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Global Biodiversity Information Facility (GBIF) Benin

Biodiversity Information for Development (BID) program

BEST PRACTICES AND LESSONS LEARNT ALONG THE BID PROJECTS

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Content

Foreword

We seize this opportunity to thank very much the European Union (EU) who funded the BID projects. We tell our gratitude to the Secretariat of the Global Biodiversity Information Facility (GBIF) and to the team of the program of Biodiversity Information for Development (BID) for their supports and solicitude all along the implementation of the projects.

GBIF Benin has now some years of experience and is successful to some extent. All along, we did have some challenges and tried to overcome come them.

Hereafter, we will try to summarize what we considered as best practices along the projects and talk about some lessons learnt.

1-Best practices in getting and consolidating partnership with nationals

1.1-Information and training strategies

1.1.1-Within the team of GBIF Benin

From the beginning, we understood that our team has to acquire some reliable capacities in data digitization, data cleaning, data publishing, and data uses so that to be able to train national partners. To achieve that purpose, the node manager and his collaborators seized all the existing opportunities offered by GBIFS and also actively raised funds to get projects funded, including collaborative projects with senior node managers. Those opportunities offered adequate resources and occasions to build capacities to the team members. It is important to keep the team coherent and interested in the common and shared objectives of success by sharing with objectivity and ethics the training opportunities of GBIF Benin so as to have a team capacitated rather than few people inside the team.

1.1.2-Among GBIF Benin partners

Information and training of partners are key requisites for success. We therefore organized since 2010, at least two workshops each year to inform and capacitate our partners. At the beginning, we experienced some reluctance from them and this was mostly due to a lack of understanding of our mission and goals. As we set them clearly, from workshops to workshops, the partners became more and more open mind. The key point of success was to clearly define and help partners identify the types of data we needed (primary biodiversity data) and their sources (herbaria, museum, natural, observations, sample protocols…). Potential data holders became then more and more accessible and were given full attention for capacity building.

We then moved forwards during workshops in training partners in data digitization and data cleaning. Further data cleaning were processed by the team of GBIF Benin and datasets were progressively provided and published on GBIF portal.

1.2-Strategies to incentivize the partners

The first incentive was to provide financial assistance to data providers and data digitization helpers. This helped much maintaining them onboard. Students mostly used their financial supports to pay their scholarships and are happy to collaborate. Another good incentive was the certificates of workshops attendance we delivered to participants. Other incentives consisted of directly showing on GBIF site, the names and affiliations of data publishers and data holders who already published their data. Showing them to the participants helped much in getting new data holders onboard. The advantages of becoming member of a worldwide network like GBIF, with many opportunities to collaborate with others around the world were underlined enough.

2-Best practices from data digitization to data cleaning

Publishing cleaned data is one of our key objectives. To achieve successful data digitization, skilled GBIF Benin members are assigned to data holders and progressively guide them in data digitization and data formatting. The datasets are then provided to GBIF Benin where they are cleaned. In data cleaning process we used Excel, OpenRefine, R, QGIS, reliable sites like that of Catalog of life, GeoLocate, iPlant Collaborative… to track taxonomic names errors, duplicates, attribute coordinates to data lacking coordinates, validate data inside the country boundaries…

3-Data publishing and required ethics

We were trained by GBIF France to use the IPT of GBIF Benin generously hosted by GBIF France. We seize the opportunity to tell our profound gratitude to the team of GBIF France for their efficient mentorship. Using the IPT to publish data of partners required that we pay respect to the information given in the metadata of datasets in order to rescue the right information on data creators, data contacts, metadata providers, data citations… Doing so helped avoid conflicts that could preclude confidence among partners and advancement of the team.

4-Some data uses best practices

An important challenge in biodiversity informatics is to use data and derive products to inform decisions. In order to achieve this, we need in-depth capacities that we developed in our team during internship opportunities around the world. We then used the data in GIS to achieve the distribution maps of species. We further use the data along with environmental data in MaxEnt to achieve distribution and ecological models to inform decisions…

5-Lessons learnt and recommendations

BID projects are good opportunities to achieve sound results in data mobilization in priority thematic areas. In the framework of the regional BID project of Benin, at least 50,000 occurrence data were published on invasive alien species and threatened species on GBIF site whereas, more than 60,000 occurrence data were published on medicinal and agroforestry plants of Benin in the framework of the national BID project. We understood that, when the partners are informed and trained, they can contribute very soundly to the success of projects by providing relevant data and collaboration. We noticed that the potential of data mobilization is still huge in Benin. Data uses are more and more relevant and can influence decision making in the near future but, the path ahead is still long. Indeed, decision makers are not so keen on listening researchers and the latter need to develop better lobbying strategies to reach the point. In the framework of the regional BID project, we were happy to work with some of our partners. Some of them are beginners but their fruitful collaboration helped to advance in the achievement of the results of the project. I am sure they will do better in the future.