

Synthesis and assessment of the 2008-2012 period DGD-RBINS programme

Including a summary of the self-assessment for the period 2008 to 2011



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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 Hydrodynamical 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
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
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	Flemish Interuniversity Council, Belgium

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Executive summary

At the demand of DGD and Belspo, a synthesis of the programme DGD-RBINS for the period 2008-2012 has been made in August-September 2013 in order to inform the steering committee in view of the activity programme 2014-2018.

After a short introduction explaining the five specific objectives of the DGD-RBINS programme 2008-2012 and the general architecture of the programme, generic characteristics of the interventions are provided.

The self-assessment (full text in annex) for the period 2008-2011 is summarised per component of the programme for performance indicators, strengths and weaknesses, lessons learned and recommendations. Trends over the period 2008-2012 for indicators, output and financial means are explained. A SWOT analysis is provided, followed by conclusions.

The self-assessment highlighted the many strengths of the project, especially the small-scale tailor-made and personal approach and high dedication of staff, project promoters, and trainees, as well as the quality output, as expressed in numbers of projects, trainings and trainees, workshops, upgraded web sites, international meetings, graduates, experimental plots, digitalised and disseminated archives and publications. Also the points of attention to be taken towards the next strategy period are highlighted. E.g. the low computer and English literacy in RD Congo, the need for more field workshops in the context of habitat monitoring in RDC and elsewhere, the need to continue organising regional CHM meetings and to promote distance learning, the optimisation of data recording and other procedures for the programme and the need to improve the editing and dissemination processes of AbcTaxa. Meanwhile this last has been remediated. There is the urgency to remain at the spear point of internationally accepted recognised capacity building practices, to improve the visibility of the project and of the interventions, to enhance communication about the link between biodiversity and other environmental themes, and to optimise the use of indicators in a result based management approach.

The observed trends over the period 2008-2012 show a steady increase of funding by DGD according to new emerging needs, awareness and prioritization of the biodiversity on the political agenda, nationally and internationally, together with the confirmation that the specific expertise of individuals at RBINS offers a real added value to the programme. Concerning the cost structure, the proportion of operational costs to salaries is relatively stable over time. Further, the number of trainings and trainees in the South and in Belgium increases over the years.

As usual, outcome and impact are difficult to measure, but one can conclude that the DGD-RBINS programme is creating a global community of highly skilled practitioners (scientists, web masters, civil servants) in selected developing countries of the Belgian cooperation and settles an increasingly visible and proactive Belgian position on the international scene of capacity building and partnerships concerning biodiversity and development in the framework of the Rio conventions and national and international obligations. It is the expectation that such community will act as multipliers and goodwill ambassadors for the seek of preserving biodiversity in their own countries and regions by providing scientific input at the science-policy interphase, hence influencing policies in order to enhance the biodiversity status of their

countries and regions. These policies and increased knowledge about the local ecosystems, when leading to a better conservation, management and use of natural resources and biodiversity in the broad sense (species, ecosystems, genetic variety) are expected to support development, income raising and poverty reduction in a sustainable way.

Context

During the steering committee meeting of 26 June 2013, the annual report for the activities in 2012 has been presented and approved. DGD and BELSPO asked to complement this report with a synthesis of the major developments, trends and results obtained during the last 5 years of the project, in order to be able to better articulate and identify the challenges when implementing the new strategy 2014-2023. This is the present paper.

The RBINS-DGD specific convention aims to support the implementation of national, regional and international biodiversity policy, in particular the Convention on Biological Diversity (CBD). The 2008-2012 work programme focused on building capacities to study biodiversity, share scientific and technical information, offer scientific support to policy processes and raise awareness on the importance of biodiversity for development. It included the following sub-programmes:

- T1. Tackling the taxonomic impediment (GTI): offering training in taxonomy and collections management.
- T2. Supporting biodiversity inventories, monitoring and assessments (IMAB): field- and lab-oriented training on the monitoring and modelling of species and ecosystems, with the view to improve biodiversity conservation and management.
- T3. Enhancing biodiversity information networks (CHM): building biodiversity information networks, by strengthening human capacities and setting up electronic networks.
- T4. Providing scientific support to biodiversity policy (POL): delivery of expertise on issues linking biodiversity and development.
- T5. Coordination and management (COORD): coordination and management, as well as transversal issues such as project communication, networking and outreach.
- T2010. Celebrating the International Year of Biodiversity (CEPA): a special component set up for the international year of biodiversity in 2010.

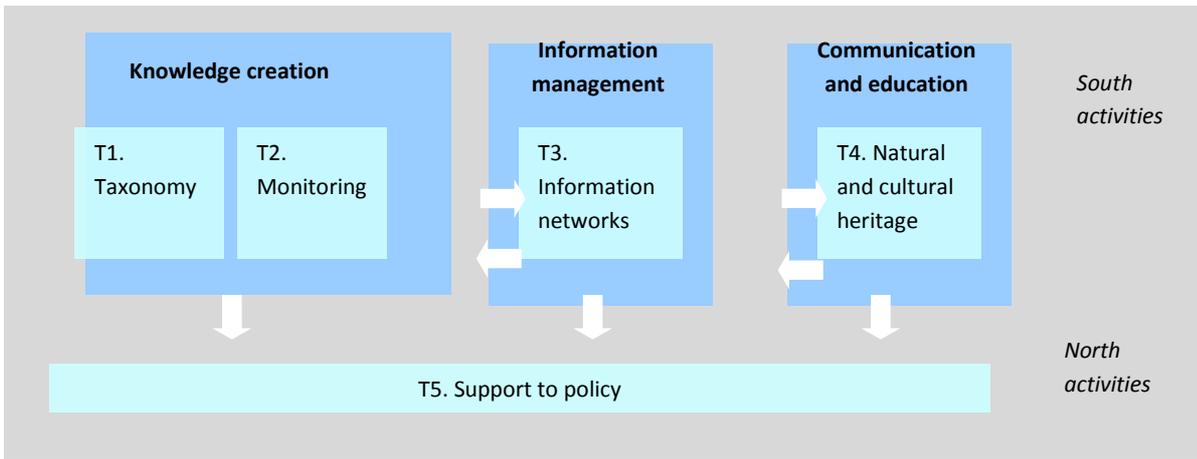


Fig. 1. Organisation of the programme of activities into its various sub-programmes

The current document provides an overview of the major trends and results of the project, as well as a summary of a self-assessment that covers the first four years of the work programme, from 2008 till 2011. The last year of the programme has not been evaluated because that self-evaluation exercise was done in 2012.

The structure or 'general architecture' of the DGD-RBINS programme can be summarized in the following scheme.

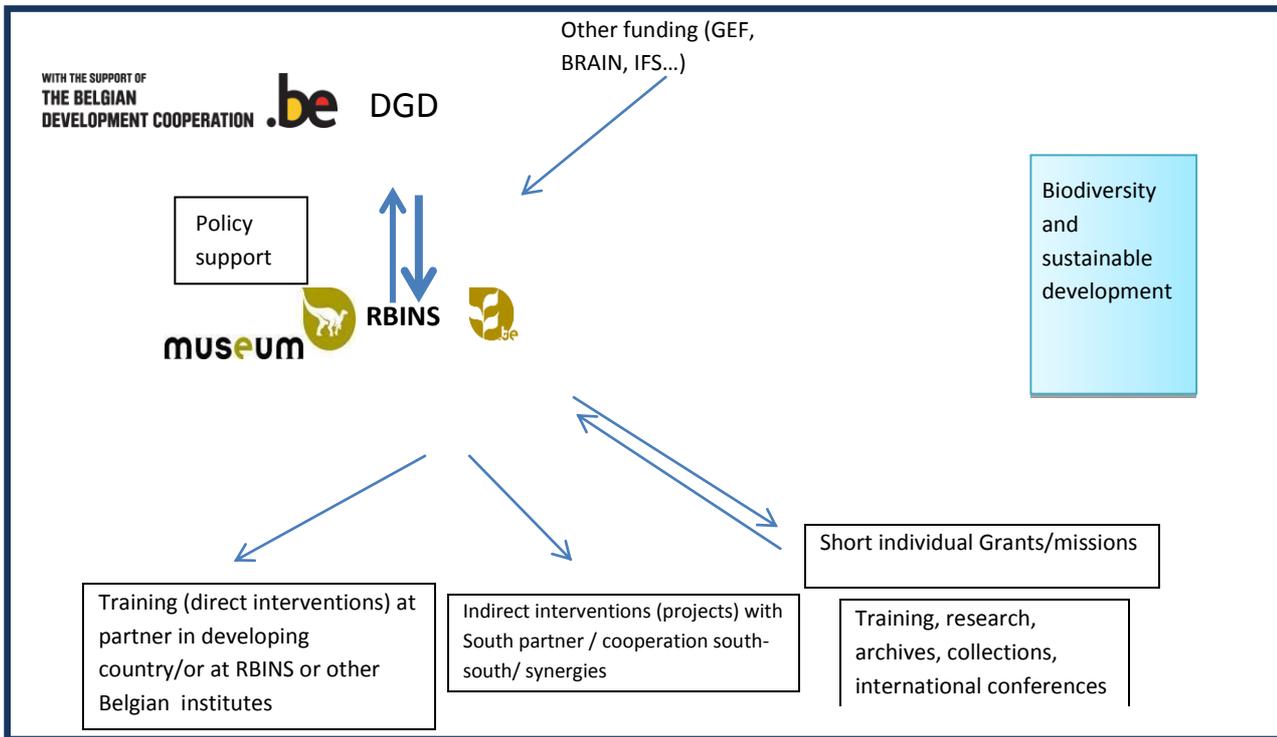


Fig. 2. General architecture of the programme

Characteristics of the interventions

It is helpful to give an overview of the modalities and generic interventions which the DGD-RBINS programme is organising.

Eligibility criteria

When selecting candidates or projects submitted to a competitive call or ad hoc interventions, the eligibility criteria are

- relevance to development or link to poverty alleviation,
- eventual track record of cooperation,
- Country of intervention,
- Scientific quality,
- Relevance to the management or conservation of biodiversity
- Adherence to the other criteria listed in the call

Interventions

The DGD-RBINS programme strives at capacity building through short individual or group trainings in the field of biodiversity. The trainings last between 1 week and max. 6 months and don't deliver any diploma, but a certificate of successful participation. The aim is to strengthen the candidates in their function to promote biodiversity linked to development in their country through knowledge and expertise acquisition and dissemination, increased and better information flow, awareness raising, and policy mainstreaming (strategy 2008-2012).

General objectives

Promoting the knowledge and sustainable use of ecosystem services

Anchoring biodiversity to development and good governance

The target public in developing countries:

- Master or PhD students
- Post-docs or lecturers
- Managers in nature conservation institutes, government agencies, ministries
- Webmasters at focal points, ministries
- Technical personnel such as park rangers, civil servants

The target public in Belgium:

- Staff at DGD

In the next strategy the following public will be targeted:

- NGOs and other agencies
- Private sector (e.g. through KAURI, Chambers of commerce)
- Embassies in Belgium and locally
- BTC in Belgium and locally

The calls (as for 2008-2012)

- Calls for short grants (GTI) for training, research
 - Open within constraints of eligibility criteria
 - Competitive
 - 1 call/year: for scientists of RBINS → South
 - 1 call/year: for Southern scientists → Belgium
- Calls for in situ projects (GTI, CHM):
 - Open or directed
 - competitive
 - 1 call/year for CHM webmasters
 - 1 call/year for awareness raising

Other interventions

Institutional partnerships (interventions within GTI, IMAB, CHM)

Specific publications: AbcTaxa and lexicons

Support to publications (GTI and IMAB)

Setting-up and follow-up of national web sites (CHM)

Workshops/training in South (IMAB, GTI, CHM), in North (CHM) and through e-learning (CHM)

Support of Masters and PhD students

Summary of self-assessment

The full narrative of the self assessment can be found in annex 1 (GTI) , annex 2 (CHM, IMAB, POL, GTI distance learning, COORD) and annex 3 (bees). A summary of the occurrence of information found in the self-assessments (annexes 1-3) is provided in table 1. Note that elements of ‘outcome’, even though not explicitly covered by GTI and IMAB, are present in the other chapters.

Table 1. Occurrence of information in self-assessments

Component	Relevance	Efficiency	Efficacy	Impact	Sustainability	Outcome	Weaknesses	Strengths	Lessons learned	Recommendations
GTI	X	X	X	X	X	-	X	X	X	X
Distance learning	X	X	X	X	X	-	X	X	X	X
IMAB Kisangani	X	X	X	X	X	-	X	X	X	X
IMAB ICCN	X	X	X	X	X	-	X	X	X	X
IMAB Coherens	-	-	-	-	-	-	-	-	X	X

CHM	X	X	X	X	X	X	X	X	X	X
POL	X	X	X	X	X	-	X	X	X	X
COORD	-	-	-	-	-	-	X	X	X	X
CEPA	-	-	-	-	-	X	-	-	X	X

A tabular summary of the self-assessment is provided in annex 4 (table 1-4).

The main conclusions drawn from tables 1-4 of annex 4 are summarized in the next series of tables. Note that the statements are new statements based on the original text to achieve a more concise format.

Table 2. Summary of self-assessments (see annex 4) for performance, weaknesses, strengths, lessons learned and recommendations

Relevance	
GTI	GTI is fully justified to organise short trainings at the collections in Belgium and workshops in situ, since possibilities for early career taxonomists in developing countries need to be created. Similarly, Abc Taxa liberates useful taxonomic knowledge for such countries.
Distance learning	It is confirmed by the statistics of the GTI web site that there is a real demand to inform on line.
IMAB Kisangani	Impediments with the outcome of seminars are insufficient internet connection, low English skills, as well as low computer skills. Nevertheless, word is spreading at Unikis about the advantages of such seminars. Visits to Belgium promote academic careers and prepare the path for the “releve académique” at UNIKIS with an old staff near to retirement. Field campaigns bring material, but also new logistic skills. Training of a central curator at CSB is a necessary step for a better management of collections. Outdated antivirus software and harsh climatic conditions for IT remain a problem.
IMAB ICCN	It is relevant to train personnel through workshops in LEM and on the experimental plots since it brings field work to be ‘fashionable’ and providing input for a better management of natural resources.
IMAB Coherens	Not provided
CHM	COP decisions very clearly show the high demand for CHM. This invites developing countries to seek support from Belgium.
POL	Policy advice to DGD is demand-driven, flexible and tailor made, which is pertinent over time.
COORD	Not provided
CEPA	Not provided
Efficiency	
GTI	Small grants schemes remain relatively expensive and efficiency increases with a proper identification of target public and topic, and limited to small infrastructure. Distribution of Abc Taxa does not yield expected result.
Distance learning	Since 2009 active, initial training in PTK slowed down the process but now reached good level.
IMAB Kisangani	Local conditions are harsh (climate, lack of skills) and influence efficiency.
IMAB ICCN	It is expensive and time consuming to bring together stakeholders from 10 different protected areas together. Syllabus and lexicons distributed personally without much costs. Workshops combined with preparation of lexicon increased efficiency. Some mismatch between expected and realised created 15% over cost.
IMAB Coherens	Not provided

CHM	Increased numbers of websites, web site visits and trained people, compared with period 2003-2007, due to co-financing with GEF and switch from html to PTK software. Personal support and information on writing proposal helped a lot as well.
POL	Time spent relatively low to number of demands; However better prioritization would increase efficiency. DGD-project is only one player as biodiversity expertise and some confusion present as to the roles of e.g; KLIMOS and DGD project.
COORD	Not provided
CEPA	Not provided
Effectiveness	
GTI	Good awareness with Belgian promoters. However drop-outs quite common due to other motivation than contents (per diem...). Positive reviews of publications.
Distance learning	Manuals and exercises available online and e-coaching started, so objectives are achieved.
IMAB Kisangani	Seminars locally suffer from small returns on investment. Visits to Belgium helps consolidate the researcher in his field. Foeld work (Congo expedition) has a strong rallying effect with longer term consequences.
IMAB ICCN	Workshops including theory and practice received echoes to be continued in the protected areas. Due to rebel activity, some delay in production of lexicon. Tele-training locally suffers from lack of internet. Bad centralised coordination of LEM by ICCN.
IMAB Coherens	Not provided
CHM	External factors such as death cases, other priorities of the national focal points and political unrest slow down the effects of the local workshops. Despite small budgets, the CHM calls (reinforcement especially) remain popular. Many delays due to poor personnel performance in national focal points (especially RDC, Zambia, Mali, Rwanda).
POL	It is perceived that biodiversity is not always high on the political agenda, surpassed by climate change. More proactivity is needed. Therefore training of civil servants at DGD remain fundamental, to mainstream biodiversity. This training also enables the RBINS staff to better grasp the world of cooperation.
COORD	Not provided
CEPA	Not provided
Impact	
GTI	Many publications, but it remains too much from North initiatives. The role of alumni in the short and long term cannot be underestimated in terms of projects and publications. AbcTaxa clearly meets a need, as number of requests and abstracting show.
Distance learning	Started too recently, no impact measured yet.
IMAB Kisangani	Trained academics will see new opportunities in their respective careers.
IMAB ICCN	High demand of ICCN staff member to be trained and wide echo in local press show the impact of the LEM workshops beyond the trainees themselves. High interest for the lexicons is noted as well. Tele training prepared people better for local workshops. Rangers enthusiastic, but turn-over of rangers is mitigating effect. Habitat changes, invasive liana and consequences for gorillas are under discussion.
IMAB Coherens	Not provided
CHM	Multiplier effect spread to 12 non partner countries to develop their national CHM, also to more local workshops organised and more information posted on the CHM. Four countries adopted national CHM and recommendations of regional meeting were taken up in COP. Impact of awareness difficult to assess, however number of people and echo in press encouraging. Maintenance of web hosting remains an issue.
POL	Growing support for CSB in Kisangani shows increasing awareness and priority at DGD for biodiversity and recognising RBINS and MRAC as expert centres for biodiversity. Positive impacts seen in nominations, participation in peer reviews and strong participation in EU and COP meetings.
COORD	Not provided
CEPA	Not provided
Sustainability	
GTI	Some alumni advanced in their career. Personal relation between tutor and trainee essential for long term cooperation. Publications stand test of time.

Distance learning	Update of manuals is mandatory to reflect on bugs and improve the software with the software deliver company. E-coaching needed to provide distance learning. Use of PTK on their own is possible. Use of PTK as a support tool for the Belgian delegation at COP10.
IMAB Kisangani	Several people are willing to invest in activities that may lead to an academic career. Difficult conditions hamper sustainability.
IMAB ICCN	Habitat dynamics workshops at ICCN depend on external funding. Production of educational material is in Belgium and locally, without much problems. Access to internet is a handicap for LEM. Permanent plots offer possibilities not fully exploited by ICCN.
IMAB Coherens CHM	Not provided External funds remain a prerequisite to organise CHM workshops. Allocation of national budgets to CHM should increase under increasing international pressure for national obligations. Other funding plays a role as well, such as GEF and the Netherlands for Ghana.
POL	Provision of expertise is one of the core missions of RBINS. Financial support to the salaries is needed, if this support is to be maintained.
COORD	Not provided
CEPA	Not provided
Outcome	
GTI	Not provided
Distance learning	Not provided
IMAB Kisangani	Not provided
IMAB ICCN	Not provided
IMAB Coherens CHM	Not provided Information and functionalities added to national CHM, sites launched, after the trainings in several countries. Public awareness linked to CHM. Turnover and deaths hamper some positive outcome.
POL	Not provided
COORD	Not provided
CEPA	AbcTaxa on bees translated in French. South South cooperation between Burundi and south Africa is one of the side effects of the bee party organised in 2010, as well as the launch of an institutional partnership between RBINS and INECN. Methodologies exchanged about inventories, conservation of material and identification of bees. Awareness on pollinators is raised.
Weaknesses	
GTI	Budgets too small to ensure structural conservation of collections and large infrastructure in developing countries. Needs assessment not global enough, mostly national and biased to promoters' field of expertise. Competition from global and sophisticated databases on all taxa. Not all capacities for every taxon present in Belgium and taxonomic expertise is dwindling.
Distance learning	Lack of time line and expected output hamper e-learning process, but modernised CHM e-learning is proving good. GTI is not a real e-learning module, more a provider of information.
IMAB Kisangani	Computer virus and lack of English skills, as well as lack of transparency amongst local researchers to share information are obstacles. Educational tools need to be developed. English courses and UNIVERSITIC are now in place through VLIR-UOS and CUD. Very enthusiastic visiting researchers. Skills in literature search, statistics, analytical tools, experimental design and conceptual work need special attention.
IMAB ICCN	Implementation of LEM is hampered by delays of activity reports of field work, postponing annual campaigns, under-utilization of trained man power, weak support of some local managers and lack of adequate herbarium facilities.
IMAB Coherens	Not provided
CHM	Follow-up locally of CHM workshop is much depending on follow-up financing, otherwise it is restricted to added information on the web site. Calls not always attractive to countries because of small budgets. No adaptation of calls for small and large countries. Some partner countries not active despite renewed efforts to motivate them. No clear solution for that available.
POL	Little man power on science/policy interphase, high fragmentation of expertise in Belgium and internationally. Links not

	always explained to outsiders between biodiversity, climate change, food security and desertification.
COORD	Fragmented communication of the project lacking coherence, diminishing the impacts and visibility of the programme.
CEPA	Not provided
Strengths	
GTI	Project promoters have good expertise to understand taxonomic needs in developing countries, with lasting impact of their interventions, such as improved collection management, data collection, specimen sampling collections access, linked to conservation and management of biodiversity. Access to data and meta-data, AbcTaxa contribute to that. We can drive the decision process at international level through informed scientific evidence in cooperation with RMCA and NBSG. Cross cutting themes such as invasive species and climate change are also tackled with by GTI expertise.
Distance learning	Many visitors to our web sites. Improved CHM training material, more user-friendly
IMAB Kisangani	Information is desired by target audience. Successful selection of good candidates for training in Belgium (dedicated, eager, bright). Collaboration increased between participants to the Congo expeditions. Valorisation of useful collections. Future field campaigns by CSB may be eligible for IMAB support. Collaboration with UNIVERSITIC and NTEB may help alleviate computer virus problem.
IMAB ICCN	29 trained people more familiar with dynamics of habitats and implementing LEM. Supply of didactical material all right. Synergies between universities and ICCN in PNKB successful in framework of research by students. Interest became contracts with INECN (Burundi), but also ERAIFT-WWF.
IMAB Coherens	Not provided
CHM	Our programme is one of the few worldwide to support CHM in developing countries in long term cooperation, follow-up activities and public awareness projects.
POL	Tailor-made answers, good visibility and appreciation of RBINS by CBD secretariat and others, development of high quality training programme
COORD	Excellent level of financial follow-up, good networking, and start of many long term partnerships since 2008. Integration within RBINS provides opportunities for services in both directions on communication, administration, accountancy and graphics, next of course to the biodiversity expertise.
CEPA	Not provided
Lessons learned	
GTI	The 7 legs of GTI adheres well to the 5 objectives to provide the outputs desired in a pragmatic approach. Publications and other output (PhDs, ...) attest for that. Some adjustment is needed to meet new trends and to attain higher sustainability at political level. Automation of administration could even further improve the good value for money already achieved. More desktop editor support is needed for AbcTaxa. Small scale and output-oriented, this component is successful, especially through the personal relations and commitments between the actors.
Distance learning	Due to less manpower available as expected, and quite a lot of time requested for the mobility questions of the trainees, the distance learning process took some time to be developed. Recruiting a part-time secretary from 2010 onwards helped in that.
IMAB Kisangani	The seminars in Kisangani have created an inductive atmosphere to promote academic careers and write papers and proposals for DEA, PhDs and external funding. 4 staff are about to finish their PhD, a major achievement to ensure the 'relève académique'. The expedition made the staff familiar with multidisciplinary cooperation and the provision of small material matched some immediate needs, such as a projector, a couple of PCs, hard drives. The project contributes to prepare the 'encadrement' at CSB of some 35 personnel recruited by the government.

IMAB ICCN	Further workshops required to consolidate earlier trainees and to train new staff for LEM. Two lexicons produced, but many more protected areas need such lexica. Herbarium facilities are in need of improvement. Practice of in situ workshops and of cooperation of rangers with universities to be reinforced, given positive effects registered. To strengthen this cooperation would alleviate the negative effects encountered by the lack of coordination at the management level.
IMAB Coherens	Low budget and lack of licence agreement (under debate) for the model COHERENS is restricting numbers of trainees and widespread dissemination and use for scientific and commercial applications. CLIMARCO and VLABEL are two examples of projects trying to integrate additional modules to within the physical model, hence including modelling on sedimentation, phytoplankton. It meet the need for a more integrated approach. The use of parallel machines enhances the computer speed during processing. Experience personnel is essential to provide adequate online support, which appears to be a bottleneck. There is a growing need to work with user groups instead of individuals. Structures will be created to meet that demand.
CHM	Post-workshop follow-up meetings appear to be essential in order not to lose the momentum created by the training. Signed agreements could be an option to ensure the follow-up. Public awareness projects are mostly carried out by the most active countries. Supporting pre-projects for the weaker countries is an option to encourage them submitting a project, with variable results.
POL	Not provided
COORD	Not provided
CEPA	Not provided
recommendations	
GTI GTI1=proj.outside B/ 2=proj. in B/3=Tax. Worksh in situ/4=coop with sel inst/5=Abc Taxa/ 6=teaching modules/7=worksh & conf	GTI1: funding for 2 years of at least 25000 EURO and exit strategies recommended. Prolongations should be result-based and there should be some operational funds available for the publishing itself of the results obtained. GTI2: a staged approach is advised, starting with seed grants, grow grants, harvest grants and profit grants, with increasing budget. GTI3: Win-win cooperation with non-Belgian expert institutions should be promoted. GTI4: Institutional cooperation only with increased funds. GTI5: open access and improved distribution through national channels, risk of corruption though. GTI6: couple with other databases. GTI7: reporting templates for Belgian GTI, more leverage to influence GTI to create long term positions for taxonomists in developing countries. Belgian GTI is convinced that taxonomy is further declining despite emerging cyber and genetic taxonomy. Strategy should have title 'build up taxonomy for all'. Issuing a biannual price could be a good idea. Suggestion to name it "Louis Dollo Award". More visibility is needed.
Distance learning	The e-learning programme cannot be done by one person. There is the contents aspects and there is the technical aspect. Belgian researchers having projects with GTI should their teaching material for online course modules for the South in a secured environment. CHM distance learning should certainly be further promoted, with new, more "theoretical" modules explaining also about the structuring and use of the contents in a national context, the information architecture, best practices, use of tablets and mobile phones, better communication and advertisement towards CBD, having side events at SBSTTA, IPBES or COP. To involve more our national partners in blended courses etc...
IMAB Kisangani	See lessons learned
IMAB ICCN	Several recommendations to start similar LEM activities in other protected (adjacent) areas in RDC. See lessons learned.
IMAB Coherens	See lessons learned
CHM	For large countries like RDC it is recommended to create sub-national CHMs, e.g. in Lubumbashi and in Kisangani. National training workshops involving south-south cooperation should be encouraged. Concerning INECON, adherence to their strategy, if existing, is needed, as well a better integration within the PIC and the bilateral cooperation through the Belgian embassy in Bujumbura. The web based application to follow-up the COP decisions and Aichi targets should be (further) developed. Calls for public awareness should continue. South-south cooperation with non-partner countries can be encouraged. Full scale regional projects should have other finance sources as well.
POL	Awareness raising and educational/training activities should help better disseminating the concept of ecosystem services, replacing the more easy to understand concepts of species, charismatic or endangered species. There is a need to link biodiversity with climate change, desertification, food security, water management at level of contents and actors. One option, not done so far is to feed the KLIMOS database with the CHM information of the partner countries. Also, synergies with BTC need to be developed.
COORD	A tool for better compilation of data of the programme could be developed in order to facilitate reporting and communication.
CEPA	See lessons learned

Main trends

Trends for indicators defined ex-ante

Table 3. Target indicators as specified in annual reports, for the period 2008-2012 for the components of the project. Numbers in brackets are estimated achieved targets.

GTI				
Year	GTI persons trained	supp material abctaxa	course modules	pos outcome
2008	25 (23)	1 (0)	10 (11)	1 of 25% (12)
2009	25 (35)	1 (2)	10 (continued)	1 of 25% (19)
2010	15 (32)	1 (3)	50% (continued)	1 of 25% (3)
2011	15 (60)	1 (2)	50% (continued)	1 of 25% (>5)
2012	15 (79)	1 (1)	50% (continued)	1 of 25% (>10)
IMAB				
Year	pers tr per year	supp material	pos outcomes	educ demo mat
2008	25 (113)	5 (2)	5 (8)	none
2009	25 (139)	5 (0)	5 (5)	n.sp.
2010	25 (184)	2 (2)	5 (3)	n.sp. (1)
2011	25 (123)	2 (4)	5 (7)	n.sp. (2)
2012	25 (27)	2 (4)	5 (5)	n.sp. (2)
CHM				
Year	people trained	websites	level of activities	
2008	25 (39)	50% (60%)	5 (5)	
2009	25 (91)	50% (60%)	5 (6+9)	
2010	15 (50)	50% (60%)	5 (3+4)	
2011	15 (71)	50% (60%)	5 (4+6)	
2012	15 (61)	50% (60%)	5 (4+8)	
HER		POL		CEPA
Year	educ and demonstr mat	consult	negotiat COP nr topics	event+ass activities
2008	?	3 (>10)		
2009	none	5 (>10)		
2010	none		3 (1)	1 (1)
2011	none	5 (>10)		
2012	none	5 (>10)	(1)	

The target indicators were relatively stable over the 5 year period. Some indicators were designed without specified targets, like in IMAB (educational demo material). Others changed over time, like for CHM (from 25 to 15 people trained) or IMAB (from 5 to 2 supporting material). Overall, most of the targets were reached or surpassed (see numbers between brackets, table 3).

Critical note on targets and indicators:

Clear and SMART quantified target indicators are useful. As has been the case in the course of the 5 year period, adaptations occurred on the basis of what was feasible. In other words, the indicator became SMARTer. Other indicators, although with specified quantitative targets, were rather vague, such as “number of positive outcomes” or “outcome 1 of 25%”. The value of such indicator in an evaluation is rather limited, if not supplemented by an explanative text.

The achieved targets (see numbers in brackets in table 3) represent easy to understand figures when related to training (number of trained people), AbcTaxa and teaching modules). However, ‘positive outcomes’, ‘supplemented material’, and ‘level of activities’ were more difficult to be assigned a value, since the values are a mixture of different output (publications, workshops, projects...).

Trends for interventions and output

The output for the period 2008-2012

Table 4. Summary of output for the period 2008-2011 (self-assessment), data for 2012 are added. The output 'training' also includes various workshops

Indicator: calls-meetings-accepted projects-trained persons								
Program me	Sub-programme	Output	2008	2009	2010	2011	2012	5 years
T1. GTI	GTI	Calls: Int. Meetings: Projects South: Field work Trainings South: Trainings North: Trained persons: Publications: Training modules Graduates Conf Belgium	2 3 2 23 8art+3 po 11 3 nanosymposium	2 EBPRSPrague/ Paris 2 3 14+21 1+2+19publ nanosymp	2 Guam 3 2 2 15+17 3abc	2 4 60 2abc 5	2 4 79 1abc & others Symp afr bees Semin Yeo, Valdes	10 calls 3 intern. meetings 8 projects south 15 field work missions/training 2 trainings Belgium 229 trained 8 abcTaxa, >40 publ by thirds 11 training modules 8 PhDs 5 symposia/seminars at RBINS
	Distance learning for the GTI and the CHM	Trained persons:					6+14	5+4
Indicator: calls-meetings-accepted projects-trained persons								
Program me	Sub-programme	Output	2008	2009	2010	2011	2012	5 years
T2. IMAB	01-Cooperation with Univ. Kisangani	Int. Meetings: Trainings South: Trainings North: Trained persons: Publications: graduates	Kisangani 62 2 2		Minisymp unikis	Opinion survey CSB	Kis labelequip	1 survey 3 meetings/trainings 62 trained persons >2 publications 2 PhDs
Indicator: calls-meetings-accepted projects-trained persons								
Program	Sub-	Output	2008	2009	2010	2011	2012	5 years

me	programme							
	02-Cooperation with ICCN (RD Congo)	Int. Meetings: Trainings South: Trainings North: Trained persons: Publications: Websites/archives (HER) graduates	cococongo Ws bombo lum 24 Web site online/ exh katanga/1syll/1ppt/ zoo lumumbashi	Cococongo Katanga/ Virunga/Bombo 105	Kin/Lum Katang 3 13+98 2lex 3 series/90 dig books 1PhD	Kat/Bur 79 1lex/1syll:2m 4series 2phdalmost	Bur/RDC 27 1lex/1syll/2art 3+2 series sent 1phd	4 meetings/conf in RDC 9 workshops/trainings in RDC 3 training Belgium 346 people trained 3 lexica, 2 syll and 8 publ 12 series dig and dissem/>90books digitalised/ idem/ website 3 PhDs, 1 Ma
Indicator: calls-meetings-accepted projects-trained persons								
Program me	Sub-programme	Output	2008	2009	2010	2011	2012	5 years
	03-Coherens	Trainings South: Training North Trained persons: Publications:	Sao Paulo 27 Ppts/user manual/helpdesk/appl setups	2 34	Vietn/Indonesia 5 73	Columbia/Peru 1 44	IEAPM Brazil	6 trainings South 8 people trained in North 178 trained in South 1 user manual/1 helpdesk/1 application setup
	Total IMAB	Int. Meetings: Trainings South: Trainings North: Trained persons: Publications: graduates	1 3 2 113 2 3	3 3 2 139 2 1	2 4 3 184 2 1	8 123 4 7	7 27 4 1	6 25 7 586 >10 12
Indicator: calls-meetings-accepted projects-trained persons								
Program me	Sub-programme	Output	2008	2009	2010	2011	2012	5 years
T3. CHM	01-training of web masters and web	Calls: Int. Meetings: Projects South:	2 Morocco/Mali/Niger/Abid	2 9	2 4	2 Reg train 6	2 8	10 calls 6 regional meetings 27 projects

	content managers	Trainings South: Trainings North: Trained persons:	Asean Thailand/abidjan/Niger/Mali Brussels 39	Accra/ Cote 'Ivoir/Bukarest/Bujumb/Niger Liberia Brussels 91	Coton/Ghana/Camer 2 50	Liberia/Madag/Burundi/Benin 71	Niger/Ghana/Bur/Rwanda 1 61	21 trainings South 5 trainings Belgium 312 trained people
	02-e-learning	Trained persons:		9	1	81	5	96 trained via E-coaching
	03-maintenance CHM websites	Publications:	5 websites updated/ 4 upgraded	12 web sites	60%upd, 10% progr	50% websites regularly updated, 20% with 10-15 updates during the year, 30% with less than 10 updates during the year	60% websites regularly updated, 15% with 10-15 updates during the year, 25% with less than 10 updates during the year	High number of websites upgraded
	04-national networking	Int. Meetings: CHM websites						1 12
	05-supranational networking	Int. Meetings:					Morocco	1 internatiol meeting
	CHM TOTAL	Nr trained national Nr trained regional Nr trained Belgium Nr. Trained total	13 18 8 39	70 19 2 91	47 0 3 50	34 33 4 71	55 5 e-coach 1 61	219 75 18 312
T4. POL		Int. Meetings: In Belgium Trainings trained	10+meetings support DGD, Belspo others/ contr 2 nd fed plan sust dev/ printemps de l'env	20+requests	20+requests 2 35	2 35	ABS/NBS Attaché day NBSABreporting Copenh	2 Over 40 requests 3 trainings 70 trained
T5. COORD		Int. Meetings: Meetings Belgium	Bonn 12th +13th Stuurgroep/kickoff coherens/CBD consortium		COP10 20 files as pilot or copilot	Self-assessm	SBSTTA16 COP11 (6 dossiers)	4 intern conf 1 self assessment Various meetings, stuurgroepen
T2010. CEPA		Trainings North: Trained persons:			Bee party 4500 visitors			1 major event with 4500 visitors

Total	Calls:	4	4	4	4	4	4	20 calls
	Int. Meetings:	3	3	4	1	3	3	14 intern meetings
	Projects South:	3	11	7	6	8	8	35 projects South
	Trainings S+field wrk:	10	12	9	12	11	11	54 training/worksh/ field w South
	Trainings North:	1	1	8	1	2	2	13 training North
	Trained persons:	180	274	307	390	177	177	1328 trained
	Graduates	5	0	1	7	1	1	14 PhD
	ABCtaxa	1	1	3	2	1	1	8 abc Taxa
	Lexica		1		1	1	1	3 lexica
	Pub Other (third)	>10	19					>60 publ by third
	Archives			3 series/90 books	4 series	5 series		12 series / 90 books digit and sent
Symp, sem in Belg	1	1	1 major event CEPA	1 survey	1 self ass/ 3		>8 seminars/sympos in Belgium	

GTI : the number of calls per year and per component is constant, as it is a stable structural intervention. However, the volume as number of projects and grantees, increases over the years.

IMAB: some indicators are not taken up in Table 1, such as the number of field plots for habitat monitoring in RDC, although it is clear this indicator is important to measure the level of field activity in IMAB. The so called own publications such as AbcTaxa and the lexica are a constant quality feature over the years. Another important output in this table is the digitalization and dissemination of archives, hence ensuring a historical anchoring of present day management, sustainable use and conservation of biodiversity in RD Congo.

CHM: the number of calls per year and per component is constant, as it is a stable structural intervention. E-coaching started in 2010 and steadily increased since that time. The focus of the national workshops is concentrated in 9 countries of West Africa, but policy work was also done through participation to an Asean meeting in Thailand, next to piloting and side events at SBSSTA and COP.

POL and COORD: the role of the coordinator cannot be underestimated, even though concrete output is less tangible, as the coordinator acts more as a facilitator, ensuring the proper functioning of the programme at different levels, from administration, representation, human resources, over scientific training, research, to multistakeholder communication, policy lobbying and support.

Number of trained persons

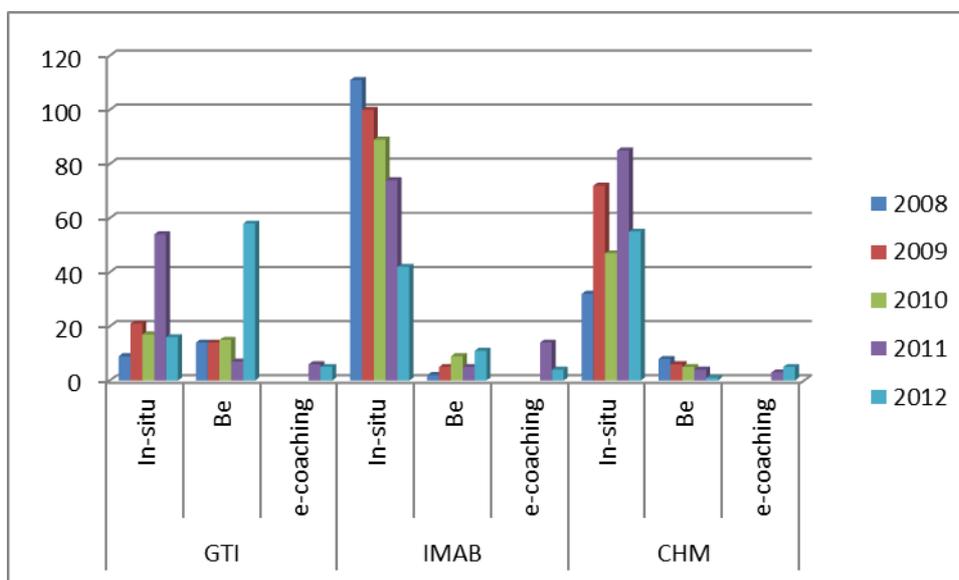


Fig. 3. Number of trained persons in the period 2008-2012 for the components GTI, IMAB and CHM in developing countries (in situ), in Belgium and by distance e-learning

The GTI national and regional trainings gave capacity building for 15-20 persons annually, with a peak in 2011 with over 50 persons trained. The trainings in Belgium followed the same absolute figures, however with a clear peak in 2012 with almost 60 people trained. E-coaching started to develop in 2011-2012 in all three components of the project. The component IMAB saw trainings in Belgium increasing slightly over the years, while this decreased for the CHM component. The contrary was observed for the much higher numbers of trained people in developing countries: a decrease between 2009 and 2012 for IMAB and an increase for CHM.

Critical note on indicator ‘number of people trained’:

The training of a person can differ considerably in numbers of hours spent by the tutor, by the trainee, the quality of the training, the scientific or technical content. Some trainings have a large scientific impact by stimulating the trainee to analyse or publish data and get a master or PhD, other training offers a basic knowledge on how to post information on the CHM with possibly a very large impact on the awareness raising and information of the civil servants and the public at large. Therefore, comparison of numbers of trained people or of trainings should be taken with caution. The narratives next to the quantitative obtained targets are in that respect more important to give a nuanced assessment of the degree of quality obtained, as well as the resulting short term outcome and longer term impact. For that we refer to annex 1-4.

Trends for budget and expenditures

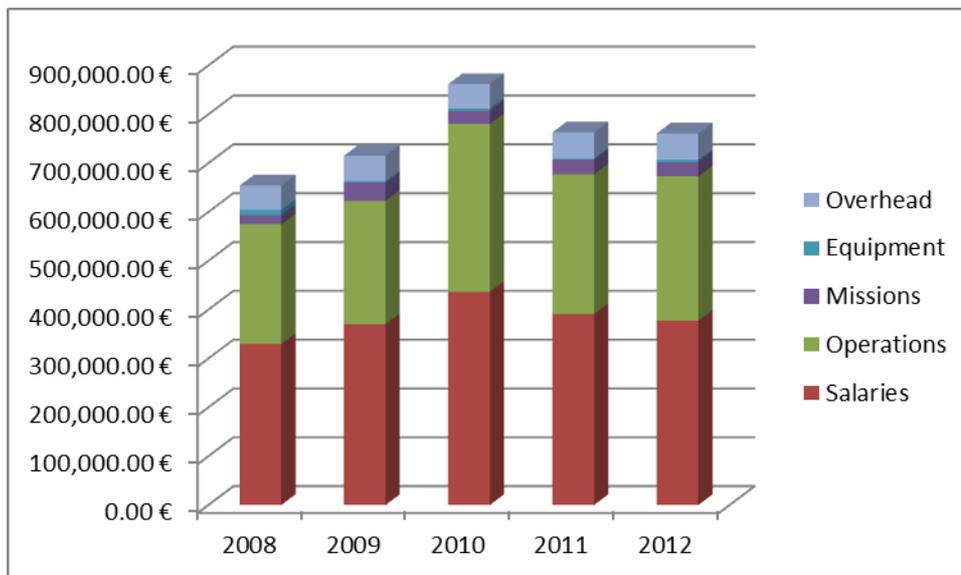


Fig. 4. Evolution of expenditures per budget line over the period 2008-2012

The year 2010 was characterised by an increased budget due to the year of Biodiversity. Otherwise, the budget with almost 100% expenditure increased slightly over 5 years, with a stable proportion of salaries/operational costs (red and green bars), a stable overhead, very little equipment and a relatively stable proportion for the missions by the staff.

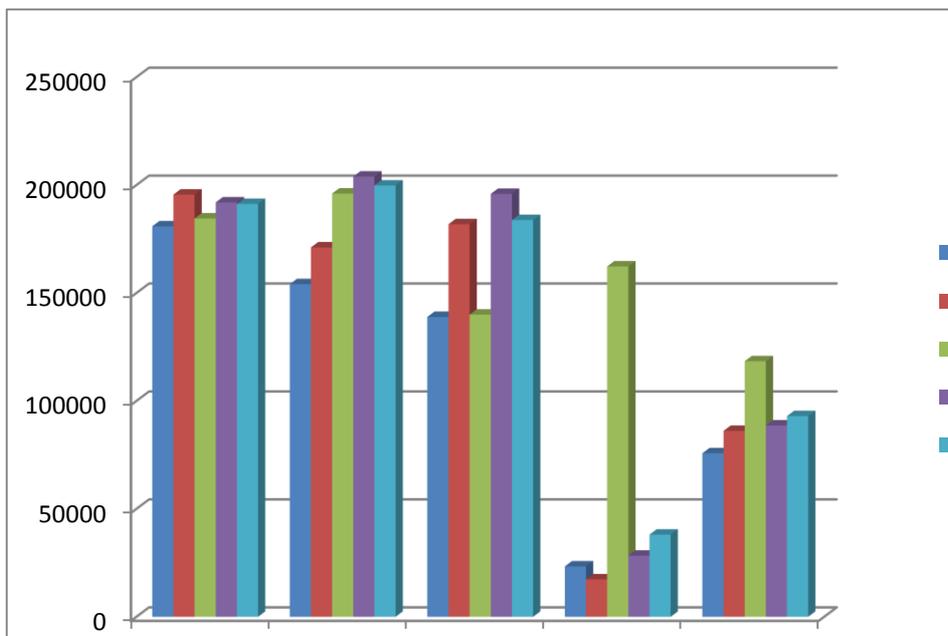


Fig. 5. Trends of expenditures over 5 years for GTI, IMAB, CHM, Policy and Coord

The GTI expenses are quite constant over time, between 150 and 200.000 Euro per year. The IMAB expenses steadily increased over time. The CHM expenses, more prone to international decisions, saw peak years in 2009, 2011 and 2012. As expected, Policy and coordination peaked in 2010 during the international year of Biodiversity (CEPA), but otherwise, saw a steady relative increase over the years.

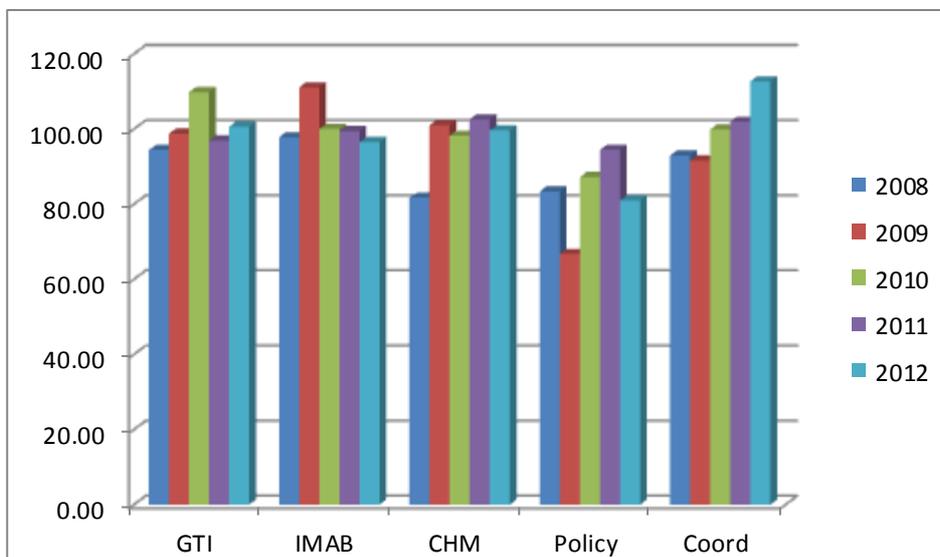


Fig. 6. Evolution of % spent budget over 5 years for GTI, IMAB, CHM, Policy and coordination

The budget was almost fully spent or slightly overspent for the components GTI, IMAB and CHM. The coordination budget expenditure % improved steadily over the years. The budget allocated for the component Policy did equally well, albeit in the range 80-90%, except for 2009 (65%).

SWOT analysis and recommendations

SWOT

With regard to the redaction of this synthesis 2008-2012 and the redaction of the 5 year activity programme (2014-2018) (during the months July-September 2013), in June 2013 the team of the DGD-RBINS programme has collectively identified the strengths, opportunities, weaknesses and threats of the project. It results from a brainstorming session held in June 2013 and will serve as input for the action plan or strategy of the newly created Operational Direction “Natural environments” of RBINS.

	Positive	Negative
	Strengths	Weaknesses
	Housed within RBINS and linked (part of) to National focal point for Biological diversity	Contractual functions, lack of career opportunities, and limited skills development for staff
	Expertise of scientific, administrative and technical staff/ excellent global network	Institutional procedural constraints
	Experience in capacity building, very motivated staff, expertise in mobility of researchers and competitive grants	
	Staff is national focal point GTI and CHM	Project Cycle Management and result based management capacities can be improved
	Niche of direct and indirect interventions, very focused short term actions, with long term multiplier and “Training of Trainers” effects in outreach	Dependent on one source of funding, apart from some consultancies
	10 year strategy, predictability	
	Opportunities	Threats
	Increased budget, installation as a centre of excellence in Biodiversity-development	Budget cuts in development cooperation, regionalisation, Belgian politics
	Diversification in calls, themes and geographical interventions	Turn-over of staff, expertise loss
	Potential with alumni, better visibility through e.g. own website, communication strategy	Working with institutions in low income or fragile states with weak institutions, brain drain
	Increase of own capacities in ecosystem services and PCM	Dispersion across too many small projects of limited budgets / loss of interest by partners
	Search for external projects	
	Link to Belgian universities, can be promoted by working on complementarity concerning ecological, conservation and sociological expertise	
	Skilled staff, mid term evaluation in 2017	

Table 5. SWOT analysis

Recommendations

It is clear that the **strengths** summarize well the very reasons why the project is based at RBINS. The **weaknesses** and **threats** are useful to be listed as they help identify assumptions, conditions and risks. They mainly serve to be aware of bottlenecks and to work for improvements on all fronts, as far as it is feasible.

The **opportunities** offer the perspectives for the next 10 year strategy, which can be the basis for a number of recommendations:

1. consolidation of what is working well, and diversification towards new opportunities, both thematic, concerning actors and partners and funding in Belgian cooperation partner countries;
2. strengthening the own PCM capacities and visibility (Result based management), as the drafting of the five year activity programme for 2014-2018 based on the 10 year strategy 2014-2023 offers a unique window of opportunity. A PCM workshop has been organised in september 2013.
3. expansion to regions which are highly interesting for biodiversity and the Belgian cooperation;
4. promoting the acquired experience as a multiplier effect with new partners in Belgium and in the developing countries;
5. promoting new themes and modalities of cooperation by creating calls specifically devoted to emerging issues;
6. further integration at RBINS with colleagues and projects dealing with biodiversity and capacity building (e.g. national focal points, biodiversity platform, EU-projects)
7. reacting to other funding opportunities (e.g. BRAIN, IFS)
8. further strengthening the link to development, sustainability, gender equality and ownership in the South

This should allow this unit to develop further as a **centre of excellence** concerning **Biodiversity and sustainable development** with and within the larger group of colleagues and projects at RBINS devoted to biodiversity and according to the mandate and strategy as outlined and agreed with DGD.

Conclusions

Achievements

The **self-assessment** of the period 2008-2011, carried out by the scientific staff of the DGD-RBINS programme in 2012, was done very thoroughly, focusing on achievements, performance, outcome, impact, lessons learned and recommendations. It can be concluded that the contents-related components of Global Taxonomy Initiative (GTI), Inventories Monitoring and Assessment of Biodiversity (IMAB) and Clearing House Mechanism (CHM), as well as the policy support (POL), coordination and management were carried out with professionalism and excellence with regard to relevance, efficiency, efficacy, sustainability and impact and laid a sound foundation for the subsequent identification and formulation of the strategy for the period 2014-2023.

The **funding** increased over the years as a function of emerging needs and the increasing awareness and importance of biodiversity on the political agenda. The budget was characterised by a stable proportion of operational costs to salaries and minimal investment in small equipment. The main bulk of funding went to GTI, followed by CHM and IMAB. The year 2010 was characterized by increased funding to support the international year of biodiversity (CEPA).

The **indicators** fixed at the onset of this five year period were relatively straightforward, but sometimes too vague and were slightly adjusted over time, with targets of less people trained for GTI and CHM from 2010 onwards, but more projects and workshops in situ.

The **output** of the five years is impressive, with over 1000 people in developing countries trained in various aspects of taxonomy, ecology, marine modelling and clearing House Mechanism, mostly in Africa (at least 10 countries), but also in Latin America (≥ 4 countries) and Asia (≥ 2 countries), at least 12 PhD's reached thanks to significant support of the programme (the graduation is an indirect outcome, since the capacity building is not providing diplomas), over 80 publications by third parties having benefitted from the programme, 3 lexica on habitats and vegetation of specific protected areas in RDC and 8 AbcTaxa produced by IMAB, over 35 national and regional workshops, and active participation to the Belgian delegations to SBSSTA and COP meetings, as part of the Belgian Focal Points for the Convention on Biological Diversity, GTI and CHM. In the five years period 2008-2012, 20 project calls were launched, generating 35 projects in the South, 54 trainings, workshops and field visits, 13 trainings in Belgium and 8 seminars or small symposia in Belgium (values may slightly vary according to sources). Moreover, the distance learning through E-coaching has left the starting blocks, both in GTI and in CHM.

All these results can serve as a target baseline for the new activity programme 2014-2018

Lessons learned and recommendations

Although the funding of projects and grants is relatively small scale, the designation 'small is beautiful' or 'tailor-made' applies well to the programme. It allows for a tailor-made approach, where personal commitment of promoters and trainees is conditional towards successful cooperation. It is clear that the specific expertise of the respective scientists involved in the programme greatly contributed to the achievements, be it the promotion of AbcTaxa, the monitoring of habitats in RDC, or the promotion of CHM and GTI, hence validating again the wise choice to host this project at RBINS, as excellence centre for Biodiversity and development. The self-assessment leads to the conclusion that the relatively high handling cost intensity per trainee or project is well worth the money on the condition that mechanisms are built in to ensure a proper follow-up of the trainings and trainees over a longer time.

The **GTI component** needs to remain open to new opportunities, be focused on a pertinent selection of projects, subjects and grantees, be at the spear point of internationally acknowledged capacity building practices linked to development and poverty reduction. Improvements on the editing and dissemination of AbcTaxa are under way.

The **CHM component** benefits from the starting implementation of e-learning. Follow-up of local workshops is a priority in order not to lose the momentum, especially in view of the high turn-over of trained staff. Regional meetings and workshops in selected partner countries are instrumental for increased regional sensitization and awareness, as well as increased ownership about the political obligations towards the Aichi targets and other COP decisions and promoting regional integration and South-South cooperation within and even beyond the partner countries of the Belgian cooperation.

The **IMAB component, partim ICCN** will benefit from workshops in situ and additional training due to turn over of local staff. It's new focus on Burundi and Benin is promising. For **IMAB, Partim Kisangani**, the interventions create a new dynamics towards more academic fulfilment, and computer and English skills are being tackled through VLIR-UOS and CUD initiatives. For **IMAB, partim Coherens**, the need arises to organise more collective trainings in order to increase efficiency, to ensure a proper licensing of the model for commercial and scientific use and to add more biological modules to the physical model, with a better . The **policy support and coordination** needs to be alert to explain well to target publics the links between biodiversity and the other big environmental issues such as desertification, food security, water management and climate change and to join or adhere to other national (e.g. KLIMOS) and international initiatives in view of synergies and exchange of best practices. More trainings in Belgium of civil servants and other stakeholders is warranted. The **use of indicators** and targets should be expanded, more detailed and towards the future, be complemented with a baseline in order to improve the result-based management of the programme.