JICA's Cooperation in Asia on Biodiversity Information Development for Decision Making in Nature Conservation

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Noriaki SAKAGUCHI
Japan International Cooperation Agency

Overview

1. JICA's Strategy for Forestry and Nature Conservation

2. Importance of Biodiversity Information for Nature Conservation

3. JICA's Cooperation for the Development of Biodiversity Information System

4. Challenges in Developing Biodiversity Information System and Networks

Strategic Approach of JCIA in Forestry and Nature Conservation 2015-2020

Overall Goal	Harmonization between Nature Conservation and Human Activities			
Strategic Theme	Measures for addressing Climate Change through sustainable forest management		Enhancement of livelihood in vulnerable communities trough sustainable natural resource use	Biodiversity conservation through management of PAs and their buffer zones
	Mitigation of global warming through REDD+	Eco-DRR by ecosystem function and services **Adaptation**		
Relevant IEAs	UNFCCC	UNFCCC Sendai Framework for DRR	UNCCD	UNCBD
Approach	Realization of REDD+ in tropical countries	Disaster risk reduction by using ecosystem function and services	Supporting local communities through green economy	Capacity building and community participation for management of PA and buffer zoon

Development of Biodiversity Information as Scientific Basis for Biodiversity Conservation

Existing data from
- Institutes
- Universities
- Ministries
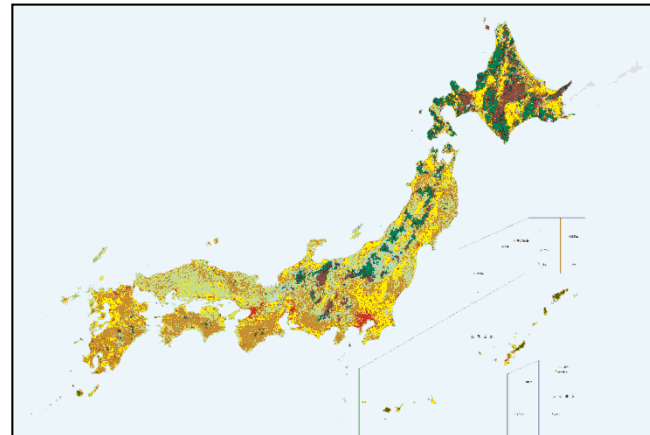- Researchers

Biodiversity Center of Japan, MOE-J

Policy Making

Planning/Implementation
- Development and revision of NBSAP
- Designation of PAs
- Natural resources / Ecosystem Management
- Other policies

Gathering

Storing

Utilizing

Biodiversity Data and Information

Biodiversity Information System

Collecting

Evaluation
- NBSAP, Aichi Targets
- IPBES Assessment
- Ecosystem / Species /Natural resources monitoring

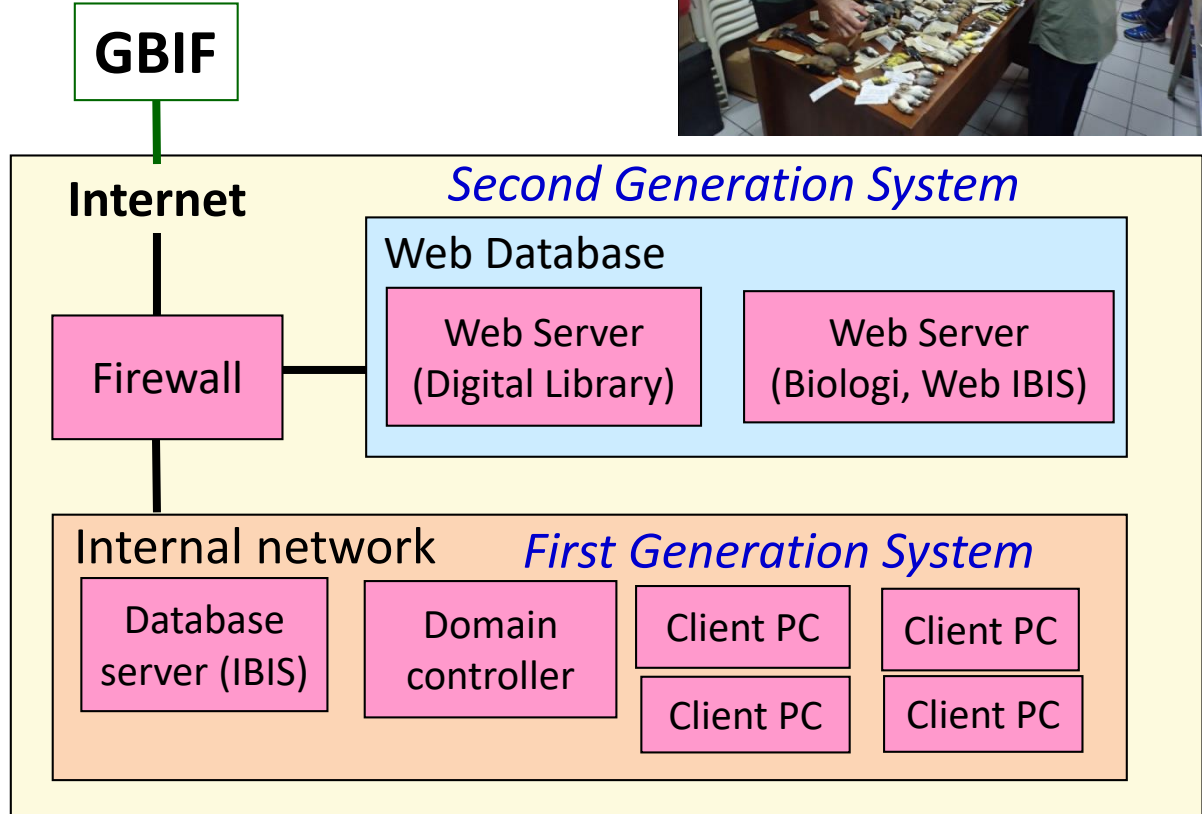# Development of Biodiversity Information System in Indonesia

Indonesia has the **richest biodiversity** in the world, since it consists of about **17,000 tropical islands** and crosses a **biogeographical border**.

Biodiversity information system is essential to conserve the mega-biodiversity.

Biodiversity Conservation Project Phase I and II (1995 – 2003)
Project on Specimen Management in RCB-LIPI (2007 – 2009)

GBIF

Internet

Firewall

Second Generation System

Web Database

Web Server
(Digital Library)

Web Server
(Biologi, Web IBIS)

Internal network

First Generation System

Database server (IBIS)

Domain controller

Client PC
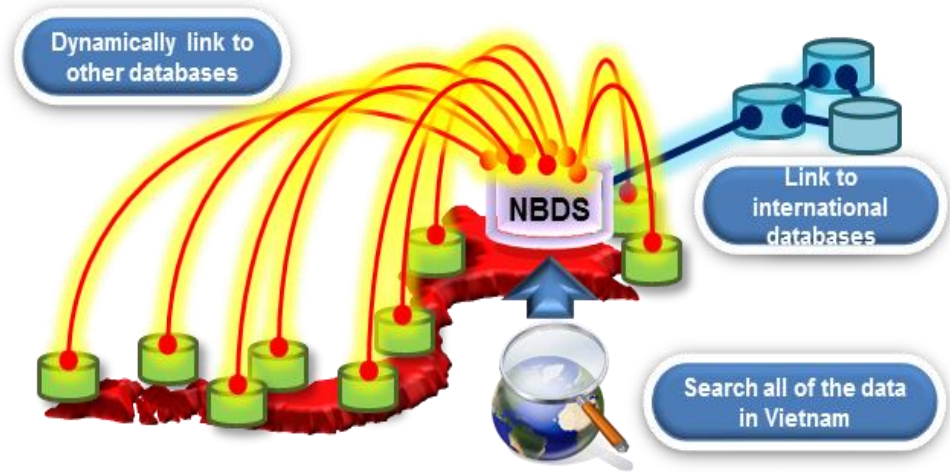
Client PC

Client PC

Client PC

National Biodiversity Database System (NBDS)

SRNM supports the management of the NBDS in Vietnam which provides comprehensive dataset and information for policy making and implementation on biodiversity conservation.

<KEY AREAS OF WORK>

• Consolidation of biodiversity data and information scattered all over the country

• Capacity building on biodiversity data collection and management

• Development of biodiversity monitoring system for terrestrial ecosystem

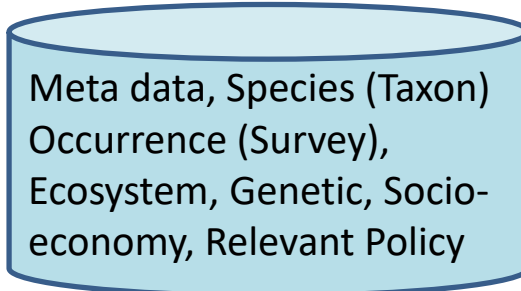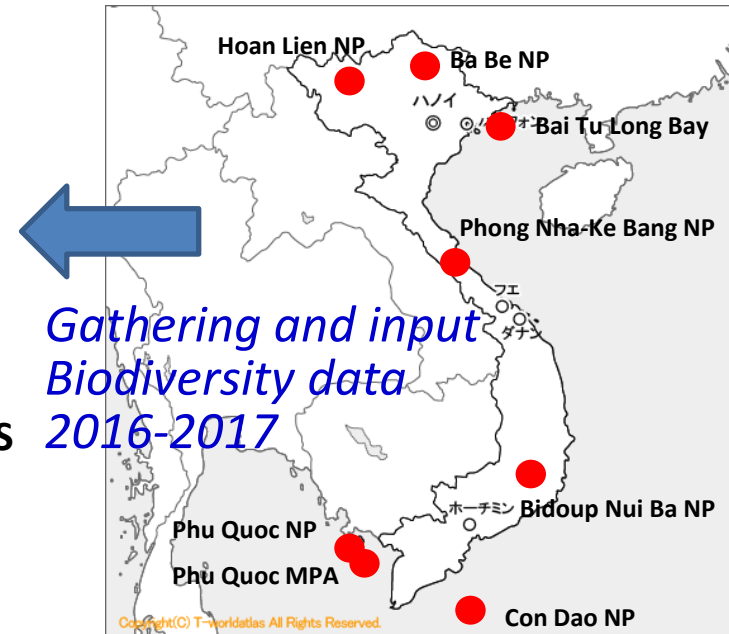• Linking NBDS with the international biodiversity database system (GBIF)

Dynamically link to other databases
NBDS
Link to international databases
Search all of the data in Vietnam

NBDS training in Ba Vi NP

NBDS training in HCMC

Data Structure of NBDS

Meta data, Species (Taxon) Occurrence (Survey), Ecosystem, Genetic, Socio-economy, Relevant Policy

Data collected and stored by NBDS Project (2011 – 2015)

-Biodiversity data in Xuan Thuy NP
-Data on Red Book Vietnam

Hoan Lien NP
Ba Be NP
Bai Tu Long Bay
Phong Nha-Ke Bang NP
Gathering and input Biodiversity data 2016-2017
Phu Quoc NP
Phu Quoc MPA
Bidoup Nui Ba NP
Con Dao NP

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Development of biodiversity monitoring system for terrestrial ecosystem

SNRM supports the development of biodiversity monitoring system for terrestrial ecosystem through pilot activities in LB-BR.

<KEY ACTIVITIES>

❑ A series of biodiversity basic surveys

⇒ Around 1000 species (plant, mammal, fish, bird, amphibian, reptile and insect) were recorded including some probable new species. ---- **Data input to NBDS**

❑ Identification of indicator species for biodiversity monitoring

❑ Development of biodiversity monitoring manual or guideline

❑ Development of LB-BR vegetation map

❑ Review of patrol method to introduce more efficient and effective way

Biodiversity basic survey

Analyzing species information

Discussion on monitoring method

Challenges on Development of Biodiversity Information System and Networks

Data Collection
- No systematic data collection all over the nation--- Indicator taxonomic groups, methodology, period, area
- Lack of human resource and capacity for data collection

Gathering and sharing existing data
- Most of data aren't digitized.
- Sectionalism in bureaucracy
- Lack of site information at which the necessary data are stored.

Biodiversity Information System
- Lack of budget and capacity necessary for the system management
- Undeveloped environment and facility for information networking

Utilization of Biodiversity information for Decision Making
- Insufficient scientific information to be utilized in policies for biodiversity
- Necessity of gap analysis between policies and biodiversity information

CAM ON BAN !!