (2019)
   <a href="https://www.cbd.int/doc/nr/nr-06/be-nr-06-en.pdf">https://www.cbd.int/doc/nr/nr-06/be-nr-06-en.pdf</a>
   see pg. 109, 200, 202, etc...
- NBSAP Forum: <a href="https://nbsapforum.net/knowledge-base/best-practice/raising-biodiversity/E2/880/99s-public-profile-belgian-success-story">https://nbsapforum.net/knowledge-base/best-practice/raising-biodiversity/E2/880/99s-public-profile-belgian-success-story</a>
- Pathways to sustainable development- First Belgian National Voluntary Review
   <a href="http://bdf.belgium.be/media/static/files/import/2017">http://bdf.belgium.be/media/static/files/import/2017</a> 07 17 sdgs/2017-06-20-sdgs-1st-voluntary-report-belgium-15721belgium english.pdf pg 57
- CEBioS in Educaid: <a href="https://www.educaid.be/fr/membres/liste-des-membres/cebios">https://www.educaid.be/fr/membres/liste-des-membres/cebios</a>
- Overview of the outcomes of the study to inform the preparation of a long-term strategic framework for capacity-building beyond 2020
   <a href="https://www.cbd.int/doc/c/46f5/0af0/994f8d246f1684eb26f16e26/post2020-ws-2020-02-inf-01-en.docx">https://www.cbd.int/doc/c/46f5/0af0/994f8d246f1684eb26f16e26/post2020-ws-2020-02-inf-01-en.docx</a>. Interview with Han de Koeijer to prepare the document, mention of work of RBINS with regards to capacity building in the annex (document will be updated as the annex doesn't include all the work of RBINS (CEBioS)
- Meeting reports of Informal Advisory Committees for the CHM, Communication Education and Public Awareness, ABS-CH and capacity building for the Nagoya Protocol, where Han de Koeijer is member as well as Chairperson for the CHM-IAC. Surf to e.g. <a href="https://www.cbd.int/meetings/005950">https://www.cbd.int/meetings/005950</a> (also other reports in CBD web sites).

# 5. SYNERGY AND COMPLEMENTARITY WITH OTHER COOPERATION ACTORS

Since 2016, CEBioS staff has followed the formulation of the joint strategic framework for the partner countries as well as the strategic dialogues for Benin, Burundi, DR Congo and Vietnam. for. In phase II, synergies with Belgian actors of the Development Cooperation are further developed. A special 'synergy fund' was set aside for this purpose.



# Benin

CEBioS aims for synergies under the JSF strategic objectives 2C, 3C, 3F, 3J, 4G, 5aA, 5aF, 5bA, 5bB, 5bC, 5bD, 7B

Through our diverse calls and our collaborations with the Ministry of Environment, UAC, Université de Parakou and IRHOB, we implement the strategic objectives of the JSF in various ways. Most are related to strengthening higher education, scientific capacities, awareness raising for biodiversity and vulgarisation of scientific results. CEBioS sees possibilities to work with other actors in the Atakora region, e.g. with ARES and Vétérinaires sans frontières. Also with Via Don Bosco, there are possibilities to set up awareness actions for biodiversity in schools. With Louvain Cooperation, we seek enhanced cooperation on the mangroves of the MAB site 'Delta du Mono' on the coast, through cooperation with Prof. J. Hugé (Uhasselt, VUB). On demand of the bilateral cooperation CEBioS is also available to provide training about the CBD and the Nagoya Protocol to the Port authorities. For its representation in Benin CEBioS can call on a local expert, Dr. Jean-Didier Akpona, of the UAC (Laboratoire de Biomathématiques et d'Estimations Forestières, LABEF). He attends as much as possible the local meetings of the JSF and the Strategic Dialogue of the ACNGs.

Prof. Nourou of the University of Parakou, wanted to organise a field excursion on the use of mushrooms during the annual JSF. Unfortunately, this was cancelled due to the Covid crisis.

The following points of action were proposed by CEBioS for the learning trajectory of the JSF environment in Benin:

- Explanation of the Klimos toolkit, in connection with the Environmental Integration Toolkit (OIE) of Louvain Coopération;
- Presentation on the link between climate change and biodiversity;
- Presentation by CEBioS partners on their practices in agriculture and hydrobiology;
- Brief explanation of the EVAMAB project (research project on the economic valuation of ecosystem services in African biosphere reserves, including the Pendjari Park in Benin), as well as the CEBioS Pendjari lexicon;
- Brief information on the Clearing House Mechanism (CHM), without technical training;

Presentation of a module on fire management for the general public.

# Burundi

CEBioS aims for synergies under the JSF strategic objectives 2A, 2C, 2D, 6I, 8A, 8B, 8C

Through our diverse calls and our collaborations with the Ministry of Environment, OBPE and the Université du Burundi, we implement the strategic objectives of the JSF in various ways. Most are related to strengthening higher education, scientific capacities, awareness raising for biodiversity and vulgarisation of scientific results. In 2018 we started exploring possibilities to set up a cooperation framework between OBPE and Broederlijk Delen. This was strongly encouraged and facilitated by the Belgian Embassy in Bujumbura. The aim is to mainstream the preservation of biodiversity into agricultural landscapes for a more sustainable food production. In the coming years we will further develop concrete actions of awareness and training.

With OBPE, CEBioS seeks to support a private initiative fostering the conservation of an arboretum next to Rusizi National Park. OBPE has signed a long term MoU with this private partner. This pilot project can serve as benchmark for concepts of ecotourism.

CEBioS remains open to act as a co-promotor to VLIR-UOS projects in Burundi, depending on demands of the Burundian partners and the Flemish academic world. We are searching to continue a previous VLIR-UOS South Initiative on the biomonitoring of Lake Tanganyika, eventually with other external funding.

OBPE signed an MoU with the private sector ( PROCEBU) to promote biodiversity amongst local schools and fishermen at the arboretum of Bujumbura, which is a buffer area of the Rusizi National Park.

# DR Congo

CEBioS aims for synergies under the JSF strategic objectives 2A, 2C, 2D, 2F, 3B, 3D, 4A, 4D, 5B, 5D, 6G, 6I, 9A, 9B, 9C, 9D, 9E, 9F

Through our diverse calls and our collaborations with the MEDD and its DDD, ICCN, and several universities, we implement the strategic objectives of the JSF in various ways. Most are related to strengthening higher education, scientific capacities, awareness raising for biodiversity and vulgarisation of scientific results.

Contacts between SANBI and DDD were stimulated.

MEDD and DDD were encouraged to write and submit a project proposal for the upscaling phase of the WCMC-UNEP CONNECT project, aiming at mainstreaming biodiversity in all governance sectors of the DRC.

A follow-up project of the successful activities with Kadima's Pride of Africa Safari Park, Kinshasa, started up in 2018, has been implemented, permitting school children of Kinshasa to spend a day at the zoo and Safari Park and being made aware of biodiversity in their surroundings.

Discussions were held with Join for Water to investigate cooperation in the Ituri Province, and with VVOB to create a joint project linking the expertise on mushroom growing and developing a value chain available in CEBioS' network with the schools VVOB is working at in Kongo-Central.

During the SD participants were invited to visit Kadima's Pride of Africa Safari Park, an excursion organised by CEBioS and Mr Kadima's team.

Cooperation with ENABEL for technical and administrative support to the CSB in Kisangani.

Cooperation with an ICT consultancy firm in Kisangani.

Cooperation with the Instituut voor Ontwikkelingsbeleid (IOB) to organise training on semistructured surveying for political economic purposes in Kisangani

Cooperation with the VLIR-UOS IUC of UHasselt in Kisangani regarding biodiversity related issues.

Participation of RIKOLTO at the MRV workshop in Bukavu.

# **Vietnam**

CEBioS aims for synergies under the JSF strategic objectives 1F, 3C, 3F, 3H

The work, previously done on marine modelling with IMER, will continue with external funding (CLIMDIS, financed by BELSPO). Through GTI-projects research on biodiversity hotspots and raising awareness with local authorities is supported. With the assistance of the Belgian Embassy, CEBioS is trying to join other environmental interventions, e.g. in the Learning Trajectories of the Strategic Dialogue.

CEBioS was associated to ECOMOD (OD Nature, RBINS) to submit: ISAMAB - Integrated Sustainability Assessment of Mangroves - beyond BioShields, BRAIN-be 2.0, as a possible spin-off of the marine modelling part. However, this project was not selected.

The CLIMDIS project on marine modeling and climate change in Vietnam, a spin-off of the CEBioS marine modeling in Vietnam was approved and will start as of 2020. It is financed by BELSPO.

#### 6. MANAGEMENT OF CEBIOS

# The staff

#### The structure of the staff paid by the CEBioS programme in 2019- beginning of 2020:

The staff is composed of 9.3 FTE (varies according to 80-100% of individual co-workers). The salaries are ventilated according to the following key:

Coordinator (1): COO Scientific Officer (5.5): SOF Financial administrator (1): ACO

Secretariat (0.8): SEC

Graphism and communication (1): GRAC

**COO**: 1 FTE for general strategy, management, streamlining of administrative processes, coordination, policy support to DGD and international, communication and visibility, COP, formulation and part of monitoring & evaluation; also involved in the different SO1-2-3-4 for specific activities related to the above.

**SOF 1**: 1 FTE divided equally on SO1 and SO2 for training in habitat monitoring, coaching of students and production of lexica; support to UAC in Benin, OBPE in Burundi and ICCN and universities in DR Congo;

**SOF 2**: 1 FTE for SO1 on the GTI grants programme and the GTI support for scientific capacity building in the South by RBINS researchers, SO2 and 3 for CHM-IT and Public Awareness as well as in SO3 and SO4 for involvement of CEBioS in Educaid, IPBES, OECD Environet, alumni work, and pilot in SBSSTA and COP, facilitation for production and dissemination of AbcTaxa; In April 2020, this SOF quit her job after 11 years at CEBioS for a statutory job. A replacement has been selected and should start in July 2020.

SOF 3: 1 FTE divided amongst SO1, SO2, SO3 and SO4 for the MRV work, policy briefs;

**SOF 4:** 1 FTE divided amongst all SO for CHM and awareness work, for policy support, DGD attests, COP, Nagoya Protocol, part of M&E and cooperation in strategic dialogues; support to OBPE in Burundi;

**SOF 5**: 1 FTE in SO1, SO2, SO3 and SO4 for MRV work, policy briefs, support to CSB in DR Congo, part of M&E and cooperation in strategic dialogues and gender aspects;

**SOF 6**: 0.5 FTE for marine modelling in Benin (SO1); support to IRHOB in Benin; This SOF quit CEBioS for a statutory job at RBINS. The recruitment of a replacement is under way (June 2020). It will be essentially the same role, together with a component of capacity building for remote sensing in order to strengthen our partners to analyse land and water use/cover.

**ACO:** 1 FTE for general financial accounting of the programme in cooperation with central accountancy of RBINS Under management costs for year 1-3 Divided among SO1, SO2, SO3; SO4 and management costs for year 4-5

**SEC**: 0.8 FTE responsible for general logistics of the CEBioS programme, including administration of mobility of grantees, preparation of letters, DGD attests, buying of small equipment, shipment of equipment, books, AbcTaxa, presence at events with booth and folders. She works closely together and is supported by another FTE from the National CBD Focal Point team at RBINS. Divided under SO1, SO2 and SO3. This SEC quit in January 2020 for a statutory job. We have recruited a replacement with a somewhat higher level under a minus 26 job agreement, who should start in July 2020.

**GRAC**: 1 FTE for the graphical design of reports, plans, folders, posters, policy briefs and communication through social media, web site. Divided under SO1, SO2, SO3 and SO4. The current GRAC is a minus 26 job who replaces the previous person who is on career interruption leave.

The team is working closely together, in an integrated way, due to the good habit of holding weekly team meetings and an open discussion culture. Tasks can easily be redistributed among colleagues when needed. The team is constantly working towards integration of the different subprograms in phase II, which is already reflected in the way the phase II program is designed.

In December 2019 we had a team building day at AfricaMuseum.

# **Monitoring & Evaluation**

CEBioS has designated two SOF and the coordinator to monitor the indicators of the programme and M&E activities.

## The following activities contributed to M&E in 2019:

- Updating the 120 indicators to provide input for the 2019 report and guidance about whether CEBioS is on the right track
- Meeting at BELSPO to learn about software MIRABEL;
- In every partner institution a local staff member is designed to monitor the programme executed in collaboration with CEBioS. CEBioS staff, responsible for every institutional partnership, has trained this person and followed-up on his monitoring activities during visits, by e-mail and telephone contacts. An end-evaluation and mid-term evaluations, were executed in the CSB, OBPE, UAC and IRHOB by regular visits, during which elaborated discussions with the local program coordinators took place. At the end of the programme, indicator-tables tailored to each institute's program, have been properly filled out (available at CEBioS).
- Missions by scientific staff to the partner institutions permitted to monitor current activities and solve potential issues, apart from providing specific training;
- In 2019, the following missions to our institutional partners took place:

#### CSB:

- **17-22 April**, Hilde Keunen and Erik Verheyen: preparation of the programme: quality improvement financial services; organisation of the programme coordination; quality improvement of research, cooperation with ENABEL and IOB
- **11-28 August**, Hilde Keunen and Erik Verheyen:Content of institutional collaboration had to be re-discussed and fine-tuned: planning of activities had to be adjusted; Nagoya Protocol procedure for export of biological samples, discussions about generating revenues based on the assets available; visit with MEDD and DDD in Kinshasa
- **23 November-3 December**, Hilde Keunen: evaluation and follow-up of the program and of the training sessions organised under R.1.16 (data-bases)
- **3-8 March 2020 (budget 2019)**, Hilde Keunen during MRV workshop in Bukavu, attended by the two programme coordinators of the CSB: overview of the first drafts of the financial and narrative reports of the programme, evaluation of different activities, evaluation of the coordination, evaluation of the collaboration with CEBioS, planning for 2020

#### OBPE:

- **3-12** August, Han de Koeijer, follow up of the programme and discussions with the DG of OBPE and Director Forestry division to smoothen the problems related to the programme and the team of researchers responsible for its implementation.
- **13-21 October**, Luc Janssens and Han de Koeijer, Participation at the annual meeting of the Belgian development actors in Burundi to promote synergies between OBPE and the Belgian actors, as well as to integrated biodiversity in their programmes. Discussions were held with the DG of OBPE to improve the implementation of the programme taking into account recent difficulties with the director of Forest Department who had blocked the activities or assigned different people then those who were trained to accomplish tasks.

#### UAC, , UNILU, UGOM, UOB, IRHOB:

At least one visit by Katrijn Baetens (IRHOB) and François Muhashy

## Monitoring of workshops

• All CEBioS interventions are accompanied by post intervention surveys in order to get enough feedback for improvements and feed the indicator table. After (almost) every workshop or training session a survey was filled out by a majority of the participants, whenever possible in an electronic way, otherwise on printed forms. The results of those surveys are available at CEBioS. Apart from comments on practical issues (hotel rooms, food, internet connection, per diems) the participants indicate in most cases to be very satisfied with the information provided, the format and the quality of the participating experts. In general they mention the workshop has been (very) relevant for their proper work. Most participants indicate to be able to transfer the acquired skills and knowledge and they plan to effectively do so.

Following surveys are available:

- MRV formulation and training workshop Ouidah, Benin, October 2019
- MRV formulation and training workshop Entebbe, Uganda, February 2020
- MRV training workshop Bukavu, RDC, March 2020
- GTI training workshop Ouidah, Benin, November 2019
- Training Habitat Monitoring, Kisangani, September 2019
- CHM/GBIF network training, September 2019

Surveys at the end of the workshops enable to assess the quality of the workshop at different levels. The same questions were asked at the **3 MRV workshops**, enabling to assess the following indicators for these workshops (64 answers over 3 workshops):

- Level of satisfaction with the quality of capacity building: average score of 8.9 /10
- Level of self-reported motivation and ability to apply new knowledge and skills: average score 9.1 /10

For the **CHM networking workshop/training** the replies to the questionnaire:

- Level of satisfaction with the quality of capacity building: average score of 9.1 /10
- Level of self-reported motivation and ability to apply new knowledge and skills: average score 8.3 /10

# Monitoring of the implementation of the programme

- The selection of projects in the framework of competitive calls is done by a jury composed of the programme officers, seconded by an external colleague as far as it is possible to mobilise them on a voluntary basis. One of the juries' tasks is to monitor the eligibility of the proposed projects against the criteria defined by the CEBioS team and validated by DGD. This was done for the GTI, MRV, CHM and Awareness calls.
- In weekly meetings, the CEBioS staff (joint administrative and scientific) informs the colleagues and gets informed by the colleagues about own activities and management issues. This continuous mutual monitoring has proven its value.
- The M&E officers focus on the complementarities and synergies with other Belgian actors (ACNGs) in the field (especially Benin, Burundi, DR Congo, AfricaMuseum and Botanical Garden Meise and selected ACNGs) and as much as possible stimulate this kind of cooperation.
- In Burundi: cooperation with OBPE, Join for Water, Broederlijk Delen and PROCOBU
- CEBioS, as part of Biopols in the OD Nature of RBINS has also the obligation to report on the RBINS indicators.

#### Gender

Two staff of CEBioS followed online UN webinars about gender and biodiversity and set up an action plan which will be implemented from 2019 onwards to reach at least 30% female supported scientists.

At the three MRV workshops only 5 women, apart from 2 CEBioS female staff and a local female organiser, participated on a total number of participants of 22 Benin, 13 in Uganda, 48 in Bukavu. During every workshop we drew the attention of the participants to the fact that there were so few women present. We showed a picture of the participating women, and initiated a brief discussion on the subject.

At the CSB, after drawing attention to the lack of female participation at all activities, the project coordinators paid particular attention to this fact: one lady participated at the training session on socio-economic surveys. She participated also at the field work in relation to this. Two other ladies participated at the training sessions on habitat monitoring and GIS, but, due to family circumstances, they could not participate at the field work.





Fig 10. participants at the opening lunch of the CHM/GBIF networking workshop, September 2019, Brussels Belgium



Fig. 9. Female participants at MRV workshops in Benin and Uganda

From the different projects on CHM and public awareness call reports it isn't yet clear how many women participated in the different workshops or their percentage. This needs to be improved in the future. Based on an estimate from 3 different project reports their participation is estimated at 20-30 % from the participants. For the CHM/GBIF workshop in September 2019, their participation stood at 15 % of the participants, however when including the trainers/facilitators this number raised to 25 %.

# 7. FINANCIAL REPORT 2019

(Stand: 5 June 2020, will be approved once all projects are reported)

SO	Budget lines					Cost detail (for 5 years)	Budget 2019	Expense 2019 (Euro) engaged	Expense 2019 (Euro) paid	% of Budget (engaged)
SO1	1. Coûts opérationnels	Oper ation al costs				-	608,700	613,731.473	574,471.45	100.83
		1.1.	Investm ents				6000.00	6449.78	6398.96	107.50
			1.1.1.		Infrastructure		0.00	0.00	0.00	
			1.1.2.		Fauinmont		6000.00	6449.78	6398.96	107.50
			1.1.2.		Equipment  R1.1 Capacity Building		6000.00	0449.76	0596.90	107.50
				R2.2- 19b	Marine modelling in Benin: computers	3 computers @ 1000	3000.00	3032.50	3032.50	101.08
				R2.2- 19b	OBPE institutional cooperation for research: computers	3 computers @ 1000	3000.00	3417.28	3366.46	113.91
				R2.2- 19b	CSB/UNIKIS: institutional cooperation for research: computers	5 computers @ 1000				
			1.1.3.		Credits		0.00	0.00	0.00	
		1.2.	Operati ons				348500.00	321202.23	284723.79	92.17
			1.2.1.		Study, research		249000.00	220325.23	202959.22	88.48

1.2.2.

R1.1 Capacity Building		225000.00	198059.23	180693.22	88.03
GTI grantees from South	9-11 grants 5000 per yr	55000.00	57068.19	51225.05	103.76
GTI for RBINS researchers doing capacity building in the South	5 projects @ca 6300 per year	35000.00	25514.92	23873.78	72.90
RD Congo universities, ICCN: institutional cooperation for research	5 PhD's, 3 Masters	25000.00	23677.50	19874.63	94.71
Marine modelling in Benin: data collection	5 field trips@different cost	8000.00	7200.00	7200.00	90.00
Marine modelling in Benin: study grants S-N	8 grants @different cost	12000.00	9010.73	6153.73	75.09
pilot projects on monitoring and databases	necessities to prepare for monitoring activities	3000.00	2529.00	2529.00	84.30
OBPE institutional cooperation for	see detail budget OBPE sheet	37000.00	28499.03	27262.97	77.02
UAC institutional cooperation for research	3 PhD's	9000.00	7200.00	7200.00	80.00
CSB/UNIKIS: institutional cooperation for research	see detail budget CSB sheet	41000.00	37359.86	35374.06	91.12
R1.3 MRV		24000.00	22266.00	22266.00	92.78
MRV projects	12-16 projects @ 4000	24000.00	22266.00	22266.00	92.78
R.1.4 Awareness		0.00	0.00	0.00	
Marine modelling in Benin: dissemination	communication activities				
Publications, databases		29500.00	34847.40	25953.71	118.13
	GTI grantees from South GTI for RBINS researchers doing capacity building in the South RD Congo universities, ICCN: institutional cooperation for research Marine modelling in Benin: data collection Marine modelling in Benin: study grants S-N pilot projects on monitoring and databases OBPE institutional cooperation for research UAC institutional cooperation for research CSB/UNIKIS: institutional cooperation for research R1.3 MRV MRV projects  R.1.4 Awareness  Marine modelling in Benin: dissemination Publications,	GTI grantees from South GTI for RBINS Tesearchers doing capacity building in the South RD Congo universities, ICCN: institutional cooperation for research Marine modelling in Benin: study grants S-N pilot projects on monitoring and databases OBPE institutional cooperation for research UAC institutional cooperation for research UAC institutional cooperation for research CSB/UNIKIS: institutional cooperation for research R1.3 MRV MRV projects Marine modelling in Benin: dissemination Publications,  9-11 grants 5000 per yr  5 projects @ca 6300 per year  Find a cooperation Find a cooperation Find trips@different cost  8 grants @different cost  8 grants @different cost  8 grants @different cost  8 different cost  8 grants @different cost  9-10 trips@different cost  8 grants @different cost  8 different cost  9-10 trips@different cost  8 grants @different cost  8 grants @different cost  9-10 trips@different cost  8 grants @different cost  8 grants @different cost  9-10 trips@different cost  8 grants @different cost  9-10 trips@different cost  9 trips@di	GTI grantees from South GTI for RBINS 5 projects @ca 6300 per yr 35000.00 researchers doing capacity building in the South RD Congo universities, ICCN: institutional cooperation for research Marine modelling in Benin: study grants S-N pilot projects on monitoring and databases OBPE institutional see detail budget OBPE sheet 37000.00 cooperation for research UAC institutional cooperation for research 9 phD's see detail budget CSB sheet 1000.00 cooperation for research 9 phD's see detail budget CSB sheet 1000.00 cooperation for research 9 phD's see detail budget CSB sheet 1000.00 cooperation for research 9 phD's see detail budget CSB sheet 1000.00 cooperation for research 9 phD's see detail budget CSB sheet 1000.00 cooperation for research 1000.00 cooperation for 1000.00 cooperati	GTI grantees from 9-11 grants 5000 per yr 5000.00 57068.19  South GTI for RBINS 5 projects @ca 6300 per year researchers doing capacity building in the South RD Congo universities, ICCN: institutional cooperation for research Marine modelling in 8 grants @different cost 8000.00 7200.00  Marine modelling in 8 grants @different cost 12000.00 9010.73  Benin: study grants S-N pilot projects on necessities to prepare for monitoring and databases OBPE institutional cooperation for research UAC institutional cooperation for research UAC institutional cooperation for research UAC institutional cooperation for research R1.3 MRV  MRV projects 12-16 projects @ 4000 24000.00 22266.00  Marine modelling in 8 grants @ 4000 43487.40	GTI grantees from South GTI for RBINS 5000 per yr South GTI for RBINS 5 projects @ca 6300 per year researchers doing capacity building in the South RD Congo universities, ICCN: institutional cooperation for research Marine modelling in Benin: data collection Marine modelling in necessities to prepare for monitoring and databases OBPE institutional see detail budget OBPE sheet COSB/UNIKIS: see detail budget CSB sheet institutional cooperation for research MRV projects 12-16 projects @ 4000 24000.00 22266.00 22266.00 22266.00 Marine modelling in See detail occurrence and the projects on necessities to prepare for monitoring and databases OBPE institutional cooperation for research UAC institutional cooperation for research R1.3 MRV RNV projects on communication activities are detail budget CSB sheet occurrence arch R1.3 MRV RNV projects on communication activities archives are detail budget CSB sheet occurrence arch R1.3 MRV RNV projects on communication activities archives Banin: dissemination Publications, 29500.00 34847.40 25953.71

			R.1.1 Capacity building		21500.00	28401.25	25953.71	132.10
		R1.1 -5	production of AbcTaxa	5 volumes @ 18000	18000.00	23448.47	21000.93	130.27
		R1.1 -6	pilot projects on monitoring and databases R1.2 CHM-IT		3500.00 <b>8000.00</b>	4952.78 <b>6446.15</b>	4952.78 <b>0.00</b>	141.51 80.58
		R1.2 - 10	digitalisation	2 projects/yr @4000	8000.00	6446.15	0.00	80.58
	1.2.3.		Training (seminars, workshops, meetings)		70000.00	66029.60	55810.86	94.33
			R.1.1 Capacity building		0.00	0.00	0.00	
		R1.1 -4	Marine modelling in Benin: meetings R1.3 MRV	2 local meetings @2000	50000.00	50178.75	39960.01	100.36
		R1.3 - 12	MRV training and formulation workshops	2 formulation+training workshops@25000	50000.00	50178.75	39960.01	100.36
		R1.3 - 12	MRV closing workshops (in combination with training workshop on awareness raising for CEBioS alumni	2 closing workshops @9000 (back to back with R1.4-13)				
			R.1.4 Awareness		20000.00	15850.85	15850.85	79.25
		R1.4 - 13	Awareness methodology for CEBioS alumni	1 workshop @20000; 2 workshops @41000 (back to back with R1.3-12)	20000.00	15850.85	15850.85	79.25
1.3.	Mission s				42,500	39,008.46	36,277.70	91.78
			R1.1 Capacity Building		42,500	39,008.46	36,277.70	91.78
		R1.1 -2	GTI for RBINS researchers doing capacity building in the South	22p@4000	20000.00	16465.83	15333.37	82.33

		R1.1 -3	RD Congo universities, ICCN: institutional cooperation for research	5x1p@3000	3000.00	3,243.31	2,560.61	108.11
		R1.1 -4	Marine modelling in Benin	5x2p@2500	5000.00	4648.16	4648.16	92.96
		R1.1 -6	pilot projects on monitoring and databases	3x1p@3000	3500.00	2588.64	2588.64	73.96
		R1.1 -7	OBPE institutional cooperation for research	5x1p@3000	3000.00	2398.70	2129.10	79.96
		R1.1 -8	UAC institutional cooperation for research	combined with other missions	1000.00	0.00	0.00	0.00
		R1.1 -9	CSB/UNIKIS: institutional cooperation for research R.1.4 Awareness	5x2p@3500	7000.00 <b>0.00</b>	9,663.82 <b>0.00</b>	9,017.82 <b>0.00</b>	138.05
		R1.4 - 13	Awareness methodology for CEBioS alumni	1x3p @3000				
1.4.	Personn el				211700.00	247,071.00	247,071.00	116.71
	1.4.1.		Personnel		211700.00	247,071.00	247,071.00	116.71
			FTE 2019-2021= 3,033 ; 2022-2023 = 3.133		211700.00	247,071.003	247,071.003	116.70807 89

SO	Budget lines						Budget 2019	Expense 2019 (Euro) engaged	Expense 2019 (Euro) paid	% of Budget (engaged)
SO2	1. Coûts opérationnels	Operatio nal costs					306600.00	266,338.04	246,237.04	86.87
		1.1.	Investm ents				4000.00	3755.54	3755.54	93.89
			1.1.1.		Infrastructure		0.00	0.00	0.00	
			1.1.2.		Equipment		4000.00	3755.54	3755.54	93.89
					R2.1 Capacity Building					
				R2.2- 19b	training on habitat monitoring in Benin : computers	2 computers @1000	2000.00	2210.42	2210.42	110.52
				R2.2- 19b	training on habitat monitoring in Burundi : computers	2 computers @1000	2000.00	1545.12	1545.12	77.26
				R2.2- 19b	•	replacement of CHM server at RBINS				
			1.1.3.		Credits		0.00	0.00	0.00	
		1.2.	Operati ons				118000.00	83322.86	63809.86	70.61
			1.2.1.		Study, research		47400.00	35431.32	35431.32	74.75
					R2.1 Capacity Building		42400.00	32828.34	32828.34	77.43
				R2.1- 14	training on habitat monitoring in Benin	5 field trips	20500.00	17850.20	17850.20	87.07
				R2.1- 15	training on habitat monitoring in Burundi	see detail budget OBPE sheet	19900.00	14978.14	14978.14	75.27
				R2.1- 16	training on habitat monitoring in RDC		2000.00	0.00	0.00	0.00

1.3.

		R.2.3. MRV		0.00	0.00	0.00	
	R2.3- 21	awareness projects for alumni based on the MRV projects R2.4 Awareness		5000.00	2602.98	2602.98	52.06
	R2.4- 23	production and dissemination of other material like brochures, policy briefs, posters etc		5000.00	2602.98	2602.98	52.06
1.2.2.		Publications, databases		5600.00	0.00	0.00	0.00
		R2.1 Capacity Building		5600.00	0.00	0.00	0.00
	R2.1- 17	production of lexica	5 lexica@5000	5000.00	0.00	0.00	0.00
	R2.1- 15	training on habitat monitoring in Burundi		600.00	0.00	0.00	0.00
1.2.3.		Training (seminars, workshops, meetings)		65000.00	47891.54	28378.54	73.68
		R2.1 Capacity Building		0.00	0.00	0.00	
	R2.1- 15 R2.1- 14	training on habitat monitoring in Burundi training on habitat monitoring in Benin	1 training workshop  1 training workshop				
		R2.2 CHM-IT		65000.00	47891.54	28378.54	73.68
	R2.2- 18	workshops on CHM	10 workshops@10000	20000.00	5700.00	3700.00	28.50
	R2.2- 19	training on Bioland	15-20 training sessions @4000-5000	20000.00	17513.00	0.00	87.57
	R2.2- 20	networking CHM	5 regional meetings	25000.00	24678.54	24678.54	98.71
		R2.4 Awareness		0.00	0.00	0.00	
	R2.2- 24	punctual workshops, summer schools	2 workshops				
Mission s				53000.00	28,642.43	28,054.43	54.04

			R2.1 Capacity Building		12000.00	7156.88	7156.88	59.64
		R2.1- 14	training on habitat monitoring in Benin	6x1p@3500	3500.00	2487.19	2487.19	71.06
		R2.1- 15	training on habitat monitoring in Burundi	6x1p@3500	3500.00	2592.65	2592.65	74.08
		R2.1- 16	training on habitat monitoring in RDC	2x1p	5000.00	2077.04	2077.04	41.54
			R2.2 CHM-IT		25000.00	5950.79	5950.79	23.80
		R2.2- 18	workshops on CHM	18x2p@2500	20000.00	4035.27	4035.27	20.18
		R2.2- 20	networking CHM	5x2p@2500	5000.00	1915.52	1915.52	38.31
			R2.3 MRV		16000.00	15,534.76	14,946.76	97.09
		R2.3- 22	Coaching by CEBioS staff in dedicated MRV- workshops and other MRV-related activities R2.4 Awareness	2x5p@3200	16000.00 <b>0.00</b>	15,534.76 <b>0.00</b>	<b>0.00</b>	97.09
		R2.2- 24	punctual workshops, summer schools x	2x5p@3000				
1.4.	Personn el				131600.00	150,617.21	150,617.21	114.45
	1.3.1.		Personnel		131600.00	150,617.2110	150,617.21	114.45
			FTE 2019-2021= 2.133 ; 2022-2023 = 2.233		131600.00	150,617.2110	150,617.21	114.45

SO	Budget lines						Budget 2019	Expense 2019 (Euro) engaged	Expense 2019 (Euro) paid	% of Budget (engaged)
SO3	1. Coûts opérationnels	Operational costs					175300.00	158,096.25	146,063.65	90.19
		1.1.	Investments				0.00	0.00	0.00	
			1.1.1.		Infrastructure		0.00	0.00	0.00	
			1.1.2.		Equipment		0.00	0.00	0.00	
			1.1.3.		Credits		0.00	0.00	0.00	
		1.2.	Operations				100000.00	70766.20	58733.60	70.77
			1.2.1.		Study, research		90000.00	64510.00	58190.00	71.68
				R3.1- 26	R3.1 Capacity Building support of South to attend international policy	2-3 missions for S-partner	0.00	0.00	0.00	
					R3.2 CHM-IT		50000.00	25565.00	38945.00	51.13
				R3.2- 27	CHM call	20-40 projects @8000-10000	50000.00	25565.00	19245.00	51.13
					R3.4 Awareness		40000.00	38945.00	38945.00	97.36
				R3.4- 29	Awareness calls, including training on awareness, including baseline studies	20-30 projects @8000	40000.00	38945.00	38945.00	97.36
			1.2.2.		Publications, databases		0.00	0.00	0.00	

	1.2.3.		Training (seminars, workshops, meetings)		10000.00	6256.20	543.60
			R3.4 Awareness		10000.00	0.00	0.00
		R3.4- 30	activities related to COPs in 2020, 2022	2 side events			
		R3.4- 31	activities in framework of awareness calls or ad hoc,in Belgium or abroad	10-15 projects@3000-5000	10000.00	0.00	0.00
1.3.	Missions				9000.00	10350.40	10350.40
			R3.1 Capacity Building		6000.00	7114.22	7114.22
		R3.1- 25	missions CEBios for policy	10-15x1p	6000.00	7114.22	7114.22
			R3.2 CHM-IT		3000.00	3236.18	3236.18
		R3.2- 28	participation in juries etcon demand (5x1p)	5x1p@3000	3000.00	3236.18	3236.18
1.4.	Personnel				66300.00	76,979.65	76,979.65
	1.3.1.		Personnel		66300.00	76,979.65	76,979.65
			FTE 2019-2021=		66300.00	76,979.65	76,979.65

so	Budget lines					Budget 2019	Expense 2019 (Euro) engaged	Expense 2019 (Euro) paid	% of Budget (engaged)
SO4	1. Coûts opérationnels	Operational costs				79660.00	83,585.23	75,863.23	104.93
		1.1.	Investments			0.00	0.00	0.00	
			1.1.1.		Infrastructure	0.00	0.00	0.00	
			1.1.2.		Equipment	0.00	0.00	0.00	
			1.1.3.		Credits	0.00	0.00	0.00	
		1.2.	Operations			10500.00	9,541.32	1,819.32	90.87
			1.2.1.		Study, research	9500.00	9,370.32	1,648.32	98.63
					R4.1 Capacity Building	9500.00	9,370.32	1,648.32	98.63
				R4.1- 33	Synergy fund to promote specific synergy projects with civil society and private sector agriculture and conservation	9500.00	9,370.32	1,648.32	98.63
				R4.4- 35	R4.4 Awareness  Special call to measure change in perception on biodiversity of target groups of activities financed by CEBio	0.00	0.00	0.00	
			1.2.2.		Publications, databases	0.00	0.00	0.00	
			1.2.3.		Training (seminars, workshops, meetings)	1000.00	171.00	171.00	17.10
					R4.4 Awareness	1000.00	171.00	171.00	17.10

	R4.4- 34	increase awareness in North (CEBioS) and South for the partners of the Belgian development cooperation, civil society, often back to back with attending SD-activities		1000.00	171.00	171.00	17.10
1.3.	Missions			8000.00	8161.71	8161.71	102.02
		R.4.1 Capacity Building	see detail budget OBPE sheet	8000.00	8161.71	8161.71	102.02
	R4.1- 32	budgets to attend SD in South	5-10x1p	5000.00	4913.23	4913.23	98.26
	R4.1- 33	Synergy fund to promote specific synergy projects with civil society and private sector in agriculture and conservation		3000.00	3248.48	3248.48	108.28
1.4.	Personnel	<u>-</u>		61160.00	65,882.20	65,882.20	107.72
	1.3.1.	Personnel		61160.00	65,882.20	65,882.20	107.72
		FTE 2019-2021= 0.9 ; 2022- 2023 = 1.1		61160.00	65,882.20	65,882.20	107.72

SO	Budget	lines						Budget 2019	Expense 2019 (Euro) engaged	Expense 2019 (Euro) paid	% of Budget (engaged)
		2. Coûts de gestion 10%	management cost 10%					113240.98	124,996.55	124,996.55	110.38
			2.1.	Investments				0.00	0.00	0.00	
				2.1.1.		Infrastructure		0.00	0.00	0.00	
				2.1.2.		Equipment		0.00	0.00	0.00	
				2.1.3.		Credits		0.00	0.00	0.00	
			2.2.	Operations				0.00	0.00	0.00	
					36	End of term evaluation, also in the South					
			2.3.	Missions				4000.00	885.42	885.42	22.14
					37	follow-up missions	2-3 x1p/yr	4000.00	885.42	885.42	22.14
			2.4.	Personnel				109240.98	124,111.13	124,111.13	113.61
						FTE 2019- 2021= 1.55;		109240.98	124,111.13	124,111.13	113.61

		2022-2023 = 0.95				
		Fotal operational costs per cransversal theme / year	1170260.00	1,121,750.99	1,042,635.37	95.85
	7	Total direct costs per year	1283500.98	1,246,747.54	1,167,631.92	97.14
		Fotal Investments (operational costs + management costs)	10000.00	10205.32	10154.50	102.05
		Total Operations (operational costs + management costs)	577000.00	484,832.61	409,086.57	84.03
		Fotal missions (operational costs management costs)	116500.00	87,048.42	83,729.66	74.72
		Total Personnel (operational costs + management costs)	580000.98	664,661.19	664,661.19	114.60
	ructural osts 7%					
3.:	(	Structural costs per /ear	98000.00	98000.00	98000.00	100.00
TOTAL BUDGET			1381500.98	1,344,747.54	1,265,631.92	97.34

### Some remarks on the expenditure 2019

The expenses reached 97,34 % of the budget (stand 5 June 2020). Still, a few projects need to be reported, due to the late start of 2019.

- R-1-1-3: The funding that had been planned to support the ecological component of Rizide Jean-Claude's (UNIGOM) research in the PNVi was not released because he worked at the UCL and JBM laboratories throughout 2019.
- R-2-1-16: The mission planned for July 2019 did not take place due to the Ebola outbreak in Kivu.
- R-2-1-17: The activities were carried out with the support of the KfW Development Bank and the Wildlife Conservation Society.
- R-2-1-15: The ICCN workshop in which Burundians would be involved in the Ruzizi Transboundary Reserve was not organized because of Ebola.
- R-2-2-18: Due to Bioland not ready on time and COVID 19, networking event CHM organised in Brussels
- R-2-2-19: Meeting in Benin cancelled due to COVID 19.

### 8. REPORT 2019 FOR SPECIFIC OBJECTIVES AND RESULTS

See annex 1 for a presentation of the intervention logic of the log frame (full text).

The most relevant information is explained in the document. Other information is briefly mentioned under each relevant indicator.

Budget CEBioS Phase II	Indicators (linked to indicators in log frame)	Budget post	Details	BUDGET Euro	Target	Ach iev ed			
Specific objective 1 (SO1):	Based on Aichi target 19, SDG 6.6, SDG 14								
The <b>scientists</b> of the partner countries of the Belgian development cooperation acquire knowledge,(see annex 1 for full	3. Participation by scientists from partner countries in				>50%				
text)	For phase II we seek an increase of participation of scientis are involved one way or another in national MRV processe <50%.  number of MRV scientific project partners (= number of pr	s, the scien	ce-policy interface and CHM. T	ne baseline in	phase I was				
	4. Scientists are more able to integrate new knowledge, find appropriate funding, apply it				>50%				
	awareness by scientists. However, concerning the articles, >80% of scientists supported by CEBioS to deal in their result than just mentioning the outputs, as it shows a rone for GTI, one participates in MRV workshop Bukavu Blog about alumni GTI workshop in Benin: https://sciencescience.html GTI article on termites, see <a href="https://popups.uliege.be/2030">https://popups.uliege.be/2030</a> Coaching to Cosme to apply for a Rufford scholarship on menual publications by GTI beneficiaries, 2019 >10 publications, see <a href="http://www.taxonomy.be/gticalls/geography.com/">http://www.taxonomy.be/gticalls/geography.com/</a>	log about alumni GTI workshop in Benin: https://scienceofgiro.blogspot.com/2019/11/le-programme-cebios-promeut-la- cience.html  TI article on termites, see <a href="https://popups.uliege.be/2030-6318/index.php?id=4621">https://popups.uliege.be/2030-6318/index.php?id=4621</a> oaching to Cosme to apply for a Rufford scholarship on macroinvertebrates of Pendjari River, Benin, he succeeded. ublications by GTI beneficiaries, 2019							
<b>Result 1.1 (CB-1):</b> The knowledge and understanding of biodiversity and ecosystem services	5. More researchers in the South are empowered to conduct more applied research on biodiversity and development (1) to consolidate the knowledge on habitats and biodiversity, (2) to understand and valorise ecosystem services and their value chains of the protected areas and surrounding rural landscapes in DRC, Burundi and in Benin and (3) to understand water	1	GTI for grantees from South	55000	6	32+ 14			

	currents having an influence on coastal erosion and dispersal of organisms such as shrimp or fish in Benin and Vietnam  Laban Musinguzi, MRV project promotor will work on a Pl with CEBioS study of value chains at PK172 axe Kisangani-Ituri (see also 15 GTI trainees under external call (See Table 1 in main pa Prof Sylvestre Gambalemoke attended with CEBioS support	o indicat irt )	or 17	')			
Budget CEBioS Phase II	2019, Mekelle University, Mekelle, Tigray, Ethiopia.  Indicators (linked to indicators in log frame)	Budge post	et	Details	BUDGET Euro	Target	Ach iev ed
	5bis. Annual number of interventions integrating different calls in the institutional cooperation, hence allowing cross-fertilization between science, awareness, MRV and CHM in the science-policy-development interface.	2		GTI for RBINS researchers doing capacity building in the South	55000	1	4
		3		RD Congo universities, ICCN: institutional cooperation for research	28000		
		4		Marine modelling in Benin	25000		
				of Sylvain Gozignan (Benin) to a mp exploitation at Lake Nokou		ИРА scholar	ship,
		5		production of AbcTaxa	18000		
		6		pilot projects on monitoring and data bases	10000		
				Einstitutional cooperation esearch	40000		
				essible on demand	I		
			resea		10000		
		Repoi	rt acc	essible on demand			

		9	CSB/UNIKIS: institutional cooperation for research	48000		
		Rep	ort accessible on demand			
	6. Annual number of mentions in different scientific, policy or popular media with direct or indirect reference to ecosystem		zero budget		4	8+4
Budget CEBioS Phase II	Indicators (linked to indicators in log frame)	Bu dg et po st	Details	BUDGET Euro	Target	Ach iev ed
	-video sur l'approche MRV et communication vers décideu -3 Glo.be articles related to our MRV policy briefs (bushme -Oryx news on ES in BRs (+associated videos) -ES tool review paper EVAMAB -Lucie put our highlights report on Besnet -Un enregistrement sonore préparé et diffusé 8 fois sur les KisanganiHermann Taedoumg used the opportunity to be author of 2020H. Taedoumg was promoted lecturer at University Yaounc -2 articles de vulgarisation dans la presse écrite béninoises -1 vidéo sur l'expédition au Vietnam de J. Constant ; -1 article de presse sur l'atelier des GTI alumni de novembre -Voir atelier dans la presse: http://www.laperchedunord.ir Et https://scienceofgiro.blogspot.com/2019/11/le-programe-Best poster awrad van RAOS, to Iliana Janssens	anter the n dé I (Casur le re 201 nfo/?p	nnes de la radio Flambeau de l'Orient next AbcTaxa volume on the Rubiacea ameroun) travail de Moissou Lagnika et Patrick .9 (cf annexe) p=3517 cebios-pour-la.html	ae, to ask for a		

Budget CEBioS Phase II	Indicators (linked to indicators in log frame)	Budget post	Details	BUDGET Euro	Target	Ach iev ed
<b>Result 1.2 (CHM-IT-1):</b> CHM and other IT tools in service of national research is functional and useful to scientists and their	7. Annual nr. of items of scientific information added on the national CHM of partner countries, showing		zero budget		10	17+ 3
partners	L'information concernant 1 livre et 16 articles scienti	ifiques prod	uits par les scientifiques du C	SB ont été ajoutés a	u site du CHI	M
	8. Number of interventions of grey literature digitalisation, including amount of contents scanned,	10	Digitalisation	8000	1	0
	Programme de digitalisation avec le CSB attend son	exécution			<u> </u>	
	9. Digitised grey literature is available on national CHM, being a direct				20	0
	Programme de digitalisation avec le CSB attend son	exécution		<u> </u>		
Result 1.3 (MRV-1): Scientist are able to valorize research data for feeding national and local indicators and formulating trends supporting improved biodiversity related strategies	10. Number of MRV project with relevant information feeding into National Biodiversity Reports and other assessments	11	MRV calls, projects	24000	0	1
	Burundi CBD national report 2019; RDC no national r See video MRV in Benin: https://www.youtube.com/	·				
	11. Number of indicators developed by the partners used to feed into NBSAP		zero budget		0	
	12. Number of scientists able to use MRV-related methodologies ot transfer their data towards indicator based systems of reporting	12	MRV workshops	50000	40	78
	Number of participants to 3 MRV workshops - in 22	Benin, 13 in	Uganda, 40 in Bukavu	1	<u>'</u>	,

Budget CEBioS Phase II	Indicators (linked to indicators in log frame)	Budget post	Details	BUDGET Euro	Target	Ach iev ed
Result 1.4 (AW-1): Awareness on dissemination methodologies are raised among scientists	13. Number of scientists able to communicate and raise awareness for different audiences in order to valorise science in outreach		dissemination of policy briefs and other awareness material (see also SO2) part of indicator 48	0		
		13	awareness methodology workshop for CEBioS alumni	20000	12	12+ 22
	National CHM of the 12 partner countries are up and partners as this information is difficult to obtain.  Posters and articles produced by GTI alumni trained Intranet (e-bib) CSB is operational, discussions with	during the (	GTI alumni workshop in November 20 nme to open up for both faculties on	)19	cientist and th	eir
			TOTAL SO1	391000		
Specific objective 2 (SO2):	Based on SDG 2.4., Aichi 7, SDG 8.9, SDG 12.2, 15.1					
National implementing authorities in the south and their partners improve sustainable management and use of ecosystem	40. Management plans of national authorities, agencies, their local civil society partners and research institutes of partner countries of the Belgian Development Cooperation take		In phase I , CEBioS supported IMER, IMARPE, ICCN, OBPE, CSB and IRHOB. However Peru stopped: IMARPE			
	Han de Koeijer appointed member of Informal Advis one of 3 members for Western Europe. Han de Koeijer appointed member of Informal Advis Protocol	·			_	
Result 2.1 (CB-2): Monitoring, management and conservation of	41. Number and skills of staff of implementing agencies,		training on habitat monitoring		10	j
ecosystems and services,		14	in Benin	24000		
		15	in Burundi	24000		
		16	in RDC	7000		1
	42. Improved monitoring through campaigns to collect data		see training		3	1

Budget CEBioS Phase II	Indicators (linked to indicators in log frame)	Budget post	Details	BUDGET Euro	Target	Ach iev ed				
	Constitution d'une base des données botaniques pou habitats avec l'utilisation des fiches LEM Data collection by Centre national Florestique, Côte			·	·					
	43. Number of databanks or publications with these data to point out the dynamics trend and to feed national reporting		see training		1	10				
		s équipes du CSB qui se sont déployées dans le secteur Bekeni-Kondolole ont produit chacune une base des données: enquêtes cio-économiques, botanique, petits Mammifères, grands Mammifères, Insectes ravageurs et maladies des plantes, Reptiles, yriapodes, Coléoptères, ichtyologie.								
	44. Increasing use of tools (lexica) that facilitate the application of scientific knowledge to ensure the monitoring of habitats and of ecosystem health. (related to indicator 50)	17	Production of lexica, see chapter.	5000	1	9				
	44.bis. Number of concrete projects by environmental agencies or associated partners to promote value chains of ecosystem services for rural livelihoods									
	about bushmeat trade (DRC) about medicinal plants commercialization (Benin) about fisheries, their management and their impact (3 in DRC, 1 in TZ, 1 in UG) about shea nut trade (Uganda)									

Budget CEBioS Phase II	Indicators (linked to indicators in log frame)	Budget post	Details	BUDGET Euro	Target	Ach iev ed
Result 2.2 (CHM-IT-2): CHM and other IT tools in service of monitoring and management are functional and are used by the authorities and target publics	45. Number of contributors to the national CHMs in partner countries and Belgium, showing the correct functioning of the national focal point and the contributors network	18	workshops on CHM	40000	30	25
	A quick check on the latest additions in 2019 showed	d at least 30	contributors to the national CHMs th	at posted one i	tem or more	e.
	46. Number of postings on the CHM about activities under SO2 financed by CEBioS, providing access to valuable information about biodiversity and development	19	training on Bioland	20000	Target: 23 achieved 365.886	80.000
	46.bis. Number of visits by authorities and large public of dedicated web sites such as CHM,	19b	Computers and server for South and http://www.biodiv.be	10000		
	showing the increasing demand and use by interested stakeholders of the information posted on the CHM	20	Networking CHM	30000		
	The number of page visits on national CHM websites new Bioland tool hasn't been taken into account in t				by Burundi	on
Result 2.3 (MRV-2): Scientists, in collaboration with implementing authorities, develop the tools to communicate about	47. Number of tools developed by CEBioS-MRV alumni used for awareness raising, and influencing policies	21	awareness projects for alumni based on the MRV projects		0	1
	PB on crocodiles and hippo's in the Ruzizi plains, DRO	Ċ				
	48. Number of scientists involved in the production of lexica, policy briefs and scientific papers,	22	Coaching by CEBioS staff in dedicated MRV-workshops and other MRV-related activities	16000	3	5
	The Bukavu PB about the MRV approach in DRC, invo (Bashonga) -ongoing	olving at lea	ast 4 scientists + PB on crocodiles and	hippo's in the F	luzizi plains,	DRC

Budget CEBioS Phase II		Budget post		BUDGET Euro	Target	Achi eved
Result 2.4 (AW-2): The observations and conclusions of the scientific research are vulgarized towards authorities competent	49. Number of authorities, decision makers, local organisations and NGO's on having benefited from awareness raising activities and converting it in	23	production and dissemination of other material like brochures, policy briefs, posters etc	5000	5	36
for monitoring and managing ecosystem services	their professional lives at level of policies or management	24	punctual workshops, summer schools			
	Participation in OBPE meetings by members of differ Awareness raising by the CSB in the Bekeni-Kondolol responsaible de la Police territoriale, 4 pasteurs, 3 di Durable.  A series of GLO.Be articles dedicated to the CEBioS P https://www.glo-be.be/fr/quick-articles/biodiversite/https://www.glo-be.be/nl/quick-articles/biodiversite/https://www.glo-be.be/nl/quick-articles/minder-hou/https://www.glo-be.be/nl/quick-articles/minder-hou/https://www.glo-be.be/nl/articles/sierplant-verpest-https://www.glo-be.be/nl/quick-articles/minder-en-	e sector cor recteurs d'é olicy Briefs, -et-medecir eit-en-tradit udvlees-op-l utskool-om- -het-taname	mprised: 1 chef de secteur, 4 chefs de coles, 1 agent du Ministère de l'Environe.  :  :  :  :  :  :  :  :  :  :  :  :  :	ronnement et	_	
Specific objective 3 (SO3):	Based on Aichi targets 2, 16 and 17, SDG 15, 16					
The authorities, decision makers and policymakers develop and implement pertinent policies, strategies and action plans for a sustainable	70. The participation of developing countries in the institutions of global governance					

Budget CEBioS Phase II	Indicators (linked to indicators in log frame)	Budget post	Details	BUDGET Euro	Target	Achi eved
	71. Number of times ecosystem and biodiversity values are mentioned into national and local planning,				3	
Result 3.1 (CB-3): Policy makers in North	Nagoya: SDG 15.6 and Aichi target 16					
and South contribute to national and international policy on biodiversity and development in the South	72. Number of CEBioS staff leading agenda items for Belgium as (co-)pilots in international policy meetings like OECD, IBPES by CEBioS staff members	25	missions CEBios for policy	6000	2	
	73. Number of partner country staff that were supported or are involved in CEBioS activities, attending	26	support of South to attend international policy		0	
	74. Number of CEBioS staff leading agenda items for Belgium as (co-)pilots in SBSTTA and COP and expert meetings of CBD, EU and other organisations by CEBioS staff members		see Annual Number of attendance to international policy meetings like OECD, IBPES by CEBioS staff members.		2	2
	HdK: SBSTTA 23and WG8J November 2019; Themati 03/2020	c consultati	ons on Implementation and Capacity	building as v	vell as OEW(	G2 02-
	75. Number of North scientists requesting Nagoya PIC and MAT (related to indicator 89) to the competent authorities as a result of CEBioS training, showing the level of implementation of the Nagoya Protocol				5	4+4

Budget CEBioS Phase II	Indicators (linked to indicators in log frame)	Budget post	Details	BUDGET Euro	Target	Achi eved
	According to the ABS-CH, 4 internationally recognise beginning of 2020 2 additional ones have been publi development of PEC and MAT procedure with MEDE Piet Stoffelen from Meise Botanical Garden question RBINS researchers for GTI calls informed about PIC a	shed. ) as on PIC and	d MAT replied to and given advice on	how to obtain	them	In the
	76. Number of South scientists requesting Nagoya PIC and MAT (related to indicator 89) to the competent authorities as a result of CEBoS training, showing the level of implementation of the Nagoya Protocol					6+14
	Eugéne SINZINKAYO/ Badjejea/ Mande/ Akuboy/ Ng	oy, all 14 GT	Trainees (1 visit cancelled due to Co	ovid-19)		
Result 3.2 (CHM-IT-3): CHM and other IT based information and reporting tools for policies are functional and used by the authorities for the development of policy	77. Number of CHM technical and IAC meetings participation, showing the level of CEBioS involvement and influence in the global CHM policy				3	3
plans	HdK participation in CHM-IAC, Capacity building IAC	and ABS-CH	IAC meetings			
	78. Number of people enabled to train contributors to the CHM in partner countries, showing the sustainability of train the trainer approach by CEBioS	27	CHM call	50000	4	4
	Training of Morocco, Burundi, Niger and Benin			<u> </u>		
	79. Number of contributors to CHM of partner countries, showing CHM community network is functioning		see call		60	>30
	Checked additions by different contributors on 10 sit	tes. Due to r	migration to Bioland not reached the	number expec	ted.	

Budget CEBioS Phase II		Budget post		BUDGET Euro	Target	Achiev ed
	80. Participation in CHM-related activities such as juries, contests, prices by partner countries, showing value the CBD or D4D price is attributing to CEBioS and partners	28	participation in juries etcon demand	3000	1	2
	Training given in Morocco and Saudi Arabia on CHM, not possible	requests fr	om different countries to also give tr	aining but due	e to Bioland	late start
	81. Visits to the CHM websites of partner countries and others that receive support through South-South cooperation,		zero budget, see other posts		280.00	670.05 3
	Numbers based on google data of the PTK sites.					
Result 3.3 (MRV-3): . Reporting to NBSAPs and other biodiversity related plans is based on evidence-based data	82. Number of official documents using MRV for reporting, showing a functioning science-policy interface		zero budget		0	
. Influencing local authorities to adopt or develop decisions and policies based on CEBioS project results, is organised	83. Number of official documents referring to new relevant policies or decisions and local plans, referring to documents, reports, actions of CEBioS projects and alumni		zero budget		0	1
	New protected area created in Palestine following M	RV project	2018			
Result 3.4 (AW-3): Awareness on biodiversity governance and available tools is raised amongst authorities and results	84 Number of projects on awareness raising carried out, showing qualitative projects to raise awareness amongst				5	15
	5 projects were carried out under the CHM awarene Awareness raising activities on Nagoya Protocol and 8 émissions radiodiffusées pour sensibiliser le grand autorités politico-administratives qui écoutent la rad No awarenss project call planned for GTI in 2019	biodiversity public, y co	y OBPE/PROCUBU mpris la Société Civile, les organisatio		rnementale	s et les
	85. Number of national and sub-national deciders attending meetings for awareness raising	29	Awareness calls, including training on awareness, including baseline studies	40000	10	14

Budget CEBioS Phase II	Indicators (linked to indicators in log frame)	Budget post	Details	BUDGET Euro	Target	Achiev ed
	The project reports aren't available yet.  OBPE participation in NP and ecotourism meetings					
	85. Number of national and sub-national deciders attending meetings for awareness raising	30	activities related to COPs in 2020, 2022			
	85. Number of national and sub-national deciders attending meetings for awareness raising	31	activities in framework of awareness calls or ad hoc,in Belgium or abroad	10000		
	86 deleted					
	87 deleted					
			TOTAL SO3	109000		
Specific objective 4 (SO4) :	Based on Aichi targets 1 and 4, SDG 17					
Enhanced synergy between the partners of the Belgian Development cooperation, civil society and the private sector to	101.Number of activities on North-South, South- South, triangular regional and international cooperation to enhance				1	4
achieve sustainable development by mainstreaming biodiversity issues	3 MRV workshops promoting N-S-S cooperation (Sou 1 MRV workshop at Lake Kivu was associated to the			able discussio	ons).	
	102. Number of activities that promote effective public, public-private and civil society partnerships for a sustainable use of ecosystem services in rural landscapes				1	7
	Project OBPE – PROCUBU on awareness raising for so PROCUBU on native species with interest for the local MRV projects involving private or NGO partners (Nug	al population	n in watersheds;			OBPE and
Result 4.1 (CB-4): Increased synergies of CEBIOS with ACNG's, DGD, ENABEL and private sector for mainstreaming of biodiversity	103.Number of projects in the South involving synergies or complementarities with Belgian actors	32	attending SD in South	5000	1	10

Budget CEBioS Phase II	Indicators (linked to indicators in log frame)	Budget post	Details	BUDGET Euro	Target	Achiev ed
	Rikolto participated to the MRV workhop in Bukavu IOB: formation enquêtes socio-économiques (VLIR-T Le CSB a aussi bénéficié du concours de Bob Utshudi et l'entretien du réseau internet.		CT du projet FORET soutenu par l'Un	ion Européen	ne, pour la r	éparation
		33	Synergy fund to promote specific synergy projects with civil society and private sector in agriculture and conservation	12500	1	1
	Projects between OBPE and PROCOBU on awareness integrating local species in water catchment areas. A		· ·			
Result 4.2 (CHM-IT-4): CHM and other mainstreaming tools are functional and are used by the partners of the Belgian	104. Number of projects reports of partners of the Belgian Development cooperation available on the national CHMs		zero budget		1	5
development cooperation, civil society and private sector	105. Number of additions on the national CHMs on activities by civil society and the private sector.		zero budget		5	2
	3 projects under the CHM call 2019 and 2 projects unwell as news items on the national CHMs  Project results of OBPE-PROCOBU project as well as a		19 awareness call have added their re	ports, events	announcem	ents as
Result 4.3 (AW-4): The awareness about sustainable use and management of biodiversity is raised within the partners of the Belgian development cooperation, civil society and private sector	106. Number of initiatives raising awareness on biodiversity and development in private sector and NGOs (with call explained under R3.4),		see synergy fund		5	5
	Excursion nr Kadima DS 19 RDC; Development of thematiche JSF 'water and forest respective Development of thematische JSF 'research' GSK - Burundi 2019; Project "Join for Water"/OBPE/PROCUBU Development project on mushrooms and their value		VVOR DRC			
	Participation in NGO meetings in Benin by J-D Akpon		VVOD, DRC			

	107. Number of training sessions to increase capacity on awareness in North (CEBioS) and South for the partners of the Belgian development cooperation, civil society	34	CEBioS increases awareness in North and South for the partners of the Belgian development cooperation, civil society	1000	1	2
Budget CEBioS Phase II	Indicators (linked to indicators in log frame)	Budget post	Details	BUDGET Euro	Target	Achiev ed
	Presentation DS 19 RDC Training session foreseen in March 2020 in Burundi Advice to the Royal Palace about relevant literature			eral Assembl	y.	
	108. Number of projects to measure change in perception on biodiversity of target groups of activities financed by CEBioS.	35	Special call at end of phase II		1	1
	OBPE-PROCUBU project					
			TOTAL SO4	18500		
Coordination						
		36	End of term evaluation (N and S)			
		37	Identification, Formulation, Monitoring and evaluation	4000		
		Formulati Developm Productio	I on of Report and Highlights for the pe ion of new log frame for 2020-2023 we nent of a performant accountancy too on of financial Vademecum for CEBioS nent of Vademecumfor RMCA and RB	vith a consult ol with a f con partners	ant. Isultant	OGD.
Salaries		38		109241		
Total Management costs				113241		
Total Direct costs				1283501		
Structural costs 7%				98000		
Subsidies requested from DGD				1381501		

### 9. REPORT 2019 FOR INDICATORS AT LEVEL OF ACTIVITIES

Intervention logic	Indicators	Budget 2019	Targets planned	Achieved
			Yr 1 2019	
Specific objective 1 (SO1):				
The <b>scientists</b> of the partner countries of the Belgian development cooperation acquire knowledge, understand, apply and disseminate results useful for sustainable management, use and conservation of biodiversity and ecosystem services		391000		
Activities R1.1 (CB-1):				
· Coaching of students in terrestrial/freshwater biology and ecosystem services directly by CEBIOS staff to apply for grants, write abstracts for conferences, write papers	14. Number of students from the south coached on biodiversity and ecosystem services in the framework of a thesis in the South		8	9 (6M+3F)
Coaching of students directly by CEBIOS staf for marine modelling to apply for grants, write abstracts for conferences, write papers	15. Number of GTI grants to young researchers to come to Belgium and alumni database		12	12
<ul> <li>Organise GTI calls</li> <li>Coaching of students through GTI call and earmarked budgets</li> <li>Mobilising/motivating research units in the South to start specific research</li> </ul>	16. Number of GTI projects supporting RBINS scientists performing capacity building in the South		4	4
topics  Organise, co-organise or participate in larger events (symposia, summer schools)	17. Number of students in RDC (universities, CSB) supported by CEBioS for their field work		16	42+7M+2F
<ul> <li>Coordination of editors and PSU for production of AbcTaxa</li> <li>Attending juries by CEBioS staff</li> </ul>	18. Number of students in Burundi supported by CEBioS for their field work		1	1
<ul> <li>Attending congresses by CEBioS staff with poster or oral presentation to consolidate scientific credibility and present results</li> <li>Supporting South scientists to attend international scientific congresses</li> </ul>	19. Number of students in Benin supported to work in the field		1	
· Supporting South partners to organise international scientific congresses	20. Number of students in Marine modelling		1	2
<ul> <li>Sending AbcTaxa to South partners or North partners (sales) by the secretariat of CEBioS</li> <li>Organising workshops on policy briefs</li> </ul>	21. Number of colloquia or symposia on SDGs, post Aichi, biodiversity, ecosystem services and development organised directly by CEBioS		1 minor	3

14. Dosso Kanvaly appointed Maître de Conférences en Ecologie par le Conseil Africain et Malgache de l'Enseignement Supérieur (CAMES, www.lecames.org) lors de sa 41ème session des Conseils Consultatifs Interministériels tenue à Bangui en Centrafrique

Gaby Badjejea (CSB): amphibiens, IFS grant proposal (prolong) - will no longer be asked. Another internship in VLIR-IUS instead, proposal for Witherford foundation Bruno Modenga (CSB): crevettes, stimuler la coopération avec MHN Paris et avec YIAKIS (daughter of IITA) + prep demande bourse GTI

Jeannot Akuboy (CSB): herpetologie, IFS grant proposal preparation end 2019, VLIR-IUS

Ndjoku Bienfait (UNIKIS): Primatology with TL2 and Max Planck Gesellschaft

Musaba (UNIKIS): chauve-souris, D.E.S. finished

Masudi (CSB): amphibiens, IFS grant proposal (new) coached, Rufford grant coached and granted, GTI grant coached

Pascal Baelo du CSB écureuils + pathologie, D.E.S. finished, IFS grant proposal preparation end 2019, bourse GTI 2019 -not succeeded (Nagoya permit problems), stage GTI en Belgique du 01-17/03/2020. Il est retourné au pays avant la fin du stage à cause de la pandémie de COVID-19.

Jean Bakondongama csb a profité des activités de biomonitoring pour conduire une enquête dans le cadre de sa thèse de doctorat : Connaissance, perceptions sur les infestations et les moyens de contrôle de Zonocerus variegatus dans la zone forestière de Kisangani.

PhDs RDC: UNIGOM (Rizinde Habimana Jean -Claude; Ndamiyehe Ncuti Jean-Baptiste); UNILU (Kasangij A Kasangij Patrick, Sebagenzi Guy David, Basheke Linda Lydie, Mashagiro Gracia); BENIN: UAC (Efio Sylvain, Houindote Elodiade, Adantin Adèle).

15. Cfr. GTI Table 4 for details

16. Call being updated to new criteria

Cfr. GTI Table 4 for details

17. training GIS and linking fauna and flora data sets, Kisangani, 17-30 september, collaboration with ICCN, 3 M + 2 F

.training politico-economical questionnaires by IOB, Kisangani, 2 M + 1 F

.Pascal Baelo (GTI)

.team CSB supported for field research in institutional collaboration, 31 M, plus 2 étudiants de la Faculté des Sciences ont accompagné la mission multidisciplinaire de bio-monitoring pour la récolte des données pour leurs travaux de fin cycles en zoologie

.Contribution to implement the CSB programme according to the log frame: 8 persons trained on habitats monitoring (mission 09 - 25.09 2019)

18. SINZINKAYO Eugène

**20**. Wilfried Sintondji, Sylvain Gozingan: two accepted abstracts for the VLIZ marine science day, presentation of work in a short movie because cancelled event (COVID). Application for DAAD scholarship. Review on taxonomy of shrimps in lake Nokoué and on hydrodynamics of the lake

21. during MRV workshops in Entebbe and Bukavu sessions on those items were organised

Intervention logic	Indicators	Budget 2019	Targets planned	Achieved
	22. Annual Number of AbcTaxa produced		1	
	23. Annual number of participation in Master, PhD and other external grant juries, visitations etc by CEBioS staff, related to biodiversity and development		3	5
	24. Annual number of scientific congresses attended by CEBioS staff with poster or oral presentation		2	4
	25. Annual number of scientific congresses attended by South researchers with poster or oral presentation supported by CEBioS		1	4
	26. Annual number of scientific congresses organised by South researchers with poster or oral presentation supported by CEBioS		0	
	27. Number of students in Marine modelling trained in linux based operating systems, programming languages, scientific methodology		1	

- 22. Excellent review received on Diatoms ABC taxa: <a href="https://www.tandfonline.com/doi/abs/10.2989/16085914.2019.1628702">https://www.tandfonline.com/doi/abs/10.2989/16085914.2019.1628702</a>. Volume on brittle stars Give the number and the official title!
- 23. Luc reviewed 4 IFS projects 'April), gave 1 lecture at VUB and 2 lectures at Uhasselt. Jury of 1 master thesis in VUBIliana Janssens
- 24. Presentation at CSP meeting during SBSTTA 23 on DNA technics to assist identification of wildlife traffic and CITES by RBINS. Conferences AfriMAB (Luc + Koen), ESP Hannover (Iliana+Jean), London (Hilde + AJ)
- 25. JD Akpona at Ecosystem Service Platform conference Togo with cebios support Prof Sylvestre Gambalemoke (CSB) at the African Small Mammals Symposium in Mekele, Ethiopie + in collaboration with VLIR-UOS Pr Guy Crispin Gembu (CSB-UNIKIS) and ARR Casimir Nebesse (CSB-UNIKIS) + two grants by the organisers for Claude Mande (UNIKIS-CSB) and Prescott Musaba (UNIKIS-CSB) obtained with CEBioS support/coaching, Prof Onésime Mubenga (CSB) et Prof Jean-Claude Mukinzi (CSB) at MRV workshop in Bukavu
- **26**. not applicable
- 27. see chapter marine modelling

Act	tivities R1.2 (CHM-IT-1):			
	Organising national content management workshops for scientists	28. Annual number of scientists participating in national	12	14
	Encouraging scientific posts on the CHM	content management workshops or workshops in		
		Belgium.		

<ul> <li>Organising scanning sessions of archives at RBINS and in the partner countries</li> </ul>	29. Annual number of posting on the national CHMs of partner countries related to scientific research done by CEBioS financing (related to indicator 7)		10	Not measured
	30. Annual number of scanned pages from the archives (RBINS, Leopold III and others)		30	600
<ul> <li>28. 14 GTI students</li> <li>29. 2 on Burundi and 1 on Benin CHMs</li> <li>30. 4 students have scanned more than 600 photos during the summer of 2019</li> </ul>				
Activities R1.3 (MRV-1):				
Organise MRV formulation and training workshops Fr and Engl Organise MRV calls Fr and Engl	31. Number of MRV formulation and training workshops organised		2	3
<ul> <li>Implement and follow up on MRV projects</li> <li>Organise MRV closing workshops Fr and Engl, back to back with awareness methodology workshops</li> </ul>	32. Number of participants at the MRV formulation and training workshops		50	83
Intervention logic	Indicators	Budget 2019	Targets planned	Achieved
	33. Number of MRV calls opened		2	2
	34. Number of MRV projects implemented		0	8
	35. Number of MRV closing workshops organised		0	
	36. Number of participants at the MRV closing workshops		0	
Activities R1.4 (AW-1):				
· Organise awareness methodology and communication workshops for CEBioS-alumni	37. Number of workshops to train scientists in communication and awareness raising		1	1
	38. Number of participants at the awareness methodology workshops		12	11
	39. Number of events on vulgarization, dissemination and awareness for marine modelling		0	

- . Benin October 2019, Entebbe Feb 2020, Bukavu March 2020
- . Number of participants to 3 MRV workshops in 22 Benin, 13 in Uganda, 48 in Bukavu
- . 1 EN and 1 FR
- . 8 FR projects in budget year 2019
- . n a
- . n a
- . see report
- 38. 12 were invited but 1 participant was not able to attend because of other professional commitments
- . n a

Specific objective 2 (SO2):				
National implementing authorities in the south and their partners improve sustainable management and use of ecosystem services to conserve biodiversity and support the livelihood of rural populations through the development of best practices and value chains		181000		
Activities R2.1 (CB-2):				
<ul> <li>Implement South trainings in habitat monitoring</li> <li>Identify, formulate and implement research projects related to value chains of ecosystem services</li> <li>Collect data on transects in protected areas</li> <li>Co-produce lexica with local partners</li> </ul>	50. number of lexica on habitat monitoring (related to indicator 44)		1	1
	51. number of research projects on value chains of certain ecosystem services		2	2
	52. Number of South trainings in habitat monitoring		1	4
	53. Number of Data-sets on transects in protected areas		2	3
Intervention logic	Indicators	Budget 2019	Targets planne d	Achie ved
Activities R2.2 (CHM-IT-2):				
Organisation of networking and training events for national CHM Participation in meetings for development of IT tools in the framework of CBD and EU	54. Number of networking and training events for national CHM		4	3
Involvement in development or application of mainstreaming tools	55. (moved towards 46bis)		230000	

	56. Number of meetings for development of other IT tools in the framework of CBD or EU	1	5
	57. Number of networking meetings, seminaries, regional workshops for CHM	1	1
	(indicator 58 cancelled)	1	1
	59. Attendance to strategic meetings on development related to the CHM (ind. 58 cancelled)	1	2
Activities R2.3 (MRV-2):			
Organise MRV, GTI awareness calls Fr and Engl	61. Number of MRV etc awareness calls organized	0	
Implement and follow up on awareness projects Create policy briefs with and by CEBioS- alumni	62. Number of MRV etc awareness projects implemented	0	
	63. Number of Policy Briefs published	0	2
Activities R2.4 (AW-2):			
Create flyers, posters, video's, with and by MRV, GTI alumni	64. Number of vulgarizing documents produced	2	2
Organise local meetings with specific target groups Assure the targeted dissemination of the tools produced	65. Number of persons involved into awareness activities	4	12
· Publish activity reports to CHM	66. Number of local meetings organized	5	8
	67. Number of participants to the local meetings	60	> 400
	68. Number of dissemination activities	4	13
	69. Number of reports published at the CHM websites	5	5

- **50**. Ruvubu is being finalised
- **51**. Rotan awareness activity

CSB team on PK172 axe Kisangani-Ituri as part of institutional collaboration

UNIGOM: Rizinde Habimana Jean - Claude (PhD student) is working on diversity and habitats of wild edible mushrooms in the Albertine Rift

**52.**1 formation avec François Muhashy de CEBioS du 17 au 18 septembre 2019 pour préparer les chercheurs CSB au biomonitoring

One training: mission in PN Ruvubu (12 - 17.06. 2019)

**53**. See annual report 2019 OBPE. One visit done in 2020 on 2019 budget.

CSB team on Rubi-Tele as part of institutional collaboration

- 54. Regional training in Saoudi Arabia (S-A, Bahrain, Oman), Burundi, Niger project
- **55**. 365886
- 56. Skype meeting DART, Bioland meeting during CHM-IAC, Several skype meetings on development of GBIF module in Bioland
- **57**. Network meeting in Belgium together with GBIF-project (12 countries)

58. deleted

59. Januari 2019; during SBSTTA23

**60**. deleted

61.

62.

- 63. PB14 of MRV activities in 2018, 1 PB of MRV partner (Bashonga), PB on Lake Tana
- **64**. Comprendre l'importance socio-economique du rotin pour sa restauration effective: « Appel lancé aux communautés locales et administratives à la base pour leur implication effective à la restauration du rotin au Burundi » training module fichier de sonorisation pour diffusion sur les chaînes de radio à Kisangani et la grande région autour
- **67**. Personnes qui ont participé à la campagne de sensibilisation organisé par le CEBioS-CSB du 14-20 décembre 2019 (voir indicateur 49). +226 Participants in the 4 projects under the call with more than 15 + per meeting, OBPE meetings also 15 + per meeting
- 68. 4 réunions + 8 radiodiffusions + article sur Karibu-online
- 69. Le rapport des activités CSB-CEBioS 2019 est en cours de finalisation et sera publié incessamment.

Reports of the 4 projects under the call are online

Intervention logic	Indicators	Budget 2019	Targets planne d	Achieved
Specific objective 3 (SO3):			•	
The authorities, decision makers and policymakers develop and implement pertinent policies, strategies and action plans for a sustainable management of the national biodiversity in service of the livelihoods of the local populations in the South		109000		
Activities R3.1 (CB-3):				
Attend international policy meetings for OECD, IPBES	86 deleted			
<ul> <li>Attend SBSTTA and COP of CBD</li> <li>Support and promote South attendance to SBSSTA, COP etc</li> </ul>	87 deleted			
<ul> <li>Organise trainings on the Nagoya Protocol in the North</li> <li>Organise trainings on the Nagoya Protocol in the South</li> </ul>	88 Number of international policy meetings attended by CEBioS staff and partners		0 - 1	5
	89 Number of trainings on Nagoya P. organized (related to indicator 76)		1	1
Activities R3.2 (CHM-IT-3):				
<ul> <li>Attend CHM technical and IAC meetings</li> <li>Attend CHM-related activities such as contests, prices</li> </ul>	90. Number of CHM technical and IAC meetings participation		2	2

Organise CHM trainings in partner countries	91. Number of CHM trainees in partner countries		60	50
· Stimulate partners to participate in in CHM related activities	92. Number of Participation in CHM-related activities such as contests, prices by partner countries		1	1
	93. Visits to the CHM of partner countries and others that receive support through South-South cooperation		280.000	365.886
Activities R3.3 (MRV-3):				
<ul> <li>Publish summaries of tendencies, indicators, research for uptake in NBSAPs and other biodiversity related plans</li> <li>Special training session on reporting for uptake in NBSAPS and other biodiversity related plans during the MRV closing workshops</li> <li>Coaching of scientists to valorize their research results and to report for NBSAPs and other plans on individual basis</li> <li>Special training session on best practices during the awareness training and MRV closing workshops</li> </ul>	94. Number of documents produced by MRV alumni for uptake in NBSAPs and other biodiversity related plans		0	
Intervention logic	Indicators	Budget 2019	Targets planne d	Achieved
	95. Number of special training sessions on reporting for uptake in NBSAPs and other biodiversity related plans		0	3
	96. Number of special training sessions on best practices during the awareness training and MRV closing workshops		0	
	97. Number of scientists coached by CEBioS staff to valorize their results with regards to reporting to the NBSAPS or other plans		0	
Activities R3.4 (AW-3):				
Attend/organise national or regional deciders meetings	98. Number of national meetings organised involving policy makers		1	7
<ul> <li>Attend/organise side events and CEPA sessions at COPs and other national and international meetings;</li> </ul>	policy makers			

Number of side events attended and/or organized	0	2
during COPs and other national and international		
meetings		

- 88. SBSTTA 23, WG8J, and ABS-CH IAC (Nov-Dec), Nagoya capacity building-IAC (Start of November). Capacity for Conservation Conference, London
- **89**. No new developments in Belgium with regards to the NP. Several replies to mails from researchers. Training by Han de Koeijer and Hendrik Segers on NP to VLIR outlining and testing procedure to export biological samples of research by collaboration CSB-MEDD-CEBioS (RDC) outlining and testing procedure to export biological samples of research by collaboration CSB-MEDD-CEBioS (RDC)
- 90. 17-19 June 2019/ SBSTTA 23 Oct 2019
- 91. Burundi national training (Aug)/ Niger training GBIF FP and related. 12 during CHM Networking workshop in 2019
- 92. GBIF project with 6 partner countries
- 93. Numbers of visitors at the partner CHM sites for 2019
- 95. sessions during three MRV workshops (Bukavu, Entebbe, Benin)
- **98**. 3 MRV workshops involving decision makers (NEMA Uganda, MEDD DRC, Antennes provinciales DRC, DGFN Benin, District council Zanzibar). OBPE: ecotourism meeting; NP meeting2 Awareness projects involved policy makers
- 99. WPIEI meetings to prepare SBSTTA and OEWG 2. During SBSTTA-23 Han de Koeijer participated in 2 side-events. On CSP with a presentation, DARTS as member of Panel

Specific objective 4 (SO4):				
Enhanced synergy between <b>the partners of the Belgian Development cooperation, civil society and the private sector</b> to achieve sustainable development by mainstreaming biodiversity issues		18500		
Activities R4.1 (CB-4):				
Attend strategic dialogues in Belgium and whenever possible in the South  Conclude strategic talks and Models.	109. Number of strategic dialogues attended		3	6
<ul><li>Conclude strategic talks and MoUs</li><li>Implement synergy projects with ACNGs and local partners</li></ul>	110. Number of meetings in Belgium for Fiabel, Educaid, etc attended		5	
	Educato, etc attenueu			2
Activities R4.2 (CHM-IT-4):				
	111. Number of training workshops		4	3

Organise training on CHM use and insist on the participation of partners, civil society and the private sector.	112. Number of participants from the target group participating in training workshops		8	9	
Intervention logic	Indicators	Budget 2019	Targets planned		Ac hi ev ed
Activities R4.3 (AW-4):					
Promote biodiversity and development with private sector in the South     Promote biodiversity and related tools in the strategic dialogues and	113. Number of meetings organized for the chosen target groups organised or attended		1	3	•
learning trajectories     Organise training on awareness     Calls to raise awareness of target groups	114. Number of projects to raise awareness signed		4	6	
109. CSC Burundi (oct). CDC Rwanda, Burundi, DRC Travail Décent 28/05/2019. GSI	C DRC 240619; DS RDC nov 19, several for Benin		<u> </u>		1
<ul> <li>110. prep to meet FIABEL to work on indicators of log frame. Luc and Hilde 29/04/2 deelname CAFRINAT meeting (Luc)</li> <li>111. Morocco national training. OBPE training of inter-institutional contributors. N by the CBD secretariat no trainings were organised in the foreseen countries. The total contributors.</li> </ul>	ational training Niger for GBIF FP. Due to problems to get Bio	land official	ly released		
112. Nat training Burundi (aug)/national training Niger for GBIF FP					
113. workshop BD in DC during Alternet/Eklips conference 18/06/19. Meeting duri	ng CSC with PROCOBU, Join for Water and PROCOBU				
<b>114</b> . Projects were financed in Benin (3), Niger, Rwanda. Project in Morocco was se Burundi, RDC and Benin with Louvain cooperation	elected but not executed due to difficulties to sign a contract.	preparation	n of SD		
COORDINATION AND MANAGEMENT  CEBioS programme is implemented according to plan and in a professional way and is recognised as an expertise centre for biodiversity and development	115. Positive monitoring and evaluation through OD Nature, CEBioS staff, local partners, mid and end term evaluations and through steering and strategic committees. The positive M& E is due to a smooth planning and implementation.	see budget Table for salaries, coordinat ion, monitori ng & evaluatio n	annual plan and report		
	116. Internal and external visibility and recognition of CEBioS		at least 5 mentions in internatio	4	

		nal document s or web sites	
	116bis Percentage of women amongst the beneficiaries of the CEBioS programme (gender indicator, transversal to all SO, therefore under coordination)	30	1 4
Activities			
CEBioS is well integrated into RBINS     Professional and unbureaucratic administrative and financial processes     Efficient human resources     Evaluations, audits	117. CEBioS is well functioning within RBINS	6 Biopols reports and sheets	6
	118. Efficient administrative and financial processes		
	119. Human Resources stable and satisfied		

#### 115. Monitoring sheets ready and used

- 116. WCMC\_UNEP CONNECT All-Hands meeting, Durban, SA, 7-8 Nov. Facebook and LinkedIn page CEBioS
- 117. Biopols meetings attended.
- 118. Continuation of improvement of internal processes, looking for better financial interactivity and controlling software. Financial Vademecum for partners in EN and FR in use. "Outil de Compta" in use
- 119. 3 staff members left 2019-beginning of 2020 as they got jobs offered with a permanent statuary status which CEBioS can't offer. Temporarily recruitment of Prof Jean Hugé on EVAMAB. Internships by Stef, Dorien, Thibaud, Iliana. January-May 2020: recruitment of new secretariat and 2 new scientific programme officers (GTI and marine modelling).

#### **ANNEX 1- INTERVENTION LOGICS**

#### Mission Phase II

The CEBioS programme contributes to the achievement of the SDGs related to climate change and biodiversity (SDGs 13, 14, 15) by the DGD partner countries, in order to reduce poverty (SDG 1), hunger (SDG 2) and improve good health and well-being (SDG 3).

The CEBioS programme contributes to the achievement of the 2020 (and beyond) strategic plan of the Convention on Biological Diversity (CBD) through the (post)Aichi targets and its related protocols by the DGD partner countries.

#### **General objective Phase II**

The protection of ecosystems and their biodiversity in partner countries of the Belgian Development Cooperation, is implemented in order to strengthen their capacity to generate benefits essential for sustainable development of rural populations.

#### Specific objectives & transversal approaches

SO 1: The scientists of the partner countries of the Belgian Development Cooperation acquire knowledge, understand, apply and disseminate results useful for sustainable management, use and conservation of biodiversity and ecosystem services

Result 1.1 (CB-1): The knowledge and understanding of biodiversity and ecosystem services by the scientists of partner countries of the Belgian Development Cooperation is enhanced and disseminated through capacity building

Result 1.2 (CHM-IT-1): CHM and other IT tools in service of national research is functional and useful to scientists and their partners

Result 1.3 (MRV-1): Scientist are able to valorize research data for feeding national and local indicators and formulating trends supporting improved biodiversity related strategies

Result 1.4 (AW-1): Awareness on dissemination methodologies is raised among scientists

SO1 contributes particularly to Aichi targets 5, 11, 14, 16, 17, 18 and 19.

SO 2: National implementing authorities in the south and their partners improve sustainable management and use of ecosystem services to conserve biodiversity and support the livelihood of rural populations through the development of best practices and value chains

Result 2.1 (CB-2)

Monitoring, management and conservation of ecosystems and services, including development of related value chains by the national implementing authorities is improved through capacity building

Result 2.2 (CHM-IT-2)

CHM and other IT tools in service of monitoring and management are functional and are used by the authorities and target publics

Result 2.3 (MRV-2)

Scientists, in collaboration with implementing authorities, develop the tools to communicate about the results of their research related to monitoring and managing ecosystems and services, among authorities and decision makers

Result 2.4 (AW-2)

The observations and conclusions of the scientific research are vulgarized towards authorities competent for monitoring and managing ecosystem services

#### SO2 contributes particularly to Aichi targets 5, 7, 10, 14 and 17.

SO 3: The authorities, decision makers and policymakers develop and implement pertinent policies, strategies and action plans for a sustainable management of the national biodiversity in service of the livelihoods of the local populations in the South

Result 3.1 (CB-3)

Policy makers in North and South contribute to national and international policy on biodiversity and development in the South

Result 3.2 (CHM-IT-3)

CHM and other IT based information and reporting tools for policies are functional and used by the authorities for the development of policy plans

Result 3.3 (MRV-3)

Reporting to NBSAPs and other biodiversity related plans is based on evidence-based data, and

local authorities adopt or develop decisions and policies based on CEBioS project results

Result 3.4 (AW-3)

Awareness on biodiversity governance and available tools is raised amongst authorities and results in the formulation of policies and organization or participation to (inter) national policy events

#### SO3 contributes particularly to Aichi targets 2 and 16.

SO 4: Enhanced synergy between the partners of the Belgian Development Cooperation, civil society and the private sector to achieve sustainable development by mainstreaming biodiversity issues

Result 4.1 (CB-4)

Increased synergies of CEBIOS with ACNG's, DGD, ENABEL and private sector for mainstreaming of biodiversity

Result 4.2 (CHM-IT-4)

CHM and other mainstreaming tools are functional and are used by the partners of the Belgian Development Cooperation, civil society and private sector

Result 4.3 (AW-4)

The awareness about sustainable use and management of biodiversity is raised with the partners of the Belgian Development Co operation, civil society and private sector

SO4 contributes particularly to Aichi targets 1 and 4.

### ANNEX 2 - SUMMARY OF CEBIOS' THEORY OF CHANGE (2019-2023)

In order to understand the theory of change of the CEBioS programme, the specific objectives (SO) and their results are represented in the three spheres of outcome mapping:

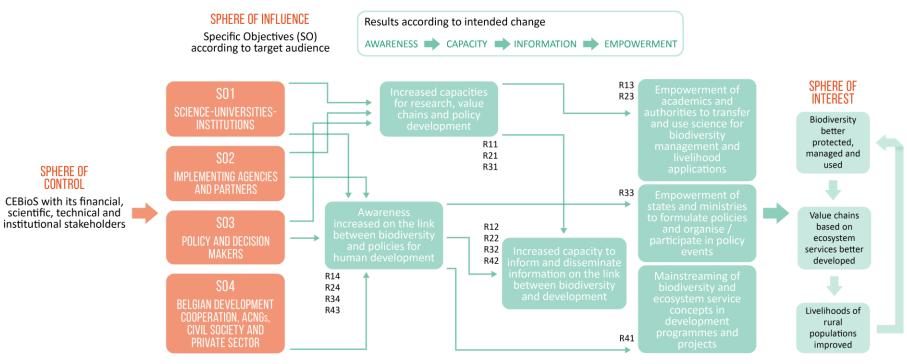


Fig. 8. The 4 Specific Objectives (SO) and the 15 Results (Rxy) of the CEBioS programme phase II in a perspective of theory of change. The results are explained further in the text (annex 1).

### **ANNEX 3- SOCIAL MEDIA**

### Statistiques de la page Facebook CEBioS\* for 2019, created 29-05-2020

Fans		
Mois	Mentions J'aime la page	% d'augmentation
Mai	42	100.00%
Juin	89	52.81%
Juillet	100	12.36%
Août	101	1.00%
Septembre	126	24.75%
Octobre	158	25.40%
Novembre	173	9.49%
Décembre	177	4.05%

Portée			
Mois	Couverture des publications	Vues de pages	Visiteurs
Mai	239	11	7
Juin	2,212	81	44
Juillet	2,531	54	26
Août	131	32	10

Septembre	5,538	81	39
Octobre	5,911	94	59
Novembre	3,829	67	42
Décembre	360	26	7

Publications								
Mois	Date	Sujet	Personnes atteintes	Clics	Mentions J'aime	Commentaires	Partages	Réactions négatives
Mai	29/05/19	EVAMAB closing workshop in Ethiopia	552	90	27	3	4	0
Juin	19/06/19	Presentations of the EVAMAB workshop	75	12	13	0	0	0
Juillet	07/04/2019	RTBF article on the bushmeat research	70	7	6	0	4	0
	07/09/2019	Report and pictures of the EVAMAB workshop	74	27	10	0	2	0
	07/10/2019	Alexis Bashonga Bishobibiri's policy brief	381	7	9	0	1	0
Août	08/12/2019	Seminar in Vilm attended by Luc	67	11	11	0	0	0
Septembre	09/12/2019	CSB at the African Small Mammals Symposium, Ethiopia	218	68	21	4	1	0
	13/09/19	Good review of the Abc Taxa 16	1,902	32	17	0	2	0
	18/09/19	Training on habitat monitoring at the CSB	335	45	23	6	2	0
	23/09/19	Video of Greta Thunberg and George Monbiot	58	2	4	0	0	0
	23/09/19	Policy brief #14	3,309	148	45	2	8	4

	25/09/19	Announcement of the AfriMAB manual	300	4	8	0	1	0
Octobre	10/01/2019	London poster about biodiversity research in DR Congo	140	17	8	0	1	0
	10/04/2019	London poster about joining science and policy	148	14	13	1	1	0
	10/08/2019	Katrijn's blog on the marine sensor in Benin	1,735	27	17	0	1	1
	10/09/2019	Patrick Martin's awareness conferences in the press	74	8	9	0	0	0
	10/10/19	CHM and GBIF joined meeting at the RBINS	222	94	26	0	1	0
	21/10/19	Conservation news (Oryx) about the EVAMAB workshop	83	16	9	0	0	0
	22/10/19	229 Science video about MRV workshop in Ouidah	111	42	36	2	3	0
	23/10/19	Workshop at the CRH Uvira on the production of a PB	98	11	10	1	0	0
	24/10/19	Appointment of Dr Claver Yian as research associate	770	263	167	93	3	0
	25/10/19	Strategic dialogue at the PNUD Burundi	194	18	6	0	1	0
	26/10/19	Paper by Drs Odountan and Koudenoukpo, GTI grantees	128	16	12	5	0	0
	28/10/19	Promotion of Héritier Milenge at the ISP Bukavu	2,418	303	107	115	1	0
	30/10/19	GTI workshop on scientific writing at the RBINS	1,071	279	63	13	6	0
Novembre	5/11/19	Presentation of Iliana Janssens (TESSA & Q) at the ESP 10	93	21	5	0	0	0

	12/11/19	Article about the GTI alumni workshop in Benin	1,623	30	22	0	1	0
Décembre	16/12/19	Release of the Educaid methodological sheet	84	6	3	0	0	0
	19/12/19	Video about bushmeat experts	206	7	9	1	2	0
	·	TOTAL	16,539	1,625	716	246	46	5

Définitions des termes	utilises				
Mentions J'aime la page	Total des personnes qui "likent" la page (au dernier jour du mois en question).				
% d'augmentation	Pourcentage de personnes en plus qui "likent" la page, comparé au mois précédent.				
Couverture des publications	Nombre de personnes pour qui des publications de la page se sont affichées sur leur écran. Ce chiffre est une estimation et peut ne pas être précis.				
Vues de page	Nombre de fois où la page a été affichée sur l'écran de quelqu'un.				
Visiteurs	Nombre de personnes qui ont visité la page.				
Personnes atteintes	Nombre de personnes qui ont vu la publication (que ce soit sur la page ou leur fil d'actualités).				
Clics	Nombre de fois où quelqu'un a cliqué sur la publication (pour afficher la photo ou un lien, pour afficher plus de texte, peu importe).				
Mentions J'aime	Nombre de "likes" (ou réactions) sur la publication, ainsi que sur les partages de celles-ci (dans le cas où certains l'auraient partagée sur leur propre mur).				
Commentaires	Nombre de commentaires sur la publication, ainsi que sur les partages de celles-ci (dans le cas où certains l'auraient partagée sur leur propre mur).				
Partages	Nombre de fois où la publication a été "republiée" sur le mur ou la page de quelqu'un d'autre.				
Réactions négatives	Demandes pour masquer la publication (ou toutes les publications de la page) / "signaler comme indésirable" / "Je n'aime plus la page".				