

## Asian Nodes Regional Workshop of the GBIF Ivy Hall, Aoyama, Tokyo, March 1 – 2, 2012 Meeting Report

## 1. Introduction/Background

Following the previous meeting in India, the third Asian meeting was convened in Tokyo. Six representatives out of 7 nodes attended the meeting. The goal of the workshop was to facilitate regional cooperation, with information sharing in the Asian region with inputs from the GBIF Secretariat. The meeting was expected to resolve two important issues: 1) Selection of the regional representative from the Asian region and 2) Generate an agreement on possible cooperation in Asian region.

## 2. Summary

On strengthening the status of GBIF in Asia, the discussions in the meeting were focused on three major challenges: 1) Data publishing; 2) Scientific usages of GBIF Data; 3) New data types. **Data publishing** activities are still dormant in some areas in Asian region. Data locked in museums and herbaria need continuous conversations and incentives before they can be released and mobilised in the GBIF Network. Repatriation of data could improve the situation and show the benefits of open access biodiversity data. **Scientific usages of GBIF Data** demonstrate the value of GBIF. Scientific topics like monitoring avian influenza and others were considered as promising directions to show how GBIF mediated data could be used. While more data are required for analysis, newly acquired data should be mobilised altogether. **New data types** like abundance and genomics data are of very high interests among participants. It's generally agreed that, with new types of data, scientific usages of GBIF data can further extend to multiple disciplines and therefore show the relevance of GBIF. To address the three challenges, a collaboration framework in GBIF Asia was also formulated, which includes creating a project for existing Participants, experience sharing, and defining strategic applications for contributing to policy and decision-making of GEO-BON and IPBES.

#### 3. Meeting highlights

- (1) Dr. Sheila Vergara of the ASEAN Centre for Biodiversity (ACB) was elected as the new regional Node representative for the Asian Region, and will represent from Asia in the Nodes Steering Group.
- (2) Participants from Asia agreed that, although data mobilization is still essential in certain



- areas, it's critical that nodes start to ask questions on how to utilize GBIF data to demonstrate and strengthen the relevance of GBIF. Designing strategic applications which could directly feed into policy framework of individual countries could be the first step.
- (3) Starting a project on regional collaboration was considered as a possible methodology to initiate building data usage practices. In East Asia, collaboration between AP-BON and GBIF Nodes is on the way. In South and South-East Asia, ICIMOD and ACB could play a crucial role, although some fundamental data publishing challenges still need to be overcome.
- (4) Inter-ministerial collaboration was also mentioned as a way to facilitate regional collaboration. South Korea, with support from Japan, offered to organise a side meeting in Governing Board 19 for the HoDs from Asia region, there, conversations can happen at the government level.
  - The main framework to develop collaboration in Asian regional activity was discussed, and a preliminary strategic framework was agreed. In the meeting, nodes have started to explore scientific issues, in which GBIF data can be used to answer and test a specific hypothesis. Further discussion and formulation of developing pragmatic action plan was deemed necessary for which second Asian Regional meeting was suggested and is tentatively scheduled on the 25<sup>th</sup> through the 29th of June, in Taipei.
- (5) Throughout the discussions it became clear that despite the potential benefits that can be derived from GBIF mediated data for use in science-policy interface (informed decision making), there is a need to devise appropriate incentive mechanisms for scientists and other wider data publishing communities so that countries are convinced to sign up with GBIF. Specifically, there is a need to:
  - 1. Promote the better understanding of GBIF and its activities at the node level
  - 2. Develop proposals to mobilize the necessary funding requirements
  - 3. Develop incentive mechanisms for data mobilization and publishing
  - 4. Continuously demonstrate the statistics of data usage
  - 5. Strengthen regional members/institutions to cater assistance and support at the regional level and minimise the pressure to the Secretariat.

## 4. Date, Venue

2012 March 1-2, Ivy Hall, Aoyama, Tokyo

#### 5. List of Participants

Dr. Howard (Hyung-Seon) Park Republic of Korea

Dr. Tsuyoshi Hosoya Japan Dr. Keiichi Matsuura Japan



Dr. Motomi Ito Japan
Dr. GautamTalukdar India
Mr. Ahmad JauharArief Indonesia

Dr. Sheila G. Vergara ASEAN Centre for Biodiversity (ACB)

Dr. Nakul Chettri International Centre for Integrated Mountain Development

(ICIMOD)

Dr. Yu-Huang Wang Chinese Taipei

Dr. Masahiro Ohara Japan Dr. Takeshi Osawa Japan Dr. Kozue Sotome Japan Dr. Hideaki Sugawara Japan Dr. KentaroHosaka Japan Mr. Naohisa Okuda Japan Mr. Wataru Suzuki Japan Mr. Hajime Hirosawa Japan Ms. Mari Yamazaki Japan Ms. Makiko Tanaka Japan Dr. Hidetsugu Miwa Japan

Dr. Olaf S. Bánki Senior Programme Officer for Participation (GBIFS)

Mr. Burke Chih-Jen Ko Informatics Liaison (GBIFS)

## 6. Agenda

## [Day 1]

9:30-9:50	Welcome address	N. Okuda, W. Suzuki
9:55-11:15	Update on developments within the GBIF secretariat	O. Bánki, B. Ko
11:15-	Status of Memorandum of Understanding (MOU)	M. Ito
11:30	consignment and modification in new MOU.	
11:30-	Status report from the participants (1)Japan, Korea	M. Ito, H. Park
12:30		
12:30-	Lunch	
14:00		
14:00-	Status report from the participants (2) Taiwan, India,	Y-H. Wang, G. Talukdar, A.J
17:10	Indonesia, ACB, ICIMOD	Arief, S.G. Vergara, N.
		Chettri
17:10-	Election of the representative from Asian region	T. Hosoya, H. Park
17:35		

## [Day 2]

9:30-9:50	Introduction to global unique identifier, concept of	B. Ko
	"data publishing"	
9:50-10:30	Information on the GBIF training workshop (Taipei,	Y-H. Wang
	2012)	
10:30-	Perspectives on regional collaboration	O. Bánki
12:30		
12:30-	Lunch	
14:00		



14:00- 16:00	Major framework on collaboration	Discussion by all the participants chaired by S. G. Vergara
16:00-	Report on GBIF Genome Standards Consortium Oxford	H. Sugawara
16:35	Workshop	
16:35-	Next Asian Regional Meeting	All
17:05		
17:15	Closing address	W. Suzuki

#### 7. Abstract of each agendum

## (1) Update on developments within the GBIF Secretariat (O. Bánki, B. Ko)

- Needs of database for the use of niche models, climate models, monitoring, estimation of spread of invasive species, was presented from GBIF Secretariat (GBIFS).
- Introduction of Integrated Publishing Toolkit (IPT) was presented. Increase of the number of IPT installations, shortening the time for indexing, improvement of indication of genus names was presented.
- Governance based on regionalized nodes was explained, and needs for regional cooperation through joint activities is increasingly required.

#### Discussion

- 1. Rich data on biodiversity is still underutilized. How to incorporate these data is in need of discussion.
- 2. Due to the heterogeneous data structure, genomic data may be difficult to standardize. We should start working with small scale data and gradual expansion is expected.
- 3. How to incorporate the existing data to the GBIF data.

#### (2) Status of MOU consignment and modification in new MOU (M. Ito)

Status of MOU consignments and modification of new MoU was explained.

## (3) Status report from the participants

Status reports of the Nodes were presented by each participant, followed by the discussion summarized below. For the content of the presentation, see presentation materials in Appendices.

#### Japan:

Change in governance has been occurring. GBIFS will assist in facilitating the communication between the governing ministries and the node. It's critical that GBIF Japan shows its relevance in the wider scientific context, therefore Japan is closely



working with AP-BON group to implement the integrated infrastructure and also to include observation as well as abundance data. For the fundamental aspect of data, geo-referencing for legacy data is one of the top concerns. More data curators need to be identified.

#### • Korea:

In spite of the fund shortage, lively capacity building and outreach activities are being carried out in Korea. Despite the gap between the ministries, the National Biodiversity Institutions Consortium (NBIC) was formed and currently acts as the data source for KBIF. Funds are limited for the implementation of the work program but several volunteers and volunteer organizations have joined the NBIC. Data providers (data nodes) are extended to 31 institutions and are publishing data of 40 NBIC institutions. A series of NBIC executive meetings have been convened, followed by expert Workshops, field surveys and research activities. As a result, 4 volumes of the "Journal of Korean Nature" have been published. KBIF identified some challenges, including the need to improve communications with the help of GBIFS and incorporating "sleeping data" (already digitized but not yet incorporated into GBIF data frame) is urgently required. And similar to the rest of the nodes, the services of aa node manager is on a voluntary basis in addition to the person's current position responsibilities.

#### Taiwan:

GBIF-ROC is formulated as the national committee for open-access biodiversity data in the public domain. TBIF translates GBits and training manuals into Chinese, maintains species catalogue of Taiwan and facilitates data input with collaborations among museums, universities, and governmental agencies.

The new Node Manager, Dr. Yu-Huang Wang, has succeeded Dr. Eric Yen. TaiBIF and Taiwan Forestry Research Institute (TFRI) has been working closely to integrate specimen-based occurrence data and catalogue-based ecological research data, with TaiBIF focusing on natural history collections as well as national checklists, and TFRI focusing on integrating data publishing and analysis workflows with EML systems (IPT2, Morpho, MetaCat and Kepler). TFRI is also exploring the linked open data approach to integrate heterogeneous database systems by technique of resources description framework (RDF).

#### • India:

GBIF-India activities are supported by the Wildlife Institute of India (WII) as coordinating node and four other thematic nodes. The road map for development of a distributed biodiversity data network, The Indian Biodiversity Information Facility



(InBIF) was discussed. Different channels to secure funding for InBIF were being explored. The publication of the first data paper from Indiain Zookeys was highlighted as a means of incentive for data publishing.

#### Indonesia:

Indonesian Institute of Sciences (LIPI) is the leading institution for biodiversity activities and data including reference collection of fauna (Museum Zoologicum Bogoriense) and Flora (Herbarium Bogoriense). Internal discussions on becoming a voting participant are being carried out. Membership fees, challenges related to data contribution and the lack of incentives are being discussed. There is a need to increase the appeal and importance of GBIF to the government and articulate the conservation benefits that may be derived from data sharing

#### ACB:

ACB was designed to be sustained from contributions of the ASEAN member states (AMS). In the recent past, EU provided funds for its operations. At current, the Philippine government as host is providing funds for its core operations. AMS are contributing various forms of support through cash contributions, support to workshops and hosting of events. Funds are also being sourced through project implementation.

The ACB Data Portal uses the Catalogue of Life as the taxonomic backbone of its species database and updates it with data from IUCN, other global data sets and contributions from the AMS. As a regional organization, ACB requires the approval of member states through the ASEAN working groups before it can publish species based information including those that will flow through the GBIF Network.

#### ICIMOD:

ICIMOD is an associate member of GBIF since 2009 but, being an Intergovernmental regional knowledge and enabling centre, ICIMOD have the mandate of collation, analysis and generation of knowledge for its regional member countries. The presentation highlighted the infrastructure and strength for data publishing and its ongoing efforts. However, as indicated by other nodes, ICIMOD articulated the lack of incentives to mobilize and publish data through ICIMOD Node. ICIMOD expressed to have fair trade off on publishing data within its own domain and linked to GBIF. So far, the experience is transforming ICIMOD's existing data into GBIF through IPT and publishing in GBIF domain has been practiced. This practice seems to have one way trade off and difficult to justify efforts on transforming ICIMOD data into GBIF domain. It was clarified that though there are three sources of funding to ICIMOD (contribution



from the regional member countries, support of International Support Group and project based income), the biodiversity data publishing support is limited. Therefore, in order to sustain operations, long-term financing is required. In addition, the necessary support for capacity building, mentoring and guidance from the GBIFS was emphasized and possible institutionalization at ICIMOD was proposed.

### (4) Election of the representative from Asian region (T. Hosoya, H. Park)

As a result of voting, Dr. Sheila Vergara, representative of ACB was elected as the new representative of the Asian region. In case of Dr. Vergara being unable to execute her terms of reference as a regional representative, the participants agreed that Dr. Nakul Chettri, representative of ICIMOD, will take on her role.

# (5) Explanation on how the uniqueness of a record is maintained; how does data publishing compare to article publishing on journals. (B. Ko)

- Currently the uniqueness of a record is decided by calculating CollectionCode,
   InstitutionCode and CatalogueNumber. CollectorNumber was suggested as a key for uniqueness.
- At present, data publishing is not entirely comparable to article publishing, which is not changeable once published. Data publisher are encouraged to review their data and metadata before they are published.

#### (6) Information on the GBIF training workshop (Taipei, 2012) (Yu-Huang Wang)

• The approval of the GBIF training workshop in Taipei was announced.

## (7) Discussion on major framework for the collaboration in Asian Region (All the participants)

- Followed by the presentation on perspectives on regional collaboration from GBIFS, constructing a major framework for the collaboration in Asian Region was discussed chaired by the new representative.
- The draft for the strategy to construct major framework in Asian Region was presented and revised upon the discussion of the participants (See Appendix).
- The participants also agreed with the need for continuing improvement and scrutinizing the strategy of the framework document. The schedule of the next meeting was discussed. Carrying out such a meeting annexed to Taipei GBIF training workshop was investigated as a strong possibility.



## (8) Report on GBIF Genome Standards Consortium Oxford Workshop (H. Sugawara)

 Dr H. Sugawara brought back the hot information about the result of GBIF Genome Standards Consortium Workshop held in Oxford. Outlines of the data structure of Darwin Core MIxS [Minimum {Genome | Metagenome | Marker gene} Sequence] was explained.

## (9) Regional Activities in 2012-2013

April 2012	Mid term meeting	
June 25 <sup>th</sup> – 27 <sup>th</sup> , 2012	Training, Taipei	
June 28 <sup>th</sup> – 29 <sup>th</sup> , 2012	Regional Meeting, Taipei	
August 1 <sup>st</sup> , 2012	Deadline for regional report	
September 17 <sup>th</sup> -21 <sup>st</sup> , 2012	Governing Board 19	

Note: Indonesia (LIPI) was nominated to host the meeting in 2013, but this needs the confirmation of Indonesia. As a back-up, South Korea will host the Asian Regional Nodes Meeting in 2013, if sufficient fund would be secured.

#### **Appendix: List of presentation materials**

- 1) Presentation from GBIFS (1)
- 2) Presentation from Japan
- 3) Presentation from Korea
- 4) Presentation from Taiwan
- 5) Presentation from India
- 6) Presentation from Indonesia
- 7) Presentation from ACB
- 8) Presentation from ICIMOD
- 9) Presentation by Ko
- 10) Presentation from GBIFS (2)
- 11) Presentation by Sugawara
- 12) Towards a Framework for Collaboration in Asia