



# HIGHLIGHTS

PHASE I (2014-2018)

CEBioS PROGRAMME

Building capacities for biodiversity  
and sustainable development



**CEBioS**

DGD-RBINS programme  
Protocol of cooperation

**museum** 

 **Belgium**  
partner in development

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**CEBioS stand for “Capacities for Biodiversity and Sustainable Development”.**

It is a capacity building programme aiming at strengthening and empowering scientific and public service partners in partner countries of the Belgian development Cooperation in the domain of biodiversity management and conservation.

The CEBioS programme, based at the Royal Belgian Institute of Natural Sciences, and financed by DGD, ended its first phase of 5 years (2014-2018).

A mid-term evaluation recommended to continue the programme into Phase II (2019-2023). This HIGHLIGHTS report presents most activities, outputs and success stories (outcome) realised in these five years. For more details, we refer to the five year REPORT and the annual reports posted online: <http://www.biodiv.be/cebios2/docs/reports>.

Although active in over 10 countries, CEBioS worked especially with institutions in DR Congo, Burundi, Benin, Vietnam and Peru.



# Executive Summary

## SO1: knowledge

This large specific objective covered the capacity building of young scientists in taxonomy and marine modelling through grants of 1-3 months in Belgium, as well as in situ training of scientists, the production of lexica and Abc Taxa series and the institutional cooperation in DR Congo, Benin, Burundi on habitat monitoring or Vietnam and Peru for marine modelling.

More than 80 young scientists benefited from the Global Taxonomy Initiative (GTI) to acquire skills at RBINS, Botanical Garden Meise, RMCA or a Belgian university. Together with their scientific mentors they produced over 80 scientific articles, and more than 10 scientists obtained a PhD related to their GTI work. Most work concerned insects as pollinators, as pests or as endangered species in fragile biodiversity hotspots, but the work on wild edible mushrooms was also very important. More than 20 times RBINS and Botanical Garden researchers trained groups of scientists in the South on taxonomy, sampling and collection management. Four students from the University of Kisangani were coached for their PhD locally and in Belgium on diverse subjects such as fish, rodents, bats, bushmeat and zoonoses. Many of the CEBioS alumni got afterwards a promotion to assistant professor, an accreditation by CAMES or a position at national authorities or a research institute. Four lexica were produced in a participative way with local authorities: 2 in DRC concerning protected areas of

Bombo Lumene and Kahuzi Biega N.P., 1 in Burundi for Kibera N.P. and 1 in Benin for Pendjari N.P. (specifically on the management of bush fire and pastoralism in the area). The lexica explain through photographic material the existing habitats of the areas as well as the methodology to monitor the dynamics of change and provide also vernacular names of the plants. All were distributed and restituted to target publics such as riverine populations, managers and decision makers affiliated to agencies such as ICCN, OBPE or CENAGREF. The lexica supported ICCN in DRC to better define the boundaries of the parks and better understand their habitats and threats. Abc Taxa volumes were co-produced with South scientists, often GTI alumni, on sawflies, diatoms, brittle stars, mushrooms and fish parasites. On 14 occasions, individual students on marine modelling from Peru and Vietnam came to follow a training at RBINS. For Peru it resulted in the production of a policy brief widely circulated to make the authorities aware of dangers of pollution along the coast, and in the formation of an active working group of young enthusiastic modelers continuing the work. For Vietnam, the work helped IMER to better understand the threats the Red River poses to Halong Bay, a tourist hotspot known for its corals and fisheries and stimulated them to seek other external funding to continue the work. The collaboration with IRHOB and CEBioS resulted in the 2<sup>nd</sup> prize during the D4D awards in 2018.

## SO2: information

SO2 mainly focused on capacity building related to the national Clearing-House Mechanism web sites (CHM: a UN CBD promoted network of information web sites), both at RBINS, as in national and in regional workshops in Africa. About 13 national CHM workshops were organised, mostly in West Africa, and half of them benefited from a follow up training. The CHM in 14 countries was significantly improved with active maintenance and input of information. In 10 Arab speaking countries and 3 francophone countries, South-south cooperation projects with Morocco or Benin took place. CBD secretariat awarded a prize to the work of CEBioS concerning CHM in Africa and several national CHM supported by CEBioS won prizes (Belgium 3<sup>rd</sup> prize 2016, Burundi 1<sup>st</sup> and Benin 3<sup>rd</sup> existing CHM, Guinea-Bissau 3<sup>rd</sup> new CHM in 2018). CEBioS was also active in the development of a European reporting tool for the Aichi targets and in the mainstreaming of biodiversity in the KLIMOS toolbox. Four francophone and one anglophone regional workshops were organised in Africa together with the CBD secretariat on the use of CHM and in the framework of South-South collaboration.

The Belgium CHM is hosting a total of 36 national CHMs of which 26 are posting at least more than 10 new items each year. Since 2014 there is an increase of almost 110 % of the number of visitors to 14 of the sites for which we have statistics since 2014. It went up from 108.000 in 2014 to 222.000 in 2018. At least 1000 pages were added over all the sites with Burundi and RD Congo contributing up to 400 and 300 pages respectively in 2018.

## SO3: awareness

SO3 was implemented through annual calls for projects towards the CHM focal points in the respective ministries and their civil society partners to organise baseline studies (6) and awareness raising about biodiversity (15 projects). CEBioS organised colloquia in 2015 and in 2018 on biodiversity and development with resp. 260 and 120 participants and with the presence of resp. Minister Alexander De Croo and the deputy chief of cabinet, Mr. Tom Neijens. CEBioS produced a booth and some awareness raising games

which were exhibited annually on national and European fairs. More than 15 awareness projects were implemented locally by our institutional partners, using media, school campaigns etc, also involving the appreciated cooperation by VVOB in RDC. CEBioS supported 2 times the Centre de Surveillance de la Biodiversité (CSB, Kisangani, RDC) for active participation in the “semaines de la Science” in Kinshasa, and the CSB was host to a “summer school” in 2017 with over 100 attendees on various topics such as CHM, governance, conservation, scientific writing and Nagoya Protocol.

## SO4: mainstreaming in policies

Under this specific objective were all interventions of a more policy related nature related to the CBD, OECD and IPBES, as well as CEBioS’ advice to DGD (positively evaluated) and indicative cooperation programmes for West African countries, and participation to Belgian fora such as Educaid and the strategic dialogues of the development actors. CEBioS, as part of the official Belgian delegation, was pilot and co-pilot for several items of the agendas of COP 12 (S Korea), COP 13 (Cancun) and COP 14 (Sharm El Sheikh), as well as in most SBTTA and SBI<sup>1</sup> meetings preparing the COPs. The items handled were mainly concerning mainstreaming, CHM, capacity building and bushmeat. CEBioS was also European representative in the Chennai process of mainstreaming and was participant in the OECD working group Environet which produced the report OECD (2016). We also organised several side events in the CEPA fair (awareness chapter of COP), COP 14 and in cooperation with OECD and UNEP on mainstreaming of biodiversity in development cooperation, which resulted in several citations in official UN documents. Training on the CBD and biodiversity was also provided on two occasions to DGD and Enabel. CEBioS signed an MoU of cooperation with Enabel and became observing member of FIABEL, the federation of institutional actors in development cooperation, and the “NGO federatie”. CEBioS participated in the joined strategic frameworks and the strategic dialogues of the ACNGs for Benin, Burundi, DR Congo and Vietnam.

<sup>1</sup>SBTTA = Subsidiary Body on Scientific, Technical and Technological Advice, <https://www.cbd.int/sbttta/>, SBI = Subsidiary Body on Implementation, <https://www.cbd.int/sbi/>

## SO5: Measurement, Reporting and Verification (MRV)

MRV was implemented through annual calls for 15 projects in Anglophone, Francophone Africa and DRC in order to strengthen the capacities of scientists to collect biodiversity data and report them to their authorities in order to feed national indicators. Important outputs were the production of 11 policy briefs, co-produced in a participative way in closing workshops. They can be consulted here: <http://www.biodiv.be/cebios2/docs/publications/policy-briefs>

Some CEBioS scientists published in cooperation with KLIMOS A1 publications on environmental impact assessment and capacity building through MRV in development cooperation, as well as a vulgarizing article on biodiversity and development in the magazine of DGD, Glo.be.

Several externally financed projects were implemented as well: EVAMAB with Belspo funds dedicated to UNESCO-MAB, see <http://www.biodiv.be/evamab/>, some other projects financed by VLIR-UOS in cooperation with Flemish universities on Lake Manyara, Lake Tanganyika and a summer school in Morocco and some grants by Leopold III foundation. Staff members gave several university lectures and were involved in Master and PhD juries and evaluation of projects of the International Foundation for Science (Stockholm, Sweden), all related to biodiversity, ecosystem services, capacity building and development.

## SO6: Nagoya Protocol

In Phase I, the interventions of CEBioS concerned training of scientists and civil servants about the Nagoya Protocol<sup>2</sup> on 5 occasions and online (FAQs). The cooperation with OBPE in Burundi also implemented several actions on the Nagoya Protocol, such as information sharing, awareness raising with authorities and scientists and the signing of a protocol of cooperation with the association of traditional healers for a fair sharing of traditional knowledge with scientists, hence implementing the contents and spirits of the Nagoya Protocol. This pioneering work was presented as an example of best practices at the International congress on tropical ecology in Brussels in 2017.

<sup>2</sup> Nagoya Protocol: the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity is an international agreement which aims at sharing the benefits arising from the utilization of genetic resources in a fair and equitable way. It entered into force on 12 October 2014, 90 days after the date of deposit of the fiftieth instrument of ratification.

## Success stories

The Clearing-House Mechanism (CHM) websites, a tool of the Convention on Biological Diversity (CBD) set up in every country, permits to collect and share biodiversity information and knowledge, to enhance networking between contributors and to promote technical cooperation. The support to the CHM teams by CEBioS has led to increased contributions to the 6<sup>th</sup> National Reports to the Convention of Biological Diversity.

Belgium was granted a 3<sup>rd</sup> prize for its CHM in the 2016 CBD competition. Several CHMs supported by CEBioS won prizes in the 2018 competition.

**506** people were trained in the use of the CHM website tool through workshops in **27** different countries, or by attending training sessions in Belgium.

Taxonomy is the key competence for identifications of animals and plants, and therefore for all kind of biodiversity surveys. The Global Taxonomy Initiative (GTI), an initiative of the CBD, aims at maintaining and transferring this knowledge. Global Taxonomy Internships and projects (GTI) granted by CEBioS clearly promoted the career development of young scientists (e.g. CAMES accreditation, academic promotions), often allowing them to become recognized in their countries as biodiversity-experts who can contribute to the development of national biodiversity and development plans and who are able to train future generations of researchers. Their work was essential to provide scientific evidence about e.g. the extent of threats in biodiversity hotspots, the use of biological control against pests, the understanding of the role of termites in soil fertilisation, the threat to wild pollinators or the effectiveness of certification in coffee plantations.

**86** papers published in peer-reviewed scientific journals.

**83** scholars came to Belgium to access collections and/or taxonomic expertise.

As part of its capacity building activities, CEBioS staff supported South partners with applications for diverse projects and grant proposals (BioBridge, IFS, MAB,...). Some results: Benin won a 2<sup>nd</sup> prize in the 2018 D4D competition; in 2018 several IFS-grants were obtained for partners; in 2018 a Biobridge project was secured for Benin.

**4 LEXICA PUBLISHED**

These manuals, co-developed by users of the local ecosystems and CEBioS staff, enable plant and habitat identification of protected areas for park rangers and local populations, the knowledge needed for habitat monitoring. Sessions to explain and disseminate them locally encounter huge success and the local demand is very high. They are considered as invaluable tools in the field of conservation management.

A Measurement, Reporting and Verification project followed by awareness raising activities for decision makers, both funded by CEBioS and executed by the “Centre de Recherche Hydrobiologique” at Uvira, led to the signature of an Act of Engagement by the local authorities to ensure sustainable fisheries at Lake Tanganyika. A similar success was booked in Mbuyi-Mayi, also in the DR Congo.



CEBioS' work has led to the creation of the "Réseau des Mycologues de la Région des Grands Lacs d'Afrique" (initiated with Belspo funding), a network being used as anchor for the development of value chains for mushrooms of the region: identifying varieties suited for production in small scale farms, the multiplication of "blanc", the transfer of know-how to farmers, the introduction of the varieties at the local markets. This again led to a next "spin-off", a large regional ARES project which will implement these aims.

In pilot agricultural secondary schools in two provinces of the DRC, biodiversity and its conservation was added to the curriculum. This was made possible by collaboration with VVOB promoted by CEBioS. Thanks to this synergy, the ministries of education and of environment learned to know each other and worked together in DR Congo.

After years of CEBioS' supported research on termite mounds in the clear forests around Lubumbashi, CEBioS provided for a drone at the University of Lubumbashi to facilitate the monitoring of the habitats of the Luswishi Forest reserve. The researchers aim at using this new technology to detect fire, habitat encroachment or illegal activities such as poaching or logging. This test case will be presented to ICCN as an effective management tool.

**12** high impact policy briefs were produced, presenting key scientific project results and recommendations for decision makers.

The participatory development and redaction of 12 Policy Briefs with South-partners in the DR Congo, Benin, Burundi, Peru, and Vietnam, was promoted and facilitated by CEBioS staff. Policy briefs are used to build awareness among politicians, decision makers and in the civil society. The proposed measures and recommendations in the briefs inform these target groups about the latest scientific findings on hot environmental subjects, and hence will lead to more informed decisions on poverty reduction strategies and action plans. Some policy briefs have already led to changes in local legislation, for instance to help ensure sustainable fisheries in the East of DRC. Subjects treated were thus far: fire, charcoal, fisheries, access and benefit sharing for traditional practitioners, bush meat, prioritising biodiversity indicators, computer models to protect shore lines, ecosystem services in Pendjari Biosphere reserve, uptake of indicators in development plans.



## POLICY SUPPORT

**CEBioS provided policy advice to DGD and indicative cooperation programmes for West African countries. CEBioS was part of Belgian fora such as Educaid and the strategic dialogues of the development actors. Moreover, CEBioS contributed to the review of many policy documents linked to the CBD, OECD and IPBES.**

CEBioS, as part of the official Belgian delegation, was pilot and co-pilot for several items of the agendas of COP 12 (South Korea), COP 13 (Cancun) and COP 14 (Sharm El Sheikh), as well as in most SBTTA and SBI meetings preparing the COPs. The items handled were mainly about mainstreaming, CHM, capacity building and bushmeat.

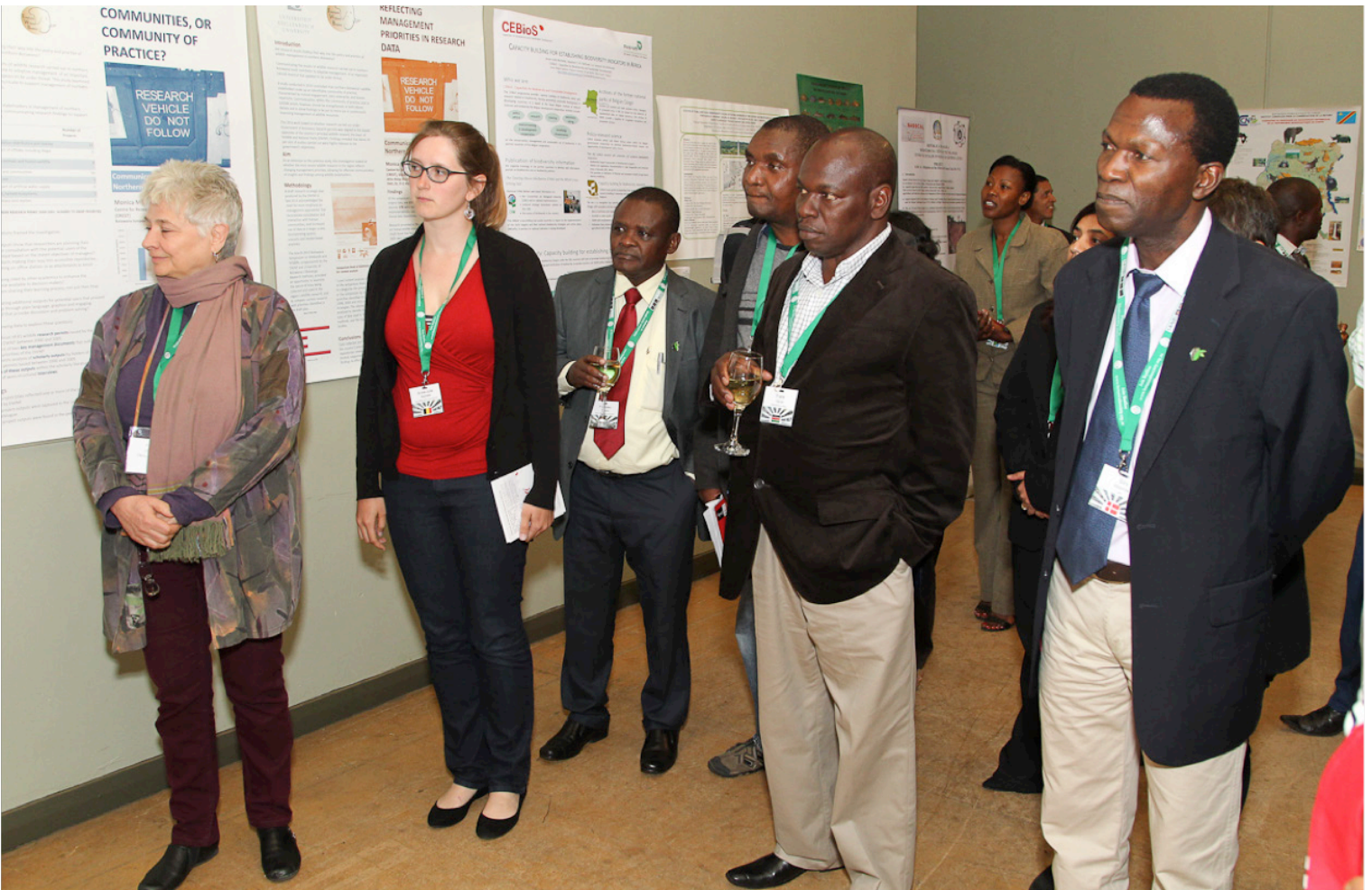
CEBioS was also European representative in the Chennai process of mainstreaming and was participant in the OECD working group Environet which produced the report OECD (2016).

We also organised several side events in the CEPA fair (awareness chapter of COP) and in cooperation with OECD and UNEP on mainstreaming of biodiversity in development cooperation, which resulted in several citations in official UN documents. CEBioS contributed to the IPBES global and African assessments.

Training on the CBD and biodiversity was provided on two occasions to DGD and Enabel.

CEBioS achieved an MoU of cooperation with Enabel and became observing member of FIABEL, the federation of institutional actors in development cooperation and the “NGO federatie”.





## Success stories

The policy support of CEBioS to DGD was evaluated positively by an external evaluation of the Belgian actors.

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The cooperation with OBPE in Burundi also implemented several actions on the Nagoya Protocol, such as information sharing, awareness raising with authorities and scientists and the signing of a protocol of cooperation with the association of traditional healers for a fair sharing of traditional knowledge with scientists, hence implementing the contents and spirits of the Nagoya Protocol. This pioneering work was presented as an example of best practices at the International congress on tropical ecology in Brussels in 2017.

In DR Congo, test-cases for the exportation of biological sample for research purposes have been set up in a triangular collaboration between the *Centre de Surveillance de la Biodiversité* in Kisangani, the National Ministry of Environment with its National Focal Point for the Nagoya Protocol and CEBioS staff, after a successful workshop on the Protocol with over 100 participants in Kisangani in 2017.



# CLEARING-HOUSE MECHANISM



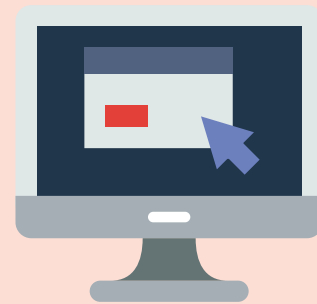
## Digitalization in service of biodiversity

In 2014-2018, CEBioS played a prominent role in the capacity development of partner countries to establish their Clearing-House Mechanism web sites (CHM). This is an important contribution towards the digitalisation of the knowledge base within the public services of these countries.

MORE THAN 470 WEB MASTERS TRAINED



IN 12 PARTNER COUNTRIES



MORE THAN 4,000  
WEB PAGES

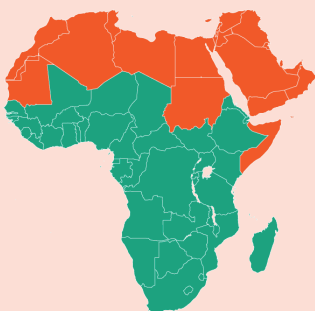
REGIONAL

5 MEETINGS

## SUCCESS STORY

In 2016 a 3<sup>rd</sup> prize CHM was granted to Belgium. CHMs supported by CEBioS won: 2018 Burundi 1<sup>st</sup> prize, Morocco 3<sup>rd</sup> prize for existing CHM, Guinea Bissau 3<sup>rd</sup> prize for new CHM. IRHOB, Benin, with CEBioS, won a 2<sup>nd</sup> prize in the D4D prize 2018 with “Developing IoT sensors for Benin”. IRHOB with CEBioS, received 2018 Brio-bridge innovation funding with “Développement d’une méthodologie pour acquérir des séries spatio-temporelles des paramètres physico-chimiques de l’environnement marin côtier du Bénin”.

## MOROCCO'S COMMITMENT TO STRENGTHEN THE CHM OF SEVERAL PARTNERS



- The Arab League recommended that Morocco develops the capacities of the Arab States and assist them in establishing their CHM.
- In decision IX/30 and X/15, the COP encourages partners and the CBD to contribute to the development of national CHMs.

Goal 2, par. 2.5 of Strategic Plan 2011-2020 for the CHM

## Website of the archives of the former National Parks of Belgian Congo

The Royal Belgian Institute of Natural Sciences (RBINS) was responsible for the management of the national parks of Congo through its sister institute “Institute

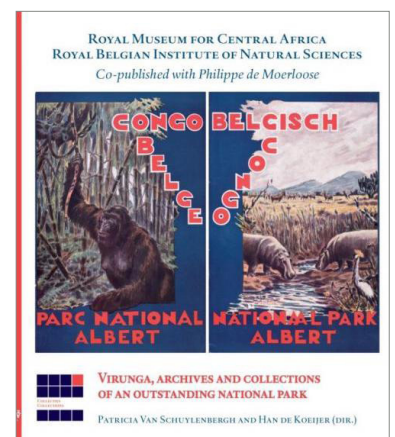


of the National Parks of Belgian Congo” till the independence of Congo from Belgium. During the period 1925 - 1960 several scientific missions were organised by the Institute in order to survey and to make inventories of the biodiversity in the national parks. The material that was brought back to Belgium was added to the scientific collections of RBINS and the Royal Museum of Central Africa.

The archives were only accessible in Belgium and could not be used by the present custodians of the national parks, the Congolese Institute for Nature Conservation (ICCN). In 2003 a start was made with the digitalisation of the archives in order to repatriate the digitised information to the ICCN. This website gives the possibility to search the archives, photo archives mostly at this stage, and use the information.

## “Virunga, archives and collections of an outstanding national park”

The collections of the Royal Museum for Central Africa (RMCA) and the RBINS conserve a significant portion of the documentary heritage amassed in the Virunga National Park and which recounts the fascinating and sometimes challenging human adventure behind it. Institutional archives, reports, scientific publications, photographs, maps, and above all, multidisciplinary collections from exploratory and fieldwork missions conducted until the early 1960s embody a formidable source of knowledge, from which researchers and environmental conservation managers can still reap enormous benefits today. The gradual classification and digitization of these data, available in open access, will lend maximum visibility to these sources for their many users. Meanwhile, historical research makes it possible to contextualize them with precision and grasp the issues at stake. Our two institutions preserve and enhance the value of these unique testimonials from the past, for our present and our future.

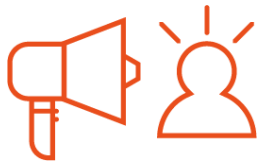


This book was edited by Patricia Van Schuylenbergh and Han de Koeijer, in cooperation with the RMCA.



In Benin one of the 5 projects focused on the development of 12 actions that people could undertake to promote biodiversity. They made a campaign for schools, spots on radio and television as well as text messages, Facebook and Twitter. The poster that they developed was taken up by the Ministry of the Environment and distributed as well as special lessons in more than 1000 schools all over Benin.



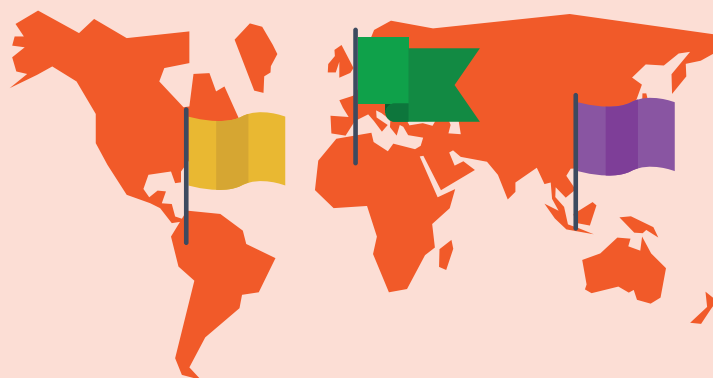


# AWARENESS RAISING



One of the corner stones of biodiversity conservation is to increase general awareness amongst several target publics, such as civil servants, managers, focal points, scientists, regional and local authorities, students, children and their parents. It especially answers to the Aichi Target #1.

## 62 PROJECTS



## IN MORE THAN 8 COUNTRIES

## SUCCESS STORIES

CEBioS organised colloquia in 2015 and in 2018 on biodiversity and development with resp. 260 and 120 participants and with the presence of resp. Minister Alexander De Croo and the deputy chief of cabinet, Mr. Tom Neijens.



CEBioS produced a booth and created awareness raising games which are exhibited annually on national and European fairs.



CEBioS cooperated with VVOB to let the ministries of education and environment work together to mainstream biodiversity in professional school of Agronomy in Bas Congo and Kinshasa.

# Institutional partners

## 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 (formerly INECN).

## 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 and pastoralism around protected areas (Pendjari NP) with the cooperation of CENAGREF and the civil society (especially AVIGREF<sup>3</sup>).

### **Institutional partner 2: “Institut de Recherches Halieutiques et de l’Océan 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 started at the end of Phase I.

### **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.

## DR Congo

### **Institutional partner 1: “Institut Congolais pour la Conservation de la Nature” (ICCN) and universities (e.g. UOB, UG, UNIKIS, UNILU, 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 (including the production of lexica) with the cooperation of universities.

### **Institutional partner 2: “Centre de Surveillance de la Biodiversité” (CSB)**

Description: an MoU has been signed for in the period 2014-2018 with CSB. This MoU can be seen as a strategic partnership between RBINS and CSB. The institutional cooperation with CSB in Kisangani was implemented 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 (mainly through the research of Prof. Erik Verheyen, RBINS, UA); the capacity building of CSB staff. Some awareness raising support started with private partners such as Kadima’s Pride of Africa wildlife park as well in order to raise awareness of children of Kinshasa.

### **Institutional partner 3: “Ministère de l’Environnement et du Développement Durable”**

Description: integrating transversal themes such as Clearing-House Mechanism, awareness raising (e.g. in cooperation with VVOB) and MRV was carried out in cooperation with the “Direction de Développement Durable” (DDD) of the Ministry of Environment and Sustainable Development and research institutes.

<sup>3</sup> AVIGREF: Associations Villageoises de Gestion des Réserves de Faune de la Pendjari, see <https://avigref-pendjari.iimdo.com/>



## Vietnam

### **Institutional partner 1: “Institute of Marine Environmental Research” (IMER)**

Description: the marine modelling cooperation with the “Institute of Marine Environmental Research” (IMER) cooperates with CEBioS in order to work on the threats on Halong Bay.

### **Institutional partner 2: “Vietnam National Museum of 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 (<http://www.biodiv.be/cebios2/news/launch-of-a-policy-brief-dedicated-to-insect-biodiversity-in-vietnam>).

## Peru

### **Institutional partner: ‘Instituto del Mar del Peru’ (IMARPE)**

Description: the marine modelling cooperation with IMARPE has been successfully implemented in Phase I and resulted in a widely acclaimed policy brief in Spanish

(<http://www.biodiv.be/cebios2/news/launch-of-a-new-policy-brief-on-cebios-work-in-peru-using-the-coherens-model>). The work will continue based on other funding than the CEBioS core funding. The local team of young scientists is very keen to continue and created a working group to achieve this goal.

## Other institutional partners

The work on CHM, awareness, GTI and MRV often involves national focal points or experts at the Ministries of Environment or universities of several other (mostly) African countries. In Phase I, we worked with such ministries or universities in e.g. Togo, Ivory Coast, Cameroon (exit), Madagascar (exit), Morocco, Niger, Burkina Faso, Uganda, Rwanda, Tanzania, Kenya, South Africa, Cambodia and Ecuador. With some we stopped cooperation because of the demand by DGD to concentrate on fewer countries.

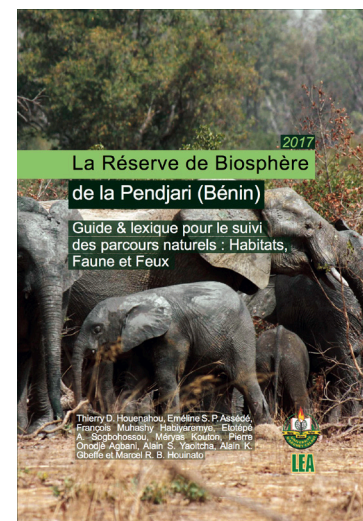


## Benin

### Université d'Abomey-Calavi & Pendjari National Park

During the 2014-2018 period, CEBioS developed a fruitful collaboration with the “Laboratoire d'Ecologie Appliquée” of Prof. Brice Sinsin and Marcel Houinato. The main focus was on the transfer of scientific knowledge about the ecology of Pendjari National Park to the CENAGREF (managing the park and the

AVIGREFs, being the main village association in the area). The ecology focused on habitat monitoring as a function of fire management and the “parcours” (transhumance by cattle herds). It resulted in a lexicon about the Pendjari Park, which was widely acclaimed by managers and ecoguards.



### Clearing-House Mechanism & awareness raising

CEBioS developed a fruitful collaboration with the Ministry of Environment for establishing one of the most performing Clearing-House Mechanisms in Africa.

This was achieved through numerous national training workshops, followed by regional workshops in West Africa in a perspective of “train the trainer” and South-South collaboration.





## The EVAMAB project

### Assessment of ecosystem services in the Pendjari Biosphere Reserve

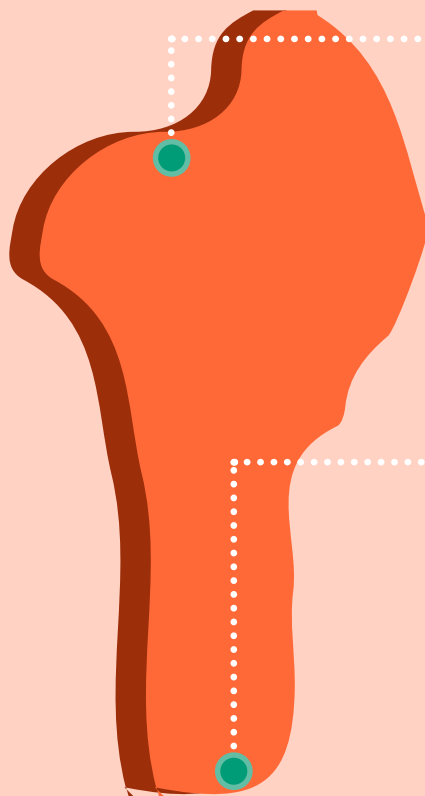
CEBioS coordinates the EVAMAB project that addresses the assessment of ecosystem services in UNESCO-Man and Biosphere (MAB) sites in 4 countries: Benin, Ethiopia, Tanzania and Uganda. In Benin the focus is on the Pendjari Biosphere Reserve. Three Belgian master students went on the field for several months to conduct re-



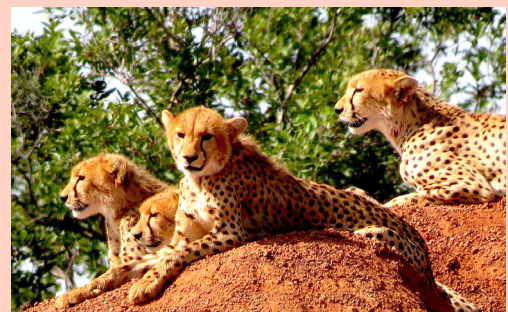
search for their master theses, together with Beninese students. They were co-supervised by CEBioS and professors from LABEF, Université d'Abomey-Calavi. Their results were published in a policy brief and presented and discussed in a stakeholders workshop organized in Natitingou in September 2018.

CEBioS, together with LABEF and EVAMAB members, played the role of facilitator between important actors of the Pendjari Biosphere Reserve (African Parks Network, scientists, NGOs, government actors,...) to collectively select priority management options to preserve the ecosystem services that were prioritized by riverine communities for their livelihoods. All outputs of this project will be published in scientific papers and policy briefs and shared within networks such as the UNESCO-MAB community and the Ecosystem Services Partnership.

More information: [biodiv.be/evamab](http://biodiv.be/evamab)



PENDJARI NATIONAL PARK



COTONOU





# Burundi

## Cooperation with the OBPE

The cooperation with the Nature Conservancy agency in Burundi, INECN, later merged with forest department to OBPE, was multi-faceted and driven by a champion of biodiversity, Benoit Nzidigahera, who very sadly deceased in 2018.

Numerous trainings in North and South of scientific staff of OBPE, combined with a whole series of local workshops on habitat monitoring, awareness raising, Nagoya Protocol, collection management, herbaria, library, the edition of a scientific Bulletin, and CHM resulted in a strengthened agency, which better situates its role in the management of the three national parks in Burundi, Rusizi, Kibira and Ruvubu.

An important milestone was the publication of the Kibira Lexicon, being a reference for the management of this endangered mountain protected area. Lots of work has been done on wild polinisors and edible wild mushrooms as well.



RUSIZI NATIONAL PARK



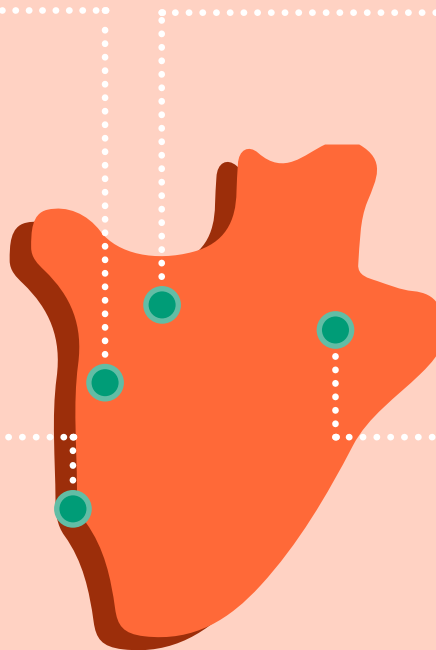
KIBIRA NATIONAL PARK



LAKE TANGANYIKA

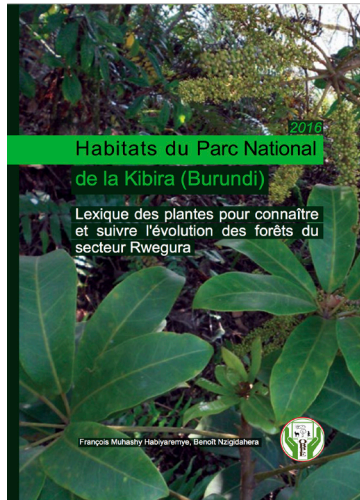


RUVUBU NATIONAL PARK



## Success stories

### Research on habitats



The research on the dynamics of different habitats in protected areas of Burundi is done in the framework of DEA and Master at the "Université du Burundi" and serves to prepare the lexica tools.

A first lexicon has been published for Kibira N.P.

### Collection of technical data on habitats

Collection of vegetation characteristics is done on large transects which are identified per administrative sector and taking into account different habitat types. Data are collected with help of LEM fiches in the field and transferred to Excel at headquarters. This already led to interpretation of new trends within specific habitats, linked to climate change mainly.

The success of the approach is mainly due to the dedicated interest by OBPE staff. Most trained ecogardes or managers are still in place and can apply the learned skills over consecutive years, meaning they can improve on the basis of experience. The largest training workshop was done in 2014.

In all sectors, data was collected according to plan in the 3 main protected areas of the country.

Moreover, the transects were also providing data for the inventory of mushrooms and the evaluation of their productivity. This work was at the origin of the creation of the "Réseau des Mycologues de la Région de Grands Lacs d'Afrique" (Myco RGL), financed by BELSPO and now further developed in an ARES project on value chains of edible wild mushrooms. The mushroom research has been extended towards Virunga, Itombwe and Kahuzi Biega NP.

A lab for mycology is planned in the region (Goma) and the project will support 3 PhDs and 2 Master students.

The project partners are UNIGOM, UOB, OBPE, UB, UR and UCL, ULB, ULG/Gembloux, Institut Paul Lambin and JBM.





## DR Congo

### Academic Support to ICCN

The approach of CEBioS in DR Congo is to focus on specific protected areas with the help of DEA, Master and PhD students from the universities of Lubumbashi, Kisangani, Kinshasa, Goma and Bukavu.

The chosen subjects are discussed thoroughly with ICCN who manages these areas and approved on the basis of real scientific needs to better understand ecosystem services.



### Support to CSB

The *Centre de Surveillance de la Biodiversité* in Kisangani, DR Congo, has been created and built mainly with funds of the Belgian Development cooperation. In 2017, the RBINS concluded a Memorandum of Understanding with the CSB to strengthen its role as secondary CHM for DR Congo, an agreement signed with the full consent of the National Ministry of Environment of DR Congo. As secondary CHM, the CSB is an important player nationwide, to help streamline biodiversity research and monitoring as well as to facilitate the dissemination of the biodiversity-related information.

### Summer School in Kisangani

Over 100 participants from all over the country attended a two-weeks summer school at the CSB. Several topics were treated: awareness raising in schools, project writing, scientific and general communication, the governance of biodiversity, the MRV concept and its closing workshop, the Nagoya Protocol, CHM-training, and other specific subjects.

### Effects of a long-term presence

Since 2010, scientists of the CSB and UNIKIS, via VLIR-projects, projects of the RMCA and CEBioS-interventions have been doing lots of terrain work. A hoped for, but a nevertheless unexpected result, is that quite some youngsters from remote villages, are now studying biology due to the contacts with the scientists during their childhood years.



## KAHUZI-BIEGA NATIONAL PARK



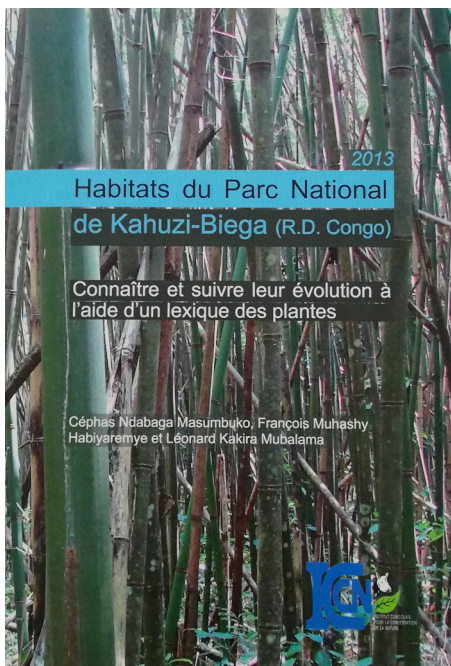
## BOMBO LUMENE NATURE RESERVE



## VIRUNGA NATIONAL PARK



## ITOMBWE NATURE RESERVE



## Kahuzi-Biega National Park

With its 6000 km<sup>2</sup>, Kahuzi Biega NP occupies a prominent place in South Kivu as a biodiversity hotspot, with e.g. the lowland gorilla, and is since 1980 a world heritage site.

Together with the university of Goma and the local ICCN managers and ecoguards, a habitat monitoring lexicon has been produced. It is a valuable tool for the management of the park.

## Virunga National Park

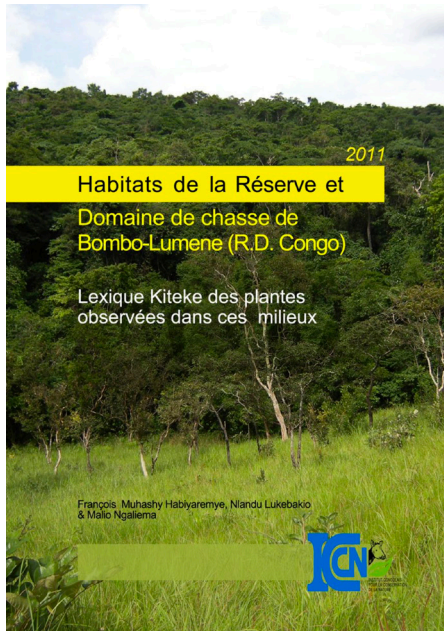
Covering 790 000 ha, the “parc national des Virunga”, Unesco World Heritage Site, presents a high habitat diversity, inherent to contrasted topography, ranging from plains until mountains over 5000 m and including lakes, swamps, next to deep soils and lava, associated with various types of forests, savannas and steppes.

The University of Goma and CEBioS carry out Inventories and ecological studies of edible mushrooms in this Park, as potential alternative resources to alleviate poverty and thereby decrease pressure on the hotspot of biodiversity within protected areas in the Albertine Rift.

## Itombwe Nature Reserve

The Itombwe Mountains (or Itombwe Massif, Plateau) are a range of mountains in the South Kivu province of the Democratic Republic of the Congo (DRC). They run along the west shore of the northern part of Lake Tanganyika. They contain a vast area of contiguous montane forest and are home to a rich diversity of wildlife.

In order to prepare the site as a world heritage site, CEBioS and ICCN support academic research in the area to better understand the habitat dynamics, the flora and the ecosystem services. This knowledge production will result in the co-production of tools such as a lexicon.



## Bombo Lumene National Park

Bombo Lumene National Park derived its name from regional Rivers (Lumene and Bombo) and it features among the most incredible protected area which offer tourists opportunity to sight at the unique flora and also engage in fishing adventures. For visitors who looking for the best destinations to spend their weekend gateway, Bombo Lumene National Park is within the proximity of Kinshasa capital city, a few kilometers off the savanna grassland of Bandu'undu in the Democratic Republic of Congo (DRC). This magnificent protected area is situated 135 kilometers and it is a two hours' drive off Kinshasa capital city.

ICCN co-produced with CEBioS a lexicon supporting the local ecoguards to better evaluate and understand their managed area and to provide them with a simple tool to monitor the dynamics of the vegetation over time.

## The Luswishi Reserve and its drone

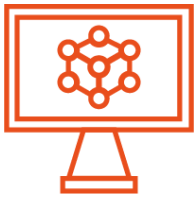
The Luswishi Forest, at the outskirts of Lubumbashi is a typical open Miombo dry forest and an example of preserved nature in an area heavily impacted by decades of mining activities. Analysed in the 60-80ies by Prof. Malaisse, the forest is now subject to academic research by the University of Lubumbashi and supported by the botanical expertise present at CEBioS.

The main focus lies on the termitosols and how termites play an important ecosystem service in ground fertilisation and aeration. The effects of termites on the vegetation is analysed recently in a pilot project with a light drone and opens new perspective of mapping and documentation of the area, including anti-poaching control.









# SUPPORT TO MARINE MODELLING



## Capacity building

On 14 occasions, individual students on marine modelling from Peru and Vietnam came to follow a training at RBINS.



## Policy brief for Peru

For Peru it resulted in the production of a policy brief in Spanish widely circulated to make the authorities aware of dangers of pollution along the coast, and in the formation of an active working group of young enthusiastic modelers continuing the work.



## Vietnam

For Vietnam, the work helped IMER to better understand the threats the Red River poses to Halong Bay, a tourist hotspot known for its corals and fisheries and stimulated them to seek other external funding to continue the work.



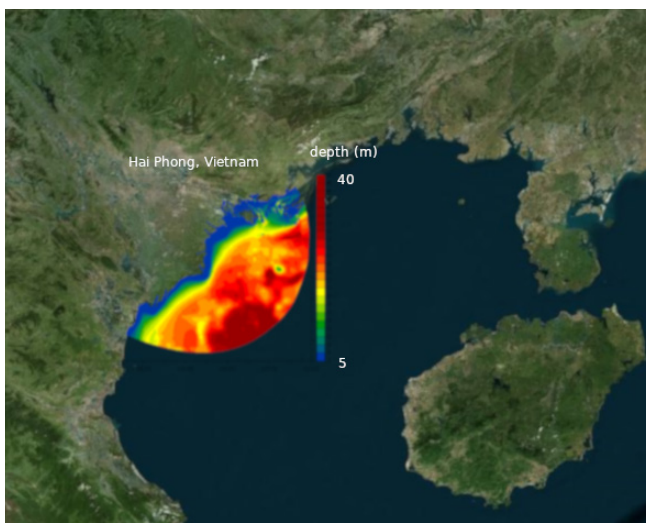
## Prize D4D

The project developing IoT sensors for Benin was nominated by the jury for the Prize D4D in the category iChoose. This prize rewards outstanding initiatives that use digitisation and (new) technologies as a lever for development towards achieving the Sustainable Development Goals (SDGs).



## COHERENS

COHERENS is an open access software developed at RBINS to modelise sea currents of the North Sea as a function of physical and chemical parameters. The last years it is being developed to modelise movements of particles (sand, detritus) and small organisms as well (plankton, fish larvae, jellyfish). Through CEBioS, COHERENS is now being transferred to developing countries wanting to better understand coastal, lake and sea currents as a function of biodiversity and climate adaptation.





HALONG BAY



PERUVIAN COAST



# MEASUREMENT, REPORTING & VERIFICATION



This component of the CEBioS-programme aims to fill the gap between data collection by scientists and their use by government authorities for reporting and follow-up of the state of biodiversity and biodiversity policies. The MRV- approach tackles the translation from science to policy to development by valorising scientific data to feed local and national indicators for reporting and verification.

It was described and discussed in a scientific paper: *“Joining science and policy in capacity development for monitoring progress towards the Aichi Biodiversity Targets in the global South”*<sup>4</sup>.

During the first phase of CEBios, the MRV-component was considered to be a pilot subprogramme to be further developed in the future.

## Developing policy-relevant biodiversity indicators: lessons learnt from case studies in Africa

Five projects were implemented in French-speaking partner countries of CEBioS. They aimed at developing biodiversity indicators to contribute to reporting towards their respective NBSAPs. The methodological approaches were discussed at a closing workshop and compared to the methodology developed by the Biodiversity Indicators Partnership (BIP). Lessons learnt and recommendations were summarized in four policy briefs and a common scientific paper.



# 26

projects from 9 different countries, selected among 52 received proposals

# 15

follow-up projects in 3 countries to disseminate the results

# 8

policy briefs produced

# 1

opening workshop in Brussels with 9 African partners and 6 Belgian and international experts

# 3

closing workshops in Africa gathering 89 African participants

# 4

scientific papers published, submitted or in preparation (co-written with African partners)

<sup>4</sup> Maarten P.M. Vanhove, Anne-Julie Rochette, Luc Janssens de Bisthoven, *Joining science and policy in capacity development for monitoring progress towards the Aichi Biodiversity Targets in the global South*, Ecological Indicators, Volume 73, 2017, 694-697.

## Policy-relevant monitoring of bushmeat, charcoal and fisheries in DR Congo

Eleven projects conducted by a tandem of a scientific institution and an institutional partner (government, administration) targeted the documenting of the use of selected natural resources (bushmeat, charcoal and fisheries) across DR Congo during a closing workshop in Kisangani with representatives of the projects and other key Congolese actors of biodiversity. Key-results were discussed and policy briefs for each theme were created and widely distributed and used throughout the country ever since. The meeting ended up in a common position statement co-developed by 56 participants in which challenges for policy-relevant monitoring in RD Congo are identified and indicators for selected natural resources are proposed.



## Establishing biodiversity indicators around protected areas in English-speaking partner countries

In six English-speaking partner countries, ten projects were implemented, focusing on three focal areas around protected areas : human-wildlife interactions, charcoal and firewood, and fisheries. The aim was to promote links between the world of science and policy-making in order to develop biodiversity indicators in the buffer zones of protected areas.



At the closing workshop in Entebbe, Uganda, representatives of the projects and of the National Environment Management Authority of Uganda, co-created a policy brief focussing on linking biodiversity indicators to human development strategies, a theme selected by the participants as most relevant in the frameworks of their own countries.

## Success stories

### Dissemination of MRV results: awareness projects

On explicit demand of the MRV-project leaders, 15 follow-up awareness projects were granted to create and intensify awareness about key results of the projects: some addressed a better way of exploiting the resources for which indicators were developed, others focused on the importance of those indicators and their relevance for related policies. Target audiences varied between local populations, local policy makers, provincial decision makers, implementation-administrations and so on. These awareness activities made intensive use of the policy briefs developed during the closing workshops.

### Raising awareness about bushmeat issues facilitated by the presence of Ebola in Ituri

Prof. Consolate Kaswera of the Centre de Surveillance de la Biodiversité and Mr Casimir Nebesse of the Université de Kisangani conducted MRV-work on bushmeat in and around Kisangani, DR Congo. When discussing with hunters, poachers, chiefs and villagers in the Ituri-forest to make them aware of the many issues related to bushmeat, Ebola had emerged in the East of the Ituri province. The presence of the disease made their public all of sudden very attentive and eager to follow the recommendations given by the scientists!

### New legislation decreed following awareness activities of an MRV project

At Lake Tanganyika, Mr Mulimbwa and his team of the Centre de Recherche Hydrobiologique at Uvira, managed, based on the results of their MRV project, to convince the local authorities responsible for managing the halieutic resources of the lake, to sign an Act of Engagement in which they promise to completely engage to ensure sustainable fisheries at the Lake. To that extent new Decrees by the “Chef de Territoire” of Uvira are currently being issued.

A similar story at Mbuyi Mayi, where Mr Faustin Nyembo of SCRID’ AGRI ASBL and his team, managed to obtain the attention of the Provincial Minister of Fisheries. The Minister has stressed his willingness to engage in decreeing measures to maintain sustainable fisheries at the Lubilanji river. He has ordered his services to continue awareness activities on sustainable measures during their interactions with the fishers associations and encourages them to seek advice and assistance from SCRID’ AGRI ASBL.



## Lessons learned

French-speaking and English-speaking partner countries call for a different approach in many different ways. Mixing both language-cultural groups does not seem to be a realistic possibility. Much more in-depth knowledge about Biodiversity Indicators, database management in all its aspects and understanding the importance of the follow-up of indicator trends has to be disseminated.

# Policy Briefs



**12** high impact outputs were produced: the **policy briefs**, co-produced in a participative way in closing workshops. They can be consulted here: <http://cebios.naturalsciences.be/docs/publications/policy-briefs>



Throughout 5 years of CEBioS-activities twelve high impact policy briefs were produced, presenting key projects results and recommendations toward decision makers, in an appropriate language and with an attractive layout.

Most policy briefs result from participative project restitution workshops in various activities of the programme and are co-generated with or 100% made by South partners in order to ensure ownership and reality check with local conditions and perceptions.



# GLOBAL TAXONOMY INITIATIVE



In Belgium, the RBINS has been the National Focal Point for the GTI since 2001. Thanks to the framework agreement concluded with the Ministry of Development Cooperation (since 2014 called CEBioS), the RBINS has been able to support Belgium's southern partner countries in strengthening their capacities in taxonomy and collection management since 2004. The GTI component operates mainly through two annual calls for projects and has given rise to unanimously recognized taxonomic capacity building manuals, the "Abc Taxa".

During the 1<sup>st</sup> phase of the CEBioS programme, the GTI calls selected projects with positive impacts on development by choosing research topics focusing on agriculture, pest control, drinking water, edible mushrooms... The GTI also worked more closely with the other components of CEBioS by promoting the

sharing of information and awareness on the results of taxonomic research, the organization of restitution workshops for decision-makers/stakeholders and the production and dissemination of policy briefs. This component received a positive evaluation during the 2017 mid-term evaluation.

## 83

scholars were welcomed between 2014 and 2018, as part of the external call. For them, it is a question of accessing the collections and/or taxonomic expertise located in Belgium.



GTI internships are also important for the career development of our alumni, who find teaching and research positions in their home universities. Some - already lecturers - are promoted to a higher grade through the CAMES regional academic accreditation system in French-speaking Africa and train future generations of African researchers themselves... This is a perfect example of the "train the trainer" approach: the knowledge acquired is passed on to future generations.

Finally, GTI alumni are recognized in their countries and sub-regions as experts. Thus we were pleasantly

surprised to meet several GTI alumni in Abidjan, in November 2017, during the 1<sup>st</sup> WABES expert workshop. This workshop brought together 77 participants from 20 countries to initiate the creation of a network of West African experts who can contribute to the IPBES work programme.

## 86

publications directly resulting from GTI projects in peer-reviewed scientific journals (since 2014).



# Abc Taxa

Abc Taxa is a widely acclaimed peer reviewed series of volumes dedicated to the methodologies of sampling, collection management and identification of specific plants or animals in developing countries. The authors are often GTI alumni and North and South co-author most volumes. CEBioS finances its production and dissemination to South stakeholders (scientists, parataxonomists, ministries, universities) and to the North at porto and production costs.

Part is disseminated to specific target publics (national focal points to the CBD etc.) and part is on demand.

During the period 2014-2018, 5 volumes were published: on liverworts and hornworts of Rwanda, on diatoms of the Congo and Zambezi basins, on mushrooms of Haut-Katanga, on sawflies of Namibia and western South Africa and on the fish parasites of Africa.



## An award for “Liverworts and Hornworts of Rwanda”

Abc Taxa volume 14 was awarded as the best bryological publication for the years 2013-2014 by the International Association of Bryologists. The volume 15 on sawflies of Namibia and South West Africa was published in 2015.

The Committee for the Hattori Prize unanimously selected the book: Liverworts and Hornworts of Rwanda by E. Fischer. ABC Taxa vol. 14. 552 pp. (2013) as the best bryological publication for the years 2013/2014.

The book treats 262 taxa, it has a key to these taxa, color photos of habit and microscopic details of the plants. It is available to the public on the Web, and will be useful not only for Rwanda and surrounding countries but for most African and tropical countries. It is a remarkable effort by one author in a country torn by wars and hence difficult to do scientific work. It is a very meritorious effort and scientific contribution to bryology.

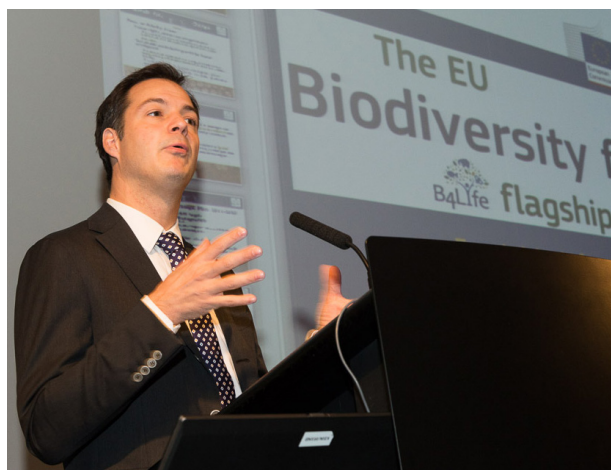
## Some colloquia and meetings organized by CEBioS

### *Biodiversity & development, a global heritage*

The symposium *“Biodiversity and development, a global heritage”* took place at the Royal Belgian Institute of Natural Sciences on November 26<sup>th</sup> 2015 in the framework of the European year for development. The event was supported by the following partners: VLIR-UOS, ARES-CCD, The Shift, KLIMOS, BELSPO, Belgian Biodiversity Platform, National Focal Point for the Convention on Biological Diversity (CBD), The European Commission, the Royal Museum for Central Africa and Botanical Garden Meise.

The Belgian Minister for Development Cooperation, Mr. Alexander De Croo, gave an opening speech about the Belgian priorities in development cooperation regarding the environment, climate change and biodiversity. He emphasised the need for cooperation amongst all Belgian actors in this domain, as development without the conservation of biodiversity and vice-versa are no viable options in view of the ongoing biodiversity crisis in developing countries.

The day included key notes by invited gifted speakers, as well as practitioners’ stories by our own researchers and other Belgian actors about why and how



biodiversity in developing countries should be protected and used or managed in a sustainable way. Many aspects of ecosystem services offered by biodiversity were raised during the day, including cultural aspects and traditional knowledge, food security, carbon sink, water and housing, heating and the concept of “One Health”.

Various stakeholders also presented their activities during the poster/booth session.

### *Education meets biodiversity in DR Congo*



On September 27<sup>th</sup> 2016, school inspectors from DR Congo met various Belgian stakeholders working in the field of Education and Development. The event was organized at the Royal Belgian Institute of Natural Sciences in the framework of a collaboration between VVOB and the “Secrétariat Général à l’Environnement et la Conservation de la Nature” from DR Congo, with the support of CEBioS.

The project entitled “Sensibilisation sur les apports de l’agriculture durable à la biodiversité dans l’enseignement technique agricole en RDC” was presented. Besides the Congolese delegation, participants from the Royal Museum for Central Africa, VVOB, Via Don Bosco, the Botanical Garden Meise, the Belgian Biodiversity Focal Point, and the Belgian Development Cooperation (DGD) were present.

## The Nagoya Protocol in the framework of development cooperation

For researchers of fauna and flora worldwide, the implementation of the Nagoya Protocol and the associated system of Access and Benefit-Sharing (ABS) have major consequences for their way of working.

Belgian researchers, some of whom work in the context of development cooperation, have to apply it for their own work or for the work of visiting scientists from partner countries. Partner countries of development cooperation do not always have an in-depth understanding of the treaties they have signed and most

still need to develop any legislation for their implementation. Capacity building in this regard therefore seems necessary. CEBioS, together with the National Focal Point for the CBD and other partners, takes up the glove and focuses on the D.R. Congo where the implementation of the Protocol still has to be developed and where many Belgian researchers are active. This event was an opportunity to review the principles and consequences of this important Protocol.

## Biodiversity for Development, a way forward to the SDGs

How is biodiversity integrated into development cooperation? How can the support of the Northern countries to protect biodiversity in the South contribute to the achievement of Sustainable Development Goals (SDGs)?

To answer those questions, the involved Belgian and foreign partners gathered in Brussels, in the week of May 28<sup>th</sup> to June 1<sup>st</sup> 2018. The achievements were presented in a public colloquium on May 28<sup>th</sup>, starting with an introductory speech by Mr. Tom Neijens, deputy chief of cabinet of Minister A. De Croo. The colloquium was a big success, and involved the active participation of the public in an interactive way.

From the application of global programs and mechanisms (e.g. Convention on Biological Diversity, Nagoya Protocol, Clearing-House Mechanism) to detailed site-specific case studies, from coastal plains to mountain forests, from Benin to Burundi and from Vietnam to Peru, the colloquium made very clear to the audience that CEBioS is active on all levels and in all places where established and potential partners require assistance in building up the theoretical and practical knowledge required in the combined battle *for* biodiversity conservation and *against* poverty.

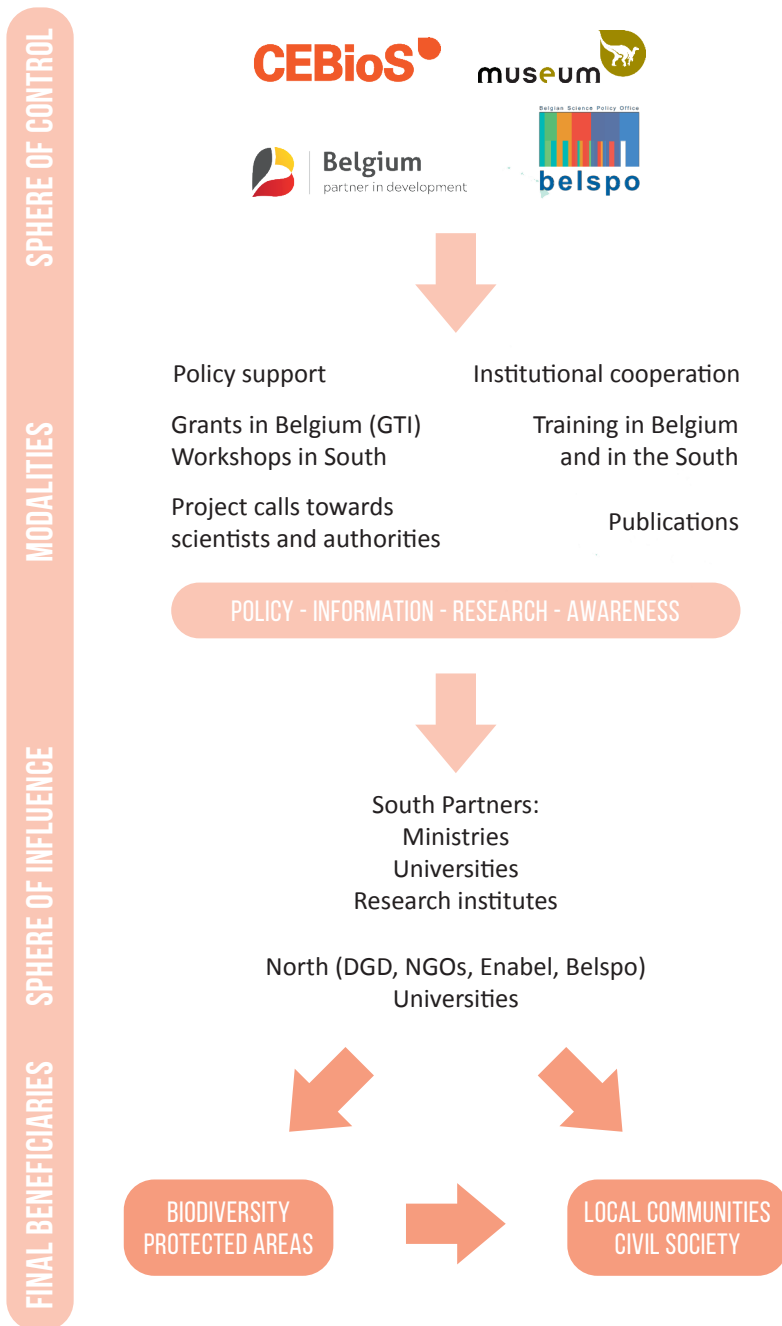
More information on our web site:  
<http://cebios.naturalsciences.be/events>



# How does CEBioS function?

In a perspective of Theory of Change, as shown with this diagram, CEBioS organises policy support (advise to DGD, review of policy documents for DGD, UNEP, CBD, OECD, IPBES). Further, CEBioS implements institutional cooperation with privileged partners. This includes a whole battery of tools, including awareness projects, workshops for co-production of policy briefs, taxonomic research, training in marine modeling etc... Part of the budget is allocated to projects selected in competitive calls (awareness, CHM, MRV, GTI). Most training is in the South, but some are also at RBINS. The main audience targeted is the public service of partner countries (especially in Ministries of Environment and

their agencies) and research institutes and universities. Outcomes are measured as positive evolutions in scientific career paths of alumni, better transfer of science to policy, biodiversity policy support in the partner countries, better functioning CHM web sites and more use, better regulations and legislations as consequence of policy briefs, better awareness of ecosystem services and Nature's benefits amongst decision makers, policy makers, authorities, managers, ecoguards and local villages and communities, and better management of protected areas, taking into account livelihoods of local communities.



The priority countries for the CEBioS programme in 2014-2018 were Peru, Vietnam, Benin, Burundi and DR Congo. In each of these countries, a package of interventions was realised, including Habitat monitoring, GTI grants, MRV projects, CHM trainings, awareness projects or some externally funded projects such as VLIR-UOS projects and the BELSPO funded EVAMAB.

## Peru

- Ocean currents modeling (COHERENS)

## Benin

- Habitat monitoring
- Lexicons
- Research on ES
- Training of ecoguards
- GTI grants
- CHM
- Awareness raising
- Biodiversity monitoring indicators (+ policy briefs)
- EVAMAB (ES evaluation)
- Ocean currents modeling (COHERENS)
- Quality scientific knowledge produced & put into use

## DR Congo

- Habitat monitoring
- Lexicons
- Research on ES
- Workshops and training sessions
- Training of ecoguards
- GTI grants
- CHM
- Awareness raising
- Biodiversity monitoring indicators (+ policy briefs)
- Training on the Nagoya Protocol
- Scientific support to UNIKIS & the CSB
- Quality scientific knowledge produced & put into use

## Vietnam

- GTI grants + policy brief
- Ocean currents modeling (COHERENS)

## Burundi

- Habitat monitoring
- Lexicons
- Research on ES
- Workshops and training sessions
- Training of ecoguards
- GTI grants
- CHM
- Awareness raising
- Biodiversity monitoring indicators (+ policy briefs)
- Training on the Nagoya Protocol
- Quality scientific knowledge produced & put into use
- External project: South Initiative Lake Tanganyika (VLIR-UOS)

# Digital presence

## Our web site



In 2014, the DGD-RBINS framework agreement started a new strategy of 10 years, consisting of two phases of 5 years. The programme got then a new name, “CEBioS, Capacities for Biodiversity and Sustainable Development”. At the same time, its web site was created, explaining its vision, mission and modalities of cooperation, displaying its annual plans and reports, the publications, the lexica, the Abc Taxa, and bringing every day news items about events, workshops, publications within CEBioS, as well as important biodiversity and development news. It greatly enhanced its identity and visibility and became during these years a well-known institutional actor amongst the Belgian development actors, actively participating in the ACNG strategic dialogues for Burundi, DR Congo, Benin and Vietnam.

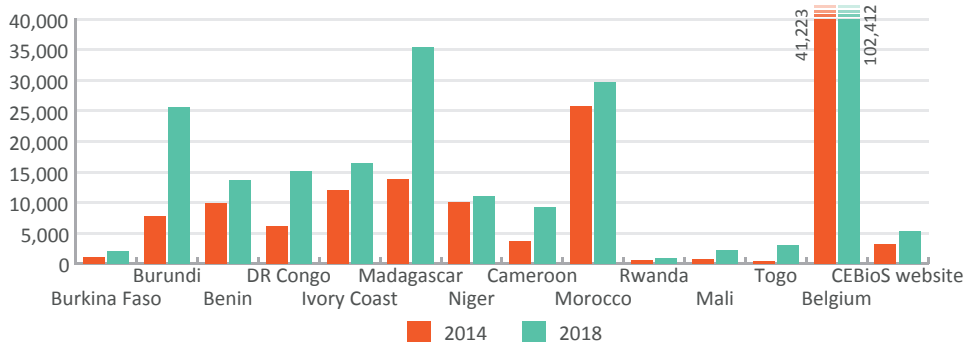


## CHMs

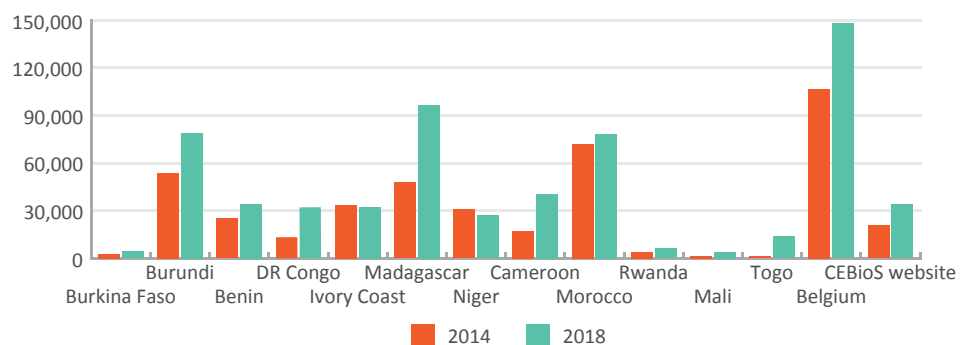


Fulfilling the mandate of Belgium within the CBD concerning its strategy on capacity building, CEBioS with its national focal point CHM was instrumental in training a whole generation of civil servants and web masters in the environment ministries of many countries in Africa, especially Tanzania, Uganda, Kenya, Madagascar, Cameroon, Togo, Benin, Niger, Mali, Chad and Morocco. The “train the trainer” approach in Morocco led to the training by Morocco of other Arab speaking states, such as Tchad, Sudan, Palestinian territory, Jordan, Iraq. In 2015 and 2018, CEBioS with its Beninese and Burundese colleagues, was granted a prize in a competition for capacity building initiatives, organised by the CBD. A true encouragement for both teams and a splendid example for the other CHM-teams.

### Number of visits of national CHM websites per country



### Number of pages visited in national CHM websites



# Facts and figures

## Staff

**Dr. Katrijn Baetens (2012-)**  
*Marine environment modelling*

**Dr. Luc Janssens de Bisthoven (2013-)**  
*Coordinator of the CEBioS programme*

**Dr. Maarten Vanhove (2015-2017)**  
*MRV, awareness, Nagoya Protocol external projects*

**Kristien Vrancken (2007-)**  
*Infographics and graphic design*

**Ir. Han de Koeijer (1999-)**  
*CHM, awareness, Nagoya Protocol, policy support  
Belgian focal point for the CHM*



**Yassine Loufa (2014-)**  
*Secretariat and logistic support  
(National Focal Point CBD)*

**Dr. Marie-Lucie Susini Ondafe (2009-)**  
*GTI, CHM, awareness, policy support  
Belgian focal point for the GTI  
webmaster*

**Vincent Pinton (2006-)**  
*Financial administration*

**Ir. Anne-Julie Rochette (2015-)**  
*MRV, awareness, EVAMAB*

**Mariam Agarad (2010-)**  
*Secretariat and logistic support*

**Dr. François Muhashy Habiyaemye (2006-)**  
*Research and capacity building on the  
dynamics of habitats, ecosystem services and  
management of protected areas*



**Ir. Hilde Keunen (2016-)**  
*MRV, CHM, awareness, Nagoya Protocol, Strategic Dialogues  
Focus on DR Congo*



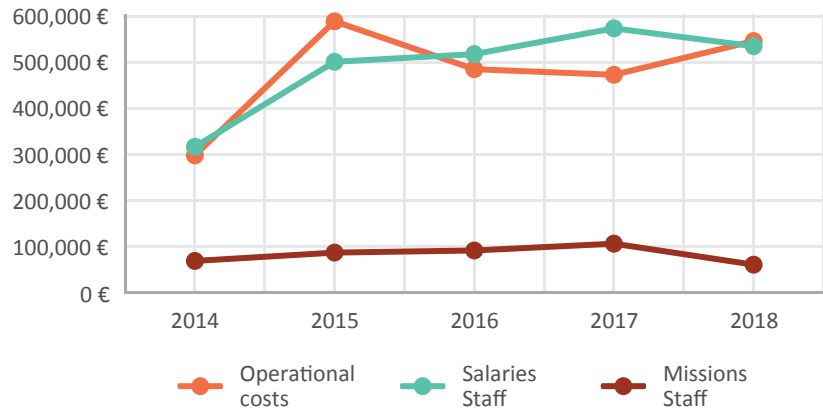
**Lucie Ongena (2018-)**  
*Communication and graphic design*



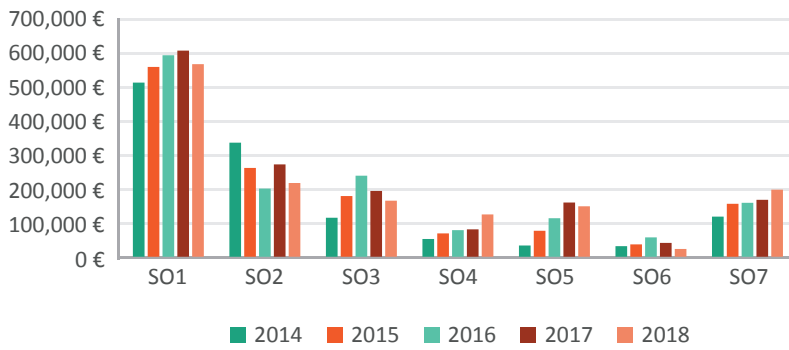
**Dr. Erik Verheyen**  
*Senior researcher*



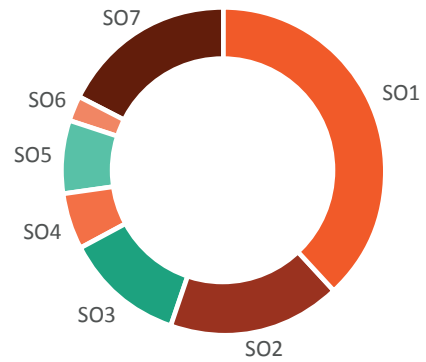
### Types of expenses



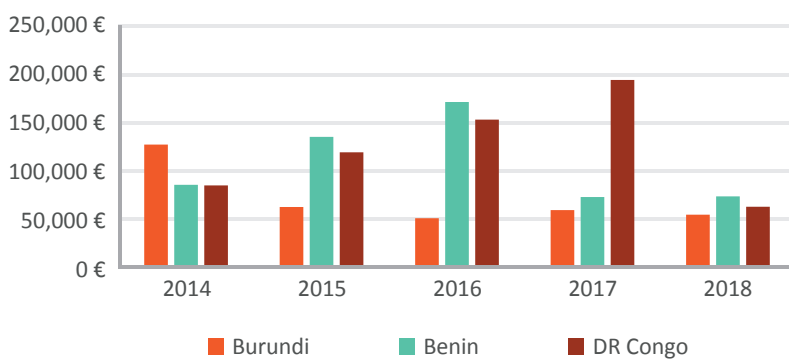
### Expenses per year and SO



### % expenses per SO over 5 years



### Expenses in priority African countries



# Acronyms

ABS	Access and Benefit Sharing
BTC	Belgian Technical Cooperation
CBD	Convention on Biological Diversity
CHM	Clearing-House Mechanism
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
COMIFAC	Commission des Forêts d'Afrique Centrale
COORD	Programme Coordination and Management
COP	Conference of the Parties
CSB	Centre de Surveillance de la Biodiversité
DGD	Belgian Development Cooperation
EDIT	European Distributed Institute of Taxonomy
GTI	Global Taxonomy Initiative
ICCN	Institut Congolais pour la Conservation de la Nature, Kinshasa, D.R. Congo
ICT	Information and Computer Technology
IDCP	Indicative Development Cooperation Plan
IEBR	Institute of Ecology and Biological Resources, Hanoi, Viet Nam
IMAB	Inventories Monitoring and Assessment of Biodiversity
IMARPE	Instituto del Mar del Peru
IMER	Institute of Marine Environment Research
INECN	Institut National pour l'Environnement et la Conservation de la Nature, Bujumbura, Burundi
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
ISCNET	Institut Supérieur de Conservation de la Nature, de l'Environnement et du Tourisme , R.D. Congo
ISDR-GL	Institut Supérieur de Développement Rural des Grands Lacs, D.R. Congo
LEGERA	Laboratoire d'Ecologie et de Gestion des Ressources Animales, D.R. Congo
LEM	Law Enforcement Monitoring
MATEE	Ministère de l'Aménagement du Territoire, de l'Eau et de l'Environnement, Morocco
MIST	Management Information System
MRV	Measurement, Reporting and Verification
MUMM	Management Unit of the North Sea Mathematical Models
NGO	Non-Governmental Organisation
NP	Nagoya Protocol
NBSAP	National Biodiversity Strategy and Action Plan
PEET	Partnerships for Enhancing Expertise in Taxonomy
PM	Person Month
PNKB	Parc Nationale de Kahuzi-Biega
PN	Parc National
POL	Policy Support
PTK	Portal Toolkit

RBINS	Royal Belgian Institute of Natural Sciences
RDC	D.R. Congo
SACEP	South Asia Co-Operative Environment Program
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
SSC	South-South Cooperation
TST	Trans Sectorial Team
UAC	Université d'Abomey- Calavi, Benin
UA	Universiteit van Antwerpen, Belgium
UB	Université du Burundi
ULB	Université Libre de Bruxelles, Belgium
UNIKIS	Université de Kisangani, D.R. Congo
UNILU	Université de Lubumbashi, D.R. Congo
UOB	Université Officielle de Bukavu, D.R. Congo
VLIR-UOS	Flemish Interuniversity Council, Cooperation for development, Belgium



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