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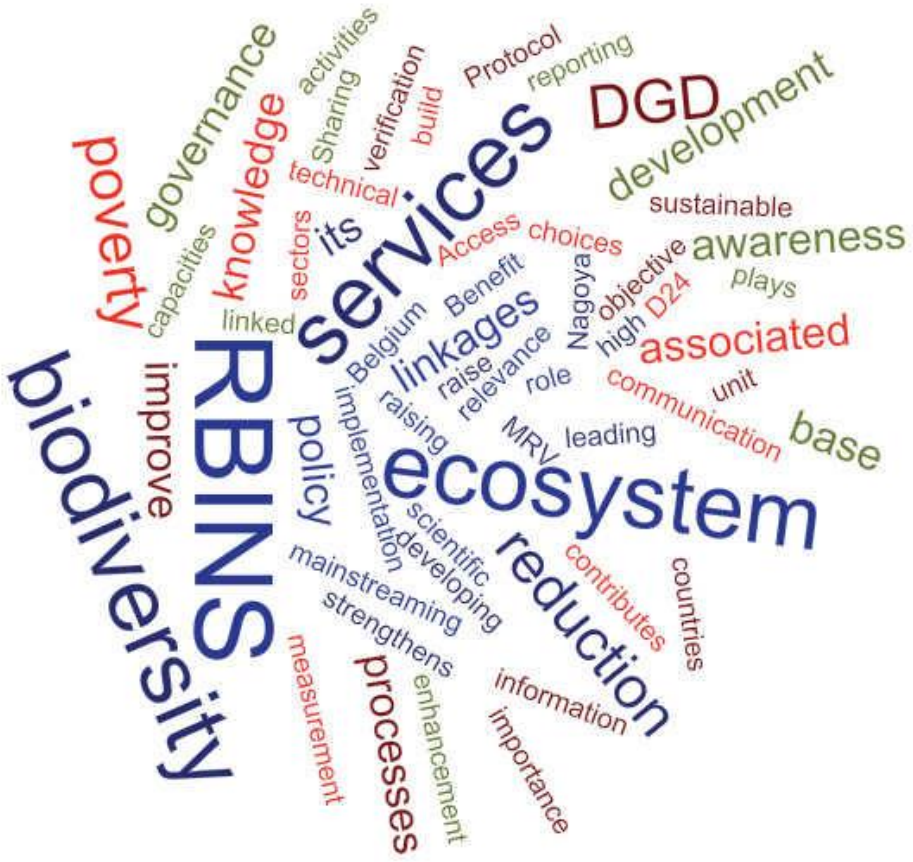
BUILDING CAPACITIES FOR BIODIVERSITY

for sustainable development and poverty reduction

Pluri-annual plan 2014-2018



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ACRONYMS

ABS	Access and Benefit Sharing
BTC	Belgian Technical Cooperation
CBD	Convention on Biological Diversity
CHM	Clearing House Mechanism
CITES	Convention on International Trade in Endangered Species of wild fauna and flora
CNEDD	Conseil National de l'Environnement pour un Développement Durable, Niger
COHERENS	Coupled Hydrodynamic Ecological Model for Regional Shelf Seas
COMIFAC	Commission des Forêts d'Afrique Centrale
COORD	Program Coordination and Management
COP	Conference of the Parties
CSB	Centre de Surveillance de la Biodiversité
DGD	Belgian Development Cooperation
EDIT	European Distributed Institute of Taxonomy
GTI	Global Taxonomy Initiative
ICCN	Institut Congolais pour la Conservation de la Nature, Kinshasa, D.R. Congo
ICT	Information and Computer Technology
IDCP	Indicative Development Cooperation Plan
IEBR	Institute of Ecology and Biological Resources, Hanoi, Viet Nam
IMAB	Inventories Monitoring and Assessment of Biodiversity
INECN	Institut National pour l'Environnement et la Conservation de la Nature, Bujumbura, Burundi
IMARPE	Instituto del Mar del Peru
IMER	Institute of Marine Environment Research
ISCNET	Institut Supérieur de Conservation de la Nature, de l'Environnement et du Tourisme , R.D. Congo
ISDR-GL	Institut Supérieur de Développement Rural des Grands Lacs, D.R. Congo
LEGERA	Laboratoire d'Ecologie et de Gestion des Ressources Animales, D.R. Congo
LEM	Law Enforcement Monitoring
MATEE	Ministère de l'Aménagement du Territoire, de l'Eau et de l'Environnement , Morocco
MIST	Management Information System
MRV	Measurement Reporting and Verification
MUMM	Management Unit of the North Sea Mathematical Models
NGO	Non-Governmental Organisation

NP	Nagoya Protocol
NBSAP	National Biodiversity Strategy and Action Plan
PEET	Partnerships for Enhancing Expertise in Taxonomy
PM	Person Month
PNKB	Parc Nationale de Kahuzi-Biega
PN	Parc National
POL	Policy Support
PTK	Portal Toolkit
RBINS	Royal Belgian Institute of Natural Sciences
RDC	D.R. Congo
SACEP	South Asia Co-Operative Environment Program
SBSTTA	Subsidiary Body on Scientific, Technical and Technological Advice
SSC	South-South Cooperation
TST	Trans Sectorial Team
UAC	Université d'Abomey- Calavi , Benin
UA	Universiteit van Antwerpen, Belgium
UB	Université du Burundi
ULB	Université Libre de Bruxelles, Belgium
UNIKIS	Université de Kisangani, D.R. Congo
UNILU	Université de Lubumbashi, D.R. Congo
UOB	Université Officielle de Bukavu, D.R. Congo
VLIR-UOS	Flemish Interuniversity Council, Cooperation for development, Belgium

INTRODUCTION

In December 2012 a new 10 year strategy (2014-2023) of the DGD-RBINS pluri-annual programme (in the text also: 'DGD-programme' or DGD-unit) on capacity building for Biodiversity has been approved by the Steering Committee. The strategy contains a general objective, 6 specific objectives, and 16 expected results. In June 2013 the relevant Minister accepted this approval for a strategy of 10 years, divided into two phases of 5 years, with an indicative budget of 6 M EURO for the first phase of five years, (on condition of budget approval). In September 2013, a workshop was held on Project Cycle Management for the RBINS-team, reviewing the main activities and indicators. This document presents the programme for the first phase of 5 years (2014-2018), with special attention to the objectives and outcome and their indicators in an approach of result-based management. This programme is based on the results of a self-assessment, done in the previous period covering 2007-2012 and a synthesis of that period (available on demand). The complete logical framework, operational plans, the budget and a list of institutional partners are given in annex (1-4). The linkages between the specific objectives of the DGD-RBINS pluri-annual plan and the Aïchi targets (COP 10) are listed in annex 5. A more detailed description at the level of activities will be outlined in the annual plans 2014-2018. Finally the embedding of the DGD-RBINS pluri-annual programme into the strategic action plan of the recently created operational Direction 'Nature' of RBINS is explained in the short- (2014-2015), mid- (2016-2018) and long-term (2018-2023) perspective as shown in annex 6.

The DGD-RBINS pluri-annual programme adopts two approaches: (A) institutional strengthening through capacity development and (B) a grants programme through competitive calls, both dedicated to biodiversity and poverty eradication

The programme focuses on the biodiversity of terrestrial (tropical forest, dry and highland forests, savannahs, grasslands), and aquatic ecosystems (marine and wetlands).

As an introduction, some elements of the strategic framework, (part III of the strategic plan 2014-2023), are presented in order to list the general and specific objectives, the links with the international context, global results and intended impacts. Then the programme design, outcome and budget are presented. Finally each of the 6 specific objectives (SO) is worked out in more detail.

Compared with the previous strategy (2008-2012), the budget increased with ca. 36%, the specific objectives were expanded and 3 new specific objectives were added (Specific objective 3 on awareness raising, SO5 on 'Measuring, Reporting and Verification (MRV) of biodiversity interventions and SO6 on the Protocol of Nagoya). On condition of budget approval and in order to fulfil the additional requirements of the new strategy, a scientist shall be recruited by the beginning of 2014.

As promoted by the Paris Declaration, the Agenda of Accra and Busan[1] on improved efficiency of development cooperation (with special emphasis on ownership, harmonisation, alignment and mutual accountability), it is important to link (synergies), align and harmonise our projects to similar or complementary initiatives, whether in Belgium (e.g. bilateral, delegated or scientific cooperation undertaken by DGD or BELSPO) or other European and international actors (e.g. the International Foundation for Science, IFS, Sweden[2]). Such synergies will be essential for the quality of generation of results that can have a real impact on development policies and good governance related to the conservation and the promotion of biodiversity as promulgated by the Aïchi targets. Moreover, the implementation of the strategy should contribute to the post 2015 Sustainable Development Goals, as well as the Belgian efforts for climate change mitigation and adaptation in the developing world.

Almost ¾ of the programme is dedicated to Africa. Half of the earmarked budget for institutional strengthening through capacity development in Africa is dedicated to DR Congo.

The DGD-unit at RBINS aims at becoming an excellence centre about the link between biodiversity policy, conservation and management, the sustainable use of ecosystem services and sustainable development with a particular focus on poverty reduction and eradication, through capacity building and research. Its web site will be updated and refreshed in order to increase (i) visibility, (ii) transparency, (iii) information sharing with all stakeholders and (iv) information sharing with the broader public. Due to the recent restructuration at RBINS (2013), the DGD-unit has become part of the Operational Direction "Natural Environments". The National Focal Point on the Convention for Biodiversity (CBD) and the Belgian Platform for Biodiversity are housed at RBINS as well. This brings possibilities of synergies between these three units within RBINS and beyond.

In order to remain at the spear point of the latest developments, the DGD-programme needs to be evaluated on a regular basis (mid- and end of term). The preparations for these evaluations will take place during the years 4 and 10-11 (to be developed in the second phase), and the implementation of the evaluations will take place in respectively years 4-5 and 10-11.

Concerning capacities for research and habitat monitoring related to biodiversity and poverty eradication, the DGD-RBINS pluri-annual programme mainly supports institutional strengthening in DR Congo, Burundi, Benin, Peru and Vietnam.

The DGD-unit will seek to promote research on the link between biodiversity conservation, policies and

[1] http://www.oecd.org/dac/effectiveness/thehighlevelforaonaideffectivenessahistory.htm: he formulation of a set of principles for effective aid - now adhered to by over 100 countries as the blueprint for maximising the impact of aid - grew out of a need to understand why aid was not producting the development results everyone wanted to see and to step up efforts to meet the ambitious targets set by the Millennium Development Goals (MDGs). These principles are rooted in continuous efforts to improve the delivery of aid, marked by three notable events: the High Level Fora on Aid Effectiveness in Rome, Paris, Accra and Busan in 2003, 2005 and 2008, and 2011 respectively.

[2] www.ifs.se

sustainable development and poverty alleviation in order to develop relevant indicators, but also solutions by and for the partner countries.

Integration of poverty eradication plans into national biodiversity strategies and, vice-versa, of biodiversity plans into national development plans will be more and more applied in the developing countries. The DGD-RBINS pluri-annual programme contributes to these processes, a.o. through participation in the mixed commissions for the preparation of the Indicative Development Cooperation Plans (IDCP). By doing so, the programme adheres as much as possible to the local processes of needs analysis.

Concerning information flow, awareness raising, indicators, measuring, reporting and verification, policy support and mainstreaming, the DGD-RBINS pluri-annual programme supports national institutional partners in more than 10 African partner countries of the Belgian cooperation, as well as training and policy support for DGD and attachés

One new feature in the programme is the support of pilot projects in the South that will enable our partners to feed biodiversity monitoring data into national indicator processes. It will be important to valorise the work carried out by our partners 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. 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.

Mainstreaming of, and training about biodiversity issues in the sector of cooperation, but also at local governance levels will gain importance in the coming years. The Protocol of Nagoya will retain particular attention in that respect, as it will become a global instrument to accede and use genetic resources and derived products in a more sustainable and equitable way, once the parties, also Belgium ratify it (expected during 2014).

Burundi© H. de Koeijer/RBINS

I. OBJECTIVES AT THE 2020 HORIZON

"By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people"

Vision of the Strategic Plan for Biodiversity 2011-2020

1.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 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.

2.Specific objectives

The RBINS will achieve six specific objectives by 2018. These objectives are grouped into two clusters. These highlight how the responsibilities are shared for the programme's implementation.

The RBINS, with its partners aims:

- To strengthen the scientific and technical knowledge base on biodiversity and on its linkages with ecosystem services and poverty reduction;
- To enhance the information base on these issues and on associated governance processes;
- 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, with both its partners and DGD:

- To improve the mainstreaming of biodiversity and ecosystem services in policy sectors that have a high relevance for development;
- To improve the knowledge on the measurement, reporting and verification (MRV) of policy choices and activities linked to biodiversity and ecosystem services;
- To raise awareness on, and build capacities for, the implementation of the Nagoya Protocol on Access and Benefit Sharing.

The first cluster groups specific objectives that will be achieved by the RBINS and its partners[3] at their own initiative, in accordance to national development priorities and policy frameworks, both of Belgium and of the developing countries as parties. Multi-year and/or annual work programmes established by the RBINS[4] will serve as a guiding thread for the planning and undertaking of the activities. DGD will essentially act as a counsellor for a better integration of development issues during the implementation of these objectives and as a relay of project outputs to its network of potentially interested end-users.

The second cluster groups specific objectives that will be fulfilled by the RBINS[5], its partners and DGD. These objectives refer to themes that have special significance for DGD towards the partner countries. Moreover, these objectives need to be addressed by Belgium as well as by developing

[3] The partners of the RBINS are essentially scientific institutions, administrations or (non)governmental organisations based in developing countries . Other partners may include, on a more limited basis, other Belgian actors of the non-governmental cooperation such as scientific institutes, universities and NGOs; international organizations such as the Secretariat of the Convention on Biological Diversity; UN bodies such as UNEP and UNEP-WCMC; European Agencies, scientific institutions in other European countries…
[4] Approved by DGD as well as the other members of the steering committee of the programme.
[5] Approved by DGD as well as the other members of the steering committee of the programme.

countries as they figure in CBD requirements. Activities will be identified either by DGD, the RBINS or one of the RBINS partners.

3. Links with the international context

The six specific objectives are guided by recent strategic decisions taken by the Convention on Biological Diversity and by developments under other international governance processes.

These include, among others,

- the Strategic Plan for Biodiversity 2011-2020, adopted at the 10th Conference of the Parties of the Convention on Biological Diversity (i.e. the Nagoya Summit) in 2010, including the Aïchi biodiversity targets;
- the Strategy for Resource Mobilization, also adopted at Nagoya in 2010;
- the Nagoya Protocol for Access and Benefit-Sharing, also adopted at Nagoya in 2010[6];
- the Biodiversity and Development Initiative and the Dehradun Recommendations on Biodiversity for Development adopted at the 11th Conference of the Parties of the CBD in 2012[7];
- the Biodiversity and Development Initiative and the Chennai Recommendations on Biodiversity for Development, which will be submitted for adoption at the 12th Conference of the Parties of the CBD in 2014;
- the options for enhanced cooperation identified by the three Rio Conventions[8];
- the outcomes of the UN Conference on Sustainable Development (Rio+20) adopted in 2012;
- the capacity development framework established by UNDP to implement the Millennium Development Goals and the future sustainable development goals;
- the capacity building programme to be developed by the newly-established Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)[9];
- the European commitments to averting global biodiversity loss, as reflected in the EU Biodiversity Strategy to 2020[10] and the related EU Council conclusions[11].
- The Poverty Eradication Initiative (PEI), a joint UNEP-UNDP programme[12]

[6] It should be noted that aspects linked the Cartagena Protocol on Biosafety and the Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress will not be addressed in this strategic programme, even though they are two protocols established under the CBD.
[7] The recommendations formally adopted at the CBD's 11th Conference of the Parties, in October 2012.
[8] http://www.cbd.int/rio/
[9] http:// www.ipbes.net/
[10] http://ec.europa.eu/environment/nature/biodiversity/comm2006/pdf/2020/1_EN_ACT_part1_v7%5B1%5D.pdf
[11] http://register.consilium.europa.eu/pdf/en/11/st18/st18862.en11.pdf
[12] http://www.unpei.org/

4. Global results and intended impacts

The RBINS and its partners are either scientific institutions and/or administrations involved in the implementation of the Convention on Biological Diversity. Their contribution essentially lies in knowledge generation and dissemination, as well in biodiversity policy design and implementation.

The RBINS and its partners will achieve their results supporting (i) the study of biodiversity and (ii) that the best scientific evidence and information available reach the right audiences at the right moment. In addition, some of the partners are field-based organisations that can have impacts on the ground in the form of biodiversity conservation and in the development of nature-based economic solutions.

DGD will help the RBINS and its partners influence policies and institutions at all levels. Influence on biodiversity policies will be ensured among others by information exchange and networking activities with focal points. Such influence will mainly be ensured through active networking with national and international development actors, as well as by the mainstreaming of biodiversity in sectors of economic development.

Figure 1 below provides a simplified results chain for the work programme. Outputs of activities are under the direct control of the RBINS, its partners and DGD. Outcomes also depend on many other factors. These will be taken under consideration in the most efficient way while implementing the activities. The general objective is to contribute to achieving positive impacts on the status of biodiversity and ecosystem services, together with reduced poverty and sustainable development.

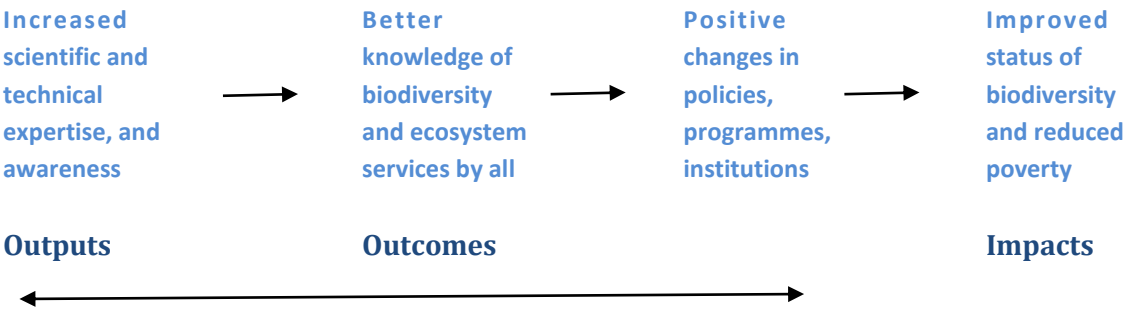

Fig. 1. Simplified results chain for the 2014-2019 DGD-RBINS work programme.

The results of the programme will be assessed using various categories of indicators, among which:

- outcome-oriented indicators, assessing whether the activities have been able to yield changes in development policies (proportion of outputs having found their way into national policy processes...).
- process indicators, assessing the level of activity put in place (number of training events, number and type of field-based projects, number and diversity of tools produced...);
- output-oriented indicators, measuring the quality and relevance of the above-mentioned activities (quality of scientific outputs, quality and timeliness of information reaching stakeholders and end-users...);

The five year programme essentially focuses on outcome and its indicators, while the annual activity programmes will present process and output indicators.

II. PROGRAMME DESIGN, OUTCOME AND BUDGET

1.Introduction

With the new strategy 2014-2023, the link between biodiversity, more specifically the ecosystem services, with poverty eradication and sustainable development will even become more emphasised and focused upon as in the previous period. As the interventions of RBINS are intrinsically of scientific nature in the field of capacity building and policy support, it is a learning process to integrate the poverty reduction component in a more systematic way. The last Conference of the Parties, COP 11 at Hyderabad (India), recommended the expert group of Dehadrun on Biodiversity and poverty eradication (EGBPE) to continue its work in order to formulate recommendations in Chennai (December 2013, India) for COP 12 which will take place in October 2014 in South Korea, on the integration of biodiversity with poverty eradication. The coordinator of the present programme actively participated as one of the 5 European experts in the Chennai meeting in December 2013, and the DGD-RBINS pluri-annual programme will be actively involved in COP 12 as well. This involvement supports the increased mainstreaming of biodiversity in development cooperation and vice-versa.

As the present programme is essentially a capacity building (or development, see footnote 13) and policy support programme and is funded by DGD, it fully adheres to the principles of the Belgian cooperation concerning capacity building in particular, and will do optimal efforts to further link up with other initiatives funded by the Belgian cooperation (e.g. KLIMOS, university cooperation, RMCA), next to the obvious links to the actions of BELSPO.

The link between the conservation and sustainable use and management of biodiversity and climate change is obvious: it is true that the effects of climate change greatly affect biodiversity through e.g. higher variations in temperatures and rainfall or the acidification of the oceans, provoking i.e. shifts in distribution and extinction of sensitive terrestrial and marine species, as well as changes in vector-borne disease patterns. However, inversely, the biodiversity and its ecosystem services play an essential role in mitigating and adapting processes to the negative effects of climate change: e.g. mangroves protecting the coast against typhoons, backwater forests and other wetlands preventing flooding, native forests being more resilient than plantations against storms and hence better able at acting as a carbon sink etc.... Whenever possible, the RDG-RBINS programme will contribute to the international debate with facts and figures for processes such as REDD+ and resource mobilisation. The DGD-RBINS pluri-annual programme hence contributes also to the Belgian efforts on mitigation and adaptation to climate change. Moreover, climate change affects the most poor and vulnerable populations in developing countries in the first place, by depleting essential ecosystem services, such as e.g. food security and drinking water, hence once again demonstrating the evident link between biodiversity, poverty eradication and climate change.

2. The general design of the capacity development programme

2.1. Principles of Belgian cooperation for capacity building

The general design of this capacity building[13] programme follows the principles of the Belgian cooperation for development and can be summarised as follows.

1. It strives at full integration in the IDCPs wherever possible. It essentially depends on the selected sectors of the Belgian cooperation. Moreover, full support by the Belgian embassies to the programme is a prerequisite and active participation of the embassies will be promoted during the 10 year strategy, taking into account the guidelines of DGD;
2. The DGD-RBINS pluri-annual programme will strive to adhere as much as possible to the recently developed country strategies of VLIR-UOS and CUD, as far as it concerns the linkage between biodiversity and poverty eradication, and given the fact that the programme is too small to develop its own country strategies. This will create further synergies. KLIMOS might act here as an “in-between”.
3. The grants’ programme of about 300,000 Euros p.a. is set-up with a global objective to respond to the recipient countries’ needs for quality human resources.

[13] The UN prefers to promote the use of the term ‘capacity development’, corresponding to the increasing capacities in many developing countries. We use both terms ‘building’ and ‘development’ as accepted terms, without negative connotations towards the countries having built or building their own capacities.

4. The programme is based on needs analyses at national level and formulated in national development plans and national educational plans, as well as on data obtained from communication and workshops with the relevant stakeholders. Priority areas are preferentially focused on the concentration sectors of the Belgian cooperation, as far as they are linked to environmental issues.
5. The DGD-RBINS pluri-annual programme seeks to support women as much as possible and ideally to reach a female proportion of up to 50 % of the grantees. However to reach that goal is an incremental and long term process as the prior concern is to maintain a high scientific quality irrespective of the gender in accordance with the mission of RBINS. In case of equal scientific capacities between female and male candidates, women will be selected.
6. A correct response to both long-term and immediate capacity needs on an institutional and individual base will be considered. The design of the calls will to be more institution-oriented, than focused on individuals, by ensuring that the acquired skills and knowledge is not only to the benefit of the grantee, but all and foremost to the benefits of his/her institute, and in the mid- and long-term, integrated in international research networks. Safeguards will be built in, in that respect, such as asking for a letter of support by the direction and long term plans for the grantee as a staff member in the framework of his/her institute's plans and strategies.
7. A multi-year Grant's Programme, governed by a specific agreement and a technical & financial file, will target key partner institutions such as e.g. UAC in Benin and UNIKIS in DR Congo and excellent individuals in their aim to realize proven potentials in local, regional or international institutions. The list of partners, where the programme is working with in Benin, DR Congo and Burundi, can be found in annex 4.
8. Within the grant's programme an "Alumni forum" will be set up to allow alumni who studied in Belgium to maintain after their studies academic linkages with their 'mother' universities in Belgium. Real academic partnerships between the countries will be stimulated in order to strengthen an effective relationship in the future. In case the capacities of the DGD-RBINS pluri-annual programme prove to be insufficient for this purpose, efforts will be made to encourage the alumni to adhere to existing alumni fora (e.g. BTC, VLIR-UOS).
9. The grant's programme shall be based on the concept of institutional capacity building, meaning that the project aims at improving overall performance of institutions and organizations rather than concentrating exclusively on the individual capacities of staff members. Institutional needs for capacity building ensure that initiatives at the individual level are indeed meaningful and sustainable for the institution and the system in general.
10. In order to get synergies through a global approach within the sectors of the Belgian cooperation, the programme will concentrate in areas where there are already on-going Belgian activities (implemented by indirect actors & multilateral institutions).
11. The candidates that are working within the focus sectors who are based (have their working station) at the proposed institutions (annex 4), are eligible for call selections but only if they adhere to a number of minimum criteria that are pre-defined.

2.2. The capacity building programme takes also into account the following documents

- The Belgian law on international cooperation of 19 March 2013;
- The General Agreement on Direct Bilateral Cooperation between the Kingdom of Belgium and the partner countries where such agreements exist; In that respect, the DGD-RBINS pluri-annual programme actively participates to the FABAC (Forum d'Aide Belge au Congo) initiative of the Belgian embassy in DR Congo.
- The guidelines of the Paris Declaration on Aid Effectiveness, Harmonization and Alignment, 2005;
- The EU Consensus for Development, 2005;
- The EU Code of Conduct on Complementary and Division of Labour in Development Policy, 2007;
- The Accra Agenda for Action on Aid Effectiveness, 2008;
- The Busan Partnership for Effective Development Cooperation, 2011;

2.3. Institutional strengthening through capacity development

2.3.1. Objective of the intervention

Within the specific objectives of the general logical framework of the DGD-RBINS pluri-annual programme, overall and specific objectives for capacity building in particular as in other Belgian capacity building programmes (BTC, University cooperation, RMCA) will apply:

Overall objective (goal):

The overall General Objective is "Contributing to Institutional Capacity Development of partner country.

Specific Objective (purpose):

To improve institutional and organizational capacities of selected institutions that are benefiting from the bilateral cooperation through training of their staff.

2.3.2. Location and target groups

HOW TO CHOOSE PARTNERS?

The proposed partnerships (annex 4) are a continuation and a consolidation of previous strategy 2008-2012. Monitoring of the obtained results, as well as the mid term evaluation in 2017-2018 will eventually identify which partnerships are successful and deserve further support, or whether new partnerships can be started.
Since the approach of the DGD-RBINS pluri-annual programme is involving both competitive calls directed at the extended list of Belgian cooperation countries and the institutional strengthening of a few selected countries (Burundi, DR Congo, Benin, Peru, Vietnam), the programme design may vary.
However, wherever possible, the programme will have a national character and will be in cooperation with all the relevant Ministries and preferably integrated in the IDCPs. If there is a need emanating from the South and endorsed by DGD, the formulation will determine other locations with beneficiary institutes.

WHICH TARGET GROUPS?

The intervention will target employees and persons of public institutions that fall within the sectors of concentration of the IDCP (if sector is relevant for biodiversity or environment at large), including transversal themes (e.g. climate change mitigation, ecosystem services related to health). During the formulation phase, all concerned Ministries and Institutions will define the specific beneficiary institutions and priority training areas. Civil society will also be consulted during this exercise. In case of equal qualification between male and female candidates, at least 50% of the capacity building will be devoted to women.

INVOLVING HIGHER EDUCATION INSTITUTIONS

The programme effectively contributes to increased capacities of the science staff and their students in terms of skills and knowledge in the sector of higher education, since in all three African countries where we cooperate, universities are closely associated with the institutional partnerships with the nature conservation agencies ICCN, INECN, UAC+CENAGREF, and CSB.
This concept, which, in the case of Burundi, DR Congo and Benin, builds on synergies between research and ecosystem management, appears to be a very successful recipe, really at the science-policy interface. It is expected that, as the scientific staff becomes more confident and mature, it will produce more scientific output and attract more extra-muros funds for their institutions.

WHY HUMAN CAPACITY ?

At the level of ICCN, INECN, and UAC+CENAGREF (main partner in Benin is University Abomey-Calavi), rangers, technical and scientific staff, acquire better skills , knowledge and tools, as well as best practices though the trainings given. This creates an enabling environment, where each one feels more confident, implements conservation and monitoring tasks in a more efficient way, and contributes to a more stable and trustworthy institution.

Concerning he marine modelling, staff members of national marine institutes (a.o. IMER, IMARPE) become skilful at using the model and applying it in order to answer management questions. The model feeds decision support systems, hence contributing to the generation of master plans for integrated coastal and marine management, where a delicate balance is achieved between marine conservation an d sustainable development of coastal local communities.

REACHING THE END USERS

Through our cooperation with ICCN, INECN, UAC+CENAGREF (main partner in Benin is University Abomey-Calavi) and CSB, and associated with them, UNIKIS, UAC and other universities, more efficient management plans will be developed and implemented, taking into account the effective valorisation of the protected areas, where ecosystem services are protected, not only for their intrinsic non-monetary value (i.e. ecosystem functions), but also and foremost in order to offer a sustainable alternative of green economy to the local communities living in and around these fragile ecosystems, alternatives to practices of predation and destruction. Two examples:
- A thesis on melliferous plants in the vicinity of the Parc National des Virunga demonstrated that apiculturists are interested actors for the conservation of plants and their habitats ;
- The evaluation of the occurrence of *Gnetum africanum*, a wild liana which is very much consumed in the Congo basin showed the same interest of the local communities for the preservation of the liana and associated habitat.

ENSURING OWNERSHIP

The formulation of the programme and the operational plan results as much as possible from a participative approach. The priorities formulated by the stakeholders are constantly matched with the policy of DGD, the outcome of Rio+20 and the biodiversity strategy 2010-2020 (COP 10, Nagoya).

GENDER

The actual state in DR Congo, au Burundi et au Benin is that 90% of the personnel of the partner institutions is male. The DGD-RBINS pluri-annual programme can only influence the gender proportion by raising awareness with the decision makers on the one hand and by supporting equally qualified female candidate students and workshop participants on the other hand.
Towards the end users, i.e. the poor and vulnerable, the DGD-RBINS pluri-annual programme will increase its efforts to sensitize the decision-makers to empower women in the villages with regard to conservation and management measures.

HOW TO ENSURE SUSTAINABILITY, EXIT STRATEGIES AND WHAT ARE THE RISKS ?

Institutions, management, conservation and research are carried by people. The risk of brain drain is well-known, especially in such fragile countries as Burundi and DR Congo, where people with increased skills try their chance in (I)INGOs or abroad for getting a higher income. Other risks involve incompetence, patronising, corruption, centralisation of power. The DGD-RBINS pluri-annual programme stays always alert for such possibilities and will promptly react in order to remediate by dialogue or, in case it is impossible, to withdraw. It stays for good governance and transparency and promotes it at all levels. The ultimate outcome of a better functioning nature agency, and university researchers being part of the global science community and research networks, involving renowned institutions such as RBINS and increasing mutual social control is the best indicator for success and sustainability. Financial control of the reports and audits are further safeguards for a good management of the funds.

2.3.3. Type of beneficiary institutions (BIs)

Institutions already having a formal or an informal cooperation within the DGD-RBINS pluri-annual programme are listed under annex 4.

The DGD-RBINS pluri-annual programme essentially targets three types of institutions:

1. Ministry of environment or equivalent. This especially applies to the cooperation of the DGD-RBINS pluri-annual programme with the CBD focal points and the CHM, GTI and Nagoya Protocol focal points, often situated within relevant ministries. The cooperation with these ministries focuses on information flow (e.g. CHM) and awareness raising, as well as mainstreaming and policy support.

2. Institute for Nature Conservation or equivalent. The DGD-RBINS pluri-annual programme targets national institutions implementing the concrete implementation of nature conservancy and biodiversity related interventions. This specifically applies to our cooperation with Benin, DR Congo and Burundi for the terrestrial and freshwater ecosystems, and Peru and Vietnam for the marine environment. New institutions might play an increasing role in e.g. East Africa and North Africa, depending on the identification of partners.

3. Universities and research institutes. Grantees are staff members of such institutes and will through their capacity development contribute to the strengthening of their institutions. Often, the DGD-RBINS pluri-annual programme combines or promotes the cooperation between national conservation institutes and universities in order to support the science/policy interface and the practical application of the research through extension. Examples are UNIKIS and the CBD.

The five year programme is generally structured according to a programme logics. However, the present chapter explains the geographical and thematic focus of the programme.

2.3.4. Focus on Africa: DR Congo, Burundi and Benin

WHICH PARTNER COUNTRIES?

The programme interventions for institutional strengthening in Africa mainly concentrate on DR Congo, Burundi and Benin, all priority Belgian cooperation partner countries.

WHICH ECOSYSTEMS?

These interventions mainly focus on **terrestrial ecosystems**, e.g. *tropical rain forest* (DR Congo), *highland forest* (Burundi), dry clear forest ('miombo') (DR Congo), and *Sudanese and Sahelian forests*, and *grasslands* (Benin). However, other related fragile ecosystems such as *wetlands (often Ramsar sites)*, may be investigated as well, given the present expertise at RBINS and the relevance towards the Aichi targets (annex 5).

WHICH SPECIFIC OBJECTIVES OF THE DGD-RBINS PLURI-ANNUAL PROGRAMME?

According to the programme's logics, the *institutional strengthening* runs under the umbrella of specific objective 1 mainly (SO1: strengthen the scientific and technical knowledge base). However, interventions in these countries include also actions on information (SO2), awareness (SO3), policy and mainstreaming (SO4), monitoring, reporting and verification (SO5) and the protocol of Nagoya (SO6). In all three countries, the DGD-RBINS pluri-annual programme offers trainings in habitat monitoring in situ, local workshops on specific ecosystem services and the generation of syllabi, trainings on taxonomy and ecology in Belgium, manuals and lexica, as well as the access to historical archives concerning DR Congo and Burundi.

WHICH OTHER PARTNERS?

Partner institutions are designated by their country in order to manage conservation areas of high value for biodiversity. These institutions are mandated to promote and implement the sustainable use and management of ecosystem services as well as the conservation of fragile ecosystem with their endangered plant-and wildlife. The DGD-RBINS pluri-annual programme cooperates in this framework with WWF, the Belgian Botanical Gardens, the Royal Museum for Central Africa, the Université de Liège, University of Antwerp, Université Libre de Bruxelles and others, depending on the interests of Belgian researchers for specific topics proposed by the partners.

2.3.4.1. Institutional cooperation

The budgets in the text cover only the operational costs (including missions). For the associated salaries we refer to the budget tables in annex 3.

DR Congo

- The DGD-RBINS pluri-annual programme is involved in institutional strengthening of the Institut pour la Conservation Congolaise de la Nature (ICCN, see http://www.envirosecurity.org/actionguide/view.php?r=204&m=organisations). This cooperation involves various other partners (see annex 4), such as ERAIFT, ISDR-GL, UOB, UNIGOM, UNIKIN, UNIKIS, UNILU.

DR Congo (ICCN)

Budget (5 yrs) : 115.000 Euro

Outcome: 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.

- The DGD-RBINS pluri-annual programme is involved in institutional strengthening of the Université de Kisangani (UNIKIS) and the Centre de Surveillance de la Biodiversité (CSB, see http://www.congobiodiv.org/nl/infrastructuur/csb/lees-meer)

DR Congo (UNIKIS, CSB)

Budget (5 yrs) : 150.000 Euro

Outcome: 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 exta-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.

Burundi

The DGD-RBINS pluri-annual programme is involved in institutional strengthening of the Institut National de l'Environnement et la Conservation de la Nature (INECN, see http://bi.chm-cbd.net/implementation/pfnationaux/pfinstitut/document-inecn-regine). This cooperation involves also the University of Bujumbura for implementing research on certain questions identified by INECN .

Burundi (INECN)

Budget (5 yrs) : 93.000 Euro

Outcome: after five years, INECN 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). INECN 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.

Benin

The DGD-RBINS pluri-annual programme is involved through cooperation (terms of reference[14]) with the main partner, the Université Abomey-Calavi (UAC, see http://www.uac.bj/accueil/index.php/en/), in institutional strengthening of the Centre National de Gestion des Réserves de Faune (CENAGREF, see http://www.cenagref.net/), which is member of IUCN. *The cooperation is just starting and needs further formulation with UAC and with CENAGREF.* This cooperation involves other local partners involved in the sustainable management of the Penjari area, such as a village association. UAC also runs a partnership with CUD/CIUF and runs a joint post-doc call "ELAN", see http://www.uac.bj/accueil/index.php/en/home/2-uncategorised/305-appel-a-candidature-

[14] Partenariat entre l'Institut royal des Sciences naturelles de Belgique (IRScNB) et le Laboratoire d'Ecologie Appliquée de l'Université d'Abomey-Calavi (LEA/UAC), 2013.

pour-bourse-post-doctorale-elan-de-la-cud-belgique-1 . Possible synergies with the ELAN programme will be explored.

The focus will be on the université Abomey Calavi (UAC), whose rector is Prof. Sinsin (active member of BIOTA, see http://www.biota-africa.org/ and author of the 'Atlas de la Biodiversité de l'Afrique de l'Ouest, Tome I, Bénin). CENAGREF itself benefits from important aid by the World Bank and the FSOA (see http://bj.chm-cbd.net/biodiversity/parcs-nationaux/fsoa_benin_rapport_31_mars_2010_final-1-.pdf) .

Also to be mentioned is the cooperation with Benin is the partner 'Direction Générale des Forêts et des Ressources Naturelles (DGFRN, Unité Focale de la Convention sur la Diversité Biologique du Bénin, Ministère de l'Environnement (see also SO2, pg. 70) mandated with the « gestion des changements climatiques, du reboisement et de la protection des ressources naturelles et forestières », and whose director is an active partner for the work on clearing house mechanism (see SO2).

Benin (UAC)

Budget (5 yrs) : 119.000 Euro

Outcome: after five years, UAC will be better able at delivering relavant scientific information on temporal and spatial occurrence and management of bush fire and pastoralism in protected areas around Penjari National Park to stakeholders, such as CENAGREF and partners (associations de villageois). This will enable to better 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). 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.

2.3.4.2. Needs analysis

DR Congo

Various consulations with the beneficiaries have been carried out in the last years to assess the needs for developing the DGD-RBINS pluri-annual programme. Workshops were organised for the personnel of ICCN in order to assess the needs for the monitoring of fragile habitats in 10 protected areas. This resulted in recommendations for a.o. strengthening the

acquired skils with follow-up training in the field. Various consultations were organised with UNIKIS and the CSB as a consequence of the Congo expedition in 2010 financed by DGD in order to identify the research needs matching with the development needs of the region as regard the ecosystem services.

Burundi

Beneficiaries were consulted as follows :

- In December 2012 a workshop was held on habitat dynamics, resulting in recommendations by the personnel of INECN. The practical part of the workshop in the Parc National de la Kibira gave the occasion to consult stakeholders in the field. Rangers were present from the three main protected areas of Burundi and insisted on the generation of practical tools such as lexica for the monitoring of habitats. The civil society, villagers around the parcs were consulted and were getting more confidence and mutual trust about the work of INECN concerning the valuation of ecosystem services.
- Professors and students of the University of Bujumbura gained useful information from these workshops for a better identification of research subjects, more close to the real needs of the country concerning biodiversity and poverty eradication.

Benin

The institutional cooperation with Benin is very recent and still in the phase of formulation.

- A written intent has been formulated by the university Abomey-Calavy (UAC) and RBINS.
- A mission of RBINS in the field has been organised in June 2013 in order to consult the managers of the targeted protected area (Penjari NP), together with researchers from UAC. A needs assessment has been initiated concerning the management of pastoralism and bush fire.
- Prof. Brice Sinsin, Rector of UAC met the director of RBINS and the coordinator and responsible senior scientist of the DGD-RBINS pluri-annual programme in August 2013 in order to prepare the formulation mission of April 2014.

2.3.5. Focus on Peru and Vietnam

WHICH ECOSYSTEMS?

This part of the DGD-RBINS pluri-annual programme focuses on the biodiversity of marine and coastal environment, through the development, training and application of a marine model, called “Coherens” (see http://www2.mumm.ac.be/coherens/index.php).

WHICH SPECIFIC OBJECTIVES OF THE DGD-RBINS PLURI-ANNUAL PROGRAMME?

The institutional strengthening in Peru and Vietnam runs under the umbrella of specific objective 1 mainly (SO1: strengthen the scientific and technical knowledge base). However, interventions in these countries include also actions on information (SO2), awareness (SO3), and policy and mainstreaming (SO4). The team developing the marine model 'Coherens' offers workshops in situ, as well as training of staff in situ and in Belgium.

WHICH PARTNERS?

Partner institutions are designated by their country in order to manage conservation areas of high value for biodiversity in the marine realm. These institutions are mandated to promote and implement the sustainable use and management of ecosystem services as well as the conservation of fragile ecosystem with their endangered plant-and wildlife (e.g. Cetaceans or whales, sustainable fisheries).

In a first phase, 2 partners were selected on the basis of previous trainings during the programme 2008-2012. These partners are institutions in Vietnam and Peru.

In a next phase, the institute of marine sciences of Zanzibar (University of Dar es Salaam), as well as an institute on the Mediterranean Sea (Algeria, to be discussed with DGD), might be taken in partnership if the conditions of capacity demand and needs, as well as available resources are favourable.

2.3.5.1. Institutional cooperation

Vietnam

The DGD-RBINS pluri-annual programme is involved in institutional strengthening of Vietnam: Institute of Marine Environment Research (IMER), which also cooperates with the Vrije universiteit Brussels (see: http://www.projectsecoa.eu/index.php?option=com_content&view=article&id=77), and is part of the Vietnamese Academy of Science and Technology (VAST). This intervention aligns well with the 'Green Growth Strategy' of Vietnam (see http://www.greengrowth-elearning.org/pdf/VietNam-GreenGrowth-Strategy.pdf). Climate adaptation and green growth are the priority sectors of the Belgian cooperation in Vietnam.

Vietnam (IMER)

Budget (5 yrs) : ca. 75.000 Euro

Outcome: 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.

Previously, the Coherens-group worked in the framework of CLIMARCO, which was a two year project in the context of the bilateral cooperation and financed by BELSPO (contract nr: DL/KBIN/V24). It concerned the influence of climate change on Halong Bay and the Red River delta. Since then, the group has submitted a UNESCO project on sedimentation and pollution together with the UGENT on Halong Bay, but did not get funds.

Peru

The DGD-RBINS pluri-annual programme is involved in institutional strengthening of Peru, Instituto del Mar del Peru (IMARPE) (see: http://www.imarpe.pe/imarpe/)

Peru (IMARPE)

Budget (5 yrs) : ca. 75.000 Euro

Outcome: 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.

Given the high priority of DGD towards Peru and the relevant topic, the possibility of deepening the starting cooperation through a formulation mission is considered, using the PCM methodology.

2.3.5.2. Needs analysis

Vietnam

In the framework of DGD two COHERENS workshops were organised with several Vietnamese institutes participating. The researchers from IMER were the most enthusiastic to work with and immediately came up with a number of problems they could tackle when using this hydrodynamic model. The needs assessment for Vietnam was done through several workshops and stakeholder meetings. Two stakeholder meetings in Vietnam were done with local and national government in the framework of the CLIMARCO project funded by BELSPO in 2010-2011 (see 2.3.5.1.).

From close contacts with the director of IMER Tran Dinh Lan and the oceanographer Vu Duy Vinh from the Institute of Marine Environment and Resources in Haipong it was decided that sedimentation of the area was the most important problem to tackle because of the acute threat to fragile coral reefs, hotspots for biodiversity and key ecosystem for the local communities.

We have already built up expertise in this region because we had a two year bilateral project CLIMARCO (2010-2012, funded by BELSPO) and got familiar with the different stakeholders (two stakeholder meetings took place during the project).

Peru

A COHERENS workshop was given in Peru in 2012, where a number of presentations with case studies was given by the participants and it was decided to work with IMARPE.

The programme will focus on the coastal upwelling zones, with a high biodiversity and a high value for fisheries. It is already successfully demonstrated for the North Sea that Coherens is a useful tool in marine studies on e.g. fish larvae (Lacroix et al., 2013[15]), but also in modelling oil spills and the occurrence of oiled sea birds (see http://www.mumm.ac.be/EN/News/). In practice for Peru the model is aimed at determining where the fish nurseries are, so which areas should be taken care of, what the turnover rates are of the species and the model demonstrates the effects of the abiotic environment. A threat next to overfishing of the ecosystem is that climate change changes the El Nino patterns, meaning a shift in the general wind system and the global ocean circulation. This can stop the upwelling of nutrient rich waters and will make the ecosystem collapse.

[15] Lacroix G., Maes G. E., Bolle L. J., Volckaert F.A.M. (2013). Modelling dispersal dynamics of the early life stages of a marine flatfish (Solea solea L.). Journal of Sea Research. 84 (13-25)

2.3.5.3. Policy and principles for institutional cooperation

WHICH OUTCOME INDICATORS?

Operational tools for the management of ecosystem services are developed and applied in a tailor-made fashion per partner institute and staff is trained on its development and application towards policy recommendations for an integrated coastal management. The main issues are sedimentation of mangrove forests, warning systems for flooding, pollution, and fishery management.

WHO ARE THE BENEFICIARIES?

Stakeholders are marine institutes (see 2.3.5.1), government agencies, private companies, local coastal communities, and fisherman.

WHAT IS THE EXIT STRATEGY?

The tools are developed by local scientists during the project and then made available to non-scientific stakeholders for operational use. A user training for applications and further developments is planned at the end of each partnership project. Further support is provided through the online Coherens User Forum, keeping the scientific and technical exchanges alive well beyond the end of the project.

THE CODE OF THE MODEL (via Coherens licence)

The code of the software is available for free. This is principally also the case for the applications in agreement with the partners.

2.3.6. Capacity building for information flow, awareness, MRV and mainstreaming in Africa

WHICH INTERVENTIONS AND MODALITIES?

Next to the institutional strengthening through capacity development in selected national institutes in DR Congo, Burundi, Benin, Peru and Vietnam (see 2.3.5.), the DGD-RBINS pluri-annual programme is also active with local trainings in more than 10 African countries with specific workshops on *Clearing House Mechanism, awareness and dissemination, indicators and the Nagoya Protocol (NP)*, as well as in Belgium on the issues of *mainstreaming, policy support and the NP.* Many interventions are based on open or targeted competitive calls in order to ensure demand-driveness, ownership and competition-based quality.

WHICH SPECIFIC OBJECTIVES OF THE DGD-RBINS PLURI-ANNUAL PROGRAMME?

This part of the programme runs under the umbrella of the specific objectives SO2 (information flow), SO3 (awareness), SO4 (policy support), SO5 (Measuring, reporting, Verification) and SO6 (Protocol of Nagoya).

WHICH PARTNERS?

The people being trained have key positions at the Ministère de l'Aménagement du Territoire, de l'Environnement et de la Ville (Algeria), Ministère de l'environnement, de l'habitat et de l'urbanisme (Benin), Institut National pour l'Environnement et la Conservation de la Nature (Burundi), Ministère de l'Environnement, Conservation de la Nature et Tourisme (Democratic republic of Congo), Ministère de l'Environnement et de l'Assainissement du Mali (Mali), Secrétariat d'Etat chargé de l'Eau et de l'Environnement (Morocco), Conseil National de l'Environnement pour un Développement Durable, Cabinet du Premier Ministre (Niger), as well as in the Ministère de l'Environnement et du Developpement Durable (Burkina Faso), Ministry of Environment, Protection of Nature and Sustainable Development (Cameroon), Ministère du Logement, du Cadre de Vie et de l'Environnement (Côte d'Ivoire), Office National pour l'Environnement (ONE), Ministère de l'Environnement, des Eaux et Forêts et du Tourisme (Madagascar), and others.

In the next year the programme will gradually shift its activities from the extended list of partner countries (see above), towards the 18 Belgian priority partner countries through its calls in order to align with the general strategy of DGD to concentrate aid and make it more efficient.

WHAT IS THE OUTCOME AND THE INDICATIVE BUDGET ?

Capacity building for information flow, awareness, MRV and mainstreaming in Africa

Budget (5 yrs) : 677.500 Euro (SO2)+535.000 Euro (SO3)+ 88.000 Euro (SO4)+140.500 Euro (SO5)+83.000 Euro (SO6) = TOTAL of 1.524.000 Euro

Outcome:

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 countries have an improved National Biodiversity Strategic plan (NBSAP) and implement it in a more efficient and effective way, hence working towards the Aïchi targets until 2020.

Biodiversity is more integrated into national development plans and poverty eradication strategies are better integrated into the NBSAPs (mainstreaming).

Concerning SO4, DGD and the Belgian embassies are better informed about biodiversity, ecosystem services, Aïchi targets and are more integrating it into the Indicative Cooperation Plans.

The partner institutes have more mutual South-South contacts, exchanges and cooperation.

Finally, both the administrations in Belgium and in the partner countries are better informed about the Nagoya protocol and its implementation (SO6)

What about Sustainability ?

Before 2013 this activity has enabled three countries (Madagascar, benin and Burundi) to develop their national CHM strategy. The advantages of developing such a strategy were a clear involvement of national partner in information sharing. Another result was that their respective governments put some budget allocations in their respective national budgets. During the last year of the 2008- 2013 programme we have had the development that those countries add more than the requested 20 % to activities under our programme. Also countries have started to use CHM funding under GEF NBSAPs allocation to further develop their CHMs. We will strive to use this experience in other countries and assist them in developing their national CHM strategy. Together with the public awareness activities towards policy makers and highly placed persons in different ministries in partner countries this might lead to more budget allocations in other countries as well. However some of the least developed countries, like Burundi, Burkina Faso, Niger, and others, might not be able to allocate national resources, even though having a national CHM strategy.

2.3.7. Relationship of the programme with the National Development Plan (NDP), the Millennium Development Goals (MDG's) and the Aïchi Targets

The primary goal of the DGD-RBINS pluri-annual programme until now was to promote as much as possible the 20 Aïchi targets of the 2010-2020 strategy of the Rio convention in the framework of poverty eradication. The links between the DGD-RBINS pluri-annual programme and the Aïchi targets are numerous and obvious and are listed in annex 5.

However, the post 2015 millenium goals will be replaced by Sustainable Development Goals, with increased attention for climate change and biodiversity. It is expected that the SDGs will in fact build a bridge between the biodiversity and poverty eradication and sustainable development.

At national level, the National Biodiversity Strategic plans (NBSAP) will increasingly integrate a poverty eradication component, which essentially relates to the Aïchi targets 2, 14 and 20, but not exclusively (see annex 5).

The National Development Plans, mostly for periods of 5 to 10 years focus essentially on development and economic growth, in order to eradicate poverty. It is expected that these National Development Plans and equivalent (e.g. PRSPs) will increasingly incorporate biodiversity and climate change as priority issues (i.e. mainstreaming process). The DGD-RBINS pluri-annual programme will as much as possible refer to these plans in order to align with the national agendas and priorities in the Paris Declaration spirit for human resource development in areas of environmental education, skills development, and environment.

The DGD-RBINS pluri-annual programme is essentially linked to the following MDG:

- MDG 7: Environmental sustainability

However, other MDGs are relevant as well, such as e.g.

- MDG 3: Gender equality;

Once the SGDs will be defined in 2015, the strategy of the DGD-RBINS pluri-annual programme will be reviewed accordingly.

2.3.8. Synergies and coherence with other donors

The multilateral donors and the European Union underscore capacity building as a means to spearhead and sustain development. The programme is in line with international efforts and perspectives which place capacity building as a central activity. The RBINS staff of the National Focal Point on Biological Diversity and the DGD-RBINS pluri-annual programme is informed and attends to the EU meeting organised on environmental and developmental policy.

The DGD-RBINS pluri-annual programme follows with great interest the joint UNDP-UNEP programme on Biodiversity and poverty eradication and will draw interesting ideas and cooperation possibilities from this (Box 1).

BOX 1: The Poverty-Environment Initiative (PEI)

The Poverty-Environment Initiative (PEI) of the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP) is a global programme that supports country-led efforts to mainstream poverty-environment linkages into national development and sub-national development planning, from policymaking to budgeting, implementation and monitoring.

With both financial and technical support, PEI assists government decision-makers and a wide range of other stakeholders to manage the environment in a way that improves livelihoods and leads to sustainable growth. The PEI works with key government partners to raise awareness, influence policy making and strengthen the mainstreaming of poverty-environment into budget processes, sector programmes and sub-national planning. The overall aim is to bring about lasting institutional change and to catalyse key actors to increase investment in pro-poor environmental and natural resource management.

See more at: http://www.unpei.org

The DGD-RBINS pluri-annual programme actively participates in national and United Nations political negotiations for the Rio convention on Biological Diversity in fora such as expert group on biodiversity and poverty eradication, high level panels, OESO scoping paper on biodiversity and development (ENVIRONET), EU working groups, steering committees Nature and CBD, SBSTTA, COP, WGRI, WIPEI, IPBES and others. It also will react to Belspo calls such as BRAIN, IFS and others.

2.3.9. Measures to safeguard the sustainability of the intervention after completion

By fully embedding the intervention within the governmental and official institutions it will contribute to their structural development and hence favor their own sustainability.

Priority will be given to short term training courses, on the job coaching and training, group training and internships and distance e-learning based on a training plan of the institutions and needs analysis of the beneficiary institutions.

One of the main outcomes of capacity development with the partner institutes is that the beneficiaries start working in research networks including RBINS and become part of the global scientific community. If this is the case, it is the ideal indicator of a successful capacity development programme.

It should be noted that the programme 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 the programme indirectly contributes to obtaining this degree through access to tools, material and knowledge. Therefore, in the logframe the number of graduates is given as a (proxy) target, albeit being an indirect measure of output.

2.4. Grants programme

WHICH PRINCIPLES AND MODALITIES?

The RBINS grant's programme that runs under the DGD-RBINS pluri-annual programme is the former GTI (Global Taxonomy Initiative) component of the previous strategy.
In general, all principles and modalities explained under '2.3. Institutional strengthening' (e.g.: 2.3.1. Objective of the intervention; how to choose partners? Which target groups? Involving higher education institutions, why human capacity? Reaching the end users, ensuring ownership, gender, how to ensure sustainability, exit strategies and what are the risks?) are valid for the grants programme of the DGD-RBINS pluri-annual programme.

OUTCOME AND BUDGET

Grants programme

Budget (5yrs): 315.750 Euro (individual grants)+452.500 Euro (field work and workshops)+194.850 Euro (production of tools, AbcTaxa and dissemination) = TOTAL 963.100 Euro

Outcome after 5 years: 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.

WHICH SPECIFIC OBJECTIVE OF THE DGD-RBINS PLURI-ANNUAL PROGRAMME?

The grant's programme (individual and workshops), as well as the production of relevant didactical material fall under SO1.

WHAT IS THE GLOBAL CONTEXT OF THE GLOBAL TAXONOMY INITIATIVE (GTI)?

The Global Taxonomy Initiative is one of the thematic areas set up by the parties to the CBD. The overacting objective of the GTI part of our project is to reduce the so-called taxonomic impediment that hinders the implementation of the Convention on Biological Diversity. This is

done by helping with the settlement of the needed taxonomic and curatorial capacities in developing countries partner of the Belgian cooperation.
In 2012, at COP11 in India, the parties adopted the Decision XI/29 which welcomes the revised Capacity-building Strategy for the Global Taxonomy Initiative**.** This decision can be found here http://www.cbd.int/doc/decisions/cop-11/cop-11-dec-29-en.pdf. In this decision, the conference of the parties "emphasizes that the new Strategic Plan for Biodiversity 2011-2020 and its Aïchi Biodiversity Targets should guide the future work of all of the Convention's cross-cutting issues and thematic areas, and acknowledges the importance of the Capacity-building Strategy for the Global Taxonomy Initiative in this context."
In this decision, the COP "invites organizations and Parties to make particular efforts to train, sustain, enhance and increase human resources for creating inventories, monitoring biodiversity and further taxonomic information". This is what we have been trying to do with the GTI component of our project.
The GTI Capacity-building Strategy's vision is the following: 'By 2020, the taxonomic barriers to the universal availability of scientific knowledge, data and information on biodiversity have been removed, thereby enabling their use at all levels of society in supporting decision-making with a view to achieve the three goals of the Convention.' This is a vision we fully share within the GTI component of our project.

WHICH PARTNERSHIPS?

To achieve a better reinforcement of taxonomic capacities, we have signed MoUs with institutions from 2 partner countries: Cuba (Institute of Ecology and Systematics, Havana and Cuba's National Museum of Natural History) and Vietnam (Institute of Ecology and Biological Resources, Hanoi) (see annex 4). However, many grantees originate from other research institutes of the partner countries as well (priority and extended list). As is the case in the new strategy of a similar grant's programme in Sweden (International Foundation for Science, IFS, www.ifs.se), the DGD-RBINS pluri-annual programme will strive to increasingly involve the institutes where the grantees originate, in order to ensure an institutional anchoring of the acquired capacities. Moreover, a gradual shift to concentrate more on the 18 partner countries of the Belgian cooperation will take place through the next calls.

SUSTAINABILITY, EXIT STRATEGIES

With the GTI component of the project, we train scientists who are teachers in their homelands and thus will themselves pass on the valuable knowledge they have acquired in Belgium to students in the South.
We also fund local small infrastructures, as we did in Vietnam for our partner the IEBR, and train local technical staff so that they can achieve a better conservation of the collections. This contributes to a better general state of collections that will be used by the future generations.

ANNUAL CALLS

We launch annual calls which are open only to the 18 partner countries of the Belgian Development Cooperation and the extended list, with the following criteria:

- Does the project address clear taxonomic and/or curatorial components?
- Does the project address priority taxonomic and/or curatorial key gaps of your country or region?
- Does the project aim at building taxonomic and curatorial expertise in your country or region?
- Are you a citizen of the 18 priority partner countries of the Belgian cooperation (Algeria, Benin, Bolivia, Burundi, D.R. Congo, Ecuador, Mali, Morocco, Mozambique, Niger, Palestine, Peru, Rwanda, Senegal, South Africa,Tanzania, Uganda, Vietnam) and the countries which are member of the regional partner organisations of the Belgian cooperation.
- Are you in any way linked to a scientific institution with which the Belgian GTI NFP has a privileged relationship?
- Provide information on the relevance of your work to poverty reduction and the way that the results will be used to raise public awareness on the subject.

OWNERSHIP, GENDER

Until now the RBINS staff did not influence the research thematic of the submitted projects through the open call. Thus the capacity building we provide is bottom-up: the students, young researchers and professional taxonomists are totally free to ask for the reinforcement they need, as long as it fits into the theme of biodiversity. Future calls will include the issue of poverty and ecosystem services. During the examination of the submitted proposals we try to balance the gender of successful candidates. We should note however that there are far less applications of female candidates.

3. The expected outcome

The 6 specific objectives as listed in the logical framework (annex 1) are derived from the 6 strategic objectives from the 2014-2023 strategy.

BOX 2: List of specific objectives of the DGD-RBINS pluri-annual programme

SO1

To strengthen the scientific and technical knowledge base on biodiversity and on its linkages with ecosystem services and poverty reduction

- ⇨ **Institutional strengthening in Burundi, Benin, DR Congo, Vietnam and Peru**
- ⇨ **Grants programme for individuals and field work/workshops in situ through competitive calls**

SO2

To enhance the information base on biodiversity and on its linkages with ecosystem services and poverty reduction and on associated governance processes (CHM)

- ⇨ **Institutional strengthening in more than 10 African countries through capacity development and South-South cooperation**

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

- ⇨ **Competitive calls for projects on awareness**

SO4

To improve the mainstreaming of biodiversity and ecosystem services in policy sectors that have a high relevance for development

- ⇨ **Workshops, seminars, teaching modules for DGD, attachés and other stakeholders**
- ⇨ **Active involvement in international negotiations and processes (e.g. COP, SBSSTA, WGRI, EU)**

SO5

To improve the knowledge on the measurement, reporting and verification (MRV) of policy choices and activities linked to biodiversity and ecosystem services

- ⇨ **Competitive calls for projects on MRV**

SO6

To raise awareness on, and build capacities for, the implementation of the Nagoya Protocol on Access and Benefit Sharing

- ⇨ **Workshops, seminars, teaching modules for DGD, attachés and other stakeholders**

The six specific objectives (box 2) reflect the approaches to find solutions to known barriers to achieve the Aïchi targets in developing countries: such as lack of taxonomic skills and knowledge, lack of knowledge about biodiversity, ecosystem functions, services and valuation in terrestrial, freshwater and marine ecosystems, lack of strong institutions and good governance (SO1), lack of skills to install performing web sites and to devise communication strategies or campaigns (SO2), lack of awareness in the administration and the large public (SO3), lack of political will and

knowledge how to formulate a policy and implement it with good governance (SO4), lack of knowledge about monitoring, verification and reporting of biodiversity and the use of smart indicators, lack of tools to perform MRV (SO5), and lack of understanding and knowledge about Access and Benefit Sharing of genetic resources in the framework of he Nagoya Protocol (January 2013: 29 countries ratified it, mostly developing countries) (ABS) (SO6).

The DGD-RBINS pluri-annual programme seeks to implement a participative cooperation model in order that the partners in the developing countries find solutions to overcome these different barriers.

The outcome of the DGD-RBINS pluri-annual programme (see box 3) can be described in terms of better functioning institutions with more senior and skilled staff, with more confidence and awareness in their tasks, in decision-making and implementation, larger and more efficient networks, more south-south and north-south-south cooperation, better mutual understanding and awareness resulting in less conflicts, better mitigating measures against the adverse effects of climate change on food security, better management plans for integrated coastal management and tropical forestry, better monitoring of habitat change in selected fragile ecosystems, better understanding of functions and services in fragile ecosystems and their economic and ecological value and valuation process, more synergies between donors, local institutions, better integration of developing countries in the United Nations debates, more multiplicator effects by training of trainers, increased scientific output in terms of peer reviewed publications, conference abstracts, book chapters, increased efficiency of the science/policy interface through policy briefs, workshops, extension work, action research, better practice of taxonomy and ecology by dedicated staff through the use of manuals, tools, lexica and guidelines and a better awareness with the authorities and the larger public, especially the poor and vulnerable communities, better knowledge of, and access to, traditional knowledge with respect of the rights of indigenous and local communities.

The ultimate outcome resulting from above is a more efficient conservation and a more sustainable use and management of biodiversity, resulting in poverty reduction and sustainable development of the vulnerable and the poor.
The outcome and outcome indicators per specific objective are summarised in Box 3.

BOX 3. Expected outcome **Numbers in brackets refer to the expected results, explained in the text**	
SO1 To strengthen the scientific and technical knowledge base on biodiversity and on its linkages with ecosystem services and poverty reduction	
Outcome	**Outcome indicators**
• Selected partner institutions carry out their mandate related to biodiversity and poverty eradication (1.2, 1.3. and 1.4.) 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	• Generation of papers, policy briefs and participation to conferences, seminars etc… are indicators for the good functioning of scientists supported through institutional strengthening and through the grant's programme

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 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 exta-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. INECN (Burundi) after five years, INECN 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).). INECN 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 (associations de villageois, 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) 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. 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. • 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.) • The mathematical Coherens model, is applied, to answer questions about marine biodiversity by partner countries.	• Production of quality reports on habitat changes at ICCN, INECN and UAC with CENAGREF • Functioning scientific and technical networks as attested by email volume, number of workshops, questions and answers, e-coaching activities, joint projects, memberships in international fora at all partner institutes and with all grantees and Belgian researchers at RBINS and elsewhere • Integrated coastal management plans developed by local authorities can be seen as a proxy indicator of the successful capacity development by the programme at IMER and IMARPE • Number of Scientific output accessible, disseminated and used by stakeholders (1.4.).

• A North South South network for Coherens users is functioning (1.2) • National indicator processes receive input (1.3)	
SO2 To enhance the information base on biodiversity and on its linkages with ecosystem services and poverty reduction and on associated governance processes (CHM)	
Outcome	**Outcome indicators**
• 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 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)	• Professionals in 10 partner countries and 5 neighboring non-partner countries through South South cooperation participate to their national CHM (2.1., 2.2.) • Quality and quantity information added to the national CHM sites in Algeria, Benin, Burundi, Congo, Mali, Morocco, Niger, Burkina Faso, Cameroon, Côte d'Ivoire, Madagascar and others • The CHM sites are more user-friendly and informative
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	
Outcome	**Outcome indicators**
• 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)	• Quality awareness campaigns are organised in the partner countries • Local people are reached by awareness campaigns, and have access to fliers, media, posters, information
SO4 To improve the mainstreaming of biodiversity and ecosystem services in policy sectors that have a high relevance for development	
Outcome	**Outcome indicators**
• 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 Aïchi targets and risk assessment of the planned cooperation interventions (4.2)	• Biodiversity and Aïchi targets are part of the Indicative Cooperation Plans • Poverty eradication is linked to biodiversity in cooperation plans and in national development plans (proxy

	indicator) • On demand of DGD eventual production of syllabi, didactical units and courses
SO5 To improve the knowledge on the measurement, reporting and verification (MRV) of policy choices and activities linked to biodiversity and ecosystem services	
Outcome	**Outcome indicators**
• RBINS provides advice on MRV to different authorities • tool developed used to monitor and report achievement of Aïchi targets in Belgium and in partner countries	• tool developed is accepted at level of EU and is applied in developing countries • workshops, seminars about MRV
SO6 To raise awareness on, and build capacities for, the implementation of the Nagoya Protocol on Access and Benefit Sharing	
Outcome	**Outcome indicators**
• 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	• Workshops, seminars • Implementation of Nagoya Protocol on the basis of guidance material such as e.g. dissemination papers produced by the National Biodiversity Authority of India (footnote 38)
7. Coordination and Management	
Outcome	**Outcome indicators**
• The project is properly coordinated and managed in order to implement smoothly the 16 expected results under the 6 specific objectives	• Quality planning and reporting • Team is valorised and DGD-unit recognised as a centre of excellence for biodiversity and poverty eradication through numerous invitations, questions, requests

4. The budget

FACTS AND FIGURES

Table 1 gives an overview of the operational costs and the salaries over the five years per specific objective (programme logic). SO7 refers to coordination and management. When considering the total volume of salaries, they represent on average 40,7 % of the total yearly budgets (see annex 3). For a detailed overview of the budget per year and for the entire 5 year period we refer to annex 3.

Budget line	SO	2014	2015	2016	2017	2018	Total 5 yrs
Activities	1	301,900 €	311,750 €	329,550 €	328,050 €	298,850 €	1,570,100
Salaries	1	139,291 €	144,863 €	150,657 €	156,684 €	162,951 €	754,446

Total per SO	**1**	**441,191 €**	**456,613 €**	**480,207 €**	**484,734 €**	**461,801 €**	2,324,546
Activities	2	129,000 €	128,000 €	139,500 €	140,500 €	140,500 €	677,500
Salaries	2	62,774 €	65,285 €	67,897 €	70,612 €	73,437 €	340,005
Total per SO	**2**	**191,774 €**	**193,285 €**	**207,397 €**	**211,112 €**	**213,937 €**	1,017,505
Activities	3	100,000 €	105,000 €	90,000 €	105,000 €	135,000 €	535,000
Salaries	3	46,365 €	48,219 €	50,148 €	52,154 €	54,240 €	251,126
Total per SO	**3**	**146,365 €**	**153,219 €**	**140,148 €**	**157,154 €**	**189,240 €**	786,126
Activities	4	12,000 €	18,000 €	18,000 €	20,000 €	20,000 €	88,000
Salaries	4	46,578 €	48,441 €	50,378 €	52,393 €	54,489 €	252,279
Total per SO	**4**	**58,578 €**	**66,441 €**	**68,378 €**	**72,393 €**	**74,489 €**	340,279
Activities	5	19,000 €	31,000 €	23,500 €	33,500 €	33,500 €	140,500
Salaries	5	35,352 €	36,766 €	38,236 €	39,766 €	41,356 €	191,476
Total per SO	**5**	**54,352 €**	**67,766 €**	**61,736 €**	**73,266 €**	**74,856 €**	331,976
Activities	6	11,001 €	15,000 €	25,000 €	16,000 €	16,000 €	83,001
Salaries	6	15,868 €	16,503 €	17,163 €	17,849 €	18,563 €	85,946
Total per SO	**6**	**26,869 €**	**31,503 €**	**42,163 €**	**33,849 €**	**34,563 €**	168,947
Activities	**7**	**2,000 €**	**2,000 €**	**2,000 €**	**22,000 €**	**2,000 €**	30,000
Salaries	**7**	**105,056 €**	**109,259 €**	**113,629 €**	**118,174 €**	**122,901 €**	569,019
Total per SO	**7**	**107,056 €**	**111,259 €**	**115,629 €**	**140,174 €**	**124,901 €**	599,019
Total		**1,026,184 €**	**1,080,085 €**	**1,115,658 €**	**1,172,682 €**	**1,173,788 €**	5,568,397
Administrative costs (7,75%)		**79,500 €**	**83,700 €**	**86,500 €**	**90,900 €**	**91,000 €**	431,600
Total with Administrative		**1,105,684 €**	**1,163,785 €**	**1,202,158 €**	**1,263,582 €**	**1,264,788 €**	5,999,997
Total five yrs		**5,999,997 €**					

Table 1: overview of budget per year and specific objective (SO) for the activities and the salaries. Note: the budget for SO4 (policy support and mainstreaming) is dependent on demands by DGD. An indicative budget of ±7% of the total budget has been allocated.

As shown in Fig. 2, the salaries tend to be less than half of the activities for the first three specific objectives, which run through grants and projects. For the specific objectives 4-6, the salaries equal or are slightly superior to the activities, since part of the activities are effectively carried out by the relevant staff.

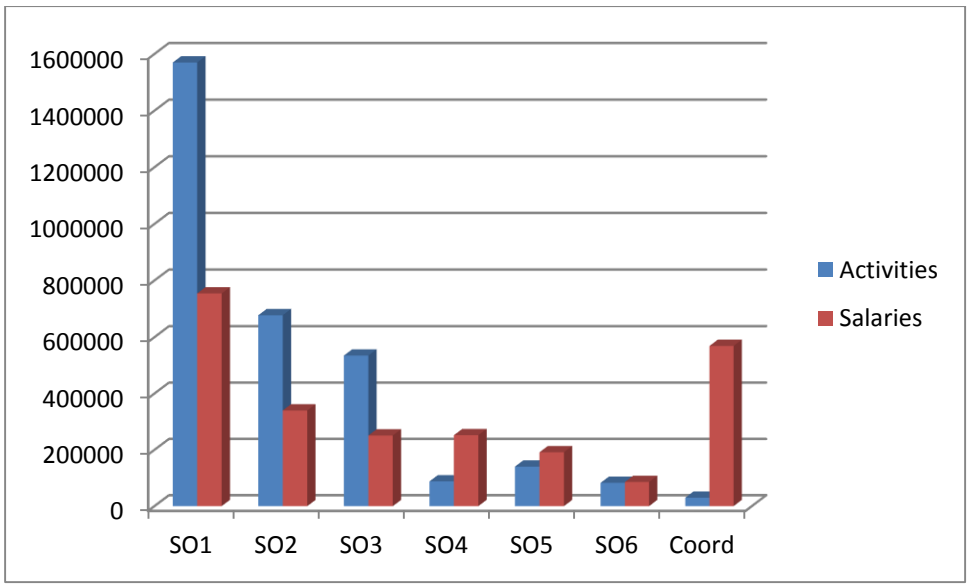

Fig. 2. Salaries and activities per specific objective for the 5 year period (Euro).

For coordination, there is only a small budget for activities as such. Coordination activities related to policy mainstreaming are allocated in SO4.

A clear feature is the relative weight of SO1 compared to the other specific objectives. This is due to the nature of the activities, being the core business of the DGD-RBINS pluri-annual programme, namely capacity building through institutional development of selected partners and grants.When considering the programme in a geographical perspective, allocating budgets to continents and countries can only be partial, since some calls are not specific per country or continent, and hence the outcome of the competitive selection cannot be predicted. As shown in table 2, the proportion of allocated funds for Africa in the past 2 years varied in the range of 77-81 %. It is expected that this will continue like that during the programme 2014-2018: almost ¾ of the programme will be dedicated to Africa. Within Africa, DR Congo will represent 55,6% of the total funding for institutional strengthening in Africa, followed by Benin (24.9%) and Burundi (19.5%).

Expenses per continent (%) for the period 2010 - 2012						
Year	**Africa**	**Asia**	**Central America**	**South America**	**Total**	
2010	77.32	8.81	4.09	9.78	100.00	
2011	72.14	12.52	0.56	14.78	100.00	
2012	80.91	7.05	4.21	7.83	100.00	

Budget per country (only Africa) for the programme 2014-2018							
	2014	**2015**	**2016**	**2017**	**2018**	**Total**	**%**
Burundi (INECN)	18000	24000	22000	14000	15000	**93000**	**19.5**
RDC (ICCN)	28500	21000	24000	24000	17500	115000	

RDC (Kisangani)	27050	30000	27050	30050	35850	150000	
Total RDC	**55550**	**51000**	**51050**	**54050**	**53350**	**265000**	**55.6**
Benin	22500	24500	25500	27000	19500	**119000**	**24.9**
Total	**96050**	**99500**	**98550**	**95050**	**87850**	**477000**	**100**

Table 2. Percentage of expenses per continent for the period 2010-2012 and budget earmarked for institutional strengthening Africa for the programme 2014-2018.

SOME INFORMATION ABOUT THE BUDGET IN COMPARISON TO PREVIOUS STRATEGY

This additional explanation refers to the budget table in annex 3.

SO1

- The costs of AbcTaxa have increased with 25% because of increasing printing costs and the perspective of publishing more than one volume per year. Similarly, it is expected that the number of published lexica will increase over the years.

SO2

- Some fluctuations of project budgets are due to a shift of budget towards the new SO4 and SO6.
- There is provision for an extra server in 2014 in order to ensure the necessary back ups of the databases and to replace a server in 2016 (unit price of a server is 3835€).

SO3

- In 2016 one more project is programmed (5 instead of 4) due to consolidating projects of previous years
- Some fluctuations for awareness over the 5 years is due to the fact that it is programmed to produce stands and folders in 2014-2015 with reference to a baseline study on public awareness together with the National Focal Point on Biological diversity, followed by just a reprint of the folders and some mobility in 2016. In 2017-2018 the material will be updated with the latest findings of the previous projects and a repetition of the baseline study in order to assess temporal fluctuations in awareness.

SO7 (coordination and management)

- The sum of 22000€ is earmarked in 2017 in order to finance a mid term evaluation

III. MAIN ELEMENTS OF THE PROGRAMME

Per **specific objective (SO)** the main elements are presented, i.e. a short text about the wider context, background related to RBINS, expected results, synergies and partnerships (from the strategic plan, part III). Further, per SO the expected results, indicators and a budget for the next five years are presented.

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

The 2010 biodiversity target has not been achieved. Despite growing evidence that human well-being depends on multiple services that are provided by ecosystems, the diversity that underpins these systems is still decreasing at an unprecedented rate. There is a need for the international scientific community to respond to the accelerating loss of biodiversity by focusing its efforts on addressing the key gaps to address policy-relevant issues. DIVERSITAS[16], the leading international programme on biodiversity, has identified four challenges to achieve this response, i.e. (1) on critical detrimental changes in biodiversity and ecosystem services, (2) on the capacity of social-ecological systems to adapt, (3) on patterns, origins and changes in biodiversity and (4) on the establishment of a global network of biodiversity science[17]. The fourth challenge links to the recently-established Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). IPBES will be an interface between the scientific community and policy makers that aims to build capacity for and strengthen the use of science in policy making. Once operational, this process will identify further activities that will need to be developed.

1.1. Background

The RBINS possesses an internationally recognized scientific and technical expertise in the study of biodiversity and of ecosystems. In addition, the RBINS has developed valuable know-how on how to translate research results into valuable advice for policy and decision-makers.

[16] DIVERSITAS is an international global environmental change programme dedicated to the science of biodiversity. Its overall goals are (i) to promote an integrative biodiversity science, linking biological, ecological and social disciplines in an effort to produce socially relevant new knowledge; and (ii) to provide the scientific bases for the conservation and sustainable use of biodiversity. See http://www.diversitas-international.org/

[17] Larigauderie et al. 2012. Current Opinion in Environmental Sustainability, 4:101–105.

Strong points of RBINS expertise that are most relevant for this work programme can be grouped into three main categories: (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. These fields of expertise cover all types of ecosystems, whether terrestrial, freshwater or marine.

In the framework of this programme, the RBINS has for objective to build capacities to perform quality 'biodiversity and ecosystem science' – concentrating on the three identified categories above – that has relevance for poverty reduction and sustainable development. We will provide support to well-established scientific and technical institutions in developing countries, while not forgetting to help early career scientists and newly established research teams boost their capacities to undertake research. We will help our partners in developing countries contribute primary data and quality information in response to challenges 1, 3 and 4 of DIVERSITAS.

Expected results # 1

1.1. Scientific and technical expertise is built.

1.2. Quality scientific knowledge is produced.

1.3. Monitoring data is fed into national indicator processes.

1.4. Scientific outputs are made accessible to users.

As biodiversity focal point, the RBINS operates at the interface of science and policy making. In this context, we will build capacities how to effectively put research results into use in developing countries. A key requirement is to increase the understanding of our own researchers and of our partners on how to convey scientific information so that it can be used by a whole range of actors that include the policy and decision-making communities.

1.2. Expected results: general

Expected results are of three different kinds:

The **first** is process-oriented: we aim to build new scientific and technical expertise or to increase/improve the existing expertise of our partners; Candidates selected by competitive calls will be trained and will carry out research in the North on taxonomical and ecological scientific questions.

The **second** focuses on strengthened capacity to generate high quality output on biodiversity, which is pertinent to provide baseline information for the follow-up of national strategies. Without sound biodiversity knowledge or sound knowledge of the abiotic environment that host biodiversity, policy decisions can lead to inadequate or ineffective actions. Sustained efforts and sufficient timeframes are therefore needed to produce quality, and we integrate this dimension in

our programme; Results in the South (training workshops and joint practical training in the field) include monitoring data, publication of syllabi, guidelines for habitat monitoring output, assessment of ecosystem services. Moreover, specific focus is placed on institutional strengthening of target institutions in Benin (UAC, CENAGREF), Burundi (INECN), DR Congo (ICCN, UNIKIS) Also, capacity is enhanced for application of modelling of marine and coastal habitats in selected partner countries for integrated coastal management (Peru (IMARPE) and Vietnam (IMER)).

The **third** and **fourth** results focus on the exploitation and valorisation of these outputs. By making the outputs available to people who need scientific data for their work, we contribute to generating changes that will ultimately have positive impacts on biodiversity and ecosystem services, as well as sustainable development.
The **third** expected result explicitly is a series of adapted and developed instruments for monitoring biodiversity designed to facilitate reporting towards national indicators at species and ecosystem level.

The **fourth** result concerns publications valorising the training and research as an output of SO1, 1.1, 1.2 and 1.3, including AbcTaxa.

1.3. Synergies and partnerships

A list of partners is provided in annex 4.

Synergies with other scientific actors in Belgium and abroad will be crucial, especially when training activities come at hand. This is also the case for the production of tools such as manuals and other publications. Often, the RBINS is not the sole source of expertise, but one of the many players that may allow to successfully address a given problematic. The specificity of the RBINS is that it is able to provide very specific and specialized expertise and training.

In Belgium, the RBINS works in particular with the Royal Museum for Central Africa (RMCA), the National Botanic Garden of Belgium (NBGB) and all the universities (with regard to SO1, 1.1, 1.2 and 1.4.). The Vlaamse Interuniversitaire Raad (VLIR-UOS) and Commission Universitaire pour le Développement (CUD) will be structural networking partners (1.2. and 1.3.). At the European and international levels, privileged partners are natural history museums, conservation institutions and universities (1.2, 1.3. and 1.4.). More details on the nature of this cooperation can be found in annex 4 and below. More specific interventions on vulgarisation and public awareness raising based on the results of SO1 are developed under SO3.

Finally, it will be important to link our scientific projects to existing initiatives in Belgium and outside Belgium. In this context, at least the following activities of BELSPO should be considered: mobility grants (post-doc and return grants), pluri-annual plans (1.2. and 1.3.) (Brain-be; STEREO,

PAI...), the Belgian Biodiversity Platform (1.2. and 1.3. on databases), bilateral actions with target countries and, support for international networking (the "topping up" scheme). At international level (1.2. and 1.3.), the opportunities offered by namely the ERA-NET scheme, the framework programme Horizon 2020, the European Strategy Forum on Research Infrastructures (ESFRI), COST and the International Foundation for science (IFS) should not be neglected. As far as feasible, our activities should serve for the development of, or the inclusion in, bigger programmes that are financed by other donors. Such synergies will be essential for the generation of results that can have a real impact on policy development.

Note about logframes:

For lay-out reasons, only parts of the logframe are presented in the text: objectives, expected results, and indicators. Concerning the sources of verifications and assumptions, see the full logframe in annex 1.
Logframes are for five years. Output indicators and targets are for five years, except when specified as annually, and are indicative. The annual plans will further specify the targets.

1.4. Logframe (partim) for SO1

Specific objective (SO, outcome)	OV Indicator & targets	
	Outcome	**Outcome indicators**
SO1 **To strengthen the scientific and technical knowledge base on biodiversity and on its linkages with ecosystem services and poverty reduction**	Selected partner institutions carry out their mandate related to biodiversity and poverty eradication (1.2, 1.3. and 1.4.) 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 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 exta-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. INECN (Burundi) after five years, INECN is able to better monitor the dynamics of habitats in its protected areas, both at the implementation level	• Generation of papers, policy briefs and participation to conferences, seminars etc… are indicators for the good functioning of scientists supported through institutional strengthening and through the grant's programme • Production of quality reports on habitat changes at ICCN, INECN and UAC with CENAGREF • Functioning scientific and technical networks as attested by email volume, number of workshops, questions and answers, e-coaching activities, joint projects, memberships in international fora at all partner institutes and with all grantees and Belgian researchers at RBINS and elsewhere • Integrated coastal management plans developed by local authorities can be seen as a proxy indicator of the successful capacity development by the programme at IMER and IMARPE • Number of Scientific output accessible, disseminated and used by stakeholders (1.4.).

	(rangers using tools), as at the management level (reporting, analysing trends and deciding on specific interventions).). INECN 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 (associations de villageois, 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) 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. 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.	

	• 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.) • The mathematical Coherens model, is applied, to answer questions about marine biodiversity by partner countries. • A North South South network for Coherens users is functioning (1.2) • National indicator processes receive input (1.3)	
Expected Results (output)	**Output Indicators and targets**	
1.1 Scientific and technical expertise is built (individual grants programme)	National authorities use the information provided by SO1 in the national indicator process ○ 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;	

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) Taxonomic research is implemented for a better understanding of biodiversity (grants programme for training and field work in situ)
 	
1.2.2.(B). The monitoring of habitats for the management of ecosystems is strengthened (institutional strengthening in INECN (Burundi), UAC and CENAGREF (Benin) and ICCN (DR Congo))
 	
1.2.3. (C). Taxonomic research and the monitoring of lowland forests are enhanced at the University of Kisangani (institutional strengthening of UNIKIS and CSB, DR Congo)
	A
	• number of trained students trained / 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.
	
	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)
	• 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)

1.2.4.(D) Application of the COHERENS model for integrated coastal management and monitoring of ecosystems (institutional strengthening of IMER (Vietnam) and IMARPE (Peru)	• 2 publications in scientific journals/PhD student (total=6). D • 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	• 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.
1.4 Scientific outputs are made accessible to users	• At least 5 Abc Taxa 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.

Table 3: logframe (partim) for SO1

1.5. Expected results: details

Expected result 1.1 Scientific and technical expertise is built (individual grant's programme)

Individual grants for short terms assignments (study visits, participation in workshops or conferences, networking...) 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.

In 2014, a call will be launched for scientists from partner developing countries who want to strengthen their taxonomic capacities, improve their collection management skills and/or access collections located in Belgium.
The best 18 proposals will be selected which not only tackle taxonomic issues but also clearly state the relevance of their work towards poverty eradication and multiplier possibilities. At the end of 2014, an evaluation will be done about the potential of the results and 12 people among the 18 will be given the opportunity to continue their research for 2 more years. In 2015 and 2016, 3 additional places will be reserved for people who wrote good project proposals in 2014 but were not selected in 2014 and were placed on hold.

At the end of 2016, all projects should finish. It is foreseen that as many projects as possible will have presented their results to the scientific community in their country or internationally through workshops. They should also, whenever possible, have organized public awareness activities in conjunction with activities 1.4 and 3.2 of the programme.

In 2017, a second call will be launched and again 18 people will be funded to work on their taxonomic projects for 2 years (2017 and 2018).

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

This expected result focuses on the generation and appropriate use of scientific knowledge related to taxonomy, ecology and ecosystems (function, services). Due to historical, 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.

Expected Result 1.2.

The first part A: 'taxonomic research is implemented for a better understanding of biodiversity' is grants programme for training and field work in situ

The second part B: the institutional strengthening of partner institutions in Benin (UAC, CENAGREF) , Burundi (INECN) and DR Congo (ICCN) through capacity development

The third part C: institutional strengthening of the Université de Kisangani (UNIKIS) and the Centre de surveillance de la Biodiversité (CSB) in DR Congo

The fourth part D: institutional strengthening of marine institutes in Peru (IMARPE) and Vietnam (IMER).

The first part A: 'taxonomic research is implemented for a better understanding of biodiversity' (grants programme for training and field work in situ)

Part A 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. This applies also to the parts B, C and D. The selection of such interventions under part A happens through competitive calls in the framework of the Global taxonomy Initiative (GTI).
This activity enables RBINS experts to transfer their knowledge to professional academicians and students of partner institutions by involving them in the various stages of their research projects. Four to five projects initiated by RBINS experts in collaboration with partner institutions will be

funded each year of the programme. Depending on the quality and relevance of applications, projects will either be long-term projects funded throughout one 3-year sub-programme, or short projects of 1-year. Long-term projects will be encouraged. Students and early career scientists from the partner institutions will also be given the opportunity to receive individual grants for study visits following the same selection criteria mentioned for expected result SO1.1., thereby concentrating efforts for partner institutions.

The second part B: the institutional strengthening of partner institutions in Benin, Burundi and DR Congo through capacity development

RBINS' renowned experience in the study and monitoring of habitat dynamics will be put to use for the management of vulnerable ecosystems of importance for human well-being, with a special attention for protected areas. Activities will be developed in cooperation with three long-standing partner institutions:

- the 'Institut Congolais de la Conservation de la Nature (ICCN) IN DR Congo,
- the Institut National pour l'Environnement et la Conservation de la Nature (INECN) of Burundi,
- the Université d'Abomey-Calavi and CENAGREF (UAC) in Benin.

Activities will consists of (i) the training of park rangers and other stakeholders (including scientists) involved in the monitoring and surveillance of habitats, (ii) the collection and analysis of data on monitored habitats, (iii) the provision of basic equipment and (iv) the continuous adaptation of the Law Enforcement Monitoring files (LEM). The training of park rangers starts with their participation in in situ workshops. Two workshops per partner institution will be required throughout the duration of the multi-annual plan. In DR Congo, the organisation of the workshops will coincide, as far as possible, with the participation to the CoCoCongo (consortium of stakeholders of ICCN) meetings by the trainer.

Activities will also include contributing to the GECO (Geology for an ECOnomical sustainable development) initiative aiming at the enhancement of sustainable management of mineral resources, particularly in Africa. Support will be focused on the assessment of the threats on biodiversity in protected areas surrounded or overlapped by mining activities in the Katanga Province, DRC.

1. **In 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 a vulgarization tool (lexicon) of the vegetation of selected 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 parcs and the research by students coming from the universities of

Bukavu, Lumumbashi, and Kinshasa. The cooperation with ICCN focuses on tropical rain forest and dry clear forest.

2. **In Burundi**, the same concept is applied with some other nuances to the INECN, responsible for the protected areas. However the ecosystems are highland forests.

3. **In Benin**, this concept will be applied as well, however with special attention to the ecological issues typical for the Sudanese and Sahelian zones, being overgrazing by pastoralism and knowing the occurrence of bush fire. The work in Benin is about to start in 2014 and combines the unique participation of the Université Abomey Calavy, together with the CENAGREF (responsible for the national parcs) and a consortium of village representatives who have their seat in the 'conseil d'administration' of the CENAGREF. This highly 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.

The third part C: institutional strengthening of Unikis and CSB (DR Congo)

Part C specifically deals with the remotely located but highly significant Université de Kisangani (UNIKIS) in DR Congo and the Centre de surveillance de la Biodiversité (CSB). It is significant, because located within the Congo basin and the associated tropical rain forest, being extremely relevant for its hotspot biodiversity and climate regulation function at the planetary scale. Moreover, this research will benefit other initiatives of the Belgian cooperation such as KLIMOS, the O*platform on climate change and cooperation for development (see http://www.biw.kuleuven.be/lbh/lbnl/forecoman/klimos/klimosfrontpage.html). The main target of 1.2.3.(C) is the Science Faculty of the University of Kisangani, especially the young academics

("chefs de travail" with a master level degree). 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. Through this approach, the UNIKIS academic community will be strengthened, whereas 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. We support Congolese scientists 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)" 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 newly erected 'Centre de Surveillance de la Biodiversité' or CSB, funded by DGD. Moreover, this work is done in synergy with other actors such as CUD and VLIR-UOS, also active at UNIKIS. This will help to provide for a strong scientific local support for the young CSB-team. 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 project in Kisangani that has a biodiversity sub project (start of 2nd phase in April 2014).

The fourth part D concerns the institutional strengthening of marine institutes in Peru and Vietnam

Part D provides capacity development in the framework of institutional strengthening of two marine institutes in Peru and Vietnam, with some cooperation with a marine institute in Columbia, with the development and use of a marine mathematical model, called 'Coherens'.

Which partners?

Since its official release in 2000, more than 1,000 potential users have registered to use the model worldwide. Many of these users are based in developing countries. Six institutes have been selected as institutional partners for this capacity building activity. The aim is to offer them all the tools to apply the model most efficiently to local conditions and to enable them to further disseminate knowledge in using the model.

Two institutes in Peru and Vietnam receive particular attention in the framework of the DGD-RBINS pluri-annual programme:

- **Vietnam** : Institute of Marine Environment Research (IMER), which also cooperates with the Vrije universiteit Brussels (see: http://www.projectsecoa.eu/index.php?option=com_content&view=article&id=77)
- **Peru** : Instituto del Mar del Peru (IMARPE) (see: http://www.imarpe.pe/imarpe/)

It is the intention to expand to the Mediterranean area (Algeria) and East Africa (Institute of Marine Sciences of Zanzibar, University of Dar Es Salaam) as well, important areas of the Belgian cooperation, on condition of favourable advise by the local Belgian embassies and DGD on the existing needs and capacities.

Vietnam needs support for coastal management issues related to rapid economic expansion and experiences problems with sedimentation in the UNESCO protected Halong Bay (see Box 4).

In **Peru** they are interested in the supply of nutrients to the nurseries of their fishing stock (see Box 5).

Box 4

Vietnam: the case of Halong Bay

Halong Bay, a UNESCO protected area in North Vietnam is a subtropical marine region with many species of coral colonies. The corals of the bay are under threat because the surrounding terrestrial region knows a high industrial development with Haiphong the most important port of North Vietnam and a lot of coal mining going on in the Quang Ninh province. There is a mining management project (www.rame.vn), however, the mining industry gives rise to an elevated sediment transport from the mountain rivers into the basin of Halong. This means the bay is becoming more and more shallow, silted and turbulent. The sediment discharge buries the highly corals, known for their extraordinary biodiversity, and makes the waters of the bay too turbid, posing an increased threat to the local fisheries. Moreover, climate change may change the temperature and turbidity of the sea water. The disappearance of the corals changes the whole ecosystem and as a consequence this will affect the lives of the local communities (the sea gypsies) who live on floating houses in the bay. It is clear that for the management of the area it is crucial to get a scientifically supported view on the sedimentation processes. This will be done with the Coherens model, the model gives insight in the sedimentation processes but is also able to predict how the region will evolve spatially.

Which Aïchi targets?

This part of the DGD-RBINS pluri-annual programme is the only involvement of the DGD-programme in the marine realm, specifically mentioned in Aïchi targets 6, 8, 10 and 11 (see annex 5).

Who develops the model?

This model is being developed by the Marine Unit Mathematical Modelling, situated in Brussels, campus 'Gulledelle' of RBINS, a department of the Operational Direction 'Nature' of RBINS, in which the DGD-programme belongs as well. The Coherens experts provide workshops in these countries and also train invited scientists on the model in Belgium and through e-coaching.

Box 5

Peru: upwelling zones

The upwelling phenomenon is the process in which colder nutrient rich water from the bottom of the ocean raises at the surface near the coast line. This process is driven by wind, Eckman transport and Coriolis force. As a consequence of the steady supply of nutrients there is typically a very high and rich biodiversity in such regions, like the coastal zone of Peru, which is very much under the influence of the El Nino phenomenon, the last years perturbed by climate change. Overfishing with trawl nets due to decreased fish productivity destroys the ecosystem and even if it is just a temporal collapse, some of the species may not survive the destruction. A known strategy in the management of ecosystem services is to protect the key species of the ecosystem. In upwelling ecosystems these are the species of the medium trophic level of the food web. They are the key species since they are the least abundant in the food web but connect the low and high trophic levels. Changes in their populations would affect the food chain and the biodiversity.

What is the use of the model?

COHERENS is a mathematical model used for the monitoring and management of the near-coastal zone, estuaries, lagoons, reservoirs and lakes (http://www.mumm.ac.be/coherens). It is publicly available in the form of free software code. The current version (V2.5) contains the physical core part and satellite parts (modules) for sediment transport and land flooding. Additional modules for biology, morphology (simulating changes of the sea bed and coastal erosion), contaminants (discharge and dispersion of pollutants) and tracers have already been developed and will be integrated in later official releases of the code. The model generates scenarios of water, sediment and biota transport of coastal areas, hence providing the necessary scientific data needed to inform an integrated coastal management and climate change mitigation and adaptation scenarios. This model serves to 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 for the management of coastal seas (e.g. establishment of protected areas or of aquaculture farms).

The nature of the research questions can be very diverse, some examples are:

- Environmental impact assessments: dispersion and impact of potential pollutants
- Management of coastal seas: establishment of protected areas or of aquaculture farms

- Climate change: forecasting the reactions of coastal ecosystems under different sets of physical, chemical and biological conditions
- Flooding risks (the consequences of hurricanes, the possible impacts, …)
- Climate change mitigation and adaptation
- Coastal erosion trends
- Sedimentation problems due to industrialization, study the impact on the local communities
- Fishery of local communities

It is part of a decision support system in order for managers and decision makers to take the right decisions of coastal management to accommodate the multiple uses of sustainable development of the coastal populations and the needs to safeguard the parts which are important for biodiversity and ecosystem services, such as e.g. mangroves and reefs.

Why a Users' community?

A forum for the COHERENS user community is currently developed at the institute in collaboration with partners of the Flemish Community and will be operational in the next months . The objective of the user forum is to provide support for user questions which can be answered by other registered users and as a tool for starting future collaborations on new developments. The maintenance and set up of this forum will be centralised at our department. At the Web site new possibilities (e.g. a fish finding tool, a tool to track pollution, …) will be demonstrated and explained. The organisation of a user conference, where all users present their work and new contacts will be made.
Identification of new members are important if we want to keep some dynamism in the use of the code. Possibilities are Cuba, Zanzibar (Tanzania), Bangladesh, the Mediterranean region (e.g. Algeria). Identification means that it will be investigated at which level we can collaborate with possible new candidates. The criteria for entering the complex research question programme are the feasibility of applying COHERENS, the availability of data, the capacity of local scientists (a basic capacity is required for further training) and the availability of personnel within the budget. Individual scientists (PhD students, post-docs) can also be invited for a longer stay as far as the budget allows.

Expected result 1.3 Monitoring data is fed into national indicator processes.

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 fulfil specific objective 5, on measurement, verifying and reporting processes (MRV).

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 in line with the Strategic Plan for Biodiversity 2011-2020 and including specified national Aïchi 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 expertise in collecting data to feed the indicator processes. 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 Aïchi targets, will be supported. 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.
Each year a call for projects will be launched that will work on gathering indicator data for Aïchi objectives related to habitat/ecosystem monitoring, species data and have a relation with poverty eradication

Expected result 1.4. Scientific outputs are made accessible to users

Production of tools and contribution 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. At this stage, we prefer not to provide a restricted list, as to ensure a maximal adequacy with the national priorities of our partners.

The publication of taxonomic tools will continue to be supported via the production of one Abc Taxa 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.

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 DR 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 DR 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.

1.6. Budget for SO1

Activities		2014	2015	2016	2017	2018	Total/SO
1.1		67,500	56,250	60,000	72,000	60,000	315750
1.2	1.2.1. (A)	62500	75000	75000	75000	75000	362500
	1.2.2. (B)	69000	69500	71500	65000	52000	327000
	1.2.3. (C)	27,050	30000	27050	30,050	35,850	150000
	1.2.4. (D)	26,000	26,000	26,000	26,000	26,000	130000
1.3	1.3.1.	20,000	20,000	20,000	20,000	10,000	90000
1.4	1.4.1.	20,000	20,000	25,000	25,000	25,000	115000
	1.4.2.	9850	15000	25000	15000	15000	79850
Total/year		301,900	311,750	329,550	328,050	298,850	
						Total	1570100

Table 4: Summary of budget for SO1


Benin © M.-L. Susini/RBINS

2. Specific objective 2. The RBINS and its partners play 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.

In the past twenty years, the world of information has changed in ways most of us could not imagine[18]: the Internet, mobile phones and social media have increased the global connectivity. For developing countries, this revolution has helped bring information in areas where it was structurally absent. However, despite this change, scientific and technical information on biodiversity and ecosystem services remains under-valorised by potential users of this information, including policy and decision-makers. There are two main issues here. First, qualitative information is instrumental for policy or management decisions[19]. The use of new and traditional media therefore retains all its importance to provide adequate information flows between science, policy and practice. Second, it is not sufficient to provide immediate and easy access to information.

[18] UNEP (2011). Keeping Track of Our Changing Environment: From Rio to Rio+20 (1992-2012). Division of Early Warning and Assessment (DEWA), United Nations Environment Programme (UNEP), Nairobi

[19] Edwards et al. 2000. Interoperability of Biodiversity Databases: Biodiversity Information on Every Desktop. Science, 289: 2312-2314.

There is also a need to bring the information to the right audiences at the right time and in the right form, in order to prevent the situation where "nothing is done" because of existing or perceived constraints linked to a lack of knowledge or appropriation. To meet these two issues, there is a need to not only develop an expertise in managing information – and the pertaining necessary technology – but also in making it available to the right audiences on the right occasion. This will help that policies and programmes be established by taking into account the best available evidence on the importance of biodiversity and ecosystem services for sustainable development.

2.1. Background

The RBINS has been an active player in information exchange and networking for biodiversity since the early beginnings of the Convention on Biological Diversity. We started modestly, by setting up in 1996 one of the first websites of the Convention's information exchange mechanism[20]. Over the years, we gained expertise on how to improve access to information through web-based technologies. Even though our focus was mainly on the technical development of websites, we also worked on issues of content: what type of information should reach different audiences and under what format? Finally, we developed initiatives that encouraged using scientific and technical information to raise awareness on the importance of biodiversity and ecosystem services.

To ensure empowerment of our partners we also assisted three partner countries to develop their national CHM strategies, with clear objectives, national steering committees, roles of partners, needs and budget lines. From training only individuals from a country, we developed a long term training strategy for each country: starting with individual training for one person, followed by national training with 15 key partners and several one day follow up training sessions. So far this had partly as a result that 3 countries organised sub-national training workshops (without our assistance). Some of our partner countries are also starting to assist neighbouring countries on best practices of information exchange on their demand (South-South cooperation).

In the coming years, we will continue playing our leadership role in the establishment of biodiversity information networks under the Convention on Biological Diversity. We will focus on two aspects: first, we will continue providing training on and support for the use of web-based and social media based technologies as a mean to disseminate and use information (technical aspects). second, we will also build capacities on how to improve the content, relevance and timing of the information provided (strategic aspects).

[20] The Clearing-House Mechanism, see http://www.cbd.int/chm.

Throughout all activities, specific attention will be devoted to the ways information flows contribute to the implementation of the various governance processes related to biodiversity and development, and in ensuring the cross-linkages between all these processes.

Our different activities under this objective are based on demands by our partner countries expressed during the preparatory meeting for the development of our strategy 2014 - 2023, held in Benin in 2012. We will also take into account developments and demands made by Parties to the Convention on Biological Diversity through COP decisions to the CHM to adjust our actions if the need arises. The training workshops will be organised on demand by the countries where they feel that they are ready to also do a follow up and keep the network active. The subjects of the yearly call for projects and other activities will be based on the recommendations from the workshop or on decisions by the COP of the CBD.

2.2. Expected results: general

Expected results # 2

2.1. Expertise in information management is built.

2.2. Information flows are improved.

2.3. Information is used to advise governance processes.

The philosophy underlying the expected results (see box #2) is the same as for the first specific objective:
the first expected result is process-oriented, as we aim to build new expertise or to increase/improve the existing expertise of our partners;
the second focuses on the quality of the information flows. Our experience has shown that many external constraints can hinder these flows. We will minimise these constraints or find loops around them;
the third result focuses on the exploitation and valorisation of the information produced, so that it reaches the right audiences at the right moment.

A combined general result is the improvement of the capacity for information exchange in relevant Ministries (see below) of partner countries that are responsible for the implementation of the Convention on Biological Diversity. Information quality and access means empowerment and enables a more transparent and informed decision making process for the development of policies and the follow up of implementation of these policies (good governance). To measure this result or the impact of interventions objectively under will remain a challenge.

In practice, we will attain these results by supporting activities of the following nature:

- enabling training activities that cover beginner training in website management/web2.0 technologies as well as training in content management. They include follow-up activities (such as e-coaching) to put the acquired skills in practice. Such activities will be carried out with new partners, or with new individuals joining well-established partnerships.

- collaborative projects that cover advanced training, enhancement of web infrastructure, the support of networking activities, communication and awareness activities on information exchange at national level and any other levels that enable an efficient and effective dissemination of information. Such projects primarily target active, well established partners; social media of course will play a role. In that sense there is now an app launched about the Aïchi targets and other initiatives at a global scale. We keep informed and convey this information to our partners.
- Networking activities that enable the exchange of best practices at the international level (mainly at sub- regional or regional level). These activities bring together our well established partners in different countries so that they can strengthen their supra-national partnerships.

Our main partners are the webmasters, web content managers and focal points working on the dissemination of information related to the Convention on Biological Diversity. However, as biodiversity and ecosystem services are issues that have a much broader reach than the Convention itself, we stimulate the establishment of active networks, at national level and (sub)regional level, between civil servants, experts, scientists, NGOs, the private sector and other actors working in many different fields such as agriculture, climate change, forestry, water management, etc.

This is also why activities under this objective serve as a central node to all other activities of the work programme. Special efforts will be taken to ensure that information flows exist between all the actors involved in our programme and that this information reaches wider audiences. In this regard, expected results 1.3 and 2.2 are closely related to each other. the CHM is an initiative of the CBD-secretariat following a COP decision. We as DGD-programme contribute to its implementation in the developing world in a very concrete way, together with very few other countries such as Norway. The Francophone zone is doing the same with 'media-terre'. The concept is in a way self-organising and includes increasing autonomy over time, as the governments of developing countries increasingly take over the funding of their own CHM.

2.3. Synergies and partnerships

Obviously, our network of partners in developing countries is crucial to ensuring the success of the activities. Over the last decade we have developed through open calls and on demand from the South long-lasting and fruitful partnerships with biodiversity information managers in a number of African countries.

The table in annex 4 lists the formal agreements between RBINS and these partners.

The people being trained have key positions at the Ministère de l'Aménagement du Territoire, de l'Environnement et de la Ville (Algeria), Ministère de l'environnement, de l'habitat et de

l'urbanisme (Benin), Institut National pour l'Environnement et la Conservation de la Nature (Burundi), Ministère de l'Environnement, Conservation de la Nature et Tourisme (Democratic republic of Congo), Ministère de l'Environnement et de l'Assainissement du Mali (Mali), Secrétariat d'Etat chargé de l'Eau et de l'Environnement (Morocco), Conseil National de l'Environnement pour un Développement Durable, Cabinet du Premier Ministre (Niger), as well as in the Ministère de l'Environnement et du Developpement Durable (Burkina Faso), Ministry of Environment, Protection of Nature and Sustainable Development (Cameroon), Ministère du Logement, du Cadre de Vie et de l'Environnement (Côte d'Ivoire), Office National pour l'Environnement (ONE), Ministère de l'Environnement, des Eaux et Forêts et du Tourisme (Madagascar), and others.

We intend to further strengthen and develop these partnerships. We also have some partnerships running in other parts of the world, such as in South Asia through the South Asia Co-operative Environment Programme (SACEP).

The people trained acquire through our training better technical and scientific skills and deliver a better service in their professional positions in terms of quality and access of the information about biodiversity, hence serving as national 'ambassadors' and 'multiplicators' when attending national and regional meetings. These professionals feel better connected to the international context and the global issues affecting their country: they are empowered and become more senior in the fulfilment of their tasks at ministerial level in decision making and other policy processes, hence participating in better governance.

Synergies with other programmes or organisations are crucial for ensuring information flows. In Belgium, we are in contact with all the partners already mentioned under objective 1, i.e. scientific institutions and universities. To these scientific partners we add the Belgian Biodiversity Platform, which is in charge, among others, of promoting the inclusion of biodiversity data in international databases such as the Global Information Facility (GBIF)21. Administrations and decision-making bodies, such as DGD and federal/regional environmental administrations, are choice partners as they are both providers and recipients of information.

At the European and international levels, we maintain close contacts with other biodiversity information managers, whether in scientific institutions and universities or in administrations. Three important partners for the development of strategies and tools are the European Environment Agency, the Secretariat of the Convention on Biological Diversity and the World Conservation and Monitoring Centre of the United Nations Environment Programme (WCMC-UNEP) .

[21] http://www.gbif.org

Since 2012 some of our partner countries have started to use their knowledge in information exchange to assist neighbouring countries. This South-South cooperation ensures that biodiversity information exchange is possible in eco-regions and that they can learn from best practices from other countries. When the partner country takes the initiative to organise a South-South cooperation or regional workshop on e.g. “public awareness”, we can decide to accept the project even though it might have a higher budget as initially earmarked for a national intervention. Morocco has started partnerships with Environmental Ministries in Yemen, Sudan, Mauritania and some other Arabic countries, Cameroon and COMIFAC have partnerships with Environmental Ministries in Chad, the Central African Republic and they are developing partnerships with Gabon and the Congo, Madagascar has started a partnership with the Environment Ministry of the Islamic union of the Comoros.

In the countries the steering committees of the national CHM comprise in most cases representatives of NGO's, Universities and different Ministries and research institutes. This should ensure full participation of different stakeholders in the countries. Through the integration of Access and Benefit Sharing-Clearing Houses in national CHMs our partner countries will ensure that also indigenous and local communities will be integrated in the sharing of biodiversity information.


Burundi © H. de Koeijer/RBINS

2.4. Logframe (partim) for SO2

Specific objectives (SO)	Key indicators (OVI) and targets	
	Outcome	**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 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 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)	• Professionals in 10 partner countries and 5 neighbouring non-partner countries through South South cooperation participate to their national CHM (2.1., 2.2.) • Quality and quantity information added to the national CHM sites • The CHM sites are more user-friendly and informative

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
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 • 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
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.

Table5: Logframe (partim) for SO2.

2.5. Expected results: details

Expected result 2.1 Expertise in information management is built

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 seen the developments in the technology as well as the 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 partner's competences.
In 2014 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 Aïchi targets. The tool is still under development by the EU CHM with active participation by the Belgian CHM in its development. To implement the tool it will be useful to add a training and information component to facilitate the adaptation of the tool.

With the experience and the results of the training sessions during the 2008-2012 programme, it has been decided to change the set-up of the training sessions. With each country, a capacity building strategy (this includes communication strategy) will be developed to ensure a follow up by the national focal point with the trainees after the training. This strategy will include one national training by the Belgian CHM as well as several one or 2-day follow-up trainings organised and given by the national focal point to ensure a continued participation and update by the trainees. Training material for the follow-up training session will be prepared by the Belgian CHM in cooperation with the national focal points. .

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 18 possible partner countries of the Belgian development cooperation or the extended list of partner countries (countries are : Chad, Congo, Gabon, Mauritania, Djibouti, Central African Republic, Comores, Ghana), 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. Other options are to work through regional organisations like e.g. COMIFAC and SACEP.

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 will 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 Aïchi targets as mentioned above.

E-learning/coaching consists of three distinct phases. The first phase is the online 'pre-course' preparatory phase: it enables the trainers to stimulate the future participants to a CHM training course to surf their national CHM Portal Toolkit (PTK) website before the training, and to look at the online presentations available on our e-learning training website. Two weeks before the training, participants are asked to create a user account on the PTK training website and to carry out several basic exercises. This first phase is a precious time saver since it familiarizes trainees with the PTK before the 'face-to-face" training, which is the second phase. It is also a way to better involve people before the training. The third phase consists of e-coaching taking place after the training. It is a way to encourage people to use what they have learnt during the training. This follow up is made through e-mails and discussion forums. CD-Roms containing the PTK manuals will be distributed to every participant at the CHM trainings.
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.

Expected result 2.2 Information flows are improved

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. This does not guarantee that the countries will also allocate resources or sufficient resources to improve information flows through the national CHM. We see 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 therefor 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. This seed money has enabled countries like Cameroun and COMIFAC to obtain additional funds from other programmes or the government. Other 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.

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 synergy with expected result SO1.2, support will be provided to the Institut National pour l'Environnement et la Conservation de la Nature (INECN) in Burundi.

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. Projects that include an ABS component will be higher ranked under calls for projects.

Expected result 2.3 Information is used to advise governance processes

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.

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

At the international level the activities will be three-fold

Workshops are organised to bring partner countries and if possible DGD attachees at the Belgian embassies together to exchange experiences on how to use the available information in governance processes.
Participation in meetings organised by the CBD Secretariat (for the global CHM) and by the European Environment Agency (for the European Community CHM). The participation in some of these meetings will be ensured by the organisers. The participation can be by the Belgian national focal point as well as through contributing the participation of partner countries representatives.
Assist regional partner organisation to organise meetings on how to use information to advice governance processes.
This activity also includes all participation to international meetings like COPs, WGRIs, CHM-IAC meetings as well as the EU CHM meetings. These meetings serve to ensure that the CHM developments are taken in to account in international governance meetings.

SO2. Equipment

This part of the programme consists 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.

2.6. Budget for SO2

Activities	2014	2015	2016	2017	2018	Total/SO
2.1	50,000	50,000	50,000	50,000	50,000	250000
2.2	50,000	50,000	60,500	62,500	62,500	285500
2.3	25,000	25,000	25,000	25,000	25,000	125000
Equipment	4000	3000	4000	3000	3000	17000
Total/year	129,000	128,000	139,500	140,500	140,500	677500 €

Table 6: summary of the budget for SO2.

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

Governments worldwide have understood the strategic need to increase understanding of biodiversity, ecosystem services and their importance for human development. This is reflected by the formulation of the very first Aïchi Target of the Strategic Plan for Biodiversity 2011-2020: "By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably". As stated by UEBT's Biodiversity Barometer 2012-22, "awareness of biodiversity reveals the potential for increasing understanding and action on related issues". This does not mean that the concepts of biodiversity, and even more so of ecosystems services, are well-known and understood by the public. UEBT, the Union for Ethical BioTrade, has been conducting surveys on biodiversity awareness among consumers worldwide for the past few years. Although it focuses essentially on developed or emerging economies, it is the only data available that can be compared across continents and provides trends. Data from 2012 show that awareness on biodiversity around the world is generally high – 63% of respondents have heard the word 'biodiversity' – with particularly high awareness rates in countries like Brazil, France, Switzerland and South Korea. Significant differences of awareness exist between countries, even within the same region. The understanding on biodiversity, measured through the number of people that provided correct definitions on biodiversity, is often very limited: nowhere does it exceed 50%. However, a positive finding is that since 2009, the understanding of biodiversity has gone up in France, Germany, UK and USA from 16% to 26%. Understanding can therefore be expected to grow in the coming years.

3.1. Background

The RBINS in its capacity of scientific institution and museum, as well as focal point for biodiversity, is placed in a unique position to contribute to awareness raising and communication on biodiversity and ecosystem services. It knows how to work with a wide range of audiences, which include the 'general public', schools, citizen associations, scientists, policy-makers... It can capitalize on its experience gained as one of the main awareness raiser in Belgium to guide its partners in developing countries develop effective, efficient and relevant public awareness programmes or communication campaigns. In turn, the RBINS will also learn from its partners as each country has cultural specificities that makes communication so different from one place to another.

[22] http://www.ethicalbiotrade.org/news/wp-content/uploads/BAROMETER.2O12.web_1.pdf (last accessed 15.06.2012)

Meeting target 1 of the Strategic Plan for Biodiversity[23] requires that people are aware of (i) the importance of biodiversity (i.e. its environmental, cultural, economic and intrinsic values) and ecosystem services; and (ii) people are aware of the type of actions they can take to conserve biodiversity and use it sustainably. Different segments of society can take different actions depending on the types of activities they have control over.

As biodiversity is a global issue, it is crucial that people are not only aware of their relationships to the biodiversity of their own country but also to that of the rest of the world. This discourse can, among others, be brought forward through the concept of local, regional or global ecosystem services.

This objective and some of the activities have been developed based on the recommendations from the preparatory meeting for the development of our strategy 2014 - 2023, held in Benin in 2012, and relevant COP decisions. We will also take into account developments and demands made by Parties to the Convention on Biological Diversity through COP decisions on Public Awareness during the implementation of the five year programme to adjust our activities if the need arises.

3.2. Expected results: general

Expected results (see box #3) are of two kinds:
the first expected result is that the partner countries have a better knowledge of the **level of awareness and/or commitment** of their target audiences (baselines) as defined in their **national strategies**. These areas are partner and project-dependent.
The second expected result is to **raise** the levels of awareness and/or commitment. This increase will essentially be measured in the areas for which the partner countries have established baselines.

Expected results # 3

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

In practice, we will attain our results by developing the following:
pilot studies identifying suitable indicators and establishing baselines on the level of awareness and/or participation in our partner countries. Measurement of public awareness is not easy, nor understanding of public commitment[24]. However, in order to measure progress it is imperative to

[23] By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.
[24] Possible indicators could include the number of visits to protected areas and parks, zoos, botanical gardens...; the number of school biodiversity education programmes; volunteer participation in relevant activities; the development and use of lists of recommended

start establishing reference frameworks. The pilot studies will be in areas and on issues designated by our partners, in function of their national priorities as defined in their updated national strategies. Results will be project-dependent. We hope in some instances to be able to provide national information. We will encourage the application of standardised methodologies if possible[25]. The pilot studies are linked to our work on indicators (see specific objective 5);
awareness raising or public participation projects on biodiversity, ecosystem services and related governances processes (such as the Convention on Biological Diversity and its new Protocol on Access and Benefit sharing – See objective 6) as a follow-up of the pilot studies establishing the baselines. These projects will be area and issue-dependent, as for the pilot studies. This will enable our partners to monitor the results of activities and programmes, so as to identify whether progress has been made. We also strive that each participant and activity under SO1 will present results of their studies through public awareness activities. This can take the form of seminars to the scientific community, special workshops to give feedback to the population of areas where activities have taken place.

On a more limited scale, we will also foster and promote communication and awareness raising in Belgium, among others on the importance of natural resources (including genetic resources – See specific Objective 6) and ecosystem services in/from developing countries for the well-being of the Belgian population. One of the priority themes will be the (Belgian) dependencies on biodiversity and ecosystem services, as well as on the pressures that our consumption and production patterns impose on biodiversity and the impacts thereof for us (Belgians) and for developing countries26. To achieve this, we could contribute to projects and activities by other actors of the Belgian development cooperation (Belgian Technical Cooperation, NGOs etc) or we could encourage the development of communication, education or awareness raising tools/materials on the issue (e.g. VVOB, APEFE).

Contrary to our activities to strengthen the science base (objective 1) and the information base (objective 2), we will not develop a training programme on awareness raising. Cultural contexts and local situations greatly influence how public awareness and commitment activities are set up. Our Belgian experience therefore cannot be transposed locally in developing countries. However, whenever needed, we will provide methodological support and exchange best practices with our partners.

We will stimulate the partner countries to post the results of their activities on their national CHMs and on the central CBD site as best practices. Materials that have been used in one country will be shared with other partner countries during workshops under SO2. We will strive that they

actions for citizens, the private sector, and other stakeholders... The impact of public awareness campaigns could be monitored through surveys of awareness and attitudes. Other possible indicators could include the number of biodiversity related news articles published in national newspapers as well as changes in the demand for environmentally friendly products,...

[25] Work is ongoing at the international level, among others by the Secretariat of the Convention on Biological Diversity, to establish methodologies and indicators, and hopefully by 2014 some will be available for testing and/or use.

[26] For example, we could investigate and raise awareness on how we depend on natural resources and raw materials (in space and time), how these dependencies links to current and future economic development and how this economic development impacts (positively or negatively) biodiversity and ecosystem services.

will be used, and if need be adapted to national needs, where relevant, by other partner countries.

When publishing the calls for projects we will include the gender and biodiversity issue. Projects that have a gender aspect will get a higher mark while making the selection.

3.3. Synergies and partnerships

Our main partners (see annex) in developing countries will be our network of information managers already mentioned under Synergies and partnerships under specific objective 2. However, this is not exclusive as these partners will act as contact points and relays to awareness raising and education specialists in their respective countries. These can be NGOs, educational structures, universities...

In Belgium, the partners will vary in function of the projects identified. Our usual network of scientific partners (the universities, the National Botanic Garden and the Museum for Central Africa) may be involved if relevant. We will also keep contacts with NGOs and networks specialised in development education: they will be able to provide us with sound advice and expertise on activities to be developed by our own partners and /or they may propose interesting projects in which we could bring our biodiversity expertise. If the opportunity arises we could also develop with them a pilot project on how to use national CHMs in their projects. The DGD will also be an important partner, as it has communication channels that can be put to good use to inform the wider community on ongoing initiatives or important issues (e.g. the Dimension 3 magazine).

An important partner overall for the framing of our activities and for methodological guidance is the Secretariat of the Convention on Biological Diversity. The Secretariat is the driving force behind the implementation of a comprehensive programme of activities as part of 'UN Decade on Biodiversity' (2011-2020). This Decade has been established to build support and momentum for the implementation of the Strategic Plan for Biodiversity 2011-2020 and to mainstream biodiversity at different levels27.

Another potential international partner is the International Union for Conservation of Nature (IUCN)[28,] and in particular the members of its Commission on Education and Communication. IUCN heads an extensive network of partners from very diverse backgrounds (national and international non-governmental organisations, scientific institutions, state and government

[27] http://www.cbd.int/2011-2020/goals/ , accessed on 21 June 2012
[28] http://www.iucn.org

agencies...). It carries out projects on the conservation and sustainable use of natural resources, including aspects related to communication, learning and knowledge management.

We will also collaborate with the Biodiversity Indicator Partnership (BIP) to report on indicators used by partner countries. We will also start discussion with other possible partners that are developing indicators with a global reach. During Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) 17 we started discussions with the World association of Zoos and aquariums (WAZA) on their global indicator of zoo attendance, which might be relevant for some partner countries. During the same meeting we also contacted an association that is developing a global indicator on visitors to national parks.
The work with the CBD-secretariat is under the auspices of UNEP. The Secretariat is institutionally linked to the United Nations Environment Programme, its host institution and, pursuant to decision II/19, is located in Montreal, Canada since 1996. It currently employs some 70 staff, including short-term staff and consultants. Civil servants of the Secretariat come from around the world. Its head, the Executive Secretary, is appointed by the Secretary-General of the United Nations in consultation with the COP through its Bureau.

3.4. Logframe (partim) for SO3

Specific objectives (SO)	**Key indicators (OVI) and targets**	
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**	**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	**Outcome indicators** • Quality awareness campaigns are organised in the partner countries • Local people are reached by awareness campaigns, and have access to fliers, media, posters, information

	exercise (3.3)	
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.	
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.	
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	

Table 7: logframe (partim) for SO3.

3.5. Expected results: details

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

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. Aïchi target 1 is targeting this. However 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 on what biodiversity is meant by biodiversity and what they understand about it's role in their daily life. Also to be able to measure the changes that the strategies have given one needs to have baseline studies at the start and the same studies towards the end of the strategies to be able to compare the data. This programme element will allow the following activities:

2-3 year programmes with the 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 on in several 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.

Special attention will be placed on raising the awareness on ABS and the Nagoya protocol so there will be a strong link with SO6

Towards the end of the programme, 2018 - 2019 the studies from the start of the programme need to be redone to check what the actual change in awareness has been.

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. Niger, Morocco, Madagascar, Côte d'Ivoir, Benin, RDC, Burundi). Awareness raising is a typical mixed issue of top-down process (invitation to submit a project according to Aïchi 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 driveness can only start, once this kind of awareness is growing.

Expected result 3.2. Awareness and commitment are raised.

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-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.
- The projects that will be chosen can run over 1-3 years as one time actions don't have as much impact as repetition when it involves public awareness. Exception will be made for projects that work on the theme for the international year on biodiversity 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 to do something.

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.

The IUCN **Commission on Education and Communication (CEPA)** has developed a useful toolkit (CEPA) in that respect, although the concrete implementation still needs to be integrated or developed in our programme, as far as it is relevant for SO3.
(http://www.iucn.org/about/union/commissions/cec/cec_specialty_groups/cec_cepa_specialty_group/)
This acronym summarizes the range of tools and processes involved in bringing about change in people and society.

C/Communication: is about the exchange of information. It is based on establishing a dialogue between sectors and stakeholders to increase understanding of issues and to support collaborative planning and acting for the environment. **Capacity development**: enhances the skills of individuals and social groups often through participatory training. It also develops the policies and procedures of organisations so that they can work more effec-tively for the environment.

E/Education: develops understanding, clarifies values, develops attitudes of concern for the environment and develops the motivation and skills to act for the environment. **Empowerment**: develops the agency or competence to take responsibility for decision making.
P/Public Awareness: is a first step in developing understanding and concern, to help people know of the issue, to make the issue part of the public discourse or put the issue on the agenda.
Participation: allows for different knowledge to be shared in the learning process that builds people's abilities and empowers them to take responsibility and action to bring about changes for the environment. "Participation" is used with a wide diversity of meanings. There is increasing empowerment with progress from informing stakeholders, to consultation, to consensus building, to devolved decision making, risk taking and partnerships. **Partnerships**: are cooperative working relations between organisations that add value to each other's contributions in work on a project or task. **Partners** can contribute different skills, ideas, financial and technical support to each other.
A/Action: is required to make a change in the biodiversity condition as awareness is not sufficient. **Action learning** is a process designed to build capacity using reflection and assessment on the effectiveness of action taken. Other similar terms are **action research**, **adaptive learning** or **adaptive management**

Expected result 3.3 Communication and awareness raising in Belgium.

The results of SO1 - SO3 can be used to raise awareness in Belgium and on 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.

3. 6. Budget for SO3

Activities	2014	2015	2016	2017	2018	Total/SO
3.1	30,000	30,000	10,000	30,000	60,000	160000
3.2	60,000	60,000	75,000	60,000	60,000	315000
3.3	10,000	15,000	5,000	15,000	15,000	60000
Total/year	100,000	105,000	90,000	105,000	135,000	
					Total	535000 €

Table 8: summary of the budget for SO3

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

The UNDP description of biodiversity mainstreaming fits perfectly our purpose[29]: "Most biodiversity in the world resides outside protected areas on lands and in waters dedicated to various economic production activities, including agriculture, forestry, fisheries, mining and tourism. The integration, or 'mainstreaming', of biodiversity-management objectives into these sectors constitutes a key vehicle for achieving the sustainable exploitation of natural resources". It is widely recognized that the values of biodiversity are not yet widely reflected in public and private decision-making. If actors in these economic fields see biodiversity maintenance as a negative balance sheet item, then the ecosystems will likely be unsustainably managed and their biodiversity lost. Thus, communities, policy makers and businesses need to be persuaded of the link between the value of ecosystem goods and services, and sustainable economic development. In practice, mainstreaming biodiversity and ecosystem services into strategies, planning processes and economic production activities will require their appropriate valuation. It will also imply an increased coordination among various ministries as well as among various categories of public and private stakeholders. Tools to assess the values of biodiversity and ecosystem services are now being made more widely available, including the Convention on Biological Diversity's work on economic, trade and incentive measures, the Economics of Ecosystems and Biodiversity (TEEB) study, the UN System of Economic and Environmental Accounting (SEEA), the World Bank's experience in integrating natural capital (such as forests) into national accounts, the Integrated Biodiversity Assessment Tool and many others... Such tools should be built upon and further developed, so that mainstreaming can occur in a stepwise or incremental manner, by first including those values of biodiversity which are easiest to account for and then by fully integrating all biodiversity values into decision making processes.

4.1. Background

RBINS started examining how best to develop mainstreaming activities in 2010. Since then, we have built some expertise in the field. Our main lesson learned is that he single most important aspect of mainstreaming is to take ample time to understand what are the needs and constraints of the target sectors and audiences. These will be different from one country to another, pending on local context and circumstances.

One of the activities we organised in 2011, together with DGD, was a short training session (9 hours) on biodiversity and ecosystem services for programme and project managers of DGD. Since

[29] http://web.undp.org/biodiversity/mainstreaming.shtml, accessed on 13 June 2012

then, we trained staff in, and worked with, many other federal administrations. This improved our understanding of many branches of economic activities and enabled us to develop a more holistic approach for our discourse on dependencies, pressures and impacts on biodiversity. We are now ready to share this expertise, with DGD and with our partners in developing countries.

As the law regarding the Belgian development cooperation stipulates that the protection of the environment is a transversal theme to be integrated in all the interventions of the Belgian cooperation, DGD is the perfect partner for our mainstreaming activities. While the RBINS will be the main content developer, DGD will be the main driver of the exchange of information to and from all the actors involved in the Belgian Development Cooperation. DGD will also identify issues of attention and for which a coordinated action of both partners will be needed.

4.2. Expected results: general

Expected results (see box #4) are of two kinds:
the first is process-oriented: we aim to build the expertise of the various actors of the Belgian Development Cooperation[30] on the values of biodiversity and ecosystem services for development, as well as their ability to transmit the acquired knowledge to their peers in Belgium or abroad;
the second is outcome-oriented: thanks to our training activities and our work with DGD2, we aim to see a better integration of biodiversity and ecosystem services in all types of activities supported by the Belgian Development Cooperation (policies, programmes, projects…).

Expected results # 4

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

In practice, we will undertake the following:
training of staff working for the Belgian Development Cooperation at large, either upon their request or as part of organized workshops, on the importance of biodiversity and ecosystem services for development, on options for the sustainable management of ecosystems or on more specific / specialized topics related to these issues;
provision of advice and support during the development cycle of policies, programmes and projects that are supported by the Belgian Development Cooperation. This will be achieved on a demand-driven basis, according to the needs expressed by Belgium's partner countries, to undergoing discussions in international fora or to specific requests from DGD. We will maintain a constant dialogue with our partners, as to ensure that we are able to correctly understand what

[30] These actors may be the Directorate-General for Development Cooperation (*attachés* in Belgium or in the partner countries), the Belgian Technical Cooperation, BIO-Invest (the Belgian Investment Company for Developing Countries) or non-governmental actors undertaking activities under DGD funding.

their priorities and constraints are, and they are able to better capture the values of biodiversity and reflect them better in decision-making.

4.3. Synergies and partnerships

As part of our mainstreaming activities, we will take care to increase synergies between the RBINS, the Belgian Development Cooperation and other actors working in different fields and under different governance processes.

For example, synergies between actors working for the three Rio Conventions (climate, biodiversity, and desertification) need to be boosted, particularly when addressing forest-related issues. This relates among others to issues such as REDD+ (Reducing Emissions from Deforestation and Forest Degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries), but also to issues such as the biodiversity of arid and sub-humid lands. These ecosystems are extremely fragile, and are particularly at risk of pressures such as land degradation and climate change.

Partners for our activities will include the DGD, other federal administrations (e.g. the Federal Public Service for Public Health, Food Chain Safety and Environment, European Forest Institute (EFI)) as well as universities, scientific institutions and NGOs.


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4.4. Logframe (partim) for SO4

Specific objectives (SO)	Key indicators (OVI) and targets	
SO4 **To improve the mainstreaming of biodiversity and ecosystem services in policy sectors that have a high relevance for development**	**Outcome**	**Outcome indicators**
	• 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 Aïchi targets and risk assessment of the planned cooperation interventions (4.2)	• Biodiversity and Aïchi targets are part of the Indicative Cooperation Plans • Poverty eradication is linked to biodiversity in cooperation plans and in national development plans (proxy indicator) • On demand of DGD eventual production of syllabi, didactical units and courses
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	
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	

Table 9: logframe (partim) for SO4

4.5. Expected results: details

Expected result 4.1. Expertise of Belgian Development Cooperation is built.

Expertise of the various actors of Belgian Development Cooperation will be built through the organization of training workshops. Training content and material will 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 ('ONG programme'), staff from relevant services of the DGD and development cooperation Attachés.

Four different sets of training workshops will be organized during the first 3-year programme (details to be determined in collaboration with D2.4 and representatives of each targeted group). Drawing on our previous expertise in similar training projects, at least three sessions of three hours will be necessary for each group. Each participant must attend all three sessions as they are part of a cumulative learning process. As Attachés presence in Belgium is scarce, the duration of the training will have to be adapted and synced with the Attachés days.

As of the third year of the multiannual plan, based on the experience acquired during the workshops as well as on the input from participants, short practical manuals will be developed and published for the target groups. These manuals will both include fundamental notions and basic steps for integrating biodiversity in their processes. It is closely tied to the environmental toolkit that has recently been developed by the DGD and will contribute to answer its 'biodiversity' questions efficiently. A general brochure will be developed for Attachés and can also be distributed to relevant stakeholders in the North and in the South. The elaboration of the manuals and brochure is closely related to expected result SO2.4.

Follow-up activities are foreseen in the second 3-year programme (2017-2019) in order to evaluate and/or complement the capacity-building achieved in the previous training workshops. These can take the form of additional training sessions and/or more punctual support activities related to the implementation of integration tools (see SO4.2).

The DGD- project unit at RBINS aims at becoming an excellence centre about the link between biodiversity conservation and development or poverty alleviation. Therefore, its web site will be updated and refreshed in order to increase (i) visibility, (ii) transparency, (iii) information sharing with all stakeholders and (iv) information sharing with the broader public. This relates to SO2 and 3 as well.

In order to remain at the spear point of the latest development, the DGD- project needs to be evaluated on a regular basis. Actors and mode of evaluation needs to be assessed, as well as a concrete time line and terms of references.

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

As of 2014, participation and support of RBINS in processes of importance such as the negotiation and elaboration of Indicative Cooperation Programmes (PIC) should be initiated and done in a more systematic way 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.

Starting in 2017, continuous support will be provided for the use and implementation of the integration tools, i.e. the environmental toolkit in its provisions related to biodiversity and the specific practical manuals developed under expected result SO4.2.

Support will also continue to be carried out on a demand-driven basis for other types of procedures or activities. 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,
- participation to the preparation of 'commissions mixtes' of bilateral cooperation,
- punctual support for the follow-up of multilateral agreements
- continue the current support in the CBD process on themes relevant to development cooperation,
- support to the decision-making process of the ministerial office, de definition of positions in the international debate and processes (UN, EU, OCDE, ..)
- 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.

Depending on the results of a pending assessment of environmental mainstreaming in Belgian Development Cooperation, support can include contribution to the elaboration of a new strategic note on environment and/or support to the implementation of the possible subsequent action plan.

4.6. Budget for SO4

Activities	2014	2015	2016	2017	2018	Total/SO
4.1	3,000	8,000	8,000	8,000	8,000	35000
4.2	9,000	10,000	10,000	12,000	12,000	53000
Total/year	12,000	18,000	18,000	20,000	20,000	
					Total	88000 €

Table 10: summary of the budget for SO4

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

The notion of 'MRV' - Measuring, Reporting and Verification - can be conceived as a set of processes and procedures that enable the collection and reporting of factual information (data), their evaluation and audit to determine whether, when and how countries have met their obligations31. The system was initially established under the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. It requires reporting on emission reductions, as well as on financial assistance, technology and capacity building provided by developed countries to developing countries. Although not denominated 'MRV', more or less converging processes have been launched recently for biodiversity. The Biodiversity Indicators Partnership[32] (BIP) was initially mandated by the CBD to help monitor progress towards the 2010 Biodiversity target. However, the BIP has also provided support to other Multilateral Environmental Agreements, national and regional governments and other sectors. The Partnership will continue to supply biodiversity indicator information and trends into the future, and will be a key player for the monitoring of progress towards the Aïchi Biodiversity Targets33 established by the CBD's Strategic Plan for Biodiversity 2011-2020. One issue of particular sensitivity will be the monitoring of financial flows going to the conservation and sustainable use of biodiversity and to equitable sharing of benefits arising from the use of genetic resources. Targets for the mobilisation of financial resources are one of the hot topics under discussion since the Nagoya Summit in 2010.

[31] Definition taken from http://www.climat.be/spip.php?article749 (accessed on 13 June 2012)
[32] http://www.bipindicators.net/
[33] http://www.cbd.int/sp/targets/

5.1. 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 Aïchi Biodiversity Targets, countries will have to formulate indicators and gather data that will populate these.

The RBINS has relatively limited experience on the elaboration and formulation of indicators (largely a regional competence in Belgium) and on the establishment / follow-up of formal 'MRV' processes. This is therefore a relatively new field of expertise for us and we will need to build our own capacities before being fully operational. DGD on the contrary has been, for many years, quite active in the follow-up of all three Rio conventions (climate, biodiversity, and desertification). It has also been following financial discussions on a whole range of environmental issues and has extensive expertise on resource mobilisation. DGDtherefore possesses a unique transversal view of the main issues at stake and will be instrumental in proposing activities that will enable us to meet this specific objective. The RBINS will take the responsibility of identifying the right partners and in delivering outputs of high scientific quality.

5.2. Expected results: general

Expected results (see box #5) are of two kinds:
the first is process-oriented: we aim to build our own expertise on how to establish and follow-up formal MRV processes;
the second is output-oriented: through our work with D2.4 and with our partners, we aim to help develop methodologies to monitor the implementation of the Strategic Plan for Biodiversity 2011-2020 and the progress towards the Aïchi Targets.

Expected results # 5

5.1. Expertise of the RBINS on MRV is built.

5.2. Methodologies to assess progress towards the Aïchi Targets are available.

We will focus our work on specific issues linked to our main fields of expertise and/or priorities:
We will first start with knowledge acquisition. We will scan the literature, identify and, if possible, MRV experts and examine what has been achieved under the CBD, other biodiversity-related conventions and the other Rio Conventions to acquire an overall comprehension on the MRV processes and associated indicators. When needed, we will transmit this knowledge our partners involved in projects linked to MRV (e.g. see specific objective 1 and expected result 1.3 on monitoring data and national indicator processes).

Second, we will help our partners with the establishment of baselines and indicators for public awareness and public participation, as has been started in the 2008-2012 work programme. There is currently no formally agreed indicator on this issue and work is still ongoing to find the best (set of) indicator(s). This has already been reflected under specific objective 3.
Third, a set of indicators for resource mobilisation was adopted by the CBD in 2010. These indicators will likely be complemented by targets in 2012. Work will be needed to gather baseline information as well as subsequent data for this indicator. The RBINS will help DGD gather information and follow this process at the Belgian level.

Finally, it should be noted that no coherent and inclusive set of poverty-biodiversity indicators currently exists. Such set of indicators should serve to measure the interconnections at different levels of interaction of biodiversity and poverty. Formulation work is currently under way at the CBD level34. The RBINS and DGD will follow the results of the undergoing studies, and will increase their own expertise and mastery of poverty-biodiversity indicators. When pertinent, we will encourage and help our partners in developing countries to make such indicators operational.

5.3. Synergies and partnerships

Our main partners in developing countries will be those who already work with us under specific objectives 1 to 3, as results to be obtained under this objective are closely linked to the others. However, this is not exclusive as these partners will act as contact points and relays to MRV specialists in their respective countries.

We will develop synergies with MRV experts in Belgium, either from federal or regional administrations and institutions (e.g. for resource mobilisation) or from universities and NGOs (e.g. for public awareness/public participation). All services of the DGD will be essential in helping us fulfil our objectives, particularly for issues such as resource mobilisation and poverty-biodiversity indicators.

At the international level, the Secretariat of the Convention on Biological Diversity will be a great help for the achievement of our activities.

[34] See http://www.cbd.int/doc/vacancies/2012/scbd/Consultancies/scbd-2012-consultancy-poverty-indicators-en.pdf (accessed 13 June 2012).

5.4. Logframe (partim) for SO5

Specific objectives (SO)	Key indicators (OVI) and targets	
SO5 **To improve the knowledge on the measurement, reporting and verification (MRV) of policy choices and activities linked to biodiversity and ecosystem services**	**Outcome** • RBINS provides advice on MRV to different authorities • tool developed used to monitor and report achievement of Aïchi targets in Belgium and in partner countries	**Outcome Indicators** • tool developed is accepted at level of EU and is applied in developing countries • workshops, seminars about MRV
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 Aïchi targets	
5.2. Methodologies to assess progress towards the Aïchi Targets are available	National indicators are developed and used for reporting towards the Aïchi targets	

Table 11: logframe (partim) for SO5

5.5. Expected results: details

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

During the first year of the programme, activities will be focused on consolidating all relevant information on MRV and identifying existing best practice, via the literature and contact with experts. Among expert institutions to be consulted are the European Environment Agency and one of its partners, the European Topic Centre on Biological Diversity. One of its main tasks is to build capacity for reporting on biodiversity in Europe, mainly through the European Information and Observation Network (Eionet).

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.

Starting in 2014 and during the other years of the programme, following 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 (one aspect already under way) and, on the other hand, determine what activities can/should be monitored through new MRV methodologies.

All internal capacity building efforts will be closely tied to lessons learned in activities under SO5.2.

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

The development of methodologies is necessary for the three levels of MRV, measurement, reporting and verification.

In the field of measurement, a partnership will be undertaken with universities in partner countries and Belgian universities (to be determined) in order to launch research on best practice. The objective will be to assess indicators developed by various countries (probably a pool of ten 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. This activity will be initiated as soon as National Biodiversity Strategies are available, i.e. in the course of the year 2015..

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.

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 this tool that will be at the centre of the reporting processes on Aïchi targets. The use of this new tool by partners countries will be ensured through the training activities planned under SO2.1.

5.6 Budget for SO5

Activities	2014	2015	2016	2017	2018	Total/SO
5.1	8,000	3,000	3,000	3,000	3,000	20000
5.2	11000	28000	20500	30500	30500	120500
Total/year	19,000	31,000	23,500	33,500	33,500	
					Total	140500 €

Table 12: summary of the budget for SO5

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

The fair and equitable sharing of the benefits arising out of the utilization of genetic resources is one of the three objectives of the Convention on Biological Diversity. The 'Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity' – or Nagoya Protocol in short – is an international agreement which aims at sharing the benefits arising from the utilization of genetic resources in a fair and equitable way, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding. As a protocol to the CBD, the Nagoya Protocol is the instrument for the implementation of the access and benefit sharing provisions of the CBD. The Nagoya Protocol also applies to traditional knowledge associated with genetic resources within the scope of the Convention and to the benefits arising from the utilization of such knowledge. The Nagoya Protocol was adopted under the auspices of the Convention on Biological Diversity during the 11th Conference of the Parties, in Nagoya (Japan) in 2010. Many countries still need to sign and ratify the Nagoya Protocol for it to enter into force: it will enter into force 90 days after the date of deposit of the 50th instrument of ratification. As of June 2012, only five countries have ratified the Protocol. The Nagoya Protocol will only be legally binding for the countries that do sign and ratify it. Belgium has signed the Protocol in 2011 and now is in the process of preparing its ratification. This process will closely be linked to that of the European Union, as access and benefit sharing relies on both European and national competencies.

6.1. Background

The RBINS and D2.4 both have rather limited experience on genetic resources, access and benefit sharing provisions or traditional knowledge associated to the use of genetic resources. They have followed the issue in their respective work related to the Convention on Biological Diversity, but without necessarily developing expertise or playing an active role in the process. At the Belgian level, many other interested parties are in a similar situation with the exception of the National Botanical Garden that does have some experience through European networks.

In order to clarify the implications of the Nagoya Protocol for Belgium, the Federal Public Service for Public Health, Security of the Food Chain and Environment and the environment administrations of the three regions have launched in 2012 a study that should prepare the

ratification of the treaty by Belgium35. Based on the result of this study it was decided during the Inter-Governmental Conference of Environment Ministers meeting in November 2013, to extend the mandate for the CHM of RBINS to include as well the Access and Benefit Sharing - Clearing House.

Implementation in Belgium involves the federal level, the Regions and the Communities, and could include both legal and non-legal measures. This scope is extremely broad and goes far beyond the fields of competences of both the RBINS and DGD. For this reason, we propose to focus our activities during this work programme on issues that are within our expertise, i.e. capacity building, public awareness and information management (and the focus of these will depend on the results of the ongoing multilateral negotiations and of the 2012 Belgian study).

6.2. Expected results: general

Expected results (see box #6) are process and output-oriented :

The first result is process-oriented. Given that the Nagoya Protocol is fairly new and that is still needs quite a lot of work and many negotiations to make it operational, the RBINS and DGD will concentrate their efforts on understanding the process at hand and on building their own capacities.

The second result is output-oriented. We will contribute to raising awareness in Belgium on the Protocol and its implications for various categories of stakeholders, one of these being the scientific community involved in biodiversity exploration. Given that we have no established baselines, and that it is a fairly new issue, we will concentrate on producing outputs of limited scope.

Expected results # 6

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.

In practice, this has the following implications:

As a scientific institution, one of the RBINS' target audiences will be the scientific biodiversity community, whether in Belgium or in partner institutions in developing countries. This scientific community is directly concerned by the provisions on non-commercial research under the Protocol, and needs to be informed of the future implications of the Nagoya Protocol for their work.

Other activities will depend on the evolution of the process, in Belgium, in Europe and at the international level. We will closely remain in touch with the ABS Focal Point at the Federal Public

[35] Study for the implementation in Belgium of the Nagoya Protocol on Access and Benefit Sharing to the Convention on Biological Diversity, BIOGOV Unit of the Centre for Philosophy of Law, Université Catholique de Louvain. See the results of the workshop of 29 May 2010, which presented the preliminary results, on the Belgian CHM website: http://www.biodiv.be/implementation/cross-cutting-issues/abs (accessed 19 July 2012).

Service Public Health, Food Chain Safety and Environment and with the main ABS contact points in the three Belgian regions. One of the basis for our work will be the 'Awareness-raising strategy for the Nagoya Protocol on access and benefit-sharing' to be adopted at the 11th Conference of the Parties of the CBD in October 201236.

In parallel, we will be attentive of developments on ABS carried out in our main partner countries. Some of them already have started awareness raising activities or have prepared communication plans (such as Benin for example) and we will certainly gain from their experience. If needed, we will help our partners launch projects linked to ABS issues but this might not be needed as there are / will be ample methodological support and funds available via a number of global initiatives (such as the Japan Biodiversity Fund)37.

6.3. Synergies and partnerships

The main partners for implementing this objective are the federal and regional administrations in charge of the ABS process in Belgium38, as well as the universities and scientific institutions who have developed an academic expertise on this issue. In this respect a formal agreement has been signed between the RBINS and the Federal Public Service for Health, Food Chain Safety and the Environment, Environment Directorate-General, Service for multilateral and strategic matters (SPSCAE) for collaborating in training workshop to inform Belgian stakeholders. In our partner countries, we will work with the administrations in charge of ABS issues as well as with their own national ABS networks.

Morocco © H. de Koeijer/RBINS

[36] See document UNEP/CBD/ICNP/2/L.4, adopted in July 2012 by the 2nd Intergovernmental Committee for the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, www.cbd.int/doc/meetings/abs/icnp-02/in-session/icnp-02-L-04-en.doc (accessed on 19 July 2012).
[37] http://www.cbd.int/jbf/ (accessed on 12 September 2012).
[38] The four commissioners of the 2012 ABS study are: the Federal Public Service for Health, Food Chain Safety and the Environment, Environment Directorate-General, Service for multilateral and strategic matters (SPSCAE), Bruxelles Environnement/Leefmilieu Brussel (IBGE-BIM), Vlaamse overheid, Departement Leefmilieu, Natuur en Energie (LNE), Service public de Wallonie, Direction générale opérationnelle Agriculture, Ressources naturelles et Environnement (DGARNE). Other administrations are involved at crucial steps of the study through workshops meant to collect views and comments on possible options for the implementation of the core obligations of the NP.

6.4. Logframe (partim) for SO6

Specific objectives (SO)	Key indicators (OVI) and targets	
SO6 **To raise awareness on, and build capacities for, the implementation of the Nagoya Protocol on Access and Benefit Sharing**	**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	**Outcome Indicators** • Workshops, seminars • Implementation of Nagoya Protocol on the basis of guidance material such as e.g. dissemination papers produced by the National Biodiversity Authority of India[39]
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.	
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	

Table 13: logframe (partim) for SO6

6.5. Expected results: details

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

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 on both levels. Also the person will ensure during the preparation of and also at the SBSTTA, WGRI and COP meetings the follow up for DGD in

[39] National Biodiversity Authority, 2013. Valuation of biodiversity- dissemination papers 1-3, Chennai,Tamil Nadu, India.

cooperation with the ABS and Nagoya Protocol Belgian focal point. Participation to the international working group on capacity building for the Nagoya Protocol can also be part of the activities but will depend on the acceptance by the Secretariat of the 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.

Briefing papers will be sent on a regular basis to the DGD to inform them on issues that have implications for developing cooperation.

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

RBINS is well placed to become NP-CH focal point for Belgium. It will depend on the political choices that will be made while drafting the legislation for the implementation of the NP in Belgium in 2013 - 2014. In case that the RBINS is designated NP-CH focal point it will imply organising information sessions to the scientific community, training the scientific community to fill in the necessary documents and report on a regular interval on research that has been done with the imported specimen.

It will also imply information sessions for other authorities, like customs officers, on the implications of NP on obligatory documents that have to accompany imported specimen. In collaboration with the authority that will do the follow up on the collections and research that has been done with NP specimen, follow-up reporting should be ensured by the NP-CH.

This experience will be used to assist partner countries on their demand to organise information sessions for the scientific community in their country.

At this moment a budget cannot yet be established as there are many factors that will influence what tasks will be asked and developments on the capacity building strategy for the NP. An expert meeting will be organised by the CBD in June 2013 and Belgium has nominated one of the team members to the Secretariat so he can participate. However if big organisations like UNEP-GEF, or countries like Germany and Japan will finance capacity building workshops in developing countries, the Belgian efforts will be too small in comparison and should not be started except if there is niche with the NP-CH.

6.6. Budget for SO6

Activities	2014	2015	2016	2017	2018	Total/SO
6.1	10,501	5,000	5,500	1,000	1,000	23001
6.2	500	10,000	19,500	15,000	15,000	60000
Total/year	11,001	15,000	25,000	16,000	16,000	
					Total	83001 €

Table 14: summary of the budget for SO6

7. Coordination and management

7.1. Background

The DGD-RBINS pluri-annual programme is a policy support and capacity building unit under the Operational Directorate 'Natural environment' of RBINS, headed by the operational director Patrick Roose. It is coordinated by a coordinator and managed by the coordinator (Luc Janssens de Bisthoven), an administrative support staff (3 persons: Mariam Agarad, Vincent Pinton, Kristien Vrancken) and three scientists (Han de Koeijer, François Muhasy, Marie-Lucie Susini). Moreover, the project supports a number of salary months for 2 scientists of RBINS working at the MUMM (Management Unit of the North Sea Mathematical Models and the Scheldt estuary), a department of RBINS (Patrick Luyten and Katrijn Baetens). The unit works closely with a scientist at RBINS, Erik Verheyen, concerning the capacity building in Kisangani (RDC). A new colleague scientist will be recruited in 2014 in order to contribute to o.a. the implementation of SO3, SO5 and SO6.

7.2. Logframe (partim) for coordination & management

Specific Objective (SO)	**Key indicators (OVI) and targets**	
7. Coordination and Management	**Outcome**	**Outcome Indicators**
	• The project is properly coordinated and managed in order to implement smoothly the 16 expected results	• Quality planning and reporting • Team is valorised and DGD-unit recognised as a centre of excellence for biodiversity and poverty eradication through

	under the 6 specific objectives	numerous invitations, questions, requests
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 trainees, trainings, workshops, symposia, projects, awareness campaigns and functioning CHM websites in developing countries • Audit • Paperwork • Functional computers, equipment (servers…)	

Table 15: logframe (partim) for 'coordination and management'

7.3. Budget for SO7, Coordination & Management

Activities	2014	2015	2016	2017	2018	Total/SO
7.1	2,000	2,000	2,000	22,000	2,000	
Total/year	Total					30000 €

Table 16: summary of the budget for SO7

The higher amount in 2017 is due to the mid term evaluation.

ANNEXES

Numbering of expected results and activities is coherent with the respective specific objectives and is the same in the logframe, in the operational plans (annex 2) and the budget table (annex 3). This facilitates result based management of the project.

Annex 1: Logframe matrix Phase I (2014-2018)

see word file

Annex 2: operational plan Phase I (2014-2018)

See Exel file

Annex 3: budget phase I (2014-2018)

see Exel file

Annex 4: Partnerships phase I (2014-2018)

see Exel file

Annex 5: Aïchi targets and DGD-RBINS pluri-annual programme

- Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society
- Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use
- Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity
- Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services
- Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building

Icon	***Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society***	**Specific objective of the DGD-RBINS pluri-annual programme**
	**Target 1** By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	**SO2, SO3 on awareness**
	**Target 2** By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	**SO4, SO5 and the whole DGD-RBINS pluri-annual programme**
	**Target 3** By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.	
	**Target 4** By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.	**SO1 knowledge provides scientific arguments**
Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use		
	**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.	**SO1, 1.2.B and C focus on forest ecosystems**

	**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.	**SO1, 1.1, 1.2C deal with aquatic organisms**
	**Target 7** By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	**SO1**
	**Target 8** By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.	
	**Target 9** By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.	
	**Target 10** By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.	**SO1, 1.2D deals with marine ecosystems**
Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity		
	**Target 11** By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	**SO1, 1.2D deals with marine ecosystems, 1.2.B and C deal with terrestrial and freshwater ecosystems**
	**Target 12** By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	**The knowledge of endangered species is only possible if their taxonomy is known, tackled with under SO1**
	**Target 13** By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.	**topic of research under SO1**
Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services		

	**Target 14** By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.	**topic of research under SO1**
	**Target 15** By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.	**topic of research under SO1**
	**Target 16** By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.	**SO6**
Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building		
	**Target 17** By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.	**SO5**
	**Target 18** By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.	**SO6, but also aspects under SO1, 1.2B**
	**Target 19** By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.	**topic of research under SO1**
	**Target 20** By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	**It is essential that developing countries have enough resources.**

Annex 6: Strategic action plan of the DGD-RBINS pluri-annual programme for the Operational Direction 'Nature' of RBINS

This annex is integral part of the strategic action plan of the Operational Direction 'Nature' of RBINS and refers to its strategic goals 1 (research and expertise in aquatic and terrestrial ecosystems) and 2 (centre for biodiversity research, policy support and advice).

STRATEGIC ACTION PLAN DGD-RBINS PLURI-ANNUAL PROGRAMME

SHORT TERM ACTIONS 2014-2015

Strategic Goal	Objective(s) =specific objectives strategical plan 2014-2023	Action	Actor (s)	Target date	Indicator(s)
1, 2	Strategic plan DGD-RBINS pluri-annual programme	-Cooperation protocol DGD-Belspo	Directors RBINS, RMCA, Belspo, DGD, Luc	End of February 2014	Signed cooperation protocol
		five year plan and 2014 year programme	Luc, Han, DGD	End of February 2014	Approved 5 year plan and 2014 year programme
		-recruitment of SWI on awareness, MRV, Nagoya protocol -recruitment SWII on habitat monitoring	Luc, director, HR	April-May 2014	Vacature, Work contract
		-web site of DGD-RBINS pluri-annual programme/ increased visibility through folder	Luc, Kristien, Marie-Lucie	November 2014	Web site, linked to new web site of RBINS, www.biodiv.be and www.taxonomy.be , folder, uptake in Science Connection (begin of 2014)
		--response to BRAIN, IFS and others -involvement in OECD Environet, SDSN, IPBES, KLIMOS, Acropolis -improve PCM, result based management, IT management	Luc and team		
1-research and expertise in aquatic	-Specific Objective (SO) 1: scientific and technical knowledge	Institutional strengthening in Burundi, Benin, DR Congo, Vietnam and Peru			

and terrestrial ecosystems	base…	1/formulation institutional cooperation Benin and Burundi, lexica	François, Han, Luc, , partners	-Indicative April 2014: formulation partnership Benin -Indicative middle 2014: formulation partnership Burundi, September 2014?	Logframes for Benin and Burundi, MoU for 5 year
		2/strengthening ties DR Congo, lexica	François, Luc, Erik, partners	-conference CSB Kisangani June 2014 onder voorbehoud van veiligheid	
		3/strengthening institutional cooperation with Peru and Vietnam (Coherens), evnt formulation in Peru on demand of DGD	Patrick Luyten and Katrijn Baetens, Luc		MoU, integration in PIC Belgian cooperation if feasible
		Grants programme for individuals and field work/workshops in situ through competitive calls			
		1/optimalisation of administrative procedures: e.g. tax-free export small material, receipt of material, calls at VLIR-UOS web site etc…	Luc, Marie-Lucie, Vincent	-Optimisation of grants programme first half of 2014	calls and mobility for grantees functional according to new modalities
		2/inclusion of poverty reduction and ecosystem services in contents of the calls, evaluation forms supervisors and grantees	François, Luc, Erik, Marie –Lucie, scientists RBINS , partners		
		-AbcTaxa	- Samyn, Kristien, Christian, partners		
2-centre for biodiversity research, policy support and advice	-SO2: information base…	Institutional strengthening in more than 10 African countries through capacity development and South-South cooperation	Han, Marie-Lucie, , partners	-development of CHM networks in 2014-2015	Increased south south cooperation agreements, MoUs
		A more efficient input into the Belgian CHM in cooperation with the NFP	Han, Marc, Anne-Julie	First half of 2014	

	-SO3: awareness…	Archivage and book on Katanga	Han, Kristien + Michel Hasson+MRAC	End of 2014	Book
		Competitive calls for projects on awareness	Han, Marie-Lucie, Kristien	March 2014	
	-SO4: mainstreaming and policy	Workshops, seminars, teaching modules for DGD, attachés and other stakeholders	Luc, Han, Marie-Lucie, new SW1, François	-inclusion of CAPA in calls, alignment with other actors such as VVOB (meeting Febr. 2014) Clear plan of teaching at DGD by September 2014	MoU with VVOB by the end of 2014 Operational plan for teaching/ depends on demands by DGD
		Active involvement in international negotiations and processes (e.g. COP, SBSTTA, WGRI, EU)	Luc, Han, Marie-Lucie, new SW1	Follow up Chennai recommendations (Luc) ICNP3: February 2014 (Han) WGRI 5: June 2014 (Han) SBSTTA18: June 2014 (Marie-Lucie) COP12: October 2014 (Luc, Han)	Conference reports, mission reports EU reports, ratification text
	-SO5: measurement, reporting and verification (MRV)…	Competitive calls for projects on MRV	Luc, new SWI	September 2014	
	-SO6: Nagoya Protocol on ABS	Workshops, seminars, teaching modules for DGD, attachés and other stakeholders: participation to peer review belgian and European positions	Han, new SWI	Up to October 2014 for ratification/ South Korea (Han) Febr 2014	Conference reports, mission reports EU reports, ratification text

MIDDLE TERM ACTIONS 2016-2018

Strategic Goal	Objective(s)	Action	Actor(s)	Target date	Indicator(s)
1, 2	Strategic plan DGD-RBINS pluri-annual programme	-preparation and implementation of of mid term evaluation + integration of recommendations	-coordinator, Belspo	Mid 2018	TOR, mid term evaluation, report of strategic committee
		-exploration and eventual start of cooperation with Tanzania and Algeria or other countries Mediterranean sea in cooperation with attachés, DGD	Coherens	2015-2016, eventually already in 2014-2015	Integration in PIC
		-lexica Benin, RDC and Burundi -AbcTaxa Publications, Posters, workshops	François, Marie-Lucie, Erik, Samyn, Katrijn, RBINS staff, grantees		
1-research and expertise in aquatic and terrestrial ecosystems	-Specific Objective (SO) 1: scientific and technical knowledge base…	-scoping/ review paper on thematics of biodiversity and capacity building-ecosystem services -synergies with VLIR-UOS and CUD, including social sciences -extension towards Ethiopia, Tanzania -work on alumni and e-learning	Luc and co-authors		Lexica, calls, projects, Volumes of AbcTaxa Accepted article
2-centre for biodiversity research, policy support and advice	-SO2: information base… -SO3: awareness… -SO4: mainstreaming and policy -SO5: measurement, reporting and verification (MRV)… -SO6: Nagoya Protocol on ABS	-implementation awareness calls, involvement of APEFE -CHM training and calls -GTI -habitat monitoring in Benin, Burundi, RDC -strengthening CSB in Kisangani -implementation of MRV actions -implementation of teaching meanstreaming DGD -implementation of actions on Nagoya protocol -further SBSTTA, WGRI and COP meetings, WPEI	Han, new SWI Han, Marie-Lucie Marie-Lucie François, E. Verheyen Yves, Kristien Whole team		

LONG TERM ACTIONS 2018-2023

Strategic Goal	Objective(s)	Action	Actor(s)	Target date	Indicator(s)
1, 2	Strategic plan DGD-RBINS pluri-annual programme	-implementation of the recommendations of the mid-term evaluation, with new 5 year programme -preparation and implementation of end of term evaluation+ recommendations To be a centre of excellence for biodiversity and sustainable development	-coordinator, Belspo	Mid 2023	TOR, mid term evaluation, report of strategic committee
1-research and expertise in aquatic and terrestrial ecosystems	-Specific Objective (SO) 1: scientific and technical knowledge base…	-scoping of results into seminar/congress on biodiversity and ecosystem services in developing countries	team	To be worked out	Conference proceedings, special issue journal
2-centre for biodiversity research, policy support and advice	-SO2: information base… -SO3: awareness… -SO4: mainstreaming and policy -SO5: measurement, reporting and verification (MRV)… -SO6: Nagoya Protocol on ABS	- extension of teaching / mainstreaming of biodiversity and NP towards -BTC -Koepelorganisatie 11111 -Industrie en handelskamers -Belgische ambassades	team	Tweede fase van strategisch plan, eventueel met enkele aspecten al in eerste fase	Teaching modules, agreements with BTC, NGOs, DGD…