



## REPORT 2014-2018 (PHASE I) & ANNUAL REPORT 2018

### CEBioS PROGRAMME

Building capacities for biodiversity  
and sustainable development



DGD-RBINS programme  
Protocol of cooperation



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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 synthesis presents most activities, outputs and success stories (outcome) realised in these five years. For more details we refer to 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> price 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> price 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 aware-

ness 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>SBSTTA = Subsidiary Body on Scientific, Technical and Technological Advice, <https://www.cbd.int/sbstta/>, 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 (Bio-Bridge, 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 DRC.



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 termitosols 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 SBT TA 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.

In Phase I, the interventions of CEBioS concerned training of scientists and civil servants about the Nagoya Protocol on five 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.

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 insti-



tute “Institute of the National Parks of Belgian Congo” till the independance 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 rapatriate 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.

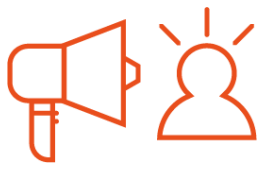




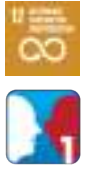
In Benin one of the 5 projects focused on the development of 12 actions that people could undertake to promote biodiversity. They made a campaign for schools, spots on radio and television as well as text messages, Facebook and Twitter. The poster that they developed was taken up by the Ministry of the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





## 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 Houinatou. The main focus was on the transfer of scientific knowledge about the ecology of Pendjari National Park to the CENAGREF (managing the park

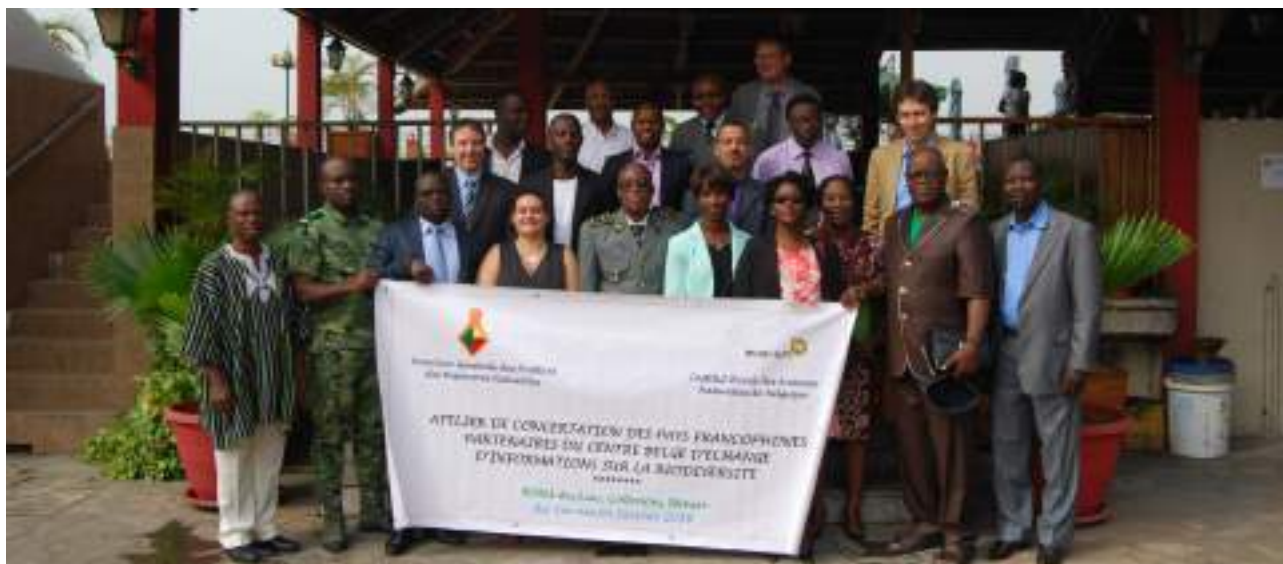
and the AVIGREFs, being the main village association in the area). The ecology focused on habitat monitoring as a function of fire management and the “parcours” (transhumance by cattle herds). It resulted in a lexicon about the Pendjari Park, which was widely acclaimed by managers and ecoguards.



## 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

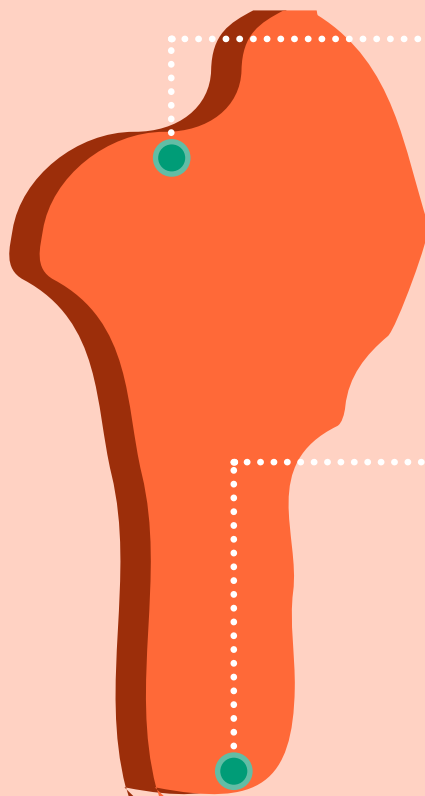
CEBioS coordinates the EVAMAB project that addresses the assessment of ecosystem services in UNESCO-Man and Biosphere (MAB) sites in 4 countries: Benin, Ethiopia, Tanzania and Uganda. In Benin the focus is on the Pendjari Biosphere Reserve. Three Belgian master students went on the field for several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



research 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 polinisers and edible wild mushrooms as well.



RUSIZI NATIONAL PARK



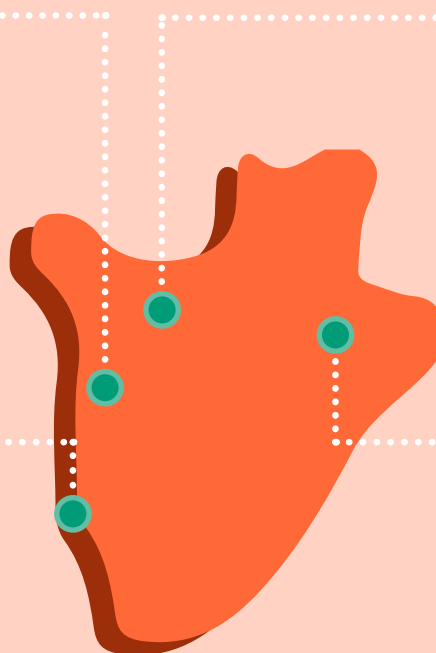
KIBIRA NATIONAL PARK



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 build 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



VIRUNGA NATIONAL PARK



BOMBO LUMENE NATURE RESERVE



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

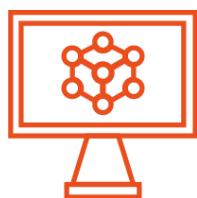
The Luswishi Forest, at the outskirts of Lubumbashi is a typical open Miombo dry forest and an example of preserved nature in an area heavily impacted by decades of mining activities. Analysed in the 60-80ies by Prof. Malaisse, the forest is now subject to academic research by the University of Lubumbashi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



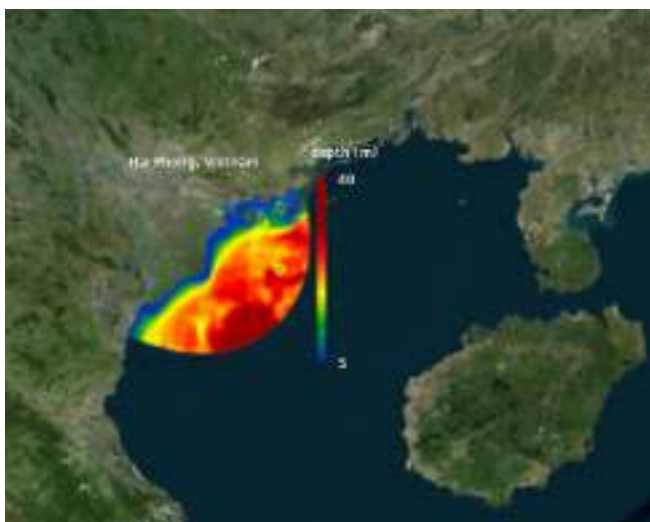
## Prize D4D

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

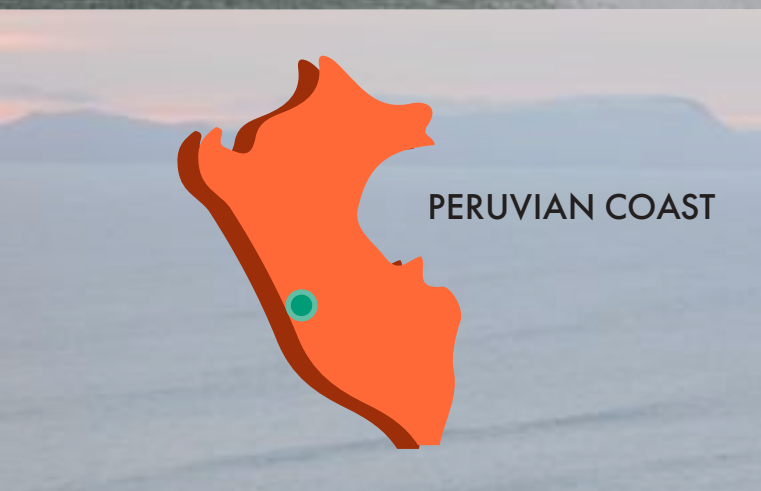
COHERENS is an open access software developed at RBINS to modelise sea currents of the North Sea as a function of physical and chemical parameters. The last years it is being developed to modelise movements of particles (sand, detritus) and small organisms as well (plankton, fish larvae, jellyfish). 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



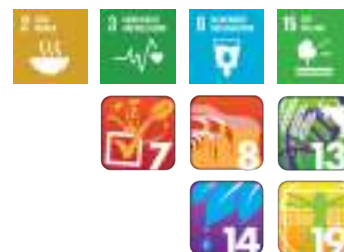
**12** high impact outputs were produced: the **policy briefs**, co-produced in a participative way in closing workshops. They can be consulted here: <http://cebios.naturalsciences.be/docs/publications/policy-briefs>

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 promo-

ting 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 pleasant-

ly 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 books 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 re-



searchers 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.

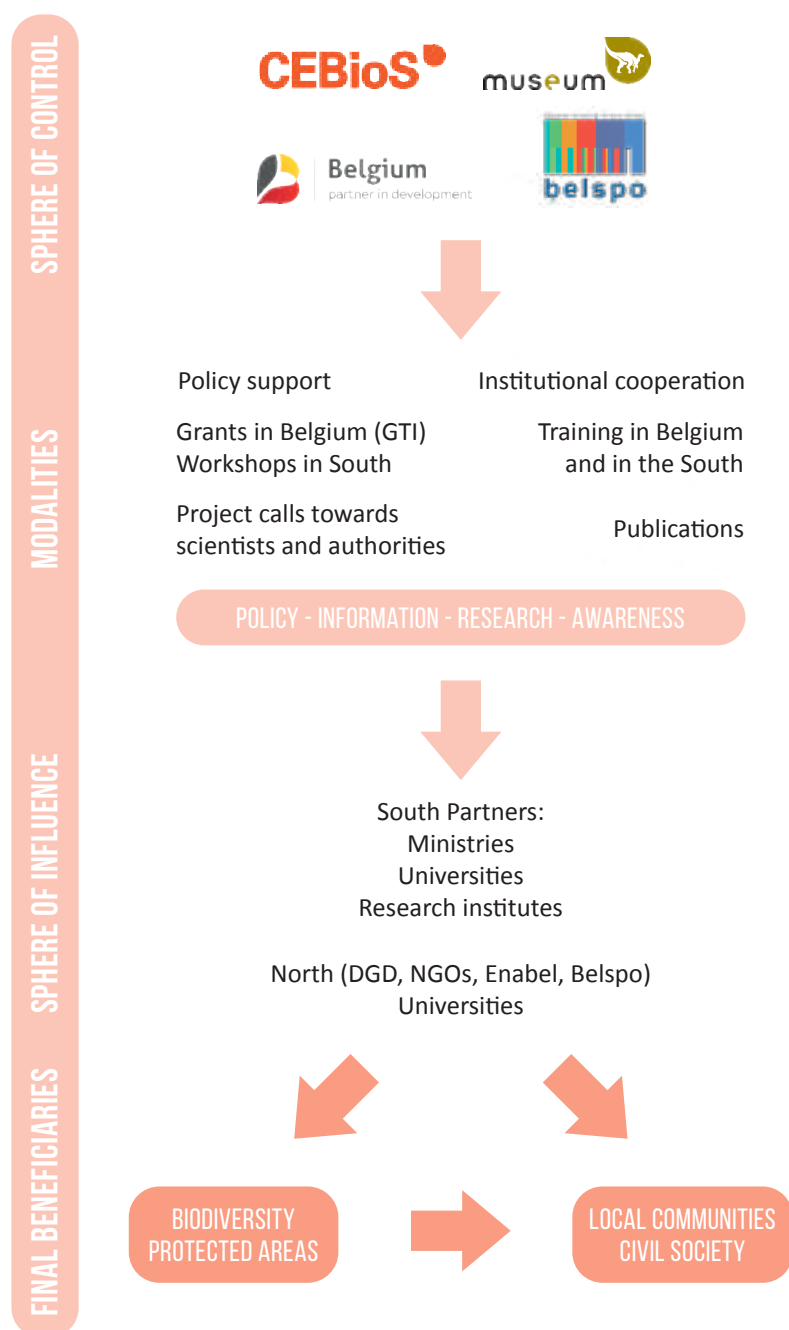
More information on our web site:  
<http://cebios.naturalsciences.be/events>



## 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)

# Sustainability

The term “sustainability” is inherent part of the CEBioS acronym: “capacities for biodiversity and sustainable development”. The core business of CEBioS is to offer, promote or support capacity building at individual and group level in order to strengthen the researchers, the implementing environmental state agencies, the policy makers and the development actors, civil society and private sector. All these groups are considered to be strengthened at institutional level through a variety of modalities going from competitive project calls to the organisation of workshops. Trained and skilled stakeholders in the partner countries of the Belgian Development Cooperation are the best human proof of sustainability. They will (1) integrate the learned skills and knowledge, (2) apply them in their daily professional lives and (3) pass them on, as “champions” or “multiplicators”, to peers and other target groups and to the students, being the next generation.

Therefore, “train the trainer” is quite essential and CEBioS will always insist on peer to peer transparency of acquired knowledge in the concerned institutions for a sustainable uptake for the future. The different chapters of the cooperation are building up on past track records and adding additional modules in follow-up paths and self-evaluation moments. Special attention to the alumni is part of a sustainable strategy (data-base, activities, lessons learned, success stories, career paths, mentoring of junior peers). Hence CEBioS tries to avoid so-called “one shot interventions”, but is instead building a network of knowledge carriers and skilled personnel in the realm of biodiversity and development. This technical, administrative and scientific executive is bearing the potential success for a sustainable future. The Sustainable Development Goals were ratified in 2015 and became paramount to anchor our interventions in that perspective.

# Knowledge management

The recommendations of the MTE and of the financial and organisational audit have been discussed in depth by the CEBioS team and a number of measures have been taken on in the meantime (see: also lessons learned).

CEBioS' team, including support staff, attends weekly team meetings (Tuesday at 10- 11.30 a.m.) during which practical issues as well as issues with the projects or with aspects of the programme in general are discussed. When staff members return from missions, a summary of their experiences with partners, projects is also presented at those weekly meetings (later on a more extensive, written mission report is sent to all team members).

Practical issues may cover accounting issues, the organisation of the stay of grantees or other visitors, progress with printing orders (lexica, Abc Taxa, flyers,...), progress reports of editing tasks (Abc Taxa, Lexica) and so on.

Project issues may have to do with late arrival of funds, delaying deadlines for report submissions, problems encountered during the execution of projects, problems that may have risen with individuals or institutions during project or grant calls or during the execution of the projects, and how these issues can be dealt with.

When staff members return from missions to institutional partners, discussions may be about the internal organisation of the partner institute, the necessity to amend a running programme, the impact of the absence of key persons and how to deal with it, reporting of the discussions at the partner institute about the cooperation with CEBioS, etc.

Mission reports and other meeting reports of individual staff members also inform CEBioS staff on developments in the protected areas we are working in (management changes, incidents, reports), on developments in the countries themselves, at embassy level, in the Strategic Dialogue groups and so on.

Based on the information received during the staff meetings and in written reports, separate discussions are organised between CEBioS staff members or between CEBioS staff and institutional partners, to re-orientate some programme parts, or develop activities to help mitigate problems discovered (e.g. lack of information about the Nagoya Protocol in DRC > CEBioS organised a seminar at DGD and during the Summer School in Kisangani in 2017).

CEBioS staff also has the good habit of (literally) working with open doors to facilitate an easy communication between all staff members.

In short, the way of working of CEBioS staff, together with the weekly staff meetings guarantee a continuous evaluation of many aspects of the programme and of separate activities within the programme. The many-fold contacts with our institutional partners, whom we know quite well, permits to inform them and discuss with them any changes or adjustments to the programme that is needed.

At the level of RBINS, CEBioS needs to report highlights per semester and to inform the operational director about progress at regular OD Nature meeting ("business reviews").



## Lessons learned

During Phase I, CEBioS did not yet actively enough play the card of gender equality, a complex and difficult issue in the often academic or (political) administration circles in its partner countries. CEBioS will be more proactive in that.

- Staff will explicitly focus on gender issues throughout the development, follow-up and evaluation of activities in Phase II.

In Phase I, CEBioS has been paying attention rather implicitly to the improvement of livelihoods and well-being of local people. By naming them as the final beneficiaries of the CEBioS programme in its Theory of Change, both aspects will be explicitly present in the planned activities of Phase II, thus improving the impact of the programme.

- Research grants (GTI and others), as well as MRV and awareness projects will be dedicated to subjects directly linked to these aspects.

The eligibility criteria in the calls will direct the projects towards pest management (biological control), soil fertility, pollinisation, agroforestry, value chains on edible wild animals and plants with high nutrient and protein contents or medicinal value (related to the Nagoya Protocol and traditional knowledge), efficiency of crop certification schemes, conservation management (regeneration, defaunation, connectivity, production of charcoal, bushmeat), carbon stock, zoonoses, sustainable use (carrying capacity, quotas, control) and development of national and local smart indicators linking biodiversity to development in the framework of the (post) Aichi targets of the CBD strategy and the SDGs.

- Activities are more designed to yield direct results benefiting to local people, authorities or other stakeholders, whenever possible.

During Phase I, the CEBioS programme was divided into 6 sub-programmes, often considered as stand-alone programmes, each of them with insufficient interactions with the others. This approach clearly proved its limits, especially when it comes to efficiency and the obtaining of integrated results.

- For Phase II, the CEBioS team rethought its way of operating. It introduced transversal themes throughout the programme and it defined new Specific Objectives to ensure that each previous sub-programme touches all aspects of the Phase II- programme directed to 4 key target audiences: (1) scientists, (2) environment administrations, (3) policy makers, decision makers, politics, and (4) civil society, private sectors and development actors.

The administrative and financial follow-up of CEBioS' activities was not efficient enough and at times rather complicated.

- At the start of Phase II, measures are being taken to simplify the administrative and financial follow-up, also taking into account the recommendations of the financial and organisational audit (end 2018) with the implementation of new software tools.

The Monitoring and Evaluation framework within CEBioS proved to be cumbersome and not always efficient.

- New initiatives are being developed to valorise the content of past projects and a calendar tool should allow to check on the progress of the different projects more regularly and to directly relate to all 120 indicators of the five-year plan. The M & E within CEBioS is being improved by allocating M&E tasks to key staff and by better defining process flows. Annual planning and reporting will be more strictly adhering to a result-based management approach.

CEBioS's communication and visibility policies should be improved.

- A communication officer has been recruited.

- The current website will be further updated and will be migrated to a more actual content management system (Bioland).
- The collaboration with other communication services of the RBINS will be intensified allowing for extra input of stimulating and creative ideas, action plans, etc.

A major asset of the CEBioS programme is its potential to swiftly adapt to changing circumstances, be it in its partner countries or in the Belgian context. This flexibility, both in the design of new actions or projects, as on a budgetary level, permits to book the required results more easily, obtain stronger results (high value for money ratio, see mid term evaluation). The open, versatile way of operating and decision-making within the CEBioS team and within the steering committee, makes this possible.

- This 'modus operandi' should be kept up during Phase II of the programme. It adheres to the principles of adaptive management and capacity development.

#### Contract templates need revision.

- The different types of contract templates (project contracts EN and FR, training grant contracts EN and FR) will be revised and streamlined by the juridical services of the RBINS.

#### Financial guidelines have to be updated, elaborated and formalized.

- A set of financial guidelines will be established by CEBioS staff in collaboration with the RBINS accounting department, both for the programme officers and the South partners.

In some cases, collaboration with individuals, institutes or organisations proves too difficult or even impossible due to low reactivity, governmental interferences and restrictions.

- These findings will be taken into account when developing activities and projects in Phase II.
- Support to these individual researchers is stopped.

For the Measurement, Reporting and Verification programme (MRV), considered to be a pilot programme in Phase I, CEBioS has been working with two different language groups (French and English) through similar though separate calls, workshops, etc. We learned that both groups need a different approach in the set-up phase as well as in the follow-up and evaluation phase of the projects.

- In Phase II the MRV activities for the French-speaking countries will provide more training, learning and information than those for the English-speaking countries, where CEBioS will rather have a facilitating role.

The MRV piloting phase also pointed out that the results of this type of projects, including the co-production of policy briefs, can be substantially amplified with immediate impact on the livelihoods of local people, if they are followed by dissemination and awareness raising activities.

- For Phase II, MRV projects will be followed by publication of the project results (scientific papers, pdf series of project reports, policy briefs, videos, use of the media,...) and dissemination and awareness raising activities for target audiences like local people or managers, policy and decision makers.

The support for Masters and PhDs at UNIKIS in Phase I has been successful, even more so if considered in combination with the efforts of the VLIR-IUC with UNIKIS in the last 10 years. However this type of intervention not always contribute enough to the envisaged institutional reinforcement of UNIKIS or the CSB.

- This part of the programme will be discontinued and replaced by other types of support to UNIKIS/CSB related to the 5-year annual plan of the CSB.

## Main recommendations of the Mid-Term Evaluation

Guided by the results of the Mid-Term Evaluation (MTE), the formulation of Phase II was started early in 2018 taking the following **main recommendations** into account:

- Develop a clear vision about change processes, concerning biodiversity and the challenges under each specific objective;
- Improve results-based management instead of activity-based management;
- Organise a strategic reflection about the identity of CEBioS (secretariat-training provider-expertise centre) and clear communication about it;
- Improve learning and communication strategies;
- Develop strategic partnerships;
- Re-arrange the logframe to make it more balanced. Now, the SO1 is disproportionately large compared to the other SOs. Moreover, some SOs can be merged;
- Use also more qualitative indicators (“SPICED”) and improve the results-based management by creating a follow-up logframe with indicator targets per year;
- Better integrate the different components of the program;
- Pay more attention to awareness methodology, capacity building on awareness raising and follow-up of awareness projects;
- Be better integrated into the Belgian Development Cooperation;
- CEBioS should embrace the Theory of Change in its next phase.

The MTE also provided the following **recommendations**, not directly related to the process of formulation for Phase II, but nevertheless important for the implementation of the next phase:

- Simplify and add flexibility to the planning and reporting;
- Be more visible, known, recognised, nationally and internationally and improve communication strategy;
- Seek for simplified administrative and financial control;
- Pay attention to human resources issues.

Moreover, the formulation also considered the recent policies of the **Belgian Development Cooperation**, more specifically:

- Organize Development Cooperation according to the 3-track policy;
- Be more connected to the Sustainable Development Goals. Since they were ratified in 2015, Phase I, started up in 2014, could not formally include them in the strategy and the five-year plan. The formulation of Phase II now offers a nice window of opportunity to include them;
- Work more explicitly on ecosystem services, especially the potential to develop value chains that directly benefit local rural populations and their livelihoods, principally based on agriculture, but also on health issues. In other words, support more applied biodiversity research linked to a proper understanding and application of ecosystem services for the rural poor. This may result in a better acceptance of conservation measures of biodiversity and hence will contribute to the achievement of the (post)- Aichi targets<sup>5</sup> of the CBD strategic plan;
- Involve the private sector for achieving the SDGs in the partner countries;
- Continue to be an active member of the DGD initiated “strategic dialogues” in order to execute more synergies and complementarities with the other Belgian ACNGs in the field.

<sup>5</sup> Aichi targets, see <https://www.cbd.int/sp/targets/>



## MTE recommendations implemented in 2018

The large SO1 from Phase I has now been split in Phase II according to target audience: SO1 for scientists and SO2 for environmental agencies. The two new SOs are now better structured and less dominant in the overall programme architecture. The creation of “transversal results” (capacity building, CHM, MRV, awareness), now present in all 4 specific objectives and the creation of a number of integrative indicators will ensure a better integration of the subprogrammes. The tool Abc Taxa, but also the tool lexicon remain strong pillars in SO1 of Phase II. The marine modeling focuses now exclusively on Benin, while its activities with Vietnam will continue mainly with external project fundings.

CHM remains a strong subprogramme in Phase II and emphasizes a “train the trainer” approach, integrative approach with other focal points and ministries and South-South collaboration. Main emphasis remains in Burundi, Benin, DRC, Morocco (by extension training the Arab world) and West Africa.

Meanwhile the ToC workshops have been done. A budget is set aside for training on awareness raising techniques for CEBioS and South partners. Many workshops are planned for alumni, GTI, MRV and CHM to disseminate knowledge and raise awareness capacities. The production of policy briefs together with our South partners will always be accompanied by a follow-up for information and dissemination to target audiences. The expertise built up about policy briefs will be transferred to AfricaMuseum on their demand. A communication officer has been recruited.

The FEDtWIN profile for BIOPOLS (group to which CEBioS belongs) has been submitted for approval. The first round (2018) failed however. A new submission in 2019 is planned. The MoUs with Enabel and WWF are now signed.

The MRV component is now a transversal result and appears in SO1 (scientists), SO2 (environmental agencies), and SO3 (policy makers). The cooperation with the successor of the KLIMOS programme will be explored and promoted whenever possible. MRV

outputs will always be closely linked to awareness and dissemination activities to raise the impact.

The Nagoya Protocol, being one of the protocols of the Rio CBD convention, is now integrated under policy (SO3) and awareness (in all SOs, according to target audiences). The implementation of the Nagoya protocol is just starting, both in Belgium and in the South. Appropriate indicators have been developed for that.

ToC workshops in Belgium and with partners have been realized. Tabular reporting is now a fact, with the new format of the annual plan 2019, to be found as part of the five-year programme. The indicators at the level of the SO and the results will now ensure a better reporting on the results, outcome and impact. The budget, operational plan and annual plans are now all connected to the logframe to ensure an improved results-based management (exel). The budget is now more balanced between the SOs.

Calls (GTI, CHM, awareness, MRV) are under review and will better reflect the increased sense of connecting biodiversity to poverty reduction and sustainable development.

Thanks to several meetings between CEBioS and central RBINS services and the Belspo organized financial audit (December 2018), as well as the new financial guidelines of DGD for RBINS and AfricaMuseum, CEBioS is in the process of seriously improving its financial and administrative processes (e.g. better accounting tables installed by external consultant, plan to learn from Belspo tools, writing of financial guidelines for CEBioS and for South partners with simplified lump sum approach if possible).

The new logframe and budget provide for more flexibility to participate to the strategic dialogues and learning trajectories, as well as developing synergies with other Belgian actor with an own “synergy fund” under SO4. Appropriate indicators are now installed.

# Risk management

The policy of the current Belgian administration is to focus on fragile countries. This is the case for DRC and Burundi. However, this potentially entails certain risks. We had the chance to work with very reliable institutional partners in Benin, Burundi and DR Congo. Proximity and personal involvement created a common sense of responsibility and accountability. The operational level of the research institutes, universities and environmental administrations was independent enough from recent political developments to remain active and functional and be able to implement our cooperation programme. Lack of reporting response by certain focal points in the Sahel countries or of some local park administrations incited us to focus on other partners. Every transfer of funds is always accompa-

nied by a contract specifying budget, timeline and deliverables. Every grant and project is finalised by a report and self-evaluation forms (for the grants). The budget of every project is first negotiated with the partners in order to secure adherence to financial guidelines and deliverables in the context of a logical framework. Multiple controls at the level of RBINS central accountancy and by the CEBioS staff ensure severe safeguards to avoid financial errors or bad governance issues. Unfortunately, CEBioS deplores the sad loss of two strong “champions”, Mr. Benoit Nzigidahera (OBPE, scientific director, Burundi) and Mr. Olivier Demunck (Clearing-House Mechanism, CBD, Montreal), who were strong drivers of our cooperation during Phase I.

Summary of main risks and mitigation measures during Phase I (Risk score = impact (range 1-5) \* probability (range 1-4))

Risk	Risk score	Mitigation
POLITICAL		
1. Embassy or diplomatic rotation	4 ●	Re-inform new embassy personnel about CEBioS programme, produce paper and digital documentation about CEBioS, country files, etc.
2. Conflicts, political instability, bad governance, corruption, hidden agendas, fraud	6 ●	Only implement what is possible and allowed by Belgian policy of Foreign Affairs, remain transparent and proactive about values of good governance, decrease project volume or retract from cooperation if necessary, refer to and apply integrity charter of Belgian Development Cooperation, be vigilant with financial reports, implement monitoring locally.
ECONOMIC		
3. Banking systems not well developed in the South, weak local financial resources, lack of alignment between bookkeeping systems, varying currency exchange	4 ●	Ensure transparent financial management / align whenever possible or be aware of different systems / add some capacity building about financial management in institutional cooperation, beware of substitution of local capacities, keep improving administrative processes internally and with partners.
4. Accountancy system at RBINS could be better aligned to CEBioS daily activities	6 ●	Improve communication and develop common tools for improving work flow between CEBioS and RBINS accountancy systems.
SOCIAL		
5. Poor demand for synergies/ cooperation from AICNGs, Enabel, poor involvement in development of the PICs	6 ●	Be visible, communicative, be on the agenda of others, through proactivity in strategic dialogues, policy advice to DGD etc., add elements into the learning trajectory of the strategic dialogues, organize events promoting the science-policy-development interface (see events of CEBioS in 2015 and in 2018).
6. Lack of interest or low budgetary priority for biodiversity amongst actors in Development Cooperation and amongst authorities in the South	4 ●	This is one of the reasons why CEBioS exists: organising awareness and sensibilisation for biodiversity in the South linked to development in order to promote the Millennium Development Goals and the Aichi targets (Phase I), or the SDGs and post-Aichi targets (Phase II).

7. Difficulty to find enough Belgian experts wanting to spend their time on capacity building in biodiversity research with South students. Lack of enough expertise on awareness and social science aspects.	6 ●	Due to shrinking budgets for taxonomy and environmental studies in general, the number of Belgian experts is decreasing on the one hand and the pressure on the remaining experts to work only for academically or financially rewarding projects, is increasing, both in the North and in the South. CEBioS will have to work hard to be convincing enough to mobilise expertise by stressing the win-win of such collaborations. Sometimes, for specific expertise touching on Payment for, or valuation of Ecosystem Services, agro-ecology and agro-forestry, as well awareness and stakeholder engagement methodology, CEBioS needs to have the reflex to seek external help of short-term consultants. Contracting a FEDtWIN candidate in that field would be very welcome.
8. High turn-over of personnel with the South partners and gender issues	6 ●	The paradox of capacity building in partner institutions, is that well-trained individuals will look for more rewarding jobs in the NGO or the private sector and hence will be leaving the institution. CEBioS always tries to receive some guarantees about a stable future position for the trained individuals. On the other hand, these individuals will use their expertise and services in other jobs in their country, in most cases for the cause of biodiversity, which can be perceived as useful for society. The strong bias towards male scientists and managers in the global South is a real concern. CEBioS should always encourage female candidates in the different subprogrammes and sometimes instore strict quotas as well.
TECHNICAL		
9. Weak logistics, management, administrative and financial capacities / lack of infrastructure, equipment, consumables, internet with the South partners	6 ●	Capacity building at project level / include small equipment in projects / seek efficiency, digitalisation of processes, alternative energy sources such as solar, use of drones.
10. Ambitions by CEBioS not matched by existing expertise or field reality in the South	6 ●	CEBioS has the ambition to further develop and to be recognized as an expert centre concerning the biodiversity-development interface within the group "BIOPOLS" of the Operational Directorate "Nature" of RBINS. However, this is only possible if its staff remains abreast and proactive, with regards to the latest developments in IT tools (e.g. CHM and other platforms), as well as for scientific skills in conservation, ecosystem services, rapid assessment, habitat monitoring and policy skills in UN conventions negotiation, IPBES and OECD working groups, etc. Continuous learning is the key word. Some external drives such as the Belspo funded EVAMAB project, the ARES funded mycology project or the cooperation with KLIMOS greatly contribute to increased staff knowledge through extensive cooperation with academic colleagues. As explained under factor 7, CEBioS sometimes will be consulting for others (e.g. Enabel) or seek expertise from external consultancy (outsourcing when complementary skills needed).
ENVIRONMENTAL		
11. The environmental risks for the CEBioS program are rather situated in the risks of natural disasters such as flooding, drought, fire, damage by climate change, or other human induced degradation such as deforestation and poaching and hence changing/ impoverishing the protected areas and the management options.	2 ●	Climate change or other human induced degradation of the environment are part of the habitat dynamics monitored by the CEBioS partners or studied by South scientists supported by CEBioS. So it is rather an inherent element of the programme. Nevertheless, it is important that CEBioS remains up-to-date regarding possible techniques of monitoring, and conservation management as e.g. developed or promoted by IUCN, CBD and IPBES.
LEGAL		
Legal risks at the level of CEBioS are minimal, since it is embedded in a federal institute and is considered as a programme of the Institute.	1 ●	Produce legally sound or water tight contracts, MoUs, after fiat by the internal juridical service. Work toward leaner and more efficient administrative processes.
Legal risks in the South are perceived at the level of non-application of environmental laws by local population or beneficiaries of the programme, but also in a political economy context, such as corruption or fraud.	4 ●	The mitigation possibilities are rather limited since it is up to the local authorities to cope with this problem. However, CEBioS can be of support to promote CBD directives and explain the Nagoya Protocol and its implementation measures. For fraud and corruption, see factor 2.



# Recommendations of the financial audit (January 2019)

(In French)

## Administration

- Développer une application spécifique pour gérer l'ensemble des interventions liées à la bonne gestion du projet CEBioS (MIRABEL ?).
- Formaliser un plan de personnel pour la durée du prochain programme 2019-2023.
- Mettre à jour la base de données et s'assurer régulièrement qu'elle est complète.
- Développer des indicateurs/tableaux de bord standards préformatés.
- Développer un outil pouvant gérer un calendrier proactif (GANTT ?).
- Formaliser une procédure écrite sur la gestion des appels à projets.
- Organiser "l'ownership" des SOs sur des critères d'efficacité.

## Finance

- Veillez à une meilleure répartition budgétaire entre SOs
- Elaborez un véritable budget opérationnel au plus proche des dépenses réalisées au cours des 5 dernières années.
- Implémenter un outil de gestion pour la réconciliation budget/dépenses (art. budgétaire) : Business Object en Excel/module spécifique "gestion de projets". En concertation avec la première action.
- Se concerter avec le MRAC pour uniformiser les tarifs de per diem.
- Eviter les transferts cash de la main à la main. Ecrire une instruction dans ce sens.
- Revoir la politique de justification des dépenses locales. Se concerter avec le Service comptable, écrire un guide, mettre à jour les contrats en conséquence.





# 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” ap-

proach 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.

## Result indicators

We refer to the executive summary of this report for a detailed account per SO. We also refer to the ‘success stories’ at the beginning of this document.

### SO1- knowledge

Through 110 scholars from developing countries trained on the taxonomy of important taxa linked to mushrooms, pollinators, termites, yam, bushmeat, marine models, zoonoses, coffee, conservation and others, the CBD Global Taxonomy Initiative and CEBioS' work in DR Congo and Benin, resulted in the publication of 86 scientific articles. This brought the grantees and their institutions in the international scientific spotlights and served as leverage for their scientific careers through the obtention of academic degrees, promotions or accreditations. Moreover, our alumni became successful competitors on the international fund-raising market, e.g. at the International Foundation for Science (IFS, Stockholm), Bio-Bridge (CBD), Man and Biosphere (UNESCO, Paris) and the D4D competition (DGD, Belgium).

DRC: four lexica were published, co-developed by

users of the local ecosystems and CEBioS staff, enabling 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 encountered huge success and the local demand is very high. They are considered as invaluable tools in the field of conservation management. After years of CEBioS' supported research on termitosols 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.

### SO2- information

With more than 500 people trained in the use of the CHM website tool through workshops in 27 countries and in Belgium, CEBioS made a significant contribution to the CBD strategy to enlarge access to biodiversity information worldwide. This Belgian contribution was internationally acclaimed and recognized through several awards. In 12 partner countries, more than 4000 web pages were uploaded on the national CHMs. Five regional meetings in Africa resulted in more networking and exchanges of best practices, as well as streamlining of CHM procedures. “Train the trainer” resulted in more capacity building by Morocco in the Arab world.

### SO3- awareness

62 projects in more than 8 countries were implemented on awareness raising. 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 environment learned to know each other and worked together in DR Congo. CEBioS staff contributed to several book chapters related to the biodiversity in DRC. Two major colloquia with the active participation of the Ministry of Development Cooperation highlighted the CEBioS programme in 2015 and in 2018.

## SO4- policy

CEBioS had a proactive role as part of the Belgian delegation to the SBSSTA, SBI, CHM-IAC and COP meetings, both in the negotiation process on specific items (capacity building, CHM, bushmeat, mainstreaming) as in the organisation of side events with (1) UNEP in the COP-12 in S-Korea and (2) in cooperation with the Belgian embassy in Egypt for the COP-14. The coordinator was also European representative in the Chennai CBD-led meeting on mainstreaming in 2014. CEBioS also contributed to two technical papers by OECD-Environet. The policy support to DGD was evaluated positively by the “Dienst Bijzondere Evaluatie”.

## SO5- MRV

12 high impact policy briefs were produced with South partners in the DR Congo, Benin, Burundi, Peru, and Vietnam, presenting key scientific project results and recommendations for decision makers. 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 the Pendjari Biosphere Reserve, uptake of indicators in development plans. MRV succeeded through 26 small projects (and 15 follow-up awareness projects) to let work scientists and local authorities together to dig up grey literature and data to feed national indicators on biodiversity. The capacity building approach in MRV was subject to more than 4 scientific papers published by CEBioS scientists and South partners. This enables CEBioS to remain at the forefront in terms of scientific credibility.

## SO6- Nagoya Protocol

The CEBioS support to OBPE in Burundi enabled this administration to lead a participatory national consultation process between the Ministries of Environment, of Health, the Université du Burundi and the main association of traditional healers. They signed an MoU to implement a fair access to the benefits of medicinal plants in the spirit of the Nagoya Protocol. In the DR Congo, CEBioS organised a seminar on the Nagoya Protocol and its implications for international research for over a hundred participants. Later on, it facilitated the development of a test procedure for the export of samples for scientific research, run by the CSB and the National Focal Point for Nagoya.

## External projects

CEBioS was successful in securing external competitive funding as a (co-)promoter or partner from VLIR-UOS, ARES and Belspo for 6 projects, and from Unesco-Mab (Belspo funding) for the EVAMAB project. All projects related to the core mandate of CEBioS, i.e. capacity building in our partner countries about biodiversity and sustainable development, with special focus on the lakes Tanganyika (Burundi) and Manyara (Tanzania), mushrooms and their value chain (DRC, Burundi, Rwanda), and fish and their parasites (DRC).



# Monitoring table

SO1, knowledge, science				
Nr. of IR	IR	Output indicators	2014	2015
<b>1</b>	<b>1.1</b> GTI extern	<b>1.</b> National authorities use the information provided by SO1 in the national indicator process;		
		<b>2.</b> 12-18 students trained/ year will produce: 8 posters and/ or oral presentations given at national or international events/ year;	18 stages/ 2 short symposia by trainees	20 stages/ 7 short symposia by trainees
		<b>3.</b> 5 publications in scientific journals or general media/year;	15 articles, see full list here: <a href="http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2014">http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2014</a>	10 articles, see full list here: <a href="http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2015">http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2015</a>
		<b>4.</b> 3 who graduate (Master or Ph. D.)/ year;	2 PhDs: Cameroon and Ivory Coast/ 1 master	2 PhDs in Benin/ 1 Master/ 1 GTI alumnus accepted in CAMES/ 1 GTI alumnus promoted lecturer Ivory Coast
<b>2</b>	<b>1.2</b> Quality scientific knowledge...			
	<b>1.2.1 (A)</b>	A		
	GTI intern	<b>5.</b> nr. of trained students trained / year will produce;	4 projects (Ecuador, Ivory Coast, Vietnam, RD Congo) ; 21 people trained in situ	5 projects (Ivory Coast, Vietnam, Benin, RDC, S Africa) ; 49 people trained in situ
		<b>6.</b> publications in scientific journals and general media;	15 articles, see full list here: <a href="http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2014">http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2014</a>	6 articles, see full list here: <a href="http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2015">http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2015</a>
		<b>7.</b> graduates (Master or Ph. D.);		
		<b>8.</b> in-country training courses as multiplier effect and additional people trained. Results will be valorised through publication in renowned science journals. They will also be used under SO1.4. A and B to produce vulgarisation tools.	For 2014, 2015 and 2016, reports are available online here: <a href="http://www.taxonomy.be/gti_calls/grants_awarded/grants-rbins-2014">http://www.taxonomy.be/gti_calls/grants_awarded/grants-rbins-2014</a>	
	<b>1.2.2 (B)</b>	B		
	RDC, Benin, Burundi habitat monitoring	<b>9.</b> At least 1 training per country is organized and is followed by two applications campaigns on the field. 30 people trained in the habitat monitoring;	<b>Burundi</b> OBPE: Recording of standardized observations on the vegetation, 14 participants; <b>RDC</b> UNILU: Training on forest dynamics and ecosystem services inherent to termite mounds (Luswishi), 2 PhD students; <b>Benin</b> UAC: impact of fires on habitats in Pendjari, 9 participants	<b>RDC</b> UNIGOM: 1 workshop Ecosystem services: Edible mushrooms of the Albertine forests, 15 participants; DRCBL (Bombo Lumene): 1 workshop on the habitats, 9 participants; <b>Benin</b> UAC: the use of fires and their impacts on habitats in the PNP, 8 participants

2016	2017	2018	TOTAL
1 GTI alumni workshop Benin / 10 awareness projects by alumni, with production of outreach material (posters, videos, briefs) See website here: <a href="http://www.taxonomy.be/project-s/gti-alumni-workshop-2016">http://www.taxonomy.be/project-s/gti-alumni-workshop-2016</a> And here: <a href="http://www.taxonomy.be/gti_calls/grants_awarded/gti-awareness-projects">http://www.taxonomy.be/gti_calls/grants_awarded/gti-awareness-projects</a>	1 restitution workshop in April 2017 of 10 years GTI cooperation on entomodiversity in Vietnam. The workshop was in Hanoi and Cuc National park and included scientists from Belgium, Italy, France, Cambodia and Vietnam. The restitution was done to the directors of the national parks. A film crew made a documentary for Canvas TV.		The transfer of GTI knowledge to the national indicator process is still to be more developed and is more to be reported under SO5, MRV. ●
13 stages/ 12 presentations at GTI alumni workshop in Cotonou, Benin/ Presentation GTI RDC on L. Tang. Fish/ 1 abstract zool. Congress Awerpen	18 stages	12 stages	81 stages ●, 21 posters or presentations ●. The support of scientific outreach by former grantees needs more follow-up.
14 articles, see full list here: <a href="http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2016">http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2016</a>	7 articles, see list here: <a href="http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2017">http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2017</a>	6 articles, see list here: <a href="http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2018">http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2018</a>	At least 45 publications reported (but more were published). ●
2 PhD in Cameroon and Germany/ 1 Cuban GTI alumnus got a 1 year-scholarship from the JSPS (Japan)	2 PhD in Benin and DR Congo	5 PhD: 2 in Côte d'Ivoire, 2 in DR Congo and 1 in Rwanda	At least 19 graduations with support of CEBioS (reported). ●
3 projects (Benin, SE Asia, Burundi) ; 37 people trained in situ	5 projects (Benin, Cambodia, Mozambique, Vietnam, Tanzania)	4 projects (Benin, Burundi, Cambodia, Vietnam)	At least 107 South staff trained, but more (2017 and 2018 certainly at least 20). ●
5 articles, see full list here: <a href="http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2016">http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2016</a>	2 articles, see list here: <a href="http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2017">http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2017</a>	7 articles, see list here: <a href="http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2018">http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti/2018</a>	35 articles ●
			See indicator 4
	Preparation of a policy brief on insect biodiversity in Vietnam and its importance for conservation in National Parks.		This relates to indicator 5, with 21 GTI projects in the South, and the high quality policy brief on insect biodiversity in hotspots in Vietnam. The follow-up of materials produced could be improved. ●●
<b>RDC+Burundi+Benin</b> ICCN, OBPE, UAC: 1 regional workshop to share lessons learned on the monitoring of habitats. PNKB, 25 participants	<b>RDC</b> UNIGOM: 1 regional workshop on Ecosystem services: Edible mushrooms from protected areas, 50 participants (DRC: 39; Burundi: 5; Rwanda, 3)	<b>RDC+Burundi+Benin</b> ICCN, OBPE, UAC: 1 regional workshop to share lessons learned on the impact of fire on the vegetation and therefore, to be able to reduce negative effect and to make the most of the benefits of fire for maintaining habitats and their biodiversity. PNRu, 30 participants (DRC: 4; Burundi: 23; Benin: 3).	Each year at least 3 trainings were given, not always in the 3 countries, sometimes 2 in RDC for example. In 2016 and 2018, the regional trainings combined all 3 countries and promoted synergy and complementarity as well as added value and cross-fertilisation. ●

Nr. of IR	IR	Output indicators	2014	2015
		10. syllabi produced and/or updated (see also 1.4.B);	OBPE: 1 new syllabus	ICCN: 1 syllabus updated
		11. equipment purchased;	UOB : 1 Kit Gorilla pour assurer l'autonomie de l'énergie pour le matériel informatique ; Appareil photographique ; 1 séchoir portable + accessoires	UNIGOM : 1 Kit Gorilla; 1 GPS ; 1 Appareil photographique ; 1 séchoir portable + accessoires UNILU : 1 drone phantom 3 professional + 3 Telemeters
		12. 4 articles published in peer reviewed journals;	1 chapter in book Garamba; 1 chapter in "Mountains: Geology, Topography and Environmental Concerns"	1 article (UOB)
		13. 4 lexicons will be finalized and used;  see also SO1-4b	1 lexicon on PN Kahuzi Biega published in 2013	1 lexicon "Habitats Nature Reserve Itombwe" significant progress
		14. over 5 years: 2 PhD students;		2 PhD on the way (termites, UNILU)
		15. 6 master students finalised their thesis;	3 students supported (on termites in RDC, Katanga)/ 2 masters (RDC at ERAIFT, UNIKIN on plants ecosystem services)	2 masters (UNILU on miombo)/ Benin: 1 DEA, 1 Master/ in preparation: 1DEA (Benin), 1 Master (Benin), 2 licences (Benin), 3 masters at UB (cfr OBPE)
		16. 5 oral contributions (participation to meetings, conferences, lectures, seminars...);		
		17. 5 information exchange sessions have been organised in relation with poverty reduction related subjects of the studies.		1 large CEBioS event 'biodiversity, a natural heritage', held in November at RBINS, 270 participants
1.2.3. UNIKIS & CSB, RDC	C			
		18. 3 PhD students identified;	3 PhDs identified	3 same students
		19. 3 PhD students/ year followed training supervised by expert in Belgium/ elsewhere (total=15);	3 PhDs training in BE	3 PhDs training in BE
		20. for 3 PhD students: 1 local visit/ 2 years by supervisor (total=9);	1 local visit by BE sci	1 local visit by BE sci
		21. 1 'atelier de restitution'/ year for the 3 PhD students after their training framed in the context of poverty reduction related subjects of the studies (total=4+the PhD defence);	1st International coference on biodiversity in CSB Kisangani, 240 participants, >150 abstracts/ 21st Benelux Congress of Zoology, Liege, Belgium	9th European Congress on Tropical Medicine and International Health (ECTMIH), 6-10 September 2015, Basel , Switzerl/ Royal Academy For Overseas Sciences Multidisciplinary Workshop, Vulnerable Coastal Areas (Brussels, Thursday 10 December 2015) (3 abstracts)



2016	2017	2018	TOTAL
		OBPE: 1 syllabus updated	2 syllabi with some updates. This indicator suffers somewhat from a lack of definition of what CEBioS means with 'syllabus'. Part of the role of a syllabus is incorporated in the lexica. ●
UAC : 2 GPSs + 7appareils photo	UNIGOM: 1 Goal Zero 61209 Yeti 400 Batterie + 1 chargeur solaire guide 10+		Cameras, GPS, solar batteries, drone supported the field work of the partners. The tablets for Burundi were not successful due to technical constraints. ●
1 article (UAC)	1 article (UOB) 1 article (UNIGOM)	1 chapter in a book on the PNVi	At least 7 articles reported in indicator table, but more articles as spin-offs are known. ●
1 lexicon on Kibira N.P. (Burundi) published/ lexicons (PN Rububu, Burundi; Itombwe Natural Reserve, DRC ), manuscripts are almost ready	1 lexicon on PN Pendjari (Benin) was released		4 lexica published ●
			2 PhD students graduated ●
1 DEA on mushrooms (UNIGOM) (4 similar theses in 2014-2016), 4 masters at UB (cfr OBPE)		8 PhD launched (UNILU:3; UNIGOM-UNIKIS : 1; UNIGOM-UCL: 1 on PNVi + PNKB; UAC on PN Penjari: 3)	At least 20 masters or DEA, and at least 8 PhDs ongoing ●
1 abstract+poster at Young Researchers' Overseas Day, Royal Academy for Overseas Sciences, Brussels, 13 December 2016/ 28 abstracts were presented at the workshop of the Mycologists Network in Great Lakes Region ( <a href="http://mycorgl2016.jimdo.com/programme/">http://mycorgl2016.jimdo.com/programme/</a> ) - Belspo programme	18 oral communications at the 2nd workshop of the Mycologists Network in Great Lakes Region	9 oral communications At the regional workshop on the management of vegetation fire in protected areas Support to 4 South scientists for participation to Pan-African Fish and Fisheries Association (Mangochi, Malawi, September 2018)	at least 34 oral presentations ●
1 regional workshop in PN Kahuzi Biega, RDC, 25 stakeholders, 3 from Benin, 5 from Burundi and 17 from DR Congo participated+ presentation of lexicon on PNKB		5 (2 in Burundi ; 2 in Benin; 1 in DRC)	Information exchange sessions at different levels, from local (Burundi, RDC to global (CEBioS: 2) ●
2 same and 1 new	2 same and 1 new	2 same and 1 new	3 PhDs accomplished ●
3 PhDs training in BE 1 trainee obtained Vervenne Grant (KULeuven) , collaboration with ITG, Prof Jacobs	3 PhDs training in BE participation of the 3 trainees in VLIR-Monkey Pox project participation of the 3 trainees and BE sci in Ebola source monitoring (outbreak Bas-Uele)	3 pilot project submissions evaluated and executed participation of the 3 trainees in VLIR-Monkey Pox project	4 PhDs accomplished ●
1 local visit by BE sci	1 local visit by BE sci	Participation to the European Coingress on Tropical Ecology, Brussels, February.2018 (indirectly, as contributors to posters) Restitution of preliminary results of the pilot studies to CSB en Faculty Staff	Students visited Erik Verheyen in 2014, 2015, 2016 and 2017. In 2017 they accomplished surveys on bushmeat in Brussels. ●
23th edition of the Benelux Zoology Congress: Zoology2016 Congress, University of Antwerp, 15-17 December 2016/ International Bat Research Conference 2016, Durban, South Africa, 31st July – 5th August 2016 (4 abstracts)	Participation to the European Coingress on Tropical Ecology, Brussels, February.2017	Participation to the European Coingress on Tropical Ecology, Brussels, February.2018 (indirectly, as contributors to posters) Restitution of preliminary results of the pilot studies to CSB en Faculty Staff Participation of trainees in recording of a PANQ	Participation in at least 4 major international conferences and more local ones. ●

Nr. of IR	IR	Output indicators	2014	2015
		22. 2 publications in scientific journals/ PhD student (total=6).	0 A1 articles, 2 abstracts	2 A1 publications; 2 abstracts
	1.2.4. Marine modelling	D		
		23. 1 review of the presentation of the specific research questions of the partner institutes;	July 2014: formulation with IMARPE in Peru, logframe, problem, objective trees, stakeholder's analysis, operational plan, MoU signed (3-02-2015) and training of 8 students	Formulation mission Vietnam, logframe, problem, objective trees, stakeholder's analysis, operational plan, MoU signed
		24. number of scientific output (presentations, conference);	None	None
		25. strategic management plans concerning COHERENS for the institute and local authorities;	None	None
		26. number of qualified trainee ex-post reports within the visitors programme;	December 2014: training at RBINS of 3 Peruvians in marine modeling	Training in Belgium <ul style="list-style-type: none"> <li>• 2 students from Vietnam</li> <li>• 3 students from Peru</li> </ul>
		27. 3 policy briefs are to be produced by the partners;	None	None
		28. documentation of the developed modules for COHERENS available.	e-coaching	Official launch of web-site with forum maintenance e-coaching

2016	2017	2018	TOTAL
3 A1 publications, 4 abstracts	6 A1 publications, 3 abstracts, 1 thesis defended	1 A1 publications, 3 abstracts, 2 theses defences scheduled for academic year 2018-19, 3 A1 papers in preparation	13 publications and many abstracts ●
Evaluation mission and technical meeting in Vietnam Identification mission at IRHOB in Benin, 1 year MoU signed	Closing workshop of 3 year cooperation with IMARPE, Peru and restitution to the stakeholders, Lima Start of cooperation with IRHOB, Benin, in situ training in sept. 2017 Contact to IRD and Un. Dakar senegal, planning of identification mission Contacts with Zanzibar	Formulation mission and set up of MoU with IRHOB Benin Call for biobridge funding for sensor development project with a positive outcome Participation to D4D competition organized by KMMA, 2nd prize Call for bilateral project between Vietnam and Belgium, part of the exit strategy, ranked first on Belgian side, no info from Vietnamese side available yet Introduction of Tine Compennolle to IMER, to bring in the economic point of view of nature conservation. 1 Thesis	Identification, formulation, mid term technical evaluation and closure workshops gave ample opportunities for this indicator. ●
Participation of Vietnamese scientists to conference in Norway (2 oral presentations) 1 participation to conference in Lima (poster) Publication in peer reviewed journal (exit strategy India) 1 PhD (exit strategy India)	3 participations (2 oral 1 poster) to conference in Chile 1 preparation for peer reviewed article Vietnam 2 thesis in Peru (1 bachelor, 1 Master), 1 PhD in progress Peru	1 PhD in vietnam, finished Exit strategy: visit of two indonesian researchers supported in the past with the CEBioS programme, they used their own funding for their stay of 4 months Creation of youtube movie for sensor development in Benin ( <a href="https://www.youtube.com/watch?v=or_HrW-L3qc">https://www.youtube.com/watch?v=or_HrW-L3qc</a> ) Invited pitch talk about CEBioS and marine modelling at OORI event ( <a href="http://www.oceansandlakes.ugent.be/sites/default/files/abstract_OORI.pdf">http://www.oceansandlakes.ugent.be/sites/default/files/abstract_OORI.pdf</a> )	The first two years, the students had to integrate the knowledge. From 2016 onwards the scientific output increased steadily, both for Peru and Vietnam. ●
None	Dissemination of policy briefs Vietnam to authorities planned end of 2017 and 2018 / idem for PERU, already contacts with private fisheries sector	None	High quality policy brief in Spanish in Peru with good distribution and support by Belgian embassy. However, for Vietnam the policy brief is planned in 2019. Lack of uptake into strategic plans and actions of the partner institutes and authorities. There CEBioS needs to pay attention or adapt the indicator. ●
Training in Belgium • 2 students from Vietnam • 3 students from Peru	Training in Peru of 8 students 1 student Vietnam Request to give a training in Columbia (exit strategy, unfortunately no funding available)	1 visit from Vietnamese researcher	15 visits by scientists from Vietnam and Peru to Belgium and their reports. ●
None	1 policy brief about the 4 bays in Peru being produced/ 1 policy brief on Halong Bay Vietnam planned for June 2018	Policy briefs in preparation, planned for beginning of 2018	See indicator 25
Production of 'COHERENS for dummies' • 'How to' files, a more practical approach for modelling, made available on web-site • Request through the forum for help in setting up a hydrodynamic model resulting in a collaboration with Benin • e-coaching • 2 requests for an internship through the web-site (2 Iranian students)	Course notes for three weeks training programme (visualisation, communication, theory and practical application) e-coaching	e-coaching Youtube tutorials on how to use the modelling software in prep. First one is expected beginning of 2018	Several attempts to produce didactic materials ●●



Nr. of IR	IR	Output indicators	2014	2015
3	1.3. Monitoring data is fed into national indicator processes	29. In at least 4 partner countries of the Belgian development cooperation data from monitoring activities are integrated in at least one of the indicators for the follow up of the respective national strategy.	Postponed to 2015	Within a competitive MRV call, five projects were selected to work on indicators at different levels (from feeding local data into indicators, to indicator policy at the national level), from: Benin (2x), Burundi, the DR Congo and Morocco.  See SO5
4	1.4. Lexica and Abc Taxa	30. At least 5 Abc Taxa manuals have been produced during the 5-year period, dissemination per volume;	Abc Taxa: list of volumes, publication of volume 14 "liverworts and hornworts of Rwanda"	Abc Taxa: publication in 2015 about sawflies
		31. supporting/ disseminating materials formerly produced;	Poster at CSB, Kisangani, flyer at side event 'Mainstreaming' COP12, flyer CEBioS	Event to name the new species of phasmid at the RBINS/ Posters at conferences (Rochette, Laudoit, De Koeijer)
		32. 4 lexicons;  See also indicator 13	1 lexicon on PN Kahuzi Biega published in 2013/ 1 lexicon on Bombo Lumene published in 2011/ Lexicon in Burundi: collection of data is ongoing, publication expected in spring 2015	1 lexicon "Habitats Nature Reserve Itombwe" significant progress/ Lexicon in Burundi: collection of data is ongoing, publication expected in 2016
		33. syllabuses produced and/or upgraded;	Guest lecture by L. Janssens de Bisthoven at the KU Leuven (Master aquatic ecology and sustainable development)	Guest lecture by L. Janssens de Bisthoven at the KU Leuven (Master aquatic ecology and sustainable development)
		34. participation by staff members in 5 events relevant to taxonomic popularisation tools development/ capacity building;	Participation of Marie-Lucie Susini to an ISF workshop in Benin	CEBioS participated to capacity building congress Nairobi, Kenya CEBioS participated to capacity building congress South Africa
		35. feedback on the use of courses available;	None	None
		36. results of at least 5 projects and public awareness activities under SO1-1 and SO1-2 are published on the internet on <a href="http://www.taxonomy.be">www.taxonomy.be</a> or a national CHM website if available.	Projects from SO2 and SO3 started in second half of 2014 and reports and results are expected in 2015. Posting on CHM will be done in 2015.	Projects from SO2 and SO3 started in second half of 2015 and reports and results are expected in 2016. Posting on CHM will be done in 2016.
SO2, information flow				
5	2.1. Expertise in information management is built	37. 10 national training workshops;	3 national training workshops (Rwanda, Burundi, Comoros, Sudan (SSC Morocco/Sudan)	4 national training workshops (DR Congo, Myanmar, Tanzania and Togo)
		38. 120 persons trained;	99 persons trained	162 persons trained

2016	2017	2018	TOTAL
<p>Within a competitive MRV call, five projects were selected in 2015 and 2016 to work on indicators at different levels (from feeding local data into indicators, to indicator policy at the national level), from: Benin (2x), Burundi, the D.R.Congo and Morocco. These projects were finalised in 2016 and outputs were disseminated (see SO5 for detailed output).</p> <p>Also in 2016, a new call was launched and 11 projects were selected with a focus on the DR Congo, to support the contribution of the regional level to national reporting processes. These projects are ongoing. Done, selected projects finished (2015 call) or ongoing (2016 call).</p> <p>See SO5</p>	<p>Follow-up of projects under the call 2016 along the three focal topics of bushmeat, charcoal and fisheries;</p> <p>Closing meeting in D.R.Congo for projects under 2016 call, including communication to scientists and policy makers both during the workshop and through published outputs, as for preceding call;</p> <p>Launch of the 2017 call towards English-speaking partner countries, hence reaching the predicted number of partner countries where MRV pilot projects would be launched.</p> <p>See MRV SO5</p>	<p>11 projects from 6 countries (Ghana, Kenya, Palestine, Rwanda, Tanzania, Uganda) selected and implemented.</p> <p>Closing workshop for two participants per project in Entebbe (Uganda) in September-October.</p>	<p>The MRV workshops created and stimulated exchanges of best practices and lessons learned on the development and implementation of indicators and nice policy briefs. However, the transfer of this co-produced knowledge at the national level (NBSAP) is still suboptimal. Mechanisms have to be analysed (hopefully with FED-tWIN candidate). ●</p>
<p>Abc Taxa: publication in 2016-2017 about diatoms in Congo and zambezi basins</p>	<p>Abc Taxa: publication of volume 17, "mushrooms of Haut Katanga"</p>	<p>Abc Taxa: publication in 2016-2017 about the parasites of African freshwater fishes</p>	<p>5 Abc Taxa produced, published and disseminated, one price for volume 14 ●</p>
<p>Posters at conferences</p>			<p>At least 15 dissemination materials produced. ● The monitoring of this material produced by partners with support of CEBioS is lacking.</p>
<p>1 lexicon on Kibira N.P. (Burundi) published/ lexicons (PN Ruvubu, Burundi; Itombwe Natural Reserve, DRC and PN Pendjari), manuscripts are almost ready</p>	<p>Lexica on Ruvubu and Ruzizi (Burundi) being produced/ lexicon on Pendjari (Benin) to be published</p>		<p>4 lexica published ●, see indicator 13</p>
<p>Guest lecture by L. Janssens de Bisthoven at the VUB (ICP Master Human Ecology)</p> <p>Guest lecture by H. De Koeijer about taxonomic research at UGent</p>	<p>Luc Janssens de Bisthoven gave conservation management and biodiversity governance to U Hasselt (Bachelors) and VUB (Masters).</p>	<p>Luc Janssens de Bisthoven gave conservation management and biodiversity governance to U Hasselt (Bachelors) and VUB (Masters).</p>	<p>Not really syllabusses, but lectures at VUB, U Hasselt, KU Leuven, UGent on biodiversity and development ●</p>
<p>CEBioS staff participated to GEOBON in Leipzig, GE</p>	<p>CEBioS staff participated to the European Congress of Tropical Ecology, Brussels</p>		<p>CEBioS staff actively participated in 5 events as described. ●</p>
<p>None</p>			<p>This indicator was ill designed and could not be reported properly ●</p>
	<p>Several postings on CHM of reports.</p>	<p>Several postings on CHM of reports. However, a case of plagiarism has been reported, so the way of posting process has to be reviewed and adapted.</p>	<p>Postings of reports on 'taxonomy.be' or on national CHM is done but reporting about it is suboptimal. ●</p>
<p>4 national training workshops (DR Congo, Morocco, Jordan, Côte d'Ivoire)</p>	<p>1 follow-up in RDC, Togo, Gabon</p>	<p>National training in Guinea Bissau</p>	<p>13 national training workshops ●</p>
<p>116 persons trained</p>	<p>100 persons trained</p>	<p>15 persons trained</p>	<p>At least 470 persons trained ●</p>

Nr. of IR	IR	Output indicators	2014	2015
		<b>39.</b> follow-up training has been organised in at least 8 partner countries;	Follow-up training in 2 partner countries (Burundi, Ghana)	2 follow-up trainings (Burundi, DR Congo)
		<b>40.</b> 5 countries participate in the information management/ CHM network through South-South Cooperation (SSC) with one of our partner countries;	4 countries participate in SSC through 3 South-South collaboration projects (Cameroun/ Morocco, Madagascar/ Comoros, West Africa region/ Togo-Guinea Bissau)	4 South-South collaboration projects (Cameroun/ Morocco, Madagascar/ Comoros, West Africa region/ Togo-Guinea Bissau, Togo/ Gabon)
		<b>41.</b> 70 % of the partner CHM sites have 20 pages added or updated /year;	80% of partner countries have added >20 pages in 2014	80% of partner countries have added >20 pages in 2015
		<b>42.</b> tool to follow-up the implementation of the national strategy is actively used in at least 5 countries.	Tool is actively used in 1 partner country and started in 4 others. Promotion of tool in Burundi and during regional meetings with partner countries.	Tool is actively used in 2 partner country and started in 3 others.
<b>6</b>	<b>2.2.</b> Information flows are improved	<b>43.</b> CHM websites running and regularly updated: 50% of websites updated Alternative indicator: information added on the CHM partner websites during 2014-2018 has increased with 20 % compared to the period 2008-2012;	100%: all websites have been updated with new information.	100%: all websites have been updated with new information.
		<b>44.</b> number of information meetings with different stakeholders in partner countries;	According to the projects, at least 10 meetings.	Through the different projects meetings were held in country with different stakeholders. The call was launched in 2015. 6 countries have started to work on 6 projects for CHM consolidation. 5 projects from 2014 are still running or closing in 2015.
		<b>45.</b> INECN strengthened: CHM website updated on a regular base (pages added/ year and number of visitors per year compared to baseline of 2012), library documented and used (number of books added in the library database, number of visitors to the library), 5+ scientific bulletins published;	OBPE: website has been updated with 500 % more pages. At the time of writing of the report no information available on books added to library database nor number of visitors. One scientific bulletin has been published.	OBPE: website has been updated with more than 400 pages. Due to civil unrest and the person responsible for the library having taken refugee status in Belgium no information on the library is available. Scientific bulletin has been published.
		<b>45 bis.</b> (added in 2017) equipment;		Start of process of buying solar panels for OBPE
<b>7</b>	<b>2.3.</b> Information is used to advise governance processes	<b>46.</b> level of activity of the network of partners: one regional workshop organised;	Regional workshop in Benin for West African francophone countries, African regional meeting with CBD for the CHM	Regional Workshop for Anglophone countries



2016	2017	2018	TOTAL
3 follow-up trainings (Togo, Niger, Tanzania)	1 follow-up training in Jordan	Follow-up training in Gabon, Burundi, Ghana, Guinea Bissau	12 partner countries ●
4 South-South collaboration projects (Niger/ Morocco, Morocco/ Gabon, Morocco/ Jordan, Morocco/ Syria)	6 countries participate (Jordan, Syria, Sudan, Gabon, Liban, Yemen)	6 countries participate (Jordan, Syria, Sudan, Gabon, Liban, Yemen)	S-S cooperation with at least 7 countries ●
80% of partner countries have added >20 pages in 2016	7 countries have added 20 + pages each year. 3 countries have added between 15 and 20 pages Only Rwanda and Mali haven't added any in 2017.	Will be known in January 2019	More than 70% and > 20 pages per partner country ●
Tool is actively used in 3 partner countries and started in 2 others. 3 countries are using the tool (Morocco, Benin, Burundi).	The tool is picked up by the MEA Knowledge management workgroup, EU and Switzerland. Till the development is satisfactory no new countries will be initiated.	DART tool is still in development. 3 partner countries and Belgium have used the tool to prepare their sixth national report.	Yes, indicator fulfilled in at least 5 countries. ●
100 %: at this moment all websites are updated regularly except Mali.	At this moment all websites are updated regularly except Mali and Rwanda. Mali's trained person has changed position and we stop for the time being the cooperation as this was the third person trained in 5 years.	Will be known in January 2019. 3 partner countries received CHM-awards during COP14: 1st price Burundi, 3rd price Morocco for established CHMs, 3rd price for Guinea Bissau for new CHMs.	More than 50% updated and more than 20% increased input on CHM. ●
Through the different projects meetings were held in country with different stakeholders. The call was launched in 2016. 4 countries have started to work on 4 projects for CHM consolidation. 8 projects from 2014 and 2015 are still running or closing in 2016.	Through the different projects meetings were held in country with different stakeholders. The call was launched in 2017. 5 countries have started to work on 7 projects for CHM consolidation. 5 projects from 2014, 2015 and 2016 are still running or closing in 2017.	Through the different projects meetings were held in country with different stakeholders. The call was launched in 2018. 5 countries have started to work on 5 projects for CHM consolidation. 8 projects from 2014, 2015, 2016 and 2017 are still running and closing in 2018.	At least 50 stakeholder meetings within CHM projects. ●
OBPE: website has been updated with more than 400 pages. Due to civil unrest and the person responsible for the library having taken refugee status in Belgium no information on the library is available. The first scientific bulletin of the OBPE has been published.	More than 400 pages added per year. Due to the civil strife in Burundi between 2014 and now the activities have slowed down due to lack of electricity, the solar pannels have been finally installed in october 2017. However the Internet connection hasn't been paid by OBPE. 2nd scientific bulletin has been published.	Will be known in January 2019; 3rd scientific bulletin has been prepared but will be special edition in commemoration of Benoit Nzigidahera who died in May 2018.	Strong drive by "biodiversity champion" scientific director of OBPE, Benoit Nzigidahera (+), indicator fulfilled. Careful to keep dynamics in scientific bulletin in the future. ●
Solar panels acquisition continued	Installation of solar panels at OBPE Bujumbura in October 2017	Maintenance of the Solar Panels done and training been given for maintenance	Solar panels officially installed in the presence of Burundese minister and Belgian ambassador. Some extra costs incurred due to delays and dédouanement. ●
Regional and sub-regional Workshop for Francophone countries (Benin, February and November 2016)	Regional workshop for francophone partner countries has been organised. A total of 6 regional workshops have been organized	Regional Workshop for francophone partner countries held in Belgium back to back to the conference of 28/05/2018. Regional Workshop for Arab countries coorganised in Egypt in march 2018. Total of 8 regional workshops organised or participated in.	Each year at least one regional workshop in Africa. ●

Nr. of IR	IR	Output indicators	2014	2015
		47. number of participation in EU and global governing activities by Be and partner countries;	WGRI-5, COP12, COP-MOP1	SBSTTA 19, CHM-IAC, Article 8j, OECD Environet Paris
		48. EU tool for the follow-up of the reporting on the national strategies is used in at least 5 countries for the reporting to CBD, related biodiversity Conventions and agreements;	Tool is actively used in 1 partner country and started in 4 others. Promotion of tool in Burundi and during regional meetings with partner countries.	Tool is actively used in 2 partner country and started in 3 others
		49. number of information meetings with different stakeholders in partner countries.	2 expert meetings Geneva, Copenhagen Luc Janssens de Bisthoven participated as European representative in Chennai meeting (India) on biodiversity mainstreaming organised by CBD.	2 expert meetings (Copenhagen, Geneva)
<b>SO3, awareness</b>				
<b>8</b>	<b>3.1.</b> Baselines provide an insight on the level of awareness and/or commitment	50. Number of public awareness projects completed;	2 projects on baseline study have been initiated (Benin/Madagascar)	1 project started (Burundi), 2 projects have finished (Madagascar and Benin)
		51. at least 3-5 countries will reply to the special call for projects and develop indicators for public awareness;	2 countries applied to the call (Madagascar, Benin)	One country applied to the call (Morocco); Burundi was accepted as institutional strengthening
		52. in 2018 and 2019 these countries and countries that did their baseline studies and indicators development in 2011-2012 will receive can submit projects for funding to redo the same studies as undertaken in the first years. This will facilitate them to study effects and change in conception of the Public awareness work done under SO3.2.		

2016	2017	2018	TOTAL
SBSTTA 20, SBI, CHM-IAC, COP13, OECD Environet Paris	No exact number for the partner countries can be given other than the participation paid for by CEBioS to COP. 4 persons have been paid for directly. CEBioS staff has participated in more than 4 international meetings each year, SBSTTA 21 OECD Environet.	No exact number for the partner countries can be given other than the participation paid for by CEBioS to COP14. 5 persons have been paid for directly. CEBioS staff has participated in more than 10 international meetings this year, SBSTTA 22, SBI2, COP14, 8 EU WPIEI meetings, CEPA-IAC, CHM-IAC, CHM 2018 Award Jury, Jury for Biobridge projects.	Participation in at least 18 global conferences for CBD and OECD, IPBES, and support to 9 partners to attend COP. ●
Tool is actively used in 3 partner country and started in 2 others. 3 countries are using the tool (Morocco, Benin, Burundi)	The tool is picked up by the MEA Knowledge management workgroup, EU and Switzerland. Till the development is satisfactory no new countries will be initiated.	DART tool is still in development. 3 partner countries and Belgium have used the tool to prepare their sixth national report.	Tool used in at least 5 countries ● see also indicator 4
	1 expert Meeting in Montreux > 14 information meetings have been organized in the partner countries	12 expert meetings organised in partner countries through the calls, CEBioS staff participated in + 10 expert meetings	CEBioS participated in at least 5 international meetings. ●
For the baseline studies 2 studies have been finalized at the time of this report: Benin and Burundi. Togo and DR Congo are undertaking their study under 2016 financing but haven't completed yet.	Togo has completed its baseline study as well as DR Congo. Niger has applied for the baseline study however due to money transfer problems it hasn't started the study.	Burundi applied to redo the study for the baseline. As Togo only submitted their report in 2018 it wasn't redone. Niger has finished their baseline study. RD Congo and Benin haven't applied to redo their baseline study.	At least 10 awareness projects; some difficulties with capacities to do baseline studies. ●
2 countries applied to the call (Tanzania and Togo). Tanzania wasn't accepted as two other projects not finished yet.	RD Congo applied for a project under the call 2016 but was too late to submit it.		6 countries applied to the call and received funding. ●
	2 of the countries that did their baseline study in 2011 and 2012 aren't any longer in the list of priority countries and will not be able to do this study in 2018 with our financing.	Burundi applied to redo their baseline study. Benin didn't apply for the call as too many other projects running at this moment and not enough personnel available.	This indicator was created to remediate on indicator 50 difficulties. ●



Nr. of IR	IR	Output indicators	2014	2015
9	3.2. Awareness and engagement are raised	53. Indicators on public awareness show a positive development between 2014 and 2018;	Collection of data on going with: • Benin: "Raising awareness of national stakeholders on the conservation of biodiversity in Benin". • Burundi: "Towards an effective awareness raising in the light of the conservation of biodiversity". • DR Congo: awareness raising on the role of sustainable agriculture for biodiversity in the technical agriculture teaching system.	Collection of data on going with: • Benin: "Raising awareness of national stakeholders on the conservation of biodiversity in Benin". • Burundi: "Towards an effective awareness raising in the light of the conservation of biodiversity". • DR Congo: awareness raising on the role of sustainable agriculture for biodiversity in the technical agriculture teaching system. New projects with: Benin, Côte d'Ivoire, DR Congo, Guinea-Bissau, Togo
		54. PA materials are developed and used in different countries.		
10	3.3. Communication and awareness raising in Belgium	55. Number of people reached in Belgium through stands and events;		500 persons estimated at our booth during 3 events
		56. number of related communication material (posters, brochures);	Poster at conference Kisangani Flyer CEBioS Web site CEBioS Flyer at side event COP12 about mainstreaming	Two awareness raising posters created on biodiversity and development; pencils, notebook and bags developed for event as well as brochure on CEBioS
		57. number of people attending awareness raising events or receiving material, etc.: 4-5 public awareness projects completed;		240 persons registered for event Biodiversity, a global heritage, November 2015, with presence of Minister A. Decroo
		58. number of events with new stand;		Organisation of an awareness raising event on 26/11, RBINS, 3 events with new booth
		59. new stand;	Preparation meetings to build a stand in 2015	Creation of the new booth
		60. number of awareness presence in events;		Organisation of an awareness raising event on 26/11, RBINS, see indicator 58
		61. courses.		Guest lecture at KU Leuven about mainstreaming
SO4, mainstreaming				
11	4.1. Expertise of Belgian Development Cooperation is built	62. 4 training workshops organised for the target groups decided by DGD;	Discussions with DGD and KLIMOS, planned for 2015 URL: <a href="http://cebios.naturalsciences.be/">http://cebios.naturalsciences.be/</a>	Training joint with KLIMOS of DGD and BTC/ paper in preparation on EIA with KLIMOS/ document reviews for e.g. Mali, Rwanda, UNEP/ participation of CEBioS to ACNG exercise of GCA URL: <a href="http://cebios.naturalsciences.be/">http://cebios.naturalsciences.be/</a> 2 days-training for DGD organized in November

2016	2017	2018	TOTAL
Collection of data on going with: • Benin: "Raising awareness of national stakeholders on the conservation of biodiversity in Benin" • Burundi: "Towards an effective awareness raising in the light of the conservation of biodiversity" • Guinea-Bissau: raising awareness and environmental education of local development agents towards a sustainable management of biodiversity and natural resources in Guinea-Bissau • Côte d'Ivoire: education and raising awareness on invasive alien species in Côte d'Ivoire • DR Congo: awareness raising on the role of sustainable agriculture for biodiversity in the technical agriculture teaching system in cooperation with VVOB New projects with: Benin (2), Niger Side event on experiences from the country projects during COP13	<ul style="list-style-type: none"> <li>• RDC CSB at the 'Semaine de la Science et de Technologies' in Kinshasa (&gt;8000 visitors).</li> <li>• RDC IDAY awareness raising on the protection of biodiversity in 4 secondary schools.</li> <li>• RDC Mikembo awareness raising on the protection of the Miombo forest.</li> <li>• Benin CEIBA awareness raising about deforestation « parc transfrontalier du W ».</li> <li>• Awareness call for FR-speaking MRV alumni to raise awareness with the general public and local authorities (follow-up action on 2015-2016 MRV projects).</li> </ul>	<ul style="list-style-type: none"> <li>• 4 awareness raising projects in Benin (IRHOB, LABEF, UAC and Nature Tropicale), 1 in Côte d'Ivoire, 2 in DRC (Kadima Safari Park and CSB) have started.</li> <li>• RDC CSB participated at the 'Semaine de la Science et de Technologies' in Kinshasa (&gt;10000 visitors).</li> <li>• 15 MRV awareness projects for the general public and local authorities implemented: 12 in RDC, 2 in Benin, 1 in Burundi. The projects made intensive use of the policy briefs developed at the end of the MRV projects. Some projects resulted in changing of local laws based on the project results.</li> </ul>	This indicator is difficult to measure, but given the high press attention to CEBioS activities in Benin and Burundi, we believe it was fulfilled. ●
	PA materials are being developed however there isn't yet a take-up by one country of the materials developed by another country. This is in the pipe-line for Benin, Burkina Faso and Niger.		See indicator 53 ●
400 persons estimated at our booth during 2 events		+120 people during may event, participation in 2 other events in Brussels and one regional meeting of the Congo Basin Partnership	Through our 2 colloquia and the booths at EU and national fairs, more than 1000 persons were reached. ●
One video created on biodiversity and development and CEBioS activities Creation of a new video; flyer updated as well as separate flyer for event COP13	New stand, web site, brochures produced/ Games being developed/ Videos produced and in production	Games ready for use, several videos produced as result of the Mid term review meeting	Variety of media such as 10 videos, flyers, posters, games ●
	A project for implication of Belgian Schools was refused by the Direction as not our target audience. Through a south project however still 3 schools and one pensioners home involved with schools in the South.	Biodiversity for Development - A way forward to the SDGs had > 150 inscriptions	See indicator 55
Booth presented at 2 awareness raising event	In 2018: CEBioS Phase I EVENT planned, new brochures abcTaxa, posters, policy briefs...	3 events with stand: Brussels Champetre, jour de l'iris, CBP conference	Booth in 10 events ●
CEBioS booth used at several events	CEBioS booth used at several events	CEBioS booth used at several events	Booth produced and used ●
Participation to the organization of NFP awareness raising event Participation in One health/ecohealth Symposium	Each year at least 2 events in Belgium attended with stand, brochures	3 events with stand: Brussels Champetre, jour de l'iris, CBP conference	See indicator 54 ●
Courses for Gent students visiting RBINS	Courses at several universities, companies and ministries/ Publications in GLO.Be and web sites	Courses for Gent students visiting RBINS, Course in U Hasselt, Seminar	See indicator 33 ●
No training done in 2016, as no request from DGD	3 training workshop organized so far as no other request received from DGD. In 2017 a second training (on Nagoya protocol) organised together with Meise, Tervuren etc...	The coordinator gave a lecture about CEBioS and CBD to young diplomats at DGD.	3 trainings at DGD, attendance is weak ●●

Nr. of IR	IR	Output indicators	2014	2015
		<b>63.</b> capacities of DGD to include biodiversity in ex-ante SEA and EIA for cooperation projects are raised. Increase of biodiversity protection measures in the development cooperation.	Participation in workgroup meetings on agriculture as well as desertification organised by DGD to promote inclusion of biodiversity in these areas of work	Participation in workgroup meetings on agriculture as well as desertification organised by DGD to promote inclusion of biodiversity in these areas of work
<b>12</b>	<b>4.2.</b> Biodiversity and ecosystem services are mainstreamed in activities supported by the Belgian Development Cooperation	<b>64.</b> Number of consultancy requests from DGD staff;	Comments on DCI programme <ul style="list-style-type: none"> <li>- side event at COP12</li> <li>- lecture at KULeuven</li> <li>- review GBO4</li> <li>- comments on DGD strategy</li> <li>- briefing Vietnam at DGD</li> </ul>	Support for the update of the biodiversity section in KLIMOS toolkit <ul style="list-style-type: none"> <li>- consultancy for DGD and other government bodies (SPW, Belspo, Belgian embassies)</li> </ul> Meetings or consultancies on demand, on the topics of: <ul style="list-style-type: none"> <li>- the SDGs, for the Service Publique de Wallonie;</li> <li>- the scoping paper for Societal challenge 6 ("inclusive and reflexive societies") for an EU research program, for Belspo;</li> <li>- a BTC project in Tanzania, for the Belgian embassy in Tanzania;</li> <li>- discussion on a Burundese "licence" dissertation on pollution in Lake Tanganyika, for the Belgian embassy in Burundi;</li> <li>- a meeting with the Burundese NGO Floresta, for the Belgian embassy in Burundi;</li> <li>- the Green Climate Fund, for DGD;</li> <li>- potential biodiversity indicators for Mali, for DGD.</li> </ul> <p>See also annual report 2015, SO7, pg. 161, table 34, meetings and consultancies: 66 items</p>
		<b>65.</b> number of processes.	See 2018	See 2018



2016	2017	2018	TOTAL
<p>Participation in workgroup meetings on agriculture as well as desertification organised by DGD to promote inclusion of biodiversity in these areas of work</p> <p>Publication: Janssens de Bisthoven, L., 2016. De bedreigde biodiversiteit in het globale zuiden heeft meer dan ooit collectieve bescherming nodig/ La biodiversité dans le sud a plus que jamais besoin de protection GLO.Be., Sept.-Dec., 34-35.</p>	<p>Several times CEBioS tried to get involved in the preparation of the PICs for partner countries. So far this was only possible in Mali.</p> <p>Advice on prep. Meetings for Guinée, Burkina faso, Palestina/ Paper on EIA in dev. Coop. published/ Chennai process, IPBES cap. Build., WIPEI, Event 2015, visit DG of DGD, VVOB event contribute to 4.1. as well.</p> <p>Publication: Hugé J., Rochette A.-J., Janssens de Bisthoven L., Dahdouh-Guebas F., Koedam N. &amp; Vanhove M.P.M., 2017 – Utilitarian framings of biodiversity shape environmental impact assessment in development cooperation. Environmental Science &amp; Policy, Volume 75, September 2017, Pages 91–102</p> <p>Participation in JSF and strategic dialogues of ACNGs</p>	<p>Participation in workgroup meetings agriculture, desertification at DGD</p> <p>Publication IPBES African regional assessment, with CEBioS lead author in chapter 5</p> <p>Participation in JSF and strategic dialogues of ACNGs</p>	<p>Through participations in several working groups, the participation in JSF and strategic dialogues of ACNGs, a publication on EIA, a policy brief on mainstreaming in development cooperation, a vulgarizing publication in Glo.Be and several advices to PIC for West Africa and Palestina, we believe we succeeded for this indicator, but the demand for mainstreaming could be increased from the part of Belgian development actors. ●</p>
<p>See tables under SO4 and SO7 in annual report 2016:</p> <p>SO4: Table 24, pg 164: Advice to pioicy: 18 items Participation to policy meetings: 18 items</p> <p>See also SO7: table 31, pg. 199: Meetings, networking: 15 items RBINS, OD Nature, CEBioS processes: 11 items academic work, teaching, research: 20 items</p>	<p>Till 2017 only 1 official request was made for a PIC, however many smaller requests were made for input in other documents from DGD</p>	<p>CEBioS very active in Synergies with ANCs in Burundi, Benin, DR Congo</p>	<p>On at least 12 occasions ●</p>
<p>See 2018</p>	<p>See 2018</p>	<p>2014-2018: CEBioS is participating in the processes of the CBD (3 COPS, 6 SBSTTAs, 1 WGRI, 2 SBI, 7 IAC meetings, +16 WPIEs), UNESCO, BES network, BID Network, IPBES, OECD</p>	<p>At least 10 important policy processes ●</p>

Nr. of IR	IR	Output indicators	2014	2015
<b>SO5, MRV</b>				
<b>13</b>	<b>5.1.</b> Expertise of the RBINS on MRV is built	<b>66.</b> The EU reporting tool for NBS's is developed in cooperation with the CHM network;	Several meetings on the tool by Han De Koeijer The reporting tool is used by Burundi, other countries are testing it. Stage Sandrine Vandenbossche, 3 weeks, on MRV (Haute Ecole Charlemagne)	Several meetings on the tool by Han de Koeijer. The reporting tool is used by Burundi, other countries are testing it. - Updated version of the KLIMOS Toolkit proposed during training for DGD functionaries - 2 trainings followed by CEBioS staff - 2 CEBioS scientists participated actively in meetings related to MRV (conference on mobilising biodiversity data; IPBES first author meeting for African RA) Contributions of relevant specialists (e.g. BIP-WCMC, KLIMOS) to CEBioS-organised trainings. Collaborations with institutes and organisations relevant to MRV are ongoing.
		<b>67.</b> the reporting tool is used for the follow up of the implementation of national strategies and the reporting towards the Aichi targets.	Participation of CEBioS to the first International Conference on the Biodiversity of the Congo basin at CSB, Kisangani, RDC	

2016	2017	2018	TOTAL
<p>Several meetings on the tool by Han de Koeijer.</p> <p>The reporting tool is used by Burundi, other countries are testing it.</p> <p>- Updated version of the KLIMOS Toolkit online, with input from CEBioS regarding biodiversity (<a href="http://ees.kuleuven.be/klimos/toolkit/index.html">http://ees.kuleuven.be/klimos/toolkit/index.html</a>)</p> <p>- CEBioS scientists participated actively in meetings related to MRV (e.g. GEO BON, European One Health/EcoHealth Workshop, Zoology 2017) (all three of which including talks both by CEBioS' South partners and RBINS scientists; the former two of which including conference/session organisation by CEBioS and partners).</p> <p>Contributions of relevant specialists (e.g. BIP-WCMC, KLIMOS) to CEBioS-organised trainings and calls.</p> <p>Collaborations with institutes and organisations relevant to MRV are ongoing.</p>	<p>- Publication on our capacity development model: Vanhove et al. 2017, Ecological Indicators;</p> <p>- publication, in collaboration with KLIMOS, about the possibilities for environmental impact assessment focused on biodiversity in the context of development cooperation: Hugé et al. 2017, Environmental Science &amp; Policy;</p> <p>- meeting report calling for a community of practice on One Health/EcoHealth: Keune et al., submitted to Archives of Public Health.</p> <p>- Sustainable Globe Award for poster by Els De Keyser, Maarten Vanhove et al. 2017. Sustainable fisheries in Africa.</p>	<p>- Publication with African partners, on the lessons learnt from the 2015 call in a special issue of on 'Conservation in Africa: Exploring the Impact of Social, Economic, and Political Drivers on Conservation Outcomes'; Environmental Research Letters</p> <p>- In preparation: paper about the challenges for policy-relevant monitoring of selected natural resources in DR Congo (result of the 2016 MRV projects in DR Congo).</p> <p>- Participation in the restitution workshop of the VLIR-UOS SureLive project in Kampala (Uganda) in the presence of a representative of the Belgian embassy and various Ugandan stakeholders.</p> <p>- Regular contacts with institutes and organisations relevant to MRV are ongoing (e.g. BIP, UNEP-WCMC,...).</p> <p>- Methodologies for policy-relevant biodiversity monitoring investigated in externally funded project (EVAMAB) and through collaboration with several universities and institutions in partner countries and in Belgium.</p>	<p>MRV was a new topic in Phase I (2014-2018) and started gradually. Initially we concentrated in the EU reporting tool as entry point, but towards 2016-2018, the MRV projects diversified independently from the EU tool itself, with more accent on upstream capacity building at the level of scientists and authorities on the MRV process. ● This asks for more differentiated indicators in phase II.</p>
	<p>The 6th national report will be started in 2017 with available information from the tool for Belgium</p> <p>. Membership of the International Technical Advisory and Upscaling Group (ITAUG) of the Connect Project of UNEP-WCMC (uptake of biodiversity in decision-making.</p> <p>. Involvement as lead author within the IPBES RA for Africa.</p> <p>. Follow-up of SDSN, COPBH and GEO BON for acquiring input for internal capacity building efforts on MRV, data valorisation and indicator development and to allow for dissemination of outputs and calls.</p>	<p>The 6th national report has been started with available information from the tool for Belgium</p> <p>. Staff attended the yearly Connect Project meeting in Ghana (dec 2018) where methodological progress of biodiversity indicator uptake for policy procedures was discussed.</p> <p>. Staff is planning to include an 'uptake-for-policy' session during the 2nd International Conference on Biodiversity in the Congo Basin (2020).</p> <p>. Staff is preparing to help develop a 'reporting structure' in DRC in preparation of this conference (follow up of the 'Etat des lieux de la Biodiversité en RD Congo', published in 2014).</p>	<p>Fulfilled ●, see also indicator 66</p>



Nr. of IR	IR	Output indicators	2014	2015
14	5.2. Methodologies to assess progress towards the Aichi Targets are available	68. National indicators are developed and used for reporting towards the AICHI targets.	Data being collected in several projects and programmes under SO-1, 2 and 3	Data being collected in several projects and programmes under SO-1, 2 and 3 in addition to external funding. Within a competitive MRV call, five projects were selected to work on indicators at different levels (from feeding local data into indicators, to indicator policy at the national level), from: Benin (2x), Burundi, the D.R.Congo and Morocco; launch included opening workshop for 10 participants and in collaboration with external partners. Selected projects ongoing.
SO6, P. of Nagoya				
15	6.1. The RBINS and DGD are familiar with the obligations under the Nagoya Protocol	69. National indicators are developed and used for reporting towards the AICHI targets;	Han De Koeijer attended several meetings in S Korea and Europe, see table 'highlights'. Nagoya Protocol entry into force October 2014. Briefing paper in 2015 foreseen when Belgian Legislation discussions done.	Han de Koeijer attended Capacity building IAC for the NP. Belgium still didn't ratify the NP, Maarten Vanhove and Anne-Julie got acquainted with the NP. 3 staff members have continued to read up on international developments among which CETAF activities. Training of 20 RBINS and 20 RMCA scientists during 2 information sessions (several participants came from developing countries), As Belgium hasn't ratified the NP yet this wasn't possible. FAQ on NP for researchers/scientists prepared and used by CETAF and in the information sessions. Several requests from national and international scientists and companies have been analysed and answered in cooperation with the ABS nfp.
		70. number of staff members aware of the implications of Nagoya Protocol;		3 meetings were organised between federal scientific institutes, the abs-nfp and cbd-nfp (RBINS, RMCA, BCCM). One meeting with collection managers of BGM, abs-nfp and cbd-nfp was facilitated at RBINS. Informal discussions and email correspondence (20) were held with scientists and companies.
		71. implementation: 2 members of staff trained;		

2016	2017	2018	TOTAL
<p>Data being collected in several projects and programmes under SO-1, 2 and 3 in addition to external funding.</p> <p>Within a competitive MRV call, four projects from the 2015 call were finalised that work on indicators at different levels (from feeding local data into indicators, to indicator policy at the national level), from: Benin (2x), Burundi and the DR Congo.</p> <p>Within the second MRV call (2016), 11 projects were selected and are ongoing. They focus on indicator development, and data collection to feed into these indicators, for three focal areas of the Congolese NBSAP: fisheries, charcoal and bush meat. Selected projects finalised (2015 call) and ongoing (2016 call).</p> <p>Externally-funded workshops and other short-term training activities, mainly on monitoring techniques, reached an additional ca. 80 participants spread over 9 African countries in 2015-2016.</p> <p>Closing workshop 2015 call organised. Communication of results to scientists and policy makers through:</p> <ul style="list-style-type: none"> <li>- a closing workshop (Cotonou, October 2016) with project participants (ca. 10 in total including scientists and policy makers from Benin, D.R.Congo, Burundi) and stakeholders (presence of Belgian diplomatic representation in Benin);</li> <li>- the production of 4 policy briefs, distributed a.o. at the COP and at various conferences, in addition to local outreach activities of the individual projects;</li> <li>- the communication channels of SDSN and GEO BON.</li> </ul>	<ul style="list-style-type: none"> <li>. 4 projects contributing to the integration of monitoring activities into indicators in 3 countries: Benin, DRC, Burundi (Morocco: project halted while still in course for administrative reasons);</li> <li>. 11 projects in DRC, focussing on indicator development and data collection to feed into these indicators for three focal areas of the Congolese NBSAP: charcoal, fisheries and bush meat;</li> <li>. closing workshop in Kisangani, September-October 2017</li> <li>. creation of 3 Policy Briefs (Charcoal, Bush meat and fisheries)</li> <li>. follow up activity by means of awareness projects (local populations involved in the data collection, local and provincial administrations and politicians) - call launched Nov 2017 under SO3.2</li> <li>. scientific paper on the development of this MRV process and about indicators for the three selected themes was drafted with the participating Congolese partners. (A similar paper for the MRV call 2015 is being finalized).</li> <li>. large distribution of the 3 Policy Briefs (physically and as Pdf), also in the follow-up awareness projects and by DDD as 'note techniques' to help prepare legislative documents within the appropriate commissions of the national parliament.</li> <li>. MRV call for Anglophone countries (2017-18) : these projects all follow up on at least 2 Aichi Targets and the corresponding national target or strategic priority axis of the national plan. The structures responsible for the follow-up and reporting of NBSAPs (CHM and CBD focal points) of the respective countries are included in this process as project partners or jury members.</li> </ul>	<p>The call for English speaking countries, launched in november 2017, aims at promoting links between the worlds of science and policy in order to develop biodiversity indicators in the buffer zones of protected areas, in order to maximise interactions and complementarities with the expertise CEBioS is building through the EVAMAB-project. Moreover, projects had to deal with (at least one of) the following themes:</p> <p>Human-wildlife interactions (including, but not limited to, human-wildlife conflicts, and hunting/poaching); Charcoal and firewood; Fisheries. Eleven projects from six countries (Ghana, Kenya, Palestinian Territory Rwanda, Tanzania, Uganda) were implemented until August 2018. A closing workshop, in Uganda in October, led to the creation of a policy brief (not published yet) and intensified contacts with members of the Connect Project (uptake of biodiversity indicators in policy).</p>	<p>Productive MRV calls (3), opening and closing workshops, production of 8 policy briefs, lively exchanges and contacts between scientists and authorities in the MRV process. Therefore it is green (green). However, the uplifting of this knowledge towards reporting on Aichi targets at national level needs more attention and monitoring. ●</p>
<p>Han de Koeijer attended the 2nd Capacity building IAC for the NP, SBI1 and COP/MOP2 of the NP. Belgium ratified the NP, 3 staff members have continued to read up on international developments among which CETAF activities. Replies to several mails with requests on implementation of NP in Belgium. Belgium only ratified in November 2016. It still isn't known what the legal framework will be, therefor not possible to make the flyer.</p> <p>FAQ on NP for researchers/scientists prepared and used by CETAF and in the information sessions. Several requests from national and international scientists and companies have been analysed and answered in cooperation with the ABS nfp.</p> <p>Informal discussions and email correspondence (&gt; 25) were held with scientists and companies. Participation in 3 international meetings on and related to the NP</p>	See 2018	8 CBD organized meetings have been attended (SBI-1 and 2, COP/MOP 1 to 3, 2 IAC meeting on Capacity building for the NP, 2 ABS-CH IAC meetings.	Complex process, interfered by politics, ongoing ●
	25 RBINS staff have been familiarized with the NP, of these 5 CEBioS staff and 1 person of the NFP CBD.	Most visiting students have contacted their ABS nfps to get PIC and MAT where possible on the demand of their RBINS staff tutors.	All scientific officers are aware ●
	2 staff members have been trained in the NP		2 members of staff ●

Nr. of IR	IR	Output indicators	2014	2015
		72. researchers and other stakeholders are aware on the implications of the NP on their way to work.		
16	6.2. Awareness of the scientific community and other stakeholders on the Nagoya Protocol is raised	73. A special section on the Belgian Clearing House on "Frequently Asked Questions on the Nagoya Protocol" has been developed and is updated regularly;	Not 2014, planned for March 2015 In collaboration with FOD Environment development of FAQ on NP	This section has been put on <a href="http://www.taxonomy.be">www.taxonomy.be</a> As Belgium hasn't ratified yet, this section has seen no further development.
		74. number of flyers;	None	None
		75. number of information sessions.		3 sessions have been organised with 45 participants

2016	2017	2018	TOTAL
	NP introductory meetings have been organized for RBINS, MRAC, BGM and Be MOSAIC staff, participation in VLIR meetings on the NP for researchers. Nagoya seminary at DGD in 2017 including a multitude of stakeholders: DGD, FPS Environment (ABS NFP), CBD-NFP, BBP, RZSA, RMCA, BGM, RBINS scientists, EAZA, universities.	Participation in the workgroup to develop the federal law on NP. Discussions with Flemish authorities on implementation.	See indicator 75, at least 40 scientists made aware ●
This section has been put on <a href="http://www.taxonomy.be">www.taxonomy.be</a> . No sessions have been organised, several requests for information have been replied to. As Belgium hasn't ratified yet, this section has seen no further development. Luc Janssens de Bisthoven and Maarten Vanhove attended two ABS/NP-related meetings during their missions there (August and October 2016); their observations and discussions with the Burundese partners were presented at the European Conference of Tropical Ecology (Brussels, February 2017).	The special section has been added to <a href="http://www.taxonomy.be">www.taxonomy.be</a> for the time being as the NFP for NP hasn't officially approved the FAQ. They are updated regularly with questions received from researchers as well seed companies.	The special section has been added to <a href="http://www.taxonomy.be">www.taxonomy.be</a> for the time being as the NFP for NP hasn't officially approved the FAQ. They are updated regularly with questions received from researchers as well seed companies.	FAQ section on taxonomy.be done and used, but is it sufficiently known? ●
None	No flyer has been produced yet as Belgium only ratified the NP end 2016, there is no legislation in place yet. However, OBPE (BURUNDI) produced a policy brief on Nagoya P. for Burundi with support by CEBioS.	No flyer produced as still no laws on how things shall be organised in Belgium.	no flyer because of lack of rule work in Belgium ●
3 information session in Burundi project	Nagoya seminary organised at CSB (October 2017) with Congolese policy makers and scientists on the basis of the Nagoya event at DGD (June 2017). 6+ information sessions have been organized so far. 1) see <a href="http://www.taxonomy.be/abs/info/session/RBINS">http://www.taxonomy.be/abs/info/session/RBINS</a> <a href="http://www.taxonomy.be/abs/info/session/MRAC">http://www.taxonomy.be/abs/info/session/MRAC</a> <a href="http://www.biodiv.be/cebios2/events/nagoya-protocol-framework-development-cooperation">http://www.biodiv.be/cebios2/events/nagoya-protocol-framework-development-cooperation</a> 2) many informal contacts with RMCA, Meise, SPF Environment	Info session organised at RBINS (20 participants)	8 sessions on NP ●



# Facts and figures

## Staff

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*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*



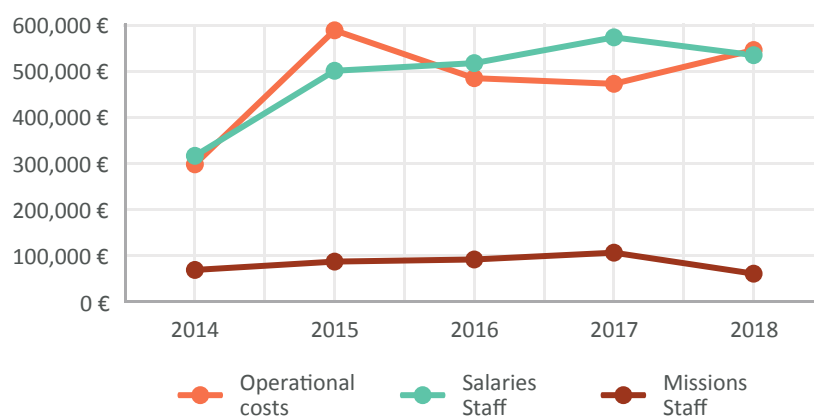
**Dr. Erik Verheyen**  
*Senior researcher*

## Expenditures

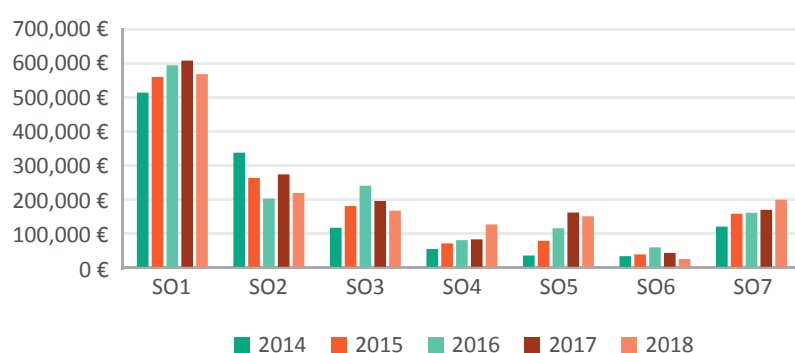
Summary table of expenditures by SO for the period 2014-2018 as at 31/12/2018

	Budget	Expenses incurred	Expenditures	Open commitments	Balance	% utilisation
<b>SO1 - Strengthen the scientific and technical knowledge base</b>						
ER 1.1 - Scientific and technical expertise is built	315.750,00 €	374.958,94 €	374.958,94 €	0,00 €	-59.208,94 €	118,75
ER 1.2 - Quality scientific knowledge is produced	969.500,00 €	901.736,13 €	912.904,37 €	-11.168,24 €	67.763,87 €	93,01
ER 1.3 - Monitoring data yield indicators	90.000,00 €	73.927,62 €	68.331,74 €	5.595,88 €	16.072,38 €	82,14
ER 1.4 - Scientific outputs accessible	194.850,00 €	101.745,44 €	100.046,33 €	1.699,11 €	93.104,56 €	52,22
Salaries M.-L. Susini-Ondafe, F. Muhashy, K. Baetens, L. Ongena	754.446,00 €	691.442,94 €	691.442,94 €	0,00 €	63.003,06 €	91,65
<b>Total budget SO1 2014-2018</b>	<b>2.324.546,00 €</b>	<b>2.143.811,07 €</b>	<b>2.147.684,32 €</b>	<b>-3.873,25 €</b>	<b>180.734,93 €</b>	<b>92,22</b>
<b>SO2 - Enhance the information base</b>						
ER 2.1 - Expertise in information management is built	250.000,00 €	214.501,96 €	198.887,01 €	15.614,95 €	35.498,04 €	85,80
ER 2.2 - Information flows are improved	285.500,00 €	286.961,07 €	278.303,62 €	8.657,45 €	-1.461,07 €	100,51
ER 2.3 - Information used in governance	125.000,00 €	158.592,64 €	158.592,64 €	0,00 €	-33.592,64 €	126,87
Equipment ICT & technical development	17.000,00 €	10.492,95 €	9.646,98 €	845,97 €	6.507,05 €	61,72
Salaries M.-L. Susini-Ondafe, H. de Koeijer, L. Ongena	340.005,00 €	328.358,09 €	328.358,09 €	0,00 €	11.646,91 €	96,57
<b>Total budget SO2 2014-2018</b>	<b>1.017.505,00 €</b>	<b>998.906,71 €</b>	<b>973.788,34 €</b>	<b>25.118,37 €</b>	<b>18.598,29 €</b>	<b>98,17</b>
<b>SO3 - Contribute to awareness raising</b>						
ER 3.1 - Baselines provide insight on awareness level	160.000,00 €	81.921,05 €	79.903,39 €	2.017,66 €	78.078,95 €	51,20
ER 3.2 - Awareness and engagement are raised	325.000,00 €	322.778,56 €	314.505,64 €	8.272,92 €	2.221,44 €	99,32
ER 3.3 - Communication and awareness raising in Belgium	50.000,00 €	41.076,89 €	41.076,89 €	0,00 €	8.923,11 €	82,15
Salaries M.-L. Susini-Ondafe, H. de Koeijer, L. Ongena	251.126,00 €	238.601,05 €	238.601,05 €	0,00 €	12.524,95 €	95,01
<b>Total budget SO3 2014-2018</b>	<b>786.126,00 €</b>	<b>684.377,55 €</b>	<b>674.086,97 €</b>	<b>10.290,58 €</b>	<b>101.748,45 €</b>	<b>87,06</b>
<b>SO4 - Improve the mainstreaming of biodiversity</b>						
ER 4.1 - Expertise of Belgian Dev. Coop. built	35.000,00 €	11.969,18 €	11.969,18 €	0,00 €	23.030,82 €	34,20
ER 4.2 - Biodiversity is mainstreamed in BDC activities	53.000,00 €	43.750,40 €	43.675,40 €	75,00 €	9.249,60 €	82,55
Salaries L. Janssens de Bisthoven + Han de Koeijer	252.279,00 €	250.467,26 €	250.467,26 €	0,00 €	1.811,74 €	99,28
<b>Total budget SO4 2014-2018</b>	<b>340.279,00 €</b>	<b>306.186,84 €</b>	<b>306.111,84 €</b>	<b>75,00 €</b>	<b>34.092,16 €</b>	<b>89,98</b>
<b>SO5 - Improve knowledge on MRV (&amp; indicators)</b>						
ER 5.1 - Expertise of DGD and RBINS built	20.000,00 €	11.254,67 €	11.254,67 €	0,00 €	8.745,33 €	56,27
ER 5.2 - Methodologies are available	120.500,00 €	125.896,61 €	121.433,74 €	4.462,87 €	-5.396,61 €	104,48
Salaries A.-J. Rochette, H. Keunen	191.476,00 €	269.218,01 €	269.218,01 €	0,00 €	-77.742,01 €	140,60
<b>Total budget SO5 2014-2018</b>	<b>331.976,00 €</b>	<b>406.369,29 €</b>	<b>401.906,42 €</b>	<b>4.462,87 €</b>	<b>-74.393,29 €</b>	<b>122,41</b>
<b>SO6 - Raise awareness &amp; built capacities on ABS NP</b>						
ER 6.1 - DGD and RBINS familiar with Nagoya Protocol	23.000,00 €	12.938,41 €	12.838,41 €	100,00 €	10.061,59 €	56,25
ER 6.2 - Awareness is raised	60.000,00 €	44.943,27 €	43.762,27 €	1.181,00 €	15.056,73 €	74,91
Salaries H. de Koeijer, M. Vanhove	85.946,00 €	85.854,18 €	85.854,18 €	0,00 €	91,82 €	99,89
<b>Total budget SO6 2014-2018</b>	<b>168.946,00 €</b>	<b>143.735,86 €</b>	<b>142.454,86 €</b>	<b>1.281,00 €</b>	<b>25.210,14 €</b>	<b>85,08</b>
<b>Coordination and management</b>						
ER - Programme is efficiently, effectively managed	30.000,00 €	24.187,00 €	22.585,00 €	1.602,00 €	5.813,00 €	80,62
Salaries L. Janssens de Bisthoven, V. Pinton, M. Agarad	569.022,00 €	581.163,08 €	581.163,08 €	0,00 €	-12.141,08 €	102,13
<b>Total budget SO7 2014-2018</b>	<b>599.022,00 €</b>	<b>605.350,08 €</b>	<b>603.748,08 €</b>	<b>1.602,00 €</b>	<b>-6.328,08 €</b>	<b>101,06</b>
<b>Total general budget 2014-2018</b>	<b>5.568.400,00 €</b>	<b>5.288.737,40 €</b>	<b>5.249.780,83 €</b>	<b>38.956,57 €</b>	<b>279.662,60 €</b>	<b>94,98</b>
Administrative costs (7,75%)	431.600,00 €	340.747,49 €	379.704,06 €	-38.956,57 €	90.852,51 €	78,95
<b>GENERAL TOTAL</b>	<b>6.000.000,00 €</b>	<b>5.629.484,89 €</b>	<b>5.629.484,89 €</b>	<b>0,00 €</b>	<b>370.515,11 €</b>	<b>93,82</b>

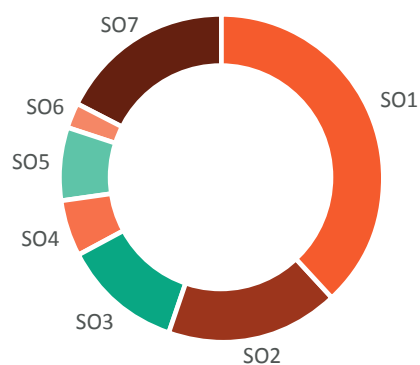
## Types of expenses



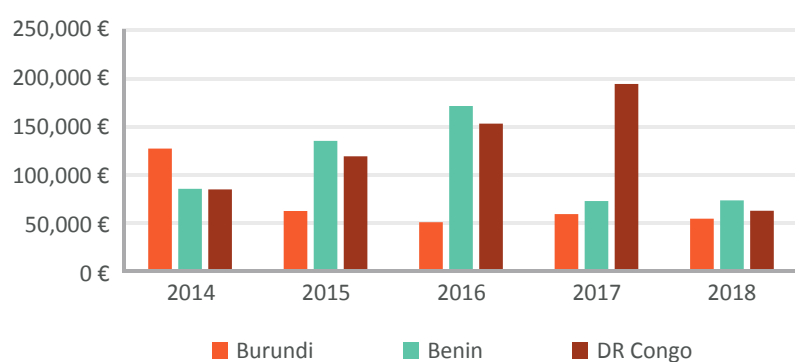
## Expenses per year and SO



## % expenses per SO over 5 years



## Expenses in priority African countries



# Major budget developments and adaptations during Phase I

(ER=expected results of logframe)

## General

The reported annual balances per year in the annual reports may differ from the final figures as reported in this 5-year Report, due to further adaptations by the delayed closing of contracts and associated balances and the final consolidation exercise with the central accounting services at RBINS.

The budgets in the 5 years were generally well respected within 15% deviations. The steering committee followed up closely and requested argumentations for over-or underexpenditures per specific objective or expected results. These adaptations can be consulted in the annual reports, see <http://www.biodiv.be/cebios2/docs/reports> and reflect well the day to day challenges of capacity building in developing countries and the related risk management. Here are the main developments per year in a multi-year context (all balances were taken to the next year):

## 2014

The implementation of the year plan 2014 started in fact in May 2014, due to delay in securing the 5 year budget because of the political agenda. We focused with the annual programme on training activities and on institutional partnerships. 2014 and following years provided a last opportunity to exit the countries which are not a partner of the bilateral Belgian cooperation (list of 18 countries, later on reduced to 14). ER1.3 – Monitoring data yield indicators, with 130 % spent is due to the fact that OBPE (Burundi) started research on ecosystem services in order to get an appreciation of their value (bamboo, rotan, indigenous trees), constituting the base to identify indicators. ER 1.4 – Scientific outputs accessible with 69 % spent is due to delay in the publications of *Abc Taxa* and of the planned lexicon in Burundi. The delay is due to long negotiations with the authors of *Abc Taxa* and the review committee. However, several volumes are in the pipeline. For the lexicon in Burundi, delay due to the fact that collecting data has to be done in the difficult terrain of the Kibera and Ruvubu National Parks. ER 2.1 – Expertise in information management is built shows 200 % expenditure. This is essentially due to the procurement of solar panels for the technical station of OBPE in Bujumbura in order to secure a sustainable and green electricity supply not only for the PC park and also to work on the collections, hence allowing for better CHM work with internet and other desk top work for the cooperation. This has been done in cooperation with the Belgian embassy and includes a maintenance agreement. ER 3.1 and ER 3.2 – Due to a lack of adequate candidates who subscribed to the call, the budget was left underspent. ER 4.1 – Expertise of Belgian Dev. Coop. built: training at DGD is postponed to 2015, due to workload for the preparation and participation in SBSTTA, COP and COP/MOP. Also, there has not yet been a concrete demand from DGD. ER 4.2 – Biodiversity is mainstreamed in BDC activities: expense concerns the organisation of the side event on “mainstreaming...” in S. Korea by L. Janssens de Bisthoven at COP12 in S Korea in cooperation with UNDP-UNEP. Due to the general delay of implementation of the annual plan, the recruitment of a new scientist who would work on MRV was signed in January 2015 because the staff member needed to finish work at his previous employer.

## 2015

Equipment: 5145 € were spent more than the budget of 3000 €, because we it was planned to invest in a server with more capacities every 3 years, so it should be seen on the multi-annual budget. ER 1.1 – Expenses 162%, due to acceptance of 20 grantees with some remaining money from 2014 in order to do the follow-up of alumni and start a few new ones. ER 1.2 – For the cooperation with DRC, some saldo from 2014 (8200 Euro) was spent in 2015 as well. For the cooperation with Kisangani, some mission costs were not used as they were provided by a VLIR-UOS programme at UNIKIS. ER 2.1 – 80% expenses: some individual projects spent less than expected. The Rwanda project decided not to take the funds because of other external funds. ER 2.3 – The regional meeting for est Africa, held in Febr. 2016 and posted on the 2015 budget saw more CHM member states as planned in the five year programme, hence the increase. ER 3.1 – 66%



expenses: some individual projects spent less than expected and there weren't enough projects submitted to the call. This will change in 2016 as we will make it mandatory to carry out a baseline study for new countries. One project had a considerable delay in signing the contract due to local administrative difficulties, hence influencing the total spending on ER. ER 4.1 – Unspent because the activities in 2015 were in Belgium and did not require spending, such as integrating biodiversity in KLIMOS toolkit, working on a paper with KLIMOS on Environmental Impact Assessment, or in house training of civil servants of DGD and BTC. There were also no political conferences in 2015 (COP). Any balances will be used in the COP year 2016 by the team. ER 4.2 – Unspent because reviewing documents does not cost and drawing rights from embassies is a starting (and learning) process. ER 5.2 – 69% spending: one MRV project (Morocco) had a considerable delay in signing the contract due to local administrative difficulties, hence influencing the total spending on ER 5.2. ER 6.1 – Also, resources for SO6 were rather spent on salaries due to the type of activities, rather than operational costs, hence the unspent ER 6.1, also because 2015 was not a COP year.

## 2016

Equipment: nothing spent in 2016, in the multi-annual budget, it compensates for the over expenditure of 2015. ER 1.3 and 1.4 – Expenses less than 50% of (relatively small budget). A volume of Abc Taxa has been published in 2016, as well as a lexicon and several policy briefs. Three lexica (Benin, DRC, Burundi) are in advanced state, but could not be printed in 2016. For Burundi, it is due to the security situation. For Benin, it is due to the late start of the project in 2014. SO2 and SO3 are often closely linked, as the same partners are involved in CHM and awareness. In some years CHM calls have more success, in other years awareness. This year, SO3 on awareness had more activities and compensates with 146,05% of budget for the 80,77% of budget expenditure of SO2. Burkina Faso still hasn't finalised a 2014 project under SO2.2 and therefore was refused their national training.

## 2017

In SO4, The 15% under-expenditure is explained by many activities or consultancies on policy for DGD and others at zero cost as it often involves attendance to meetings in Belgium and reviews of documents in the office. No major reshuffle.

## 2018

In the last year of Phase I, we tried to stop all projects by the beginning of November 2018, to be able to close the books in January 2019 and have an audit report for the expenses 1 January-31 December 2018 on consolidated data. The consolidation with the central accounting services at RBINS was a major exercise. Accumulation of small balances year after year in a multi-year context resulted in a total 370.515.11 Euro unspent or a total expenditure of 93.82% of 6 Million Euro.

# Annual report 2018

## Highlights of 2018

*For the report on the 75 indicators for 2018, we refer to the 2018 column within the general table of indicators for all 5 years in the present report.*

The year 2018 was the last year of the first phase of 5 years. A lot of activities happened in the framework of the calls for CHM, GTI, MRV and awareness, mostly in RDC, Burundi and Benin and at the level of our institutional partners in these countries. Many were to consolidate and valorize past years' interventions and yield or assess the impact of the last 4 years (see success stories). At the level of CEBioS staff, a lot of time resources went towards the application of the Theory of Change in the formulation of the new five year programme (2019-2023), both at our level in Belgium, as in the South with our main institutional partners (RD Congo: CSB, Burundi: OBPE, Benin: UAC and IRHOB, and the CHM partners of West Africa and Morocco). Also, CEBioS participated to the strategic dialogues of the ACNGs for Benin, Burundi, RD Congo and Vietnam

as much as was possible given the available man/woman power. The major event was the colloquium organised by CEBioS on 28 May 2018 (Biodiversity for Development - A way forward to the SDGs (110 participants, production of interview videos, published in GLO-Be, etc), with the active participation of many of our South partners and with the Cabinet of Minister De Croo. It celebrated 5 years of CEBioS work, after a successful mid-term evaluation. In October-December, a financial audit was organised by BELSPO to close the first phase and to prepare the programme for the next phase of five years. At the level of management and administration, several initiatives, e.g. trainings for optimisation of the financial administration, have been undertaken to streamline the functioning of the programme. Visibility and communication are also being optimized as recommended by the midterm evaluation. Two staff members went on maternity leave and CEBioS warmly welcomes their new born babies!

## SO1 Knowledge

Concerning the GTI, 10 young scientists from the South were selected for a GTI short stay grant to Belgium to work on relevant taxonomic issues related to biodiversity, pest management, ecosystem services or conservation. This year the GTI consolidated some alumni who came max. two times previously. The grantees originated from Benin, DR Congo, Morocco, Rwanda, Togo and Vietnam. 6 projects were selected to support capacity building by RBINS scientists in the South, to Benin, Burundi, Cambodia and Vietnam. The topics ranged from insects, amphibians, mushrooms to Oligochaetes.

Dr. François Muhashy (FM) explored with JP Rizinde of UNIGOM the mycoflora of the P.N. de Virunga in DR Congo. Also in DR Congo, FM continued the fruitful collaboration with ICCN and UNILU on the clear forests and the testing of a drone for monitoring purposes. FM carried out an M&E mission to UAC in Benin about the activities of habitat monitoring in the Pendjari NP. Six institutional partners (UOB, UAC x2, OBPE, CSB, MEDD) were invited to Belgium to participate in the CEBioS colloquium and to discuss about current cooperation and get training in habitat monitoring and ecosystem services. A chapter has been published in: "L'appropriation de la gestion de la biodiversité par les riveraines du Parc National des Virunga sur l'étendue comprise entre les lacs Kivu et Edouard", in a book entitled: "Entre les deux lacs" - Editions EDILIVRE. The external ARES project on mushrooms in Central Africa is being implemented, after the successful finalisation of the previous BELSPO funded network project. The vegetation data base on Itombwe protected area in DR Congo was further updated with ICCN. FM also organised a regional workshop in Burundi on fire management of protected areas.

Several CEBioS staff were members of Master and PhD juries related to ecosystem services in developing countries (e.g. UGent, ULiège/Gembloux, VUB, KU Leuven, UAC) and assisted alumni to obtain research grants (IFS, MAB, BioBridge).

The research on fire management in Pendjari NP at Master-level was continued. The research on ecosystem services in Kibira, Ruvubu and Rusizi NP in Burundi by OBPE was implemented, suffering however of the sad loss of the Burundese biodiversity champion, scientific director of OBPE, Mr. Benoit Nzidigahera.

Concerning the capacity building on marine modelling: a mission has been carried out by Dr. Katrijn Baetens (KB) to formulate the future cooperation with IRHOB in Benin. The cooperation with IRHOB Benin resulted in the production of a video clip for a marine project which was awarded a second price by the D4D contest organised by DGD and MRAC. KB submitted a project at BELSPO to continue the CEBioS cooperation with IMER in Vietnam on Halong bay. KB is co-promotor to a Master thesis at UA on valuation of fisheries and corals in Halong Bay. One expert from Vietnam came on training visit to Belgium.

The marine modelling won an external project from BioBridge, an initiative of the CBD.

A policy brief resulting from the work in Peru has been produced at a closing workshop in Lima and published in Spanish.

Distance coaching on the open access software Coherens continued for a number of experts in the South.

The cooperation with CSB continued at the level of student mentoring and formulation of the next phase of cooperation through 3 missions by CEBioS staff. With UNIKIS and CSB, 1 A1 publications, 3 abstracts, 2 theses defences scheduled for academic year 2018-19, 3 A1 papers were generated.

In the series *Abc Taxa*, volumes 17 (edible mushrooms, Haut-Katanga) and 18 (fish parasites of Africa, co-authored by Prof. Maarten Vanhove, ex-CEBioS staff) were produced and published.

In the series of *Lexica*, the lexicon about Pendjari National Park was published.

## SO2 Information - CHM

A national CHM training was done in Guinée Bissau, a regional workshop in Egypt, and a mission in Burundi to develop the next 5 Year programme. Han de Koeijer (HdK) participated to the CHM-IAC and the CEPA-IAC in Montreal. 3 students supported CEBioS in scanning archives and developing data banks of CEBioS. HdK was co-editor with MRAC of a booklet on the archives of the

Virunga National Park, which was positively reviewed in "Mémoires du Congo". A CHM meeting for 20 francophone partners was organised in Belgium. The Bioland tool testing has started. A CHM call approved 5 CHM projects out of 8 (Benin, Ghana, Maroc (cooperation South-South with Mauritania) and RD Congo (CSB)). One was at OBPE in Burundi. The premature death of Olivier

De Munck at CBD in Montreal is a big personal and professional loss for CEBioS. He was a strong driver for the CHM cause. HdK contributed to the 6<sup>th</sup> national report for Belgium and the TCT tool (EU), as well as the development of DARTS for the reporting of the MEAs. Several national CHM in Africa, supported by CEBioS, were awarded a CBD CHM price at COP 14 in Egypt.

## SO3 Awareness

Lucie Ongena was recruited as communication officer in replacement of Kristien Vrancken who is on interruption of career. Out of 9 submitted projects, the awareness call selected 6 projects (from Benin, Burundi and Ivory Coast), from which 2 at OBPE in Burundi. CEBioS was again part of the RBINS booth at the “Fête de l’Iris” in Brussels. CEBioS worked together with NFP CBD and other partners on the exhibition on wildlife trafficking at the European Parliament in July 2018. 15 MRV awareness projects were implemented: 12 in RDC, 2 in Benin, 1 in Burundi. The projects made intensive use of the policy briefs developed at the end of the MRV projects. Some projects resulted in changing of local laws based on the project results. CEBioS trainees participated in recording of a PANO documentary on Bush meat, as well as on the series “Er Was Eens” about the RBINS. The CSB participated, with CEBioS’ support, at the “Semaine de la Science et de Technologies” in Kinshasa (>10000 visitors) with

a large stand and several hand-outs. First steps have been undertaken to organize the second International Conference on biodiversity of the Congo Basin in Kisangani in 2020. Staff is planning to include an “uptake-for-policy” session during the Conference. Staff is also preparing to help develop a “reporting structure” in DRC in preparation of this conference (follow up of the “Etat des lieux de la Biodiversité en RD Congo”, published in 2014).

Several articles in the oral and written press in Benin reported the work of IRHOB supported by RBINS-CEBioS. The coordinator of CEBioS was interviewed about the biodiversity crisis on two occasions and reported in several written media in Belgium. CEBioS was cited in the OECD publication “Mainstreaming Biodiversity for Sustainable Development”. The CEBioS support to CHM is mentioned in a special chapter of the book on Biodiversity in Belgium published by CBD.

## SO4 Policy

Han de Koeijer participated to the SBSTTA and SBI-2 in Montreal in preparation of COP 14. HdK and Luc Janssens de Bisthoven were part of the Belgian delegation to COP 14 in Egypt. HdK was pilot on several items, while LJDB focused on the CEBioS booth (video and flyers, policy briefs) and the side event where CEBioS South partners were invited from Benin, Burundi, DR Congo and Niger, with the generous contribution of the Belgian Embassy in Cairo. CEBioS attended several meetings by ACODEV (observing member), FIABEL (observing

member) and EDUCAID. The 28 May CEBioS-colloquium contributed to both awareness, information transfer and policy advocacy. CEBioS worked together with NFP CBD and other partners on the exhibition on wildlife trafficking at the European Parliament in July 2018. Marie-Lucie Susini-Ondafe prepared the Belgian positions for the 6<sup>th</sup> Meeting of IPBES on Regional African assessment and global assessment. RBINS became member of the scientific college of the Congo Basin Forest Partnership and CEBioS was actively present (booth,

presentations) at its 18<sup>th</sup> MOP meeting at MRAC (scientific part) and Egmont Paleis (policy part) in November 2018. In September 2018, CEBioS participated in the “Regional Bio-Bridge Initiative Round Table for Western Europe and Others Group”, organised by the CBD and the Belgian National Focal Point CBD at RBINS in Brussels. More than 40 delegates from over 25 countries discussed about success stories concerning biodiversity. CEBioS presented its own work.



## SO5 MRV

Anne-Julie Rochette was involved in the WCMC group on the Connect Project International Technical Advisory and Upscaling Group. Hilde Keunen attended the yearly CONNECT meeting in Ghana in December 2018 where methodological progress of biodiversity indicator uptake for policy procedures was discussed. Together with KLIMOS, CEBioS produced Policy Brief Nr. 11 on “Mainstreaming biodiversity into development cooperation”.

The following publications with CEBioS staff as co-authors were prepared (selection):

- Biomonitoring of lakes using macroinvertebrates: recommended indices and metrics for use in West Africa and developing countries. **Hydrobiologia, 826(1), 1-23, DOI**
- Developing policy-relevant biodiversity indicators: lessons learnt from case studies from Africa. **Environmental research Letters, in press.**
- Rapid assessment tools for the evaluation of ecosystem services and management options in African Biosphere Reserves: a review (EVAMAB) (to be submitted in 2019)
- Rapid assessment of ecosystem services in African Man & Biosphere Reserves: methodological insights from the field (to be submitted in 2019)

(and others in preparation or submitted on e.g. Lake Manyara, One Health)

The call for English speaking countries, launched in November 2017, aimed at promoting links between the worlds of science and policy to develop biodiversity indicators in the buffer zones of protected areas, in order to maximise interactions and complementarities with the expertise CEBioS is building through the EVAMAB-project. Moreover, projects had to deal with (at least one of) the following themes:

Human-wildlife interactions (including, but not limited to, human-wildlife conflicts, and hunting/poaching); charcoal and firewood; fisheries. Eleven projects from six countries (Ghana, Kenya, Palestinian Territory Rwanda, Tanzania, Uganda) were implemented until August 2018. A closing workshop, in Uganda in October, led to the creation of a policy brief (not published yet) and intensified contacts with members of the Connect Project (uptake of biodiversity indicators in policy).

Four alumni were selected and supported to contribute to the PAFFA Fish conference in Malawi.

## SO6 Nagoya Protocol

HdK contributed to the meeting concerning the preparation of the federal law on the Nagoya Protocol. A seminary about the Nagoya Protocol was organised together with the National Focal Point CBD at RBINS for the researchers. Erik Verheyen facilitated the development of a test procedure to export scientific samples from RD Congo to Belgium, a procedure set up by the CSB together with the National Focal Point for Nagoya in RD Congo.

*More details of project and stage contents can be delivered on demand.*



## Summary table of expenditures by SO in 2018 as at 31 / 12 / 2018

	Budget (with remainders)	Expenses incurred	Expenditures	Open commitments	Balance	% utilisation
<b>SO1 - Strengthen the scientific and technical knowledge base</b>						
ER 1.1 - Scientific and technical expertise is built	60.000,00 €	56.277,18 €	56.277,18 €	0,00 €	3.722,82 €	93,80
ER 1.2 - Quality scientific knowledge is produced	188.850,00 €	129.655,44 €	141.105,20 €	-11.449,76 €	59.194,56 €	74,72
ER 1.3 - Monitoring data yield indicators	10.000,00 €	34.674,95 €	34.084,07 €	590,88 €	-24.674,95 €	340,84
ER 1.4 - Scientific outputs accessible	40.000,00 €	34.473,77 €	32.774,66 €	1.699,11 €	5.526,23 €	81,94
Salaries M.-L. Susini-Ondafe, F. Muhashy, K. Baetens, L. Ongena	162.951,00 €	151.115,07 €	151.115,07 €	0,00 €	11.835,93 €	92,74
<b>Total budget 2018</b>	<b>461.801,00 €</b>	<b>406.196,41 €</b>	<b>415.356,18 €</b>	<b>-9.159,77 €</b>	<b>55.604,59 €</b>	<b>89,94</b>
<i>Remainders 2014-2017</i>	<i>115.973,90 €</i>	<i>-846,45 €</i>	<i>13.628,48 €</i>	<i>-14.474,93 €</i>	<i>116.820,35 €</i>	<i>11,75</i>
<b>General total</b>	<b>577.774,90 €</b>	<b>405.349,96 €</b>	<b>428.984,66 €</b>	<b>-23.634,70 €</b>	<b>172.424,94 €</b>	<b>74,25</b>
<b>SO2 - Enhance the information base</b>						
ER 2.1 - Expertise in information management is built	50.000,00 €	4.953,18 €	4.953,18 €	0,00 €	45.046,82 €	9,91
ER 2.2 - Information flows are improved	62.500,00 €	45.401,86 €	42.928,41 €	2.473,45 €	17.098,14 €	68,69
ER 2.3 - Information used in governance	25.000,00 €	20.259,39 €	20.259,39 €	0,00 €	4.740,61 €	81,04
Equipment ICT & technical development	3.000,00 €	1.346,28 €	500,31 €	845,97 €	1.653,72 €	16,68
Salaries M.-L. Susini-Ondafe, H. de Koeijer, L. Ongena	73.437,00 €	73.326,14 €	73.326,14 €	0,00 €	110,86 €	99,85
<b>Total budget 2018</b>	<b>213.937,00 €</b>	<b>145.286,85 €</b>	<b>141.967,43 €</b>	<b>3.319,42 €</b>	<b>68.650,15 €</b>	<b>66,36</b>
<i>Remainders 2014-2017</i>	<i>-61.232,17 €</i>	<i>-3.121,29 €</i>	<i>22.294,36 €</i>	<i>-25.415,65 €</i>	<i>-58.110,88 €</i>	<i>-36,41</i>
<b>General total</b>	<b>152.704,83 €</b>	<b>142.165,56 €</b>	<b>164.261,79 €</b>	<b>-22.096,23 €</b>	<b>10.539,27 €</b>	<b>107,57</b>
<b>SO3 - Contribute to awareness raising</b>						
ER 3.1 - Baselines provide insight on awareness level	60.000,00 €	10.558,01 €	10.140,35 €	417,66 €	49.441,99 €	16,90
ER 3.2 - Awareness and engagement are raised	60.000,00 €	45.058,17 €	48.423,84 €	-3.365,67 €	14.941,83 €	80,71
ER 3.3 - Communication and awareness raising in Belgium	15.000,00 €	15.681,56 €	15.681,56 €	0,00 €	-681,56 €	104,54
Salaries M.-L. Susini-Ondafe, H. de Koeijer, L. Ongena	54.240,00 €	41.693,58 €	41.693,58 €	0,00 €	12.546,42 €	76,87
<b>Total budget 2018</b>	<b>189.240,00 €</b>	<b>112.991,32 €</b>	<b>115.939,33 €</b>	<b>-2.948,01 €</b>	<b>76.248,68 €</b>	<b>61,27</b>
<i>Remainders 2014-2017</i>	<i>-469,48 €</i>	<i>-1.723,88 €</i>	<i>8.940,12 €</i>	<i>-10.664,00 €</i>	<i>1.254,40 €</i>	<i>-1904,26</i>
<b>General total</b>	<b>188.770,52 €</b>	<b>111.267,44 €</b>	<b>124.879,45 €</b>	<b>-13.612,01 €</b>	<b>77.503,08 €</b>	<b>66,15</b>
<b>SO4 - Improve the mainstreaming of biodiversity</b>						
ER 4.1 - Expertise of Belgian Dev. Coop. built	8.000,00 €	11.935,58 €	11.935,58 €	0,00 €	-3.935,58 €	149,19
ER 4.2 - Biodiversity is mainstreamed in BDC activities	12.000,00 €	25.706,88 €	25.706,88 €	0,00 €	-13.706,88 €	214,22
Salaries L. Janssens de Bisthoven + Han de Koeijer	54.489,00 €	56.620,93 €	56.620,93 €	0,00 €	-2.131,93 €	103,91
<b>Total budget 2018</b>	<b>74.489,00 €</b>	<b>94.263,39 €</b>	<b>94.263,39 €</b>	<b>0,00 €</b>	<b>-19.774,39 €</b>	<b>126,55</b>
<i>Remainders 2014-2017</i>	<i>53.866,55 €</i>	<i>0,00 €</i>	<i>0,00 €</i>	<i>0,00 €</i>	<i>53.866,55 €</i>	<i>0,00</i>
<b>General total</b>	<b>128.355,55 €</b>	<b>94.263,39 €</b>	<b>94.263,39 €</b>	<b>0,00 €</b>	<b>34.092,16 €</b>	<b>73,44</b>
<b>SO5 - Improve knowledge on MRV (&amp; indicators)</b>						
ER 5.1 - Expertise of DGD and RBINS built	3.000,00 €	2.393,61 €	2.393,61 €	0,00 €	606,39 €	79,79
ER 5.2 - Methodologies are available	33.500,00 €	50.306,61 €	49.606,61 €	700,00 €	-16.806,61 €	148,08
Salaries A.-J. Rochette, H. Keunen	41.356,00 €	60.402,77 €	60.402,77 €	0,00 €	-19.046,77 €	146,06
<b>Total budget 2018</b>	<b>77.856,00 €</b>	<b>113.102,99 €</b>	<b>112.402,99 €</b>	<b>700,00 €</b>	<b>-35.246,99 €</b>	<b>144,37</b>
<i>Remainders 2014-2017</i>	<i>35.768,08 €</i>	<i>0,00 €</i>	<i>0,00 €</i>	<i>0,00 €</i>	<i>35.768,08 €</i>	<i>0,00</i>
<b>General total</b>	<b>113.624,08 €</b>	<b>113.102,99 €</b>	<b>112.402,99 €</b>	<b>700,00 €</b>	<b>521,09 €</b>	<b>98,93</b>



	Budget (with remainders)	Expenses incurred	Expenditures	Open commitments	Balance	% utilisation
<b>SO6 - Raise awareness &amp; built capacities on ABS NP</b>						
ER 6.1 - DGD and RBINS familiar with Nagoya Protocol	1.000,00 €	0,00 €	0,00 €	0,00 €	1.000,00 €	0,00
ER 6.2 - Awareness is raised	15.000,00 €	364,20 €	364,20 €	0,00 €	14.635,80 €	2,43
Salaries	18.563,00 €	16.979,11 €	16.979,11 €	0,00 €	1.583,89 €	91,47
<b>Total budget 2018</b>	<b>34.563,00 €</b>	<b>17.343,31 €</b>	<b>17.343,31 €</b>	<b>0,00 €</b>	<b>17.219,69 €</b>	<b>50,18</b>
<i>Remainders 2014-2017</i>	<i>7.990,45 €</i>	<i>0,00 €</i>	<i>0,00 €</i>	<i>0,00 €</i>	<i>7.990,45 €</i>	<i>0,00</i>
<b>General total</b>	<b>42.553,45 €</b>	<b>17.343,31 €</b>	<b>17.343,31 €</b>	<b>0,00 €</b>	<b>25.210,14 €</b>	<b>40,76</b>
<b>Coordination and management</b>						
ER - Programme is efficiently, effectively managed	2.000,00 €	15.906,88 €	14.304,88 €	1.602,00 €	-13.906,88 €	715,24
Salaries L. Janssens de Bisthoven, V. Pinton, M. Agarad	122.901,00 €	135.141,77 €	135.141,77 €	0,00 €	-12.240,77 €	109,96
<b>Total budget 2014-2018</b>	<b>124.901,00 €</b>	<b>151.048,65 €</b>	<b>149.446,65 €</b>	<b>1.602,00 €</b>	<b>-26.147,65 €</b>	<b>119,65</b>
<i>Remainders 2014-2017</i>	<i>19.816,57 €</i>	<i>0,00 €</i>	<i>0,00 €</i>	<i>0,00 €</i>	<i>19.816,57 €</i>	<i>0,00</i>
<b>General total</b>	<b>144.717,57 €</b>	<b>151.048,65 €</b>	<b>149.446,65 €</b>	<b>1.602,00 €</b>	<b>-6.331,08 €</b>	<b>103,27</b>
<b>Total general budget 2018</b>	<b>1.176.787,00 €</b>	<b>1.040.232,92 €</b>	<b>1.046.719,28 €</b>	<b>-6.486,36 €</b>	<b>136.554,08 €</b>	<b>88,95</b>
<b>Total general of remainders 2014-2017</b>	<b>171.713,90 €</b>	<b>-5.691,62 €</b>	<b>44.862,96 €</b>	<b>-50.554,58 €</b>	<b>177.405,52 €</b>	<b>26,13</b>
<b>GENERAL TOTAL</b>	<b>1.348.500,90 €</b>	<b>1.034.541,30 €</b>	<b>1.091.582,24 €</b>	<b>-57.040,94 €</b>	<b>313.959,60 €</b>	<b>80,95</b>
Administrative costs (7,75%)	91.000,00 €	91.000,00 €	91.000,00 €	0,00 €	0,00 €	100,00
<b>GENERAL TOTAL WITH ADMINISTRATIVE COSTS</b>	<b>1.439.500,90 €</b>	<b>1.125.541,30 €</b>	<b>1.182.582,24 €</b>	<b>-57.040,94 €</b>	<b>313.959,60 €</b>	<b>82,15</b>
<b>BALANCE 2014-2018</b>					<b>371.000,54 €</b>	



# 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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