ANNEX 1: The Training Course Program on Building capacity for developing and maintaining the database system as well as for utilization of GBIF

Main Venue: National Museum of Nature and Science, Tsukuba, Ibaraki, Japan

14 June-17 June, 2016

Program:

Day1 (14 June, Tuesday): Getting started: sharing information

[Japan side]

1) **Welcome and self-introduction [All]**
   Self-introduction and brief introduction of the scientific background of the participants are presented.

2) **Review of the Proposal of the Mentoring Program (with JICA) [Hosoya]**
   By reviewing the Proposal, we clarify the goal of the whole project. Connection to JICA SNRM (Sustainable Natural Resource Management Project) will be discussed

3) **Clarifying the aim and goal of the visit [Hosoya]**
   The participants are expected to clarify the thematic aim and the final product of the visit.

4) **Relationship with JICA program [Kenmiya]**
   • JICA program for biodiversity information is explained in relation to the present program.

5) **Introduction to GBIF [Hosoya]**
   Using slides, JBIF provides fundamental information (e.g. organization, strategy, background to the regionalization, activities, functions, benefit whenjoining GBIF) of GBIF to the participants. Quick overview of the website of GBIF with reference to the available resources will be presented.

   Experience in joing GBIF (data sharing mechanism to collect, analyze and share data and information?)

6) **Activities in Asia Region [Hosoya]**
   Using the slides, Asian representative provides the recent activities in Asia region (Regional strategy, scientific activities, etc.). Experiences in join in GBIF (advantages, disadvantages, responsibility of member);

(PM)

1) **Introduction to the status of Japanese Node (JBIF) [Hosoya]**
   • - The Node manager provides the status report of JBIF including its organization (how many nodes, role of Ministry of Environment and other related organization).

- • - Requirements of human and financial resources and technical standards, strategy, function, maintenance and operation of JBIF. One of the major topic the Science Museum Net will be discussed separately below.

- • - The connection between GBIF and JBIF, national database system (any disadvantage, member responsibility).

2) How Science Museum Net works [Hosoya]
- • Science Museum Net is a domestic network for data publication to GBIF and data sharing mechanism for domestic use. The presenter will provide its organization and function (Input, update, output, data standards…), structure based on the website and other resources (The typical or technical standards for input data? Any limits or disadvantage in connecting to other resources?)

3) Observation on specimen collection and data digitization from external view [Ebihara]
A researcher's view on current status on specimen collection and data digitization in Vietnamese institute will be presented.

4) Applying cumulated data to political decision making [Ebihara]
- • An example is presented for providing a data based on the analysis of cumulated specimen data for potential conservative policy making in Japan is presented.

5) DarwinCore [Jinbo, Osawa]
- • Overview of the fields of Darwin Core and Darwin Core Archives will be presented.

6) Other key words and concepts for understanding biodiversity informatics (data paper, open data, CC license, DOI, etc.) [Osawa, Jinbo]
- • Some technical terms to understand biodiversity informatics will be presented and explained with their backgrounds.

[Vietnam side]

1) Status of biodiversity informatics in Vietnam [Vietnam Participants, TBD]
- • Status report on digitization and data mobilization are expected to be presented from the Vietnamese participants.

2) NBDS: its function [Vietnam Participants, TBD]
Overview of NBDS (National Biodiversity Data System) is expected to be presented from the Vietnamese participants.

Day2 (15 June, Wednesday): Discussion regarding the possible organization and role of Vietnam Node

(AM)

1) Accelerating data mobilization from Natural Historical Collection [Nakae]

Questionnaire presented by the GBIF working group, process of response collection, and the results so far obtained will be presented.

(PM)

1) **Discussion regarding the possible organization of Vietnam Node [Vietnam Participants, TBD]**

A group discussion on possible organization of Vietnam Node, followed by a presentation from the Vietnamese participants.

2) **Discussion on the data mobilization [Vietnam Participants, TBD]**
- A group discussion on possible mechanism and incentives on data mobilization, followed by a presentation from the Vietnamese participants.

Day3 (16 June, Thursday): IPT function and data exploitation

1) **Examples of exploitation of the data in GBIF [Totsu]**
- Various interface and function to utilize data provided by GBIF will be presented based on JBIF's experience.

2) **IPT (Local use) [Osawa]**
IPT (Integrated Publication Toolkit) is a software required to send the biodiversity data to GBIF. One of the function of IPT is to publish a data paper compatible to Pensoft journal. The installation and data conversion will be demonstrated. The participants will learn the fundamental function of IPT through the process. The participants are recommended to bring their own PCs.

Day4 (17 June, Thursday): Visit to National Institute of Genetics

1) **Observation on IPT (connection to GBIF) [Yamazaki, Otsubo]**
IPT installed in server is to be used for data publication to GBIF. The function and user interface of IPT will be demonstrated by the specialist at NIG.

2) **Group discussion on data publication to GBIF**
The way forward to install IPT in the future is expected to be discussed by the Vietnamese participants.