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Cooperation protocol

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Annual plan 2017

Building capacities for biodiversity and development

photo@Luc-Janssens-de-Bisthoven, Penjari N.P., Benin

Annual plan for the period 1 January 2016-31 December 2016

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Acronyms

2010 BTCT	2010 Biodiversity Target Cross-linking Tool
ABS	Access and Benefit Sharing
BELSPO	Belgian Science Policy Office
BIP	Biodiversity Indicators Partnership
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 Hydrodynamical Ecological Model for Regional Shelf Seas
COMIFAC	Commission des Forêts d'Afrique Centrale
COORD	Programme Coordination and Management
COP	Conference of the Parties
CRH-U	Centre de Recherche en Hydrobiologie – Uvira (D.R.Congo)
CSB	Centre de Surveillance de la Biodiversité
DEVCO	European development Cooperation Directorate General
DGD	Belgian Development Cooperation
EDIT	European Distributed Institute of Taxonomy
ERAIFT	Ecole Régionale Post-Universitaire d'Aménagement et de Gestion Intégrés des Forêts et Territoires Tropicaux
FABAC	Forum des Acteurs Belges Actifs en RD Congo
FWO-Vlaanderen	Fonds voor Wetenschappelijk Onderzoek – Vlaanderen
GEO BON	Group on Earth Observations Biodiversity Observation Network
GTI	Global Taxonomy Initiative
ICCN	Institut Congolais pour la Conservation de la Nature, Kinshasa, D.R. Congo
ICT	Information and Computer Technology
IEBR	Institute of Ecology and Biological Resources, Hanoi, Viet Nam
IMAB	Inventories Monitoring and Assessment of Biodiversity
INECN	Institut National pour l'Environnement et la Conservation de la Nature, Bujumbura, Burundi
INR	Itombwe Natural Reserve
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services
IRD	Institut de Recherche pour le Développement
IRHOB	Institut de recherches Halieutiques et Océanologiques du bénin
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

ISP Mb-Ng	Institut Supérieur Pédagogique de Mbanza-Ngungu, 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
NBSAP	National Biodiversity Strategy and Action Plan
NFP	National Focal Point
NGO	Non-Governmental Organisation
NP	Nagoya Protocol
NWU	North-West University, South Africa
OBPE	Office Burundais pour la Protection de l'Environnement
OESO-DAC	Organisation for Economic Cooperation and Development-Development Cooperation directorate
PEET	Partnerships for Enhancing Expertise in Taxonomy
PM	Person Month
PN	Parc National
PNKB	Parc National de Kahuzi-Biega
PNU	Parc National de l'Upemba
POL	Policy Support
PTK	Portal Toolkit
RBINS	Royal Belgian Institute of Natural Sciences
RDC	D.R. Congo
RDCBL	Réserve et Domaine de Chasse de Bombo-Lumene
RMGL	Réseau des Mycologues de la Région des Grands-Lacs
RZSA	Royal Zoological Society of Antwerp
SACEP	South Asia Co-Operative Environment Programme
SBI	Subsidary Body on Implementation
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
SDSN	Sustainable Development Solutions Network
SSC	South-South Cooperation
TST	Trans Sectorial Team
UA	Universiteit van Antwerpen, Belgium
UAC	Université d'Abomey- Calavi , Benin
UB	Université du Burundi
ULB	Université Libre de Bruxelles, Belgium
UNIGOM	Université de Goma
UNIKIN	Université de Kinshasa
UNIKIS	Université de Kisangani, D.R. Congo
UNILU	Université de Lubumbashi, D.R. Congo

UOB	Université Officielle de Bukavu, D.R. Congo
VLIR	Flemish Interuniversity Council, Belgium
WPEI	Working Party on International Environmental Issues (EU)
ZFMK	Zoologisches Forschungsmuseum Alexander Koenig (Bonn, Germany)

Contents

Executive Summary

The year 2017 is the 4th year of the 10-year strategy 2014-2023 and of the first 5-year plan 2014-2018. 2017 will see a consolidation and valorisation of interventions and outputs started in previous years and further exploration of partnerships, external funding and co-funding with other Belgian or international actors in order to prepare for phase II (2019-2023). Due to the multi-annual format of the programme, some extra initiatives will be financed with outstanding balances from the years 2014-2016. Our institutional cooperation will continue focusing on Benin, DR Congo and Burundi for habitat monitoring, and Vietnam and Benin for marine modelling. On the practical side, the CEBioS tream will move to another floor of RBINS during autumn 2017 due to the joining up of the marine scientists from the Gulledelle campus. In 2017 BELSPO will initiate and implement a mid-term review of the CEBioS programme with external international referees. This is needed to get recommendations for the formulation of the second 5 year phase 2019-2023, formulation which will take place in 2018. The evaluation will include (1) desk study of strategic documents, (2) skype/email interviews with stakeholders in the South and face-to-face interviews in Belgium.
In 2017 CEBioS will initiate a new 2,5 year project, 'EVAMAB', financed by a BELSPO call on UNESCO-Man and Biosphere Reserves. This project in cooperation with KU Leuven, UA and ULB will focus on the rapid assessment of valuation of ecosystem services in 4 Unesco-Mab sites: Penjari N.P. in Benin, Mnt Elgon in Uganda, L. Manyara in Tanzania and L. Tana in Ethiopia. One FTE will work on the project until mid-2019.
CEBioS evaluates if submitting a JOINT project to VLIR-UOS in that domain would be an option to support the South cooperation in this framework. On the PR side, CEBioS will continue optimising its web site in order to make projects, publications and the cooperation with some institutes more visible, as well as develop some information folders (e.g. A*bcTaxa*). CEBioS will join forces with the National Focal Point CBD (NFP) to promote a campaign against the importation of bush meat at the International Airport of Zaventem.

SO1 (knowledge): *in situ* GTI workshops on taxonomy and ecosystem services and GTI internships for early career scientists from the South in Belgium will continue on a competitive basis as in the past, with special attention to institutional anchorage and long term support for successful candidates. In 2017, GTI internships will be open to new applicants, who have not benefited from our grants in the past (to date, more than 200 applications!). For the first time, a GTI 'uptake meeting' will be organised in Vietnam, in April 2017, in order for our Vietnamese partners and their Belgian counterparts to valorise more than 7 years of research results and transform them into policy recommendations and other relevant vulgarization output. This output will be officially presented to Vietnamese stakeholders of protected areas during the workshop. Finally, Marie-Lucie Susini Ondafe has been invited to become a member of the task force on capacity-building of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) as of 1 January 2017 and will attend its meeting in Norway in April.
AbcTaxa plans for 2017 the dissemination of volume 16 on Diatoms from the Congo and Zambezi basins (publication due in March 2017), as well as the production of a new volume 17 on Ophiuroidea (brittle

stars) of S. Africa. The production of **lexica** in DRC (Itombwe reserve), Burundi (Ruvubu National park) and Benin (Pendjari National Park) is well advanced and will be finalised in 2017-2018. The lexicon on Kibira N. P. in Burundi has been published in February 2017 (see http://www.biodiv.be/cebios2/news/cebios-new-lexicon). These lexica form important landmarks for the convergence between science and conservation.

Concerning **DR Congo**, the cooperation with **ICCN**, universities and the national CHM will be further strengthened. The academic support to Masters and PhDs will continue on themes relating biodiversity and poverty eradication at UNILU (Lusishwi clear forest and termites, a pilot project with a drone for aerial monitoring) and at UNIKIS (e.g. ticks, bats, bushmeat) in order to strengthen capacities of the faculté des Sciences and CSB. Several scientists from CSB-UNIKIS will be trained at RBINS and CEBioS is planning a training at CSB on CHM, MRV and other topics related to biodiversity data and writing. First contacts with KMDA Zoo of Antwerp and its Centre for Research and Conservation (CRC) have been taken to explore possibilities to support zoological gardens in RD Congo.

CEBioS is due to sign in 2017 two important cooperation agreements, one with the 'Centre de Surveillance de la Biodiversité (RDC, Kisangani), and the other with BTC-CTB, soon called 'Enabel'. A mission in March to the CSB will strengthen the cooperation and operationalise the newly signed MoU.

The planned cooperation with ICCN in the Parc National des mangroves (PNM) in the province of Bas-Congo, Moanda, RDC is temporally stalled due to political reasons. An exploratory mission to Bas-Congo is a possibility in 2017, but will be decided as a function of the situation. The work by a pre-master student from KU Leuven for mapping existing knowledge on mangrove crabs (literature, collections) and their bioindicator value will be further valorised into didactical material. CEBioS and KLIMOS explore fund raising to valorise this activity.

Concerning the work on marine modeling, the cooperation with IMARPE in Peru comes to an end. In March 2017 a closing workshop will be organised in Lima, University of San Marcos, Peru, in the presence of the Belgian embassy, to present the results of 3 years of cooperation to stakeholders. The resulting output will be the co-production between IMARPE and CEBioS of policy briefs for the 4 bays studied. The implementation of cooperation with the Marine research in Benin (IRHOB) will take place in 2017 (cooperation agreement until December 2017). A 3 weeks stay by a staff member to provide in situ capacity building is programmed in April 2017. The work with IMER in Vietnam will continue in 2017, with planned visits by two Vietnamese scientists to work on the Coherens model. An exploratory visit to the marine research centre in Zanzibar is an option to prepare for phase II. The option of working with a partner in Senegal will be explored as well.

Both institutional cooperation MoUs with **Burundi** (OBPE) and **Benin** (UAC) are due to finish in July 2017. So the period January-July 2017 will be used to complement the work where needed. No planning is needed anymore in this period. This means in 2017 we will need to formulate a transition period between mid-2017 and end of 2018 to prepare for phase II. This will imply some formulation missions to Burundi and Benin in the first semester of 2017. The Belgian embassy mediated interesting contacts with the World bank for eventual cooperation on Ruvubu N.P. and Lake Tanganyika. Further, possible cooperation with FOD Environment on climate change and its biodiversity component in Burundi is under discussion.

The external VLIR-UOS project 'South Initiative' on monitoring of Lake Tanganyika has come to an end in December 2016. New opportunities of cooperation on Lake Tanganyika will be further explored in order

to valorise the work done. The Congolese part of Lakes Tanganyika and Kivu is already the focus of three projects granted in our competitive MRV call focusing on DRC (see below under SO5). A genetic and socio-economic study on the pelagic sardine fisheries problematics in Lake Tanganyika will be developed with local institutes (e.g. Uvira) by a VLADOC PhD from KU Leuven (VLIR-UOS), linked to CEBioS.

SO2 (information) and SO3 (awareness): based on the creation in 2015 of a large information booth about CEBioS and following the successful Symposium 'Biodiversity and development, a global heritage' of 26 November 2015 (http://www.biodiv.be/cebios2/news/event-biodiversity-and-development-a-global-heritage-rbins-26-11-2015), dissemination of the importance of the link between biodiversity and development, but also more specifically 'One Health', will continue through different channels and communication and through informative flyers. CEBioS' contribution to the **Digital Agenda in the South** includes training of partners within the CHM network both in Belgium and in our partner countries (national and regional) and implementation of projects for strengthening local CHM and awareness raising – for RDC in cooperation with VVOB, with special attention to the best practices in information strategies and the guidelines from the CBD (SO2 and 3). In March a national CHM training will take place in Jordania, including Palestinians. PTK national trainings are planned for Guinea, Burkina Faso, DR Congo and Gabon and the Horn of Africa (Addis Ababa). The 'Bioland' tool will be trained in Belgium for several persons and CHM of The Netherlands as well. This might be done for a number of countries as well. In May a regional CHM meeting is planned in Togo and Benin, and in September Han de Koeijer will attend an Asia meeting and the SBSTTA in November 2017. CEBioS will also support the CSB (Kisangani) for developing appropriate PR material such as flyers, which will be disseminated at e.g. the 'semaine de la science' in Kinshasa (April).

SO4 (mainstreaming): several **demands from diplomatic posts** might involve CEBioS, e.g. Tanzania, Guinée, Palestina and Burkina Faso for on-going programmes or the negotiation of a new programme. CEBioS will provide advice on biodiversity indicators, MRV and CHM, and training options are explored depending on available man power and budget. Integration of CEBioS interventions concerning digital agenda (Archives of former national parks of Belgian Congo, CHM) will be made more known and applied, as several demands are on-going (Fonds Leopold III, Virunga National Parc). A booklet about Virunga is due to be produced at the beginning of 2017. CEBioS might be asked to contribute to a new RBINS exhibition on great apes and conservation and is involved with the exploratory work of E. Verheyen and A. Laudisoit in the exploration of Ituri (RDC, Lake Albert) and remnant chimpanzee populations.

Regarding **SO5 (MRV)** a call on Aichi targets and indicators focused on DR Congo has been launched in 2016 and will now be followed up including ad hoc support, a closing workshop and potentially field visits in 2017 (the latter depending on the political situation). The call is centered on 3 themes, decided upon after discussions with the environmental ministry based on the new Congolese NBSAP identifying priority strategic axes necessitating indicators and increased monitoring capacity. These themes are bushmeat, fisheries and charcoal. The selected projects again foster synergies between scientists and policy makers; they will be carried out at local/regional level (a.o. by members of the provincial biodiversity antennae of the CSB) and contribute to national reporting. Further, through various channels

such as video captures, policy briefs or scientific articles we are valorising and disseminating the outcomes of the round of MRV projects for francophone Africa launched in 2015 and finalised in 2016. In 2017, CEBioS will re-submit a scientific paper in co-authorship with KLIMOS on the use of Environmental Impact Analyses (e.g. as potential baseline biodiversity data) in ODA. Towards the end of 2017, we will launch a MRV call for Anglophone Africa, the scope and target audience for which is already under explorative discussions with selected local partners.

SO6 (P. of Nagoya)

In February 2017 several staff members will participate to the European Conference on tropical Ecology and present their work on capacity building, archiving and the pioneering work by Burundi (supported by CEBioS, continued in 2017) to install a MoU between traditional healers and the university to implement the protocol of Nagoya. This is also the occasion to explain the PN to a wider scientific public and the consequences for developing countries, traditional knowledge and local communities. A Nagoya training organised by the EU in Leiden will take place in March. An information seminar about the Nagoya protocol at DGD will be organised in the second half of 2017 as well.

The VLIR-UOS North South South project with NM-AIST (Arusha, Tanzania) on the development of a decision support system for an integrated management plan for Lake Manyara has come to an end in December 2016. This work should now be continued and further valorised through the new EVAMAB project and in cooperation with the Belgian NGO Trias and a UK based NERC project on similar thematics, as well as possible fundings from VLIR-UOS.

Furthermore, funding opportunities to continue our efforts for summer schools for South participants will be sought, probably in collaboration with KLIMOS and based on our earlier experience and efforts (VLIR-KOI organised in 2016; VLIR-ITP unsuccessfully applied for in 2016).

CEBioS will also candidate into the FEDtWIN programme due to start by 2018 in order to anchor academic competence and excellence for the further development as an excellence centre in 'Biodiversity and development'. Four research groups from 3 universities are candidate to cooperate in a FEDtWIN framework with RBINS-CEBioS.

Luc Janssens de Bisthoven, Coördinator Brussels, 30-03-2017

Annual Plan overview

General objective

In its capacity of National Focal Point to the Convention on Biological Diversity (CBD) and national reference centre for biodiversity, the Royal Belgian Institute of Natural Sciences uses the CBD as an overall framework for action.

The general objective of the pluri-annual programme 2014-2018 is to **build scientific and technical capacities for a more effective implementation of the Convention on Biological Diversity and its Strategic Plan for Biodiversity 2011-2020**, as a contribution to poverty reduction and sustainable development worldwide.

Specific objectives

In its foreseen framework programme for 2014-2018, the RBINS identifies six specific objectives to achieve by 2019. These objectives highlight how the responsibilities are shared for the programme's implementation.

The RBINS and its partners aim:

1. To strengthen the **scientific and technical knowledge base** on biodiversity and on its linkages with ecosystem services and poverty reduction;
2. To enhance the **information base** on these issues and on associated governance processes;
3. To **raise awareness and communicate** on the importance of biodiversity and ecosystem services for poverty reduction and sustainable development, and on associated governance processes.

The RBINS together with DGD-D2.4. and its partners aim:

4. To improve the **mainstreaming of biodiversity and ecosystem services** in policy sectors that have a high relevance for development;
5. To improve the knowledge on the **measurement, reporting and verification (MRV)** of policy choices and activities linked to biodiversity and ecosystem services;
6. To raise awareness on, and build capacities for, the implementation of the **Nagoya Protocol (NP) on Access and Benefit Sharing (ABS)**.
7. **Programme Coordination and Management (COORD)** is devoted to coordination and management, as well as transversal issues such as project communication, networking and outreach.

Budget

The 2017 budget is composed of the original 2017 budget, plus the balances of 2014+2015+2016 in a multi-annual framework.

Table 1: Indicative budget **2017 (25-03-2017)**

	Budget réel 2017 avec reliquats 2014, 2015 et 2016				
	Reliquat 2014	**Reliquat 2015**	**Reliquat 2016**	**Budget initial 2017**	**Budget 2017 avec reliquats 2014, 2015 et 2016**
SO 1 - Strengthen the scientific and technical knowledge base					
ER 1.1 - Scientific and technical expertise is built	-5,011.65 €	-35,159.05 €	-8,277.05 €	72,000.00 €	23,552.25 €
ER 1.2 - Quality scientific knowledge is produced	-3,002.57 €	20,773.22 €	-16,824.45 €	196,050.00 €	196,996.20 €
ER 1.3 - Monitoring data yield indicators	-6,030.41 €	1,799.58 €	10,799.06 €	20,000.00 €	26,568.23 €
ER 1.4 - Scientific outputs accessible	9,316.50 €	34,034.41 €	32,938.72 €	40,000.00 €	116,289.63 €
Salaries M.-L. Susini Ondafe, F. Muhashy, M. Vanhove, K. Baetens, K. Vrancken	39,609.99 €	2,616.13 €	13,300.74 €	156,684.00 €	212,210.86 €
Total	**34,881.86 €**	**24,064.29 €**	**31,937.02 €**	**484,734.00 €**	**575,617.07 €**
SO 2 - Enhance the information base					
ER 2.1 - Expertise in information management is built	-49,432.20 €	9,588.61 €	28,988.95 €	50,000.00 €	39,145.36 €
ER 2.2 - Information flows are improved	-10,214.38 €	3,443.41 €	-9,647.54 €	62,500.00 €	46,081.49 €
ER 2.3 - Information used in governance	-30,676.37 €	-9,034.33 €	12,676.63 €	25,000.00 €	-2,034.07 €
Equipment ICT & technical development	2,999.05 €	-5,145.72 €	4,000.00 €	3,000.00 €	4,853.33 €
Salaries M.-L. Susini Ondafe, H. de Koeijer, K. Vrancken	8,059.02 €	-918.51 €	2,525.95 €	70,612.00 €	80,278.46 €
Total	**-79,264.88 €**	**-2,066.54 €**	**38,543.99 €**	**211,112.00 €**	**168,324.57 €**
SO 3 - Contribute to awareness raising					
ER 3.1 - Baselines provide insight on awareness level	-6,328.62 €	10,085.00 €	-14,822.65 €	30,000.00 €	18,933.73 €
ER 3.2 - Awareness and engagement are raised	41,564.80 €	-1,243.06 €	-28,080.36 €	60,000.00 €	72,241.38 €
ER 3.3 - Communication and awareness raising in Belgium	0.00 €	1,130.08 €	-4,033.49 €	15,000.00 €	12,096.59 €
Salaries M.-L. Susini Ondafe, H. de Koeijer, M. Vanhove, K. Vrancken	24,245.37 €	-3,073.46 €	-17,527.04 €	52,154.00 €	55,798.87 €
Total	**59,481.55 €**	**6,898.56 €**	**-64,463.54 €**	**157,154.00 €**	**159,070.57 €**
SO 4 - Improve the mainstreaming of biodiversity					
ER 4.1 - Expertise of Belgian Dev. Coop. built	3,000.00 €	7,966.40 €	8,000.00 €	8,000.00 €	26,966.40 €
ER 4.2 - Biodiversity is mainstreamed in BDC activities	3,665.83 €	10,000.00 €	3,680.11 €	12,000.00 €	29,345.94 €
Salaries L. Janssens de Bisthoven + Han de Koeijer	12,265.10 €	-3,526.02 €	-2,549.80 €	52,393.00 €	58,582.28 €

Total	**18,930.93 €**	**14,440.38 €**	**9,130.31 €**	**72,393.00 €**	**114,894.62 €**
SO 5 - Improve knowledge on MRV (& indicators)					
ER 5.1 - Expertise of DGD and RBINS built	5,400.41 €	2,917.20 €	-2,877.07 €	3,000.00 €	8,440.54 €
ER 5.2 - Methodologies are available	11,000.00 €	8,518.37 €	-2,566.65 €	30,500.00 €	47,451.72 €
Salaries M. Vanhove, A.-J. Rochette, Hilde Keunen	12,895.65 €	-1,534.24 €	-21,291.71 €	39,766.00 €	29,835.70 €
Total	**29,296.06 €**	**9,901.33 €**	**-26,735.43 €**	**73,266.00 €**	**85,727.96 €**
SO 6 - Raise awareness & built capacities on ABS NP					
ER 6.1 - DGD and RBINS familiar with Nagoya Protocol	3,964.38 €	4,989.60 €	-892.39 €	1,000.00 €	9,061.59 €
ER 6.2 - Awareness is raised	500.00 €	-1,509.42 €	382.31 €	15,000.00 €	14,372.89 €
Salaries M. Vanhove	-1,278.84 €	4,030.44 €	-461.08 €	17,849.00 €	20,139.52 €
Total	**3,185.54 €**	**7,510.62 €**	**-971.16 €**	**33,849.00 €**	**43,574.00 €**
Coordination and management					
ER - Programme is efficiently, effectively managed	1,151.46 €	457.17 €	-687.39 €	22,000.00 €	22,921.24 €
Salaries L. Janssens de Bisthoven, V. Pinton, M. Agarad	16,521.57 €	-7,150.14 €	-3,868.90 €	118,174.00 €	123,676.53 €
Total	**17,673.03 €**	**-6,692.97 €**	**-4,556.29 €**	**140,174.00 €**	**146,597.77 €**
TOTAL GENERAL	**84,184.09 €**	**54,055.67 €**	**-17,115.10 €**	**1,172,682.0 €**	**1,293,806.66 €**

Staff 2017

The 2017 work programme will cover the salary costs of the following staff members:

1. Dr. Janssens de Bisthoven Luc (12 person-months, PM): Management and coordination, policy support (COORD, SO4)
2. Dr. Muhashy Habiyaremye François (12 PM): Biodiversity monitoring (SO1)
3. Dr. Susini Ondafe Marie-Lucie (12 PM): Taxonomy officer for GTI and support for CHM teaching activities, capacity building within IPBES (SO1, 2, 3)
4. Ir. de Koeijer Han (12 PM): Biodiversity information management (SO2, SO3 and SO6)
5. Dr. Baetens Katrijn (6 person-months (PM)): Ecosystem management, modelling (SO1, 1.2.4.(D) marine modeling)
6. Dr. Vanhove Maarten (12 PM:SO1, 4, 5, 6): MRV, protocol of Nagoya, awareness, cooperation with Klimos.
7. Mr. Pinton Vincent (12 PM): Accounting and logistics (COORD)
8. Ms. Vrancken Kristien (12 PM, 80%): Graphics, layout, web development for the GTI, IMAB and CHM programme components (SO1, 2, 3).
9. Ms. Agarad Mariam (12 PM, 60%): secretariat and logistics (COORD)
10. Ir. Anne-Julie Rochette (12 PM, 25%, other 75% part for EVAMAB): MRV, awareness, cooperation with Klimos (publication on EIA)
11. Ir. Hilde Keunen (12 PM): DR Congo: CSB , liaisons with other institutions in DR Congo, MRV – programme, CHM programme, external funding, events, assistance to accountancy, events.

In addition, the programme will receive considerable support from other RBINS staff:

- I. Gerard and C. Hoedemaeker (RBINS, Publication Unit) involved in AbcTaxa desk-editing
- E. Verheyen will implement activity under SO1, expected result 1.2.3. (C) (cooperation with UNIKIS).
- B. Lauwaert (RBINS-MUMM) will provide help for all matters related to marine modeling.
- Patrick Luyten for supporting marine modeling activities, a.o. in Vietnam and closing workshop in Peru.
- Y. Samyn (RBINS), chief editor for AbcTaxa, involved in the redaction of contents and general coordination.
- About fifteen researchers and technical staff will be involved in the training activities, notably in the fields of taxonomy and biodiversity monitoring (SO1).
- Several IT experts will offer their technical support for the hosting and management of websites (CHM) and for the set-up of the helpdesk related to the modelling of coastal ecosystems in the marine modeling activity.
- Staff from the communication department will offer support in the promotion of the activities of the programme of work (e.g. videos).
- Staff from the Accounting Department will support V. Pinton in processing and taking care of all the financial transactions.

Table 2: summary of main institutional partnerships

It should be noted that when partners countries are promotor of a project or programme in cooperation with RBINS, they contribute in matching funds between 10 and 50 % with own means. This ensures ownership and a sustainable approach.

Active continuous partnerships are marked in green

Formal agreements signed by the RBINS
Institute of Ecology and Systematics, Havana, Cuba (2006)
National Museum of Natural History of Havana City, Cuba (2006)
Institute of Ecology and Biological Resources, Hanoi, Vietnam (2007)
WWF and ERAIFT, D.R. Congo(2010)
Institut Congolais pour la Conservation de la Nature (ICCN), Kinshasa, D.R. Congo (2007)
Université de Kisangani, Kisangani, D.R. Congo (2010)
Institut National pour l'Environnement et la Conservation de la Nature (OBPE), Burundi (2010)
Instituto del Mar del Peru, Callao, Peru (IMARPE has become a formal cooperation since September 2014)
Institute of Marine Environment and Resources, Hai Phong, Vietnam (IMER will become formal cooperation in 2015)
Faculté des Sciences Agronomiques de l'Université d'Abomey-Calavi, (UAC, Benin (2014))
Institut de recherches Halieutiques et Océanologiques du Benin (IRHOB)

Main CHM partners since 1999
Long term partnerships (CHM network)
Ministère de l'Environnement et du Développement Durable, Burkina Faso
Direction Générale des Forêts et des Ressources Naturelles, Benin
Centre National de Floristique, Université de Cocody, Abidjan, Côte d'Ivoire
Ministère de l'Environnement, Conservation de la Nature et Tourisme, D.R. Congo
Direction Nationale de La Biodiversité et des Aires Protégées, Guinea
Instituto da Biodiversidade e Áreas Protegidas (IBAP), Guinea-Bissau
Ministry of Environment, Science and Technology, Ghana
Ministère de l'Aménagement du Territoire, de l'Eau et de l'Environnement (MATEE), Morocco
Conseil national de l'Environnement pour un Développement durable (SE/CNEDD), Niger
Ministère de l'Aménagement du Territoire et de l'Environnement, Algeria
Agence de l'Environnement et du Développement Durable, Ministère de l'Environnement et de l'Assainissement, Mali
Commission des Forêts d'Afrique centrale (COMIFAC)
South Asia Co-operative Environment Programme (SACEP) NEMA, Kenya Belgian technical Cooperation Centre de Surveillance de la Biodiversité, Kisangani, D.R. Congo Ministry of environment, Tanzania

Partnerships under consideration
Institut Supérieur de Conservation de la Nature, Environnement et Tourisme, D.R. Congo ERAIFT, Kinshasa, D.R.Congo

Still in partnership but not in active list funded by DGD, because not in official partner countries:

i-formal agreements (marine modeling) 2008-2012
Numerical Modeling Laboratory of Oceanic Processes, Instituto Oceanografica, Univ. Sao Paulo, Brazil
Bandung Institute of Technology, Bandung, Indonesia
National Institute of Oceanography, Goa, India
National Marine Environment Forecast Centre, Beijing, China
Centro de Investigaciones Oceanográficas e Hydrográficas, Colombia (since 2011)
Ministère de l'Environnement, de la Protection de la Nature et du Développement Durable, Cameroon
Centro de Investigaciones Oceanográficas e Hydrográficas, Colombia (since 2011)
Office National pour l'Environnement, Madagascar

Specific objective 1. The RBINS strengthens the scientific and technical knowledge base on biodiversity and on its linkages with ecosystem services and poverty reduction.

Background

Despite technological advances such as DNA barcoding or cyber taxonomy and large scale programmes such as the European EDIT or the United States' PEET project, taxonomic knowledge remains scarce and there seems to be only little, if any, speeding up of the rates of species description. To make matters worse, capacity needed to maintain and build taxonomy and taxonomic collections is fragmented or even non-existing in developing countries where the bulk of biodiversity is situated. Governments, through the Convention on Biological Diversity, have acknowledged the existence of this problem and have termed it the "taxonomic impediment". To alleviate this obstacle the Global Taxonomy Initiative (GTI) has been installed and made operational. One of the staff of the DGD-unit at RBINS is the Belgian focal point for GTI.

In Belgium, the Royal Belgian institute of Natural Sciences, as the National Focal Point to the GTI, coordinates and organizes the activities needed to implement the objectives of the GTI.

In 2017, activities will keep on focusing on the provision and facilitation of taxonomic training both in Belgium and in our partner countries: transfer of technology to selected institutions, delivery of taxonomic expertise to colleagues in the South, and access of taxonomic data via our website (http://www.taxonomy.be/). Whenever possible, we will orientate activities such as research projects so as to favour the integration of a poverty-reduction vision. We will continue to support the series AbcTaxa by the publication and distribution of one new manual, along with the distribution of already published manuals. Through two of its former sub-programmes, "Tackling the taxonomic impediment" (GTI) and "Supporting biodiversity inventories, monitoring and assessments" (IMAB), now re-named under SO 1, our cooperation programme is strengthening the scientific and technical knowledge base on biodiversity. It does so by capitalizing on the robust expertise of RBINS in the following aspects: i) the identification, monitoring and assessment of components of biodiversity (from taxonomic identification to ecological studies), (ii) the study and modelling of ecosystem functioning and (iii) the scientific foundations of conservation biology. Our mission of building scientific capacities in developing countries has proven efficient and will remain central in the on-going framework programme.

It should be noted that CEBioS provides short term capacity building without the objective of obtaining a degree (Ms or PhD). However, many scientists are in the process of obtaining their thesis through research and CEBioS directly contributes to obtaining this degree through access to tools, material and knowledge. Therefore, in the logframe the number of graduates is given as a target, albeit being indirect or 'proxy'.

Expected results

1.1. Scientific and technical **expertise** is built to acquire knowledge

- individual grants (GTI competitive external call)

1.2. Quality scientific **knowledge** is produced to serve science-based policy

- A : workshops in South (GTI competitive internal call)
- B : institutional partnership with ICCN (RDC), OBPE (Burundi), UAC (Benin)
- C : academic support to UNIKIS
- D : institutional partnership on marine modeling

1.3. Monitoring data is fed into **national indicator processes**

1.4. Scientific **outputs** are made accessible to users

Expected result 1.1 Scientific and technical expertise is built

Description:

Individual grants for short-term assignments are organised through competitive calls (study visits, participation in workshops or conferences, networking...) that will include the possibility of distance support (e.g. counselling and e-coaching). Such grants will primarily target early-career scientists and high-level scientists who need access to specialised equipment (molecular lab, electron microscopy, digital photography...). These beneficiaries should preferentially come from partners which are eligible for a partnership agreement, and which Belgium included in their Programmes of Indicative Cooperation sectors with a clear link to biodiversity and poverty eradication.

Logframe (partim):

Expected results (output)	**Output indicators**
1.1 Scientific and technical expertise is built	National authorities use the information provided by SO1 in the national indicator processes 12-18 students trained / year will produce: 8 posters and/or oral presentations given at national or international events/ year; 5 publications in scientific journals or general media/ year; 3 who graduate (Master or Ph. D.)/ year;
Activities	
1.1.1. organise the external call, selection and mobility of 12-18 trainees per year	
1.1.2. follow-up of the young scientists for scientific output and graduation	

Table 3: logframe (partim) for SO1, 1.1.

Activities:

In December 2016, the new external call for proposals was launched. It is open for applications until end-February 2017. According to budget previsions, the jury will select 18 trainees to come to Belgium in 2017 (See table 1 and 4). This call is open for new applicants, who never benefitted from our support in the past, but also to former grantees who came less than 3 times and received positive evaluation from their tutors. The selected projects will have not only to tackle taxonomic issues but also to clearly state their relevance towards poverty eradication and multiplier possibilities.

The call for proposals was launched on 19th December 2016. It was open for applications for 2 months (until end-February 2017). As usual, applicants were able to apply directly on http://www.taxonomy.be through an online form. The selection procedure will take place from mid-February to mid-March 2017. Applications will be evaluated by both GTI team members and Belgian experts (from the RBINS) according to their research field. The study visits will start at the beginning of May 2017. Study visits will last 4 weeks maximum.

While selecting trainees, priority will be given to applicants living and working in one of the 14 priority partner countries and/or working in institutions linked to the RBINS by a MoU.

Budget:

Activities	Targets	Operations	Missions	Total	
1.1.1.Organise the external call, selection and mobility of 15trainees coming from the partner countries	**Students in taxonomy and professional taxonomists in the South**				
Launch and dissemination of the external call to the relevant partners and networks					
Selection of the trainees (max. 15-18 people) by the Belgian GTI team and RBINS taxonomists					
Organisation of the trainings (logistics)					
15-18 foreign taxonomists come to Belgium and stay for 3-4 weeks to perform their taxonomic research	Students in taxonomy and professional taxonomists in the South	72000		72000	
1.1.2.Follow-up and assessment of the projects	**Students in taxonomy and professional taxonomists in the South**				
Follow-up of the young scientists for scientific output and graduation	idem				
Assessment of the projects	NA				
Total		72000		72000	

Table 4: Budget for SO1, 1.1.

Expected result 1.2 Quality scientific knowledge is produced and used for the better understanding and management of biodiversity in partner countries

Description:

Collaborative projects will be organised with partner institutions that cover training, research support to improve small infrastructures (such as material for scientific collections, lab work, training in the use and application of models to manage ecosystem services) and networking. Such projects will be undertaken with well-established partners that have signed a partnership agreement; there are a number of selection criteria for such partnerships, such as a significant operational role and mandate in the national strategy and policies at national and international level, a positive track record of past cooperation (e.g. grants, work on archives, workshops, and trainings), requests for additional cooperation. This expected result focuses on the generation and appropriate use of scientific knowledge related to taxonomy, ecology and ecosystems (function, services). Due to historical reasons, budget line and content reasons, **it is subdivided into four parts (A to D),** each dealing with one aspect and related to different partners and concepts of work (see below).
All activities undertaken to achieve this expected result, whether training workshops, research projects or equipment support, are developed in the framework of long-term partnerships. They all intend, in addition to the mentioned expected result, to consolidate partner institutions and enhance their role in their respective countries.

Outcome per institutional partner (SO1-1.2., B, C, D, with references to 1.3-1.4))

Scientists apply their expertise, enabling them to better study and understand biodiversity and ecosystem services linked to poverty eradication and better promote and disseminate the value of biodiversity to society, with enhanced access to and use of field guides, manuals, lexica and tools. Rangers monitor and report habitat changes of areas of high interest for biodiversity (1.2.)

The staff of the partner institutions carry out research more efficiently and effectively on biodiversity and ecosystem services (1.2.,1.3., and 1.4.)

National indicator processes receive input (1.3)

1.2 Quality scientific knowledge is produced / B

ICCN (DR Congo)

after five years, ICCN is able to better monitor the dynamics of habitats in its protected areas, both at the implementation level (rangers using tools), as at the management level (reporting, analysing trends and deciding on specific interventions). ICCN has a better knowledge of the value of the ecosystem services and can use this information to promote green economy such as eco-tourism.

OBPE (Burundi)

after five years, OBPE is able to better monitor the dynamics of habitats in its protected areas, both at the implementation level (rangers using tools), as at the management level (reporting, analysing trends and deciding on specific interventions).). OBPE has a better knowledge of the value of the ecosystem services and can use this information to promote green economy such as eco-tourism, mushroom collection, pollination, etc.

UAC (Benin)

after five years, UAC and partners (AVIGREF, CENAGREF) is able to better provide scientific answers to monitor the dynamics of habitats in its protected areas and buffer zones (Penjari), both at the implementation level (rangers using tools), as at the management level (reporting, analysing trends and deciding on specific management and conservation interventions, policy briefs), especially concerning pastoralism and bush fire and its implications for poverty and biodiversity. The conflict between nature conservation and pastoralism is better understood and appropriate actions are undertaken to ease this tension for the benefit of the people and the wildlife. The dynamic cycle of fire is better understood in order to take appropriate actions to control it more optimally for the benefit of people, wildlife, and biodiversity in general. IMER (Vietnam)

1.2 Quality scientific knowledge is produced / C

UNIKIS and CSB (DR Congo)

after five years, UNIKIS and CSB are more able to investigate the biodiversity in the tropical rain forest linked to poverty reduction, both at the implementation level (research), as at the management level (reporting, analysing trends and deciding on specific interventions) and are part of the global scientific community with more scientific output and extra-muros funding. CSB and UNIKIS are more able to carry out research in promising fields which can help support the local green economy, such as collection of mushrooms, fisheries, insect consumption etc.

1.2 Quality scientific knowledge is produced / D

IMARPE (Peru)

after five years, IMARPE is able to better monitor the dynamics of habitats in marine upwelling zones of the Peruvian coast, enabling them to inform the fisheries authorities which measures should be taken in order to promote sustainable fisheries, which is to the benefit of the local fish industry and the marine biodiversity.

IMER (Vietnam)

after five years, IMER is able to better monitor the dynamics of habitats in shallow ecosystems with endangered coral reefs such as Halong Bay, and hence to make the most ecologically sensitive decisions for management, taking into account the ecosystem services for the local communities.

Logframe (partim):

Expected Results	Output Indicators
1.2 Quality scientific knowledge is produced **(4 parts: A, B, C, D)** 1.2.1.(A) taxonomic research is strengthened	A number of trained students / year will produce ; publications in scientific journals and general media; graduates (Master or Ph. D.); 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.
1.2.2.(B). the monitoring of habitats for the management of ecosystems is strengthened	B At least one training per country is organized and is followed by two applications campaigns on the field. 30 people trained in the habitat monitoring, Syllabi produced and/or updated (see also 1.4.B)

1.2.3. (C). taxonomic research and the monitoring of lowland forests at the University of Kisangani is strengthened	4 articles published in peer reviewed journals, 4 lexicons will be finalized and used, see also SO1-4b over 5 years : 2 PhD students, 6 master students finalised their thesis, 5 oral contributions (participation to meetings, conferences, lectures, seminaries…) 5 information exchange sessions have been organised in relation with poverty reduction related subjects of the studies. C 3 PhD students identified 3 PhD students/year followed training supervised by expert in Belgium/ elsewhere (total=15) For 3 PhD students: 1 local visit/2years by supervisor (total=9) 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) 2 publications in scientific journals/PhD student (total=6).
1.2.4.(D) Application of the COHERENS model for integrated coastal management and monitoring of ecosystems	D A review of the presentation of the specific research questions of the partner institutes Number of scientific output (presentations, conference) Number of qualified trainee ex-post reports within the visitors programme 3 policy briefs are to be produced by the partners Documentation of the Developed modules for COHERENS available.

Activities

1.2.1.(A) Supporting taxonomic research through
Prospecting new partnerships in e.g. East Africa
Call for 4-5 'classical' projects
Follow-up of projects and publications/dissemination/reporting

1.2.2.(B). Supporting the monitoring of habitats for the management of ecosystems through
For DRC, Burundi, Benin

Training + Follow up

- Workshops + Follow up subsequent practice
- Syllabi preparation
- Expert missions
- Supplying Basic Equipment and documentation
- Collecting data on habitats state – Data base (feeding + exploitation)
- Lexica (Redaction + Publication)

Promotion of research

- Contribution to the identification of the topics
- Supporting theses: preparation + publications
- Help to Implement the recommendations issued by research

•Attending the yearly Coalition pour la Conservation au Congo (CoCoCongoCoalition pour la Conservation au Congo –CoCoCongo Une plateforme d'appui à l a conservation des Aires Protégées regroupant l'ICCN et ses partenaires) meeting
1.2.3. (C). Cooperation with the University of Kisangani for the taxonomic study and the monitoring of lowland forests through Selection of 3 PhD candidates with a relevant research programme Training of the selected PhD candidates in Belgium (RBINS, RMCA, Flemish and Francophone universities, & when necessary foreign experts) Expert missions for local follow up of progress made by 3 PhD students Financial support for field work, equipment, documentation, transport Financial support for 3 PhD thesis defence
1.2.4.(D) Application of the COHERENS model for integrated coastal management and monitoring of ecosystems through Setting up and implementing partnerships Supporting development of web sites Supporting visitor programmes Facilitating communication between independent participants Distance E-coaching Producing marine policy reports Coaching towards an independent use of the COHERENS model and its applications Coaching in developing site-specific applications with the code in function of policy needs, i.e. develop a site specific biological module or wastewater module Workshop for advanced users Support with scientific arguments for stakeholders Establishing links between physics, sedimentation and biodiversity is scientifically documented.

Table 5: logframe (partim) for SO1, 1.2.

Activity 1.2.1. (A). Supporting taxonomic research

Introduction

The first part A (activity 1.2.1. of expected result 1.2.), 'taxonomic research is strengthened', specifically involves **workshops and the application of these workshops through joint field work** with students and staff in selected partner countries of the Belgian cooperation. The output of these trainings are scientific publications, as well as field manuals to guide the professional in his work to better study and understand the biodiversity of selected fragile or hotspot ecosystems, in order to produce enough knowledge for policy purposes of conservation and sustainable management at the level of species, landscape, ecosystem. The aspect of linking the conservation of biodiversity to sustainable development is always taken into account, especially by demonstrating in the field with the field actors what kind of ecosystem services are beneficial to the local people and communities, and which social, human and ecological costs would result from the disappearance or ill-functioning of these ecosystem services. The trained persons will act as 'ambassadors of biodiversity and/or development' in their country and generate multiplicator effects. This applies also to the parts B, C and D. The selection of such

interventions happens through competitive calls in the framework of the Global taxonomy Initiative (GTI).

Taxonomic workshops in situ

A **new internal GTI call for proposals** will be addressed to RBINS taxonomists in 2017. The same selection criteria as those set in the past will help select the projects.

In 2017, we plan to fund a maximum of 5 projects but this is subject to change regarding the number and quality of received submissions. If more than 5 good-quality project applications are received, priority will be given to projects already initiated in the past. Each project will be allocated 15,000 € maximum.

At the end of their projects, researchers will be asked to provide a report along with a list of their outputs such as publications in scientific journals, posters, presentations given at international meetings, etc. The outputs will be published on our website. Since 2016, a special section is dedicated to publications here http://www.taxonomy.be/gti_calls/grants_awarded/publis-gti The network of CHMs will also be used, whenever possible, in order to disseminate the project results to a broader audience.

Cooperation with selected institutes in privileged partner countries

This part of the programme will enable us to provide our partners with equipment (such as microscopes, books, *etc*.) necessary for their research. As usual, in 2017, support will be provided according to *ad hoc* requests made by our institutional partners and depending upon available funds.

GTI uptake meeting

In April 2017, we will organize our first GTI uptake meeting in Vietnam. The meeting will be funded thanks to remaining funds from the 2016 budget (SO1, 1.2.1). There is a long lasting scientific collaboration between the RBINS and research institutions from the Vietnam Academy of Science and Technology. The collaboration started with the Institute of Ecology and Biological Resources (IEBR) and it was followed by a partnership with the Vietnam National Museum of Nature (VNMN). These collaborations were initiated in 2007 thanks to funding from the Belgian GTI focal point (CEBioS) via its competitive calls. Since 2007, numerous trainings of Vietnamese researchers took place at the RBINS and in several Vietnamese protected areas. This work led to a better knowledge of the Vietnamese biodiversity and entomofauna in particular and built the skills of Vietnamese researchers and technicians. It also enabled the improvement of entomological collections and of collection management and the study of the material preserved at VNMN. Moreover, many new species have been described.
Since scientific research must help decision making in the field of biodiversity conservation and sustainable use (e.g. CBD Aichi target 19), we consider that scientific results should be shared with the national and regional competent authorities of Vietnam in strong ownership. To this aim, we will

organise an uptake meeting in Vietnam from 3 to 7 April 2017. The meeting will take place in Hanoi and in Ba Vi National Park (60 km away from Hanoi), or similar, depending on the accommodation available. The meeting will have 3 components:

- 2 days of producing communication material and a policy brief with the Belgian and Vietnamese researchers
- 1 day of uptake meeting with the Vietnamese authorities and international participants
- 1 day of field trip to Ba Vi National Park.

Dissemination of GTI outputs

On Tuesday 7 February 2017, Marie-Lucie Susini Ondafe will participate in the European Conference of Tropical Ecology, held in Brussels. She will give an oral presentation in the session dedicated to 'Tropical biodiversity for development'. She will explain how CEBioS helps its partners use their taxonomic research results to achieve a better conservation and management of biodiversity and ecosystem services in the South.

Other opportunities to present our outputs at national or international meetings/conferences will be considered throughout the year.

Finally, Marie-Lucie Susini Ondafe has been invited to become a member of the task force on capacity-building of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) as of 1 January 2017. The primary purpose of the task force is to support the achievement of deliverables 1 (a) and 1 (b) of the first IPBES programme of work. The mandated capacity-building functions of IPBES include prioritizing key capacity-building needs to improve the science-policy interface at appropriate levels, and providing and calling for financial and other support for the highest-priority needs related directly to its activities as decided by the Plenary. The responsibilities of the task force include:

- Developing modalities for identifying, monitoring and evaluating capacity-building needs relating to the Platform's mandate and programme of work, and promote their implementation in a consistent and comparative manner;
- Supporting the building of the institutional capacity needed to implement the work programme;
- Assisting in addressing the prioritized capacity-building needs agreed by the Plenary.

Budget for 1.2.1. (A) :

Activities	Targets	Operations	Missions	Total	Money unspent in 2016
Supporting taxonomic research					
Prospecting new partnerships in east and west Africa	Taxonomists in east Africa				
Launch and dissemination of the internal call for in-country courses/ workshops	RBINS researchers				
Selection of the applications and expert mobilisation for in-country courses					
Realisation of the projects in the South	RBINS researchers + relevant experts in the South	55,000	20,000	75,000	
Follow-up of the projects					
Assessment of the projects					
GTI uptake meeting in Vietnam					30,000
Total		55,000	20,000	75,000	30,000

Table 6: budget for SO1, 1.2.1. (A)

Activity 1.2.2. (B). Supporting the monitoring of habitats for the management of ecosystems

Introduction

The second part B (activity 1.2.2. of expected result 1.2.) is very much related to the expertise present at RBINS, required for the implementation of the CEBioS programme on **habitat monitoring within tropical ecosystems**, especially protected areas. Part B concerns **institutional partnerships** about habitat monitoring in Africa (RDC, Burundi, Benin), while parts C and D concern academic support to UNIKIS and CSB, and marine modeling in Peru, Vietnam and Benin, respectively.

The enhancement of the capacities of our partners is mostly focused on the sector of **forests**, which is one of the most relevant ecosystem to the Belgian Development Cooperation. Our special interest in tropical forests is also justified by the enormous value of their biodiversity and the considerable value of the services it provides for local human development (food, medicines, fuel, climate change mitigation…) as well as global ecological stakes (such as carbon sequestration). Ecosystem functioning is what guarantees the existence of the ecosystem services necessary for human activities. Being able to

evaluate future situations or scenarios on the basis of existing conditions and predict changes in biodiversity and ecosystem functioning is thus not only crucial for the design and implementation of conservation plans but also for assessing the availability of ecosystem services and its potential impact on poverty. This part contributes also the most to research on ecosystem services and individual plant species having an economic and ecological value. It confers thus a certain scientific credibility to CEBioS concerning its own expertise, since its direct interventions in the field combine training and research.

Digitisation and dissemination of archives on national parks:

In addition to these activities, we will pursue the digitisation of archives on national parks. We will proceed with the digitisation of paper publications, as well as the encoding of data. The website with all the relevant information is publicly available at http://www.apncb.be . In addition to the institutions that have already received them in D.R. Congo and Burundi, these publications will be delivered to other national parks and scientific partners; They will also be sent to UAC in Benin.

Partner countries of the Belgian cooperation targeted in Africa: D. R. Congo, Burundi and Benin.

1. Within **DR Congo**, this component contributes specifically to the institutional strengthening of the **ICCN**, by training rangers in habitat monitoring and by contributing in a participative way to the production of vulgarization tools, especially the lexicons of the vegetation dynamics of protected areas managed by the ICCN. It is actually almost a kind of action research, since the rangers actively collect data which can be used both for the management of the parks and the research by students coming from the universities of Bukavu, Goma, Lubumbashi, Kinshasa and others. Our partnership with the ICCN for the period 2008-2012, was renewed since 2013, remains a pillar of this programme. Our capacity building activities have been supporting the 'Law Enforcement Monitoring' (LEM) programme of the ICCN, which has ensured the follow-up of the application of wildlife protection legislation and the monitoring of illegal wildlife trade use. The data generated on wildlife and habitats serve as a basis for the management of the protected areas, as well as the production of educative lexica for awareness and dissemination purposes. In 2017, our efforts will mostly be concentrated on finalizing the preparation of the lexicon on the habitats of the Itombwe Nature Reserve (DR Congo). The effort will further focus on the applications of the most relevant results from the point of view of interactions between fauna with their habitats and ecosystem in dry forest (Muhulu, Katanga). Simultaneously, we will continue to boost the assessment of ecosystem services, especially those inherent to mushroom in the Virunga National Park and in the Itombwe Natural Reserve. Finally, 2017 will also be devoted to the evaluation of the implementation of the entire programme over the period 2014-2017.

2. In **Burundi** *(The following plans for Burundi are on provision of the current security and political evolution in Burundi)*, the same concept is applied with some nuances to the **OBPE**, responsible

for the protected areas, **mostly in hill or highland ecosystems**. Our successful work with ICCN inspired "Office Burundais pour la Protection de l'Environnement (OPBE)", which expressed its interest in starting a similar collaboration with us since 2010. From 2013, the staff trained through our programme on the monitoring of the dynamics of habitat has been collecting data on these changes. This work is carried out on ten transects located in three main protected areas (Kibira, Rusizi and Ruvubu national parks), where plots have been installed in vegetation, taking into account each of the different stages of habitat dynamics. These stations were also located on the basis of their high degree of vulnerability and / or their potential value in green economy. The transect followed in the Kibira National Park, a rare place to monitor chimpanzees in these fragments of mountain forests is one of the interesting stations. In 2017, this activity will be consolidated by a campaign of new observations on the evolution of the habitats in order to increase the data serving to interpret the interrelations between wild animals with their habitats. These interpretations will be made with references to the indicators established by the OBPE with the support of UNDP in 2016. The lexicon for Ruvubu national parc will be finalized. Finally, 2017 will also be devoted to the evaluation of the implementation of our programme with the OBPE over the period 2014-2017 and the formulation of the transition period mid 2017-end 2018.

3. In **Benin**, this concept is applied as well, however with special attention to the ecological issues typical for the **Sudanese and Sahelian zones**, where overgrazing by **pastoralism** and **bushfire prevail as important structuring factors and stressors**. **The work in Benin** combines the unique participation of the Université Abomey Calavy (UAC), together with the CENAGREF (responsible for the national parcs) and a consortium of village representatives (AVIGREF[1]) who have their seat in the 'conseil d'administration' of the CENAGREF. This participative process should ensure that the research carried out by UAC remains well connected to the realities of the field and that the recommendations take into account the often conflicting agendas of nature conservation and economic development through sustainable development concepts, such as co-management. This activity enables RBINS experts to transfer on demand their knowledge to academicians and students of partner institutions by involving them in the various stages of their research projects. The Université d'Abomey- Calavi (UAC) in Benin expressed its strong interest in the methodology implemented in ICCN and OBPE parks. Following the formulation mission carried out by the RBINS delegates in 2014, formal agreement for a long term partnership was signed by the two institutions. UAC's scientific research on ecosystem dynamics is advanced. The Université d'Abomey- Calavi is drawing on our expertise in order to popularize this knowledge and valorize it for the management of ecosystems in Benin, more specifically the National Parc of Pendjari. As part of the 2017 programme, we will support the process of self-appropriation of scientific knowledge on the use of bush fire and their impacts on the habitats and animals in the Pendjari NP. Activities will consist mainly of :

    - The observations regarding the impact of bush fire on the habitats will be collected by the personnel of the Pendjari NP.
    - The results will be recorded in a database by the UAC students.

[1] Associations Villageoises de Gestion des Réserves de Faune

•More research will be done by the UAC in order to consolidate the knowledge on bush fire and their impact on the habitats and components of biodiversity; the RBINS will contribute to identification of new topics and will support theses on this topic. At least one article on the results will be published.
•Our support will be provided to park rangers and other stakeholders to continue the implementation of recommendation inspired by the whole available knowledge.

In 2017, our efforts will mostly be concentrated on finalizing the preparation of the lexicon dedicated to the Pendjari National Park (Benin). Follow-up will be ensured to obtain the deliverables expected after 3 years of the implementation of the program (2014-mid 2017), as well as to evaluate the whole activities accomplished. A mission is planned to discuss the results and formulate the transition towards the end of 2018.

Exchange of best practices and lessons learnt

Obviously, many elements from the partnerships in Benin, Burundi and RDC overlap. In addition, the partners in the latter two countries are part of the RMGL, which is the Mycologists Network of the Great Lakes Region. They will meet in a workshop in Bujumbura (Burundi) to evaluate this network whose activities supported by CEBIOS have been boosted by a BELSPO project since last year. This project should lead in particular to the standardization of the methodology of research on the productivity of mushrooms in different ecosystems of the whole region.

Details per partnership

1. **Partnership with ICCN in R.D. Congo**

(The cooperation with UNIKIS is explained under 1.2.3. (C))

Institutional partnerships and synergies in DR Congo

The cooperation framework of RBINS in RDC is based amongst others on a MoU, signed with ERAIFT, WWF, MRAC, Meise and RBINS in 2010. An attempt has been undertaken by CEBioS in 2016 to update this agreement, since the geographical coverage and the thematic are not actual anymore, but it proved too difficult to bring all partners around one new concept. More negotiations will be undertaken by WWF Belgium.
The cooperation with ICCN is based on a MoU signed in 2008 for the period 2008-2012 and is automatically prolonged under silent procedure. The cooperation with ICCN is based on a series of ad hoc service contracts for small projects of ± 4-10,000 Euro. These contracts are standard and include parties, respective responsibilities and tasks, budget, timeline, and reporting obligations and are set up

based on demand and mutual interests. The same applies for cooperation with universities in RDC, such as UNILU, UOB, UNIKIN and others, often in cooperation with ICCN. Due to the enormous surface of the country, the centralised bureaucracy of ICCN, it was until now estimated to be the most optimal way of working in DRC.
Moreover, the initiated cooperation with VVOB in DRC in 2013 has now resulted into a full-fletched awareness project at the level of pilot vocational agronomy schools and is being implemented in 2015-2017 under SO3 (awareness), as one of the selected projects.

A Framework Agreement with CSB, Kisangani, aimed at preparing the institute to act as a secondary CHM in DRC and in this role provide policy support to the ministry in charge of the environment, is to be signed early in 2017. CSB, as many other Congolese partners, is working closely with ICCN for monitoring and inventory missions in DRC's protected areas, under a 'Protocole d'Accord' signé entre l'UNIKIS et l'ICCN.

Besides the support that is required to obtain the expected products for the triennium 2014 -2016, we will endeavour to strengthen our previous activities with ICCN in synergy with Congolese scientific institutions regarding the following components:

<u>Monitoring of habitats, field work</u>

- **In the "Reserve Naturelle de la Luswishi", Katanga**

  The follow-up of the of the programme carried out previously will consist of applying again the results that were found most relevant during the period 2008-2013. An assessment of the data that were collected previously in the **Katanga province** (including the Parc National de l'Upemba, PNU) showed that remnants of dry forests of Muhulu type, which represent the most advanced stage and steady habitats (climax) in the area of woodland, were generally found on soils of termite mounds. This finding is particularly interesting in terms of conservation. Indeed we know also from the research carried out at the UNILU and the UGent (Mujinya 2012) that such soils extend on about 1/5th of the Zambezian basin. It is also known that each termite mound is characterised by very complex food chains (Malaisse 1978, 1997). This is why the ICCN wishes to monitor the dynamics of habitats on termitosols, on a model site, where activities to promote the ecosystem services that are inherent to termite mounds will be carried out also. Since 2013, the woodland Reserve of Luswishi (30 km from Lubumbashi) has been used as the field site of this initiative. Our agreement with the ICCN allows the UNILU to be involved. A drone has been acquired under the contract IRSNB-UNILU N°2015/S01-BES-2.2/68, the novelty will be to make effective the applications of this tool in all the research undertaken on the field.

- **In the PN Kahuzi Biega**

  New observations on the vegetation changes in the parcels that were delineated in 2008 will be carried out, so as to allow the analysis of diachronic dynamics of forest habitats.

- **In the Bombo Lumene Reserve, DRC**

  Given that Mr Matuba, who was responsible for the observations on the forest regeneration was transferred to the Kisantu Botanical Garden since 2016, the challenge to overcome in 2017 will be to ensure that this activity continues and that the results obtained previously can be used. Therefore it is planned to discuss this with the ICCN authorities and visit the RDCBL while we will be in transit in Kinshasa during a mission that will mainly deal with the follow-up of the ongoing works in the Luswishi Reserve (Katanga).

- **In the "Réserve transfrontalière de la Ruzizi"**

  The activities will be based on the report on the implementation of the IRSNB-UNILU contract N ° 2016 / So1-BES-2.2 / 87 which made it possible to produce an inventory of the knowledge of the "Réserve Transfrontalière de la Ruzizi" to facilitate its rehabilitation. Among the recommendations arising from this report, we will especially support the production of a map of this area.

Monitoring of habitats, lexica

The lexicon dedicated to the Itombwe Nature Reserve will be released. Its edition was planned for 2016 but it has been postponed because the priority was given to the publication of the lexicon on the National Park of Kibira, Sector Rwegura (Burundi). The manual on the INR has the same relevance as lexicons published in the frame of the previous programme and it will increase the knowledge of the exceptional value of the Itombwe ecosystems and thereby it will support the process started by ICCN to include this southern part of the Albertine Rif into the World Heritage.

Summary and output

The support hence will consist in the following activities:

1. The monitoring of the forests regeneration favoured by the strengthening of their conservation after their destruction in 2013 in the RDCBL
2. Providing the baseline of the knowledge of the "Reserve Transfrontalière de la Ruzizi", especially support the production of a map of this area.
3. Publication of the lexicon on the habitats of the "Reserve Naturelles de l'Itombwe"
4. The dynamics of habitats on termitosols, on a pilot site in the 'Réserve de la Luswishi' .
5. The use of the data collected through the LEM programme and other available data to interpret the relations between habitats and fauna.
6. Shipping the APNCB publications to the UNIGOM.

As already outlined above, the promotion of ecosystem services will be an important component of the 2017 programme. This activity will be developed especially in terms of strengthening scientific knowledge.

•Publication of the results on the "Exploration of the stations of wild coffee in the mountains of the Réserve Naturelle de l' Itombwe; the harvest of biological material; gathering ethnobotanical and ecological data". This work was carried out in the framework of the contract RBINS-UOB No. 2015 / So1-BES-2.2 / 63

•Support to a field mission of Mr Rizinde Habimana Jean Claude (assistant at the UNIGOM) in the PNVi to install permanent plots at different altitudes in the northern, central and southern sectors of the PNVi to inventory and monitor phenology and productivity of mushroom in all types of ecosystems of this protected area. This new step in the process of valorisation of the mycoflora of this park is subsequent to previous investigations that this researcher carried out succesfully for his DEA memoir at the UNIKIS, with the support of our program under the contracts of RBINS - UNIGOM N° 2015/SO 1-BES-2.2/62 and N° 2016/SO 1-BES-2.2/88. Subject: "Contribution à l'inventaire et l'écologie des champignons comestibles du Parc National des Virunga sur l'axe Beni-Mutwanga-Masambo".

- Continuation of the assessment of ecosystem services in the Kiswishi forests. This will require the support of the RBINS to the preparation of 2 PhD theses:

  - «Quantification et la monétarisation des services écosystémiques d'approvisionnement inhérents aux termitières des écosystèmes du Miombo » by **François Ntumba Ndaye** (assistant at the UNILU). This research is co-supervised by Prof Basil and Ngoie Mujinya Bazirake Schutcha (UNILU) and Dr François Muhashy (RBINS).

  - « Interactions interspécifiques et des conditions environnementales sur le comportement de construction des termites du genre *Cubitermes* dans le Katanga méridional » by **Patrick Kasangiji A Kasangiji** (assistant at the UNILU), under the supervision of Prof. Basile Mujinya Bazirake.

2. Institutional partnership with OBPE in Burundi

- A South Initiative (75000 Euro for 2015-2017) from VLIR-UOS has ended in December 2016 where RBINS and OBPE are co-promotors and UB and VUB are promotors. It is about the monitoring of the dynamics of lake Tanganyika. The Belgian embassies of Burundi, but also from other countries bordering Lake Tanganyika expressed their interest. With these funds, about 10 students of the Université du Burundi were able to start field work in 2016. A VLADOC KU Leuven student linked to CEBioS will now start working on genetic stocks and fisheries of the pelagic and economically and food security highly relevant sardines of L. Tanganyika.

- **Institutional partnership RBINS-OBPE, operational plan**

2017 is the last year of the 3 yrs cooperation agreement between RBINS and OBPE, which will end mid-2017. This means that a new agreement needs to be made after mid-2017, depending on an evaluation of the results, impact and political environment in order to cater for the transition towards the end of 2018. The title of the programme: **« Programme de recherche, échange d'information, sensibilisation et conservation de la biodiversité au Burundi »**

The main expected results are (original logframe) :

RI1-Renforcement des systèmes de suivi de la dynamique des habitats et de la biodiversité pour une bonne conservation des aires protégées;

1.1.1. Publier dans des revues internationales les 10 études faites sur la dynamique des habitats aux Parcs Nationaux de la Rusizi, de la Ruvubu et de la Kibira;

1.2.1. Etablir un système fonctionnel de collecte des données sur les types d'habitats et leur évolution;

1.2.2. Mettre en place et à jour une base de données et transférer continuellement les données;

1.2.3. Renforcer la gestion des collections de flore, en particulier celle des plantes dominantes qui, en tant que telles, servent de référence pour la reconnaissance des habitats;

1.4.1. Mener une recherche sur les Batraciens des milieux aquatiques.

RI2-Evaluation et valorisation des services écosystémiques dans les aires protégées;

2.3.1. Mener des recherches sur la taxonomie des pollinisateurs;

2.3.1. Mener une étude sur la contribution des pollinisateurs à la productivité des cultures (Haricots);

2.3.3. Mener une recherche sur le rotin (palmier rotang);

RI3-Développement de la prise de conscience sur des questions pertinentes de la biodiversité;

3.2.3. Organiser des séances de sensibilisation à la mise en place d'un accord de collaboration entre les Chercheurs et les Tradipraticiens (autres activités à la suite des résultats de 3.2.2. du plan 2015).

3.3.3. Organiser des séances de sensibilisation sur les problèmes clés de la biodiversité suivant les groupes cibles (suite aux résultats de 3.3.2. du plan 2015) (les administratifs provinciaux et communaux, décideurs, les communautés locales et autochtones);

RI4-Renforcement des mécanismes d'échange d'information sur la biodiversité.

4.1.3. Suivi via entre autres l'organisation de réunions périodiques des Points focaux interinstitutionnels du CHM;

4.1.4. Recruter un consultant chargé d'appuyer le Point Focal du CHM dans la collecte et le postage des informations sur le site web du CHM pour 12 mois;

4.2.1. Publier et diffuser annuellement le bulletin scientifique de l'OBPE;

4.2.2. Elaborer le plan stratégique de la recherche sur la biodiversité pour la mise en œuvre de la SNPAB.

For 2017, OBPE is planning to finish the work programme due to the delays caused by the political situation and to formulate with CEBioS about the transition to 2019.

Next table shows the operational plan as discussed at a participative workshop in March 2017 at OBPE, Bujumbura. Yellow markings show new features, red boxes are finalised, other boxes are to be made on current budget, competitive GTI or awareness budgets or external funding.

	ACTIVITES	**2017**	**2018**
1	**IR 1 :** La dynamique des habitats et la biodiversité des aires protégées du Burundi sont mieux connues et comprises		
1.1.	Collecte des données pour rendre compte des changements diachroniques		
1.1.1.	Etablir un système fonctionnel de collecte des données sur les types d'habitats et leur évolution (progressive/régressive)		
1.1.1.1	Suivi des types d'habitats et leur évolution (progressive/régressive)		
1.1.1.2	Suivi des feux au niveau des quadrants existants mis en place par UNDP		
1.1.1.3	Suivi des bambous au niveau des quadrants existants mis en place par UNDP		
1.1.2	Renforcer la gestion des collections de flore, en particulier celle des plantes dominantes qui, en tant que telles, servent de référence pour la reconnaissance des habitats		
1.1.2.1.	Renforcer l'herbarium de l'OBPE suivant les normes internationales (Référence au Projet BID volet Cofinancement)		
1.1.2.2.	Renforcer des herbiers des Parcs Nationaux de la Kibira, Ruvubu et de la Rusizi		
1.1.2.3.	Multiplier des guides et lexiques sur la flore et les habitats pour le suivi de leur évolution (Ruvubu et Rusizi)		
1.1.3.	Mettre en place et à jour une base de données et transférer continuellement les données		
1.2.	Renforcement des capacités en matière de recherche sur le suivi de la dynamique des habitats		

1.2.1.	Former le personnel de niveau de base sur la collecte des données		
1.2.2	Former le personnel de niveau supérieur sur la collecte, l'enregistrement et l'interprétation des données (formation sur base de données qui sera développée en juillet par un expert international)		
1.2.3.	Organiser un atelier régional d'échange d'expériences sur les meilleures pratiques et les leçons apprises (en attendant l'avis de François)		
1.3.	Promotion de la recherche sur les écosystèmes aquatiques des aires protégées du Burundi et les bio-indicateurs de leur état		
1.3.1.	Conduire des études sur les indicateurs de la santé des écosystèmes aquatiques		
1.3.2.	Conduire des études sur la typologie des macrophytes des milieux aquatiques (lac Tanganyika et vallée de la Ruvubu) (pour la formulation des indicateurs : déplacer vers le volet MRV)		
1.4.1	Mener une recherche sur les Batraciens des milieux aquatiques (ajouté en 2016)		
	Déplacement, logement et restauration d'un étudiant pour faire une étude sur la taxonomie des batraciens et leur rôle écologique en milieux aquatiques des Parc Nationaux de la Kibira, Rusizi, Ruvubu, de la Malagarazi et de Bugesera (En coopération avec Dr Olivier S.G. Pauwels, IRSNB)		
	Outils de capture, de conservation et de transport et alcool		
	Faire une visite pour la taxonomie des batraciens dans une institution spécialisée (Contacter Monsieur Pauwelset Marie Lucie pour la prise en compte du projet en 2017)		
2	**IR 2: Les services écosystémiques (SE) dans les aires protégées du Burundi sont mieux compris et valorisés**		
2.1.	Etudes sur les services écosystémiques du Burundi		
2.1.1.	Conduire une étude bibliographique d'inventaire des SE au Burundi et définition des SE les plus pertinents pour 2.1.2.		
2.1.2.	Mener une étude spécifique pour l'estimation de la valeur économique des SE sélectionnés sur base de 2.1.1. (formation sur l'évaluation économique, études d'évaluation, vérification des calculs : budget prévu en avenant 2014)		
2.2.	Recherche en mycologie		
2.2.1.	Mener une recherche sur la productivité de champignons sauvages comestibles sur base de recherche taxonomique (év. GTI) (Forêt de montagne)		
2.2.2.	Mener une recherche sur la filière commerciale et communautaire des champignons		
2.2.3.	Mener une recherche sur la restauration des zones déforestées sur base des essences autochtones en symbiose avec les champignons (Budget existant dans le projet avenant 2014)		

2.2.4.	Organiser une formation des éco-gardes et les communautés locales sur l'exploitation rationnelle des champignons (Budget existant dans le projet avenant 2014)		
2.2.5.	Mener des recherches sur la taxonomie des champignons (Budget existant dans le projet avenant 2014)		
2.2.6.	Organiser la filière des champignons		
2.3.	Recherche sur les pollinisateurs		
2.3.1.	Mener des recherches sur la taxonomie des pollinisateurs (Demander à Marie Lucie si c'est prévu dans le budget)		
2.3.2.	Mener une recherche sur l'apiculture écologique avec des espèces autochtones (meliponiculture)		
2.4.	Recherche sur les SE des plantes		
2.4.1.	Mener une recherche sur le rotin (palmier rotang) (Sensibilisation et développer projet pour la restauration : a deplacer dans le RI3)		
2.4.2.	Mener une recherche sur le bambou (Organiser la filière, chercher source de financement, ONG?)		
2.4.3.	Mener une recherche sur les macrophytes en milieu aquatique, typologie des 'wetlands' (lac Tanganyika et vallée de la Ruvubu) (pour la formulation des indicateurs : déplacer vers le volet MRV)		
2.4.4.	Inventaire, caractérisation et cartographie des plantations forestières et agroforestières + banque de données y relative		
3	**IR3 Des publics cibles sont sensibilisés à la biodiversité**		
3.1.	Etude de base sur la perception de l'objectif 1 d'AICHI au Burundi		
3.1.1..	Mener une étude sur le niveau d'implication des groupes cibles dans la protection des aires protégées		
3.1.2.	Confectionner des outils de sensibilisation sur les aires protégées suivant les groupes cibles		
3.1.3.	Organiser des séances de sensibilisation des populations riveraines des aires protégées par groupes cibles suite aux résultats de 3.1.1. et 3.1.2.		
3.2.	Etude de base sur les enjeux du Protocole de Nagoya		
3.2.1.	Mener une étude nationale sur le niveau de compréhension des groupes cibles sur les enjeux du Protocole de Nagoya et mettre en place un Cadre stratégique national y relatif		
3.2.2.	Confectionner des outils de sensibilisation sur le Protocole de Nagoya suivant les groupes cibles (suite aux résultats 3.2.1.) (regarder l'atelier du 20 au 21 Mars 2017)		

3.2.3.	Organiser des séances de sensibilisation des groupes cibles sur le Protocole de (suite aux résultats 3.2.1 et 3.2.2.) (regarder l'atelier du 20 au 21 Mars 2017)		
3.3.	Etude de base sur les problèmes clés de la biodiversité		
3.3.1.	Mener une étude nationale sur le niveau de compréhension des manifestations et des causes hiérarchisées des problèmes clés de la biodiversité par des groupes cibles (Evaluation des impacts des activités de sensibilisation pour le 6ème rapport national) juillet Août Septembre (Table ronde, lobbing, cadre dediscussion, des bailleurs et de décideurs pour l'intégration de la biodiversité dans les projets)		
3.3.2.	Confectionner des outils de sensibilisation sur les problèmes clés suivant les groupes cibles (suite aux résultats 3.3.1.)		
3.3.3.	Organiser des séances de sensibilisation des groupes cibles sur les problèmes clés de la biodiversité (suite aux résultats 3.3.1 et 3.3.2.) premier semestre de 2018 (code forestier, loi sur les aires protégées, etc.)		
3.3.4.	Promotion écotouristique		
3.3.4.1	Elaborer et multiplier un document pour la promotion écotouristique basé sur les résultats sur la valeur économique des SE (implication de l'ONT)		
3.3.4.2.	Sensibiliser pour investir dans l'écotourisme		
4	**Le CHM et le MRV sont renforcés**		
4.1.	Diffusion continue sur le site web des informations sur la biodiversité		
4.1.1	Assurer un approvisionnement continu en électricité		
4.1.1.2	Inauguration officielle de l'approvisionnement continu en électricité avec panneaux solaires		
4.1.2.	Assurer une connexion internet continue		
4.1.3	Rendre fonctionnel le CHM et mettre régulièrement à jour le site web		
4.1.3.1.	Former les différents Points focaux interinstitutionnels et autres partenaires sur Bioland		
4.1.3.2.	Alimenter régulièrement le site web par tous les acteurs concernés		
4.1.3.3.	Faire le suivi via entre autres l'organisation de réunions périodiques des Points focaux interinstitutionnels du CHM		
4.1.4.	Recruter un consultant chargé d'appuyer le Point Focal du CHM dans la collecte et le postage des informations sur le site web du CHM		
4.2.	Informations sur la biodiversité constamment diffusées sur des supports non web		

4.2.1.	Publier et diffuser annuellement le bulletin scientifique de l'OBPE		
4.2.2.	Publier et diffuser des documents pertinents dans le domaine de biodiversité		
4.2.3.	Organiser une réunion biannuelle sur l'orientation du bulletin		
4.3.	Amélioration du système de fonctionnement de la bibliothèque de référence en biodiversité		
4.3.1.	Former continuellement des bibliothécaires sur l'utilisation du logiciel WINISIS et sur la recherche et la diffusion de l'information documentaire		
4.3.2.	Organiser l'échange d'expérience pour explorer le fonctionnement des autres bibliothèques		
4.3.3.	Numériser la cartothèque et la mettre en ligne		
4.3.4.	Communiquer l''existence de la bibliothèque		
4.3.5.	Disponibiliser un guide du catalogue, un lexique vernaculaire et un dictionnaire Anglais-Français-anglais		
4.3.6.	Importer des livres dans le domaine de biodiversité (sur le lac Tanganyika et les écosystèmes centrafricains)		
4.3.7.	Plastifier certains documents importants en détérioration à la bibliothèque		
4.4.	Adoption de l'approche de Measuring, Reporting, Verification (MRV)		
4.4.1.	Intégrer approche MRV dans le système de rapportage sur la biodiversité		
4.4.2.	Adapter l'approche MRV sur les résultats obtenus des recherches aux points 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3		
4.4.2.1.	Formuler des indicateurs sur base des résultats de la recherche sur les macrophytes en milieu aquatique, typologie des 'wetlands' (lac Tanganyika et vallée de la Ruvubu)		
4.4.2.2	Mener une étude sur le statut de Cordia africana, Pterocarpus angolensis, Pterocarpus tinctorius, Raphia kalimacharica, Oxythenanthera abyssinica et établir indicateurs		

3. Institutional partnership with UAC in Benin

2017 is the last year of the 3 years cooperation agreement between RBINS and UAC. This means that a new agreement needs to be made by mid-2017, depending on an evaluation of the results and the impact. A mid-term evaluation has been made back to back with the regional CHM workshop in February 2016. A transition towards 2019 needs to be planned. The title of the programme: **Benin: implementation of scientific knowledge on fire and grazing for the monitoring of habitats:**

- In the agreement with UAC, the National Park Pendjari in the north western part of Benin, is the most privileged site for the implementation of this collaboration.
- In 2016 this output is sufficient to make a content of the first lexicon intended to boost the management of fire and grazing in a way that alleviate pressure on the habitats and their biodiversity.
- We also support a campaign to collect standardized observations on habitat change in relation to these phenomena. A database will be established and fed by these observations that will be collected by the rangers in the park.
- Regarding research on the variation of ecosystem services in relation with fire and /or overgrazing, RBINS support will be ensured to two students who will prepare their memoirs:

  - SABI LOLO ILOU Bernadette Master/FLASH/Géo/UAC on the Impact des feux de végétations sur les services écosystémiques de la réserve de Biosphère de la Pendjari au nord Benin'

  -GBEFFE Alain, DEA AGRN/FSA/UAC on the 'Productivité et Diversité des Groupes Fonctionnels des Communautés Végétales façonnées par le Feux et les Termitières dans la Réserve de Biosphère de la Pendjari'.

This work resulted in the following publication :

GBEFFE, Alain; HOUEHANOU, Thierry; Habiyaremye, François; ASSEDE, Emeline; YAOITCHA, Alain; Janssens de Bisthoven, Luc ; SOGBOHOSSOU, Etotépé; HOUINATO, Marcel; Sinsin, Brice, 2016. Termite mounds Effects on Composition and Plant Species Functional Types and Traits in Pendjari Biosphere Reserve (Benin, West – Africa). African African Journal of Ecology, doi:10.1111/aje.12391.

The expected results are :

Logique d'intervention
RI1 Les connaissances scientifiques préexistantes sont transférées vers les acteurs, y compris le CHM
1.3.3. Mise en œuvre de modules d'information/formation au profit des étudiants sur la CDB, le CHM et le Protocole de Nagoya sur l'APA.
1.3.4. Publication de la synthèse des recherches passées sur le CHM
RI2Denouveauxoutilsde gestion des feux et parcours dans des aires protégées sont disponibles pour un meilleur suivi
2.5. Le lexique est produit, et disponible en version électronique et papier, et distribué
RI 3 Les connaissances scientifiques sur les feux et les parcours sont accrues et adaptées
3.1. La recherche sur les feux et parcours est effectuée
3.2. Les résultats des recherches sont transférés ou restitués aux gestionnaires du PN de la Pendjari (Cenagref, DPNP, Avigref)
3.3. Les nouveaux résultats sont disséminés et vulgarisés (étudiants, chercheurs, riverains des aires protégées)
3.3.1. Atelier de concertation avec les chercheurs pour définir et harmoniser les orientations en matière de sensibilisation sur la base des résultats de recherche (groupes cibles, messages clés et besoins de sensibilisation, formats, etc.)
3.3.2. Publication des nouveaux résultats de recherche sous la forme adéquate sur le site Web du CHM et autres réseaux adéquats
RI 4 Le suivi de la dynamique des habitats au PN de la Pendjari par les gestionnaires est renforcé et mis enœuvre
4.2. Les gestionnaires appliquent les critères pertinents pour la collecte des données sur la dynamique des habitats et tiennent compte des résultats dans les plans de gestion du PNP
4.3. Une base de données sur le suivi de la dynamique des habitats est établie et utilisée à l'UAC par les chercheurs et étudiants. La base de données est partagée avec les gestionnaires (Supplying Basic Equipment and Documentation)
RI 5 La sensibilisation sur la conservation de la biodiversité est augmentée
5.1. Les décideurs, élus locaux sont sensibilisés
5.1.1. Atelier de sensibilisation des décideurs et élus locaux riverains au PNP sur la biodiversité et les acquis du projet.
5.2. Les riverains, les AVIGREFS sont sensibilisés
5.2.1. Atelier de sensibilisation des AVIGREF riverains au PNP sur la biodiversité, les acquis du projet et leurs implications pour la conservation.

5.2.2. Campagnes de sensibilisation dans chaque village riverain sur la biodiversité, les acquis du projet et leurs implications pour la conservation
5.3. du matériel de sensibilisation est produit, disséminé
5.3.1. Production et validation de matériel de sensibilisation sur la biodiversité et les acquis du projet pour chaque groupe cible.
5.4. Le CHM relate les activités et partage les produits de sensibilisation
5.4.1. Collecte et mise en forme de données pour améliorer la section recherche scientifique sur le CHM (recueil et résumés des mémoires, articles, livres, etc. pour publication)
5.4.2. Publication de tous les ateliers et activités du projet sur le site Web du CHM Benin
5.4.3. Publication des outils de sensibilisation sur le CHM et les autres réseaux importants.

Budget for 1.2.2. (conditional on negotiations during planning missions in April – May 2017)

Activities	Targets	Operations	Missions	Total	Saldos, see table 7bis
Burundi (indicative, negotiation on-going)					
Training + Follow up/ Burundi					
1.2.2.1•Workshops + Putting into practice the acquired knowledge				On balances previous years	
1.2.2.2 Syllabi preparation					
1.2.2.3 Expert missions			In framework RMGL, Belspo funds and back-to-back, + 2000	Other activities on balances left from previous years	
1.2.2.4 Supplying Basic Equipment and documentation					
1.2.2.5 Collecting data on habitats state – Data base (feeding + exploitation)	2000 fiches LEM	8000		8000	
1.2.2.6 Lexica (Redaction + Publication)	1				
Promotion of research/ Burundi					
1.2.2.7 Contribution to the identification of the topics	2				
1.2.2.8 Supporting theses: preparation + publications	2				

1.2.2.9 Help to Implement the recommendations issued by research		4000	2000	6000	
Subtotal		**12000**	**2000**	**14000**	
DRCongo	**Targets**	**Operations**	**Missions**	**Total**	
Training + Follow up/ DRC					
1.2.2.10 Workshops + Follow up subsequent practice					
1.2.2.11 Syllabi preparation					
1.2.2.12 Expert missions	1		5500	5500	
1.2.2.13 Supplying Basic Equipment and documentation		4000		4000	
1.2.2.14 Collecting data on habitats state – Data base (feeding + exploitation)	1600 fiches LEM	6000		6000	
1.2.2.15 Lexica (Redaction + Publication)	1				
Promotion of research/ DRC					
1.2.2.16 Contribution to the identification of the topics	3				
1.2.2.17 Supporting theses: preparation + publications	2	8500		8500	
1.2.2.18 Help to Implement the recommendations issued by research	1				
Subtotal		**18500**	**5500**	**24000**	
Benin (indicative, negotiation on-going)	**Targets**	**Operations**	**Missions**	**Total**	
Training + Follow up/ Benin					
1.2.2.19 Workshops + Follow up subsequent practice	1				
1.2.2.20 Syllabi preparation	1				
1.2.2.21 Expert missions	1		4500	4500	
1.2.2.22 Supplying Basic Equipment and documentation		2000		2000	
1.2.2.23 Collecting data on habitats state – Data base (feeding + exploitation)		8500		8500	
1.2.2.24 Lexica (Redaction + Publication)	1				
Promotion of research/ Benin					
1.2.2.25 Contribution to the identification of the topics	2				
1.2.2.26 Supporting theses: preparation + publications	1	8000		8000	
1.2.2.27 Help to Implement the recommendations issued by research		4000		4000	
SubTotal		**22500**	**4500**	**27000**	
Burundi		**12000**	**2000**	**14000**	
RDCongo		**18500**	**5500**	**24000**	
Benin		**22500**	**4500**	**27000**	
TOTAL		**53000**	**12000**	**65000**	

Table 7: budget for SO1, 1.2.2. (B)

Activity 1.2.3.(C) Cooperation with the University of Kisangani for the taxonomic study and the monitoring of lowland forests

Introduction

The third part C (activity 1.2.3. of expected result 1.2.) specifically deals with the remotely located but highly significant Université de Kisangani in RD Congo. Significant, because located within the Congo basin and the associated lowland tropical rain forest, being extremely relevant for its hotspot biodiversity and climate regulation function at the planetary scale. We support local staff to obtain a local PhD on subjects relevant to the study of biodiversity and the link to ecosystem services (food, medicinal purposes), and hence sustainable development and income generation. This is closely linked to the work of the 'Centre de Surveillance de la Biodiversité' or CSB, that was inaugurated in June 2014. Moreover, this work is done in concert with other actors such as ARES and VLIR-UOS, also active at UNIKIS. More specifically, RBINS is supporting the training of young Congolese scientists ("chefs de travail" with a master level degree) of the LEGERA (Laboratoire d'Ecologie et de Gestion des Ressources Animales) team of the Faculty of Sciences of the Université de Kisangani, UNIKIS (DR Congo) in the broader framework of the "Centre de Surveillance de la biodiversité (CSB)" that is no longer funded by the DGD since end 2014. The planned actions provide for a strong scientific local support for the young (less experienced) CSB-team; together with the strengthening of UNIKIS academic community. Our continued contribution towards the development of the scientific capacity of the Faculty of Sciences of UNIKIS will be combined with other sources of funding such as the VLIR-UOS IUC project in Kisangani that has a biodiversity sub project (3rd phase started in April 2017). Our approach involves the local selection of the most promising candidates that will be assisted by international experts to develop and execute original PhD research projects that meet specific development problems with a biodiversity component. Hence the local/regional/national population will benefit from the increased local expertise in these sectors through the application of the acquired knowledge, and the introduction of state-of-the-art courses on these subjects for university students.

Selection of 3 eligible PhD students

The following three candidates will be invited for three research visits in Belgian institutions (RBINSc, Institute of tropical medicine, and the University of Antwerp). Below a summary of the planning for 2017:

1. **Casimir Nebesse Mololo** (topic: the exploitation of natural resources: the bush meat issue, Belgian supervisor: Erik Verheyen (RBINS) & Herwig Leirs (UAntwerpen), Congolese supervisor: Prof Dudu Akaibe Migurimu (UNIKIS) has virtually finished his program. he defended his master thesis in 2016 and is programmed to submit his PHD thesis in 2018. Depending of the results of his stay in 2017, he might be replaced by a fresh PHD student in 2018.
2. **Prescott Musaba** (topic: Inventory and phylogeny of bats and their pathogens in the region of Kisangani, Belgian supervisor: Erik Verheyen (RBINS), Herwig Leirs, Victor Van Caeckenberghe

(UAntwerpen) & Anne Laudisoit (UAntwerpen, CIFOR), Congolese supervisor: Prof Guy Crispin Gembu Tungaluna (UNIKIS).

3. **Steve Ngoy** (topic: "Le role des ticks comme vecteurs de zoonoses chez les rongeurs". promoteur Gembu Crispin Tungaluna (UNIKIS), co promoteurs Erik Verheyen & Anne Laudisoit (UAntwerpen, CIFOR,) and Laetitia Lempereur (Ulg).

Identification of suitable expert supervisors

To the list of currently selected expert supervisors, we added Laetitia Lempereur, professeur à l'Université de Liège to assist Steve Ngoy with the identifications of tick species. Herwig Leirs (UAntwerpen) replaces Marijke Vanderpoorten (UAntwerpen) for the bushmeat study of Casimir Nebesse.

Support for field work, documentation, transport

Based on a budget to be proposed by each trainee and his promoters, each trainee will be awarded funding to facilitate the collection of material in the field. Normally the expenses that will be covered will consist of documentation (books, literature), costs associated with field work (fuel, ...), and costs associated with the work in Belgium (lab work, transport and registration to scientific meetings).

Training of the 3 selected candidates in Belgium

Each candidate will be invited for 2,5-3 months that coincides with the availability of the Belgian expert, and the working schedule of the trainee. The local experts will provide guidance through discussions, courses in data analyses, documentation, and laboratory facilities, should this be required. The work schemes of each candidate will have to be approved by the promoters prior to the arrival of the trainee in Belgium. At the end of each stay, each trainee will have to provide a working plan for the continuation of his activities (for example field work) that will need to be approved by the promoter before the trainee returns to the DR Congo.

Output and expected outputs

Casimir Nebesse Mololo started his work at the end of 2013 and now has a good inventory of the mammal species that are sold on the local bush meat markets, including a listing of the relative prices of various bush meat products versus grown meat (beef, pork, goat chicken), and the relative gastronomic preferences of the local consumer for each of these animals protein sources. These kind of data form a good basis for the valuation of such ecosystem services of the lowland forest. His last stay in Belgium served as a period to re-organise his various datasets in order to be able to exploit them fully, with a particular emphasis on the periodicity and geographic origin of bushmeat sold on the central market of Kisangani over the last 3 decades. Casimir Nebesse has co-authored a paper on the pangolin in an international peer reviewed journal, and two manuscripts in preparation. Moreover, he has made a poster presentation of his results the international Zoology 2016 congress held in Antwerp.

Prescott Musaba started his work in 2014. Based on the earlier field work and the methodological guidance of his local supervisor he has made a considerable collection of bat specimens and tissues for molecular research. During 2016 he supervised the work of a Flemish master student in Kisangani, a collaboration that continued in the laboratory work (DNA barcoding of bats and molecular detection of selected pathogens). With the support of the CSB it is anticipated that he will be able to obtain the necessary samples from the rest of the DR Congo territory that will allow to make a detailed map of the distribution of various bat species, and their possible role in the distribution of selected pathogens (monkeypox, bartonella) through viral transmission with live animals, or via bushmeat consumption . Prescott Musaba is co-author of a review paper on the taxonomy and biogeography of bats in central Africa in an international peer reviewed journal. He also made a poster presentation of his results the international Zoology 2016 congress held in Antwerp.

Steve Ngoy started his work in 2016. His two first stays in Belgium were used to make a photographic inventory of his collections and the collections held at the RBINS and the RMCA, he will be supervised by Laetitia Lempereur to continue with the detailed identication of blood sucking ectoparasites recorder on pigs in the slaughterhouse in Kisangani, in order to compare them with species found on the natural mammal fauna with the region of Kisangani. His research can deliver interesting contributions to the current One Health discussions that he presented as a poster presentation at the international Zoology 2016 congress held in Antwerp.

In 2017, Erik Verheyen (EV) will visit UNIKIS several times in the context of other projects (VLIR CUI and a VLIR South Initiative Project). These visits will allow him to meet the local promoters and the trainees in order to facilitate a smooth interaction with the local PhD students. During each visit EV schedules a scientific seminar “evolutionary biology”, and one on “the development of scientific communication skills”.

Budget for 1.2.3.

Budget for 1.2.3.

Activities	Targets	Operations	Missions	Total
1.2.3.1 Selection of 3 eligible (PhD) students				
1.2.3.2 Identification of suitable expert supervisors				
1.2.3.3 Support for field work, documentation transport		2050		2050
1.2.3.4 Training of 3 selected PhD candidates in Belgium		25,832.00		25,832.00

1.2.3.5 Expert missions for local follow-up of (PhD) students			On other projects	On other projects
1.2.3.6 Ateliers de restitution in Kisangani		350.00		350
1.2.3.7 Publications in scientific journals		600.00		600.00
1.2.3.8 Financial support for defence of 1 PhD thesis (Nebesse) and 2 mastertheses (Ngoy & Musaba)		1,218.00		1,218.00
Total		**30050**		**30050**

Table 8: budget for SO1, 1.2.3. (C)

Activity 1.2.4. (D). Application of the marine modeling to integrated coastal management and monitoring

Introduction

The fourth part D (activity 1.2.4. of expected result 1.2.) deals with the sustainable management of the marine environment. The marine environment differs from the terrestrial in the sense that it is a fluid medium, hence it is more difficult to monitor and manage biodiversity directly.A way to overcome this is to use models that help to understand and predict what will happen. The cornerstone of these management tools is a circulation model. This has as a consequence that each project starts with a physical study of the circulation in the region. RBINS has in-depth knowledge about **marine mathematical models, with** an in-house developed model called 'COHERENS'. This model is being developed by MUMM, situated in the Gulledelle campus of RBINS in Brussels, a department of the Operational Direction 'Nature' of RBINS.CEBioS finances the capacity development of staff in selected countries of the Belgian cooperation such as Vietnam and Peru. The experts provide workshops in these countries and train invited scientists on the model in Belgium. COHERENS is an open source**mathematical model** used for the monitoring and management of the near-coastal zone, estuaries, lagoons, reservoirs and lakes (http://www.odnature.be/coherens).

This project falls under the execution of the **Aichi targets** listed by the **Nagoya convention** (COP10, XI2, targets 6, 8, 10 and 11). The main objectives of the project are, first, to consolidate the knowledge of marine modelling for coastal protection and management in collaboration with the partners already involved in the project, and second, to apply the model in more complex research questions.

The specific objectives of this marine part of the CEBioS programme are to generate scenarios of water, sediment and biota transport of coastal areas, hence providing the necessary scientific scenarios needed to have an integrated coastal management plan. It assists managers and decision makers to take scientifically sound measures for coastal management. The main issues are the integration of economic development of the coastal area and the need to safeguard the areas which are important for biodiversity and ecosystem services, such as mangroves and reefs. Concrete applications are tailor-made for each partner as it concerns marine ecosystems with specific features and different country policies. The developed models will forecast the reactions of coastal ecosystems under different sets of physical, chemical and biological conditions. It is particularly useful for environmental impact assessments (e.g. dispersion and impact of potential pollutants and their effects on mammals and birds) and for the management of coastal seas (e.g. establishment of protected areas or of aquaculture farms).

Partner institutes

1. Institute of Marine Environment and Resources (IMER, Haiphong, Vietnam).
2. IMARPE in Peru.
3. IRHOB Benin.

These research institutes explicitly expressed their interest in implementing COHERENS on a systematic basis in their departments and have some pending research questions where our coaching is valuable.

1. **Vietnam**

The operational plan of cooperation RBINS-IMER can be found in the table below. The project progression strategy is to develop/finalize a hydrodynamic model (done in 2015), then proceed to develop a sediment model to end up with an ecosystem health tool. In 2016 we will work on sediment information collection and modelling and the preparation for the ecosystem health tool.

Planned visit, Belgium, May 2017

During May 2016 Vietnamese scientists will visit Belgium for a stay of 3 weeks. The following points will be addressed during that meeting:

- *All runs of the COHERENS model will be double checked and compared with runs from DELFT3D*
- *The results related to coral bleaching (sediment concentration volume and temperature) are validated with satellite data and in situ measurements*
- *Conclusion regarding research question (is coral bleaching caused by local (coal mining in the surrounding mountains) or global processes (temperature rise due to climate change).*
- Map of the corals in Halong Bay
- *Start to write article: The effect of temperature changes and turbidity on coral bleaching in Halong Bay, Vietnam.*
- *Training in the use of particle tracking model and plankton model*

Workshop, Vietnam, November 2017

The final seminar will be held in November 2017. Several stakeholders will be invited and the final results will be presented. Maybe a new formulation seminar will be added to the closure workshop.

External RBINS calls

Taking part in external calls is an ad hoc process and though it is not a specific goal of 2017, we will take the opportunity as it presents itself, as done in the past (the 2015 TEAM call and 2016 participation in the JONSMOD conference).

Activities VIETNAM	**2017**
1. Improved knowledge of sediment fluxes and sedimentation balance and their tools to investigate	
Coordination of the work done by colleagues	x
Identify the design and criteria of comparison	
Result analysis	
Remote sensing analysis of suspended sediments	x
Software upgrade	
Technical workshop at IMER, informal mid-term evaluation	x

2. Knowledge transfer about particle tracking module	
	x
Training of one IMER staff member in particle tracking	
3. validation with biology, linking sediment and particle tracking model with ecosystem health (e.g. sea grass, coral reefs, …)	
Sampling of organisms attached to or interacting with sediments (depending on available funds)	x
Analysis of samples taken	x
Spatial comparison of organism composition on sediments from the river to HLB (depending sample quality)	x
4. IMER staff is trained in sediment model applications (sediment and particle tracking)	
Hydrodynamic model reassessment	x
Sediment model	x
Validation and comparison	x
5. participation to external RBINS calls	
6. stakeholder awareness about implications of model for conservation of biodiversity and sustainable use (sea grass, coral reefs, …)	
Final workshop with external stakeholders	x
Several IMER seminars	

2. **Peru**: our partners in Peru prepared the programme foreseen for the period 2014-2016 during a joint CEBioS-IMARPE formulation mission in summer 2014. The goal is to develop several management tools for different regions, each region has it's own needs and hence a different approach of developing a management tool is needed. The regions are Chimbote (sedimentation issues), Paracas (el nino issues because of high biodiversity (eco-tourism) and importance of fisheries, Callau (waste pipe) and Secchura (phosphorus pollution threatens fisheries and aquaculture).

Visit, Peru, March 2017

- Before the closure meeting the results will be wrapped up and thoroughly discussed
- Problems with the applications will be solved

Closure meeting, 13-15 March 2017

- The results of the project will be presented and discussed
- Future ways of collaboration will be investigated,
- Policy briefs per bay will be produced.

Operational plan cooperation RBINS-IMARPE (2014-2016)

Activity	2017
Training in Belgium on the use of marine numerical tools	
look for correct physical boundary conditions (bathymetry, tides, wind, rivers, …)	
run the model for different periods and validate the results	
writing a thesis	
e-consultation	x
setting up a plankton model	
do the necessary adjustments to the plankton code	
train people in the use of 50lankton models	
e-consultation	x
setting up a sedimentation model	
do the necessary adjustments/manipulations to the code	
train people in the use of sedimentation models	
e-consultation	x
setting up a particle tracking model	x
do the necessary adjustments to the code	x
train people in the use and manipulations of these type of tools	x
e-consultation	x
Policy Briefs	x

3. **Training in Cotonou**

In April 2017 a three week workshop will be organized in Benin for cooperation 2017-2018 with **IRHOB**. The budget is 4000 Euro. The main goal of the workshop is to implement a first physical model for the region, this is done by:

- A basic introduction to marine models
- Analysis of collected data

- A crash course in programming
- Practical implementation

Budget for 1.2.4.

Activities	Targets	Operations	Missions	Total	With unspent balances
1.2.4.(D)1 workshop (Benin)			4000	4000	
1.2.4.(D)2 Closure **meetings Vietnam and Peru**			12000	12000	Zanzibar or Senegal, exploratory missions in 2017 or 2018
1.2.4.(D)9 Hosting scientist(s)		10000		10000	
Total		10000	16000	**26000**	

Table 9: budget for SO1, 1.2.4. (D)

Expected result 1.3 Monitoring data is fed into national indicator processes

Description:

Pilot projects that will enable biodiversity monitoring data to be fed into national indicator processes. It will be important to valorise the work carried out by our partners (target: people trained under SO1, 1.1. and 1.2) who are involved in biodiversity monitoring studies, so that their data can be useful for, and used in, current indicator processes on the status of biodiversity. This will enable science based communication in various national and international bodies and documents. Sound baselines and measurements of biodiversity are needed to be able to provide meaningful trends. To enable our partners to contribute to these indicator processes, training and dedicated follow-up will be required to ensure the quality of the produced data.

These activities also directly contribute to fullfil specific objective 5, on measurement, verifying and reporting processes (MRV).

Logframe (partim):

Expected Results	Output indicators
1.3 Monitoring data is fed into national indicator processes	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.
Activities	
1.3.1.Launch call for project on Aichi target indicators	

Table 10: logframe (partim) for SO1, 1.3.

Activities

By 2015 at the latest, all parties to the Convention on Biological Diversity will be required to present a National Biodiversity Strategy and Action Plan (NBSAP) in line with the **Strategic Plan for Biodiversity** 2011-2020 and including specified national Aichi targets with relevant **indicators**. When national targets and indicators are determined by partner countries, collaboration with authorities will be established in order to draw on our specific expertise in collecting data to feed the indicator processes. RBINS and the CEBioS team can bring in expertise especially for Aichi targets 3 (ecosystems), 6 (fisheries), 7 sustainable agriculture and aquaculture), 8 (pollution), 9 (invasives), 14, 18 (conservation). In the meantime, research projects carried out by students or early-career scientists associated with partner institutions, that are promoting the collection of data that are relevant for achieving Aichi targets, will be supported, e.g. in carrying out the aforementioned projects funded by VLIR, in which both data collection, data processing and scientific communication to stakeholders are included. We will continue to apply for additional external funding for work on the science/policy interface regarding biodiversity in the South (e.g. Belspo, FWO-Vlaanderen, scholarship through universities in Belgium or in the South). Results will be valorised through their validation and publication in renowned science journals as well as through the national strategy monitoring systems that will be promoted under specific objective (SO2)2: enhancement of the information base on biodiversity .

We will launch each year a **call for projects directed at cooperation partners** that will work on gathering indicator data for Aichi objectives related to habitat/ecosystem monitoring, species data and have a relation with poverty eradication. In 2017, the selected projects of the 2016 MRV call in DR. Congo will be followed and evaluated, while a call focusing on English-speaking partner countries will be launched (see SO5.2).

Part of the budget under 1.3.1. will be allocated to MRV activities (SO5).

Budget for 1.3.1.

		operational	missions	total
1.3.1.	1.3.1.Launch call for project on Aichi target indicators	17000	3000	20000

Table 11: budget for SO1, 1.3.

Expected result 1.4. Scientific outputs are made accessible to users

Description:

Tools will be produced and contribution will be made to processes that support research and its dissemination (publications, websites, end-user meetings, participation in communities of practice...).

The relevance of all these scientific activities for development is to be ensured by prioritizing the acquisition of knowledge and the establishment of projects in sectors that contribute to development policies, such as sustainable forest management, sustainable use of natural resources (including for agriculture and energy), sustainable water management, sustainable coastal and marine management (including use of natural resources from the marine environment), issues linked to health policy, management of invasive alien species and pest species, biodiversity conservation, ecotourism and trade.

Logframe (partim):

Expected Results	Output Indicator
1.4 Scientific outputs are made accessible to users	• At least 5 *AbcTaxa* manuals have been produced during the 5-year period dissemination per volume • Supporting/disseminating materials formerly produced • 4 lexicons, • Syllabuses produced and/or upgraded, • participation by staff members in 5 events relevant to taxonomic popularisation tools development/capacity building. • feedback on the use of courses available. • results of at least 5 projects and public awareness activities under SO1-1 and SO1-2 are published on the internet on www.taxonomy.be or a national CHM website if available.

Activities
1.4.1. Taxonomic tools production and dissemination of *AbcTaxa* manuals **1.4.2.** Popularization tools production of lexicons

production/upgrade of syllabi dissemination of tools (other than *AbcTaxa*) participation in international congresses on taxonomy and/or ICT for development and training follow-up on feedback of use of courses archiving output on GTI and CHM websites

Table 12: logframe (partim) for SO1, 1.4.

Activity 1.4.1. Taxonomic scientific tools

AbcTaxa: a series of peer-reviewed manuals dedicated to capacity building in zoological and botanical taxonomy, in collection management and in good practices in taxonomic and curatorial research

The publication of taxonomic tools will continue to be supported via the production of one AbcTaxa manual per year and the development of training material on the GTI website (www.taxonomy.be). Prioritization will be given to taxonomic groups that have impact on the livelihood of local populations.

Although, Dr. Yves Samyn the chief editor of the Abc taxa series is no longer a member of our team, we plan to further support the publication of the Abc taxa series. **AbcTaxa** plans for 2017

In 2016 (formal release only in 2017) *AbcTaxa* will release one volume entitled *Diatoms from the Congo and Zambezi Basins* as authored by Taylor and Cocquyt. In addition, *AbcTaxa* also foresees the release of a volume on South African brittlestars (Ophiuroidea). The latter has as running title "Field guide to the ophiuroids of S. Africa' and will have a first author GTI alumnius J. Olbers. Further, a volume on polystomes (vertebrate parasites) is in the pipeline .

Finally, GTI alumnius H. Taedoumg has been invited to Belgium to work on a volume with as running title 'Révision du genre *Craterispermum* Benth (Rubiaceae, Gentianales) en Afrique continentale', a project in joint collaboration with Botanic Garden Meise.

Activity 1.4.2. Popularization tools

Over the years, the collaboration with partner institutions for the monitoring of habitats has led to the production of popularization tools of high relevance for the management of ecosystems, especially protected areas. The development of such tools will continue to be encouraged and supported in the following years. Drawing on the successful experience of the « Habitats de la Réserve et Domaine de chasse de Bombo-Lumene - Lexique Kiteke des plantes observées dans ces milieux », it is planned to produce and publish about 4 additional lexicons: one in RD Congo in partnership with ICCN, two in Burundi in partnership with INECN and one in Benin in partnership with UAC. The production of syllabuses is also foreseen: one in RD Congo (ICCN), two in Burundi (INECN) and two in Benin (UAC).
Taxonomic popularization tools are also expected to be developed as the result of projects supported under expected result SO1.1. Indeed, as applicants will be required to demonstrate their direct or indirect contribution to the conservation of biodiversity and/or ecosystem services and to the fight against poverty in their country, one means of meeting this criteria is the development of tools destined for a wider audience (including competent authorities, local populations, etc.).

In order to continuously update internal capacities in dissemination technologies and methods, participation to international workshops or conferences will be necessary. One event per year will be selected for its relevance and attended to by a staff member.
The CEBioS programme is also contributing since 2014 in man-hours to the desk editing (lay-out) of a table photo book about nature and culture in Katanga, in cooperation with a local NGO and RMCA. It is expected that this book will be launched at the level of the gouverneur in Katanga in 2015, and that one staff member will be invited to attend.

Budget for 1.4.

Activities	Targets	Operations	Missions	Total	On saldos
1.4.1. Taxonomic scientific tools are produced and disseminated					
Production and dissemination of AbcTaxa manuals	Taxonomists in the South	25000		25000	
1.4.2. Popularization tools	General public, rangers, scientists in the South	10000		10000	
Production of lexicons					
Production/upgrade of syllabi					
Dissemination of popularization tools (other than AbcTaxa manuals)==>alumni workshop		5000		5000	
Participation in international congresses on taxonomy and/or ICT for development and training	Policy briefs IMARPE, fliers CSB				76290
Follow-up on feedback of use of courses					
Grand total				**40000**	

Table 13: budget for SO1, 1.4.

Budget for SO1

Activities		Operations	Missions	Total
1.1	Scientific and technical **expertise** is built to acquire knowledge/ individual grants (competitive call)	72,000 €		**72,000 €**
1.2	Quality scientific **knowledge** is produced to serve science-based policy			
	A : workshops in South (competitive call)	55000	20000	75000
	B : institutional partnership with ICCN (RDC), OBPE (Burundi), UAC (Benin)	53000	12000	65000
	C : academic support to UNIKIS	30050		30050
	D : institutional partnership with IMER (Vietnam), IMARPE (Peru)	10000	16000	26000
1.3	Monitoring data is fed into national indicator processes	17000	3000	**20000**
1.4	Scientific outputs are made accessible to users	40000		**40000**
Total		**277050**	**51000**	**328050**

Table 14: Summary of budget for SO1 (in Euro)

Specific objective 2. The RBINS plays a leading role in the enhancement of the information base on biodiversity, on its linkages with ecosystem services and poverty reduction and on associated governance processes

Background

The CBD's 'Clearing-House Mechanism' (CHM) is an essential tool for the implementation of biodiversity policy. It develops and strengthens cooperation and networking between stakeholders of various fields of biodiversity – governments, NGOs, consultants, academic institutions, environmentalists and others. By doing so, it enables the mainstreaming of scientific information into policies and plays a role in raising the awareness of all types of audiences on the importance of biodiversity.
The development of networks of websites forms the main pillar of the CHM approach for this programme. These websites are designed to host electronic information (policies, best practices, scientific papers, etc.) and databases (species, habitats, experts, etc.). As a corollary to the electronic networks, the CHM also fosters strong and active human networks, which are crucial for the gathering and restitution of the information and data
The Belgian CHM partnership is unique under the Convention on Biological Diversity and has proven its usefulness over the years. We will therefore continue our work, taking into account both the requirements from the new CBD Strategic plan 2011-2020 and the newly formulated strategy for our framework programme.

The 2016 programme will continue providing several **training opportunities at national level**, as well as its **recurrent support to CHM**. A regional workshop will be organised in Côte d'Ivoire for the West African countries through a South-South project started in 2014. Morocco has expressed the interest of several Arabic countries to start their CHM among which the Palestine territories. Morocco will submit a South-South project proposal to this end. We will initiate a multi-annual work programme, particularly towards the consolidation of our contribution to governance processes.

Outcome:

- Information is the basis of empowerment. Empowerment of the civil servants and decision makers allow them to be more aware of the global and local issues about biodiversity and sustainable development. This enables them to inform the large public, hence enhancing their ownership and increasing the transparency of governance processes. The support of CHM processes contributes to that and to a more efficient science-policy interface, and hence a more science based policy in the long term.

- After five years, The targeted institutes (in Algeria, Benin, Burundi, Congo, Mali, Morocco, Niger, Burkina Faso, Cameroon, Côte d'Ivoire, Madagascar and others) are in a better position to organise awareness raising campaigns through the CHM and other media, and are better able at identifying and applying relevant biodiversity indicators in their national reporting and strategy.
- The national CHMs are better structured, maintained and updated and offer user-friendly quality information on biodiversity and poverty reduction.
- The partner institutes have more mutual South-South contacts, exchanges and cooperation.
- Partner institutions better fulfil their role as a national information centre on biodiversity (2.2., 2.3.) (see annex 4 for the list of partner focal points)
- Level of networking and activity increased at governance level (2.2 and 2.3)

Expected results

2.1. Expertise in information management is built.
2.2. Information flows are improved.
2.3. Information is used to advise governance processes.

Expected result 2.1 Expertise in information management is built

Description:
One of the main roles of the CHM is to be a network of networks. To be able to fulfil this role, the CHM focal point must not only be able gather information to be put on the web, but it also needs to mobilise biodiversity stakeholders around specific issues. This is why we organise webmaster training sessions and networking workshops together, generally in the form of a one-day of networking back-to-back to the webmaster training course.
In 2017, we plan to provide several training sessions at national level in combination with South-South Cooperation partners of our partner countries and a training course in Belgium in cooperation with DGD-D2.4. and other departments. Based on the feedback from the training courses we will continue to update manuals on the utilization of the PTK for users and use the training material from the courses to update the e-learning modules. We will continue developing the manual for the 2020 Biodiversity Targets Cross-linking Tool for the follow-up of the implementation on national level of the national Biodiversity and Action Plan (NBSAP) and also an e-learning module.

Logframe (partim):

Expected results (ER)	Output indicators
2.1. Expertise in information management is built	• 10 national training workshops, • 120 persons trained, • follow-up training has been organised in at least 8 partner countries. • 5 countries participate in the information management/ CHM network through South-South Cooperation (SSC) with one of our partner countries. • 70 % of the partner CHM sites have 20 pages added or updated /year. • Tool to follow-up the implementation of the national strategy is actively used in at least 5 countries

Activities
2.1.1. two national training workshops per year 2.1.2. 1-2 follow-up trainings per year 2.1.3. one south south collaboration/yr initiated 2.1.4. Promotion of tool in at least 1 country /year

Table 15: logframe (partim) for SO2, 2.1.

Activity 2.1.1. two national training workshops per year

Partner countries are using the European CHM Portal Toolkit (CHM PTK) to manage information flows through the CHM and the web on the implementation in their country of the Convention. The partner countries have expressed their continuous need to refresh and update their competences, given the developments in technology as well as changes of active partners in their countries. In some countries the CHM national focal point is also responsible for the implementation of the ABS Clearing House as COP11 reiterated through relevant decisions that ABS-CH should be part of the CHM taking into account that ABS is one of the pillars of the CBD. Under specific Objective 6 (SO6), joint training activities will take place to develop our partners competences in the field of ABS.

As specified in previous annual plans, with each country, a capacity building strategy (this includes communication strategy) is being developed to ensure a follow up by the national focal point with the trainees after the training. This strategy includes one national training by the Belgian CHM as well as several one or 2-day follow-up trainings (activity 2.1.2.) organised and given by the national focal point to ensure a continued participation and update by the trainees.

This year the training sessions still need to be decided as we will move this year to a new platform that has been developed by the CBD Secretariat. A first training for some members of the CEBioS team involved in the Belgian CHM will be organised from 14-17 March 2017. The Palestine State had expressed their desire during COP13 for a national training in March 2017 however there hasn't been any official request at this moment. Moreover, Burkina Faso, and Guinea-Bissau have expressed their interest to be

trained by the Belgian CHM focal point in the near future. Most probably some of them will receive a training in 2017 as well.

With the consent of the national ministry in charge of the environment and of the provincial coordination for the environment (Province de la Tshopo), a Framework Agreement will be signed with the CSB, Kisangani, in February 2017 for the period 2017-2018. This agreement aims at preparing the CSB to become the secondary CHM for DRC, by re-enforcing its skills and expertise needed and by stimulating the institute to intensify the cooperation with its 'antennes' in other provinces, with other organisations (other universities, ERAIFT, …) and with civil society. Its official designation as the secondary CHM for the entire country will be formalised by a Memorandum of Understanding with the national ministry in charge of the environment, which hosts the Focal Point for the Clearing House Mechanism for the DRC, as soon as the political situation in the country permits to do so. The development of the CSB as secondary CHM for the DRC, complies with the CSB's Strategic Plan 2012-2017, currently under revision for the upcoming 5-year period. Also, CSB's mission to become a national expertise centre for biodiversity, will be strengthened by carrying out the CHM-related activities will be developed with the CSB (see 2.2 and 3.2.).

E-learning/coaching consists of three distinct phases, already described in previous annual plans (preparatory distance online course, face-to-face training, post training e-coaching).
To complete the above mentioned training sessions or to serve as a basis for any interested party, online training modules are available and continuously updated to assist them to install and develop their national CHM (e-coaching). The teaching modules are developed in French and English and are posted on the CHM training website (http://training.biodiv.be/formationptk).
In 2014-2018, we continue developing and updating our online learning modules on the functionalities of the PTK. One of the priority modules to be added will be on the tool to follow up the implementation of national strategies linked to the Aichi targets as mentioned above.

Activity 2.1.2. 1-2 follow-up trainings per year

The 2 follow up training sessions will be organised in countries that have organised a national training workshop, in 2017 this will be the case for Togo. A contract for this follow-up training (2 sessions) has been signed in January 2017. It will involve the training to be given by the assistant to the NFP2017 of Benin to promote South-South Cooperation. During these sessions the participants will first discuss work done since the national training by the participants and difficulties they encountered. Participants will look for solutions to these problems together and make a revised plan of work till the next training session. In the second part of the sessions the participants will be given the opportunity to add information to the CHM and learn new skills.
Training material for the follow-up training session will be prepared by the Belgian CHM in cooperation with the national focal points. The sessions will take place in countries that have received training in the current year, the year before or on demand.

Activity 2.1.3. one south south collaboration/yr initiated

Since COP10 and COP11 the role of the CHM for the follow up of the implementation of the Convention on global and national level has increased. Many countries that were partners during the first work programme 2003-2008 are asking the Belgian CHM to assist them in revamping their national CHM. These countries were not able to participate in the change towards using the EU PTK content management system as from 2006 they were no longer eligible for cooperation activities. Also other countries that have heard about the Belgian CHM cooperation show their interest. As it has not been possible to reply to all those partner requests, as many are not on the list of 14possible partner countries of the Belgian development cooperation, we have tried to assist them by seeking active partner countries that could support them through South-South cooperation. Although hosting of their national CHM is possible without any financial implication, capacity building in non-partner countries is not possible. We therefore propose partner countries that are involved in South-South Cooperation to invite non-partner countries in their region to participate in national training sessions.
We will work through a call for proposals.

In 2017 there might be a sub-regional training organised through South-South cooperation by Morocco for the Palestine Territories, Jordan and Syria in September. This will be extended to other Arabic speaking partner countries of Morocco depending on the request for additional funding to the SE CBD/Japan Fund.

Morocco had submitted a proposal towards a training in Gabon in 2016. The project was accepted however due to political reasons it was postponed till the beginning of March 2017. There might be under the 2017 call an additional training, no demand has been expressed yet.

Activity 2.1.4. Promotion of tool in at least 1 country /year

In 2017 and the following years a new element will be added to the PTK to follow up the implementation of national biodiversity strategies and to facilitate the reporting process to the CBD and its Aichi targets. To implement the tool it will be useful to add a training and information component to facilitate the adaptation of the tool. This can be done during the national training sessions or during the network meeting with partner countries. This year it will be done during the regional workshop for Francophone countries, beginning of May 2017.
We will perform consultancies on demand from countries that have received specific GEF funding to develop their national CHMs. Countries will be asked to provide transport, lodging and a daily allowance. Jordan has expressed their demand for a training in the beginning of March 2017.

Expected result 2.2 Information flows are improved

Description:

We will complete our training offer by directly supporting the work of the CHM focal points, as the development and maintenance of CHM websites of partner countries is often hindered by various technical problems (e.g. slow bandwidth, frequent power shortages, decentralised offices with little or no equipment, lack of manpower, etc.).

Also, meetings of national CHM steering groups that give advice on how to develop the national CHM, are often hampered by lack of funding to organise meetings. It is in this light that we have supported partner countries to develop national CHM strategies that will hopefully be integrated in the national biodiversity strategies. However, this does not guarantee that the countries will also allocate resources or sufficient resources to improve information flows through the national CHM. We see more positive signs in countries that have well established steering committees and a CHM strategy. These countries do not ask for projects to continue the work of the steering committees. We will therefore focus on countries that haven't yet established a CHM committee to establish one and get it working.

In the past we have organised calls for small grants to strengthen national CHMs. Some countries have developed projects to strengthen special sections of their national CHM and through this activity get partners more involved in the exchange of information through the CHM.

From the call organised in 2014, the following projects extend their activities into **2017** or beyond:

- Benin : Mise en œuvre du volet CHM du Programme de coopération scientifique UAC – IRSNB

From the call organised in 2015, the following projects extend their activities into **2017** or beyond:

- Morocco: « Développement et alimentation des Centres d'Echange d'Informations sur la Diversité Biologique régionaux ». This project is still on hold as we are still looking for ways to transfer the funds.
- Burundi : « Contrat panneaux solaires » Due to the political situation it was decided to stop the shipment of the solar panels. In December 2016 the political situation was improved enough that we got the OK from the Supplier as well as the Embassy in Bujumbura to start the shipment. The installation of the solar panels is now foreseen in May 2017 with probably official inauguration in June 2017.
- Tanzania : "Promotion and operationalization of Tanzania national CHM". With the NFP starting a MSc in 2015 the follow-up to the project wasn't done by his successor. We are still in discussions on the way forward.

From the call organised in 2016, the following projects extend their activities into **2017** or beyond:

- Benin: « Amélioration du contenu et de l'audience du centre d'échange d'informations du Bénin »
- Kenya : "Stakeholder Awareness and Sensitization on Biodiversity CHM Website" The contract still hasn't been signed due to problems to find an account in Kenya to transfer the money to. NEMA has the same problem as Morocco to receive funding.
- Ghana: A contract still hasn't been signed as the person responsible has been re-affected and the new person has been only nominated in January 2017

However countries have informed us that the small grants were not sufficient to involve agencies and organisations that were not based in the capitals to participate in the projects. The intention of the activities in this work programme is to enlarge the information flow and involve more local partners and

stakeholders. There will be one call for proposals per year that will enable four to five projects to be accepted. We will open the call not just for one-year projects but also for three-years projects that will work towards a well-established network, include a communication strategy with well-defined stakeholders, including policy makers and indigenous and local communities through relevant ONGs.

In 2017, there will be a new call for proposals that will enable three to six projects to be accepted.
One project will be on our support of the work of the "Office Burundais pour la Protection de l'Environnement" (OBPE), the former "Institut National pour l'Environnement et la Conservation de la Nature" (INECN) in Burundi. A Memorandum of Understanding was developed with the OBPE in 2014 that includes components under SO1, SO2, SO3 and SO6. A mission is foreseen in 2017 to discuss the extension of the programme till 2018 as due to civil strife in Burundi the 2015 and 2016 programmes will be extended in to 2017. During the mission it will also be discussed which programme elements are finished and if there are any additional capacity building activities that could be added to the programme for 2017 – 2018.

As for the DRC, the Framework Agreement to be signed shortly with the CSB, Kisangani, will allow to develop activities in collaboration with the national ministry in charge of the environment and the provincial coordination for the environment (Province de la Tshopo), with components under SO2, SO3, SO5 and SO6. A mission is planned early in 2017 to further elaborate a planning for 2017 and discuss options for 2018. During the mission we will further engage in discussions with the CSB-directors about appropriate strategies to strengthen the institute's scientific capacities, organisational skills and communication expertise. The search for synergies with ongoing projects and activities of other organisations (VLIR-UOS, the Lukuru Foundation, ERAIFT, Tropenbos, …) will be key to this process.
The Framework Agreement stipulates, among others, that the CSB will have to react on the 2017 CHM-call, in collaboration with the national ministry in charge of the environment and the provincial coordination for the environment (Province de la Tshopo).

Logframe (partim):

Expected results (ER)	**Output indicators**
2.2. Information flows are improved	• 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. • Number of information meetings with different stakeholders in partner countries • OBPE 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
Activities	
2.2.1. one call per year for CHM consolidation	

Table 16: logframe (partim) for SO2, .2.2.

Activities:

One **call** at the start of 2017 with 3 to 6 accepted project proposals. The projects will depend on the countries and their priorities. They can be national reinforcement or South-South cooperation as mentioned above. Projects that have a clear strategic plan for the results after the 3 years, will be given priority.

In the light of the MoU we have already received the demand by the **Office Burundais pour la Protection de l'Environnement (OBPE, former INECN)** to continue working on the work started in 2015 to reinforce the reference centre on biodiversity and nature in general. They also proposed our involvement with the network connection for the site as well as the publication of the scientific bulletin.

We will pursue our efforts to increase **synergies** with activities under specific objective 1, especially between the activities under expected result SO1.2 and partner institutions in DR Congo. This responds to the continued interest expressed by the Congolese CHM focal point to involve the UNIKIS and the CSB in the Congolese CHM.

We will also promote synergies with SO 6 on the ABS-Clearing House. Where possible projects that include an ABS component will be higher ranked under calls for projects.

Selection criteria are listed in the call online, see CHM Reinforcement call : http://www.biodiv.be/cooperation/chm_coop/chm-partnering/call_reinforcement/call-reinforcement-chm-web-sites-2014

Awareness call : http://www.biodiv.be/cooperation/chm_coop/chm-partnering/public_awareness/call-education-and-public-awareness-projects-2014-open

Expected result 2.3 Information is used to advise governance processes

Description:

One of the main roles of the CHM is to be a network of networks of all stakeholders in biodiversity conservation and utilization. The CHM website is one of the ways to share information, be it reports, meeting notes, results of research, baseline studies and other. Information sharing is still not integrated in the spirit of all and therefore it is important to continue to show its importance in national contexts to know what is known, what is being done to improve the knowledge and how to translate it into policies.

Through national CHM strategies some countries have established a framework to ensure that information is shared and also used for governance processes. However due to budgetary constraints it is not always possible to organise the necessary meetings to ensure that people are aware of the available information and also use it. Also exchange of experiences is very important.

Networking activities are encouraged also at supra-national level, as to foster cooperation and links between countries. Our support takes the form of regional training courses or workshops involving participants from several countries in a given region or sub-region.

Regional workshops will be organised in Beninand in Côte d'Ivoire(negotiations under way).

We will also further develop with the European Commission, the Secretariat to the CBD and the European Environmental Agency the Target Cross-linking tool. This tool will also facilitate reporting to other Multi-lateral Environmental Agreements.

Logframe (partim):

Expected results	**Output indicators**
2.3. Information is used to advise governance processes	• Level of activity of the network of partners: One regional workshop organised, • number of participation in EU and global governing activities by Be and partner countries. • 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. • Number of information meetings with different stakeholders in partner countries.
Activities	
2.3.1. Networking and organising 1 meeting/yr of CHM nfp of partner countries and governance	
2.3.2. one Mission /yr international meeting	

Table 17: logframe (partim) for SO2, 2.3.

Activities:

The activities under this programme component will be on a national and international level. On a national level it will allow the national CHM focal point to organise stakeholders meeting on a regular bases. This can be included in the call for projects under SO2.2.

Typically, we participate in meetings organised by the CBD Secretariat (for the global CHM) and by the European Environment Agency (for the European Community CHM). In 2017 there will probably be one CHM-IAC meeting back to back to a SBSTTA meeting and several skype conferences, a regional meeting for the EU CHM, a workgroup meeting for the development of the PTK, a regional meeting on NBSAPs as well as SBSTTA 21 organised by the CBD Secretariat and more. The participation in some of these meetings will be ensured by the organisers.

At the international level the activities will be three-fold:

We will also continue synergies with the Dutch CHM, which supports the CHMs of Ghana, Palau and Grenada. With the French CHM negotiations are under way to support Madagascar and they will sign an agreement in 2017. The CHM-IAC presidency by Han de Koeijer will be continued and ensure that follow up to COP decisions on capacity building, the CHM and technical and scientific cooperation will be implemented by the Secretariat and the partner countries. We will continue to follow up on questions from former partner countries like Comores, Congo, Gabon, Chad, Madagascar Sudan etc… which started

their CHM through GEF funding and/or with our assistance, but are not eligible anymore to participate in the formal partnership.
A memorandum might be signed in 2015 with the CBD Secretariat with financial assistance from the Japan fund for hosting and developing a new webtool for countries that cannot be part of the CHM partnership under the DGD-RBINS programme. This Memorandum might also include participation in a regional meeting for Western Asia Countries and one elsewhere.

Equipment for SO2

This part of the programme consist of ensuring that material is available to optimise the functioning of not only SO2 but also the other SOs. It is possible under this activity to purchase equipment for partner countries that will promote the overall functioning of the national focal points. Also material like new servers at RBINS to host all the CHM partner sites and possible databases, training materials for trainings in Belgium, licences for specific software and more can be put under this activity. Especially requests from institutes with whom the RBINS has signed MoUs will be considered.

Budget for SO2

SO2 **To enhance the information base on biodiversity and on its linkages with ecosystem services and poverty reduction and on associated governance processes (CHM)**		**budget** 2017
2.1.	**ER2.1 - Expertise in information flows is built**	
2.1.1.1	training workshops in Belgium	10000
2.1.1.2	national training workshops	20000
2.1.2.	follow-up trainings per year	10000
2.1.3.	south south collaboration	10000
2.1.4.	Promotion of reporting tool	
	subtotal	**50000**
2.2.	**ER2.2. Information flows are improved**	
2.2.1.	Launch and dissemination of the call for projects	
2.2.1.1	Selection of the projects	
2.2.1.2	Realisation of the projects in the South	62500
2.2.1.3	Follow-up of the projects	
2.2.1.4	Assessment of the projects	
	subtotal	**62500**
2.3.	**ER2.3. Information is used to advise governance processes**	
2.3.1	Networking and organising of meeting with partners	25000
2.3.2	Mission international meeting	
	Equipment	3000
	Subtotal	**28000**
Total		**140.500**

Table 18: summary of the budget for SO2

Specific objective 3. The RBINS contributes to awareness raising and communication on the importance of biodiversity and ecosystem services for poverty reduction and sustainable development, and on associated governance processes.

Background

A good understanding of biodiversity and ecosystem services is crucial to achieving its conservation and sustainable use for the benefit of all. For many years already, the CHM focal points have been playing a major role in the dissemination of information and outreach to various audiences. Support to CHM of partner countries not only targets the increase of CHM visibility, but also the visibility of biodiversity as a crucial component for sustainable development, hence raising the awareness of different target groups, such as civil servants and the general public.

Over the years, we have worked through calls for project proposals launched annually. These calls for proposals have proved quite successful, with 20 projects undertaken since 2005. Raising awareness has of course been the core of these calls. However, measuring the state and evolution of public awareness has lately been at the centre of our concern.

We will continue to support awareness raising activities through calls for proposals whilst pursuing our reflexion towards the establishment of baselines and the identification of suitable indicators.

Expected results

3.1. Baselines provide an insight on the level of awareness and/or commitment.

3.2. Awareness and commitment are raised.

3.3 Communication and awareness raising in Belgium

Outcome:

selected partner countries are better aware of baseline data of awareness about CBD when preparing policies and DGD when preparing ICP's (3.1.)

the awareness about the importance of biodiversity and ecosystem services is risen in partner countries at different levels (governance, general public) is enhanced/taken into account in policy making and implementation (3.2)

the awareness in relevant sectors in particular DGD and the actors of the Belgian cooperation in Belgium on biodiversity and ecosystem services related to development cooperation is increased and taken up in the preparation of the new indicative cooperation programmes with the partner countries (3.3)

NGAs and NGO programmes are involved in this exercise (3.3)

Expected result 3.1. Baselines provide an insight on the level of awareness and/or commitment

Description:

The national and CBD strategies are referring to the need that public awareness should be raised to ensure among others that biological diversity is high on the political agenda, people value it and see the need to conserve it. Aichi target 1 is targeting this. However, in order to develop indicators, to have activities on and to monitor changes in public awareness, one needs to have a basic view on what the public understands about biodiversity and what they understand about its role in their daily life, i.e. in terms of the benefits from ecosystem services. Also, to be able to measure the changes brought about by the strategies, one needs to make baseline studies at the start and towards the end of the strategies in order to be able to compare the data and to detect impacts and trends.

This programme element will allow the following activities :

- 2-3 year programmes with selected partner countries to
    - decide on useful **indicators** for the level of public awareness in their countries;
    - to undertake standardised **baseline studies** and
    - to develop public **awareness strategies** to raise the awareness on specific subjects.
- This work will be done in several selected partner countries in cooperation with the national focal points, national universities and if budget allows, Belgian lead universities. The results will be published on the national CHMs but also through the CBD CHM as best practices or international journals. The Belgian embassies will be involved in this process as much as possible.
- Special attention will be placed on raising the awareness on ABS and the Nagoya protocol so there will be a strong link with SO6.
- The topic of awareness plays a large role in the institutional programmes with OBPE(Burundi) and UAC (Benin) and is incorporated into their logframes. These partners participate with the competitive calls.

Selection criteria are listed in the call online, see CHM Reinforcement call : http://www.biodiv.be/cooperation/chm_coop/chm-partnering/call_reinforcement/call-reinforcement-chm-web-sites-2014

Awareness call : http://www.biodiv.be/cooperation/chm_coop/chm-partnering/public_awareness/call-education-and-public-awareness-projects-2014-open

Towards the end of the programme 2014-2018 the studies from the start of the programme need to be redone to check what the actual changes in awareness has been.

Logframe (partim):

Expected Results	Output Indicators
3.1 Baselines provide an insight on the level of awareness and/or commitment	• Number of public awareness projects completed, • At least 3-5 countries will reply to the special call for projects and develop indicators for public awareness. • 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.
Activities	
3.1.1. one call/year for awareness baseline projects in the South 3.1.2. The results should be used for the reporting towards the Aichi targets and the relevant indicators in the reporting tool that countries will use under SO2-1 and SO5.	

Table 19: logframe (partim) for SO3, 3.1.

Activities:

At the beginning of 2017, we will organise a **call** with as specific theme the **elaboration of baseline studies on Target 1 of the Aichi targets**. As it is subject to an open call, countries for this kind of interventions are not yet known a priori, although we would like to focus on the countries where we have contacts and functioning CHM's (e.g. Benin, Niger, Morocco, Côte d'Ivoire, , Democratic Republic of Congo, Burundi). Awareness raising is a typical mixed issue of top-down process (invitation to submit a project according to Aichi target 1) and bottom-up (identification of needs at local level and application of locally adapted instruments). The issue about increasing the awareness about the fact that awareness is important is sometimes the first step to tackle with in the less developed countries. In that sense, the demand driven aspect of awareness raising can only start, once this kind of first level awareness is growing. Priority will be given to projects that best meet the above-mentioned criteria.

DR Congo has implemented in 2015-2016 a project on integrating biodiversity education in professional schooling system in some provinces under the SO3.2 call. This was done in collaboration with VVOB Congo. They have expressed their desire to continue this project in 2017. As mentioned above we insist that there should be indicators in place in order to get projects under SO3.2. In the beginning of 2017 a project was signed to develop these indicators before the second part of 2017.

Expected result 3.2. Awareness and commitment are raised

Description:
Based on the results of the target audiences and subjects for which public awareness needs to be raised as a result of SO3.1, the partner countries and local institutions and organisations through the CHM and CBD focal points can submit projects under a **call for proposals**. Priority will be given to:

- proposals that could become "best practices" and can be replicated in other partner countries;
- projects that involve 2 or more countries that will work together on the same subject or around trans-boundary national parks;
- projects that involve awareness raising on the Nagoya Protocol and access and benefit sharing;
- projects that are the result of SO1 research and that have a high potential for awareness raising on the biodiversity or the species or habitats where the studies have been undertaken.
- Projects seeking synergies between actors, both Belgian and local.

With the support of CEBioS the CSB will be represented at the 'Semaine de la Science et des Technologies' in Kinshasa, in April 16-18 2017, a yearly event of major importance in DRC's capital, with about 8000 pupils and young students attending. The event is organised by 'Investing in People' ASBL. It is an excellent venue to present the CSB's monitoring work and hence raise awareness about biodiversity among young city-dwellers.
The CSB, Kisangani, to be compliant with its Framework Agreement, will react on the 2017 awareness-call, together with the national ministry in charge of the environment and the provincial (Province de la Tshopo) coordination for the environment, to organise a national workshop on awareness rising and communication expertise in the field of biodiversity and environmental conservation. Participants will be representatives of the provincial 'antennes' of the CSB and of NGO's and other societal groups.

One time actions don't have as much impact as recurrent actions when it involves public awareness. We will stimulate projects that run over several years. Projects will try to use as many different media types as possible, however national television will be difficult seen the costs involved to get a camera team. However, possible ideas include e.g. radio talks, theatre, art projects, eventually combined with visits to rural villages in buffer zones of protected areas and exhibitions.

The approach will take many of the elements explained by the concept of "CEPA" (e.g. http://www.cbd.int/cepa/), promoted by CBD and IUCN and involving communication, capacity development, education, empowerment, participation, partnerships and some interventions (actions). This concept will be integral part of the calls.

Logframe (partim):

Expected Results	Output Indicators
3.2 Awareness and commitment are raised	Indicators on public awareness show a positive development between 2014 and 2018. PA Materials are developed and used in different countries.
Activities	
3.2.1. special awareness project calls in South organised	

Table 20: logframe (partim) for SO3, 3.2.

Activities

We intend to finance **4 projects a year** but preferably even more if the quality of the project proposals is good enough. The amount allocated can vary per project . A project that will run in 2-3 countries at the same time will get more money allocated than a one shot project. The expertise of the Institute on educational matters and how to target different audiences as well as the technical lay-out of awareness material will be fully utilised.

Since awareness and communication strategies in developing countries are requiring special expertise, different from the European experience, the DGD-unit will eventually seek expert support from communication, education and awareness specialists (universities, NGOs, NGAs, e.g. VVOB).We will stimulate the partner countries to use also the expertise of local NGO's to ensure full participation of gender and the local population.

Projects from the 2014 call, still being implemented during <u>2017</u> are:

Burundi	Vers une sensibilisation effective pour une prise de conscience pour conservation de la biodiversité (=part of institutional cooperation with OBPE)

Projects from the 2015 call, still being implemented during <u>2017</u> are :

Maroc : « Etude de base des indicateurs de sensibilisation, de communication et d'engagement pour mesurer la perception du public à l'égard de la Biodiversité au Maroc » Due to the problems to get the funds transferred to Morocco we are still working on a solution through CTB.

Projects from the 2016 call, still being implemented during <u>2017</u> are :

Benin : « Sensibilisation à la lutte contre la déforestation et la pollution autour du parc de la Pendjari »Project end foreseen in 2018

Benin : « Projet de sauvegarde communautaire des tortues marines de l'atlantique et de leurs habitats le long du littoral du Benin » End foreseen in November 2017
Benin : « Célébration de la Journée Mondiale de l'Océan 2017 » End foreseen in August 2017
Benin : « Information et sensibilisation de la population sur les feux et les habitats du Parc National de la Pendjari » (Part of the institutional cooperation with UAC-CEBioS)
Togo : « Identification, validation et études de référence des indicateurs de sensibilisation, de communication et d'engagement du public à l'égard de la biodiversité au Togo » End foreseen in August 2017
Niger : « Projet de Sensibilisation des Détenteurs des Connaissances Traditionnelles du Niger dans le cadre de la mise en oeuvre du protocole de Nagoya sur l'Accès aux ressources génétiques et Partage des Avantages » End foreseen in July 2017

In light with raising awareness about the results of work under SO1.1 11 projects have been signed with GTI Alumni to restitute the result of their work to the General public, research community in their countries. The end of the projects is foreseen in March 2017.

Expected result 3.3 Communication and awareness raising in Belgium

Description:
The results of SO1 - SO3 can be used to raise awareness in Belgium and at international level to the problems that people face in development countries while using and conserving their biodiversity. This will of course depend on the results of the other objectives but it can also steer the call for proposals under SO3.2. A good example has been the project on the importance of pollinators in 2010. The amount reserved in the budget under this programme component will probably be not enough to organise something each year. However the amount reserved over 3 years can make a very good public awareness campaign in Belgium on what Development Cooperation and partners do towards biodiversity conservation and sustainable utilisation of its components in partner countries.
Also there is an opportunity to pass the message on the international decade on biodiversity that is hardly known in Belgium.

Logframe (partim):

Expected Results	Output Indicators
3.3 Communication and awareness is raised in Belgium	• Number of people reached in Belgium through stands and events • number of related communication material (posters, brochures), • number of people attending awareness raising events or receiving material, etc.: 4-5 public awareness projects completed • Number of events with new stand

	• New stand • Number of awareness presence in events • courses
Activities	
3.3.1.Organisation of 1 special PA event in Belgium focused on biodiversity 3.3.2.Biodiversity Decade and development cooperation (depending on additional funding to be found). 3.3.3.Use special occasions like Belgian development days, Couleur café and others to promote the awareness of the Belgian public on biodiversity in general and biodiversity in developing cooperation. 3.3.4.Development of a stand on "biodiversity and development cooperation" to be integrated in the campaign "give life to your planet" stand	

Table 21: logframe (partim) for SO3, 3.3.

Activities:

The training of Belgian civil servants (DGD) as intended under specific objective 4, is also part of awareness raising in Belgium.

This expected result involves the continuous update of our web site, which is also found in the specific objective “coordination and management’. Whenever possible, during missions abroad videos will be produced about our projects . They will be posted on a section of the website, targeted at the general public. The CEBioS stand that was produced in 2015 will be displayed at several occasions, among which– if selected- the Environment Festival and Bruxelles Champêtre. . An interactive game about biodiversity in the South, created with the support of education and museology experts from RBINS, as well as a brochure, will be produced in 2017 to consolidate the stand, explain our activities and raise awareness on biodiversity and development.

In 2017 there will be some new activities in Belgium. Some staff members will present the results of the activities 2015-2016 during the Conference “Tropical Ecology” that will take place from 06-10 February in Brussels. Han de Koeijer will also be co-editor of a booklet on the collections that RBINS and the African Museum have on the National Park of Virunga, DR Congo. This booklet will be part of a new temporary exposition on primates that will open in November 2017 at RBINS.

Budget for SO3

Activities		operational	missions	total
ER 3.1	**Baselines provide an insight on the level of awareness and/or commitment**	30000		30000
3.1.1. **3.1.1.1** **3.1.1.2**	3.1.1. one call/year for awareness baseline projects in the South Launch and dissemination of the call for projects Selection of the projects	30000		30000
3.1.2. **3.1.2.1** **3.1.2.2** **3.1.2.3**	The results should be used for the reporting towards the Aichi targets and the relevant indicators in the reporting tool that countries will use under SO2-1 and SO5 Realisation of the projects in the South Follow-up of the projects Assessment of the projects			
ER 3.2.	**ER3.2. Awareness and commitment are raised**	60000		60000
3.2.1.	Special awareness project calls in South organised			
3.2.1.1	Launch and dissemination of the call for projects			
3.2.1.2	Selection of the projects			
3.2.1.3	Realisation of the projects in the South	60000		60000
3.2.1.4	Follow-up of the projects, with saldos previous years			
3.2.1.5	Assessment of the projects			
ER 3.3.	**Communication and awareness raising in Belgium**	15000		15000
3.3.1	Organisation of 1 special PA event in Belgium focused on biodiversity	15000		15000
3.3.2	Biodiversity Decade and development cooperation			
3.3.3	Use special occasions			
3.3.4	Development of a stand on "biodiversity and development cooperation"			
Total		105000		105000

Table 22: summary of the budget for SO3

Specific objective 4. The RBINS and DGD unit D2.4 improve the mainstreaming of biodiversity and ecosystem services in policy sectors that have a high relevance for development.

Background

As a research institution, the RBINS possesses a long-running expertise on biodiversity and ecosystem management. As a museum, its educational activities are key instruments for the spreading of scientific knowledge. And through its mandate as Belgian National Focal Point to the Convention on Biological Diversity and its involvement with other agreements such as the Convention on Migratory Species and CITES, as well as the coordination of the Belgian platform for Biodiversity, it has acquired experience at the policy level. Over the years, this unique position has generated a valuable expertise at the interfaces of science, policy and education. The 'biodiversity team' of the RBINS is now clustered in the 'BIOPOLS' (Belgian Biodiversity Centre for Policy support) group, being a working group under the new operational Direction 'Nature' of RBINS. This will create additional synergies between the CEBioS-programme, the National Focal Points and the Belgian platform for Biodiversity, as well as the MUMM involved in policy work around marine policy.

RBINS puts this expertise at the service of the Belgian Development Cooperation and of other interested parties in Belgium, in order to enhance the dialogue and develop strong partnerships between scientists, decision-makers and society.

At the national level, the DGD-programme staff actively participates to the following fora:

- Steering Committee 'Nature'
- Steering Committee 'CBD'
- various BELSPO, RBINS, RMCA, Botanical Garden of Meise seminars
- various DGD and SPF Environment seminars
- Educaid.be – project group on environment
- European Congress son Tropical Ecology, Brussels, February 2017

At the international level, the DGD-programme staff actively participates (also in the framework of the other specific objectives) to the following fora in 2016, where mainstreaming activities are important:

- SBSSTA
- SBI
- WIPEI
- EU DEVCO and European working groups
- Various CHM working meetings
- CoCocongo (indicative), depending on availability and interactions with ICCN in RD Congo

- Various expert groups and fora (e.g. OESO-DAC ENVIRONET, SDSN, GTI, ANGs, KLIMOS, IFS, GEOBON)
- IPBES

Outcome: More capacities in Belgian cooperation about biodiversity (4.1.) More reference to biodiversity and ecosystem services in Belgian cooperation (PICs, mixed commissions…) by integration of the Aichi targets and risk assessment of the planned cooperation interventions (4.2)

Expected results

4.1 Expertise of Belgian Development Cooperation is built
4.2 Biodiversity and ecosystem services are mainstreamed in activities supported by the Belgian Development Cooperation

Expected result 4.1. Expertise of Belgian Development Cooperation is built

Description:
For the past few years, we have been participating in a number of meetings and events as one of the scientific institutions involved in development cooperation. We have also been involved in supporting the multilateral processes linked to the CBD through our support to DGD and our participation in the national coordination process on biodiversity (through the Coordinating Committee on International Environmental Policy).
We will continue to provide these services. We will also continue our work to raise the profile of biodiversity across sectors, not only within the development cooperation arena but also across other sectors dealing with economy and trade. The means to do so will remain fairly modest, as for example through meeting attendance, awareness raising (see SO3), networking and advocacy. However, we expect that closer collaboration with D2.4 will help determine new activities aiming at building a strong and permanent expertise of the various actors of the DGD on the values of biodiversity and ecosystem services for development. Amongst possible activities, we can note the provision of training workshops for distinct stakeholders of the Belgian Development Cooperation (BTC, NGOs, NGAs, relevant departments of DGD, private sector through KAURI). Based on the two-day training provided at DGD on November 16th-17th, 2015, we will develop a more extensive package together with KLIMOS, aiming at acquiring external funding (e.g. through VLIR). Our team will strive to answer the various requests for scientific support that arrive at the RBINS.

Examples of support include:

- advice on the implementation of biodiversity-related activities in partner countries,
- advice on proposed, submitted or running projects financed by DGD, such as KLIMOS and its toolkit
- investigating, together with KLIMOS, on how biodiversity is included into EIA by other cooperation agencies
- participation to the preparation of 'commissions mixtes' of bilateral cooperation,
- support to environmental mainstreaming e.g. in « Trans-Sectorial Teams » (TSTs),
- punctual support for the follow-up of multilateral agreements,
- support to the decision-making process of the ministerial office, the identification and formulation of positions in international debates and processes (UN, EU, OECD,…)
- contribution to publications and other outreach activities of DGD,
- raising the profile of biodiversity during thematic meetings organised by DGD,
- attendance to meetings discussing biodiversity and development issues,
- identification of people, institutions and organisations working for biodiversity worldwide,
- providing training on biodiversity issues, i.e. illustrating the importance of biodiversity for economic and social development and poverty reduction.

Some staff members are active as GTI- and CHM-focal points, as well as being actively involved with the ABS-CH position of the EU (Han de Koeijer).

Logframe (partim):

Expected results	**Output Indicators**
4.1 Expertise of Belgian Development Cooperation is built	4 training workshops organised for the target groups decided by DGD, 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
Activities	
4.1.1. Training provided: (Based on request) around the theme "biodiversity, ecosystem services and development cooperation"	

Table 23: logframe (partim) for SO4, 4.1.

Activities:

Based on request, expertise of the various actors of Belgian Development Cooperation can be built through the organization of training workshops. Training content and material can be developed in collaboration with D2.4 staff and adapted to the characteristics of Belgian Cooperation Development

(partner countries, development sectors, etc.). The training content will also match the needs and peculiarities of each target group: work processes, project scale, cooperation partners...
Four groups of actors have been identified: the Belgian Development Agency (BTC), the personnel from main Belgian NGOs or NGAs ('ONG programme'), staff from relevant services of the DGD and development cooperation Attachés. As Attachés presence in Belgium is scarce, the duration of the training will have to be adapted and synced with the diplomat days. Training was eventually planned in 2016 or at the beginning of 2017, but no request was made due to other priorities.
The CEBioS unit at RBINS aims at becoming an excellence centre about the link between biodiversity conservation and development or poverty alleviation. Therefore, its web site has been created in order to increase (i) visibility, (ii) transparency, (iii) information sharing with all stakeholders and (iv) information sharing with the broader public. In a way this is also a mainstreaming activity. This relates to SO2 and 3 as well. Since this is done with own PTK-tools, it was a zero operational cost activity.

Expected result 4.2. Biodiversity and ecosystem services are mainstreamed in activities supported by the Belgian Development Cooperation

Description:
Most of the activities undertaken in our programme strive to build capacities within the scientific community of partner countries, acknowledging the critical role of scientific knowledge for the conservation and sustainable use of biodiversity.

Logframe (partim):

Expected results	**Output Indicators**
4.2 Biodiversity and ecosystem services are mainstreamed in activities supported by the Belgian Development Cooperation	Number of consultancy requests from DGD staff Number of processes
Activities	
4.2.1. At least 8 consultancy requests honoured on demand 4.2.2.Follow-up of at least 5 processes (e.g. COP, SBSSTA, PIC…)	

Table 24: logframe (partim) for SO4., 4.2.

Activities:

As of 2017, participation and support of RBINS in processes of importance such as the negotiation and elaboration of Indicative Cooperation Programmes (PIC) should be initiated and systematised at an early stage to ensure that they take in to account effectively environmental and biodiversity issues. This is also the case for RBINS contribution to the work of « Trans-Sectorial Teams » (TSTs). The participation into the PIC processes should include a mission at the start of the process to give an introduction to relevant stakeholders in the partner countries. However, as has been the case in 2013 and the beginning of 2014, delegation of local persons of confidence to on-going processes of mixed commissions is done, since RBINS lacks permanent representation abroad. This was the case for the forum 'FABAC' in DR Congo (Forum des Acteurs Belges Actifs en RD Congo), organised by the Belgian embassy in Kinshasa.
Support will also continue to be carried out on a demand-driven basis for other types of procedures or activities. Next to the ones listed under 4.1, examples of support include:

- continue the current support in the CBD process on themes relevant to development cooperation,
- consultancies in selection procedures of IFS, VLIR-UOS and ARES
- the participation of M. Vanhove as a lead author within the IPBES African regional assessment.
- Punctual guest lectures at Belgian universities about the link between biodiversity and development
- Marie-Lucie Susini Ondafe will participate in the forthcoming meetings organized by the task force on capacity-building of the IPBES. A meeting of the task force is scheduled for April 2017 in Norway, as well as being lead for environment in Educaid.

Budget for SO4

SO4 **To improve the mainstreaming of biodiversity and ecosystem services in policy sectors that have a high relevance for development**		**Budget**		
		operations	missions	Total
IR 1	**4.1 Expertise of Belgian Development Cooperation is built**	**8000**		**8000**
4.1.1.	Training provided: (Based on request) around the theme "biodiversity, ecosystem services and development cooperation"	8000		8000
IR2	**4.2 Biodiversity and ecosystem services are mainstreamed in activities supported by the Belgian Development Cooperation**		**12000**	**12000**
4.2.1	At least 8 consultancy requests honoured on demand			
4.2.2	Follow-up of at least 5 processes (e.g. COP, SBSSTA, PIC…)		12000	12000
Total		80000	12000	20000

Table 25: summary of the budget for SO4.

Specific objective 5. The RBINS and DGD unit D2.4 improve the knowledge on the measurement, reporting and verification (MRV) of policy choices and activities linked to biodiversity and ecosystem services.

Background

The RBINS, as CBD National Focal Point, has been the coordinator of the Belgian reporting obligations under the Convention on Biological Diversity. Till recently, such reporting under the CBD was largely confined to descriptive information. With the adoption of the Strategic Plan for Biodiversity 2011- 2020 and the Aichi Biodiversity Targets, countries, including developing countries, will have to formulate indicators and gather data that will feed these.

The elaboration and formulation of indicators (largely a regional competence in Belgium) and the establishment / follow-up of formal 'MRV' processes is a relatively new field of expertise for us and we will need to build our own capacities to become fully operational. The coming year will once more be used to explore the most relevant means of building our capacities in synergy with DGD Service D2.4, which benefits from many years of experience in the follow-up of all three Rio conventions (climate, biodiversity, desertification).. Given existing expertise within CEBioS/RBINS and in Belgium, we will focus on certain Aichi targets, some of which currently poorly documented for indicators. In general, the proposed focus Targets are linked to the use of ecosystem-services and socio-economic impact. Examples include Targets 2 (integration of BD values), 3 (incentives), 6 (fishery), 7 (sust. management), 8 (pollution), 9 (IAS), 11 (ecological network), 14 (ecosystems and essential services), 18 (TK).

Expected results

5.1. Expertise of the RBINS on MRV is built.
5.2. Methodologies to assess progress towards the Aichi Targets are available

Outcome:
RBINS provides advice on MRV to different authorities Tool developed used to monitor and report achievement of Aichi targets in Belgium and in partner countries

Expected result 5.1. Expertise of the RBINS on MRV is built

Description:

To get capacity on the MRV procedures and best practices is a learning process, both at RBINS, DGD as in the developing countries. The scale may differ, from NBSAPs to environmental reporting on one particular sector (e.g. mining industry). It is related to dissemination, e.g. through the CHM (SO2).

In 2017, we will continue our internal capacity building through collaborations within Belgium and abroad, either with teams specialising in impact assessment and indicator development, and with institutions where data or collections are available which can be mobilised for MRV of biodiversity and biodiversity policy.

Logframe (partim):

Expected results (ER)	Output Indicators
5.1. Expertise of the RBINS on MRV is built.	The EU reporting tool for NBS's is developed in cooperation with the CHM network The reporting tool is used for the follow up of the implementation of national strategies and the reporting towards the Aichi targets
Activities	
5.1.1. expertise concerning MRV built up in conjunction with DGD	

Table 26: logframe (partim) for SO5, 5.1.

Activities:

During the first two years of the programme, activities focused on consolidating all relevant information on MRV and **identifying existing best practice**, via the literature and contact with experts. This mapping of expertise, research and development projects in Belgium will continue in 2017 in order to increase the efficiency of science-policy interface, facilitating a better transfer of science to real world scenarios of sustainable development. It will be explored how other institutes or expertise can be mobilised to collaborate with RBINS for concrete applications in developing countries and for reporting about development cooperation at the Belgian level.

At the CBD level, follow-up of the progress of the Ad Hoc Technical Expert Group (AHTEG) on Indicators for the Strategic Plan for Biodiversity 2011 – 2020 will be an essential part of the RBINS capacity building throughout the multiannual plan.

Based on results under expected result SO5.2, a **transversal assessment** will be carried out on MRV links with all programme activities. The assessment will aim at identifying all activities that can help

establishing methodologies for MRV in the context of Belgian Development Cooperation and, on the other hand, determine what activities can/should be monitored through new MRV methodologies.

Sustainable Development Solutions Network (SDSN) of the United Nations, GEO BON: peer review and input of contents for web site and panel papers. Following up these and other networks provides us with input and background to develop our interventions with regard to biodiversity monitoring and indicators. Conversely, our participation in these networks firmly positions our activities within a UN/CBD context and enables to disseminate our results to a well-targeted audience. In 2017, for example, the output of the MRV call of 2015-2016 will be announced through these and other channels.

All internal capacity building efforts will be closely tied to lessons learned in activities under SO5.2. Moreover, SO5 is also linked to the interventions under SO1, 1.3..

Relevant external project calls regarding MRV will be considered for application for building expertise on methodologies and extend our network of experts.
MRV expertise building can be considered at various levels: the data collection level, technical capacities for indicators establishment, use of MRV for policies, international collaboration.

Data collection and translation for the science/policy interface

Collection of data, and valorising them for the science/policy interface, in testcases in the framework of larger research projects with external funds (and where CEBioS can be co-promotor), such as BRAIN, KLIMOS, VLIR-UOS, ARES… in order to feed data to empower our partners in the South to implement Aichi targets. While a number of applications with VLIR were successful, our BRAIN and FWO project applications were not retained in 2016. Examples are mentioned in the following table; the project status is mentioned in italics below the title:

Project topic	Country	Partner institute South	Partner institute North	Aichi Target
Macro-invertebrates as bio-indicators and in ecotourism *(internship finished, searching for possibilities to continue)*	D.R.Congo	ICCN (Parc Marin des Mangroves)	KU Leuven (MSc internship) ULB	6, 8, 11
Integrated management of African lakes *(internship & project finished, in reporting phase)*	Tanzania	NM-AIST Tanzania National Parks various stakeholders	KU Leuven (VLIR-NSS, MSc internship)	6, 7, 11, 14, 18

Amphibian health for conservation, indicators, ecotourism *(ongoing)*	South Africa	NWU	KU Leuven (VLIR, sandwich PhD)	11, 14, 18
Habitat monitoring of wetlands *(project finished, Burundese partners expressed their interest to integrate this partnership into our recurrent MRV activities)*	Burundi	OBPE, Unibu	VUB (VLIR-SI)	6, 8, 11
Impact assessment of pollution on aquatic ecosystems *(project finished, in reporting phase)*	D.R.Congo	Unilu	KU Leuven, UA, RMCA (VLIR-SI)	6, 8
Sustainable management of aquatic biological resources *(project finished, in reporting phase)*	Morocco (host) with participants invited from Benin, Burkina Faso, Cameroon, D.R.Congo, Ivory Coast, Madagascar, Morocco	UM5 (host) + home institutes of participants Université Félix-Houphouët-Boigny, Université Yaoundé I (invited experts South)	KU Leuven (VLIR-STI) IRD RMCA College of Charleston (USA)	6, 7, 8, 9
use of existing collections or herbaria for determining baselines and to identify bio-indicators of anthropogenic change *(ongoing)*	a range of African countries, mainly D.R.Congo	CSB ICCN Unilu ISP Mb-Ng CRH-U …	RMCA BGM MUNI UHasselt IRD	6, 7, 9

Economic valuation of ecosystem services in Man and Biosphere reserves: testing effective rapid assessment methods in selected African MABs*(starts beginning of 2017)*	Benin, Ethiopia, Tanzania, Uganda	Trias Pendjari NP UAC …	KULeuven VUB UAntwerpen U Hasselt	2, 3, 14

- EVAMAB project: "Economic valuation of ecosystem services in Man and Biosphere reserves: testing effective rapid assessment methods in selected African MABs".

This new project coordinated by CEBioS and funded by Belspo will start in February 2017. It focuses on UNESCO Man and Biosphere reserves in four African countries: Benin, Ethiopia, Tanzania and Uganda.

- General objective: Mapping of the evaluation of the economic value of ecosystem services in UNESCO-MAB sites is performed for a better appreciation of the potential for management and socio-economic integration, in order to better protect UNESCO-MAB sites for future generations and for its biodiversity
- Specific objectives: to test rapid assessment tools for evaluation of specific ecosystem services related to UNESCO-MAB sites and to formulate relevant policy advise for managers and decision-makers concerning reward mechanisms and integration of socio-economic aspects in conservation

The project is an opportunity to strengthen internal expertise in fields relevant to MRV, especially: biodiversity databases, rapid assessment of ecosystem services, economic valuation and science/policy interface through reward mechanisms such as Payment for Ecosystem Services. This will also enable us to meet and connect with Belgian and South experts in those fields.

Technical capacities for indicator establishment

- Technical capacities identified during the 2015 MRV call as contributing to the establishment of indicators should be a focal subject for our internal capacity building (e.g.: data acquisition and publishing, database management, GIS, ecosystem services valuation,…)
- Write a scientific paper about MRV 2015 projects, together with all project partners. An opinion paper entitled "Joining science and policy in capacity development for monitoring progress towards the Aichi Biodiversity Targets in the global South" based on our experience from launching the 2015 call was already published in 2016 (see http://www.sciencedirect.com/science/article/pii/S1470160X16306306). The scientific paper is a logical follow-up to this opinion paper.
- Organise a multi-day workshop in the DR Congo (CSB) with the 11 project coordinators of the 2016 call, to increase expertise about and develop key indicators for the three key domains focused on in the call (selected together with our partners at the environmental ministry in Kinshasa on the basis of the new NBSAP for the DRC): bush-meat, charcoal, fisheries. Representatives from the environmental ministry at regional (for the Tshopo province) and national level will be invited to stimulate discussion about which data types and which methodologies, originating from the DRC MRV projects, are best suited to contribute to high-quality national reporting on biodiversity.

- Develop policy briefs and scientific publications for the DR Congo, based on the results of the workshop described above.
- During contacts with various partners, the urgent need for capacity building and policy extension in the field of (indicators for) genetic diversity became apparent, as exemplified by e.g. (1) a number of keynote lectures on the *Zoology 2016* conference (Antwerp, December 2016) where the central theme was "*Nature conservation in a changing world*"; (2) the recent establishment of the Conservation Genetics Specialist Group, one of the Disciplinary Groups within IUCN; (3) a recent call opened by BIP asking for indicator development on, among others, Aichi Target 13. As Aichi Target 13 (and therefore, genetic diversity as a central aspect of biodiversity under the CBD) is largely fallow ground in terms of indicators, we will explore pathways to contribute in this field. We will e.g. discuss potential collaboration in partner countries with the researchers of the RZSA. Maarten Vanhove is also co-supervising, for CEBioS-RBINS (together with KU Leuven and CRH-U) a VLIR-VLADOC PhD fellowship combining genetics and stakeholder involvement for the development of a sustainable management model for fisheries in African lakes (using the sardine stocks in Lake Tanganyika as a case study).

Use of MRV for policies

- Review of ToR and identification of indicators for environment for the preparation of DGD cooperation programmes;
- Explore ways to make scientific data usable and improve the science/policy interface (including providing an extension to existing projects, see examples above)
- Disseminate policy briefs created during the closing workshop of 2015 MRV call (October 2016, Benin) and assess the efficiency of such communication tools to reach decision makers and scientists and stimulate synergies between them. Channels that will be explored are e.g.: SDSN, GEO BON, BIP, and presentations at specialised fora (e.g. invited talk of Maarten Vanhove at ZFMK, January 2016; various MRV-related CEBioS contributions (talks, sessions) at the European Conference for Tropical Ecology, February 2017, Brussels).
- Disseminate policy briefs created for DR Congo and assess the efficiency of this type of communication to reach decision makers
- Start developing new activities based on the assessments to improve the communication of policy briefs/other ways of communication

International context

- Become a partner of and continue close collaboration with the BIP (Biodiversity Indicator Partnership)
- Actively attend international workshops on biodiversity indicators and monitoring, e.g. the European Conference on Tropical Ecology to be held in Brussels, VUB (February 6th-10th)
- Keep informed on evolutions of existing proposed biodiversity indicators: EBV (Essential Biodiversity indicators), AHTEG proposition, BIP tool, SEBI indicators, information on MRV for REDD+
- Contribute to GEOBON working groups relevant to MRV, as identified during the GEO BON Open Science Conference ("Biodiversity and Ecosystem Services Monitoring for the 2020 Targets and beyond") and GEO BON All Hands Meeting (Leipzig, July 2016) (e.g. WG on Ecosystem services, Biodiversity Observation Networks,…).

Expected result 5.2. Methodologies to assess progress towards the Aichi Targets are available

Description:

The development of methodologies are necessary for the three levels of MRV, measurement, reporting and verification. This terminology is mostly used in conjunction with the United Nations Framework Convention on Climate Change (UNFCCC), REDD+ and environmental assessments, e.g. for the mining industry. It is important for DGD, RBINS and the DGD programme to remain updated concerning the global trends in MRV in order to apply it as much as possible in the mainstreaming, policy support, and NBSAPs in developing countries. The budget of SO 1.3 directly contributes to this process.

Logframe (partim):

Expected results (ER)	Output Indicators
5.2. Methodologies to assess progress towards the Aichi Targets are available	National indicators are developed and used for reporting towards the Aichi targets
Activities	
5.2.1 MRV tools are developed and implemented (e.g. through project calls and other)	

Table 27: logframe (partim) for SO5, 5.2.

Activities:

Partnerships are undertaken, with a view to stimulating dialogue between science and policy, with **ministries and universities in partner countries and relevant Belgian experts** (to be determined) in order to launch pilot projects on best practice. The objective will be to develop, assess or put into practice indicators developed by various countries in the framework of their National Biodiversity Strategies. Selected countries for this analysis will preferably be current partner countries of our programme. Other countries (either in the North or South) could be chosen for the quality of the proposed indicators.

2016 MRV call in R.D. Congo- follow up in 2017

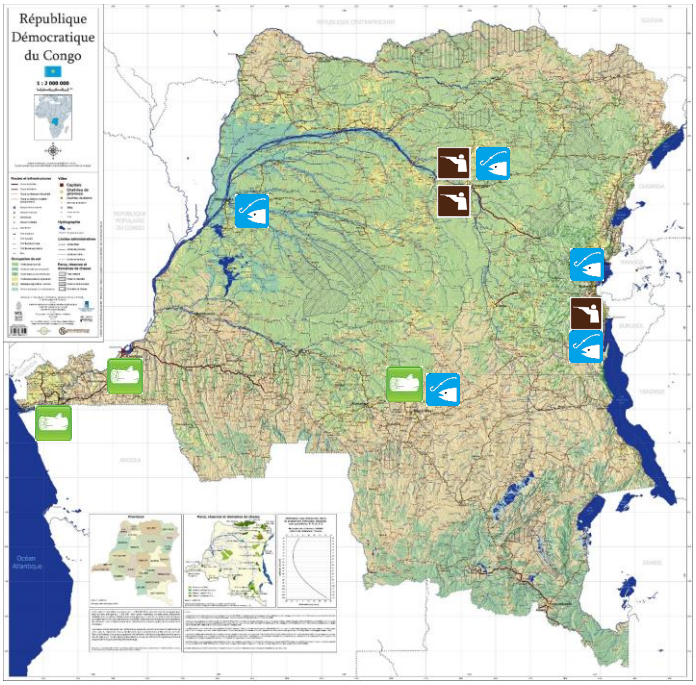
In 2017, the follow-up of the 2016 call launched in D.R.Congo will be a major component. This call builds on our long-term collaboration with the environmental authorities of the D.R.Congo and focuses on the network of antennas for biodiversity of the former provinces. Other Congolese government or official higher education institutions were also allowed to apply, pending the relevance of their activities to the Congolese NBSAP and maintaining the “tandem” approach of the 2015 MRV call, linking governance and science actors in joint projects. The objective of this call is to fill the gap between data collection and use by government authorities for reporting/follow-up of the state of biodiversity and biodiversity policies.

Eleven projects were selected, focusing on three focal areas: fisheries, charcoal and bushmeat. The map and table below summarize the 11 selected projects and their links with Aichi targets and Objectives of the Congolese NBSAP.

Bushmeat

Charcoal

Fisheries



Project	Partner institutions

Theme: **Fisheries**
• Related Aichi target:
  ○ Target 6: By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.
• Related DRC NBSAP objective(s):
  ○ Axe stratégique prioriaire 3. Pêche durable;
  ○ Objectif national 3.1. D'ici à 2020, les stocks de poissons d'eau douce sont récoltés d'une manière durable en appliquant la réglementation y afférente.
  ○ Axe stratégique prioriaire 9. Promotion de la recherche scientifique et acquisition des connaissances
• In charge of follow-up: M. Vanhove	

Suivi et caractérisation de la pêche au Lac Kivu	• l'Université Officielle de Bukavu (UOB) et • la Coordination Provinciale de l'Environnement, Conservation de la Nature, Développement durable / Province du Sud-Kivu, RD Congo
Renforcement des Capacités de l'Administration locale (Ministère de l'Agriculture, Pêche et Elevage, Ministère de l'Environnement et la police lacustre) en matière de suivi de la gestion de la pêche.	• Centre de Recherche en Hydrobiologie d'Uvira

Exploitation des poissons à Kisangani et ses environs en RDC	• Université de Kisangani • Centre de Surveillance de la Biodiversité (CSB).
Diversité ichtyologique des espèces capturées dans la rivière Lubilanji au Kasaï oriental en RDCongo	• Synergie des Compétences pour la Réussite Intégrale du Développement Agricole, « SCRID-AGRI/ASBL» • Université Officielle de Mbuji-Mayi
Les pêches durables dans l'hinterland marécageux et fluvio-lacustre le long du fleuve Congo, rivière Ikelemba et du lac Tumba de 2013 à 2016.	• Nouvelles Dynamiques pour le Développement Rural Intégral « NODRI ONGD/ASBL » • Institut Supérieur Pédagogique de Mbandaka « ISP/Mbandaka.
 Theme: **Charcoal** • Related Aichi target: o Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced. o Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity. • Related DRC NBSAP objective(s): o Axe stratégique prioriaire 2. Réduction des pressions exercées sur les habitats naturels o Axe stratégique prioriaire 5. Sauvegarde des espèces de faune et de flore menacées d'extinction o Axe stratégique prioriaire 9. Promotion de la recherche scientifique et acquisition des connaissances In charge of follow-up: A-J Rochette	
Le développement d'agroforêts comme alternative pour valoriser la production durable du charbon de bois autour de la ville de Boma dans le territoire de Muanda	• Institut Congolais pour la Conservation de la Nature (ICCN, en sigle) • Coordination urbaine de l'Environnement de la ville de Boma Territoire de MUANDA
Contribution à l'étude de la filière bois énergie au Kasaï Oriental, RDCongo: cas du bassin d'approvisionnement de la Lubi	• Université Officielle de Mbuji-Mayi, «UOM », province du Kasaï Oriental. • Synergie des Compétences pour la Réussite Intégrale du Développement Agricole, « SCRID-AGRI/ASBL
Contribution à l'étude floristique des espèces végétales utilisées dans la production de charbon de bois.	• Université de Kinshasa, Laboratoire de Botanique systématique et d'Écologie végétale. (LBsEv). • Institut Congolais pour la Conservation de la Nature (ICCN).
 Theme: **Bushmeat** • Related Aichi target: o Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced. o Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity. • Related DRC NBSAP objective(s): o Axe stratégique prioriaire 2. Réduction des pressions exercées sur les habitats naturels o Axe stratégique prioriaire 5. Sauvegarde des espèces de faune et de flore menacées d'extinction	

○ Axe stratégique prioriaire 9. Promotion de la recherche scientifique et acquisition des connaissances • In charge of follow-up: H. Keunen	
Exploitation de la viande de brousse dans la région forestière de Kisangani (RD Congo, Kisangani)	• Centre de Surveillance de la Biodiversité (C.S.B) de l'Université de Kisangani • Coordination Provinciale de l'Environnement
Les menaces des crocodiles et des hippopotames de la plaine de la Ruzizi et les stratégies de leur conservation, Sud-Kivu, République Démocratique du Congo (RDC).	• Centre de Recherche en Hydrobiologie (CRH) d'Uvira • Makerere University Kampala (MUK) Uganda
Projet de valorisation des données et de mise au point d'indicateurs de suivi de la Biodiversité en RDC: cas de la Viande de brousse	• Centre de Surveillance de la Biodiversité(CSB), Université de Kisangani • Ministère de l' Environnement Direction de Développement Durable

Table 27bis: List of MRV projects in DRCongo

If the political situation and security conditions allow it, a closing workshop will be organized at CSB in Kisangani in September/October 2017. One representative of each project will be invited, as well as representatives of local and national policy-makers and natural resources managers (CBD and CHM national focal points, Environmental provincial coordination representatives, etc.)

This workshop will have various objectives:

- Strengthening the network of biodiversity monitoring antennas in the D.R.Congo, especially around the three selected themes
- Exchange on methodology and best practices in thematic groups
- Coordinate national reporting actions
- Create outputs that are relevant for monitoring and decision-making at local and national levels, through communication tools such as policy briefs (e.g. see http://www.biodiv.be/cebios2/docs/publications/policy-briefs)
- Disseminate methodologies and results in common scientific publications

2017 call in English-speaking partner countries

End of 2017, the last new call of the 5-years programme will be launched for English-speaking partner countries. Themes, contents and criteria will be established based on the outcome of the two previous calls. CBD National focal points of eligible countries and other partner institutions will be contacted to determine priority areas. Whenever possible it will also be discussed among the working group on environment/natural resources management within the Belgian non-governmental actors and their local partner/member organisations. This approach was already discussed during a meeting with the Belgian NGO Trias in Tanzania in December 2016 (at the occasion of a workshop for a VLIR-NSS-project in which CEBioS is involved).

It will be possible to **develop methodologies** to measure progress on other indicators if the majority of the partner countries are using more or less comparable indicators. Assessed indicators that will be considered will then be used to measure progress of relevant activities undertaken in this programme, such as activities developed under SO1.

The development of indicators for the measurement of **progress** is also part of our programme via the activities under specific objective 3. The results of these activities will feed discussions at various levels (with partner countries, within CBD processes, etc.) and will hopefully be disseminated for wider implementation. After a call for French-speaking partner countries (2015), D.R.Congo (2016) and English-speaking partner countries (2017), the next call will favour follow-up applications from the first round, to allow the evaluation of progress over the course of three years.

As for **reporting** methodologies, one of the efforts will be focused on the new tool that is under development at the EU CHM. The Belgian CHM is an active player in the **construction of a tool** that will be at the centre of the reporting processes on Aichi targets. The use of this new tool by partners countries will be ensured through the training activities planned under SO2.1.

Budget for SO5

		operations	**missions**	**total**
IR 1	5.1. Expertise of the RBINS on MRV is built.		On external projects	
5.1.1	5.1.1. expertise concerning MRV built up in conjunction with DGD	3000		3000
5.1.1.1	5.1.1. expertise concerning MRV built up in conjunction with DGD			
5.1.1.2	recruitement of new scientist for contribution to OS4, 5, 6 (shifts between MRV and Evamab)			
IR2	5.2. Methodologies to assess progress towards the Aichi Targets are available			
5.2.1	5.2.1 MRV tools are developed and implemented (e.g. through project calls and other)			
5.2.1.1	- Indicators on resource mob and poverty	500	0	500
5.2.1.2	- Pilot projects on feeding data to indicators	30000		30000
Total		33500	0	33500

Table 28: summary of the budget for SO5

Specific objective 6. The RBINS and DGD unit D2.4. raise awareness on, and build capacities for, the implementation of the Nagoya Protocol on Access and Benefit Sharing in Belgium and in developing countries.

Background

In Belgium there is relatively limited experience on genetic resources, access and benefit sharing provisions or traditional knowledge associated to the use of genetic resources.
The new programme framework rightly makes of the Nagoya protocol the sixth pillar of our activities. As a preparation for years to come, members of the team started in 2014 documenting and building capacities on this matter. Also, the ABS-Clearing House will be linked to the national CHM.

Expected results

6.1. The RBINS and DGD are familiar with the obligations under the Nagoya Protocol.
6.2. Awareness of the scientific community on the Nagoya Protocol is raised. As outlined in the section below, capacities will first be built within RBINS. Information and training for other stakeholders, including DGD, was due to start as of 2014. Due to a delay in recruitment, and to the fact that The Protocol of Nagoya has only been ratified in October 2014, SO 6 will be more developed from 2015 onwards. Meanwhile, ABS clearing house received a lot of attention in 2014 with the work of Han de Koeijer.

Outcome:
RBINS provides advice to Belgian cooperation on Nagoya Protocol and DGD is better informed about the NP.Nagoya Protocol is better known in partner countries

Expected result 6.1. RBINS and DGD are familiar with the obligations under the Nagoya Protocol

Description:
The year 2017 will be devoted to the follow-up of the Nagoya Protocol on Access and Benefit-Sharing, its implementation at the Belgian, European and international (cooperation partners) level. The consolidation of internal capacities is a prerequisite for the provision of training and support to DGD, our partners and any other relevant stakeholder.
Several members of the team are already part of both the Belgian and European working groups on the Nagoya Protocol and have attended meetings and workshops held in 2012-2016 regarding this matter. The Intergovernmental Council on the Environment of Belgium has extended the responsibility for the

mandate of the CHM to include the ABS Clearing House (ABS-CH) in November 2013. Han de Koeijer has followed on the development of the ABS Clearing House in 2014-2016, and will continue doing this in 2017 with other colleagues.

Logframe (partim):

Expected results	Output Indicators
6.1. The RBINS and DGD are familiar with the obligations under the Nagoya Protocol.	Number of meetings on NP attended Number of staff members aware of the implications of Nagoya Protocol implementation: 2 members of staff trained Researchers and other stakeholders are aware on the implications of the NP on their way to work.
Activities	
6.1.1. A flyer has been developed about "the Nagoya Protocol and implication for collecting species in non-European countries". 6.1.2. One to 2 briefing papers on developments of the NP will be prepared each year. 6.1.3. to attend meetings to get acquainted with the Protocol of Nagoya and to follow up developments	

Table 29: logframe (partim) for SO6, 6.1.

Activities:

One of the main activities will be to follow the development of EU and Belgian legislation as well as on developments on the global level. This implies involvement of one person in the ABS/Nagoya Protocol working group at both levels. Participation in international meetings is foreseen in 2017.

Participation to the international working group on capacity building for the Nagoya Protocol is also part of the activities as Han de Koeijer was accepted by the Secretariat as expert.

Information on the implementation of the NP in the partner countries will be followed closely. The national legislation of the partner countries will be analysed to check their implications for the collection of specimen in the countries. Special attention will be put on implications for the export of species for research purposes by national researchers that will come to Belgium under DGD funding.

A training about the Nagoya protocol will be organised in the second half of the year for DGD and other Belgian actors (NGAs, BTC) to inform them on issues that have implications for developing cooperation. Now that the Nagoya protocol is ratified, an information flier for Belgian target publics will be produced. Prior to that, we intend to identify the knowledge gaps and anxieties amongst concerned scientists, collection managers, curators.

Expected result 6.2. Awareness of the scientific community and other stakeholders on the Nagoya Protocol is raised

Description and activities:

Scientists from Belgium will continue to collect specimens. We will continue to seek a better efficiency at the science-policy interphase. Whenever they bring those species in to Belgium, the Belgian Government will probably have the obligation to check that the necessary information in relation to Prior Informed Consent (PIC) and Mutual Agreed Terms (MAT) for the use of the species has been respected.

In order to ensure that scientists that travel abroad for collection purposes are aware of the extra paperwork, they need to be informed of the implications of the NP.

Information on ABS and the NP will be communicated through the national CHM. A special section will be developed in collaboration with the ABS national focal point of Belgium. For 2017, some partner countries have expressed their desire to organise a regional meeting on ABS-CH. We will explore the possibility to support such initiatives.

During the European Conference on tropical Ecology, Dr. L. Janssens de Bisthoven & co-authors will present the pioneering work of the government of Burundi on linking traditional healers and knowledge on medicinal plants to the scientific community of the Université du Burundi under the umbrella of several key ministries (health and environment) in the framework of the protocol of Nagoya. This intervention was part of the support of CEBioS to OBPE.

Logframe (partim):

Expected results	Output Indicators
6.2. Awareness of the scientific community and other stakeholders on the Nagoya Protocol is raised.	A special section on the Belgian Clearing House on "Frequently Asked Questions on the Nagoya Protocol" has been developed and is updated regularly.. Number of fliers Number of information sessions
Activities	
6.2.1. information sessions are organised 6.2.2. development of section on NP in CHM. 6.2.3.Further actions will depend on the decisions during COP11 and NP COP/MOP1	

Table 30: logframe (partim) for SO6, 6.2.

Budget for SO6

		Operation	Missions	Total
IR 1	**6.1. The RBINS and DGD are familiar with the obligations under the Nagoya Protocol.**	**1000**		1000
6.1.1	A flyer has been developed about "the Nagoya Protocol and implication for collecting species in non-European countries".			
6.1.2	One to 2 briefing papers will be prepared each year			
6.1.3	to attend meetings to get acquainted with the Protocol of Nagoya and to follow up developments	1000		1000
IR2	**6.2. Awareness of the scientific community and other stakeholders on the Nagoya Protocol is raised.**			
6.2.1	information sessions are organised	9000	6000	15000
6.2.2	development of section on NP in CHM			
6.2.3	Further actions			
Total				**16000**

Table 31: summary of the budget for SO6

Specific objective 7: Programme coordination and management

Background

The year 2017 will be a transition towards the last year of the five year plan, 2018 and a further development and extension of the networks, modalities and systems established by the coordinator for a results-based coordination and management of CEBioS in the framework of the starting 10 year strategy 2014-2023, phase I (2014-2018). The mid-term evaluation will be carried out in 2017.

Outcome:

The project is properly coordinated and managed in order to implement smoothly the 16 expected results under the 6 specific objectives

Expected Results

7.1. Coordination
7.2. Management

Description:
The CEBioS programme is a policy support and capacity building unit under the Operational Direction 'Natural environment' or 'Nature' of RBINS (headed by the operational director Dr. Patrick Roose). It is coordinated and managed by the coordinator (Luc Janssens de Bisthoven), an administrative support staff (3 persons: Mariam Agarad, Vincent Pinton, Kristien Vrancken) and 7 scientists (Han de Koeijer, François Muhasy, Marie-Lucie Susini Ondafe, Maarten Vanhove, Anne-Julie Rochette, Katrijn Baetens, Hilde Keunen), with the active support of senior scientist Erik Verheyen, concerning the capacity building in Kisangani (RDC).

Logframe (partim) :

7. Coordination and Management	Key indicators (OVI) and targets
Expected results (ER)	**Output Indicators**
7.1. Coordination	Annual plan Annual report Recruitments Trainings Project website Fliers, stand New partners, synergies and projects
7.2. Management	Number of trainees in Belgium Number of qualitative trainings, workshops, symposia, projects, awareness campaigns and functioning CHM websites in developing countries Audit Paperwork Functional computers, equipment (servers…)
Activities	
7.1.1. preparation of the year programme and preparation of the annual report 7.1.2. Human resources and internal capacities 7.1.3. Communication with direction of RBINS, DGD and other stakeholders and visibility 7.1.4. Prospection for synergies, partners, projects and external funding 7.1.5. motivation, support and incitement of staff to reach targets within strategy and activity programme including mid-term evaluation and general coordination	
7.2.1. organisation of the mobility of the trainees to Belgium 7.2.2. financial management 7.2.3. administration 7.2.4. ICT	

Table 32: logframe (partim) for ‘coordination and management’

Activities:

- 7.1.1. preparation of the year programme and preparation of the annual reports, both for RBINS and for DGD. It is a recurrent activity.
- Highlights per trimester, to be reported to RBINS.
- 7.1.2. Human resources and internal capacities. It is a continuous process. Special attention is given to 'development circles' and the coordinator regularly attends special training in team development. LJDB is also one of 4 resource 'trust' persons at RBINS. The HR is now facilitated with the online Crescendo software.
- 7.1.3. Communication with direction of RBINS, DGD, embassies and other stakeholders and visibility. Day to day activities and embedding into the RBINS platform 'BIOPOLS' as a unit within the operational Direction 'Nature' of RBINS, where LJDB is liaison officer.
- 7.1.4. Prospection for synergies, partners, projects and external funding. Reacting on calls, but also networking with NGOs and NGAs (e.g., IFS, VVOB, VLIR-UOS, ARES, Dienst Bijzondere Evaluatie, BELSPO, Gemeenschappelijke Contextanalyses, UNESCO-MAB).
- 7.1.5. Motivation, support and incitement of staff to reach targets within strategy and activity programme including mid-term evaluation (execution in 2017) and general coordination. Implementation of the 'development circles' compulsory for the administrative and technical staff of the federal government.
- 7.2.1. Organisation with the secretariat of the mobility of the trainees to Belgium. Procedures are continuously updated and improved to be a professional organisation and an excellence centre for Biodiversity and sustainable development.
- 7.2.2. Financial management. Day to day activity, special attention to financial and narrative report flows, contract contents and flows, and close cooperation with the financial service of RBINS.
- 7.2.3. Administration. Day to day, issues of personnel through the softwares Artio, Primetime and in face-to-face meetings.
- 7.2.4. ICT. Purchase of small equipment and servers in cooperation with the ICT department of RBINS according to budget, helping with establishment of a more formalised ICT strategy within DO 'Nature'. Han de Koeijer has the lead in this.
- Various
    - General aspects of representation, networking and communication, formulation and evaluation missions
    - Follow-up of project cycle (on the share 'seafile') within DO Nature and group and business meetings.

Budget for Coordination

		Operations	Missions	Total
7.1.1	Preparation of the year programme (AP) and preparation of the annual report (AR)			
7.1.2	Human resources and internal capacities			
7.1.3	Communication with direction of RBINS, DGD and other stakeholders and visibility			
7.1.4	Prospection for synergies, partners, projects and external funding			
7.1.5	Motivation, support and incitement of staff to reach targets within strategy and activity programme, including midterm evaluation and general coordination	22000	On arrays	22000
7.2.	**Management**			
7.2.1	Organisation of the mobility of the trainees to Belgium			
7.2.2	Financial management			
7.2.3	Administration			
7.2.4	ICT			
Various				
Total				**22000**

Table 33: summary of the budget for SO7

The role of the programme coordination is to ensure the coherence and integration of the various components of the cooperation protocol. It also plays an important role of synchronisation with the activities of all project partners: the other RBINS departments, other institutions such as the RMCA, BG of Meise and universities, NGOs, as well as administrations in Belgium and abroad, including the Belgian embassies. As part of our networking activities, we will continue to exchange information and experiences with other Belgian and international actors involved in biodiversity-related issues. Among our usual partners, we will continue working closely with the CBD Secretariat, in Montreal, as well as with other UN-agencies and programmes and with UNESCO-MAB (Paris), IUCN and others (e.g. WWF, the group 'conservation biology' of RBINS etc).

Annex 1: Log-frame matrix (for 5 years, 2014-2018)

See next pages

Annex 2: Sustainable Development Goals and CEBioS objectives

Annex 1: Logical framework for the period 2014-2018 of the DGD-RBINS programme

Complete LOGFRAME of the DGD-RBINS Programme 2014-2018

Overall objective	Indicators (OVI)*	Source of Information (SOV)	Assumptions
To build scientific and technical capacities for a more effective implementation of the Convention on Biological Diversity and its Strategic Plan for Biodiversity 2011-2020, as a contribution to poverty reduction and sustainable development worldwide, with emphasis on ecosystem services and policy support	The loss of biodiversity is significantly reduced (global headline indicators)	International reports such as the Global Biodiversity Outlook and others	Governments, organisations and stakeholders have taken actions to stop the loss of biodiversity. Indicators are available to measure this.
	Implementation of National Biodiversity Strategies and Actions Plans (NBSAPs). Integration of biodiversity issues in Poverty Reduction Strategy Papers.	National and thematic reports of countries submitted to the Convention on Biological Diversity	Policy makers have the information they need to take good decisions on the conservation and sustainable use of biodiversity. Governments are committed to CBD implementation.

Specific objectives (SO)	Expected results (ER)	**Key indicators (OVI) (see details in text for lay-out reasons)**	Source of Information (SOV)	Assumptions
		Outcome indicators		
SO1 To strengthen the scientific and technical knowledge base on biodiversity and on its linkages with ecosystem services and poverty reduction		• Scientists' apply their expertise, enabling them to better study and understand biodiversity and ecosystem services and better promote and disseminate the value of biodiversity to society (1.1. and 1.2.) Production of papers, policy briefs and participation to conferences, seminars etc… are indicators for the good functioning of scientists • Selected partner institutions carry out their mandate related to biodiversity (add 1.2, 1.3. and 1.4.) • Rangers monitor and report habitat changes of areas of high interest for biodiversity (1.2.) • the staff of of the partner institutions carry out research on biodiversity and ecosystem services (1.2..,1.3., and 1.4.) • The mathematical Coherens model, aimed at predicting scenarios of water and sediment transport as well as biotas is applied, to answer questions about marine biodiversity by partner countries. A North South South network for Coherens users is functioning. Integrated coastal management plans are developed by local authorities (1.2.) • National indicator processes receive input (1.3) • Number of Scientific output accessible and disseminated and used by stakeholders. (1.4.)		

			Output indicators and targets		
	1.1. Scientific and technical expertise is built	ER Nr. 1	•National authorities use the information provided by SO1 in the national indicator process o12-18 students trained / year will produce: 8 posters and/or oral presentations given at national or international events/ year; o5 publications in scientific journals or general media/ year; o3 who graduate (Master or Ph. D.)/ year;	Reports of training, evaluations of trainees and trainers	The requested expertise is found at the RBINS and in Belgium. Trained professionals are able to put their acquired knowledge in practice. Authors and reviewers are available to contribute to the AbcTaxa manuals and to the teaching material.
	1.2 Quality scientific knowledge is produced and used for the better understanding and management of biodiversity in partner countries (4 parts: A, B, C and D) 1.2.1.(A) Supporting taxonomic research 1.2.2.(B). Supporting the monitoring of habitats for the management of ecosystems 1.2.3. (C). Cooperation with the University of Kisangani for the taxonomic study and the monitoring of lowland forests 1.2.4.(D) Application of the	2	A •number of trained students trained / year will produce ; opublications in scientific journals and general media; ograduates (Master or Ph. D.); oin-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. B •At least one training per country is organized and is followed by two applications campaigns on the field. 30 people trained in the habitat monitoring, •Syllabi produced and/or updated (see also 1.4.B) •equipment purchased. •4 articles published in peer reviewed journals, •4 lexicons will be finalized and used, see also SO1-4b •over 5 years : 2 PhD students, •6 master students finalised their thesis, •5 oral contributions (participation to meetings, conferences, lectures, seminaries…) •5 information exchange sessions have been organised in relation with poverty reduction related subjects of the studies. C •3 PhD students identified •3 PhD students/year followed training supervised by expert in Belgium/ elsewhere (total=15) •For 3 PhD students: 1 local visit/2years by supervisor (total=9) •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) •2 publications in scientific journals/PhD student (total=6). D	Degrees, peer reviewed scientific publications, new projects, data produced, workshop reports, List of questions and solution of problems addressed in E-coaching and user forum (Coherens)	

	COHERENS model for integrated coastal management and monitoring of ecosystems		•A review of the presentation of the specific research questions of the partner institutes •Number of scientific output (presentations, conference) •Strategic management plans concerning Coherens for the institute and local authorities •Number of qualified trainee ex-post reports within the visitors programme •3 policy briefs are to be produced by the partners •Documentation of the Developed modules for COHERENS available.		
	1.3. Monitoring data is fed into national indicator processes.	3	•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.	National reports	
	1.4. Scientific outputs are made accessible to users	4	• At least 5 AbcTaxa manuals have been produced during the 5-year period dissemination per volume • Supporting/disseminating materials formerly produced • 4 lexicons, • Syllabuses produced and/or upgraded, • participation by staff members in 5 events relevant to taxonomic popularisation tools development/capacity building. • feedback on the use of courses available. • results of at least 5 projects and public awareness activities under SO1-1 and SO1-2 are published on the internet on www.taxonomy.be or a national CHM website if available.	AbcTaxa manuals, GTI website with teaching material and information. teaching materials; purchase and shipment orders of small equipment	
Specific objectives (SO)	Expected results (ER)	ER	Key indicators (OVI)	Source of Information (SOV)	Assumptions
		Outcome indicators			
SO2 To enhance the information base on biodiversity and on its linkages with ecosystem services and poverty reduction and on associated governance processes (CHM)			Information is the basis of empowerment. Empowerment of the civil servants and decision makers allow them to be more aware of the global and local issues about biodiversity and sustainable development. This enables them to inform the large public, hence enhancing their ownership and increasing the transparency of governance processes. The support of CHM processes contributes to that and to a more efficient science-policy interphase, and hence a more science based policy in the long term. • Professionals in 10 partner countries and 5 neighbouring non-partner countries through South South cooperation are participate to their national CHM (2.1., 2.2.) Number of people (not CHM nfp) that add information to the sites. • Partner institutions fulfil their role as a national information centre on biodiversity (2.2., 2.3.) • level of networking and activity increased at governance level (2.2 and 2.3)		

			Output indicators and targets		
	2.1. Expertise in information management is built	5	• 10 national training workshops, • 120 persons trained, • follow-up training has been organised in at least 8 partner countries. • 5 countries participate in the information management/ CHM network through South-South Cooperation (SSC) with one of our partner countries. • 70 % of the partner CHM sites have 20 pages added or updated /year. • Tool to follow-up the implementation of the national strategy is actively used in at least 5 countries	Reports of training, evaluations of trainees and trainers	Trainees stay in post after the training and are able to put the acquired knowledge in practice. Managerial and logistic issues the updating and on-line publication of CHM websites. Partners have sufficient human resources to undertake non-Internet activities.
	2.2. Information flows are improved	6	• 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. • Number of information meetings with different stakeholders in partner countries • 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	Websites, web statistics	
	2.3. Information is used to advise governance processes	7	• Level of activity of the network of partners: One regional workshop organised, • number of participation in EU and global governing activities by Be and partner countries. • 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. • Number of information meetings with different stakeholders in partner countries.	Workshops reports,reports of meetings at national, regional and international level, reports of public awareness projects	
		Outcome indicators			
SO3 To raise awareness and communicate on the importance of biodiversity and ecosystem services for poverty reduction and sustainable development, and on associated governance processes			o selected partner countries are better aware of baseline data of awareness about CBD when preparing policies and DGD when preparing ICP's (3.1.) o the awareness about the importance of biodiversity and ecosystem services is risen in partner countries at different levels (governance, general public) is enhanced/taken into account in policy making and implementation (3.2) o the awareness in relevant sectors in particular DGD and the actors of the Belgian cooperation in Belgium on biodiversity and ecosystem services related to development cooperation is increased and taken up in the preparation of the new indicative cooperation programmes		

			with the partner countries (3.3) o NGAs and NGO programmes are involved in this exercise (3.3)		
			Output indicators and targets		
	3.1. Baselines provide an insight on the level of awareness and/or commitment.	8	• Number of public awareness projects completed, • At least 3-5 countries will reply to the special call for projects and develop indicators for public awareness. • 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.	Ministry and other stakeholders reports	Wilingness to work on baselines at relevant authorities
	3.2. Awareness and engagement are raised	9	• Indicators on public awareness show a positive development between 2014 and 2018. • PA Materials are developed and used in different countries.	Public awareness projects reports	Partners have sufficient human resources to undertake non-Internet activities.
	3.3. Communication and awareness raising in Belgium	10	• Number of people reached in Belgium through stands and events • number of related communication material (posters, brochures), • number of people attending awareness raising events or receiving material, etc.: 4-5 public awareness projects completed • Number of events with new stand • New stand • Number of awareness presence in events • courses	Folders, fliers, stands, press releases, interviews, picture and movie material	
Specific objectives (SO)	Expected results (ER)	ER	Key indicators (OVI)	Source of Information (SOV)	Assumptions
		Outcome indicators			
SO4 To improve the mainstreaming of biodiversity and ecosystem services in policy sectors that have a high relevance for development			• More capacities in Belgian cooperation about biodiversity (4.1.) • More reference to biodiversity and ecosystem services in Belgian cooperation (PICs, mixed commissions…) (4.2)		
			Output indicators and targets		
	4.1. Expertise of Belgian Development Cooperation is built	11	• 4 training workshops organised for the target groups decided by DGD, • 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	Reports of trainings, evaluation of trainees and trainers	RBINS staff is requested to undertake these activities.

	4.2. Biodiversity and ecosystem services are mainstreamed in activities supported by the Belgian Development Cooperation	12	• Number of consultancy requests from DGD staff • Number of processes	Attendance to meetings, e-mails answered, notes elaborated, reports, briefing notes, workshops attended	DGD staff and Belgian decision-makers are aware of RBINS expertise.
Specific objectives (SO)	Expected results (ER)		Key indicators (OVI)	Source of Information (SOV)	Assumptions
		Outcome indicators			
SO5 To improve the knowledge on the measurement, reporting and verification (MRV) of policy choices and activities linked to biodiversity and ecosystem services			RBINS provides advice on MRV to different authorities Developed tool used to monitor and report achievement of Aichi targets in Belgium and in partner countries		
			Output indicators and targets		
	5.1. Expertise of the RBINS on MRV is built	13	The EU reporting tool for NBS's is developed in cooperation with the CHM network The reporting tool is used for the follow up of the implementation of national strategies and the reporting towards the Aichi targets	Monitoring tool, information on own web site	Needs and questions at DGD and RBINS well defined
	5.2. Methodologies to assess progress towards the Aichi Targets are available.	14	National indicators are developed and used for reporting towards the AICHI targets	Monitoring tool	Willingness to use the tool Efficiency of the tool high
Specific objectives (SO)	Expected results (ER)	ER	Key indicators (OVI)	Source of Information (SOV)	Assumptions
		Outcome indicators			
SO6 To raise awareness on, and build capacities for, the implementation of the Nagoya Protocol on Access and Benefit Sharing			RBINS provides advice to Belgian cooperation on Nagoya Protocol Nagoya Protocol better known in partner countries		

			Output indicators and targets		
	6.1. The RBINS and DGD are familiar with the obligations under the Nagoya Protocol	15	• Number of meetings on NP attended • Number of staff members aware of the implications of Nagoya Protocol • implementation: 2 members of staff trained • Researchers and other stakeholders are aware on the implications of the NP on their way to work.	Follow-up reports, own web site	RBINS staff is involved in national and international platforms on ABS
	6.2. Awareness of the scientific community and other stakeholders on the Nagoya Protocol is raised	16	• A special section on the Belgian Clearing House on "Frequently Asked Questions on the Nagoya Protocol" has been developed and is updated regularly.. • Number of fliers • Number of information sessions	Reports on taken actions, auto-evaluations, documentation on CHM	Interest and commitment with scientific community and other stakeholders of partner countries
Specific objectives (SO)	Expected results (ER)	ER	Key indicators (OVI)	Source of Information (SOV)	Assumptions
		Outcome indicators			
7. Coordination and Management			The project is properly coordinated and managed in order to implement smoothly the 16 expected results under the 6 specific objectives		
			Output indicators and targets		
	7.1. Coordination	17	• Annual programme • Annual report • Recruitments • Trainings • Project website • Fliers, stand • New partners, synergies and projects	Annual planning Annual report Concept notes on demand Internal trainings/workshop presentations Internal protocols and procedures correspondence	Support of operational directorate 'Nature' Support of DGD2 Open and transparent cooperative attitude from RBINS colleagues
	7.2. Management	18	• Number of trainees in Belgium • Number of qualitative trainees, trainings, workshops, symposia, projects, awareness campaigns and functioning CHM websites in developing countries • Audit • Paperwork • Functional computers, equipment (servers…)	financial plans financial reports mid term evaluation	Smooth procedures and clear communication lines
Activities see under	**Means**: 6 M Euro Details: annex 3 (Exel) SO1 Act 1,570,100.0 € Sal 754,445.5 € Tot 2,324,545.5 €				Pre-condition: agreement between Belspo and DGD (or ministeries) signed

	SO2 Act 677,500.0 € Sal 340,005.1 € Tot 1,017,505.1 € SO3 Act 535,000.0 € Sal 251,125.3 € Tot 786,125.3 € SO4 Act 88,000.0 € Sal 252,278.8 € Tot 340,278.8 € SO5 Act 140,504.0 € Sal 191,476.1 € Tot 331,980.1 € SO6 Act 83,000.0 € Sal 85,945.7 € Tot 168,945.7 € COORD Act 30,000.0 € Sal 569,019.1 € Tot 599,019.1 €	

Activities SO1
1.1.1. organise the external call, selection and mobility of 12-18 trainees per year **1.1.2**. follow-up of the young scientists for scientific output and graduation
1.2.1 (A). Supporting taxonomic research through Prospecting new partnerships in e.g. East Africa Call for 4-5 'classical' projects Follow-up of projects and publications/dissemination/reporting **1.2.2.(B).** Supporting the monitoring of habitats for the management of ecosystems through For DRC, Burundi, Benin Training + Follow up/ DRC •Workshops + Follow up subsequent practice •Syllabi preparation •Expert missions •Supplying Basic Equipment and documentation

•Collecting data on habitats state – Data base (feeding + exploitation)
•Lexica (Redaction + Publication)

Promotion of research/ DRC
•Contribution to the identification of the topics
• Supporting theses: preparation + publications
•Help to Implement the recommendations issued by research
•Attending the CoCoCongo meeting

1.2.3 (C) Cooperation with the University of Kisangani for the taxonomic study and the monitoring of lowland forests through

- Selection of 3 PhD candidates with a relevant research program
- Training of the selected PhD candidates in Belgium (RBINS, RMCA, Flemish and Francophone universities, & when necessary foreign experts)
- Expert missions for local follow up of progress made by 3 PhD students
- Financial support for fieldwork, equipment, documentation, transport
- Financial support for 3 PhD thesis defense

1.2.4. (D) Application of the COHERENS model for integrated coastal management and monitoring of ecosystems through

- Setting up and implementing partnerships
- Supporting development of web sites
- Supporting visitor programmes
- Facilitating communication between independent participants
- Distance E-coaching
- Producing marine policy reports
- Coaching towards an independent use of the COHERENS model and its applications
- Coaching in developing site-specific applications with the code in function of policy needs, i.e. develop a site specific biological module or wastewater module
- Workshop for advanced users
- Support with scientific arguments for stakeholders
- Establishing links between physics, sedimentation and biodiversity is scientifically documented.

1.3.1.Launch call for project on Aichi target indicators

1.4.1. Taxonomic scientific tools

- production of abcTaxa
- dissemination

1.4.2. Popularization tools

- production of lexicons
- production/upgrade of syllabi
- participation international congresses
- follow-up on feedback of use of courses
- archiving output on GTI and CHM websites

Activities SO2

2.1.1. two national training workshops per year

2.1.2. 1-2 follow-up trainings per year

2.1.3. one south south collaboration/yr initiated **2.1.4.** Promotion of tool in at least 1 country /year
2.2.1. call per year for CHM consolidation
2.3.1. Networking and organising 1 meeting/yr of CHM nfp of partner countries and governance **2.3.2.** one Mission /yr international meeting
Activities SO3
3.1.1. one call/year for awareness baseline projects in the South **3.1.2.** The results should be used for the reporting towards the AICHI targets and the relevant indicators in the reporting tool that countries will use under SO2-1 and SO5.
3.2.1. special awareness project calls in South organised
Activities SO4
4.1.1. Training provided: (Based on request) around the theme “biodiversity, ecosystem services and development cooperation”
Activities SO5
5.1.1. expertise concerning MRV built up in conjunction with DGD
5.2.1. MRV tools are developed and implemented (e.g. through project calls and other)
Activities SO6
6.1.1. A flyer has been developed about "the Nagoya Protocol and implication for collecting species in non-European countries". **6.1.2.** One to 2 briefing papers on developments of the NP will be prepared each year. **6.1.3.** to attend meetings to get acquainted with the Protocol of Nagoya and to follow up developments
6.2.1. information sessions are organised **6.2.2.** development of section on NP in CHM. **6.2.3.**Further actions will depend on the decisions during COP11 and NP COP/MOP1
Activities Coordination

7.1.1. preparation of the year programme and preparation of the annual report 7.1.2. Human resources and internal capacities 7.1.3. Communication with direction of RBINS, DGD and other stakeholders and visibility **7.1.4.** Prospection for synergies, partners, projects and external funding **7.1.5**. motivation, support and incitement of staff to reach targets within strategy and activity programme including mid term evaluation and general coordination
7.2.1. organisation of the mobility of the trainees to Belgium **7.2.2**. financial management **7.2.3.** administration **7.2.4.** ICT

Annex 2: CEBioS interventions and the Sustainable Development Goals

Sustainable Development goals and targets	Link with CEBioS activities (in grey : indirect link)	
	Link	Details
GOAL 1. End poverty in all its forms everywhere	General objective	The general objective of the pluri-annual programme 2014-2018 is to build scientific and technical capacities for a more effective implementation of the Convention on Biological Diversity and its Strategic Plan for Biodiversity 2011-2020, as a contribution to poverty reduction and sustainable development worldwide.
1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day	General objective	The general objective of the pluri-annual programme 2014-2018 is to build scientific and technical capacities for a more effective implementation of the Convention on Biological Diversity and its Strategic Plan for Biodiversity 2011-2020, as a contribution to poverty reduction and sustainable development worldwide.
1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions	SO4	SO4: "To improve the mainstreaming of biodiversity and ecosystem services in policy sectors that have a high relevance for development"
GOAL 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture		
2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed	SO6	SO6 : "To raise awareness on, and build capacities for, the implementation of the Nagoya Protocol (NP) on Access and Benefit Sharing (ABS)"
2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality	ER 1.2	ER1.1: "Scientific and technical expertise is built" --> capacity building to monitor the dynamics of marine habitats enabled to inform the fisheries authorities which measures should be taken in order to promote sustainable fisheries

2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries	SO1, ER1.1, ER 1.2	**SO1: "**The RBINS strengthens the scientific and technical knowledge base on biodiversity and on its linkages with ecosystem services and poverty reduction." **ER1.1:**"Scientific and technical expertise is built" --> taxonomic research linked to agriculture are often conducted by GTI grantees (eg in 2015: pollinators, crop pests, biological control) **ER1.2:**"Quality scientific knowledge is produced and used for the better understanding and management of biodiversity in partner countries" --> Institutional partnerships includes research linked to agriculture or provisioning services (pollinators, link pastoralism-nature conservation, edible mushrooms, marine modelling for sustainable fisheries)
GOAL 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all		
4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	SO3	**SO3:**"The RBINS contributes to awareness raising and communication on the importance of biodiversity and ecosystem services for poverty reduction and sustainable development, and on associated governance processes."
4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries	ER1.1	**SO1: "**The RBINS strengthens the scientific and technical knowledge base on biodiversity and on its linkages with ecosystem services and poverty reduction." **ER1.1:** Scientific and technical expertise is built --> Grants are awarded for students to get trained in Belgium or by Belgian experts
GOAL 5. Achieve gender equality and empower all women and girls "	General programme	CEBioS programme seeks to support women as much as possible and ideally to reach a female proportion of up to 50 % of the grantees. In case of equal scientific capacities between female and male candidates, women will be selected.
GOAL 6. Ensure availability and sustainable management of water and sanitation for all		
6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	General objective	The general objective of the pluri-annual programme 2014-2018 is to build scientific and technical capacities for a more effective implementation of the Convention on Biological Diversity and its Strategic Plan for Biodiversity 2011-2020, as a contribution to poverty reduction and sustainable development worldwide. --> All SOs contribute -at different levels- to protecting ecosystems

		- South Initiative on Lake Tanganiyka - North South South project on lake Manyara
GOAL 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation		
9.cSignificantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020	SO2	SO2. The RBINS plays a leading role in the enhancement of the information base on biodiversity, on its linkages with ecosystem services and poverty reduction and on associated governance processes 2.1. Expertise in information management is built. 2.2. Information flows are improved. 2.3. Information is used to advise governance processes.
GOAL 10. Reduce inequality within and among countries		
10.bEncourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes	General	Activities are financed and developed in accordance with national development priorities and policy frameworks, both of Belgium and of the developing countries (eg. partners' NBSAPs or through CEBioS participation in the mixed commissions for the preparation of the Indicative Development Cooperation Plans (IDCP))
GOAL 12. Ensure sustainable consumption and production patterns		
12.2 By 2030, achieve the sustainable management and efficient use of natural resources	General objective	The general objective of the pluri-annual programme 2014-2018 is to build scientific and technical capacities for a more effective implementation of the Convention on Biological Diversity and its Strategic Plan for Biodiversity 2011-2020, as a contribution to poverty reduction and sustainable development worldwide. --> All SOs contribute at different levels to the sustainable management and use of biological resources (cf CBD 2nd main objective)
12.8By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	SO3	**SO3:** The RBINS contributes to awareness raising and communication on the importance of biodiversity and ecosystem services for poverty reduction and sustainable development, and on associated governance processes.
GOAL 13. Take urgent action to combat climate change and its impacts	General programme	The link between the conservation and sustainable use and management of biodiversity and climate change is obvious. The biodiversity and its ecosystem services play an essential role in mitigating and adapting processes to the negative effects of climate change.

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	SO1, Activity 1.2.2	Activity 1.2.2. (B). "Supporting the monitoring of habitats for the management of ecosystems" The enhancement of the capacities of our partners is mostly focused on the sector of forests. Our special interest in tropical forests is justified by the enormous value of their biodiversity and the considerable value of the services it provides for local human development (including climate change mitigation…) as well as global ecological stakes (such as carbon sequestration).
GOAL 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development		
14.aIncrease scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries	ER 1.1	ER1.2: "Quality scientific knowledge is produced and used for the better understanding and management of biodiversity in partner countries" --> institutional cooperation on marine modelling *Expected outcome in Vietnam (IMER): after five years, IMER is able to better monitor the dynamics of habitats in shallow ecosystems with endangered coral reefs such as Halong Bay, and hence to make the most ecologically sensitive decisions for management, taking into account the ecosystem services for the local communities. *Expected outcome in Peru (IMARPE): after five years, IMARPE is able to better monitor the dynamics of habitats in marine upwelling zones of the Peruvian coast, enabling them to inform the fisheries authorities which measures should be taken in order to promote sustainable fisheries, which is to the benefit of the local fish industry and the marine biodiversity.
GOAL 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss		
15.1By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	General objective of the programme	The general objective of the pluri-annual programme 2014-2018 is to build scientific and technical capacities for a more effective implementation of the Convention on Biological Diversity and its Strategic Plan for Biodiversity 2011-2020, as a contribution to poverty reduction and sustainable development worldwide. --> All SOs contribute at different levels to the conservation and the sustainable use of biodiversity - South Initiative on Lake Tanganiyka - North South South project on lake Manyara
15.2By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally	SO1, ER 1.2	ER 1.2 "Quality scientific knowledge is produced and used for the better understanding and management of biodiversity in partner countries" Institutional cooperation under ER 1.2 mainly focus on forests, e.g. tropical rain forest (DR Congo), highland forest (Burundi), dry clear forest ('miombo') (DR Congo), and Sudanese and Sahelian forests, and grasslands (Benin).

15.4By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development	ER 1.1, Activity 1.2.2	*ER1.1 (Scientific and technical expertise is built): GTI grants often include taxonomic research in mountain ecosystems *Institutional cooperation under 1.2.2 (Supporting the monitoring of habitats for the management of ecosystems) include habitat monitoring and fungi taxonomy of Kibira mountain forests in Burundi, training on inventory methodologies in the mountains of Kivu-Butembo in DRC
15.5Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	Transversal	All SOs contribute at different levels to this target
15.6Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed	SO6	To raise awareness on, and build capacities for, the implementation of the Nagoya Protocol (NP) on Access and Benefit Sharing (ABS)
15.8By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species	In various SOs	e.g.: ER1.1 Scientific and technical expertise is built --> GTI grants often include taxonomic research on invasive species ER3.2 Awareness and commitment are raised --> 2015 project in Ivory Coast « Projet d'éducation et de sensibilisation sur les Espèces Exotiques Invasives (EEE) en Côte d'Ivoire »
15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts	Activity 1.2.2	Insitutional cooperation under 1.2.2 (Supporting the monitoring of habitats for the management of ecosystems) includes research and training on the valuation of ecosystem services
15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems	Transversal	Transversal
15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation	Activity 1.2.2	1.2.2.(B). The monitoring of habitats for the management of forest ecosystems is strengthened (institutional strengthening in INECN (Burundi), UAC and CENAGREF (Benin) and ICCN (DR Congo))
15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities	Activity 1.2.2	Insitutional cooperation under 1.2.2 (Supporting the monitoring of habitats for the management of ecosystems) includes research and training on the valuation of ecosystem services

GOAL 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development		
17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism	Transversal, SO5	Such initiatives are lead transversally eg SO2, ER2.1 (Expertise in information management is built), Activity 2.1.3. one south south collaboration/yr initiated
17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology	SO2	SO2. "The RBINS plays a leading role in the enhancement of the information base on biodiversity, on its linkages with ecosystem services and poverty reduction and on associated governance processes" 2.1. Expertise in information management is built. 2.2. Information flows are improved. 2.3. Information is used to advise governance processes.
17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation	Transversal, SO5	The general objective of the pluri-annual programme 2014-2018 is to build scientific and technical capacities for a more effective implementation of the Convention on Biological Diversity and its Strategic Plan for Biodiversity 2011-2020, as a contribution to poverty reduction and sustainable development worldwide.
17.14 Enhance policy coherence for sustainable development	SO4	SO4. "The RBINS and DGD unit D2.4 improve the mainstreaming of biodiversity and ecosystem services in policy sectors that have a high relevance for development."
17.15 Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development	Transversal, SO5	Transversal
17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries	Transversal, SO5	Transversal

17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	Transversal, SO5	Promoting the Science-Policy interface and public-private partnership is a transversal objective of the programme and is illustrated in various SOs: eg: SO5. The RBINS and DGD unit D2.4 improve the knowledge on the measurement, reporting and verification (MRV) of policy choices and activities linked to biodiversity and ecosystem services. Partnerships are undertaken, with a view to stimulating dialogue between science and policy, with ministries and universities in partner countries in the framework of MRV calls
17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries	SO 3.1, 5.2	ER 3.1. Baselines provide an insight on the level of awareness and/or commitment ER 5.2. Methodologies to assess progress towards the Aichi Targets are available --> Annual MRV calls are launched in order to improve the knowledge on the measurement, reporting and verification (MRV) of policy choices and activities linked to biodiversity and ecosystem services.