

NBSAP and Surveys on Natural Environment in Japan



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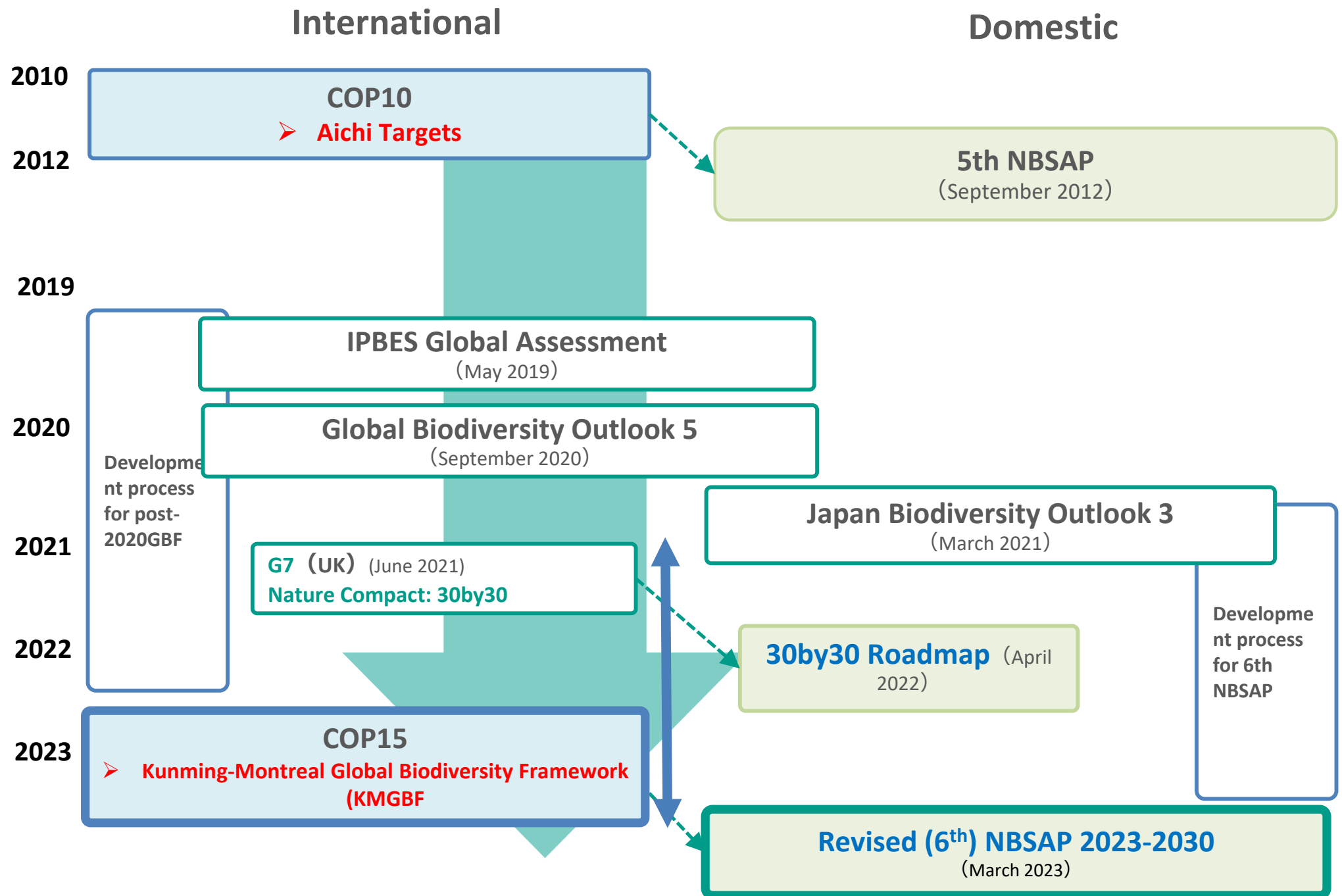
NBSAP

Surveys on Natural Environment

How surveys contribute to NBSAP

NBSAP in JAPAN

Timeline: NBSAP revision



Process: Basis and Inputs

Global

Discussion under CBD

- OEWG, SBSTTA, SBI

Assessments

- IPBES Global Assessment
- Global Biodiversity Outlook 5

National

Assessment

- Japan Biodiversity Outlook 3

Future Prediction

- 5-year research project

Evaluation of Implementation

- Report by the committee of the ministries on NBSAP

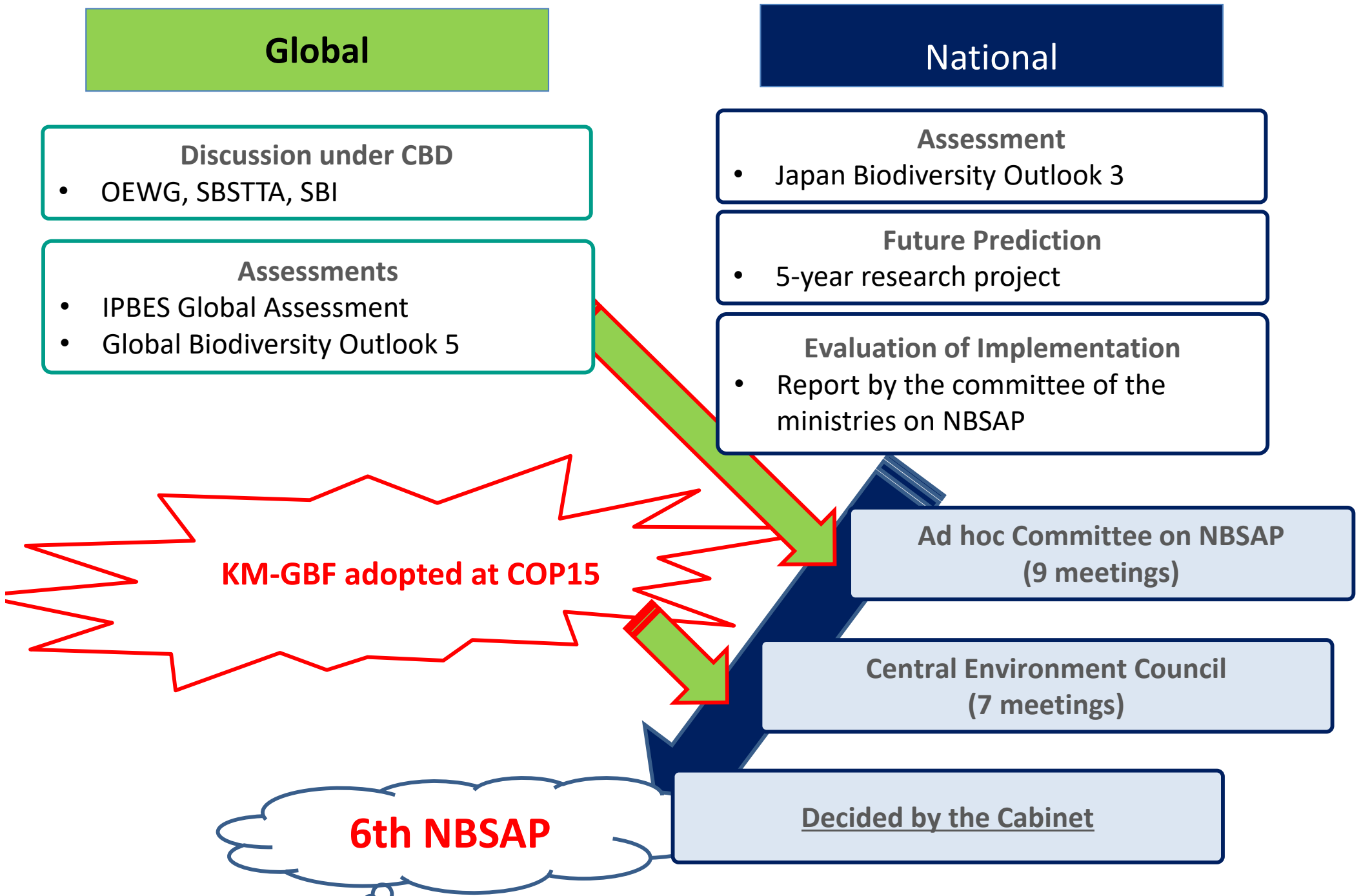
KM-GBF adopted at COP15

**Ad hoc Committee on NBSAP
(9 meetings)**

**Central Environment Council
(7 meetings)**

Decided by the Cabinet

6th NBSAP



Stakeholder engagement



- Scientific Committee
- Academic Societies (40+)

- Scientists (100+)

- All relevant Ministries
- Public comments

- Scientists and experts
- Proposals by Academic Societies

- Scientists, experts and business etc.
- Ministries, NGOs, Local governments

- Public comments

Discussion with NGOs, Local governments,
business, academia...

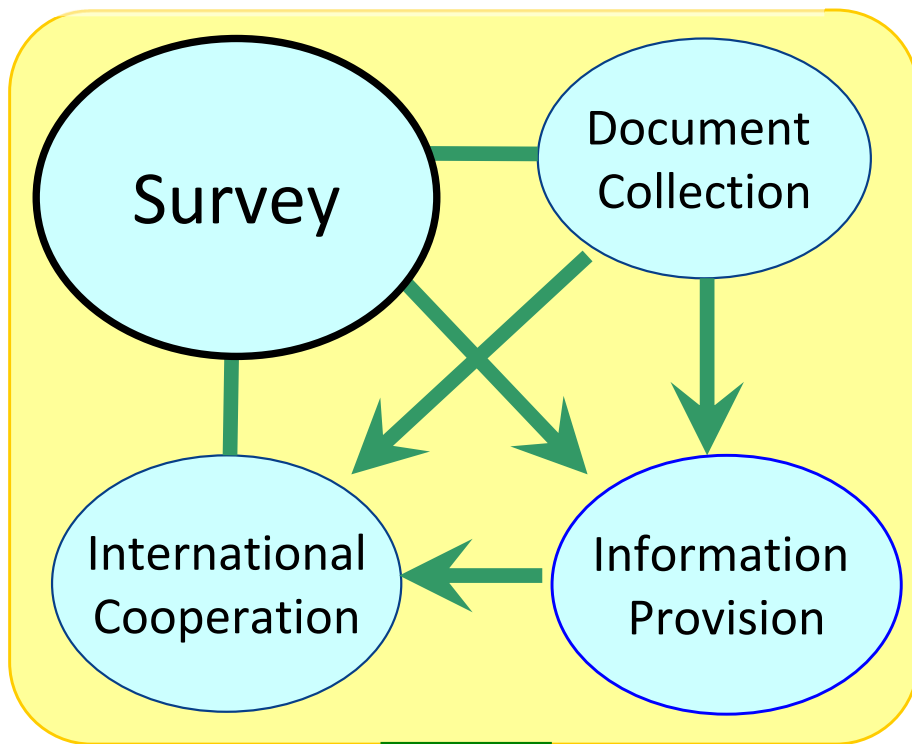
Surveys on Natural Environment in Japan

Functions of the Biodiversity Center of Japan

Core center for promoting comprehensive efforts related to "research," "provision of information," "collection of materials," and "international cooperation" concerning the natural environment and biodiversity, in order to contribute to the conservation of Japan's biodiversity.

4 Pillars

Develop and strengthen scientific information infrastructure



Basis for biodiversity conservation
Underlying support for policies

Survey

- National Survey on the Natural Environment (Green Census)
- Monitoring Sites 1000, etc.

Information Provision

- Management and provision of information collected through surveys (Biodiversity Information System, Ikimono Log, etc.)
- Raising of public awareness about biodiversity conservation

Document Collection

- Collection, storage and use of fauna and flora specimens (approx. 66,000 items) and documents (26,000 items)

International Cooperation

- Sharing of information on international biodiversity
- Acceptance of JICA participants, international capacity building in taxonomy, etc.



* Exterior: Open in Fujiyoshida City, Yamanashi in 1998

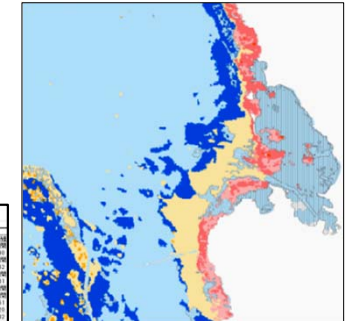
Surveys Conducted by Biodiversity Center of Japan

It is essential to understand our natural environment and its chronological transition in order to make policy and to implement appropriate measures targeting biodiversity observation.

Nationwide surveys on natural environment are conducted.

【Creating Data as Scientific Information Infrastructure】

Status of country's natural environment
Species data of each ecosystems
Understanding status and transition of ecosystems



H30サンゴ礁分布図
(宮古島大浦湾周辺)

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Monitoring Sites 1000 Datafile

■ National Survey on the Natural Environment (1973-)

- * Understanding **status and transition** of natural environment such as distribution of fauna and flora, and vegetation **spatially**.

■ Monitoring Sites 1000 (2003-)

- * Understanding **status and transition** of quantity and quality of biodiversity **chronologically**

⇒ Open data in principle

National Survey on Natural Environment

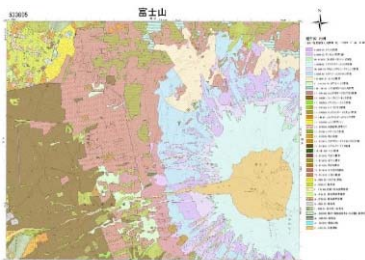
Overview: Spatial understanding of the current status and changes in the natural environment, including the distribution of fauna and flora and existing vegetation (1973-)

Target: Collection of basic data necessary for the formulation of natural environment conservation policies

Nature Conservation Act Article 4 The state shall make every effort to conduct all basic surveys once every 5 years necessary to formulate policies for the conservation of the natural environment, including those on topography, geology, vegetation and wild animals.

【Latest and Ongoing Surveys】

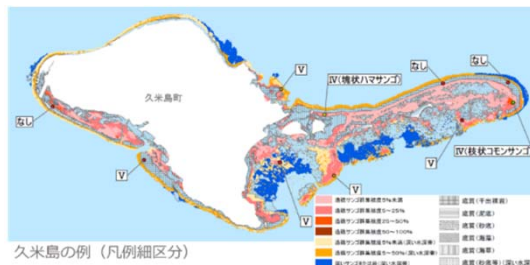
- Vegetation Survey: Nationwide 1:25,000 vegetation map completed.
- Big trees: Nationwide survey on symbolic big trees is conducted.
- Freshwater Fishes Distribution Survey: collecting existing information, survey using questionnaire, etc.
- Insects Distribution Survey : Nationwide survey on distribution of insects and survey on existing data. Also, survey is in the process of planning.
- **Survey on Coral Reefs** : Distribution and changes of coral reefs
- **Animal Distribution Survey** : Distribution of Middle and large size mammals (R4年9月公表)



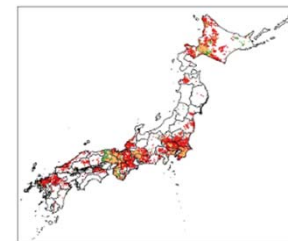
植生図の例（富士山周辺）



巨樹・巨木林調査



珊瑚礁分布図（久米島）



動物分布調査



淡水魚類分布調査（第5回調査から抜粋）

Monitoring Site 1000



モニタリングサイト1000
Since 2003

"Regional Monitoring Promotion Project for Important Ecosystems"

A project which aims to conduct long-term, quantitative monitoring of Japan's basic ecosystems, and publish obtained results in order to assist **academic research** and **develop appropriate nature conservation measures**.

- Long-term surveys of approximately 1000 sites throughout Japan over a period of **100 years** (planned)
- Continuous monitoring of **about 1,000 monitoring sites** for changes in the ecosystems in Japan
- Collection and development of monitoring data, communication of results to facilitate utilization

Justification by law

"Basic Act on Biodiversity" (Act No. 58 of 2008)

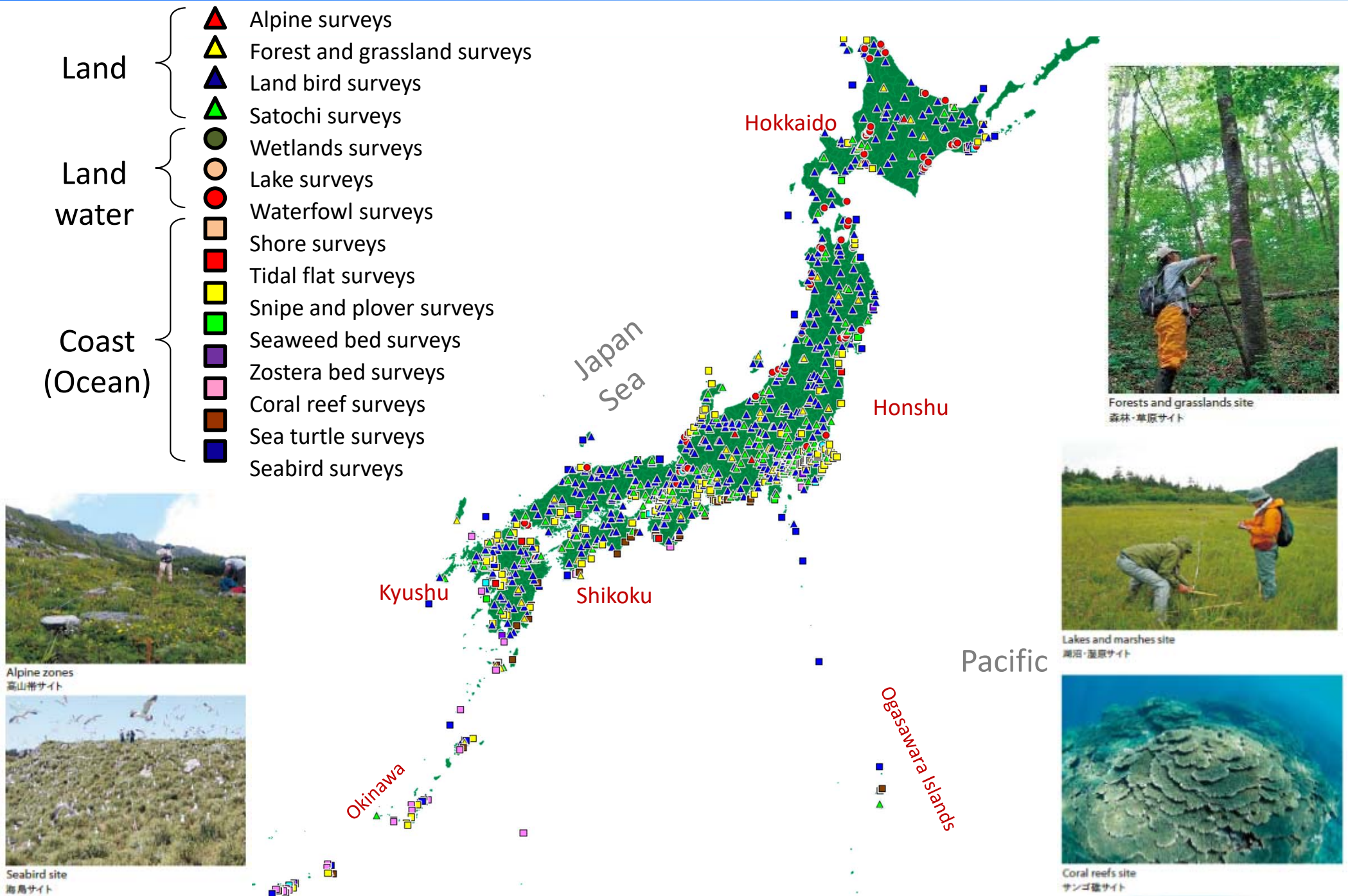
(Promotion of Surveys, etc.)

Article 22 (1) The government shall, for the purpose of properly formulating and implementing policies for conservation and sustainable use of biodiversity, implement surveys on biodiversity, including understanding and monitoring, etc. of the status of biodiversity, and establish necessary systems for the surveys, collect materials, including samples and systematically preserve them, and provide information and take other necessary measures.

Survey Fields, Contents and Number of Sites

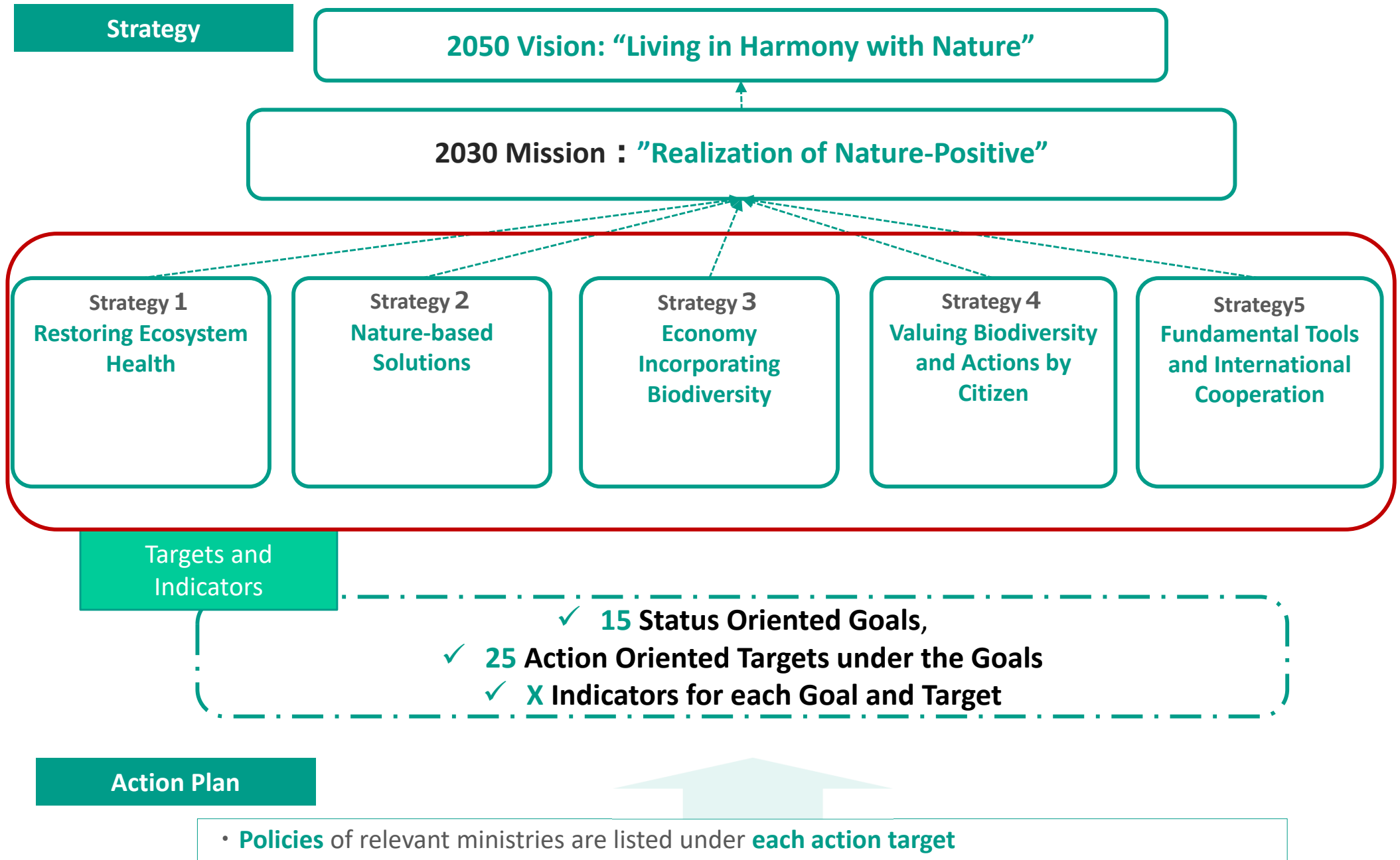
Ecosystem		Survey Site	Major Survey Items	Sites	Field Surveyors	Surveyors	
Land	Alpine		Seven surveys consisting of (1) Physical environment, (2) Vegetation, (3) Pinus pumila annual branch growth, (4) Flowering phenology, (5) Butterflies, (6) Ground wandering beetles, (7) Bumblebees	5	Researchers	50	
	Forest/ Grasslands	Core	(1) Every tree survey, (2) Litter, (3) Ground wandering beetles	20	Researchers	330	
		Quasi-core	(1) Every tree survey, (2) Litter, (3) Ground wandering beetles	28	Researchers		
		Land birds	(1) Land bird population survey	419	Citizen scientists	400	
	Satochi	Core site	Nine surveys consisting of (1) Flora, (2) Medium and large mammals, (3) Birds, (4) Butterflies, (5) Water environment, (6) Harvest mice, (7) Frogs, (8) Fireflies, (9) Vegetation map	18	Citizen scientists	2,505	
		General site	At least one survey from the nine core site surveys	219	Citizen scientists		
Land water	Lakes and wetlands		Wetlands: (1) Vegetation, (2) Physical environment and flowering phenology Lakes: (1) Animal and plant plankton, (2) Lake vegetation, (3) Lake benthos, etc.	25	Researchers	69	
		Waterfowl	(1) Population survey, (2) Swan growth rate, (3) Weather and surrounding environment	81	Citizen scientists	137	
Ocean	Coast	Sandy beaches	Sea turtles	(1) Number of landings/spawnings, (2) Sand temperature, (3) Changes to coast, (4) Understand feed damage	41	Citizen scientists	150
		Shores		(1) Benthic organisms, (2) Temperature	6	Researchers	50
		Tidal flats		(1) Benthic organisms, (2) Subsoil particle analysis, (3) Granularity loss on ignition	10	Researchers	115
			Shorebirds	(1) Population survey	144	Citizen scientists	673
		Zostera beds		(1) Seaweed survey, (2) Benthic organisms	6	Researchers	38
		Seaweed beds		(1) Seaweed survey	6	Researchers	49
	Coral reefs			(1) Coverage survey, (2) Physical environment, (3) Acanthaster population, etc.	24	Researchers	66
	Small islands		Seabird sites	(1) Population survey, (2) Breeding survey	30	Researchers	87
Total				1,082 _{sites}		4,719 _{people}	

Distribution of Monitoring Sites



How surveys contribute to NBSAP in Japan

Structure of NBSAP in Japan



(5th NBSAP compiles over 700 policies)

Structure

Basic Strategy 5

2050 Vision: "Living in Harmony with Nature"

State-Oriented Target 5-1

2030 Mission : "Realization of Nature-Positive"

Biodiversity information infrastructure will be developed, and survey/research results and provided data/tools will be utilized in various sectors, and will be put under spatial planning that takes biodiversity into account, and will be used by various actors at various spatial scales. collaboration is being promoted.

Action-Oriented Target 5-1

We will promote academic research in related fields, including the integration of biodiversity and socio-economy and the integration of natural capital into national accounts, as well as conduct long-term basic research and monitoring based on a solid system.

Action-Oriented Target 5-2

In order to promote effective and efficient biodiversity conservation, appropriate policy planning and decision-making, and citizen participation in activities, we will develop human resources and provide tools related to the dissemination and utilization of data.

✓ 15 Status Oriented Goals,

✓ 25 Action Oriented Targets under the Goals

✓ X Indicators for each Goal and Target

(Statistics AP compiles over 700 policies)

Current and Future Responsibilities of Surveys

- Continuity of surveys is extremely important. Surveys on nature environment must be continued broadly and for long period to understand past and current status.
- Information on social and political aspects regarding to nature environment should be provided
 - Definition of social and political factors which caused change of nature environment
 - Verification of policies which effected on nature environment
 - Visualization and quantification of ecosystem services
- How do we publish more effectively?

What we expect APBON

- Utilize a knowledge resource for decision making and policy making for conservation of biodiversity and ecosystem
- Promoting national BONs, improving knowledge using cutting-edge technologies
- Facilitating both science- and policy-relevant societies
- Capacity building

Thank you

