

**VIETNAM ENVIRONMENT ADMINISTRATION  
BIODIVERSITY CONSERVATION AGENCY**



# **BIFA PROJECT "DEVELOPMENT OF THE BIODIVERSITY DATABASE SYSTEM IN VIET NAM"**



**Ha Noi, 2017**



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# BIFA PROJECT INTRODUCTION

## Objective

- The project on Development of the Biodiversity Database System in Viet Nam aims to build capacity of Vietnam in biodiversity information and database management and preparation to actively take part in GBIF

## Project goal

- To identify the compatibility of the current National Biodiversity Database System with the Global Biodiversity Information Database and then, to recommend mechanisms to share information on biodiversity of Vietnam for open, free and broader access via GBIF
- To convince and increase the willingness to share biodiversity information of all biodiversity stakeholders and data managers in the country to further develop the national biodiversity database system (NBDS), contributing to inform decision makers in the policy development on biodiversity conservation and management.
- To prepare a rational proposal on road map on participation in GBIF and coordination mechanism for sharing information on biodiversity of Viet Nam to GBIF consistently and sustainably.



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# ACTIVITIES AND CALENDAR

No	Activities	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
1.	Visit of Vietnam representative to Japan to learn experience of Japanese Node									
2	Identification potential information holders for NBIF									
3	Training course for trainers on GBIF									
4	Develop a proposal on road map on participation in GBIF and coordination mechanism for sharing information to GBIF									
5	Identify compatibility and to recommend mechanisms to share information on biodiversity of Vietnam for GBIF									
6	Workshop on Biodiversity Information in Vietnam									
7	Prepare final report to GBIF									



## Activities completed

- Identification of potential biodiversity data holders for Viet Nam Biodiversity Information Facility (VBIF) in the future and engage them in VBIF;
- The capacity building in biodiversity data accumulation, digitization and sharing in a GBIF node from experience of Japan node for key trainers;
- A training workshop for trainers who are potential information holders and relevant stakeholders on GBIF is held
- A promotion workshop on Biodiversity Information in Viet Nam for relevant stakeholders is organized.
- Development of roadmap on participation in GBIF and coordination mechanism for sharing information to GBIF after several consultation meetings with key stakeholders and independent review.
- A thematic report on identifying the compatibility and to recommend mechanisms to share information on biodiversity of Vietnam for GBIF is developed after mainstreaming the comments from relevant stakeholders for completion.
- A brochure to provide the fundamental understandings about GBIF, specifically the vision, objectives, organization and access of GBIF to the target audiences.
- A midterm report completed in August, 2016 and approved by GBIF



## Project deliverables

- 4 persons visited JBIF and well understand the operation of Node
- After the 3 day ToT workshop, there are 34 participants being get approached to GBIF, the applications and software of GBIF. They also practice to utilize NBDS and IPT.
- BCA has worked with Institute of Ecology and Biological Resources (IEBR), Centre of Biodiversity (CoB), Viet Nam National University of Forestry (VNUF), Viet Nam National University (VNU): all sides have basically agreed about the information sharing and cooperation.
- About 80 participants who attended the ToT workshop and the promotion workshop on Biodiversity Information in Viet Nam for relevant stakeholders were provided understanding about NBDS and GBIF.
- A proposal on road map on participation in GBIF and coordination mechanism for sharing information to GBIF were actively commented by BCA, consulted with a number of leading experts, the JBIF node manager, Dr. Tsuyoshi Hosoya, National Museum of Nature and Science for the roadmap.
- A report on recommendation for develop a mechanisms to share information on biodiversity of Vietnam to GBIF



# A ROAD MAP FOR VIETNAM PARTICIPATING IN GBIF



**2011-2020**  
United Nations Decade on Biodiversity



# Participatory process

## Discussion before joining GBIF

- Understand Participant's **motivation** for joining GBIF, The goals of Vietnam : (1) biodiversity data housed in Vietnam are shared globally on the Internet; (2) enlist the cooperation and international aid to develop NBDS; (3) to coordinate the collection, analysis, reporting and archiving of all kinds of biodiversity related information in Vietnam
- Identify **drivers and priorities**
- Assign **formal roles**: Head of Delegation (from BCA) and temporary Node Manager (from Institute of Ecology and Biological Resources (IEBR))

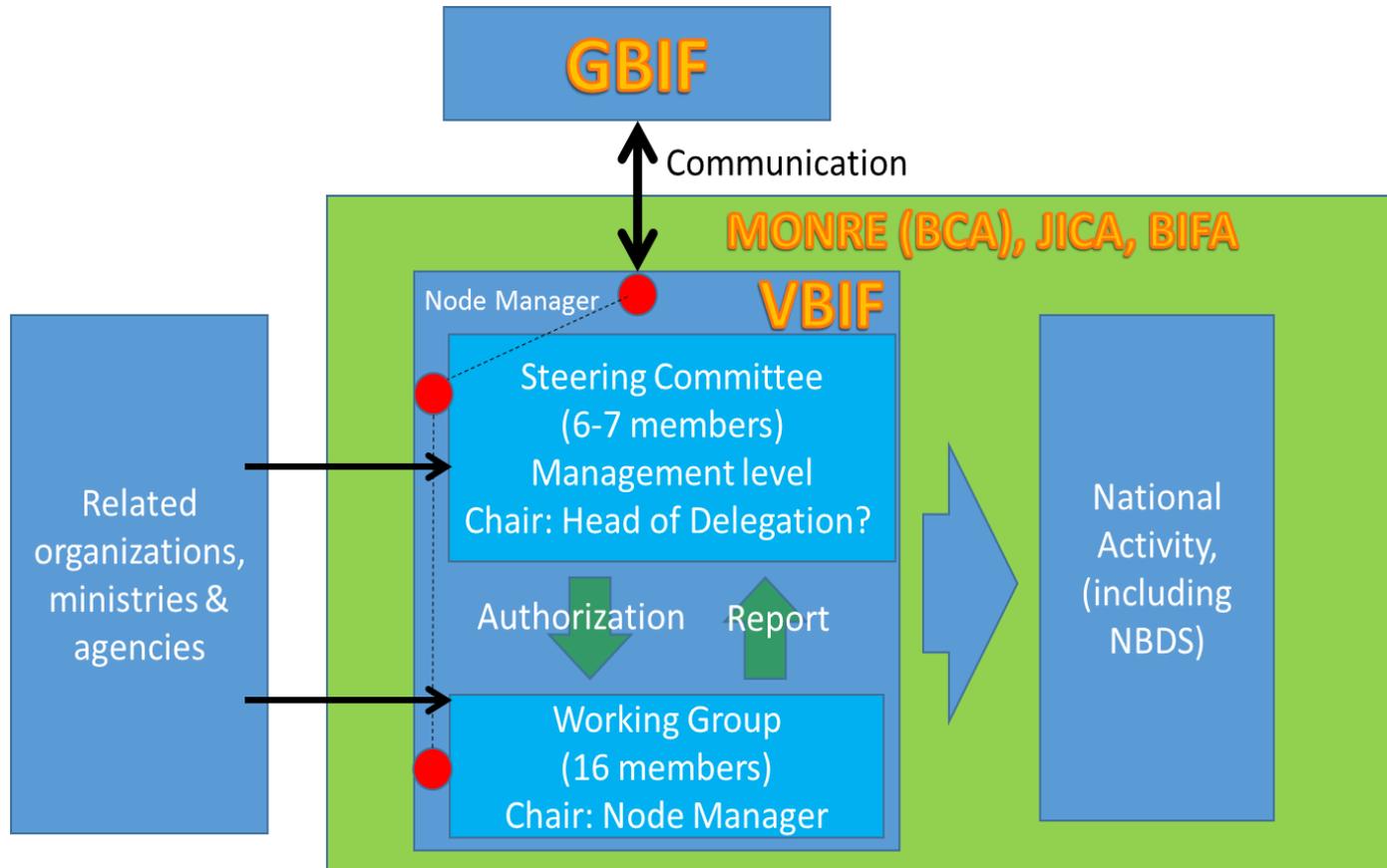
## Preparation for participatory process

- Agree **roles in the process**: BCA and Node will make final recommendation based on consulting with invested stakeholders.
- **Preparatory studies**: content needs assessment, data holders inventory, stakeholder mapping etc.
- Identify **relevant examples** from GBIF network such as Japan, Tanzania and some other countries.
- Identify **key stakeholders**: Key stakeholders will include BCA and IEBR.
- Plan a national **stakeholder meeting**

## Participatory process

- Define **priorities** for the biodiversity information facility
- Discuss which parts of the biodiversity information facility are **already in place**.
- Define key **roles for the node** in support of the biodiversity information facility. The node's roles are (1) to establish a national data network for biodiversity research & information flow; (2) to train, and disseminate key technology to assist data publishers for sharing data.
- Define **formal agreements** (data sharing/use agreements) to supports effective collaboration
- Discuss model for **informatics infrastructure**
- Discuss **governance model** and representation
- Consider **institutional location** for the node
- Discuss **a team for the node** and node manager role
- Discuss **funding models** for the node

# The organization of VBIF



# The list of potential members of VBIF



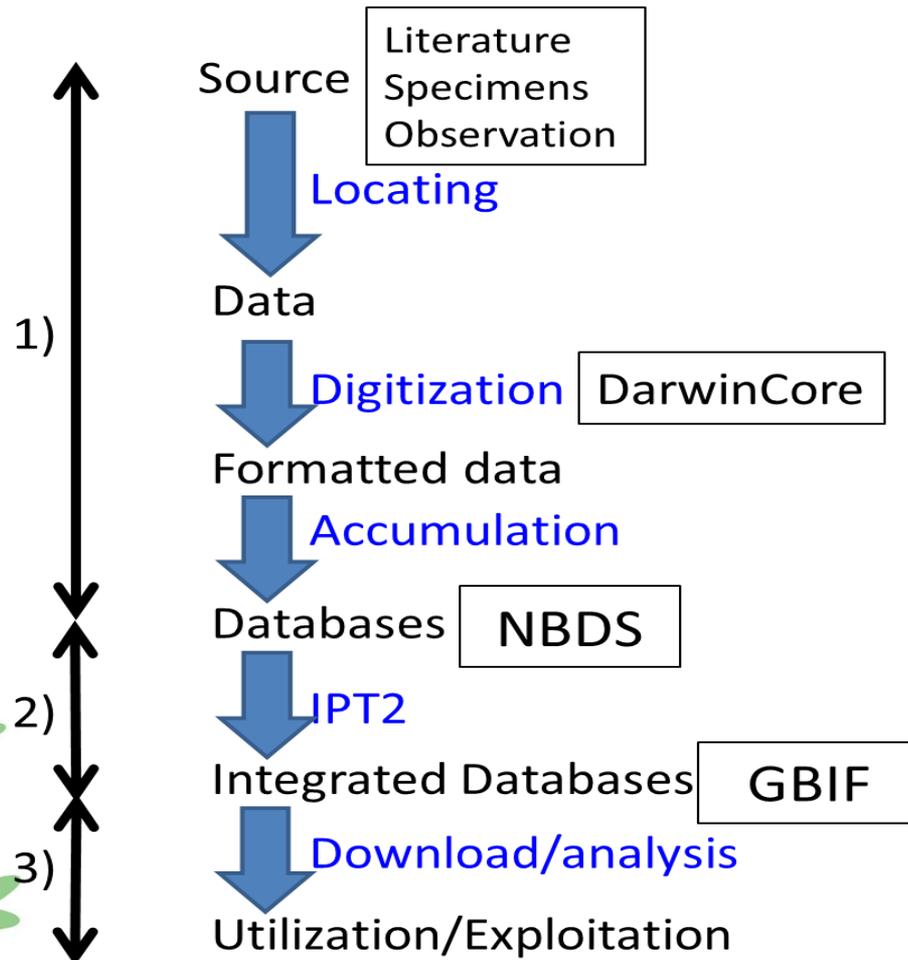
N°	Layer	Affiliation
1	Steering Committee	BCA (VEA/MONRE) (HoD)
2		Department of Nature Conservation (MARD)
3		Institute of Ecology and Biological Resources (IEBR, VAST)
4		Institute of Oceanography (IO, VAST)
5		Institute of Marine Environment and Resources (IMER, VAST)
6		Institute of Genome Research (IGR, VAST)
1	Working Group	BCA (VEA/MONRE)
2		Institute of Ecology and Biological Resources (IEBR, VAST)
		Nature Conservation Department (MARD))
3		Institute of Oceanography (IO, VAST)
4		Institute of Marine Environment and Resources (IMER, VAST)
5		The Institute of Biotechnology (IBT, VAST)
6		Institute of Genome Research (IGR, VAST)
7		Vietnam National Museum of Nature (VNMN, VAST)
8		Southern Institute of Ecology (SIE, VAST)
9		Institute of Tropical Biology (ITB, VAST)
10	Faculty of Biology, Ha Noi National University of Education (HNUE)	
11	Faculty of Biology, University of Science (HUS)	
12	Forest Inventory and Planning Department (FIPI, MARD)	
13	Vietnam National University of Agriculture (VNUA, MARD)	
14	DONRE	
15	Informatics organization	
16	Vietnam National University of Forestry (VNUF)	



# Potential Nodes in Vietnam with their advantages and disadvantages

Type of host/ Designated institution	Advantages	Disadvantages
Biodiversity Conservation Agency (BCA)	<ul style="list-style-type: none"> <li>• Very strong mandate, capacity to influence and support policy and decision making</li> <li>• Easily aligned with national biodiversity policies, strategies, and programme</li> </ul>	<ul style="list-style-type: none"> <li>• Challenges to operate at the technical level, and to provide technical support (e.g. to the scientific community)</li> <li>• Easily affected by political changes</li> <li>• May find difficulties in addressing needs from other ministries (e.g. from science or economic).</li> </ul>
Institutes of Vietnam Academy of Science and Technology (VAST), such as: IEBR, IO, IMER, IBT, IGR, VNMN.	<ul style="list-style-type: none"> <li>• Potential for developing capacity on biodiversity informatics easily and quickly</li> <li>• Full knowledge of the biodiversity-research realm</li> <li>• Knowledge of the challenges and requirements to digitize and manage natural history data</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of mandate (a strong and clear institutional mandate in terms of biodiversity database), institutional supports and funding; difficulty to formally engage with government institutions</li> <li>• It may find difficulty to engage with other communities holding other types of biodiversity data (e.g. observations, ecological data, etc.)</li> <li>• May become very dependent on funded projects</li> <li>• The Node's staff may get heavily involved in the institution's internal activities</li> </ul>

# WORK FLOW FOR DATABASING AND PUBLISHING FROM NBDS TO GBIF



- 1) Data mobilization
- 2) Providing data to GBIF
- 3) Exploitation of the data



## Recommendations and lessons learned

- Study tours, workshop and trainings should be supported and organized by GBIF in establishing a national node with a view to improving capacity for stakeholders in the future; The need for training the local staffs to operate node for VBIF in the future is also remarked
- National Biodiversity Database System in Viet Nam should be strengthened and supported by GBIF and other partners in term of technical, financial and management as well as data input for operation toward joining GBIF soon
- Establishment of mechanism for information sharing on biodiversity data in Vietnam

## Future plans

- Roadmap for participating in GBIF have to be approved by authority together with the action plan in detail
- Continuing preparation activities for Vietnam to become a member of GBIF
- Continuing mobilizing funds and grant for support Vietnam to become member of GBIF
- Continuing improving national biodiversity data system and its operation

THANKS FOR ATTENTION

