JICA Global Agenda for
No.17 Nature Conservation

Summary of the Cluster Strategy for
Nature Conservation

— To a society that can continue to enjoy the blessings of the forests and oceans by working with local communities—

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Top photo: JICA   Bottom photo: Noriaki Sakaguchi /JICA

1. JICA Global Agenda (JGA) "Nature Conservation[1]" and its Cluster Strategy

The objective of JGA "Nature Conservation" is to build a society that can continue to enjoy many blessings of nature by harmonizing nature and human activities and preventing the decline and degradation of the natural environment.

To achieve this objective, the cluster strategy "Nature Conservation" was established to work with local communities to protect the forests and oceans, and to create a society that can continue to enjoy their bounty.

(JICA website: JICA Global Agenda &Cluster Strategy.)

2. Purpose of the Cluster Strategy

2.1 Purpose

In order to achieve the objective of JGA "Nature Conservation" and to contribute to the relevant global conventions and Japanese policies listed below, the purposes of this cluster are

- ➢ to protect the natural environment of terrestrial (forests, wetlands, peatlands, etc.) and coastal areas (wetlands, mangrove forests, coral reefs, etc.) in developing countries and regions,
- ➢ to utilize the functions of the natural environment to solve social issues,
- ➢ to ensure that the efforts for the sustainable use of the natural environment are made continuously.

  Thereby we are aiming for harmony between people and natural environment.

Global Conventions and Japanese Policies

- ➢ Global Conventions, etc.: The three Rio Conventions[2] Ramsar Convention, SDGs (6, 13, 14,

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[1] The "natural environment" in JGA "Nature Conservation" mainly refers to "ecosystems", which provide benefits in the form of ecosystem services to people's livelihoods, economy and society. The ecosystem services are classified into four categories: (1) Provisioning services to provide food, water, etc. (2) Regulating services to regulate climate, conserve water resource, and mitigate natural disaster, (3) Cultural services as the provision of recreational opportunities and faith forests, and (4) Supporting services that form the basis of ecosystems, such as wildlife habitats and soils. Note that even projects in the JGA are implemented based on JICA Guidelines for Environmental and Social Considerations, same as those in other JGAs.

15, etc.), Forest Principles[3], etc.

➢ Japanese Government: National Biodiversity Strategy 2023-2030, Development Cooperation Charter (strengthening efforts to conserve the natural environment based on the principle of human security)

2.2 Targets / Indicators

Table 1 Targets and Indicators

Final Goal (2050)	Society in harmony with people and natural environment in developing countries and regions
Indirect Target (2030)	① Preventing the decline and degradation of the natural environment in developing countries and regions ➢ Improve forest management capacity in more than 50% of the total forest area in developing countries and regions (more than 30 countries) ➢ Restoration of more than 300,000 ha of forests and peatlands, and more than 30,000 ha of wetlands, mangrove forests and coral reefs \<Supplemental Indicator\> Forest area as a proportion of total land area (SDG Indicator 15.1.1) ② Further dissemination of NbS[4] in developing countries and regions ➢ NbS is implemented in more than 15 countries with the introduction of NbS into relevant policies and plans. \<Supplemental Indicator\> Number of countries using ecosystem-based approaches to managing marine areas (SDG Indicator 14.2.1) ③ Reduction or absorption of GHG emissions in developing countries and regions through ① and ② above

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[3] The first global agreement on forest-related issues adopted at the Rio Earth Summit. The agreement is that each country and international community should cooperate in implementing sustainable forest management.

[4] Abbreviation for Nature-based Solutions. As defined by the United Nations Environment Assembly (UNEA), "actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits". This cluster focuses on the various functions of the natural environment that help solve social issues, and mainly refers to climate change countermeasures (mitigation measures (REDD+, etc.) and adaptation measures) and disaster prevention and mitigation (Ecosystem-based Disaster Risk Reduction: Eco-DRR).

	➤ Absorption of more than 5 million t-CO$_2$[5]
	
	  <Supplemental Indicator>Total GHG emissions per year (SDG Indicator 13.2.2)
	
	④ Benefits to local people in developing countries and regions through ① and ② above
	
	  ➤ Benefit more than 300,000 local people through ① and ② above
	
	⑤ Capacity development of more than 12,000 government officials, etc. engaged in nature conservation in developing countries and regions for ① to ④ above

Direct Target
 	
(2026)
	➤ Steady progress in
	
	  ● improving forest management capacity in developing countries and regions
	
	  ● restoring forests, peatlands, wetlands, mangrove forests, and coral reefs
	
	  ● introducing NbS into related policies and plans
	
	➤ Capacity development of more than 6,000 government officials, etc. engaged in nature conservation in developing countries and regions

(Starting year: 2022)

3. Development Scenario

3.1 Current status

    In terms of the world's natural environment, forests have decreased by about 5% between 1990 and 2020, wetlands have decreased by about 35% since 1970, mangrove forests have decreased by about 22% between 1980 and 2020, and coral reefs have decreased by about 14% between 2009 and 2018. Peatlands are also declining and degrading in major tropical countries such as Indonesia and the Democratic Republic of the Congo, although the actual situation is not yet known. Combined with various other natural environmental degradation and loss, these are having   negative impacts on climate change (about 20% of global GHG emissions come from deforestation and forest

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[5] Calculation assumptions: (1) Equal areas of forests and mangrove forests are assumed to be planted at the end of each year from 2022 to 2030, and a certain rate of CO2 is assumed to be absorbed over time immediately after afforestation. （2）The basic unit (CO2t/ha/year) representing the relationship between afforestation area and CO2 absorption is assumed to be 1.75 for forests and 24.38 for mangroves.

degradation), biological extinction (an estimated 1 million species are threatened with extinction, and it is said to be entering "the sixth mass extinction period"), poverty and development issues (more than half of global GDP depends on the natural environment for economic value creation).

3.2 Development Scenario

Based on past experiences in Japan (e.g., recovery of forest coverage from 50% to 70% in the past 300 years through policy and planning, technical demonstration in the field, and public campaigning; designation of about 400 natural parks to achieve balancing conservation and use of the natural environment; etc.) and experiences in JICA (effective support for sustainability through strengthening governance and local participation; see Attachment 1 for major cooperation in forest sector). A series of actions below are set as a development scenario to solve issues in the current status.

➢   To establish legal and institutional systems,

➢   To develop systems for information collection and evaluation,

➢   To implement onsite solutions with the participation of local people and

➢   To expand the scope of cooperation both in Japan and overseas and promote efforts in these areas.

Each developing country has very different needs for the conservation of the natural environment and for the use of the natural environment due to differences in the social environment and other factors in each country. Therefore, the following two pillars are set as elements of the scenarios in order to make decisions on what should be prioritized according to the needs of the developing countries and to express maximum effort through specific actions.

➢   Pillar 1: Protecting the Natural Environment: Conservation and Restoration of the Natural Environment

➢   Pillar 2: Leveraging the Benefits of the Natural Environment: Nature-based Solutions

Pillar 1 and Pillar 2 are closely interrelated, and in actual implementation, they should be coordinated and sometimes implemented in an integrated manner. For example, in response to biodiversity conservation needs, activities for conservation may be implemented as part of Pillar 1, or biodiversity may be conserved as a result of Pillar 2 NbS activities. Through such activities, efforts to solve problems related to the natural environment are continuously made based on a relationship of mutual trust among the parties concerned, with the administrative departments (central and local) taking the lead, and with the proactive participation of local communities.

This development scenario applies the four common approaches of "Effective Policy and Planning," "Demonstration and Modeling Based on Local Conditions," "Developing a Scientific-based Information Infrastructure," and "Securing Resources and Innovation for Scaling-up Programs," as described in JGA "Nature Conservation". Appropriate policies and plans should be implemented and evaluated based on data. Local communities and other stakeholders should be able to enjoy and

realize the benefits of the natural environment. Thereby trust-building among those stakeholders will promote a good cycle that leads to sustainable measures to be taken. In addition, efforts should be made to widely deploy policies, systems, demonstration models, etc. by promoting collaboration with domestic and foreign partners in terms of funds, human resources, and technology. A conceptual diagram of the development scenario is shown in Attachment 2.

3.3 Development Scenario Deployment

Priority regions and countries are selected for the development scenario in three priority target areas in terms of natural environment, tropical terrestrial area (forests, wetlands, peatlands, etc.), tropical coastal area (wetlands, mangrove forests, coral reefs, etc.) and arid and semi-arid areas. Those three target areas are selected based on the degree of decline and degradation of the natural environment, existence of threatened ecosystem hot spots, vulnerability to climate change and natural disaster risks. Examples of regions and countries where these targets are distributed are shown in Table 2. In general, the most (currently about 80%) of JICA projects in the Cluster has been dealing with forests as major natural environment, as well as its contribution to biodiversity and combatting desertification.

Table 2: Priority Regions/Countries (Example)

Region	Country	Target area
Southeast Asia and Oceania	Indonesia, Philippines, Vietnam, Laos, Cambodia, Timor-Leste, PNG, Solomon Islands, Palau, etc.	Tropical terrestrial and tropical coastal areas
South Asia	India, Nepal, Bangladesh, etc.	Tropical terrestrial and tropical coastal areas
Central and South America	Brazil, Peru, etc.	Tropical terrestrial and tropical coastal areas
Africa	Democratic Republic of the Congo, Kenya, Cameroon, Ethiopia, Mozambique, Mauritius, etc.	Tropical terrestrial, tropical coastal areas, and arid/semi-arid areas

Knowledge and experiences of JICA cooperation, mostly in forest sector, in the priority countries in each region (Indonesia, Vietnam, India, Brazil, Kenya, etc.) will be utilized when deploying the development scenario in the regions, considering different characteristics of local natural environment and community (existence of indigenous people and poverty level, etc.).

Flexible combinations out of all JICA schemes are considered based on characteristics of each scheme in terms of applying for the four common approaches as below;

➢ "Effective Policy and Planning" approach: "Technical Cooperation" to strengthen policy and planning capacity

➢ "Developing a Scientific-based Information Infrastructure" approach: "Technical Cooperation" for data infrastructure operation and capacity building, "Financial

Cooperation" for data infrastructure development and "SATREPS (Science and Technology Research Partnership for Sustainable Development)" and "Public-Private Partnerships" for data-related technology development

➢ "Demonstration and Modeling Based on Local Conditions" approach: "Technical Cooperation", "JICA Partnership Program" and "Public-Private Partnerships" for community forestry, agroforestry and ecotourism which are necessary for sustainable use of the natural environment, and "JOCV (Japan Overseas Cooperation Volunteers)" and "Financial Cooperation" for model deployment.

➢ "Securing Resources and Innovation for Scaling-up Programs" approach: "Technical Cooperation" to strengthen the planning capacity necessary for obtaining external funding and "Financial Cooperation" for co-financing, and projects funded by external funds.

In recent years, about JPY 2 billion for "Technical Cooperation" and about JPY 10 billion for "Financial Cooperation" has been planned annually, for example.

Pillars 1 and 2 are closely related to each other, although they have different objectives. Therefore, both pillars are often incorporated in individual projects. (Note: Out of all JICA Projects, 30% is for mainly Pillar 1, 10% is for mainly Pillar 2 and 60% is for both Pillars.)

This development scenario is closely related to other sector/JGA/cluster strategies (Environmental Management, Water Resources Management and Water Supply, Disaster Risk Reduction, SHEP (Smallholder Horticulture Empowerment & Promotion Approach), Blue Economy, etc.) and JICA Sustainability Policy (including climate change measures, nature conservation, biodiversity mainstreaming and gender equality). The scenario is deployed in collaboration with these stakeholders.

Collaborations with various organizations are encouraged for co-creation and innovation in the deployment of future development scenarios and achievement of the targets of the cluster, for example.

(i)   International institutions such as GCF (Green Climate Fund), CAFI (Central African Forest Initiative), FAO (Food and Agriculture Organization of the United Nations), ITTO (International Tropical Timber Organization),

(ii)   Domestic institutions such as Forestry Agency, Ministry of the Environment, JAXA (Japan Aerospace Exploration Agency), Forestry and Forest Products Research Institute and

(iii) Other relevant organizations such as public organizations, NGOs, private companies, experts, funding agencies, etc. through frameworks/platforms such as "Forest and Coast Conservation Squad" (Japan Overseas Cooperation Volunteers working with JGA "Nature Conservation"), "Japan Public-Private Platform for Forest-based Solutions" and a platform on mangroves (TBD) in JICA, "International Brain Circulation" in Japanese Government and "Task Force on Nature-related Financial Disclosures (TNFD)" in the world.

In order to achieve the goals of this cluster together with other organizations, we strengthen our partnerships with and through further collaboration with funding agencies, we systematically utilize external funds, donations, etc.

Attachment 1 JICA in Forest Sector Development

Attachment 2 Conceptual Diagram of Development Scenario

JICA in Forest Sector Development

Democratic Republic of the Congo (DRC) : Technical Cooperation Project (2019-2025)

C/P*: Ministry of Environment and Sustainable Development , Kwilu Province
JICA has been implementing integrated forest monitoring throughout the country and agroforestry at the state level to restore the country's forests, which are said to be decreasing and degrading by 300,000 hectares per year.

Dialogue with community at agroforestry site

*C/P: Counterpart

Brazil : Technical Cooperation Project (2021-2026)

C/P: Ministry of Environment and Renewable Natural Resources
The project will develop the scientific information needed to monitor and control illegal logging in the Amazon forests, thereby contributing to the country's goal of zero illegal logging in the Amazon forests by 2030 .

Checking out the drone footage of the forest

② Nepal
Cooperation began in 1991; forest coverage increased from 29% to **41%** between 1994 and 2020.With the cooperation of JICA, Nepal has established its own participatory watershed management model, which is implemented with the participation of local residents, including women and socially vulnerable groups, and is being deployed throughout the country .

③ Kenya
Cooperation began in 1985. Contributed to achieving the country's priority policy of increasing forest coverage (**10%** by 2022) through the improvement of tree species suitable for arid and semi -arid lands and participatory forest management by local communities .

④Democratic Republic of the Congo (DRC)
Cooperation began in 2010. After JICA's support for the establishment of a national forest monitoring system and the development of sustainable forest management at the provincial level, the country was successful in obtaining external funding. The Congo Basin, which includes the country, has the second largest area of tropical forests after the Amazon.

① Brazil
Cooperation began in 1987. Approaching the level of advanced forest management using satellites and AI. Ranks second in the world in terms of forest area after Russia.

⑤ China
Cooperation began in 1984 (ended in 2015); JICA projects have planted **1.7 million hectares** (about 1% of the national forest area in 2015); JICA cooperation led to cooperation with other donors and international cooperation organizations; forest coverage has increased from less than 10% when the country was founded to **more than 20%** at present.

⑥ India
Cooperation began in 1991, and the afforestation area of **about 3 million hectares** under JICA projects contributed significantly to the increase in the national forest area of 8.2 million hectares from 1990 to 2020.

⑦ Vietnam
Cooperation began in 1992. Cooperation in the revision of the Forest Law, promotion of participatory forest management, and its nationwide expansion contributed to a significant recovery in forest coverage (from 24% in 1992 to **42%** in 2020).

⑧ Timor-Leste
Cooperation began in 2005. Local-community -driven development suited to the country is highly evaluated by other donors and has obtain ed external funding.

⑨ Indonesia
Cooperation began in 1973. Cooperated in policy making and planning in diverse areas such as forest fire, peatland management, and mangrove forest management. The cooperation has contributed to slowing the decline in forest area. The area of tropical forests is the third largest after the Amazon and the Congo Basin.

Indonesia: Technical Cooperation Project (under planning)

C/P: Ministry of Environment and Forestry
In the country, which has the world's largest mangrove forests, the project is implementing human resource development and mangrove conservation activities in cooperation with the Private sector, etc., utilizing the Mangrove Information Center, a Japan -Indonesia cooperation base.

Local-community-led eco-tour in mangrove forests

Conceptual Diagram of Development Scenario

Final Goal: Realization of a Society that Coexists in Harmony with the Natural Environment

Ramsar Convention

Contribution to Global Conventions and Goals

United Nations Framework Convention on Climate Change

Convention on Biological Diversity

Convention to Combat Desertification

Pillar 1 "Protecting the Natural Environment" - Conservation and Restoration of the Natural Environment

Progress in the establishment and restoration of protected areas and OECMs on land and in the sea, conservation of biodiversity, promotion of ecosystem management in collaboration with local residents under the development of information infrastructure, and conservation and restoration of the natural environment together with securing funding

-Strengthening governance and building institutions for conservation and restoration

-Creating an information collection and management system necessary for conservation and restoration

-On-site conservation and restoration with the participation of local residents

-Domestic and international expansion

Intermediate Outcome

Action

Pillar 2 " Leveraging the Benefits of the Natural Environment " - Nature-based Solutions -

Scientific evaluation of the risks and benefits of introducing NbS, integration of NbS into policies and plans to solve social issues, and widespread deployment of NbS along with securing funding

-Institutional and planning for the introduction of NbS

-Assessing the impact and cost of NbS

-NbS in practice in the field

-Domestic and international expansion

Effective Policy and Planning

Improving ability to formulate policies and plans based on scientific information

Demonstration and Modeling Based on Local Conditions

Practice and modeling of nature conservation activities based on agreements with residents

Common Approach

Developing a Scientific-based Information Infrastructure

Establishing a system to scientifically assess the current status of the natural environment

Securing Resources Innovation for Scaling-up Programs

Promoting collaboration with domestic and international funds and partners

Other Sectors (Agriculture and Fisheries, Water Resources Management, Disaster Management, Urban Development, Climate Change)

Alignment and Collaboration

Biodiversity Mainstreaming