



BID Africa 1 – National Grant Template

Mid Term narrative report

Instructions

- Fill the template below with relevant information. If no result has been achieved on a specific point, please indicate it as “no result achieved yet” and **indicate expected date of completion**
- Use the information included in your project Full proposal (reproduced in annex III.a. of your BID contract) as a baseline from which to complete this template
- The information provided below must correspond to the financial information that appears in the financial report
- Sources of verification are for example links to relevant digital documents, news/newsletters, brochures, copies of agreements with data holding institutions, workshop related documents, pictures, etc. **Please provide access to all mentioned sources of verification** by either providing the link or sending a copy of the documents.
- This report must first be sent as a **Word document** to GBIF@GBIF.org and be pre-approved by GBIFS
- Once this report is pre-approved in writing by GBIFS, it must be signed by the BID project coordinator and sent by post to:

The Global Biodiversity Information Facility Secretariat (GBIFS)
Universitetsparken 15
DK-2100 Copenhagen Ø
Denmark

Template

1. Table of Contents

1.	Table of Contents	1
2.	Project Description.....	2
3.	Overview of results	2
4.	Implementation of BID project activities	7
5.	Updated calendar for the BID project implementation and evaluation period	14
6.	Beneficiaries/affiliated entities and other cooperation	16
7.	Visibility	16





2. Project Information

2.1. Project Coordinator: Institution/network/agency name:

Herbier National du Gabon

2.2. Main contact person and role:

Nestor ENGONE OBIANG (Curator of Herbier National du Gabon), coordinator of project

2.3. BID proposal identifier:

BID-AF2015-0038-NAC

2.4. Project title:

Support for data collection of plant biodiversity in Gabon

2.5. Start date and end date of the reporting period:

01/06/2016-01/12/2018 (this date was modified according the revised schedule after the herbarium building destruction)

2.6. Country in which the activities take place: Gabon

3. Overview of results

3.1. Executive summary

Give a short summary of the activities implemented and the outcomes of the project for the reporting period (500 words maximum)

The principal initial objective of this project aimed to mobilize as much data as possible on the floristic diversity of Gabon, by combining specimen information with forest inventory data and the content of the published data in order to create database and to the made available it to public. This database had to serve as a powerful support tool to help governmental and non-governmental organizations to develop effective strategies for a sustainable management of the biodiversity. Three main goals was identified in this project statement (Establish or strengthen national biodiversity information facilities, Increase available biodiversity data, within and beyond the grant period, Apply biodiversity data in response to national priorities).

To achieve these objectives and in the strict respect of the proposed schedule, the following activities have already been implemented for this period according to the revised schedule:

1. **Organization of project activities launch workshop.** This workshop that contained 25 persons which came from 7 different institutions aimed to explain the goals and the expected outcomes of the BID project.
2. **Participation to the BID Capacity Enhancement workshop.** This workshop took place in Kigali (Rwanda), from August 22th to 25th and was related to the Biodiversity Information for Development (BID) program, which is supported at the national herbarium of Gabon and funded by the European Union in the ACP and sub-Saharan regions. The overall objective was to contribute to enhancing the capacity of the BID project team and plan/implement biodiversity data publishing efforts effectively and according to GBIF standards.
3. **Physical inventory of specimen present at the Herbier National du Gabon.** Since august 2016, **34549** specimen data were counted and mobilized. Among them, 28981 are inserted and repertoried in the database, 5568 are already mounted and inserted but non repertoried in the database. These last are subject to Rapid Data Entry (RDE) for their integration in the BRAHMS. A second counting will be done to check and confirm these
4. **Digitalization of forest inventory data.** Data come from IRET for the moment. The implementation of this activity allowed to digitalize 256 sampling data (permanent plots and transects) with more than



This programme is funded by the [European Union](#)



50 000 trees for which diameter is superior of 10 cm and about 300 species for the moment. The final goal is to obtain about 400 sampling data before the end of the project.

5. **Oral communication in the Agence Nationale des Parcs Nationaux du Gabon about the data digitalization.** By Pulchérie to explain the goals of Kigali workshop.
6. **Meeting with the ENEF's partners.** To visit their local herbarium (foundation Chris Wilks)
7. **Beginning of web site conception**
8. **Participation to UICN workshop**
9. **Participation to training of spatial ecology**



3.2. Progress against expected milestones:

Expected milestones/activities	Completed? Yes/No	Explanatory notes	Sources of verification
Completed capacity self-assessment questionnaire for national biodiversity information facilities (www.gbif.org/resource/82277).	Yes	The national capacity self assessment questionnaire has been completed	Mail sent to BID@gbif.org 05/08/2016
At least three national data publishing institutions are registered with GBIF.org For registered data publishers see: http://www.gbif.org/publisher/search	No	Ours institutions are not yet visible in GBIF.org	
At least one person from the project team has completed the certification process following the first BID Capacity Enhancement workshop	Yes	Participation of our team member to the BID Capacity Enhancement workshop that took place in Kigali (Rwanda), from August 22th to 25th	Pulchérie BISSIENGOU bissienjou_p@yahoo.fr
Knowledge dissemination activities have been scheduled following the first BID Capacity Enhancement workshop	Yes	Oral presentation was done in Agence Nationale des Parcs Nationaux du Gabon by Pulchérie to explain the goals of Kigali workshop. Different types of data was also presented	Meeting List of presnece (10.03.2017)
At least one dataset has been published to GBIF.org	No		
The data users identified in the full proposal have documented their intended use of the mobilized data and provided early feedback	Yes	Researchers of the Herbar National du Gabon and the Institut de Recherche en Ecologie Tropicale (IRET) was invited to the workshop taken place in Yaoundé, Cameroun(19 th -23 th june 2017) about the statute of conservation of species. Information relating to the identified species during this process needed the using of herbar national du Gabon database.	Invitation letter



3.3. Project deliverables and activities

Refer to the table in section 2.2 "Deliverables, activities and reporting criteria" of your BID full proposal. Provide updates on the status of each of planned deliverables. In the event of unexpected delay, please provide detailed explanatory notes and indicate planned completion date. Add as many rows as needed.

Deliverable	Related activity	Completed ? Yes/No	Explanatory notes	Sources of verification
HENGAD	Herbier National du Gabon	Herbier National du Gabon	20/2/2017	The first portions of the mobilized data will be published before the final deliverable to enable GBIF the GBIF helpdesk to evaluate the data formatting and content
HENGAD	Herbier National du Gabon	Herbier National du Gabon	1/12/2018	One of expected Deliverable of this project is the herbier national du Gabon database creation and his connexion to GBIF portal. this is only possible after of all biodiversity data mobilization
Checklist of herbarium specimens inserted	- Inventory of the herbarium specimens inserted - Updating of scientific names	Herbier National du Gabon	1/12/2018	Completed number of inserted specimens will available in the end of project but some number of samples physically present can be now consulted at the herbier national du Gabon.
The online database	Connecting the herbarium to internet	Herbier National du Gabon	1/12/2018	Access to online database interface for the National Herbarium of Gabon with the complete database mobilized at the end of period grant. But the layout of this try portal is already available (http://vmtropicar-proto.ird.fr/gabon/)
Synthesis of documents on gabonese plant diversity	Analyze documents and forestry inventory data	Herbier National du Gabon	Now	Availability of some synthesis documents on plant diversity in the National Herbarium of Gabon
Presence of new mounted herbarium specimens	<i>Mounting of herbarium specimens</i>	Herbier National du Gabon	Now	Consulting the catalog related to the number of specimens mounted for the moment



3.4. Datasets published on GBIF.org

If the dataset is not yet published, please indicate the name of the institution that is expected to host the data when published in the column "DOI or URL/Planned hosting institution". Add as many rows as needed.

Dataset title	Publishing institution	DOI or URL/Planned hosting institution	Date/expected date of publication	Explanatory notes

3.5. Examples of use of biodiversity data available through GBIF

Use the table to document use or planned use of data available through GBIF as part of your project. You may want to refer to the section 2.5 "Plan to support the integration of biodiversity information into policy and decision-making processes" of your BID full proposal. Please provide the DOI for datasets published on GBIF or data downloaded from GBIF in the "Dataset" column. Briefly describe how the data have been used or are planned to be used in the "Data use" column (ca. 50 words). Provide the date or approximate time frame in months for the use or planned use in the "Date/time frame" column. Please provide links to any documents or webpages documenting the use in the "Sources of verification" column. Add as many rows as needed.

Dataset	Data user	Data use	Date/time frame	Sources of verification	Notes
Gbif.org	The members of the project team	-Occurrences data -Taxonomic list -Sampling data	11/3/2017 10/04/2017	https://github.com/gbif/ipt/wiki/samplingEventData#templates	To see how to fill the occurrences data and sampling data form

3.6. Events organized as part of the project

List all the events that have been organized as part of your project. Please provide links to any documents or webpages documenting the use in the "Sources of verification" column. Add as many rows as needed.

Full title	Organizing institution	Dates	Number of participants	Sources of verification
BID project activities launch workshop			25	-Report of BID project activities launch workshop



	Herbier National du Gabon	27 th July 2016		-List of present persons -Power point of presentation
Meeting about data digitization	Herbier National du Gabon	10 th Marsh 2017	8	List of present persons

4. Implementation of BID project activities

Refer to section 2.2 “Deliverables, activities and reporting criteria” in your BID full proposal. Provide updates on each of the activities using the reporting criteria and other sources of verification as appropriate. If no result has been achieved on a specific activity, please indicate it as “no result achieved yet” and indicate expected date of completion.

Sources of verification are for example links to relevant digital document, news, newsletter, brochures, copies of agreements with data holding institutions, workshop related documents, pictures, etc.

4.1. Goal 1: Establish or strengthen national biodiversity information facility

Please use same activity name as the one given in section 2.2 “Deliverables, activities and reporting criteria” in your BID full proposal.

The implementation of the project activities is done according to the initial biodiversity mobilization data plan. For this specific goal, 4 main tasks are now implemented: **i) project activities launch workshop; ii) analysis of documents containing the forest inventory data; iii) the counting of the physical specimens really present in the herbarium national du Gabon; iv) Mobilization of data contained in the mounting room .**

Activity 1 name: Organization of project activities launch workshop

National meetings with the public and private administration have been suggested like one of objectives in the full proposal to mobilize the different data types. Thus, a workshop was organized on July 27, 2016 in the meeting room of the ex Herbier National du Gabon (HNG) building, from 9 am to 3 pm. The purpose of this meeting was to edify the participants on the objectives and expected outcomes of the project. The workshop consisted of 25 participants from seven institutions, six from the public sector and one from the private sector : Agence Nationale des Parcs Nationaux (ANPN); Institut de Pharmacopée et de Médecine Traditionnelle (IPHAMETRA); Institut de Recherche en Agronomie et Foresterie (IRAF); Institut de Recherche en Ecologie Tropicale (IRET) ; Ministère de la Protection de L'Environnement et des Ressources naturelles de la Forêt et de la Mer ; PIN/JACA¹; Université des Sciences et Techniques de Masuku (USTM). Following the presentation of the four statements, the discussions resulted in the following recommendations:

- Undertake administrative procedures with the partners to access their data (MINEF, Forest managers...)
- Consultation of all digital libraries on floristic biodiversity in Gabon
- Make an inventory of the collections and bibliographic background of the herbarium

Take measures to ensure the reliability of forest inventory data (find objective criteria for retaining information to be included in the database).

¹ Private Institution



Description of any implementation during the reporting period

The workshop began with the presentation of the welcome message from the Curator of the National Herbarium of Gabon and Project Coordinator who also briefly presented the general context of the project. Then, a workshop office was set up. Thus, on the proposal of the coordinator of the project, Mr. LEBAMBA Judicaël was brought to the head of this office by acclamation. His main task was to direct the work of the workshop during the day. Four oral presentations were made:

1. DETAILED PRESENTATION OF THE GBIF / BID PROJECT by Nestor ENGONE OBIANG (HNG/BID)
2. BOTANICAL RESEARCH AND HERBARIUM MANAGEMENT SYSTEM (BRAHMS) by BISSIENGOU Pulchérie (HNG)
3. DATABASE RESEARCH AUTHORIZATIONS by Aurélie Flore KOUMBA PAMBO (IRAF/ANPN)
4. ANPN Library (https://www.zotero.org/groups/anpn_bibliotheque/items) by Kathryn JEFFERY (ANPN).

After these oral presentations, exchanges were made in plenary on two themes, the data mobilization strategy and the hosting the database. A first draft of the report was drafted immediately and read in plenary. Finally, the final word was delivered by the project coordinator and the meeting rose at 3 pm.

Sources of verification

- List of workshop presence
- Workshop report
- Presentations slides

Activity 2 name: Analyze documents and forestry inventory data

The activity 2 is implemented by selecting forestry inventory data available in the bibliographic data (paper or electronic). These documents include the unpublished reports, theses and personal note book. For the moment, the following documents have already been used for data seizure:

- Balinga, M. et al. 2006. A vegetation assessment of the Waka national park, Gabon. Carpe report, Herbarium National du Gabon, Limbe Botanic Garden, Missouri Botanical Garden, Wildlife Conservation Society, Forests Resources and People, Smithsonian Institution, Libreville, Gabon.
- Sunderland, T. et al. 2004. A preliminary vegetation assessment of the Mbé national park, Monts de Cristal, Gabon. Carpe report, Herbarium National du Gabon, Limbe Botanical and Zoological Gardens, Missouri Botanical Garden, Forests Resources and People, Smithsonian National Zoological Park, Libreville, Gabon.
- Sosef M. S. M., Issembe Y., Bourobou H. P., and Koopman W. J. M.: 2004 - Botanical Diversity of the Pleistocene Forest Refuge Monts Doudou, Academy of Science memoir, 28, pp 17-91
- Bourobou H., 2002- Flore et végétation de Rabi Kounga. Rapport d'Etude de la biodiversité végétale, 160 p
- Memiaghe HR, Lutz JA, Korte L, Alonso A, Kenfack D (2016) Ecological Importance of Small-Diameter Trees to the Structure, Diversity and Biomass of a Tropical Evergreen Forest at Rabi, Gabon. PLoS ONE 11(5): e0154988. doi:10.1371/journal.pone.0154988.

Other documents have also been used, notably the field note book of IRET, data from the permanent plots of the Agence Nationale des Parcs Nationaux (ANPN) and the IRET, the inventory data of the forestry companies and of the forest ministry.

Description of any implementation during the reporting period

The activities of our project began on July after the organization of the workshop to launch the project activities. The implementation of these activities was interrupted after the destruction of the Herbarium National du Gabon building on the end of August. The restart of the activities implementation was done after the installation of the



This programme is funded by the [European Union](#)



herbarium at the Agence Nationale des parcs Nationaux offices and the obtaining of the small computer and office equipment from the ANPN manager on december. Recently, one travel have been undertaken to Makoukou from 11 to 21 of february. The aim of this mission was to visit the Ipassa herbarium and to consult the bibliographic data including the inventory data and the IRET field copy books. The implementation of this activity allowed to digitalize 254 sampling data (permanent plots and transects) with more than 50 000 trees for which diameter is superior of 10 cm and about 300 species for the moment. The final goal is to obtain about 400 sampling data before the end of the project.

Sources of verification

- The synthesis document giving the extracted number data
- The summary of the consulted bibliography

Activity 3 name: Inventory of the physical data

The physical data constitute the collections of the berbarium specimens essentially housed in the herbier national du Gabon. The other data being located at the herbarium of Ipassa (Makokou) of IRET, the herbarium of the Ecole Nationale des Eaux et forêts (ENEF) like explane in the BID full proposal (2.4).

Description of any implementation during the reporting period

The physical data counting started on december at the herbier national du Gabon. In this activity, the counting is done by family that is extracted of the brahms database and the number of the specimens counted by technician is repertoried in the note book dedicated to this activvity. The check of the counted specimen present at the herbarium is done in the database. The counting of specimen is became one daily activity at the herbier national du Gabon untill now. In the 34 549 spcimens counted, about 28 981 of them are repertoried int the BRAHMS database and the 5568 non repertoried others will subject to Rapid Data Entry (RDE) for their integration in the BRAHMS database. The underlying activity is to check if the botanical specimen quoted in the old volumes of flore du Gabon exist in the database. All specimens repertoried in the BRAHMS database and phycaly absent in the Herbier National du Gabon will be traced for their localisation. As far as others herbarium is concerned, we done a first visit to herbarium of the Ecole Nationale des Eaux et Forêts (ENEF) on january and the number of observed specimen have been estimated to more 2000. Unfortunately there is not any database in this herbarium. However, the real counting of the number of specimens and the seizure of data will be made in the next steps and will be integrated in the database of the project.

The last mission of Makokou on february (from 11 to 21 of february) led to count 500 specimen in the Ipassa herbarium. The seizure of data does not not also exist. Duplicates of the most part of these specimen have been sent to herbier national du Gabon evry time the insertion was been undertaken.

Sources of verification

- Activity report which mentions the number of counted physical samples at the National Herbarium of Gabon
- The counting sheet of the samples grouped by botanical family.
- Excel table of the checked specimen in the database

Activity 4 name: *The online database*

This activity is about to connect the herbarium database (herbarium specimens, inventory data) associated to virtual lirary to internet. The layout of this web site is available

Description of any implementation during the reporting period

The creation of the website of the Herbarium of Gabon is essentially based on the extraction of data from the file BRAHMS "extract lbv table.xlsx" which contains most of the fields necessary for the constitution of the different tables. Other data from several files (dbf format) also provided by the Herbarium made it possible to complete the main reference tables: species, commons, genus, family, plantdesc and locnote_habitat. These last two tables





have been the subject of special treatment given their specificity. Several software packages were needed to establish the PDM (Physical Data Model) and create the new database:

- FoxPro-to-CSV for migrating files in DBF format to CSV type files,
- Access and Excel 2013 for the correction of certain data, the selection of fields and the creation of the different tables,
- PostgreSQL for database creation and consistency

Sources of verification

Finally, the graphic interfaces of the site are being validated with the team of the National Herbarium of Gabon, on the content, navigation and ergonomics. But the temporary web site can already be view in the address below

<http://vmtropical-proto.ird.fr/gabon/>

4.2. Goal 2: Increase available biodiversity data, within and beyond the grant period

Activity 1 name: Repatriation and loaning of herbarium specimens

Description of any implementation during the reporting period

BRAHMS database gives 65 000 data available in digitalized form. This information is about global plant collecting in Gabon since DESA Jardin (1822-1896). Specimens are stored in many partner herbaria, especially in the Museum National d'Histoire Naturelle of Paris where the first specimens was kept before the herbarium national du Gabon creation. But extracting data stored only in Gabon exhibit 40 411 data. The activity about the counting of specimens is almost finished and about 34 549 have been already counted except Rubiaceae family. Several specimens which references are entered in the Brahms database are still in the mountain room with others. For the moment, 5568 specimens are already mounted but non repertoried in the database. Several listed specimens physically absents in the Brahms database are entered in the RDE. The associated tasks to this activity are below synthesized:

- Notify the specimens not present at the herbarium national du Gabon during the specimen counting process (started on December 2016)
- Check the presence of Gabon samples used in the description of the botanical families quoted in the old volumes of "la Flore du Gabon" in the Herbarium. The activity, which consists in listing the material studied for the first edition of the flora of Gabon in 1961 and which is not mentioned in the version of the database Brahms 2016, was carried out between April and June 2017 to list physical samples of material not cited in Brahms for digitization. At the end of this period, 5 volumes (2; 9; 18; 32; 14) of the aforementioned flora corresponding to 8 families and 204 species were consulted. This inventory shows that 404 materials studied from Gabon in the first edition of "la flore du Gabon" in 1961 are not mentioned in the Brahms 2016 version.
- Identify the traceability of these physically absent specimens in herbarium national du Gabon (after the counting process) but particularly present in MNHN of Paris. One of task relating to this activity was to make a stay in the Paris MNHN to select specimens absent in herbarium national du Gabon for their repatriation but we still wait for answers from responsible of this structure after our request. We at first stopped the activity above for this reason
- To check the samples present physically in the herbarium but absent in the Brahms database (started on December)
- To undertake the loaning process of these lack specimen in the Brahms database to the others herbaria partners (after the counting process)
- To connect our database to web page

Sources of verification

- Note book with the daily activities synthesizing the number of absent specimens in the Herbarium
- Availability of copies of requests and emails relating to samples loans



This programme is funded by the [European Union](#)



Activity 2 name: Adding and editing a new data in the Brahms database

Description of any implementation during the reporting period

The herbarium samples collected during the field missions of the researchers and partners stored in the mounting room need to be mounted. To supply the database, the following tasks are foreseen in the project:

- Select data from Tropicos, MBG (partner of project) database (extraction done by Tariq Stévant on 16th march 2017 after request from project coordinator). Investing in this database, the same information is contained in the BRAHMS database
- Input the specimens data from the present specimens in the herbarium but that not exist in the Brahms database using Rapid Data Entry files (RDE). This activity still led to input 648 new data in the RDE system and will continuous beyond the grant period.
- Mounting of herbarium specimens stored in the mounting room. About 700 specimens were still mounted and this activity continues. Many non mounted specimens collection stored in some researcher room was also destroyed by the fire
- Input field notes and printing labels
- Insertion of new collections from mounting room
- Input these specimens data in the Brahms database using Rapid Data Entry files (RDE)

Sources of verification

- Presence of herbarium specimens from other national and international structure in Herbiere national du Gabon
- Presence of the new mounted specimens in the herbarium
- Availability of the database extract from the MBG in the herbarium
- Increasing of data in the database.

Activity 3 name: Setting up a digital herbarium

The virtual herbarium will not only provide all the information on the herbarium sample (on the screen) but will also give the image of the target species in its natural ecosystem and its distribution on the national territory.

Description of any implementation during the reporting period

- Digitalization of herbarium specimens in the National Herbarium of Gabon and the volumes cited in the Flora of Gabon
- Inserting images of species in the database

Sources of verification

- Existence of digital herbarium

These two activities should be done within the grant period but the loss of the digitalization material during the building fire will carry us to wait the others grants to replace this material and start the steps of digitalization.

Activity 4 name: Sustainability of the activities initiated by the project

To ensure the sustainability of these activities beyond the grant period, we will answer to new calls for proposals.

Description of any implementation during the reporting period

We wrote and submitted for example one project, Digitalization for collection management of the National Herbarium of Gabon (DICMAGA) to "Sud Expert Plantes Développement Durable" – 4th call for projects (Collections). This project which will relay BID project has been accepted to be funded by SEP2 program. The general goal of this project is to electronically capture all of the data associated with each specimen (digitalisation) and to initiate the image capture for type and endemic species. The activities of this project are



This programme is funded by the [European Union](#)



complementary to GBIF project. Looking at the specific objectives of DICMAGA project (installation of a server to run BRAHMS, digitalisation of the 1/3 specimen left from the Netherlands 2005 digitalisation program, curation of the unmounted collections, initiate sample scan process), many activities noted in the goal 2 of BID full proposal relating to the biodiversity data availability, within and beyond the grant period (Mounting of herbarium specimens stored in the mounting room, Input field notes and printing labels, Insertion of new collections from mounting room) will continue to be implemented.

We have also obtain office and IT material across AIR Liquid project supported by SMITHSONIAN

Sources of verification

- The existence of contractual documents between herbiere national du Gabon and SEP2 program about **DICMAGA** funding
- Existence of material from SMITHSONIAN

4.3. Goal 3: Apply biodiversity data in response to national priorities

Activity 1 name: Participation of herbiere national team to workshop in Yaoundé about the statute of conservation of species

Description of any implementation during the reporting period

The database provides information about rare and endangered species and allows making analysis on plant diversity, mapping of species distributions and to determine their IUCN conservation status. Researchers of the Herbiere National du Gabon was invited to the workshop taken place in Yaoundé, Cameroun (19th -23th June 2017) about the statute of conservation of species. Information relating to the identified species during this process needed the using of herbiere national du Gabon database. Some Central African species was selected to be evaluated by the members of Herbiere national du Gabon team:

- *Guibourtia tessmannii*, *Lophira alata*, *Aucoumea klaineane* (by Nestor ENGONE OBIANG)
- *CampylospERMUM* group (by Pulcherie Bissiengou)
- *Bikinia*, *Aphanocalyx* or *andoung* group (by Mboma Raymonde)

Sources of verification

Letters of invitation for participants from Gabon for a workshop organized by the IUCN in Yaoundé, Cameroun

Activity 2 name: Support logging companies to prepare audits and certification process

Description of any implementation during the reporting period

Gabonese new forest code obliges loggers to provide their concessions of management plans, supported in part by the FSC certification process which includes requirements related to the sustainability of the forest resource. Of these requirements, Indicator 9 emphasizes that management activities must locate, maintain and monitor high value forests for conservation. In addition, indicator 8.2.1 requires the establishment of permanent sampling devices representing all types of forest stands in the concession to monitor the state and growth of the forest.

It is in this perspective one logger company has requested the intervention of the National Herbarium of Gabon in its CFAD on august and September 2017 to characterize the floristic diversity of their conservation areas and identify the different types of forests with high value for conservation. The confirmation of plant identification and the knowledge on the species characterising mature forests (*Cesalpiniaceae*) was easy thank to using the herbiere national database. This work also led us to add two plots in our forest inventory database

Sources of verification

- Field mission report available at the herbiere national du Gabon and the SBL loggers company (Lastourville, Gabon)
- Two plots (2 ha) from SBL CFAD in our forest inventory database



This programme is funded by the [European Union](#)



Activity 3 name: Environmental and social impact study to describe plant biodiversity before the implementation of economical project

Description of any implementation during the reporting period

Gabonese environmental code requires economic operators to make environmental and social impact studies before executing their projects. Most of these studies have a plant biodiversity component. It is a question of describing the floristic diversity of a given area before his destruction. To confirm the identification of the plants taken from the field, the database of the herbarium is often consulted.

Sources of verification

Between 2000 and 2017 many studies have been made by many companies using herbar national database. Reports are available at the “Ministère en charge de l’environnement au Gabon » (i.e) :

- Plant diversity study in Rabikounga by SHELL Gabon and the SMITHSONIAN (2002, 2010)
- Botanical diagnosis on the Mitzi-Oyem-Bitam-Eboro axis of the INTERCONNECTE NORD GABON project (2010)
- Botanical diagnosis on the OLAM concession (Mouila), OLAM Gabon (2012)
- Botanical diagnosis on the OLAM Project Hevea (Woleu- Ntem, Gabon), OLAM Gabon (2012)
- Study of the dynamics of vegetation sites of manganese in the Moanda (Haut Ogooue Gabon) area with Eramet-COMILOG company (2012-2014)
- Botanical data in the area of OLAM PALM project, Mandji (Ngounié- Gabon), OLAM Gabon (2013)
- Botanical diagnosis on the OLAM concession (Mouila lot3), OLAM Gabon and TERE (2014)
- Botanical diagnosis on the GRAINE project in Ndendé, OLAM Gabon and TERE (2015)
- Biodiversity study (EIS) in Ngoulmendjim and Dibwangui for the construction of electric dams, FGIS-ERANOVE, TERE (2017)
- Methodologies for the evaluation of the initial state of biodiversity in BIFOUN concession, OLAM, TERA (2017)





5. Updated calendar for the BID project implementation and evaluation period

The calendar should be completed in the same way as in the Full Project Proposal, but should include any expected changes. Provide reasons for any expected changes in section 5.1 'Explanatory Notes'.

Implementation period (maximum 24 months, starting 1 June 2016 at the earliest)																															
Implementation period start date and end date (dd/mm/yy)	01/06/2016-01/12/2018																														
Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Notes
BID Capacity Enhancement workshop 1			X	X																											
6-month progress analysis						X						X																			
Mid-term evaluation & reporting											X	X						X	X												
Workshop of launch of project activities	X																														
Mobilization of biodiversity data	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Taxonomic update	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Database conception	X	X	X	X							X	X	X	X																	
Digitalization of samples and documents			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Supplying of database	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Evaluation period (maximum 6 months, ending 31 December 2018 at the latest)																															
Evaluation period start date and end date	01/07/2018-31/06/2019																														
Activity	1	2	3	4	5	6	7	8	9	10	11	12	Notes																		
Final financial and narrative reporting					X	X						X	X																		
Review of activities	X	X	X	X			X	X	X	X			This activity will consist in doing the review of scientific activities according to initial overall goals. The different obtained results will then reported in the final document that will presented or sent to the BID administration over the last two months of evaluation period																		
Review of expenses			X	X							X	X	The proof of expense for each activity will be reported in the financial document that will also presented over the last two months																		





5.1. **Explanatory notes:** After the destruction of Herbar National du Gabon's building and infrastructure in the aftermaths presidential election on august, we requested to extend our project implementation period by six month. In this case, the timeframe was revised. This request was approved by GBIF. In the new schedule that we offered (yellow box), the activities and the narrative and financial report have been shifted of 6 months. The green boxes are the already implemented activities and their progression



This programme is funded by the [European Union](#)

6. Beneficiaries/affiliated entities and other cooperation

6.1. Relationship with project partners

Please describe the relationship between your project coordinating team/institution and your project partners, and with any other organisations involved in implementing your BID project.

The Herbarium National du Gabon had identified 4 national partners: Agence Nationale des Parcs Nationaux (ANPN), Institut de Recherche en Ecologie Tropicale (IRET), Ecole Nationale des Eaux et Forêts (ENEF), l'Université des Sciences et Techniques de Masuku (USTM) and 4 other international partners to lead the project activities. Since his starting, all these partners contribute to the smooth running of the project activities through their logistical, financial and scientific support. During the night of Wednesday 31 August 2016, the Herbarium National du Gabon building was looted and burned following the aftermaths presidential elections. This situation resulted in a loss of computer equipment, research equipment, field equipment and furniture. It is thanks to the partnership and good relations with the ANPN that the head of this institution has funded, in collaboration with the director of IPHAMETRA, the transfer of herbarium samples toward the ANPN's premises where the herbarium is now located. Despite this move, the project's activities that had already started in July was remained suspended due to the lack of work equipment lost in the flames. A few months later, the delivery of small equipment (chair, desks, computer) by the ANPN enabled the herbarium to restart the project's activities. Because the narrowness of the actual room where specimens of herbarium are stored, the ANPN head hope to house the Herbarium National du Gabon in another building with the offices of the Herbarium National du Gabon staff. In addition, the ANPN contributes to the improving our web site project with her authorization to use some extracts of her book (plantes à fleur du Gabon) which he holds the copyrights (Sosef, M.S.M., 2016. L'exploration botanique du Gabon. In: J.P. Vande weghe, E. Bidault & T. Stévar (eds), Plantes à fleurs du Gabon. Une introduction à la flore des angiospermes: 28-31. Agence Nationale des Parcs Nationaux, Libreville). The partnership with the Institute of Research in Tropical Ecology (IRET) is very important. Most of the forest inventory data that we digitized were provided by this institution which allowed us to access its field note books and its bibliographic background containing of important data. The visit of the Makokou herbarium last February made it possible to note the lack of digitization of the data of this local herbarium of the IRET. The project proposed to enter these data and integrate them into the project database. The IRET also promised to provide additional future inventory data from its project to establish 300 permanent plots on a national scale in collaboration with the ANPN. This project will therefore enable the regular supply of our database. The Ecole Nationale des Eaux et Forêts (ENEF) has a small Herbarium which we have already visited on november. The digitization of these data will also contribute to the knowledge of species distribution.

As far as relations with external partners are concerned, working sessions are often organized with the Nationaal Herbarium Nederland via skype. Recently Jan Wieringa helped us to update our database by installing BRAHMS's new versions (206, 2017). An extraction of the database of Naturalis for the gabon had reached us by wi transfer and thanks to which the update was possible. The partnership with the Missouri Botanical of Garden (MBG) has already made it possible to extract from their Tropicos database. The inventory data collected in the framework of the thesis that Tariq frames and the field missions that the MBG organizes each year will also contribute to the supply of the database of the project.

6.2. Links to other projects and actions

Where applicable, outline any links and synergies you have developed with other actions, e.g. GBIF nodes, other BID funded projects, etc. If your organization has received previous grants in view of strengthening the same target group, to what extent has your BID project been able to build upon/complement the previous project(s) ?

The project has not yet developed synergies with other GBIF entities such as nodal points. Gabon is not yet a member of the GBIF and procedures for becoming a member are under way. This is also the first time that our team has benefited from GBIF funding. However, the synergies exist between our IDB project and the others projects of the partners institutions. The project already receives forest inventory data from, for example, IRET and MBG projects. Most of these projects aim to collect data on the ground, which is not foreseen in the activities of BID project. But several of these data are already integrated in the project database and the others will be enter it progressively.

7. Visibility

Please refer to the [BID guidelines](#).



This programme is funded by the [European Union](#)



7.1. Visibility of the BID project

How is the visibility of your BID project being ensured?

Short summary

The visibility of the BID project is ensured by the use and display of the Logo in communications and correspondences relating to the project activities. The material that is paid by the project budgets bears the BID logo. It is directly marked BID on all equipment too. The different presentations (slide) are accompanied by the BID logo when the conferences take place. BID project had contributed to strengthening capacity by funding the training of project coordinator on Spatial Ecology, Geospatial Analysis, and Remote Sensing for Conservation (MCCS 0500& CONS 620), in Virginia (USA), october 2017. This training belong to the component about ecological niches modelling planned in the project. In the other hand, BID project activities are also approached when the members of our team are invited in other workshops such as UICN workshop in Yaoundé, Cameroon (june 2017), workshop about the Nagoya Protocol, Montpellier, France (november 2017). The project will be cited in acknowledgment of scientific publications if information from database is used

Sources of verification

- Letter of invitation addressed to partners at the workshop to launch project activities
- Minutes of the workshop steering committee
- Workshop Program
- Presentations
- List of participant to MCCS 0500& CONS 620 and certificate of attendance

7.2. Visibility of the EU contribution

How is the visibility of the EU contribution being ensured within your project implementation?

Short summary

The logo of the European Union is also displayed in all correspondences relating to the activities of the project. These logos had been requested by email on June when the preparation of the workshop to launch BID activities. The contributions of BID and the EU will also be visible on the title pages of the student internship briefs that the project could support.

Sources of verification

- Letter of invitation addressed to partners at the workshop to launch project activities
- Minutes of the workshop steering committee
- Workshop Program
- Presentations

Signature _____

Name of the contact person for the BID Project: _____

Date report sent by email in Word format to bid@gbif.org for pre-approval: _____

Date report sent by post to GBIF Secretariat: _____



This programme is funded by the [European Union](#)