





The Clearing-House Mechanism of the Convention on Biological Diversity

TH
National Report for
the Convention on
Biological Diversity

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# Sixth National Report

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Section I. Information on the targets being pursued at the national level

Country

Japan

#### **National Targets**

The National Biodiversity Strategy of Japan 2012-2020/National Target A-1 / Have a diverse array of actors such as governments, local municipalities, businesses, private organizations and citizens recognize the importance of the conservation and sustainable use of biodiversity and autonomously reflect this in their respective actions, thereby achieving the "mainstreaming of biodiversity across society" and reducing the fundamental causes of biodiversity loss through actions taken by diverse actors, by 2020 at the latest.

Rationale for the National Target

Mainstreaming biodiversity among all actors has been set as a national target for Strategic Goal A "Address the underlying causes of biodiversity loss" in the Aichi Biodiversity Targets.

EN

# Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

1. Awareness of biodiversity values

People are aware of the values of biodiversity

People are aware of the steps they can take to conserve and sustainably use biodiversity

2. Integration of biodiversity values

Biodiversity values integrated into national and local development and poverty reduction strategies

Biodiversity values integrated into national and local planning processes

Biodiversity values incorporated into national accounting, as appropriate

Biodiversity values incorporated into reporting systems

3. Incentives

Incentives, including subsidies, harmful to biodiversity, eliminated, phased out or reformed in order to minimize of avoid negative impacts

Positive incentives for conservation and sustainable use of biodiversity developed and applied 4. Use of natural resources

Have kept the impacts of use of natural resources well within safe ecological limits

#### Relevant documents and information

Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP 10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

ΕN

Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target B-1 / Significantly reduce the rate of loss of natural habitats, as well as their degradation and fragmentation, by 2020.

Rationale for the National Target

• Significantly reducing the rate of loss of natural habitats, as well as their degradation and fragmentation has been set as a national target for Strategic Goal B "Reduce the direct pressures on biodiversity and promote sustainable use" in the Aichi Biodiversity Targets.

ΕN

# Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

#### 5. Loss of habitats

The rate of loss of forests is at least halved and where feasible brought close to zero The loss of all habitats is at least halved and where feasible brought close to zero Degradation and fragmentation are significantly reduced

#### Relevant documents and information

• Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP 10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

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Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target B-2 / Engage in agriculture, forestry, and fisheries that ensure the conservation of biodiversity in a sustainable manner by 2020.

Rationale for the National Target

• Sustainable implementation of agriculture, forestry, and fisheries while ensuring biodiversity conservation has been set as a national target for Strategic Goal B "Reduce the direct pressures on biodiversity and promote sustainable use" in the Aichi Biodiversity Targets.

ΕN

# Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

#### 6. Sustainable fisheries

All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches

Recovery plans and measures are in place for all depleted species

Fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems

The impacts of fisheries on stocks, species and ecosystems are within safe ecological limits, i.e. overfishing avoided

7. Areas under sustainable management

Areas under agriculture are managed sustainably, ensuring conservation of biodiversity Areas under aquaculture are managed sustainably, ensuring conservation of biodiversity Areas under forestry are managed sustainably, ensuring conservation of biodiversity

#### Relevant documents and information

• Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP 10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

ΕN

Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

The National biodiversity Strategy of Japan 2012-2020 / National Target B-3 / Maintain the water quality and habitat environments desirable for the conservation of aquatic organisms, increasing biological productivity, and sustainable use while continuing to improve the state of contamination from nitrogen and

phosphorous by 2020. When it comes to water areas with a highly closed off nature—such as lakes, and deeply indented bays—(hereinafter referred to as "closed water areas") in particular, promote policies in mountainous areas, agricultural villages and the outskirts of urban areas, and urban areas that focus on the river basin in their entirety based upon the unique characteristics of each of these regions in a comprehensive and prioritized manner.

Rationale for the National Target

• Maintenance of the water quality and habitat environments desirable for sustainable use has been set as a national target for Strategic Goal B "Reduce the direct pressures on biodiversity and promote sustainable use" in the Aichi Biodiversity Targets.

ΕN

# Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

#### 8. Pollution

Pollutants (of all types) has been brought to levels that are not detrimental to ecosystem function and biodiversity

Pollution from excess nutrients has been brought to levels that are not detrimental to ecosystem function and biodiversity

#### Relevant documents and information

• Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP 10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related

governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

The National biodiversity Strategy of Japan 2012-2020 / National Target B-4 / Identify invasive alien species and organize information pertaining to the routes by which they establish themselves based upon the results of examinations of the enforcement status for the Invasive Alien Species Act by 2020. In addition, lay out the order of priority for eradicating these invasive alien species, and on the basis of this apportion out appropriate roles to each of the major actors regarding their eradication and proceed with eradicating them in a systematic manner. Promote a restoration of the habitation status of rare species and restore ecosystems to their original state by controlling or exterminating high priority species through such efforts. What is more, call the attention of related actors to the management of the routes by which invasive alien species become established in order to prevent their introduction or establishment, and promote countermeasures by examining more effective border control measures.

Rationale for the National Target

• Controlling or eradicating highly prioritized alien species, along with examining more effective border control measures has been set as a national target for Strategic Goal B "Reduce the direct pressures on biodiversity and promote their sustainable use" in the Aichi Biodiversity Targets.

ΕN

# Level of application

**Jurisdiction** 

National / Federal

#### Relevance of National Targets to Aichi Targets

Aichi Target components

Invasive Alien Species
 Invasive alien species identified and prioritized
 Pathways identified and prioritized
 Priority species controlled or eradicated
 Introduction and establishment of invasive alien species prevented

#### Relevant documents and information

• Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP 10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target B-5 / Promote initiatives for minimizing human-induced pressures that cause ecosystems to deteriorate in order to maintain the soundness and functionality of ecosystems that are vulnerable to climate change, such as coral reefs, seagrass and seaweed beds, tidal flats, islands, alpine and subalpine areas by 2015.

Rationale for the National Target

• Promoting measures to be taken to minimize human-induced pressures that deteriorate ecosystems, for the purpose of maintaining the soundness and functions of the ecosystem that are vulnerable to climate change, has been set as a national target for Strategic Goal B "Reduce the direct pressures on biodiversity and promote their sustainable use" in the Aichi Biodiversity Targets.

ΕN

# Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

# 10. Vulnerable ecosystems

Multiple anthropogenic pressures on coral reefs are minimized, so as to maintain their integrity and functioning

Multiple anthropogenic pressures on other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning

#### Relevant documents and information

• Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP 10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

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Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target C-1 / Appropriately conserve and manage at least 17% of inland areas and inland water areas, and at least 10% of coastal areas and ocean areas, by 2020.

Rationale for the National Target

 $\bullet$  Appropriately conserving and managing at least 17% of inland areas and inland water areas, and at least 10% of coastal areas and marine areas has been set as a national target for Strategic Goal C "Improve the status of biodiversity by

safeguarding ecosystems, species and genetic diversity" in the Aichi Biodiversity Targets.

# Level of application

**Jurisdiction** 

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

#### 11. Protected areas

At least 17 per cent of terrestrial and inland water areas are protected.

At least 10 per cent of coastal and marine areas are protected

Areas of particular importance for biodiversity and ecosystem services protected

Protected areas are ecologically representative

Protected areas are effectively and equitably managed

Protected areas are well connected and integrated into the wider landscape and seascape

#### Relevant documents and information

• Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP 10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

ΕN

Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

National Biodiversity Strategy 2012-2020 / National Target C-2 / Maintain a situation in the 2012 version of the Ministry of the Environment's Red List in which no new extinct species (EX)

appear (excluding species that are not found over an extended period of time for which a determination will be made over a span of 50 years or more) among the threatened species that are already known about, as well as preventing the population decrease for the known threatened species. For threatened IA species (CR) or threatened I species (CR/EN), which are the species in the greatest danger of going extinct, increase the number of species that will see their rank fall through a variety of initiatives compared to the Ministry of the Environment's 2012 Red List by 2020. Such initiatives include setting in place habitat bases by means of promoting sustainable agriculture, forestry, and fisheries that take the proactive conservation of species and biodiversity into consideration. In addition, maintain the genetic diversity of crops, livestock animals, and wild species that are closely related to them, including those species that are valuable in a socioeconomic or cultural sense, by 2020.

Rationale for the National Target

• Increasing the number of threatened species that are transferred to a category of lower threat in the Red List, as well as maintaining genetic diversity of crops and livestock animals has been set as a national target for Strategic Goal C "Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity" in the Aichi Biodiversity Targets.

EN

# Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

12. Preventing extinctions

Extinction of known threatened species has been prevented

The conservation status of those species most in decline has been improved and sustained

13. Agricultural biodiversity

The genetic diversity of cultivated plants is maintained

The genetic diversity of farmed and domesticated animals is maintained

The genetic diversity of wild relatives is maintained

The genetic diversity of socio-economically as well as culturally valuable species is maintained

Strategies have been developed and implemented for minimizing genetic erosion and safeguarding genetic diversity

#### Relevant documents and information

• Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP\_10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

ΕN

Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target: D-1 / Strengthen the benefits received from biodiversity and ecosystem services in Japan and elsewhere by giving consideration to the needs of women and local communities through the conservation and restoration of ecosystems by 2020. Carry out initiatives for each species with an awareness of the importance of the sustainable use of natural resources found in Satochi-Satoyama (socio-ecological production landscapes) areas in particular.

Rationale for the National Target

• The ecosystem conservation and restoration has been set as a national target for Strategic Goal D "Enhance the benefits to all from biodiversity and ecosystem services" in the Aichi Biodiversity Targets.

ΕN

# Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

# 14. Essential ecosystem services

Ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded

Taking into account the needs of women, indigenous and local communities, and the poor and vulnerable

#### Relevant documents and information

• Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP 10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

ΕN

Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target D-2 / Strengthen the contributions of biodiversity to resilience of ecosystem and their storage of carbon dioxide by conserving and restoring ecosystems, including restoration of at least 15% or greater for degraded ecosystems, thereby contributing to climate change mitigation and adaptation by 2020.

Rationale for the National Target

• Contributions to the mitigation of and adaptation to climate change have been set as a national target for Strategic Goal D "Enhance the benefits to all from biodiversity and ecosystem services" in the Aichi Biodiversity Targets.

# Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

# 15. Ecosystem resilience

Ecosystem resilience and the contribution of biodiversity to carbon stocks have been enhanced through conservation and restoration

At least 15 per cent of degraded ecosystems are restored, contributing to climate change mitigation and adaptation, and to combating desertification

#### Relevant documents and information

• Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP 10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

EN

Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Targets D-3 / Aim to ratify the Nagoya Protocol on ABS as early as possible and implement the domestic measures for this Protocol by 2015 at the latest.

Rationale for the National Target

The ratification of the Nagoya Protocol and the implementation of

domestic measures corresponding to the Nagoya Protocol have been set as a national target for Strategic Goal D "Enhance the benefits to all from biodiversity and ecosystem services" in the Aichi Biodiversity Targets.

# Level of application

**Jurisdiction** 

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

16. Nagoya Protocol on ABS

The Nagoya Protocol is in force

The Nagoya Protocol is operational, consistent with national legislation

#### Relevant documents and information

• Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP 10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

ΕN

Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target E-1 / Strive to promote policies related to the conservation of biodiversity and sustainable use based on the National Biodiversity Strategy of Japan in a comprehensive and systematic manner. Furthermore, provide support and cooperation to ensure that

# global initiatives geared towards achieving Target 17 are developed.

Rationale for the National Target

• The promotion of policies, in a comprehensive and systematic manner, regarding the biodiversity conservation and sustainable use based on the National Biodiversity Strategy, as well as the advancement of support and cooperation for relevant global initiatives towards achieving Target 17 have been set as a national target for Strategic Goal E "Enhance implementation through participatory planning, knowledge management an capacity building" in the Aichi Biodiversity Targets.

ΕN

# Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

#### 17. NBSAPs

Submission of NBSAPs to Secretariat by (end of) 2015 NBSAPs adopted as effective policy instrument NBSAPs are being implemented

#### Relevant documents and information

• Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP 10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

EN

Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target E-2 / Have respect for local communities' traditional knowledge related to the conservation and sustainable use of biodiversity mainstreamed by 2020. Moreover, strengthen scientific grounds pertaining to biodiversity as well as the connections between science and policy. Effectively and efficiently mobilize the resources (funds, human resources, technologies, etc.) needed to achieve the Aichi Biodiversity Targets by 2020 at the latest.

Rationale for the National Target

• Mainstreaming the respect for traditional knowledge of local communities regarding the biodiversity conservation and sustainable use by 2020, strengthening scientific foundations on biodiversity as well as ties between science and policy, and effectively and efficiently mobilizing necessary resources (such as funds, human resources and technology) have been set as a national target for Strategic Goal E "Enhance implementation through participatory planning, knowledge management an capacity building" in the Aichi Biodiversity Targets.

ΕN

# Level of application

Jurisdiction

National / Federal

# **Relevance of National Targets to Aichi Targets**

Aichi Target components

#### 18. Traditional knowledge

Traditional knowledge, innovations and practices of indigenous and local communities are respected

Traditional knowledge, innovations and practices are fully integrated and reflected in implementation of the Convention

With the full and effective participation of indigenous and local communities

# 19. Biodiversity knowledge

Knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved

Biodiversity knowledge, the science base and technologies are widely shared and transferred and applied

#### 20. Resource mobilization

Mobilization of financial resources implementing the Strategic Plan for Biodiversity from all sources have increased substantially from 2010 levels

#### Relevant documents and information

• Based on Article 6 of the Convention on Biological Diversity (CBD) and Article 11 of the Basic Act on Biodiversity, the National Biodiversity Strategy was published as a national basic plan on biodiversity conservation and sustainable use. Following the Aichi Biodiversity Targets that have been adopted in the 10th Conference of the Parties (COP 10) to the CBD in October 2010, national targets are set to achieve the targets and to be included in National Biodiversity Strategy 2012-2020. The Strategy was endorsed by the Cabinet as of January 27, 2012, after a series of due processes including hearings from various stakeholders such as academics and experts, NGOs working for conservation, dissemination and advocacy, local governments, and related governmental organizations, deliberations by the Central Environment Council, a council comprising external experts, and call for public comments.

ΕN

Other relevant website address or attached documents

https://www.env.go.jp/press/files/en/528.pdf

Section II. Implementation measures, their effectiveness, and associated obstacles and scientific and technical needs to achieve national targets

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

Key Action Goal A-1-1:

Flesh out and enhance publicity, education, and public awareness on biodiversity

• In order to promote concrete actions through participation and collaboration of various sectors to achieve the Aichi Biodiversity Targets, the Japan Committee for the United Nations Decade on Biodiversity (UNDB-J) was established in September 2011 with a wide participation of diverse actors such as experts, business leaders, NPOs /NGOs, youth, local governments, governmental entities, and so on. Through UNDB-J, relevant activities have been developed and strengthened for dissemination and advocacy of biodiversity through partnerships among those stakeholders. Those activities include: holding nationwide meetings on biodiversity; organizing local forums for sharing local various activities and exchanging opinions; selection of recommended collaborative projects; selection

of recommended books which contribute to promoting understanding of biodiversity, its dissemination and advocacy, and environmental education; and promoting implementation of the Declaration of My Actions (http://undb.jp/action/. Japanese text only) that invites individual commitment to select and declare on what to do for biodiversity (https://undb.jp/committee/team/cheering/. Japanese text only). In addition, a roadmap for UNDB-J and each partner organization was compiled in October 2016, articulating their goals and concrete commitments that need to be achieved before 2020. Their commitments are annually monitored and their activities for mainstreaming biodiversity have been accelerated. On the occasion of COP 12 and COP 13, UNDB-Day was organized in collaboration with the CBD Secretariat as a side event to share activity examples and relevant information through sessions.

- As part of support in the field of biodiversity for the reconstruction following the Great East Japan Earthquake, the Keidanren Committee on Nature Conservation has conducted reforestation campaign for creating the Restored Forest for Interactions within Tsunami Memorial Park Nakanohama in May 2014. In addition, a series of opportunities for environmental education have been provided to local elementary children through utilizing the Restored Forest for Interactions. Furthermore, the Committee has continuously supported nature conservation projects inside and outside the country through the Keidanren Nature Conservation Fund since its establishment. In 2017 as a special project to commemorate the 25th anniversary of its establishment, it decided to provide grants, equivalent to 150 million yen in total, to 3 non-governmental organizations (NGOs) that coordinated and collaborated in conducting projects for environmental education and human resources development in 6 countries and regions for 3 years. It has also actively committed to various efforts in dissemination, advocacy, education and human resources development for biodiversity, through dissemination activities for the Keidanren's Declaration on Biodiversity, including conducting biodiversity questionnaires, organizing environmental study sessions for private corporations, and lectures, in addition to organizing meetings of members in Japan Business and Biodiversity Partnership.
- The Biodiversity Working Group, established in May 2011 and collaboratively operated by the 4 Electrical and Electronic Associations, has undertaken various measures targeted on corporations to disseminate and advocate biodiversity conservation and to support corporations in promoting relevant activities. Those measures include the publication of "Let's Study Biodiversity" in 2014 as a tool for education and advocacy, the formulation of Guidelines for Action by the Electrical and Electronic Industries concerning Biodiversity Conservation in 2015, the creation and opening of database on examples for biodiversity conservation activities in 2016, and the publication of guidelines focusing on simple and easy activities entitled "Let's try Biodiversity -First steps for corporations to work on biodiversity" in 2018. In addition, seminars and study sessions have been organized. Activities by member corporations have been continuously monitored

as well.

- The Japan Business Initiative for Biodiversity (JBIB), established by Japanese corporations in April 2008, has promoted activities for mainstreaming biodiversity in business arenas, such as publishing the Guide for Promotion of Raw Material Procurement for Business in Consideration of Biodiversity in 2016, organizing JBIB Biodiversity Days, an event where participants physically experienced biodiversity through monitoring of living creatures at green spaces of each corporation, etc., and providing Green Building Certifications (expected to be over 100 sites by 2020) by the Association for Business Innovation in harmony with Nature and Community (ABINC) based on JBIB Guidelines.
- The Ministry of the Environment of Japan (MOEJ) has been promoting the branding of National Parks to enable visitors to National Parks to understand the importance of conservation and utilization of Japan's bountiful nature as well as to facilitate the vitalization of regional economies utilizing ecosystem services including traditional culture and cuisine developed through nature. In July 2016, MOEJ selected 8 parks out of 34 National Parks across the country to intensively implement the approaches for responding to inbound visitors as preceding examples. Since November 2017, relevant approaches to foreign visitors have gradually started in the other parks. (Project to Fully Enjoy National Parks: http://www.env.go.jp/en/nature/enjoy-project)
- MOEJ has contributed to increase the number of people who visit Natural Parks and to regional activation through enhancing the attractiveness of Natural Parks by conducting nature interaction events in parks and by improving the skills of volunteer personnel who assist park managements.
- In order to enhance awareness and knowledge of eco-tourism among citizens, MOEJ has disseminated relevant information through its website and participated in various exhibitions. In addition, awareness of biodiversity through agriculture, forestry, and fisheries related Declaration of My Actions have been promoted for mainstreaming biodiversity by UNDB-J. Furthermore, activities contributing to biodiversity conservation such as eco-tourism, forest volunteers such as forest management, and the restoration of seagrass and seaweed beds have spread among citizens.
- In order to increase the opportunities for children to participate in nature experience activities and environmental education using rivers and to improve nature experience activities for children in local communities, the Children's Waterfront Rediscovery Project has been promoted along with the training of instructors who can explain the natural environments of rivers as well as the dangers associated with rivers.

- Nature interaction and environmental education programs targeting children and their parents have been held through collaboration with various organizations including local governments, educational institutions, and NPOs, for the purpose of expanding the opportunities for people to learn about the importance of the natural environment of ports and harbors, by using seaside natural environment.
- Places and opportunities at urban parks, etc., have been provided for raising instructors and practitioners of environmental education and environmental learning in close collaboration with users, region, schools, etc. In addition, maintenance of urban parks, etc., for implementing such programs has been promoted.
- Biodiversity conservation in the fields of agriculture, forestry and fisheries has been promoted through various activities involving wider stakeholders such as farmers, consumers and business sectors. Those activities were conducted through utilization of guidelines and leaflets, organization of symposiums to promote new collaboration between stakeholders, and organization of exhibitions and seminars for corporations on the themes of environmental policies and economic collaboration with private sectors.
- Fisheries eco labels assure that the fishery products were caught by methods taking into account ecosystems and resource sustainability. Activities for raising awareness of such labels have been promoted through brochures for consumers, etc. (Fig. 12).
- The National Federation of Fisheries Cooperative Associations has organized national gatherings for youth and women engaging in fishery, in order to promote reporting and sharing relevant information concerning studies of resources management as well as efforts in increasing resources and environmental conservation by youth and women engaging in fishery, and results of their practices. The Women's Unit for Coordination Committee in the National Federation of Fisheries Cooperative Associations has promoted use of soaps made of natural materials that are sold as a brand product of the Women's Unit, as part of coast environment conservation.
- In addition to City Biodiversity Index (simplified version) that was developed for enabling local governments to easily comprehend and evaluate their status quos in terms of commitments to urban biodiversity in JFY2016, Guidelines for Formulating the Master Plan for Parks and Open Spaces Considering Biodiversity were published in JFY2018. Based on its dissemination, commitments to promote urban biodiversity conservation were further accelerated.
- In order to promote access to genetic resources and sharing of benefit arising from their utilization, relevant information was provided through organizing explanatory sessions and consultation desks.

• Various organizations have conducted leadership training programs in the field of environmental education.

# Key Action Goal A-1-2:

Promote initiatives to visualize economic values of biodiversity and ecosystem services.

- Efforts have been made to reform lifestyles and to restore a society where children play in nature by conducting awareness raising activities and creating educational materials in line with the perspective of each generation, including "safety and security", "childrearing", and "being stylish" towards establishing an economic society for maintaining and restoring forests, the countryside, rivers and the sea and utilizing their blessings (Regional Circular and Ecological Sphere) (The Project on "Connecting and Supporting Forests, the Countryside, Rivers and the Sea").
- Future predictions and economic valuations of biodiversity and ecosystem services have been conducted (Fig. 14). Also, support for academic research and trial of evaluation for specific cases were conducted for the purpose of considering measures that are effective in integrating biodiversity and ecosystem services into the decision making in socioeconomic activities.
- A mechanism has been studied to promote assistance by business sectors to agricultural production and other activities by farmers that contribute to biodiversity conservation, by utilizing economic valuations of biodiversity.
- Measures have been taken towards spreading of green leases, in collaboration with related government organizations to facilitate recognition and high valuation of sound and environment-conscious real estate properties developed in consideration of energy conservation, low-carbonization, biodiversity, etc., by various stakeholders including investors and to facilitate sustainable investments in the market.

# Key Action Goal A-1-3:

Promote the formulation of effective Local Biodiversity Strategies and practical initiatives by local municipalities. In addition, revise guidelines on formulating Regional Biodiversity Strategies by 2013.

• Effects of local biodiversity strategy formulation and review results of compiled good practices were shared on the websites, for the purpose of promoting the formulation of local biodiversity strategies and action plans (LBSAPs). In addition to this, local governments that have considered to formulate LBSAPs were supported to address their challenges. As of March 2017, 41 prefectures and 82

municipal governments have formulated their own LBSAPs (Fig. 15).

• Meanwhile, a second revision was made to the Guidelines on Formulating Local Biodiversity Strategies and Action Plans in March 2014.

# Key Action Goal A-1-4:

Promote the formulation of strategies and plans by the national and local governments in consideration of biodiversity. In addition, give consideration to the effects on biodiversity from incentive measures and implement incentive measures that take biodiversity into consideration.

- Supports have been provided to local governments and other entities for the formulation of statutory plans related to the conservation of biodiversity in local regions and the promotion of measures based on these plans. As of March 2015, 56 statutory plans (LBSAPs, implementation plans for controlling Specified Invasive Alien Species, etc.) had been formulated.
- MOEJ has financially supported biodiversity conservation activities (by biodiversity conservation promotion project) to encourage such activities conducted in collaboration of various actors in local regions. As of JFY2016 support had been provided to the activities of 55 organizations. All of those organizations, to which support has concluded, are still continuing with or expanding upon their activities through a variety of different structures.
- Payment for activities to enhance multi-functionality, founded in JFY2014, provided support to cooperative activities in maintaining and improving multifunctions possessed by agriculture and rural areas, and encouraged the appropriate conservation and management of local resources. With regard to biodiversity, relevant activities were supported to conserve and restore ecosystems by taking advantage of roles of agricultural land and so on as environmental resources (Figs. 9 and 10).
- The Technical Considerations for Securing Biodiversity under Master Plan for Parks and Open Spaces were formulated in October 2011 in the interest of supporting the formulation of Master Plan for Parks and Open Spaces by local governments, which gave forethought to securing urban biodiversity. In addition, local governments' commitments have been promoted through formulating the City Biodiversity Index (draft) in May 2013, City Biodiversity Index (simplified version) in November 2016, and Guidelines for Formulating the Master Plan for Parks and Open Spaces Considering Biodiversity in May 2018.
- Support has been provided for the formulation of plans by local governments targeting contributing to the reduction of CO2 and the conservation and restoration of forests, etc., by sustainably utilizing woody biomass that is locally available in woods, etc.

Key Action Goal A-1-5:

Establish and announce policies for biodiversity-conscious and sustainable business activities and encourage their implementation (the introduction of environmental management systems which give consideration to biodiversity, the procurement of raw materials which takes into consideration the supply chains, production activities, sale of goods and services, technological development, waste management, investment and financing activities, land use, employee education and information disclosure on these activities).

- A revision was made to the Guidelines for Private Sector Engagement in Biodiversity that had compiled basic information and concepts regarding business activities and biodiversity for businesses so that it would be easier for them to utilize. With regard to business associations that are supposed to lead operators according to business types, the Guideline for Operators' Associations in Conservation and Sustainable Use of Biodiversity (draft) was prepared to assist and promote those associations' activities regarding biodiversity conservation and sustainable use. In addition, coordination with the UNDB-J and Japan Business and Biodiversity Partnership has been further strengthened.
- Regarding the natural capital, MOEJ organized the International Symposium on Natural Capital Management in 2014 and introduced relevant trends in Japan and abroad regarding natural capital management. Following this, NGOs and corporations have collaborated in publishing a Japanese translation of the Natural Capital Protocol, issued by the Natural Capital Coalition, as well as in assisting the introduction of natural capital management to corporations.

#### National Target(s)

The National Biodiversity Strategy of Japan 2012-2020/National Target A-1 / Have a diverse array of actors such as governments, local municipalities, businesses, private organizations and citizens recognize the importance of the conservation and sustainable use of biodiversity and autonomously reflect this in their respective actions, thereby achieving the "mainstreaming of biodiversity across society" and reducing the fundamental causes of biodiversity loss through actions taken by diverse actors, by 2020 at the latest.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

# Measure taken has been partially effective

#### Other relevant information

• Most of the indicators regarding national target A-1, such as the number of participating local governments in the Local Government Network on Biodiversity, are trending toward increasing (refer to item 7 of Section III). Especially, as shown by the considerably increasing number of registrations in the Nijyu-maru Project (Double 20 Campaign) participated by civil organizations, business sectors, local

governments and other organizations that have declared to commit and work on activities for biodiversity to achieve the Aichi Biodiversity Targets, a certain level of progress has been observed in mainstreaming biodiversity in society (refer to Fig. 6 in item 7 of Section III).

- According to results of a questionnaire survey conducted by the Japan Business Federation, Keidanren Committee on Nature Conservation, and Japan Business and Biodiversity Partnership targeting corporations, about 80% of the corporations have shared relevant information regarding biodiversity through their environmental reports and websites. More than 80% of the member corporations know the relationships between their business activities and biodiversity. More than 60% of the corporations have set their goals in conducting activities regarding biodiversity. These examples show a certain progress in mainstreaming biodiversity among corporations (Results of a questionnaire survey regarding biodiversity, February 2018).
- Meanwhile, according to a public opinion poll targeting individuals, conducted by the Cabinet Office, degree of recognition of the word "biodiversity" (refer to Fig. 1 in item 7 of Section III), that of the National Biodiversity Strategy 2012-2020 (refer to Fig. 2 in the same item) and other relevant indicators show a decreasing tendency (Results of Public Opinion Poll on Environmental Issues (2012, 2014)). Taking into account of that, it was evaluated that measures taken have been partially effective.

Other relevant website address or attached documents

http://bd20.jp/en/

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

# Key Action Goal B-1-1:

Establish methods and standard values to serve as baselines designed to determine the rate of loss of natural habitats and their state of degradation and fragmentation, as well as sorting out their current status, so that effective action

can be launched by the mid-term review of the Aichi Biodiversity Targets that is

scheduled for 2014 or early in 2015.

• As a method to comprehend the situations regarding the rate of loss of natural habitats and their degradation and fragmentation, it was decided to utilize relevant information such as areas of forests, lakes and marshes, reclamation areas of shallow seas, and extensions of natural coastlines, considering data continuity. As for forest areas, they remain steady without considerable fluctuations. There are no significant fluctuations for areas of lakes and marshes as well. Reclamation areas have shown a decreasing tendency since the peak in the 1970s, while the extensions of natural coastlines are currently estimated to be more than 18,000 km. This information was used for the mid-term review of Aichi Biodiversity Targets.

# Key Action Goal B-1-2:

Reduce the rate of loss of natural habitats by at least half or bring this close to zero in cases where it is possible to do so by 2020. In addition, carry out the initiatives needed to noticeably reduce the degradation and fragmentation of natural habitats, such as the development of ecological networks and the restoration of wetlands and tidal flats.

• Focusing on significant areas (Satochi-Satoyama, wetlands, and marine areas) that were selected in JFY2015 and 2016 as the core of ecological networks, conservation and restoration have been promoted by the participation of diverse actors (https://www.env.go.jp/nature/satoyama/jyuuyousatoyama.html. Japanese text only;

http://www.env.go.jp/nature/important\_wetland/index.html. Japanese text only; and http://www.env.go.jp/en/nature/biodic/kaiyo-hozen/kaiiki/index.html)

As of March 2017, commitments to nature restoration based on the Act on the Promotion of Nature Restoration have expanded to 25 sites, reaching at 480,000 ha. Relevant activities to restore various ecosystems including forests, wetlands, grasslands, and coral reefs across the country have been assisted.

- While promoting conservation of wetlands, establishment and maintenance of their network, restoration of the natural environment by nature restoration projects, nature-oriented river works and so on, surveys and monitoring for understanding the natural environment have been implemented to promote effective measures.
- Measures have been taken to promote the development of green spaces around ports and harbors where various species inhabit and local residents can enjoy nature. In addition, the creation of tidal flats, seagrass and seaweed beds, etc., as well as backfilling depressions were promoted by effectively utilizing the dredged materials generated through the development of ports and harbors, etc.

- Networks of water and greenery have been formulated through conservation of green spaces and development of urban parks carried out by local government, etc., based on the Master Plan for Parks and Open Spaces, etc. (Fig. 24).
- New designation and expansion of national parks and quasi-national parks, etc. have been promoted based on the results of the project to overhaul national and quasi-national parks.
- Information collection has been conducted, in order to promote activities for nature restoration in light of disaster risk reduction and mitigation, building a sustainable society, and consolidating green infrastructure. In addition, activities for nature restoration were promoted to regain ecosystems and other natural environments that had been lost in the past, in collaboration with related organizations and entities, based on diverse actors' collaboration, building sustainable local communities, and consolidating green infrastructure.

#### Key Action Goal B-1-3:

Enhance protection and management techniques and promote surveys related to status in order to soundly implement policies for the protection and management of wildlife, including population control for wildlife. In addition, overhaul the enforcement status of the Wildlife Protection and Hunting Management Law by 2015 and create arrangements for securing leaders to take charge of protection and management and begin utilizing these arrangements by 2020.

While damages on ecosystems, related industries such as agriculture, forestry, and fisheries, and living environments have been deteriorated by sika deer (Cervus nippon) and wild boar (Sus scrofa), hunters have been rapidly decreasing and aging. Towards realizing the goal of "reduce the number of sika deer and wild boar by half in 10 years" stipulated in the Drastic measures to strengthen capture of designated wildlife species for control, prepared by the Ministry of Agriculture, Forestry, and Fisheries (MAFF) and MOEJ in December 2013, part of the law regarding the Wildlife Protection and Hunting Management Act was revised and enforced in May 2015, for the purpose of promoting further wildlife capture and securing leaders engaging in capturing. In this revision, control of wildlife was positioned as an aim of the law. With regard to wildlife that the Minister of Environment stipulated as the ones to be intensively and widely controlled as a new measure, the Capture Program of Designated Wildlife Species for Control (https://www.env.go.jp/nature/choju/reinforce/index.html. Japanese text only) in which prefectures or the national government are responsible for capturing was formed.

As to capturing wildlife, the Certified Wildlife Capture Program Implementers System was established (https://www.env.go.jp/nature/choju/capture/capture5.html. Japanese text only), in which governors of prefectures certify implementing entities that are capable of capturing wildlife ensuring safety,

appropriateness, and effectiveness. In order to promote the Capture Program of Designated Wildlife Species for Control across the country, new subsidies have been set to support capturing by each prefecture.

- General conditions regarding the Capture Program of Designated Wildlife
   Species for Control (subsidies allocated to prefectures)
   1.3 billion yen in JFY2014; 1.0 billion yen in JFY2015; 1.2 billion yen in JFY2016; 1.5 billion yen in JFY2017;
   830 million yen in JFY2018
- General conditions regarding the Capture Program of Designated Wildlife Species for Control according to prefectures
   Number of program implementing prefectures in JFY2016: 37 prefectures
   JFY2017: 38 prefectures

JFY2018: 40 prefectures?

- Protection and control committee on specified wildlife species (Type 1
  Specified Wildlife Protection Plan: plan to protect species of wildlife of which the
  populations are decreasing substantially or habitats are shrinking. Type 2
  Specified Wildlife Control Plan: plan to protect species of wildlife of which the
  populations are increasing substantially or habitats are expanding) has regularly
  managed updated information regarding protection and control as Protection
  Control Reports. Thus far, 147 plans have been reported in 46 prefectures (Type 1:
  8 plans, Type 2: 139 plans).
- Following the decrease and aging of the hunter population, there has been a need to develop and ensure human resources as Certified Wildlife Capture Program Implementers. Study sessions for corporations and other organizations that intended to become certified implementers were organized across the country, resulting in the number of Certified Wildlife Capture Program Implementers to become 134 in 40 prefectures as of April 3, 2018.
- In addition, in order to develop and ensure hunters that can contribute to wildlife control, the Hunting Forum (a forum to encourage participants to obtain hunting licenses, and so on) have been organized since JFY2012. As of April 2018, 8,500 participants attended in 33 venues in 30 prefectures across the country.
- Measures have been taken to appropriately address issues of potential influence on wildlife, occurrence of accidents, etc., due to the use of lead bullet associated with enhanced wildlife control. The scientific and systematic protection and control of wildlife was promoted properly in line with population and habitat management and damage prevention.

Key Action Goal B-1-4:

Promote initiatives to prevent damage to agricultural crops by wildlife pursuant to the Special Measures Act on Countering Nuisance Wildlife in an integrated manner by aiming for coordination with policies for wildlife conservation and management, including population control. Promote measures to combat damage to forests caused by wildlife widely and effectively, while also moving ahead with countermeasures that take coexistence with wildlife into consideration—such as working to manage and conserve diverse forests—in order to ensure habitat environments for wildlife.

• Through the Act on Special Measures for Prevention of Damage Related to Agriculture, Forestry and Fisheries Caused by Wildlife, comprehensive measures to prevent damage from wildlife have been carried out in a region-wide manner based upon the damage prevention plans created by municipalities. Support has also been provided to measures to control the population of wildlife through intensive capturing. Support has also been provided for the installation of barriers as well as capturing wildlife in an integrated way with forest maintenance. Comprehensive measures have been instituted for National Forests, such as population control, restoration measures for damaged areas, and the conservation of forests in collaboration with a diverse array of actors. As to increasing species of captured wildlife, their utilization has been promoted as edible meat (game). Through these efforts, necessary measures are to be taken to consider coexistence with wildlife in the coming period.

#### National Target(s)

National Biodiversity Strategy of Japan 2012-2020 / National Target B-1 / Significantly reduce the rate of loss of natural habitats, as well as their degradation and fragmentation, by 2020.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

# Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

- Many indicators regarding National Target B-1, such as the percentage of restored wetlands in important water systems and the percentage of restored tidal flats, show an improving trend (refer to item 7 of Section III).
- However, the improving trend of those indicators regarding National Target B-1 remains moderate. The target to significantly reduce the rate of loss of natural habitats as well as their degradation and fragmentation has not been fully achieved. Therefore, it was evaluated that the measures taken have been partially effective.

Relevant websites, links, and files

https://www.env.go.jp/nature/saisei/network/law/law2\_1\_1/sarobetsu.html. Japanese text only

Other relevant information

N/A

Obstacles and scientific and technical needs related to the measure taken

N/A

EN

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

# Key Action Goal B-2-1:

Promote initiatives that seek a balance between production-related activities and the conservation of biodiversity such as sustaining agricultural production and managing production bases that can be operated sustainably.

- Certification scheme for the farmers who introduce sustainable agricultural production methods which integrally improve the soil productivity by use of compost and reduce the use of chemical fertilizers and synthetic pesticides (called "Eco-farmers") (Fig. 26), and the direct financial support for the farmers who implement conservation oriented agriculture (environmentally friendly agriculture) including organic farming are implemented. These activities resulted in increasing the areas of the direct payment for environmentally friendly agriculture (Fig. 29). In addition, activities were promoted to accommodate both production related activities and biodiversity conservation, through the improvement of an agricultural infrastructure considering biodiversity.
- In order to secure high-level sustainability in agricultural production activities, the Good Agricultural Practice (GAP) has been disseminated including activities for reducing the environmental burden of agricultural chemicals and chemical fertilizers, etc., and for considering biodiversity.
- The number of sites improved for conservation of ecological networks

increased from 1,694 sites in JFY2012 to 2,118 sites in JFY2016, through the improvement of an agricultural infrastructure considering ecosystems such as the construction of the irrigation and drainage canals for agriculture with the structure in consideration of wildlife habitats (Fig. 27).

• Payment for activities to enhance multi-functionality increased organizations that conduct various activities, including wildlife surveys, contributing to biodiversity conservation. The payment supports such organizations comprising farmers to work on basic conservation activities of local resources such as mud dredging of channels and maintenance of farm roads, in addition to groups mobilizing rural residents to work on cooperative activities to qualitatively improve local resources such as repairing of channels and farm roads, making landscapes by planting plants, and the extension of service lives of facilities.

# Key Action Goal B-2-2:

Promote the multiple functional roles of forests, including the conservation of biodiversity, by encouraging management and conservation of diverse and healthy forests, which includes the conservation of biodiversity, based upon forest plans. In addition, move forward with the National Survey on Biodiversity of the Forest Ecosystems (monitoring surveys) that investigate trends in forest biodiversity in line with standards and indicators that has been agreed upon internationally.

The maintenance and conservation of forests have been promoted based upon matters that should be taken into consideration regarding the biodiversity conservation functions possessed by forests, as well as forestry work for producing forests that contribute to such functions based on the Basic Plan for Forests and Forestry and the National Forest Plan. Excessive disturbance of forest ecosystems was controlled with attentive and meticulous operations in national forests as well. In addition, diverse forests were developed through promoting multilayered forests and long-term logging periods according to the characteristics of forest locations. Appropriate arrangement of protection forests was implemented as to relevant forests that are especially required to fulfil public functions. In addition, the 4th National Survey on Biodiversity of the Forest Ecosystems has been conducted since JFY2014, making relevant trends of conditions in forest ecosystems understood. Meanwhile, in national forests, these data and information have been utilized for verifying and developing methods to make quantitative assessment of biodiversity. Further activities are to be continued to consolidate diverse and sound forest management by appropriate operations as well as to utilize relevant data obtained from research activities.

#### Key Action Goal B-2-3:

Promote initiatives that seek a balance between sustainable fisheries and the conservation of biodiversity. This is to be done by promoting the conservation and

regeneration of seagrass and seaweed beds and tidal flats, the construction and maintenance of fishing ports and fishing grounds with forethought given to biodiversity, international cooperation for the sustainable use and management of highly migratory fish (including tuna), resource management under resource management guidelines and resource management plans and systems, promoting breeding with forethought given to biodiversity, and promoting the conservation of sustainable aquaculture production and inland waters.

• Initiatives that sought a balance between sustainable fisheries and the conservation of biodiversity have been promoted through a variety of activities, while also promoting the sustainable use of fishery resources by utilizing scientific knowledge and implementing public awareness campaigns. Such activities included creation of seagrass and seaweed beds and tidal flats (Fig. 30), removal of sediment from fishing grounds (Fig. 31), maintenance of fishing grounds based on plans for creating favourable habitat spaces (Fig. 32), carrying out wastewater treatment in fishing settlements (Fig. 33), survey of trends of fishery resources (Fig. 35), measures to prevent the bycatch of sea turtles in coastal areas, bilateral and multilateral agreements on fisheries (Fig 34), developments of resource management plans (Fig. 36), increasing the numbers of fish species for which TACs were set (seven to eight species), countermeasures against red tides and anoxic water masses, marine eco labels, and measures to prevent damage to fisheries from the Stellar sea lion (Eumetopias jubatus).

Furthermore, assistance has been provided to local residents, mainly fishermen, for the maintenances of spawning grounds and seed production facilities. The biodiversity-friendly fisheries management which encouraged local communities to spontaneously develop plans of improving their aquaculture grounds as well as the disseminations and public awareness campaigns of by-catch mitigation techniques for fishermen were also promoted.

# Key Action Goal B-2-4:

Implement initiatives to create Sato-umi areas by means of making appropriate human interventions while living in harmony with nature.

• In order to support creating Sato-umi where diverse fish and aquatic animals live and humans are able to be blessed with benefits given from nature into the future, a website named "Sato-umi Net (https://www.env.go.jp/water/heisa/satoumi/en/index\_e.html)" provides road maps on developing Sato-umi areas and relevant information on practical cases across the country (Fig. 38). It is planned that important points in terms of quantitative assessment and implementation to be compiled based on good practices regarding seashore restoration and creation selected from JFY2016.

National Target(s)

National Biodiversity Strategy of Japan 2012-2020 / National Target B-2 / Engage in agriculture, forestry, and fisheries that ensure the conservation of biodiversity in a sustainable manner by 2020.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

# Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

- Many indicators regarding National Target B-2, such as the accumulative number of certification of Eco-farmers and the number of resource management plans initiated by fishermen and relevant stakeholders, have been increasing (refer to Section III (7)). For example, direct payment for environmentally friendly agriculture was utilized to support activities such as organic farming, winter flood control, and so on, which contribute to biodiversity conservation. More concretely, for example, in Sado City of Niigata Prefecture that has promoted the creation of an eco-friendly paddy environment where diverse wildlife including Japanese crested ibis (Nipponia nippon) are nurtured, relevant activities for sustainable agriculture, forestry, and fisheries are conducted to ensure biodiversity conservation, through assisting farmers' associations to work on organic farming, biotope, and winter flood control.
- Various activities were conducted with consideration for wildlife habitat conservation across the country through utilizing payment for activities to enhance multi-functionality that supports cooperative activities such as maintenance management of water channels for agricultural purposes and conservation of rural areas environment. Such activities included wildlife investigations and environmental education for children that were implemented by rural residents. Furthermore, paddy fields with fishways were installed to connect paddy fields and drainage channels, in addition to consolidating channels with masonry revetments in agricultural drainage channels as well as installation of biotope. Significant effects were obtained by these activities, such as enhancing awareness regarding ecosystem conservation of rural residents, as well as increases in the number of threatened species and native species.
- As such, steady progresses have been observed in many fields as to the implementation of agriculture, forestry, and fisheries while ensuring biodiversity conservation. However, continuous assistance is thought to be necessary for promoting these activities in the coming period. Therefore, it was evaluated that relevant measures taken remained partially effective.

Relevant websites, links, and files

http://www.maff.go.jp/j/seisan/kankyo/kakyou\_chokubarai/mainp.html (Japanese text only)

Other relevant information	
N/A	EN
Obstacles and scientific and technical needs related to	the measure taken
N/A	

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

# Key Action Goal B-3-1:

Reduce nutrient and organic pollutants from river basin while implementing the 7th Total Pollutant Load Control by March 2015.

- It was confirmed that, in light of the 7th Total Pollutant Load Control System aiming at JFY2014 as a target year, pollutant loads in each designated water areas have steadily been reduced as a result of implementation of relevant measures for each source of emissions by setting the targets of pollutant loads according to designated water areas. In addition, reduction plans of total pollutant loads as well as standards to regulate total quantity were formulated before July JFY2017 at related prefectures. In light of the 8th Total Pollutant Load Control System aiming at JFY2019 as a target year, relevant measures have been taken for each source of emissions including households and industries, by setting targets for reduced pollutant loads according to designated water areas (http://www.env.go.jp/water/ heisa/8kisei.html. Japanese text only). Conditions of reduced pollutant loads and effects of improved water quality are monitored every year, by implementing water quality surveys in each designated water area as well as conducting the monitoring of water environmental conditions in the sea areas. As a result, pollutant loads have been gradually reduced in each designated water area (Fig. 41).
- Efforts have been made to reduce the inflow load of nutrient salts and organic pollutants from river basin areas through various measures. These include setting in place agricultural drainage facilities and water quality conservation facilities, appropriate treatment of management for livestock waste, advanced treatment and measures to improve combined sewer systems at wastewater treatment facilities, and improvement of water environments in rivers.

## Key Action Goal B-3-2:

Carry out initiatives designed to improve the water quality and occurrences of anoxic water masses in closed water areas. In addition, examine environmental standardization with respect to bottom-layer dissolved oxygen for the conservation of aquatic organisms and transparency for the conservation of aquatic plants by 2014.

- Measures designed to improve the water quality and dissolved oxygen at the bottom layers in enclosed coastal seas have been carried out pursuant to the 8th Total Pollutant Load Control System.
- In March JFY2016, the bottom layer Dissolved Oxygen (DO) was set as an environmental standard for water bodies conservation, and littoral water transparency for the conservation of aquatic plants and areas for recreational use was set as a target in the area.
- Efforts have been made for the conservation and restoration of biodiversity in coastal areas, by utilizing dredged soil etc. and implementing projects in closed water areas such as the conservation, restoration and creation of tidal flats and shallow bottoms, and the backfilling of vestiges of seabed excavation.

## Key Action Goal B-3-3:

Carry out investigations and studies aimed at establishing management policies in order to balance the conservation of habitats for a diverse array of marine organisms high biological productivity, as well as maintaining desirable habitat environments with respect to sustainable use.

• In JFY2012, relevant surveys and demonstration experiments were conducted to clarify conditions of nutrient salt cycles and factors preventing smooth nutrient salt cycles at model areas including Mikawa Bay in Aichi Prefecture and the northeast part of Harima-nada in Hyogo Prefecture. Based on them, Plans for Achieving a Sound Material Cycle in Marine Areas ("Healthy Plans") and Guidelines for the Formulation of Healthy Plans were formulated, encouraging other areas to formulate Healthy Plans. In addition, Healthy Plan was formulated in another model area, Mitsu Bay in Hiroshima Prefecture in JFY2013. Based on these results, relevant methods were incorporated into various plans at local governments based on the Water Pollution Prevention Act and Act on Special Measures concerning Conservation of the Environment of the Seto Inland Sea. In addition, surveys and examinations have been conducted for necessary measures to be taken for grasping geographic environmental characteristics of each bay and sea area in the Seto Inland Sea as well as in long-term changes in the water environment, and implementing attentive water quality control.

National Target(s)

The National biodiversity Strategy of Japan 2012-2020 / National Target B-3 / Maintain the water quality and habitat environments desirable for the conservation of aquatic organisms, increasing biological productivity, and sustainable use while continuing to improve the state of contamination from nitrogen and phosphorous by 2020. When it comes to water areas with a highly closed off nature—such as lakes, and deeply indented bays—(hereinafter referred to as "closed water areas") in particular, promote policies in mountainous areas, agricultural villages and the outskirts of urban areas, and urban areas that focus on the river basin in their entirety based upon the unique characteristics of each of these regions in a comprehensive and prioritized manner.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

# Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

• In light of the Total Pollutant Load Control System (TPLCS) based on the Water Pollution Prevention Act, pollutant loads that occur in land areas and pour into designated water areas were reduced. The reduction of pollutant loads was promoted by setting target years for every 5 years since 1979 as well as target reduction levels according to sources of pollution such as households and industries in each prefecture. Water quality surveys have regularly been implemented by setting environment standard points in order to monitor effects of controlling total pollutant loads in designated water areas.

ΕN

• However, it was evaluated that measures taken have been partially effective since there are water areas in which neither environmental standards for water quality nor environmental standards for lakes, marshes, and enclosed coastal seas have yet been achieved.

Other relevant information

N/A

ΕN

Obstacles and scientific and technical needs related to the measure taken

N/A

ΕN

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting

other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

## Key Action Goal B-4-1:

Create a list of invasive alien species threatening biodiversity, human health and or economy development in Japan and organize information pertaining to the routes by which species on the list establish themselves by 2014.

• Based upon the Invasive Alien Species Act, 146 species were specified as designated invasive alien species by March 2018. With regard to alien species, in consideration of the state of damage to ecosystems in Japan and overseas, the list of invasive alien species threatening biodiversity, human health and/or economy development in Japan, which assessed invasiveness of those alien species in Japan, was published in JFY2015 (https://www.env.go.jp/nature/intro/2outline/iaslist.html. Japanese text only) (Figs. 55 and 56). Relevant measures have been taken against the listed species, through organizing information on the state of their establishment and settlement routes. In addition, as to designated invasive alien species that have been unintentionally and repeatedly introduced along with imports, measures have been promoted by striving to grasp the production process abroad and the entry route at distribution level as well as calling for appropriate actions to various stakeholders.

## Key Action Goal B-4-2:

Arrange the thinking behind the order of priority for controlling alien species and promote efforts such as their systematic eradication by 2014. In addition, formulate "an action plan to prevent damages and risks caused by alien species in Japan" in order to encourage action on countermeasures against alien species and voluntary initiatives at the regional level by the various actors.

- Any local governments who were confirmed by competent ministers or those who were certified by competent ministers are able to control and exterminate designated invasive alien species based upon the Invasive Alien Species Act. As of November 2017, the confirmed number of controlled cases was 1,022, along with certification of 174. Furthermore, the Action Plan to Prevent Damages and Risks caused by Alien Species in Japan was formulated in 2015, for the purpose of promoting actions relating to measures against alien species among various actors and spontaneous efforts at local levels (https://www.env.go.jp/press/files/jp/26646.pdf. Japanese text only).
- Based upon the list of invasive alien species threatening biodiversity, human health and/or economy development in Japan and Action Plan to Prevent Damages and Risks caused by Alien Species in Japan, relevant activities have been

promoted to disseminate and advocate on alien species problems and necessary measures against local governments and citizens. For this purpose, relevant information has been shared with local governments and other stakeholders as to invasive alien species as well as the promotion of their systematic and effective control.

## Key Action Goal B-4-3:

Control or eradicate high priority invasive alien species, while also restoring the habitation status of rare species and restoring ecosystems to their original state through such efforts.

• Projects to control alien species such as mongooses (Herpestes auropunctatus) and green anoles (Anolis carolinensis) have been carried out primarily in regions that are important for the conservation of biodiversity, such as the habitats of rare species and National Parks. Moreover, considerations over matters like control techniques and the creation of control manuals have been undertaken for raccoons (Procyon lotor) and other alien species that are distributed over extensive regions. In addition, support has been provided for the control efforts carried out by local governments, including the formulation of implementation plans for the control of alien species and experimental projects (five as of 2014), measures to control alien species (34 organizations as of IFY2013), and so on.

One example of the results of such efforts is that the number of mongooses captured per unit effort put into capturing them has been on a downward trend on Amami-Oshima Island and the Yamabaru area on Okinawa Island. Consequently, the number of Okinawa rails (Gallirallus okinawae) is showing an increasing trend. In addition, the mongoose control plan was revised in 2017 and the phase 3 control plan was initiated with the goal of completely eradicating the mongoose by JFY2026. Effective control will continue to be promoted while working to revise the contents of the support schemes (Figs. 58, 59, and 60).

#### National Target(s)

The National biodiversity Strategy of Japan 2012-2020 / National Target B-4 / Identify invasive alien species and organize information pertaining to the routes by which they establish themselves based upon the results of examinations of the enforcement status for the Invasive Alien Species Act by 2020. In addition, lay out the order of priority for eradicating these invasive alien species, and on the basis of this apportion out appropriate roles to each of the major actors regarding their eradication and proceed with eradicating them in a systematic manner. Promote a restoration of the habitation status of rare species and restore ecosystems to their original state by controlling or exterminating high priority species through such efforts. What is more, call the attention of related actors to the management of the routes by which invasive alien species become established in

order to prevent their introduction or establishment, and promote countermeasures by examining more effective border control measures.

tools or methodology used for the assessment of effectiveness above

• Eradication of Canada goose (Branta canadensis) in the wild succeeded in 2015 for the first time as a designated invasive alien species that had established in the country. In addition, some progress has been made in controlling highly prioritized invasive alien species such as mongooses inhabiting Amami-Oshima Island and the Yambaru area on Okinawa Island, but their eradication has not yet been achieved. Therefore, it was evaluated that measures taken have been partially effective.

ΕN

Relevant websites, links, and files

https://www.env.go.jp/nature/intro/3control/bojokankyo.html (Japanese text only) ,http://www.env.go.jp/nature/kisho/hogozoushoku/amaminokurousagi.html (Japanese text only) ,http://www.env.go.jp/nature/kisho/hogozoushoku/yambarukuina.html (Japanese text only)

Other relevant information

N/A

ΕN

Obstacles and scientific and technical needs related to the measure taken

N/A

ΕN

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

## Key Action Goal B-5-1:

Identify human-induced pressures on Japanese ecosystems that are vulnerable to climate change, such as coral reefs, seagrass and seaweed beds, tidal flats, islands, alpine and subalpine areas by 2013, define the ecologically acceptable values for these human-induced pressures by 2015, and institute initiatives for achieving these ecologically acceptable values.

ΕN

Regarding coral reefs, the Action Plan to Conserve Coral Reef Ecosystems in

Japan that had been formulated in JFY2010 was revised as the Action Plan to Conserve Coral Reef Ecosystems in Japan 2016-2020 in March 2016 (http://www.env.go.jp/nature/biodic/coralreefs/pamph/C-project2016-2020\_en.pdf). Based on this, focal issues that need tackling were identified as: promotion of measures against red soil sediments and nutrient salts from the land; promotion of sustainable tourisms in coral reef ecosystems; and establishment of relationship between community life and coral ecosystems. Relevant measures have been promoted, by implementing model projects and organizing follow-up workshops, so that a basis for conservation of the coral reef ecosystems connected to local communities will be constructed by March 2021. In addition, a working group on terrestrial measures of the nature restoration committee for Sekisei Lagoon in Okinawa Prefecture examined necessary measures for reducing loads from terrestrial areas.

• While impacts of climate change and their risk assessment in Japan have been considered, neither identification of human-induced pressures toward vulnerable ecosystems other than coral reefs nor establishment of ecologically acceptable values have yet been achieved. Meanwhile, adaptation measures for climate change have been undertaken since JFY2016 regarding vulnerable ecosystems in coral reefs and alpine regions.

### National Target(s)

National Biodiversity Strategy of Japan 2012-2020 / National Target B-5 / Promote initiatives for minimizing human-induced pressures that cause ecosystems to deteriorate in order to maintain the soundness and functionality of ecosystems that are vulnerable to climate change, such as coral reefs, seagrass and seaweed beds, tidal flats, islands, alpine and subalpine areas by 2015.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

# Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

• In 2015, a study on the state of achievements regarding the Action Plan to Conserve Coral Reef Ecosystems in Japan was conducted, by compiling implementation conditions of written items on the action plan and by conducting questionnaire surveys to 11 experts who were concerned in the formulation process of the action plan as to the state of achievements for all items, which were all evaluated. As a result, achievements were confirmed to some extent, regarding identification and control of important areas and establishment of measures to be taken for individual issues. However, achievements of promotion of coordination to create harmonized local communities and integrative control considering connectivity with land areas were evaluated as low despite of many

commitments and activities. With regard to dissemination, advocacy and human resources development; appropriate control and use of life resources; and appropriate use for tourism, it was evaluated that their achievements were relatively high but the number of activities was small. Based on this, focal issues were identified to be tackled with before JFY2020 in preparing the Action Plan to Conserve Coral Reef Ecosystems in Japan 2016-2020.

• Meanwhile, since neither identifying human-induced pressures against vulnerable ecosystems other than coral reefs nor establishing ecologically acceptable values have yet been achieved, it was evaluated that relevant measures taken have been partially effective.

Relevant websites, links, and files

## Action Plan to Conserve Coral Reef Ecosystems in Japan 2016-2020

Other relevant information

N/A EN

Obstacles and scientific and technical needs related to the measure taken

N/A EN

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

## Key Action Goal C-1-1:

Set in place methods and baselines for determining the status of conservation and management, as well as their present status, by the mid-term review for the Aichi Biodiversity Targets which are scheduled to be held in 2014 or early in 2015.

- As for terrestrial and inland water areas, Natural Parks (Fig. 64), Nature Conservation Areas (Fig. 65), Wildlife Protection Areas (Figs. 67 and 68), Natural Habitat Protection Areas (Fig. 72), Protected Forests, and Green Corridors (Fig. 70) fall under the category of areas for conservation and management. Their total area comes to 76,800 km2, which is about 20.3% of the country's land area.
- Natural parks, Nature Conservation Areas, Wildlife Protection Areas, protected

water surfaces, common fishery rights areas, designated sea areas, coastline marine resource development areas, and so on fall under the category of marine protected areas. Their total area comes to 369,200 km2, which is about 8.3% of the country's closed sea and EEZ.

### Key Action Goal C-1-2:

Move ahead with examinations on identifying regions that contribute to the conservation of biodiversity by giving consideration to their continuity with surrounding areas, while also promoting their appropriate conservation and management.

- With regard to National Parks and Quasi-National Parks based upon the Natural Parks Act, relevant considerations and coordination were promoted based on results of the Comprehensive Inspection Project on National Parks and Quasi-National Parks that were announced in October 2010. As for quasi-national parks, Kyoto Tamba Kogen Quasi-National Park was designated in March 2016, and as a national park, the Ishigaki-Iriomote National Park was expanded on a large scale in April 2016. In addition, Yambaru National Park was designated in September 2016, while Amamigunto National Park was designated in March 2017.
- As for Wilderness Areas and Nature Conservation Areas based on the Nature Conservation Act, surveys toward zonal extension and relevant coordination with local stakeholders were promoted. In February 2015, the Sakiyamawan Nature Conservation Area was expanded, together with the implementation of monitoring activities for appropriate conservation and management.
- With regard to National Wildlife Protection Areas based on the Wildlife Protection, Control and Hunting Management Act, four locations, including Hinuma and Higashiyoka-higata (tidal flat), were newly designated, in addition to expansion of five locations, including Ogata Grassland and Lower Maruyama River. All of these places were monitored for appropriate conservation and management.
- For Natural Habitat Protection Areas based on the Act on Conservation of Endangered Species of Wild Fauna and Flora, Ooka Natural Habitat Protection Area for Abe's salamander (Hynobius abei) was expanded and monitoring activities were conducted for appropriate conservation and management.
- During the period from August 2011 to October 2017, 21 places of scenic beauty as well as 39 natural monuments were designated, based on the Act on Protection of Cultural Properties. In addition, local governments were assisted in the formulation of management plans and the enhancement of conservation through supporting projects.
- In National Forests, as for relevant forests that are habitats for primeval forest

ecosystems and rare wildlife species, they were identified as either Protected Forests that are strictly protected and managed or Green Corridors that are transportation routes for wildlife. These forests were properly protected and managed through monitoring surveys on forests and animals, in addition to implementing the conservation management of plants and rearranging forest zones. In the meantime, the Protected Forest System was revised in September 2015, thereby introducing clear and effective categories of Protected Forests that focus on sustainability of forest ecosystems and wildlife populations. Protected Forests, which used to consist of seven kinds, were recategorized into three kinds. In addition to the introduction of a concept of 'resiliency', guiding forests that lost autonomous resiliency into biological communities based on potential natural vegetation, an efficient management system was established by management integration under the Management Committee for Protected Forests.

- In urban areas, the designation of Special Green Conservation Areas has been promoted based on the Urban Green Space Conservation Act, in addition to Suburban Special Green Conservation Areas based on the Act for the Conservation of Suburban Green Zones in the National Capital Region, thereby advancing designation of green spaces to secure biodiversity and their proper conservation and management.
- Marine protected areas are one of the management measures which contribute to sustainable use of fishery resources. Based on the fundamental recognition that the areas spontaneously managed by fishermen for realizing both the biodiversity conservation and sustainable use of resources could be effective marine protected areas, appropriate establishments and improvement of management of marine protected areas were promoted, while raising public awareness of their necessities.

#### Key Action Goal C-1-3:

Deepen examinations of the planning and implementation methods for ecological networks and move forward with setting in place conditions for formulating plans and implementing projects at various different spatial levels. In addition, examine policies for ecological networks at the wide-area level and move ahead with forming these.

- Support has been provided for the formulation of implementation plans for nature restoration projects based on the Act on the Promotion of Nature Restoration, as well as demonstration projects (three projects in JFY2017) to local governments. In addition, measures on important biodiversity areas (21 cases as of JFY2013) were supported, in order to conserve and restore important areas that are crucial to ecological networks in local regions.
- Demonstration projects have been conducted nationwide jointly with local governments and private organizations, committees, etc., which carry out

initiatives in collaboration with local governments (The Project on "Connecting and Supporting Forests, the Countryside, Rivers and the Sea": http://www.env.go.jp/nature/morisatokawaumi/. Japanese text only) towards establishing an economic society for maintaining and restoring forests, the countryside, rivers and the sea and utilizing their blessings (Regional Circular and Ecological Sphere).

- Appropriate arrangement and advancement of management for marine protected areas were promoted, based on the results extracted from the Ecologically or Biologically Significant Marine Areas (EBSAs).
- Relevant measures such as model projects and information sharing were promoted, based on the Action Plan to Conserve Coral Reef Ecosystems in Japan 2016-2020.
- Forest ecosystem networks have been established in National Forests by designating Protected Forests for preserving primeval forest ecosystems and Green Corridors which serve as pathways for wildlife, while gathering information on their status through continuous monitoring surveys, etc., and securing the continuity of forests together with mountain streams. In addition, model projects were promoted in areas where forest management utilizing the characteristics of the region and of the forest is expected, through collaboration and cooperation with local residents, nature conservation organizations, etc.
- For urban areas, the conservation, restoration, creation, and management of green spaces have been promoted through the establishment of urban parks and the designation of Special Green Conservation Areas.
- For rivers, the conservation and creation of the habitats and breeding environments for living creatures that rivers inherently possess have been promoted. In addition, measures were taken to form ecological networks in partnership with a diverse array of actors in the local region.

## Key Action Goal C-1-4:

Select regions that are important from the perspective of biodiversity by focusing on regions that are important when it comes to wildlife habitats and breeding and examine the need and methods for their conservation by 2014. This is to be done in order to contribute to promoting the enhancement of marine protected areas and their formation into a network.

• Ecologically or Biologically Significant Marine Areas (EBSA) were extracted during JFY2011-JFY2013 and announced in April 2016 (http://www.env.go.jp/en/nature/biodic/kaiyo-hozen/kaiiki/index.html). Based on this, characteristics of ocean areas and socioeconomic and cultural factors were taken into consideration, thereby promoting the advancement of designating marine protected areas and enhancing their management, through the coordination

between related government organizations and the appropriate utilization of systems according to conservation and management purposes.

### National Target(s)

National Biodiversity Strategy of Japan 2012-2020 / National Target C-1 / Appropriately conserve and manage at least 17% of inland areas and inland water areas, and at least 10% of coastal areas and ocean areas, by 2020.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

# Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

• The designation of areas that contribute to the conservation of biodiversity, such as natural parks, wildlife protection areas, protected forests and green corridors among national forests, has been promoted based upon relevant laws and regulations. As to the areas of marine protected areas, however, the achievements remained around 8.3% and did not reach the national target. In addition, the assessment has not been yet conducted on whether or not biodiversity conditions were improved by the conservation measures. Therefore, it was evaluated that measures taken have been partially effective.

ΕN

#### Other relevant information

N/A

ΕN

Obstacles and scientific and technical needs related to the measure taken

N/A

ΕN

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

## Key Action Goal C-2-1:

Move forward with creating structures for collecting knowledge that is crucial for promoting the conservation of threatened species (current state of threatened species' habitats, reasons for their decline, conservation status, conservation methods and techniques, etc.), sharing information among the various actors, and using this by 2020. In addition, organize Red Lists that accurately reflect the status of threatened species and revise these periodically.

- The Fourth Red List with a full revision was published in JFY2012. Furthermore, it was agreed that respective reviews were to be conducted without setting a previously determined time in cases requiring reassessment of categories based on the most recent knowledge in and after JFY2015. The MOEJ Red List 2015, with a partial revision on some of the mammals was announced in September 2015, followed by the MOEJ Red List of 2017, with a partial revision on some species in respective taxonomic groups in March 2017 (https://www.env.go.jp/nature/kisho/hozen/redlist/MOEredlist2017.pdf). Preparations for the Fifth Red List with a full revision, scheduled to be published in JFY2025, are currently under consideration.
- Since JFY2012, a basic framework to assess the degree of extinction of marine species had been considered, and using the established framework, the first Red Lists for marine species were published in March 2017. (http://www.env.go.jp/nature/kisho/hozen/redlist/kaiyo\_redlist\_all.pdf) (http://www.jfa.maff.go.jp/j/press/sigen/attach/pdf/170321-1.pdf. Japanese text only).

## Key Action Goal C-2-2:

Assign priority starting with species for which there is a particularly high risk of extinction and for which good results from countermeasures can be expected through regulations, and then steadily promote the designation of National Endangered Species of Wild Fauna and Flora based upon the Act on Conservation of Endangered Species of Wild Fauna and Flora by 2020. Promote initiatives for The Conservation Programmes defined by the law through the formulation of plans for such programs pursuant to this act, while also striving to improve the conservation methods and techniques in accordance with the unique characteristics of each respective species and taxa.

• In April 2014, the Conservation Strategy for Threatened Wild Organisms was formulated to present basic thoughts and urgent policies and measures to be taken for promoting the conservation of threatened species across the country. This Strategy aims at additional designation of 300 species of National Endangered Species based on the Act on Conservation of Endangered Species of Wild Fauna and Flora by 2020. In JFY2014, 41 species were additionally designated, followed by 45 species in JFY2015, 33 species in JFY2016, and 52 species in JFY2017 (Fig. 79). Around 40 to 50 species are to be designated every year after JFY2017.

- Plans for the protection and recovery programs were formulated for 14 species of land snails on Ogasawara Islands in May JFY2016 as well as a species of Lycaenidae (Pithecops fulgens tsushimanus) in October JFY2017. Currently, 51 plans for the protection and recovery programs regarding 64 species of National Endangered Species have been formulated (Fig. 81).
- As to some species which have seen improvement in their habitats conditions, the consideration for either the completion of protection and recovery programs or their optimization will be implemented. Meanwhile, as to some species for which ex-situ conservation has been promoted, relevant initiatives will be continuously advanced in coordination with stakeholders such as zoos and botanical gardens. In addition, a new system was established for the certification of zoos and botanical gardens that take initiatives for the conservation of rare species based upon the Act on Conservation of Endangered Species of Wild Fauna and Flora, in order to clarify public functions of zoos and botanical gardens and to enhance their social recognition. Furthermore, a new system was created for the designation of species based upon the Act on Conservation of Endangered Species of Wild Fauna and Flora, for the purpose of making some species that are distributed in secondary nature where many threatened species live and grow to be properly conserved (Enforced in June JFY2018).
- Short-tailed albatrosses (Diomedea albatrus) were captured during the period from the 1890s to 1900s in bulk for the purpose of taking their fur. A survey in 1949 reported that they were highly threatened to extinction. In 1951, around 10 short-tailed albatrosses were discovered in Torishima Island of the Izu Island chain, and since then, their conservation has been promoted. Plans for the protection and recovery programs were formulated, based on the Act on Conservation of Endangered Species of Wild Fauna and Flora, in JFY1993, followed by relevant efforts for enhancing and creating breeding grounds in Torishima Island. Since the population in Torishima Island was estimated more than 4,500 in JFY2016, it is thought that their status has been restored by these measures for their conservation. Meanwhile, Torishima Island is a volcanic island with a possibility that breeding grounds might disappear because of eruptions. Therefore, a project was initiated to disperse breeding grounds by transferring chicks from Torishima Island to Mukojima Island of the Ogasawara Islands during the period from JFY2008 to JFY2012. Chicks fledging from their nests in Mukojima Island were observed for the first time in May JFY2016.
- The population of Columba janthina nitens, an endemic subspecies that is endemic to the Ogasawara Islands, is considered to have decreased to some tens in the past period. However, its population has been improving by various initiatives in forest areas such as eliminating feral cats, setting sanctuaries, and growing plants that serve as food resources for the bird, in collaboration with

related organizations.

- Towards the revision for the Fifth Red List, the accumulation of scientific knowledge shall be advanced through adopting quantitative assessments in all taxonomic groups and strengthening field surveys, for conducting appropriate assessments on the degree of risks of extinction. In addition, the preparation for revising the Red Lists for marine species, which were published in March 2017, will be advanced, considering their integration and the expansion of assessed species.
- As for National Forests, protection and recovery programs based on the Act on Conservation of Endangered Species of Wild Fauna and Flora have been conducted across the country, through the patrol of National Endangered Species and the implementation of activities for maintaining and improving their habitat environments.

## Key Action Goal C-2-3:

Promote the development of habitats by aiming to build consensus among local regions for preventing the extinction or decline of threatened species.

• For National Forests, the improvement and conservation of diverse forests has been carried out through systematic thinning so as to allow forests to adequately exhibit their multifunctionality, including the conservation of biodiversity. Also, the maintenance and improvement of habitat environments for National Endangered Species have been implemented as part of protection and recovery program based on the Act on Conservation of Endangered Species of Wild Fauna and Flora.

## Key Action Goal C-2-4:

Work to address ex-situ conservation for those species such as the Japanese crested ibis (Nipponia nippon) and the Tsushima leopard cat (Felis bengalensis euptilura) that are believed to be at an extremely high risk of extinction and for which their survival will remain in jeopardy if only initiatives for in-situ conservation are carried out, by 2020. The aim will be to restore ecosystems and revitalize regional communities by promoting the return to wildlife of individual animals that were propagated through artificial breeding through such initiatives.

- As for Japanese crested ibis, improvements of habitat environments have been promoted on Sado Island and birds bred in captivity have been released. As a result, the number of birds in the wild had risen to 286 (including two on Honshu Island) as of the end of March 2018, and chicks are being born in the wild.
- As for the Tsushima leopard cat, efforts have been made to rear and breed captive cats in a distributed manner with the cooperation of nine zoo facilities across the country. These have contributed to improve and establish methods for breeding the cats in captivity, and establish methods for reintroducing cats that

have been bred in captivity into the wild on Tsushima Island, Nagasaki Prefecture.

• In addition, the release of Oriental stork (Ciconia boyciana) into the wild began in JFY2005, and the number of the wild birds is steadily increasing. As of October 2017 there were 125 birds living in the wild (Fig. 82).

## Key Action Goal C-2-5:

For the genetic resources of crops, construct coordinated and complementary networks for the conservation of plant genetic resources in order to prevent valuable genetic resources from disappearing in Japan, while also giving consideration to the establishment of a systematic safety back-up system to guard against disasters. For the genetic resources of livestock and poultry, move forward with securing and using diverse breeding resources that possess useful genetic traits by focusing primarily on the indigenous varieties, such as Wagyu beef cattle, locally raised chicken, and Japanese horse breeds.

- In the Genebank Project, National Agriculture and Food Research Organization (NARO), collection, characterization, preservation and distribution of a wide range of genetic resources, including animals and plants, microorganisms, and so on were conducted in coordination with multiple organizations. As to plant genetic resources, in particular, safety back-up of crop genetic resources possessed by domestic organizations was advanced (Fig. 83).
- For the purpose of ensuring the domestic enforcement of the Nagoya -Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety (hereinafter referred to as the Supplementary Protocol), a law to revise a part of the Act on the Conservation and Sustainable Use of Biological Diversity through Regulations on the Use of Living Modified Organisms (Cartangena Act) was enacted and promulgated in April 2017. Following the approval on the acceptance of the Supplementary Protocol by the Diet in May 2017, Japan deposited its instrument of acceptance to the Secretary-General of the United Nations in December of the same year, thereby making Japan a Party to the Supplementary Protocol. The Supplementary Protocol entered into force on March 5, 2018, since its requirement was fulfilled. The revised Cartagena Act came into effect on the same date as well.

## National Target(s)

National Biodiversity Strategy 2012-2020 / National Target C-2 / Maintain a situation in the 2012 version of the Ministry of the Environment's Red List in which no new extinct species (EX) appear (excluding species that are not found over an extended period of time for which a determination will be made over a span of 50 years or more) among the threatened species that are already known about, as well as preventing the population decrease for the known threatened species. For threatened IA species (CR) or threatened I species (CR/EN), which are the species in the greatest danger of

going extinct, increase the number of species that will see their rank fall through a variety of initiatives compared to the Ministry of the Environment's 2012 Red List by 2020. Such initiatives include setting in place habitat bases by means of promoting sustainable agriculture, forestry, and fisheries that take the proactive conservation of species and biodiversity into consideration. In addition, maintain the genetic diversity of crops, livestock animals, and wild species that are closely related to them, including those species that are valuable in a socioeconomic or cultural sense, by 2020.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

# Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

• While some progress was observed in the conservation of threatened species based on plans for the protection and recovery programs, there were no significant changes confirmed in the percentage of threatened species (refer to Fig. 76 in item 7 of section III). Therefore, it was evaluated that measures taken have been partially effective.

ΕN

Relevant websites, links, and files

https://www.env.go.jp/nature/kisho/hogozoushoku/ahoudori.html (Japanese text only)

Other relevant information

N/A

ΕN

Obstacles and scientific and technical needs related to the measure taken

N/A

ΕN

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

## Key Action Goal D-1-1:

ΕN

Establish sustainable forest management and promote the development and conservation of diverse and healthy forests in the aim of thereby allowing them to exhibit multifunctionality, such as watershed conservation.

• Support has been provided for forest operations such as thinning and the installation of road networks in combination with this. In addition, designation of protection forests that are especially needed to exhibit the public functions of forests and promotion of their appropriate conservation and management have been advanced in the aim of thereby allowing them to exhibit the multifunctionality that forests possess, such as watershed protection. The area of protection forests as of March 2017 came to 12.18 million ha, and this tends to increase every year.

### Key Action Goal D-1-2:

Strive to conserve and use the environment in rural areas and utilize regional resources through the sustainable agriculture.

• In JFY2016, attempts to improve the agricultural environment such as ecosystem conservation and daily management of resources including agricultural lands, channels and cooperative activities such as mud dredging and mowing along channels with the participation of 2.5 million people and organizations (Fig. 85).

### Key Action Goal D-1-3:

Promote the Satoyama Initiative, which is an initiative that aims to improve biodiversity, ecosystem services, and human well-being, both domestic and overseas.

- MOEJ supported activities of the International Partnership for the Satoyama Initiative (IPSI) (https://satoyama-initiative.org/partnership/) that started at the occasion of the Tenth of Meeting of the Conference of the Parties (COP 10) to the Convention on Biological Diversity (CBD), and participated in their operation (Fig.86). In September 2013, MOEJ also participated in the Satoyama Initiative Promotion Network that was established for promoting coordination among related organizations inside Japan under the philosophy of the Initiative.
- In JFY2015, rich and varied Satochi-Satoyama (socio-ecological production landscapes) areas that nurture diverse creatures were positioned as part of the natural environment that should be passed down to next generations, and 500 locations were selected and announced as Important Satochi-Satoyama Areas for the Conservation of Biodiversity (Important Satochi-Satoyama) (https://www.env.go.jp/nature/satoyama/jyuuyousatoyama.html. Japanese text only). Efforts will be made to promote and expand relevant initiatives to enhance the effectivity of the conservation and utilization of biodiversity by various parties, and to promote the branding and the utilization of agricultural products as tourism resources in those areas.

## Key Action Goal D-1-4:

With a view towards reconstruction from the Great East Japan Earthquake, promote the Green Reconstruction Project that is centered around the creation of the Sanriku Fukko (Reconstruction) National Park. This is to be done by passing down the natural environment and local life that has been fostered through the connections among forests, the countryside, rivers and the sea to future generations; learning about both the blessings and threats from nature; and making use of these. Establish the Sanriku Fukko (Reconstruction) National Park by 2013, and then promote the reorganization of national parks. What is more, promote the restoration of coastal forests through the Green Bonds Regeneration Project, which gives forethought to conserving biodiversity.

- Sanriku Fukko (Reconstruction) National Park was established in May 2013, into which Minami-Sanriku Kinkazan Quasi-National Park was incorporated in March 2015. The Green Reconstruction Project, based on the National Park as a center of activities, steadily implemented the arrangement of the Michinoku Coastal Trail (a nature trail along the Pacific Coast of Tohoku), the promotion of Fukkou (reconstruction) eco-tourism, and the monitoring of the natural environments.
- In addition, for the parts requiring rehabilitation construction in the coastal disaster prevention forests that were damaged by the Great East Japan Earthquake, extending to approximately 164 km, the construction for the rehabilitation and restoration of the forests for approximately 162 km has been undertaken by JFY2017. Construction has been completed for approximately 91 km, aiming at the completion of the entire forest by March 2021.

## Key Action Goal D-1-5:

Implement initiatives to create Sato-umi areas by means of making appropriate human interventions while living in harmony with nature.

• In order to support creating Sato-umi where diverse fish and aquatic organisms live and humans are able to be blessed with benefits given from nature into the future, a website named Sato-umi Net (https://www.env.go.jp/water/heisa/satoumi/en/index\_e.html) provided read maps on developing Sato-umi areas and relevant information on practical cases across the country. In addition, good practices regarding the restoration and creation of seashores were extracted and compiled relevant points for quantitative assessments and their implementation by March 2017 (Fig. 87).

## Key Action Goal D-1-6:

Move ahead with considerations for efforts like developing new policies to utilize the arrangements for Biosphere Reserves, which are better known as "UNESCO Eco Park" in Japan.

The 26th Session of the International Co-ordinating Council (ICC) of the Man

and the Biosphere (MAB) Programme was held at UNESCO in June 2014. In this session, it was decided to newly designate Tadami, located in Fukushima Prefecture, and Minami-Alps, covering parts of the prefectures of Yamanashi, Shizuoka and Nagano, as Biosphere Reserves (BRs), in addition to expanding the area of Shiga Highland in Nagano and Gumma Prefectures. In the 28th Session of UNESCO MAB-ICC, held in March 2016, it was decided to expand Mount Hakusan, covering parts of the prefectures of Toyama, Ishikawa, Fukui and Gifu; Mount Odaigahara, Mount Omine, and Osugidani in Nara and Mie Prefectures; and Yakushima and Kuchinoerabu Jima, located in Kagoshima Prefecture. In the 29th Session of UNESCO MAB-ICC in June 2017, it was decided to newly designate Sobo, Katamuki and Okue in Miyazaki and Oita Prefectures and Minakami in Gunma and Niigata Prefectures, thereby making 9 areas as BRs in Japan.

- Biodiversity conservation has been promoted mainly in core areas, through the appropriate protection and management of National Parks that are protective measures to secure BRs.
- Relevant initiatives were taken in coordination with local communities. In Aya BR of Miyazaki Prefecture that was designated in July 2012, for example, the Aya Lucidophyllous Forest Project has been promoted, aiming at the conservation and restoration of broad-leaved forests. In Minakami BR of Gunma and Niigata Prefectures that was designated in June 2017, the AKAYA Project has been implemented aiming at the conservation and restoration of a rich natural environment towards realizing diverse ecosystems with varied topographic features.
- An elementary school located inside the Shiga Highland BR carried out educational activities utilizing the BR aiming to nurture the next generation of those who are expected to play a role in creating a sustainable local community. In addition, local universities in the BR took initiatives in coordination with research facilities located next to the core areas of BR. These initiatives enabled exchanges of their resources and their effective utilization as well as supporting Education for Sustainable Development (ESD) activities of the UNESCO Associated Schools Network (ASPnet School) in local communities, which has been assisted by Ministry of Education, Culture, Sports, Science and Technology (MEXT) since JFY2016.
- Relevant initiatives were promoted through establishing international networking and knowledge sharing. For example, Japan hosted the 14th Meeting of East Asian Biosphere Reserve Network in August 2015, in addition to its assistance provided to the organization of an international symposium regarding the conservation of biocultural diversity in which a chief of section on MAB Networking from UNESCO HQs participated in May 2016.
- Furthermore, the Japanese Biosphere Reserves Network (JBRN) comprising

designated areas was launched in October 2015, promoting dissemination and advocacy as to BRs through its coordination with private foundations.

• In addition, a promotion structure was established through the participation of related government organizations in the local councils initiated by local communities.

### National Target(s)

National Biodiversity Strategy of Japan 2012-2020 / National Target: D-1 / Strengthen the benefits received from biodiversity and ecosystem services in Japan and elsewhere by giving consideration to the needs of women and local communities through the conservation and restoration of ecosystems by 2020. Carry out initiatives for each species with an awareness of the importance of the sustainable use of natural resources found in Satochi-Satoyama (socio-ecological production landscapes) areas in particular.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

# Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

• As mentioned in item 1 above, various measures have been taken and some of them are confirmed to have achieved some results. Therefore, it was evaluated that the measures taken have been partially effective.

ΕN

Relevant websites, links, and files

http://www.env.go.jp/nature/morisatokawaumi/ (Japanese text only)

#### Other relevant information

• The Project on "Connecting and Supporting Forests, the Countryside, Rivers and the Sea" has been implemented, in coordination with experts, aiming at maintaining the richness of forests, the countryside, rivers and the sea and receiving their blessings, as well as letting every single person participate in creating a society to support those blessings bestowed from forests, the countryside, rivers and the sea. The Project supported relevant activities for the development of human resources who are capable of underpinning the establishment of economic mechanisms to promote self-sustaining local communities and related activities, and promoted the creation of sustainable and autonomous local communities that conserve and utilize natural resources. Among them, in Yoshino River Basin of Tokushima Prefecture, oriental storks migrating and establishing built a momentum for advancing conservation oriented agriculture (environmentally friendly agriculture) using oriental storks as a symbol, thereby promoting an initiative to create sustainable local communities

thanks to the participation and coordination of various actors. As a result, the branding of "Oriental storks lotus roots" increased profits, advancing "Ecofarmers", and human resources were developed to be engaged in observation sessions, and so on.

Obstacles and scientific and technical needs related to the measure taken

N/A

ΕN

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

### Key Action Goal D-2-1:

Establish methods and standard values to serve as baselines designed to understand the status of conservation and restoration of ecosystems, as well as sorting out their current status, by the mid-term review of the Aichi Biodiversity Targets that are scheduled for 2014 or early in 2015.

• Monitoring methods were made to understand the status of the conservation of ecosystems through transitions in the area of forests, in addition to another method to understand the state of conservation and restoration of ecosystems by utilizing the areas of seagrass and seaweed beds and tidal flats as well as the rate of achievement of environmental quality standard for water quality in rivers, lakes and marshes, sea areas, and enclosed coastal seas.

- The forest area is stably maintained at about 2.5 million ha.
- The areas of conserved and restored seagrass and seaweed beds and tidal flats have been steadily increasing (Fig. 90). As to the achievement rate of environmental quality standards of water, it has recovered in general compared to that of the 1980s and 1990s.
- As to rivers, sea areas, and enclosed coastal seas in particular, the achievement rate of environmental quality standards, such as biochemical oxygen demand (BOD) of rivers, total nitrogen and total phosphorus in lakes, marshes and sea areas, improved compared to that of the 1980s and 1990s. For example, for BOD of rivers, improvement from 56.8% as the baseline value to an average value

of the last 5 years of 93.6%; for total nitrogen and total phosphorus in lakes and marshes, improvement from 40.5% as the baseline value to an average value of the last 5 years of 51.1%; for total nitrogen and total phosphorus in sea areas, from 55.1% as the baseline value to an average value of the last 5 years of 86.7%.

### Key Action Goal D-2-2:

Promote measures for the conservation and restoration of ecosystems, thereby advancing measures that will contribute to climate change mitigation and adaptation.

- As of March 2017, support has been provided to efforts for nature restoration based on the Act on the Promotion of Nature Restoration that were conducted in 25 locations, covering the area over 480,000 ha (Fig. 88). Measures for nature restoration were advanced nationwide focusing on a variety of ecosystems, such as forests, wetlands, grasslands, and coral reefs.
- Support has been provided to the nature restoration efforts carried out by prefectures (four areas in JFY 2017), which is expected to be effective at contributing to climate change adaptation, such as by securing corridors for the migration of wildlife.
- In addition to undertaking sink measures through the promotion of maintaining forests and advancing urban greening, with regard to carbon fixation by marine organisms, researches and studies were conducted on the carbon uptake of seagrass and seaweed beds across the country, as well as on the long-term carbon fixation ability of eelgrass beds, a type of seagrass and seaweed beds, in Seto Inland Sea (Fig. 91).
- Through the Asia-Pacific Network for Global Change Research, relevant activities were conducted including collaborative research projects regarding common issues in the region as well as capacity building training for young researchers.
- Based upon National Plan for Adaptation to the Impacts of Climate Change
  that was endorsed by the Cabinet in November 2015, continuous accumulation of
  scientific knowledge and initiatives for adaptation in the field of natural
  ecosystems have been undertaken. Such activities promoted observation,
  monitoring and research and study regarding impacts of climate change on
  ecosystems.
- Initiatives were promoted for green infrastructure which contributes to sustainable and attractive national land and community development by utilizing various functions of the natural ecosystems including disaster risk reduction both in hard and soft aspects, such as social capital and land use. Research and studies

were promoted on utilization methods, effect measuring methods, etc., in order to examine how to utilize ecosystem for an appropriate national land use and management.

- Efforts were made to realize decarbonization of local communities, through assisting the formulation of plans by local governments aiming at sustainable use of woody biomass resources existing in forests, and to realize the creation of societies in harmony with nature, through enabling the conservation and restoration of forests by circulating funds within local communities.
- Climate change mitigation measures have continuously been promoted through the development of urban parks and greening, etc., and as well as developing a method to derive the amount of greenhouse gas absorbed by urban greening, etc., and raising the awareness of the significance and effects of urban greening, etc.

## Key Action Goal D-2-3:

Contribute to climate change mitigation and adaptation by means of promoting forest sink measures such as properly carrying out forest operations like thinning in forests, as well as establishing green corridors to serve as migration routes for wildlife.

- Forest sink measures have been promoted in a comprehensive manner based upon the Basic Plan for Forests and Forestry and other such plans (Fig. 92). The measures included maintaining healthy forests through efforts like thinning, promoting the appropriate management and conservation of protection forests, and promoting the use of wood and woody biomass.
- For National Forests, protected forests and Green Corridors that form networks based primarily around protected forests are established, and migration routes that link habitats for wildlife are secured. This in turn promotes the securing of healthy forest ecosystems that are capable of coping with climate change. As of April 2015 there were as much as 968,000 ha of Protected Forests (Fig. 93) and 583,000 ha of Green Corridors (Fig. 94) on National Forest.
- For National Forests, protected forests for protecting primeval forest ecosystems and Green Corridors were established to gather information on their status through continuous monitoring surveys, etc. Efforts were made to formulate forest ecosystem network by securing the continuity of forests together with mountain streams.

#### National Target(s)

National Biodiversity Strategy of Japan 2012-2020 / National Target D-2 / Strengthen the contributions of biodiversity to resilience of ecosystem and their storage of carbon

dioxide by conserving and restoring ecosystems, including restoration of at least 15% or greater for degraded ecosystems, thereby contributing to climate change mitigation and adaptation by 2020.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

# Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

- Greenhouse gas sinks were secured by urban greening, such as enhancing urban parks, and greening roads, ports, and so on. As to the quantity of sinks that is a reporting target based on the Kyoto Protocol, reports are submitted to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) every year. Reviews are being made to improve the accuracy of removal factors unique to Japan.
- A report, prepared by the Port and Airport Research Institute, was compiled as to carbon storage rates in shallow coastal ecosystems and methods for measuring removal rates of atmospheric carbon dioxide.
- An ecosystem model was developed to predict current and future conditions regarding mitigation functions, such as carbon storage and carbon dioxide absorption, and adaptation functions, such as wave attenuation and flood control, that the conservation of shallow coastal ecosystems would have vis-a-vis climate change, and a preliminary calculation was conducted as to subtropical coastal areas in the country as a model case.

ΕN

- Based on the Basic Plan for Forests and Forestry, 47.5 million tonnes as the
  uptake of carbon dioxide were secured in JFY2016, as a result of undertaking
  various initiatives for forest sink measures, including sound forest maintenance
  through appropriate tree thinning and forestation, appropriate control and
  protection of conservation forests, activities for capacity building necessary for
  efficient and stable forestry management, forest fostering by the participation of
  citizens, and the utilization of wood and woody biomass resources.
- As such, some progress was observed in relevant measures and activities that are expected to contribute to the mitigation of and adaptation to climate change. However, further consideration is needed with regard to methods to understand the status of conservation and restoration of ecosystems. Therefore, it was evaluated that measures taken have been partially effective.

Relevant websites, links, and files

Progress of measures and policies against global warming in JFY2014 and JFY2015

Other relevant information	
N/A	EN
Obstacles and scientific and technical needs related to the measure taken	
N/A	EN

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

# Key Action Goal D-3-1:

Ratify the Nagoya Protocol as early as possible, and implement steadily the obligations under the Protocol such as designation of one or more checkpoints to monitor the use of genetic resources and awareness raising by 2015 at the latest.

• Following the approval on the acceptance of the Nagoya Protocol by the Diet in May 2017, Japan deposited its instrument of acceptance to the Secretary-General of the United Nations and thereby the Protocol entered into force for Japan on August 20, 2017. As of the same date, the Guidelines on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS Guidelines), which are domestic measures of the Protocol, came into effect. Checkpoints were set to monitor the utilization of genetic resources within the MOEJ, based on ABS Guidelines.

- Japan has been implementing the obligations required by the Nagoya Protocol steadily, through proper implementation of ABS Guidelines.
- Relevant ministries and agencies undertook various initiatives for enlightening as to the importance of genetic resources and related traditional knowledge, opportunities to their access, and their benefit sharing, including the organization of explanatory and study sessions, consultations, the preparation of a leaflet, together with handbooks to explain as to necessary procedures and some precautions in case of obtaining genetic resources abroad for researchers and plant breeders (a handbook for researchers is being prepared), release of access guidance for industrial sectors, the consolidation of ABS Domestic Clearing House (Information Exchange Center), and the dissemination of news on the Nagoya Protocol and e-mail magazines on events towards academics.

• In addition, initiatives were implemented to promote the introduction of appropriate genetic resources from abroad in the field of agriculture, forestry, and fisheries.

## Key Action Goal D-3-2:

Support developing countries for their ratification of the Protocol through the Global Environment Facility (GEF), the Nagoya Protocol Implementation Fund (NPIF), etc., in order to contribute to the global achievement of Target 16.

• Japan has been assisting developing countries in developing domestic measures, promoting the participation of the private sector and investments in the conservation and sustainable use of genetic resources, and building capacity of indigenous and local communities for ensuring proper access to traditional knowledge associated with genetic resources, with a view to contributing to the early enforcement and effective implementation of the Nagoya Protocol, through providing contribution to the GEF, the Nagoya Protocol Implementation Fund, the Japan Biodiversity Fund and others.

### National Target(s)

National Biodiversity Strategy of Japan 2012-2020 / National Targets D-3 / Aim to ratify the Nagoya Protocol on ABS as early as possible and implement the domestic measures for this Protocol by 2015 at the latest.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

#### Measure taken has been effective

tools or methodology used for the assessment of effectiveness above

• Taking into account that, in 2017, Japan accepted the Nagoya Protocol and started the implementation of ABS Guidelines which is the domestic measure for the Protocol, it was evaluated that the measures taken has been effective.

ΕN

Other relevant information

N/A EN

Obstacles and scientific and technical needs related to the measure taken

N/A EN

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

## Key Action Goal E-1-1:

Revise the National Biodiversity Strategy of Japan over 2015 and 2016 as needed based upon the mid-term review results related to the achievement status of the Aichi Biodiversity Targets at COP 12, which is scheduled for 2014 or early in 2015.

• The mid-term review of progress towards the achievement of the Aichi Biodiversity Targets was implemented in COP 12 that was held in South Korea in October 2014. As a result, it was evaluated that, despite some progress observed towards achieving the Aichi Biodiversity Targets, additional efforts are required in the coming period. Following these review results, Japan undertook measures to strengthen its implementation for achieving the Aichi Biodiversity Targets, such as compiling concrete policies that should be further accelerated, in addition to the steady implementation of the current national strategy (http://www.env.go.jp/press/files/jp/104167.pdf. Japanese text only.)

ΕN

### Key Action Goal E-1-2:

Contribute to the global achievement of Target 17 through the Global Environment Facility (GEF), the Japan Biodiversity Fund, and others.

• The CBD Secretariat organized 325 capacity building workshops in total across the world by March 2017, utilizing the Japan Biodiversity Fund, to promote the formulation and revision of respective national strategies (Fig. 95). In addition, capacity building has been supported for the implementation of respective national strategies since JFY2015, thereby advancing efforts to achieve Target 17 across the world.

## National Target(s)

National Biodiversity Strategy of Japan 2012-2020 / National Target E-1 / Strive to promote policies related to the conservation of biodiversity and sustainable use based on the National Biodiversity Strategy of Japan in a comprehensive and systematic manner. Furthermore, provide support and cooperation to ensure that global initiatives geared towards achieving Target 17 are developed.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

## Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

 Since JFY2015, the CBD Secretariat has provided technical assistance to developing countries for capacity building in the implementation of their national strategies, utilizing the Japan Biodiversity Fund. In relevant projects that were selected as pilot projects in developing countries, their national strategies were effectively implemented by mainstreaming of biodiversity and their application into land use plans, following the visualization of important areas for biodiversity conservation on maps. These projects have not only promoted efforts in their countries but also made model cases in dealing with common issues among Parties, and were thereby effective in advancing towards the achievement of Target 17 across the world.

ΕN

• Meanwhile, although new domestic measures were implemented, in addition to strengthening existing measures, for the purpose of achieving the Aichi Biodiversity Targets, there were some indicators that have not yet been improved. Therefore, it was evaluated that measures taken has been partially effective.

Other relevant information

N/A

ΕN

Obstacles and scientific and technical needs related to the measure taken

N/A

EN

Measures taken to contribute to the implementation of your country's national biodiversity strategy and action plan

(Newly taken and consolidated measures are only reported here, while omitting other measures that have been continuously followed up since the Fifth National Report of Japan to the CBD and had already been reported in it.)

## Key Action Goal E-2-1:

Reevaluate the wisdom on traditional knowledge and techniques for resource usage that have been cultivated in response to the natural characteristics of local regions, and strive to pass them down and promote their use.

ΕN

• MOEJ has promoted the establishment of Regional Circular and Ecological Sphere, equipped with relevant methods and mechanisms in sustainable management of local natural resources (natural capital), for the realization of Environmental and Life Centered Civilized Society that shall pass down the richness of biodiversity and its blessing in Japan to the next generations.

- MOEJ has assisted the formulation of plans by local governments aiming at the sustainable use of woody biomass resources reserved in forests, for realizing the societies in harmony with nature, through realizing local decarbonization as well as circulating funds within local communities enabling the conservation and restoration of forests.
- Landscapes that are important in a cultural sense for which the appropriate protection measures are taken are designated as Important Cultural Landscapes pursuant to the Act on Protection of Cultural Properties, and efforts are made for their protection, starting in 2005. As of the end of October 2017, 58 cases were selected.

## Key Action Goal E-2-2:

Enhance data collection on the natural environment, such as the National Survey on the Natural Environment, continuously and quickly update it, and improve how quickly information from it is disseminated, while also setting in place structures to collect, provide, and share data through collaborations between various actors by 2020.

- With regard to the preparation of vegetation maps that has been implemented as National Surveys on the Natural Environment, tasks have been promoted, aiming at the completion of nationwide vegetation maps by 2020. Data enhancement has been advanced through the implementation of such continuous surveys regarding the natural environment and biodiversity, thereby improving the capability of fast reporting (Fig. 96). In addition to promoting data collection in coordination with various actors, by utilizing Monitoring Sites 1000 and Ikimono Log (Log of Living Organisms), it has been aimed at providing and sharing relevant data based on the Japan Integrated Biodiversity Information Systems (J-IBIS).
- Monitoring surveys on forests and animals were carried out for the Protected Forests and Green Corridors that were established in National Forests. Additionally, surveys on fish, benthic animals, zooplankton and phytoplankton, and so on were carried out as part of the National Census on River Environments.
- The enhancement of systems for collecting, providing and sharing relevant information on biodiversity was promoted, by assisting activities of Japan Node for Global Biodiversity Information Facility (JBIF) in the Global Biodiversity Information Facility (GBIF) that collects, provides, and shares relevant information on biodiversity (Fig. 97).
- The Asia Pacific Biodiversity Observation Network (AP-BON) has been established and supported activities of the Network in the region, in coordination and cooperation with international programs such as GBIF, GEO-BON and so on.

 MOEJ has contributed to the promotion of Global Taxonomy Initiative (GTI) by establishing the East and Southeast Asian Biodiversity Information Initiative (ESABII) that collects and organizes information on biodiversity in East and Southeast Asian regions, and conducts training sessions regarding taxonomy, as well as by conducting capacity building of young researchers and administrators in the regions regarding taxonomy through organizing training sessions around twice a year.

### Key Action Goal E-2-3:

Work to round out the scientific knowledge related to marine organisms and ecosystems by 2020.

- Research on the impacts of changes in marine environments on fishery resources was conducted, in addition to marine environmental surveys in spawning marine areas and main fishery grounds.
- Technical development of models were implemented to enable impact assessment for ecosystems by environmental changes and fishing activities, in addition to clarifying the physiology of marine species and comprehensively elucidating marine ecosystem.
- Elucidation of material circulations as well as functions and structures of ecosystems in shallow coastal areas were advanced through studies utilizing a tidal flat experimental pool, which is one of the largest in the world and wideranged biological surveys in natural tidal flats, artificial tidal flats and seagrass and seaweed beds, and a model focusing on their future predictions was developed.
- MOEJ has monitored distribution of marine debris including microplastics and the state of absorption of toxic substances on Japan's coasts and seas around Japan. MOEJ has also conducted surveys towards the harmonization of monitoring methods on microplastics. In addition, MOEJ organized workshops by scientists regarding marine debris, under the bilateral and multilateral frameworks.

## Key Action Goal E-2-4:

Carry out comprehensive assessment of biodiversity in Japan and perform midterm assessment related to Japan's national targets for the achievement of the Aichi Biodiversity Targets.

• MOEJ conducted the first comprehensive review regarding the National Biodiversity Strategy of Japan 2012-2020 in JFY2013, as well as Japan Biodiversity Outlook 2 (JBO2), a comprehensive assessment regarding biodiversity in Japan (https://www.env.go.jp/en/nature/biodiv/jbo2.pdf) in JFY2015.

## Key Action Goal E-2-5:

Japan will actively participate in and contribute to the IPBES in order to make it an effective and efficient framework that is grounded in scientific evidence, and will set in place a domestic structure for this purpose.

MOEI has participated in related meetings and dispatched experts to IPBES that was established in April 2012, and contributed, through Japanese disbursement, to the consultation and coordination regarding system improvement and scope of work of IPBES. In addition, various events were organized, such as "Expert Workshops on Biodiversity and Ecosystem Services Scenarios" and "MOEJ-UNESCO International Workshop on the Contribution to the IPBES Assessment Reports to promote the science-policy interface at the national and local level". In addition, MOEJ contributed to the completion and publication of the Assessment in JFY2018, by establishing in Japan the IPBES Technical Support Unit for Asia-Pacific Regional Assessment (IPBES-TSU-AP) that IPBES started in JFY2015. Inside the country, internal coordination meetings were organized every year with the participation of experts and relevant government organizations working on IPBES, for sharing the most updated information on IPBES and considering future directions. Furthermore, MOEJ has implemented, since JFY2013, the enhancement of information foundations on biodiversity and ecosystem services in Japan.

### Key Action Goal E-2-6:

Set in place a structure to determine the extent to which resources have been mobilized in Japan for the sake of achieving the Aichi Biodiversity Targets and to report this to the Secretariat of the Convention on Biological Diversity based upon the decisions at COP 10.

• In light of the fact that an agreement was reached on provisional targets related to resource mobilization at COP 11, which was held in October 2012, Japan has proactively participated in discussions at international forums. In addition, methods for determining resource mobilization in Japan have been reviewed based on surveys and analyses related to the policies and plans of various countries towards resource mobilization, and its results were reported in 2014 and 2015.

### National Target(s)

National Biodiversity Strategy of Japan 2012-2020 / National Target E-2 / Have respect for local communities' traditional knowledge related to the conservation and sustainable use of biodiversity mainstreamed by 2020. Moreover, strengthen scientific grounds pertaining to biodiversity as well as the connections between science and policy. Effectively and efficiently mobilize the resources (funds, human resources, technologies, etc.) needed to achieve the Aichi Biodiversity Targets by 2020 at the latest.

Assessment of the effectiveness of the implementation measure taken in achieving desired outcomes

# Measure taken has been partially effective

tools or methodology used for the assessment of effectiveness above

- Measures related to National Target E-2 have been steadily implemented, and there is certain progress in mainstreaming the respect for traditional knowledge, strengthening scientific foundations regarding biodiversity, and strengthening ties between science and policy.
- Since the establishment of IPBES in 2012, in particular, significant progress has been observed in strengthening ties between science and policy, such as the publication of four assessment reports so far, including the "methodological assessment of scenarios and models of biodiversity and ecosystem services", "the assessment report on pollinators, pollination and food production", "regional/ subregional assessments on biodiversity and ecosystem services", and "thematic assessment on land degradation and restoration", in addition to a plan in which results of these assessments are to be utilized for domestic policies in the coming period.

EN

- In Monitoring Sites 1000, monitoring activities have been implemented by a method of "citizen science" that citizens spontaneously participate in some surveys on ecosystems. It was confirmed that citizen scientists who have participated long-term have developed their capacity in identifying species, which contributes to the Global Taxonomy Initiative.
- However, since these measures need to be continuously implemented, it was evaluated that the measures taken have been partially effective.

Relevant websites, links, and files

https://www.ipbes.net/assessment-reports/pollinators,https://www.ipbes.net/assessment-reports/scenarios

Other relevant information

N/A EN

Obstacles and scientific and technical needs related to the measure taken

N/A EN

The National Biodiversity Strategy of Japan 2012-2020/National Target A-1 / Have a diverse array of actors such as governments, local municipalities, businesses, private organizations and citizens recognize the importance of the conservation and sustainable use of biodiversity and autonomously reflect this in their respective actions, thereby achieving the "mainstreaming of biodiversity across society" and reducing the fundamental causes of biodiversity loss through actions taken by diverse actors, by 2020 at the latest.



# 2018 - Progress towards target but at an insufficient rate

## **Targets**

The National Biodiversity Strategy of Japan 2012-2020/National Target A-1 / Have a diverse array of actors such as governments, local municipalities, businesses, private organizations and citizens recognize the importance of the conservation and sustainable use of biodiversity and autonomously reflect this in their respective actions, thereby achieving the "mainstreaming of biodiversity across society" and reducing the fundamental causes of biodiversity loss through actions taken by diverse actors, by 2020 at the latest.

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

Progress towards target but at an insufficient rate

Date the assessment was done

#### 14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

As a result of consideration of the contents reported in Section II above as well as the following relevant indicators, it is evaluated that progress towards National Target A-1 has been being made. Many of related indicators showed progress, such as increase in the number of participating local governments in the Local Government Network on Biodiversity and that of participating organizations in the Japan Business and Biodiversity Partnership (refer to Fig. 4 in item 7 below). Activities targeting civil organizations, corporations and local governments for raising awareness to realize mainstreaming biodiversity in society and other various activities have been continuously carried out, which contributed to the increase of

FN

collaborative projects with private organizations and other bodies.

Meanwhile, it is not sufficient to say that mainstreaming biodiversity, which means various actors spontaneously reflect their recognition on the importance of conservation and sustainable use of biodiversity into their individual actions, has been widely and generally accomplished. Since further efforts are considered to be needed, it is evaluated that progress has been achieved towards target, but at an insufficient rate.

- Increases in the number of participating local governments in the Local Government Network on Biodiversity (refer to Fig. 3 in item 7 below), the number of formulated Local Biodiversity Strategy and Action Plans (Fig. 15), and the number of local governments that have introduced forest environment taxes (Fig. 18).
- Increase in agricultural land areas where cooperative activities have been conducted through resource improvement payment, including activities contributing to ecosystem conservation, which is financed by the payment for activities to enhance multi-functionality (Fig. 10).
- Increase in the number of obtained certifications, such as the Sustainable Green Ecosystem Council (SGEC), Marine Eco-Label Japan (MEL), etc. (Fig. 11 and 12).
- Degree of recognition of the word "biodiversity" has decreased from 55.7% in 2012 to 46.4% in 2014 (Fig. 1). National budget allocation for environment conservation has slightly decreased from 2013 to 2014 (Fig. 19).
- Leadership training programs have been conducted by the Nature Conservation Society of Japan (NACS-J), Council for Outdoors & Nature Experiences (CONE), Japan Society of Sharing Nature, and other organizations. For example, NACS-J has trained around 4,300 participants to become NACS-J Nature Observation Trainers, since the adoption of Aichi Biodiversity Targets. In addition, approximately 8,500 Nature Observation Trainers, who are working across the country, have provided opportunities of nature observation with1.3 million people in total every year, according to results of a questionnaire survey conducted by the NACS-J in 2016.

#### **Indicators and Activities**

Indicator(s)used in this assessment

As shown in Attachment "List of Indicators"

ΕN

Any other tools or means used for assessing progress.

• In terms of progress assessment of national targets, it was conducted and later concluded after a series of due processes including hearings from stakeholders, namely experts on biodiversity conservation, business circles, conservation and advocacy organizations such as NGOs, and related governmental organizations, collecting comments, and reporting to the Nature Conservation Committee of the Central Environment Council.

ΕN

Relevant websites, links, and files

Fig.1~Fig20.pdf

### Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

• As indicators to show the achievements of the national targets, indicators shown in the attachment material "List of Indicators" are utilized. By doing so, awareness of biodiversity among local governments, businesses, private organizations, and citizens as well as progress situations of their activities have been grasped.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Monitoring system for the target

• Related indicators that evaluate the progress situations regarding national targets are collected and compiled by responsible ministries and agencies as shown in the Attachment "List of Indicators."

ΕN

Other relevant website address or attached documents

(Attachment) List of Indicators.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target B-1 / Significantly reduce the rate of loss of natural habitats, as well as their degradation and fragmentation, by 2020.



# 2018 - Progress towards target but at an insufficient rate

#### **Targets**

National Biodiversity Strategy of Japan 2012-2020 / National Target B-1 / Significantly reduce the rate of loss of natural habitats, as well as their degradation and fragmentation, by 2020.

ΕN

## Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

Progress towards target but at an insufficient rate

Date the assessment was done

## 14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

As a result of consideration of the contents reported in Section II above as well as the trends of the following relevant indicators, it is evaluated that progress towards National Target B-1 has been being made. All indicators related to the rate of loss of natural habitats, such as the percentage of restored wetlands in important water systems and the percentage of restored tidal flats, show a positive progress. The loss of natural habitats is not considered to have significantly expanded, since there were no considerable changes in the areas of lakes and marshes, reclaimed areas and natural coastline extensions whose data were updated as of 2018, from their baseline data (The baseline data of forest areas, areas of lakes and marshes, reclaimed areas in shallow seas areas, and natural coastline extensions were set to monitor the trend of the degradation and fragmentation of natural habitats).

ΕN

Meanwhile, the Report of Comprehensive Assessment of Biodiversity and Ecosystem Services in Japan (Japan Biodiversity Outlook (JBO2)), published in 2016, indicates that change in land use have been occurring at a small scale and there could be time lags before their impacts would become apparent. Accordingly, we evaluated that progress has been made towards target, but at an insufficient rate, as the closest category.

For the review on the implementation of the National Biodiversity Strategy of

Japan 2012-2020 that was conducted in March 2014, a series of preparatory tasks such as considering methods, establishing baselines, and analyzing status quos were conducted, in order to understand the conditions of the rate of loss of natural habitats and degradation and fragmentation thereof. As to the methods, relevant information, including areas of forests, lakes and marshes, reclaimed areas in shallow seas areas, and natural coastline extensions, was utilized for the analysis considering data continuity. As baselines, values as of 2010, the year when the Aichi Biodiversity Targets were adopted, or any closest years to 2010, are used. With regard to some items with annual fluctuations, average values of 5 years before 2010 are set as baselines. Baselines and current conditions are as follows.

#### Forest Areas:

Baseline (2007): 25.1 million ha. (Currently in steady transition without significant fluctuations. Natural forest: 13.43 million ha, Planted forest: 10.29 million ha, Areas with no standing trees: 1.2 million ha, Bamboo forest: 160,000 ha)

Lake and Marsh Areas:

Baseline (2010): 2,356.61 km2 (Currently with no significant fluctuations.)

Reclaimed Areas in Shallow Sea Areas:

Baseline (5 years average between 2006 to 2010): Annual average approx. 7 km2 (Currently in slight decline after the peak of annual average 50 km2 around 1975)

# Natural Coastline Extensions:

Baseline (5 years average between 2006 to 2010): 18,105 km (estimated by the MOEJ)

- The percentage of restored wetlands in important water systems and that of tidal flats increased especially (refer to Fig. 21 and 22 in item 7).
- Efforts for water quality purification such as removing sludge, overlaying sand and removing abandoned/aground ships have been made in areas within Tokyo Bay, Ise Bay and Osaka Bay, where substratum improvement is needed (Fig. 23).

## **Indicators and Activities**

Indicator(s)used in this assessment

As shown in Attachment "List of Indicators"

EN

Any other tools or means used for assessing progress.

• In terms of progress assessment of national targets, it was conducted and later concluded after a series of due processes including hearings from stakeholders, namely experts on biodiversity conservation, business circles, conservation and advocacy organizations such as NGOs, and related governmental organizations, collecting public comments, and reporting to the Nature Conservation Committee of the Central Environment Council.

ΕN

Relevant websites, links, and files

Fig.21~Fig24.pdf

## Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

• As indicators to show the achievements of the national targets, indicators shown in the attachment material "List of Indicators" are utilized. By doing so, status of the rate of loss of natural habitats, as well as their degradation and fragmentation has been grasped.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Monitoring system for the target

• Related indicators that evaluate the progress situations regarding national targets are collected and compiled by responsible ministries and agencies as shown in the Attachment "List of Indicators."

ΕN

Other relevant website address or attached documents

(Attachment) List of Indicators.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target B-2 / Engage in agriculture, forestry, and fisheries that ensure the conservation of biodiversity in a sustainable manner by 2020.



# 2018 - Progress towards target but at an insufficient rate

## **Targets**

National Biodiversity Strategy of Japan 2012-2020 / National Target B-2 / Engage in agriculture, forestry, and fisheries that ensure the conservation of biodiversity in a sustainable manner by 2020.

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

Progress towards target but at an insufficient rate

Date the assessment was done

# 14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

As a result of consideration of the contents reported in Section II above as well as the trends of the following relevant indicators, it is evaluated that progress towards National Target B-2 has been being made. Many of the related indicators, such as the number of obtained certifications of Marine Ecolabel Japan (MEL) and the accumulative number of newly certified cases of Eco-farmers, show a positive progress towards the target.

In the meantime, there are no outstanding positive tendencies in some related indicators, such as the state of resources levels in our neighboring water areas (rate of stocks that have more than moderate resources), and agricultural areas to be prevented from decreasing in hilly and mountainous areas, compared to 2012, the standard year when the National Targets were set. Those indicators show slight decrease or the same. Accordingly, we evaluated that progress has been made towards target, but at an insufficient rate.

ΕN

• Activities for conservation oriented agriculture were conducted, including cooperative activities by farmers and relevant stakeholders working on conservation and management of local resources such as agricultural land and channels for agricultural purposes, as well as organic farming.

- With regard to forests, systematic and sustainable forestry management was promoted, enabling forests to demonstrate their multi-functions including biodiversity conservation in the long-term through the system of forestry plans.
- As to fisheries, the enhancement of fishery grounds considering biodiversity was promoted, through conservation of seagrass and seaweed beds and tidal flats, increases in their areas, and increases in areas of fisheries from which sediments were removed. In addition, the number of resource management plans formulated by fishermen and relevant stakeholders increased, as a result of their efforts. Furthermore, local commitments promoted relevant activities for sustainable fisheries and biodiversity conservation, as shown in the increase in the number of activities for creating Sato-umi. Meanwhile, as to the level of resources in our neighboring water areas, the rates of fish stocks that have more than moderate amount of resources have remained at the same level.

## **Indicators and Activities**

Indicator(s)used in this assessment

As shown in Attachment "List of Indicators"

ΕN

Any other tools or means used for assessing progress.

• In terms of progress assessment of national targets, it was conducted and later concluded after a series of due processes including hearings from stakeholders, namely experts on biodiversity conservation, business circles, conservation and advocacy organizations such as NGOs, and related governmental organizations, collecting public comments, and reporting to the Nature Conservation Committee of the Central Environment Council.

ΕN

Relevant websites, links, and files

Fig.25~Fig38.pdf

#### Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

As indicators to show the achievements of the national targets, indicators shown

EN

in the attachment material "List of Indicators" are utilized. By doing so, status of sustainable implementation of agriculture, forestry, and fisheries to ensure biodiversity conservation has been grasped.

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Monitoring system for the target

• Related indicators that evaluate the progress situations regarding national targets are collected and compiled by responsible ministries and agencies as shown in the Attachment "List of Indicators."

ΕN

Other relevant website address or attached documents

(Attachment) List of Indicators.pdf

The National biodiversity Strategy of Japan 2012-2020 / National Target B-3 / Maintain the water quality and habitat environments desirable for the conservation of aquatic organisms, increasing biological productivity, and sustainable use while continuing to improve the state of contamination from nitrogen and phosphorous by 2020. When it comes to water areas with a highly closed off nature—such as lakes, and deeply indented bays—(hereinafter referred to as "closed water areas") in particular, promote policies in mountainous areas, agricultural villages and the outskirts of urban areas, and urban areas that focus on the river basin in their entirety based upon the unique characteristics of each of these regions in a comprehensive and prioritized manner.



## 2018 - No significant change

## **Targets**

The National biodiversity Strategy of Japan 2012-2020 / National Target B-3 / Maintain the water quality and habitat environments desirable for the conservation of aquatic organisms, increasing biological productivity, and sustainable use while continuing to improve the state of contamination from nitrogen and phosphorous by 2020. When it comes to water areas with a highly closed off nature—such as lakes, and

deeply indented bays—(hereinafter referred to as "closed water areas") in particular, promote policies in mountainous areas, agricultural villages and the outskirts of urban areas, and urban areas that focus on the river basin in their entirety based upon the unique characteristics of each of these regions in a comprehensive and prioritized manner.

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

# No significant change

Date the assessment was done

# 14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

As for National Target B-3, as a result of comprehensive consideration on trends in the following indicators, in addition to the contents that are reported in Section II, many of the clusters comprising related indicators have shown no considerable changes in achievements of environmental standards such as total nitrogen and total phosphorous concentrations as well as COD in closed water areas. With regard to the achievement rate of environmental standards for total nitrogen and phosphorous in lakes, marshes and some enclosed coastal seas, the number of occurrences of red tides in some enclosed coastal seas, and the rates of achievement of COD in relation to environmental standards, neither obvious improvement nor deterioration was confirmed, though there were some relatively considerable fluctuations observed within the target assessment period from 2012 to 2015/2016. Based on abovementioned points, it was evaluated that there were no significant changes. Meanwhile, since relevant efforts for improving water quality in closed water areas have been exerted from the long-term point of view, it is difficult to evaluate improvement conditions based on short-term fluctuations within the period of target achievements.

ΕN

 As to environmental standards for water quality relating to health items, almost all of them were achieved in rivers, lakes and marshes, and sea areas. With regard to the achievement rate of environmental standards for total nitrogen and total phosphorous concentrations within closed water areas, conditions are varied according to each bay in enclosed coastal seas while the level of around 50% has continued in lakes and marshes. In addition, there were no considerable changes observed for the number of occurrences of red tides. As for the achievement rate of environmental standards for COD within closed water areas, it has remained at a constant level in recent years.

## **Indicators and Activities**

Indicator(s)used in this assessment

As shown in Attachment "List of Indicators"

ΕN

Any other tools or means used for assessing progress.

• In terms of progress assessment of national targets, it was conducted and later concluded after a series of due processes including hearings from stakeholders, namely experts on biodiversity conservation, business circles, conservation and advocacy organizations such as NGOs, and related governmental organizations, collecting public comments, and reporting to the Nature Conservation Committee of the Central Environment Council.

ΕN

Relevant websites, links, and files

Fig.39~Fig54.pdf

#### Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

• As indicators to show the achievements of the national targets, indicators shown in the attachment material "List of Indicators" are utilized. By doing so, status of maintenance of the water quality and habitat environment desirable for the sustainable use has been grasped.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Monitoring system for the target

• Related indicators that evaluate the progress situations regarding national targets are collected and compiled by responsible ministries and agencies as shown in the Attachment "List of Indicators."

ΕN

Other relevant website address or attached documents

(Attachment) List of Indicators.pdf

The National biodiversity Strategy of Japan 2012-2020 / National Target B-4 / Identify invasive alien species and organize information pertaining to the routes by which they establish themselves based upon the results of examinations of the enforcement status for the Invasive Alien Species Act by 2020. In addition, lay out the order of priority for eradicating these invasive alien species, and on the basis of this apportion out appropriate roles to each of the major actors regarding their eradication and proceed with eradicating them in a systematic manner. Promote a restoration of the habitation status of rare species and restore ecosystems to their original state by controlling or exterminating high priority species through such efforts. What is more, call the attention of related actors to the management of the routes by which invasive alien species become established in order to prevent their introduction or establishment, and promote countermeasures by examining more effective border control measures.



# 2018 - Progress towards target but at an insufficient rate

## **Targets**

The National biodiversity Strategy of Japan 2012-2020 / National Target B-4 / Identify invasive alien species and organize information pertaining to the routes by which they establish themselves based upon the results of examinations of the enforcement status for the Invasive Alien Species Act by 2020. In addition, lay out the order of priority for eradicating these invasive alien species, and on the basis of this apportion out appropriate roles to each of the major actors regarding their eradication and proceed with eradicating them in a systematic manner. Promote a restoration of the habitation status of rare species and restore ecosystems to their original state by controlling or exterminating high priority species through such efforts. What is more, call the attention of related actors to the management of the routes by which invasive alien species become established in order to prevent their introduction or establishment, and promote countermeasures by examining more effective border control measures.

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

Progress towards target but at an insufficient rate

Date the assessment was done

14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

As for National Target B-4, as a result of consideration of the contents reported in Section II above as well as relevant trends of the following related indicators, progress was confirmed in many clusters of related indicators such as the number of designated invasive alien species, the number of species that have not been established, the number of confirmed/certified cases of controls. In addition, in the case of measures against mongooses on Amami-Oshima Island and the Yambaru area on Okinawa Island, the number of captures (CPUE) have shown a steady decreasing trend, and an increasing tendency in the number of living populations of Okinawa rail has also been observed. Relevant measures against alien species need to be continued to promote the restoration of habitats for rare species in the coming period. Based on these results, it was evaluated that progress has been made towards the target but with insufficient rate, as the closest category.

• The numbers of designated invasive alien species, species that have not been established, and confirmed/certified cases of controls have all increased. The number of captured mongooses on Amami-Oshima Island and the Yambaru area on Okinawa Island has steadily decreased. As a result, it is thought that habitat conditions have improved in both areas compared to the first period when the project was initiated. On Amami-Oshima Island, while Amami rabbits have been observed in a new cells where they had not been confirmed before, some data indicate a decrease in the most recent number of cells where their habitats used to be confirmed. In the Yambaru area on Okinawa Island, the number of cells in which Okinawa rails were confirmed have been increasing in a long period, however there is no outstanding progress in recent years (Fig. 60). There are possibilities of influences by alien species other than mongoose, such as feral cats, as well as by factors including other changes in their habitat environment.

ΕN

# **Indicators and Activities**

Indicator(s)used in this assessment

As shown in Attachment "List of Indicators"

ΕN

Any other tools or means used for assessing progress.

• In terms of progress assessment of national targets, it was conducted and later concluded after a series of due processes including hearings from stakeholders, namely experts on biodiversity conservation, business circles, conservation and advocacy organizations such as NGOs, and related governmental organizations, collecting public comments, and reporting to the Nature Conservation Committee of the Central Environment Council.

Relevant websites, links, and files

Fig.55~Fig61.pdf

# **Level of confidence**

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

• As indicators to show the achievements of the national targets, indicators shown in the attachment material "List of Indicators" are utilized. Based on this, the state of relevant measures against alien species were comprehended.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Monitoring system for the target

• Related indicators that evaluate the progress situations regarding national targets are collected and compiled by responsible ministries and agencies as shown in the Attachment "List of Indicators."

ΕN

Other relevant website address or attached documents

(Attachment) List of Indicators.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target B-5 / Promote initiatives for minimizing human-induced pressures that cause ecosystems to deteriorate in order to maintain the soundness and functionality of ecosystems that are vulnerable to climate change, such as coral reefs, seagrass and seaweed beds, tidal flats, islands, alpine and subalpine areas by 2015.



2018 - Progress towards target but at an insufficient rate

#### **Targets**

National Biodiversity Strategy of Japan 2012-2020 / National Target B-5 / Promote initiatives for minimizing human-induced pressures that cause ecosystems to deteriorate in order to maintain the soundness and functionality of ecosystems that are vulnerable to climate change, such as coral reefs, seagrass and seaweed beds, tidal flats, islands, alpine and subalpine areas by 2015.

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

Progress towards target but at an insufficient rate

Date the assessment was done

14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

With regard to National Target B-5, the contents reported in Section II above and the trends of the following related indicators were comprehensively examined. As a result, human-induced pressures as to coral reefs were analyzed and organized to specify prioritized issues to tackle, namely: promotion of measures to reduce loads originated from land areas; promotion of sustainable tourisms in coral reef ecosystems; and establishing relationships between local livelihoods and coral reefs. In addition, regarding alpine vegetation and coral reefs, consideration on the implementation of relevant measures as adaptation to climate change has been promoted. Progress has been made with regard to the areas of various designated zones in coral reefs, seagrass and seaweed beds, and tidal flats in Japan.

Meanwhile, since the goal "establishing ecologically acceptable values of humaninduced pressures" has not been achieved yet, it was evaluated that progress has been made towards the target but with insufficient rate.

ΕN

• As to coral reefs, among ecosystems that are vulnerable to climate change in our country, the Action Plan to Conserve Coral Reef Ecosystems in Japan that had been formulated in 2010 was revised as the Action Plan to Conserve Coral Reef Ecosystems in Japan 2016-2020 in March 2016. Based on this, focal issues that needed tackling were identified as: promotion of measures against red soil sediments and nutrient salts from the land; promotion of sustainable tourisms in coral reef ecosystems; and establishment of relationship between community life and coral ecosystems. Relevant measures have been promoted, by implementing model projects and organizing follow-up workshops, so that a basis for conservation

of the coral reef ecosystems connected to local communities will be constructed by March 2021.

- In addition, the Basic Concepts on Adaptation to Climate Change in the Field of Biodiversity were announced in July 2015, organizing thoughts and ideas to mitigate negative impacts, or to maximize positive impacts, accompanying with climate change, in the field of biodiversity including ecosystems that are vulnerable to climate change such as coral reefs.
- Regarding coral reefs, among ecosystems that are vulnerable to climate change, bleaching of coral reefs occurred on a large scale over a wide sea area extending from the Amami Islands to the Yaeyama Islands in July and August 2016, which is thought to have been caused by the high water temperature during the summer season. In particular, more than 90% of the coral reefs in the Sekisei Lagoon, a home of the largest coral reef in Japan, were bleached, resulting in an extremely serious situation where many of coral reefs died. Following this critical situation, the Emergency Meeting on the Large-Scale Coral Bleaching Event was organized in April 2017, in which the Emergency Declaration of the Large-Scale Coral Bleaching Event was prepared. Based on this declaration, emergency measures are to be promoted through collaboration among stakeholders.
- As to alpine vegetation and coral reefs that are vulnerable to climate change, based on National Plan for Adaptation to the Impacts of Climate Change, a cabinet decision in November 2015, as well as Basic Concepts of Climate Change Adaptation on Biodiversity that was announced in July 2015, considerations on adaptation measures have been initiated as a model project and further preparation for their implementation shall be promoted in the coming period.
- Ecologically acceptable values for human-induced pressures, etc. have not been yet established.

#### Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

• As indicators to show the achievements of the national targets, indicators shown in the attachment material "List of Indicators" are utilized.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Monitoring system for the target

• Related indicators that evaluate the progress situations regarding national targets are collected and compiled by responsible ministries and agencies as shown in the Attachment "List of Indicators."

ΕN

Other relevant website address or attached documents

(Attachment) List of Indicators.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target C-1 / Appropriately conserve and manage at least 17% of inland areas and inland water areas, and at least 10% of coastal areas and ocean areas, by 2020.



# 2018 - Progress towards target but at an insufficient rate

**Targets** 

National Biodiversity Strategy of Japan 2012-2020 / National Target C-1 / Appropriately conserve and manage at least 17% of inland areas and inland water areas, and at least 10% of coastal areas and ocean areas, by 2020.

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

Progress towards target but at an insufficient rate

Date the assessment was done

14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

Regarding National Target C-1, the contents reported in Section II above and trends

of the following related indicators were comprehensively examined. As a result, it was observed that 20.3% of terrestrial and inland water areas are conserved and managed and therefore the target has achieved in terms of terrestrial and inland water areas. Meanwhile, the area of marine protected areas remained 8.3% as of April 2018. In addition, some deteriorations were observed in related indicators such as the number and size of Prefectural Wildlife Protection Areas and the number of Park Volunteers. Therefore, it was evaluated that progress has been made towards the target but with insufficient rate.

• In March 2014, the organization of methods, baselines and the current conditions was conducted to grasp the state of conservation and management, and regarding the methods, protected areas were defined as targets based on separating terrestrial and inland water areas and coastal and marine areas. The values as of early in JFY2011 were adopted as baselines.

Terrestrial and Inland Water Areas Baseline (JFY2011) Approximately 76,800 km2 (around 20.3% of the national land area)

Coastal and Marine Areas

Baseline (JFY2011): Approximately 369,200 km2 (around 8.3% of the territorial waters and exclusive economic zones)

- Approximately 20.3% of the terrestrial and inland water areas as well as approximately 8.3% of the coastal and marine areas have been conserved and managed as protected areas, thereby achieving the targets in terrestrial and inland water areas.
- In addition, study sessions were conducted by experts and extraction of Ecologically or Biologically Significant Marine Areas (EBSA) was completed in JFY2014, for the purpose of contributing to the enhancement of marine protected areas and advancement of networking. Overlaying of extracted areas upon existing marine protected areas was implemented as well. The achievements for marine protected areas remained around 8.3%. As to terrestrial and inland water areas, the designation of areas that contribute to the conservation of biodiversity, based on related laws and regulations, such as Natural Parks, Nature Conservation Areas, Wildlife Protection Areas, Protected Forests and Green Corridors in National Forests, is underway.

#### **Indicators and Activities**

Indicator(s)used in this assessment

As shown in Attachment "List of Indicators"

ΕN

Any other tools or means used for assessing progress.

• In terms of progress assessment of national targets, it was conducted and later concluded after a series of due processes including hearings from stakeholders, namely experts on biodiversity conservation, business circles, conservation and advocacy organizations such as NGOs, and related governmental organizations, collecting public comments, and reporting to the Nature Conservation Committee of the Central Environment Council.

ΕN

Relevant websites, links, and files

Fig.64~Fig75.pdf

#### Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

• As indicators to show the achievements of the national targets, indicators shown in the attachment material "List of Indicators" are utilized. By doing so, status of biodiversity improvement have been grasped.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Monitoring system for the target

• Related indicators that evaluate the progress situations regarding national targets are collected and compiled by responsible ministries and agencies as shown in the Attachment "List of Indicators."

ΕN

Other relevant website address or attached documents

(Attachment) List of Indicators.pdf

National Biodiversity Strategy 2012-2020 / National Target C-2 / Maintain a situation in the 2012

version of the Ministry of the Environment's Red List in which no new extinct species (EX) appear (excluding species that are not found over an extended period of time for which a determination will be made over a span of 50 years or more) among the threatened species that are already known about, as well as preventing the population decrease for the known threatened species. For threatened IA species (CR) or threatened I species (CR/EN), which are the species in the greatest danger of going extinct, increase the number of species that will see their rank fall through a variety of initiatives compared to the Ministry of the Environment's 2012 Red List by 2020. Such initiatives include setting in place habitat bases by means of promoting sustainable agriculture, forestry, and fisheries that take the proactive conservation of species and biodiversity into consideration. In addition, maintain the genetic diversity of crops, livestock animals, and wild species that are closely related to them, including those species that are valuable in a socioeconomic or cultural sense, by 2020.



# 2018 - Progress towards target but at an insufficient rate

## **Targets**

National Biodiversity Strategy 2012-2020 / National Target C-2 / Maintain a situation in the 2012 version of the Ministry of the Environment's Red List in which no new extinct species (EX) appear (excluding species that are not found over an extended period of time for which a determination will be made over a span of 50 years or more) among the threatened species that are already known about, as well as preventing the population decrease for the known threatened species. For threatened IA species (CR) or threatened I species (CR/EN), which are the species in the greatest danger of going extinct, increase the number of species that will see their rank fall through a variety of initiatives compared to the Ministry of the Environment's 2012 Red List by 2020. Such initiatives include setting in place habitat bases by means of promoting sustainable agriculture, forestry, and fisheries that take the proactive conservation of species and biodiversity into consideration. In addition, maintain the genetic diversity of crops, livestock animals, and wild species that are closely related to them, including those species that are valuable in a socioeconomic or cultural sense, by 2020.

ΕN

## Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

Progress towards target but at an insufficient rate

Date the assessment was done

14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

With regard to National Target C-2, the contents reported in Section II above and relevant trends of the following related indicators were comprehensively examined. As a result, significant progress was confirmed in many clusters of the related indicators, including the number of species that their ex-situ conservation has been implemented, such as vertebrate animals, insects and vascular plants, as well as the number of formulated plans for the protection and recovery program. It was confirmed that a condition in which new threatened species did not occur was maintained, and that the number of species that are transferred to a category of lower threat in the Red List increased as well. In addition, as for Japanese crested ibis and oriental stork, some achievements of conservation efforts, such as the increased number of their wild-living populations, were observed. Relevant initiatives for the conservation of plant genetic resources were also conducted. Meanwhile, some indicators, such as the percentage of threatened species, the number of Natural Habitat Protection Areas, and so on, remained at constant levels with no significant improvements. Therefore, it was evaluated that progress has been made towards the target but with insufficient rate.

- Compared to the MOEJ Fourth Red List that was announced in JFY2012, one species transferred to a lower category in the MOEJ Red List 2015, announced in JFY2015. This was followed by 8 species that moved to lower categories in the MOEJ Red List 2017, announced in JFY2016, although 10 species were ranked higher at the same time. Furthermore, a new assessment identified 28 species to be threatened species, resulting in the increased number of threatened species to 37, compared to the Fourth Red List. The number of threatened species per se increased indeed. However, many of them used to be out of the coverage of the assessment due to the previous lack of scientific knowledge, and the latest knowledge enabled their assessment. As a result, more precise comprehension and reflection concerning the states of threatened species have become possible. In March 2017, the First Red List for marine species was published, thereby evaluating 56 species as threatened species.
- With regard to the designation of National Endangered Species, based upon the Conservation Strategy for Threatened Wild Organisms that was formulated by MOEJ in April 2014, additional designation of 300 species is aimed to be achieved by 2020. 171 species were designated anew by JFY2017, and the number of designated species has been steadily increasing.
- In addition, the number of Natural Habitat Protection Areas have remained at constant levels (Fig. 80). As to protection and recovery programs, however, new plans were formulated for 14 species of land snails on Ogasawara Islands in May JFY2016, as well as for species of Lycaenidae (Pithecops fulgens tsushimanus) in October JFY2017. Relevant initiatives for ex-situ conservation have been conducted

for respective taxonomic groups, resulting in increasing tendency of the number of wild Japanese crested ibis, oriental stork, and so on.

#### **Indicators and Activities**

Indicator(s)used in this assessment

As shown in Attachment "List of Indicators"

ΕN

Any other tools or means used for assessing progress.

• In terms of progress assessment of national targets, it was conducted and later concluded after a series of due processes including hearings from stakeholders, namely experts on biodiversity conservation, business circles, conservation and advocacy organizations such as NGOs, and related governmental organizations, collecting public comments, and reporting to the Nature Conservation Committee of the Central Environment Council.

ΕN

Relevant websites, links, and files

Fig.76~Fig83.pdf

## Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

• As indicators to show the achievements of the national targets, indicators shown in the attachment material "List of Indicators" are utilized. By doing so, status of genetic biodiversity has been grasped.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Monitoring system for the target

• Related indicators that evaluate the progress situations regarding national targets are collected and compiled by responsible ministries and agencies as shown in the Attachment "List of Indicators."

Other relevant website address or attached documents

(Attachment) List of Indicators.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target: D-1 / Strengthen the benefits received from biodiversity and ecosystem services in Japan and elsewhere by giving consideration to the needs of women and local communities through the conservation and restoration of ecosystems by 2020. Carry out initiatives for each species with an awareness of the importance of the sustainable use of natural resources found in Satochi-Satoyama (socioecological production landscapes) areas in particular.



# 2018 - Progress towards target but at an insufficient rate

#### **Targets**

National Biodiversity Strategy of Japan 2012-2020 / National Target: D-1 / Strengthen the benefits received from biodiversity and ecosystem services in Japan and elsewhere by giving consideration to the needs of women and local communities through the conservation and restoration of ecosystems by 2020. Carry out initiatives for each species with an awareness of the importance of the sustainable use of natural resources found in Satochi-Satoyama (socio-ecological production landscapes) areas in particular.

ΕN

## Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

Progress towards target but at an insufficient rate

Date the assessment was done

14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

Regarding National Target D-1, the contents reported in Section II above and trends of the following related indicators were examined in a comprehensive manner. The

Report of Comprehensive Assessment of Biodiversity and Ecosystem Services in Japan (Japan Biodiversity Outlook 2 (JBO2)), which was published in 2016, evaluated that many of the ecosystem services declined or remained at the same level compared to the past. Therefore, it cannot be said that, as a long-term trend, benefits obtained from ecosystem services have been strengthened. However, relevant indicators for activities to enhance agricultural environments and to create Sato-umi areas were confirmed to have seen progress. As such, related measures have been advanced. Accordingly, it was evaluated that progress has been made toward the target but with insufficient rate.

- Towards the rehabilitation from the Great East Japan Earthquake, the Green Reconstruction Project has been promoted with a focus on the establishment of Sanriku Fukko (Reconstruction) National Park, passing down the natural environment and local livelihoods that have been nurtured by the connections among forests, the countryside, rivers and the sea, to the next generations, while learning blessings and threats from nature and utilizing them. In May 2013, Tanesashi Kaigan Hashikamidake Prefectural Natural Park was incorporated into Rikyuchu Kaigan National Park and designated as Sanriku Fukko (Reconstruction) National Park. In addition, in March 2015, Minami-Sanriku Kinkazan Quasi-National Park was integrated into Sanriku Fukko (Reconstruction) National Park. In March 2018, nature restoration projects were implemented in coastal areas, and the expansion of the park area was conducted in light of the protection of seascapes, in which views of inner bays are considered as a new landscape factor.
- Contribution has been made to the enhancement of public awareness on the importance of sustainable use of natural resources and the implementation of activities promoting sustainable use of natural resources, by promoting the Satoyama Initiative inside and outside the country through the International Partnership for the Satoyama Initiative (IPSI). The number of IPSI participating organizations has increased from 51 organizations at a time of starting to 220 organizations in total, including 20 governmental organizations from 19 countries. The number of activities for the maintenance and reestablishment of Satoyama/Sato-umi environments, in collaboration with IPSI participating organizations, became 46 cases as of March 2018. In addition, various initiatives, including local collaboration regarding the conservation and management of local resources such as agricultural land and channels for agricultural use as well as activities for creating Sato-umi areas, have been promoted across the country, and their number has increased.
- With regard to forests, sustainable forest management under the forestry plan system has been managing forests to demonstrate their multi-functions including biodiversity conservation over the long-term period.

## **Indicators and Activities**

Indicator(s)used in this assessment

As shown in Attachment "List of Indicators"

ΕN

Any other tools or means used for assessing progress.

• In terms of progress assessment of national targets, it was conducted and later concluded after a series of due processes including hearings from stakeholders, namely experts on biodiversity conservation, business circles, conservation and advocacy organizations such as NGOs, and related governmental organizations, collecting public comments, and reporting to the Nature Conservation Committee of the Central Environment Council.

ΕN

Relevant websites, links, and files

Fig.84~Fig87.pdf

#### Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

• As indicators to show the achievements of the national targets, indicators shown in the attachment material "List of Indicators" are utilized. By doing so, status of biodiversity improvement has been grasped.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Monitoring system for the target

• Related indicators that evaluate the progress situations regarding national targets are collected and compiled by responsible ministries and agencies as shown in the Attachment "List of Indicators."

ΕN

Other relevant website address or attached documents

(Attachment) List of Indicators.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target D-2 / Strengthen the contributions of biodiversity to resilience of ecosystem and their storage of carbon dioxide by conserving and restoring ecosystems, including restoration of at least 15% or greater for degraded ecosystems, thereby contributing to climate change mitigation and adaptation by 2020.



# 2018 - Progress towards target but at an insufficient rate

#### **Targets**

National Biodiversity Strategy of Japan 2012-2020 / National Target D-2 / Strengthen the contributions of biodiversity to resilience of ecosystem and their storage of carbon dioxide by conserving and restoring ecosystems, including restoration of at least 15% or greater for degraded ecosystems, thereby contributing to climate change mitigation and adaptation by 2020.

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

Progress towards target but at an insufficient rate

Date the assessment was done

# 14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

Regarding National Target D-2, the contents reported in Section II above and trends of the following related indicators were considered in a comprehensive manner. The "Report of Comprehensive Assessment of Biodiversity and Ecosystem Services in Japan (Japan Biodiversity Outlook (JBO2))", which was published in 2016, evaluated that the impacts caused by development and change in land use are very strong and have been continuing at that scale for the long-term period. Meanwhile, measures for the conservation and restoration of natural ecosystems as well as forest sink measures have been steadily conducted. Accordingly, it was evaluated that progress has been made toward the target but with insufficient rate.

ΕN

• Methods and baselines were established to monitor the state of the conservation and restoration of ecosystems for the purpose of examining the National Biodiversity Strategy that was implemented in March 2014, together with the Fifth National Report that was submitted to COP 12 of the Convention on Biological

Diversity (CBD) held in October 2014.

- A method was adopted to comprehend the state of the conservation of ecosystems through transitions in the area of forests, in addition to another method to understand the state of conservation and restoration of ecosystems by utilizing the areas of seagrass and seaweed beds and tidal flats as well as the rate of achievement of environmental quality standard for water quality in lakes and marshes, sea areas, and enclosed coastal seas.
- As to baselines, values were adopted as of 2007 for the area of forests, as of around 1978 for the area of seagrass and seaweed beds and tidal flats, as of the 1970s for BOD of rivers in water quality, as of the 1980s for total nitrogen and total phosphorus in lakes and marshes, and as of the 1990s for total nitrogen and total phosphorus in sea areas, respectively.

Baselines and current conditions are as follows.

## Forest Areas:

Baseline (2007): 25.1 million ha. Currently in steady transition without significant fluctuations.

Area of seagrass and seaweed beds and tidal flats:

Baseline (around 1978): Approximately 263,000 ha. The area that was conserved, fostered and restored by 2016 was around 28,000 ha.

Rate of achievement of environmental quality standard of water quality:

- (i) Baseline for BOD of rivers (1970s): More than 50%. The current state is more that 90% as an average for the period from 2011 to 2015.
- (ii) Baseline for total nitrogen and total phosphorus in lakes and marshes (1980s): Around 40%. The current state is more that 50% as an average for the period from 2011 to 2015.
- (iii) Baseline for total nitrogen and total phosphorus in sea areas (1990s): More than 50%. The current state is more that 80% as an average for the period from 2011 to 2015.
- Continuous initiatives have been undertaken as to nature restoration projects based on the Act on the Promotion of Nature Restoration as well as nature restoration projects inside national parks. In addition, the rates of restored tidal flats have generally been increasing.
- Uptake of greenhouse gas was secured by advancing the maintenance of forests and urban greening.

## **Indicators and Activities**

Indicator(s)used in this assessment

As shown in Attachment "List of Indicators"

ΕN

Any other tools or means used for assessing progress.

• In terms of progress assessment of national targets, it was conducted and later concluded after a series of due processes including hearings from stakeholders, namely experts on biodiversity conservation, business circles, conservation and advocacy organizations such as NGOs, and related governmental organizations, collecting public comments, and reporting to the Nature Conservation Committee of the Central Environment Council.

ΕN

Relevant websites, links, and files

Fig.88~Fig94.pdf

#### **Level of confidence**

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

• As indicators to show the achievements of the national targets, indicators shown in the attachment material "List of Indicators" are utilized. By doing so, status of mitigation and adaptation against climate change has been grasped.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Monitoring system for the target

• Related indicators that evaluate the progress situations regarding national targets are collected and compiled by responsible ministries and agencies as shown in the Attachment "List of Indicators."

ΕN

Other relevant website address or attached documents

(Attachment) List of Indicators.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Targets D-3 / Aim to ratify the Nagoya Protocol on ABS as early as possible and implement the domestic measures for this Protocol by 2015 at the latest.



# 2018 - On track to exceed target

**Targets** 

National Biodiversity Strategy of Japan 2012-2020 / National Targets D-3 / Aim to ratify the Nagoya Protocol on ABS as early as possible and implement the domestic measures for this Protocol by 2015 at the latest.

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

On track to exceed target

Date the assessment was done

14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

Taking into account that Japan accepted the Nagoya Protocol and started the implementation of domestic measures for the Protocol, it was evaluated as "on track to exceed target".

EN

## Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

No indicators were set to show the achievements of the national target.

ΕN

Adequacy of monitoring information to support assessment

Monitoring is not needed

National Biodiversity Strategy of Japan 2012-2020 / National Target E-1 / Strive to promote policies related to the conservation of biodiversity and sustainable use based on the National Biodiversity Strategy of Japan in a comprehensive and systematic manner. Furthermore, provide support and cooperation to ensure that global initiatives geared towards achieving Target 17 are developed.



# 2018 - On track to achieve target

#### **Targets**

National Biodiversity Strategy of Japan 2012-2020 / National Target E-1 / Strive to promote policies related to the conservation of biodiversity and sustainable use based on the National Biodiversity Strategy of Japan in a comprehensive and systematic manner. Furthermore, provide support and cooperation to ensure that global initiatives geared towards achieving Target 17 are developed.

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

# On track to achieve target

Date the assessment was done

# 14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

As for National Target E-1, the contents reported in Section II above as well as the trend of the following related indicator were considered in a comprehensive manner. Relevant measures were promoted such as the publication of Acceleration Measures towards Achieving the Aichi Biodiversity Targets, based on the result of a comprehensive review of National Biodiversity Strategy 2012-2020 conducted in JFY2014. In addition, the number of Parties that formulated their national biodiversity strategies and action plans with the support of the Japan Biodiversity Fund has been increasing. Accordingly, it was evaluated as "on track to achieve target".

ΕN

• Japan has been supporting developing countries toward the global achievement of Target 17 through the Japan Biodiversity Fund. The number of the Parties that received such technical assistance and revised their national biodiversity strategies has steadily increased.

#### **Indicators and Activities**

Indicator(s)used in this assessment

As shown in Attachment "List of Indicators"

ΕN

Any other tools or means used for assessing progress.

• In terms of progress assessment of national targets, it was conducted and later concluded after a series of due processes including hearings from stakeholders, namely experts on biodiversity conservation, business circles, conservation and advocacy organizations such as NGOs, and related governmental organizations, collecting public comments, and reporting to the Nature Conservation Committee of the Central Environment Council.

ΕN

Relevant websites, links, and files

Fig.95.pdf

#### Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

• As indicators to show the achievements of the national targets, indicators shown in the attachment material "List of Indicators" are utilized.

ΕN

Adequacy of monitoring information to support assessment

Monitoring related to this target is partial (e.g. only covering part of the area or issue)

Monitoring system for the target

• Related indicators that evaluate the progress situations regarding national targets are collected and compiled by responsible ministries and agencies as shown in the Attachment "List of Indicators."

ΕN

Other relevant website address or attached documents

(Attachment) List of Indicators.pdf

National Biodiversity Strategy of Japan 2012-2020 / National Target E-2 / Have respect for local communities' traditional knowledge related to the conservation and sustainable use of biodiversity mainstreamed by 2020. Moreover, strengthen scientific grounds pertaining to biodiversity as well as the connections between science and policy. Effectively and efficiently mobilize the resources (funds, human resources, technologies, etc.) needed to achieve the Aichi Biodiversity Targets by 2020 at the latest.



# 2018 - On track to achieve target

#### Targets

National Biodiversity Strategy of Japan 2012-2020 / National Target E-2 / Have respect for local communities' traditional knowledge related to the conservation and sustainable use of biodiversity mainstreamed by 2020. Moreover, strengthen scientific grounds pertaining to biodiversity as well as the connections between science and policy. Effectively and efficiently mobilize the resources (funds, human resources, technologies, etc.) needed to achieve the Aichi Biodiversity Targets by 2020 at the latest.

ΕN

# Category of progress towards the implementation of the selected target

Rate of progresses toward the implementation of the selected target

# On track to achieve target

Date the assessment was done

## 14 Sep 2018

Summary of the assessment of progresses toward the implementation of the selected target

As for National Target E-2, the contents reported in Section II above and the trends of the following related indicators were considered in a comprehensive manner. The establishment of Regional Circular and Ecological Sphere was promoted for sustainable management of natural capital by utilizing local characteristics, through the implementation of model projects to shape a life style taking advantage of blessings bestowed by nature as well as to foster societies taking advantage of traditional knowledge. The ties between science and policy has been strengthened through the participation in IPBES and contribution to its work, research and studies regarding marine ecosystems, and other efforts. Moreover, related indicators, such as the status of preparation of vegetation maps and the number of data registrations into GBIF, are confirmed to have progressed. Accordingly, it was

evaluated as "on track to achieve target".

- The establishment of systems has steadily been promoted for collecting, providing and sharing relevant data for biodiversity, through the preparation of vegetation maps in 1:25,000 scale, the implementation of continuous monitoring surveys, data registration into the GBIF, researchers' network through AP-BON, and capacity building by ESABII.
- Assessments by IPBES regarding biodiversity and ecosystem services presented the current conditions, forecasts and policy options for biodiversity based on scientific foundations. This could be utilized for future policies in Japan.

## **Indicators and Activities**

Indicator(s)used in this assessment

As shown in Attachment "List of Indicators"

ΕN

Any other tools or means used for assessing progress.

• In terms of progress assessment of national targets, it was conducted and later concluded after a series of due processes including hearings from stakeholders, namely experts on biodiversity conservation, business circles, conservation and advocacy organizations such as NGOs, and related governmental organizations, collecting public comments, and reporting to the Nature Conservation Committee of the Central Environment Council.

ΕN

Relevant websites, links, and files

Fig.96~Fig97.pdf

# Level of confidence

Level of confidence of the above assessment

Based on partial indicator information and expert opinion

Level of confidence of the above assessment

• As indicators to show the achievements of the national targets, indicators shown in the attachment material "List of Indicators" are utilized. By doing so, status of ties between science and policy as well as effective and efficient mobilization of resources have been grasped.

Adequacy of monitoring information to support assessment Monitoring related to this target is partial (e.g. only covering part of the area or issue) Monitoring system for the target Related indicators that evaluate the progress situations regarding national targets are collected and compiled by responsible ministries and agencies as shown ΕN in the Attachment "List of Indicators." Other relevant website address or attached documents (Attachment) List of Indicators.pdf Section IV. Description of national contribution to the achievement of each global Aichi Biodiversity Target 1. Awareness of biodiversity values Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target As described in Section II and III (National Target A-1) ΕN Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level N/A ΕN 2. Integration of biodiversity values Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target As described in Section II and III (National Target A-1) ΕN Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level N/A ΕN

# 3. Incentives

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As described in Section II and III (National Target A-1)

ΕN

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

N/A

ΕN

# 4. Use of natural resources

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As described in Section II and III (National Target A-1)

ΕN

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

N/A

ΕN

## 5. Loss of habitats

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As described in Section II and III (National Target B-1)

ΕN

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

• Japan has been assisting Gabon, Peru and other developing countries in establishing a monitoring system for forest areas utilizing satellites, so that the loss and degradation of natural forests due to illegal logging and forest fires could be more effectively monitored.

ΕN

## 6. Sustainable fisheries

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As described in Section II and III (National Target B-2)

# 7. Areas under sustainable management Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target As described in Section II and III (National Target B-2) ΕN Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level Japan has been promoting conservation oriented agriculture and sustainable forestry management in some developing countries including Ethiopia and Vietnam, for ΕN the purpose of improving livelihoods of local residents there. 8. Pollution Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target As described in Section II and III (National Target B-3) ΕN Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level N/A ΕN 9. Invasive Alien Species Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target As described in Section II and III (National Target B-4) ΕN Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level N/A ΕN 10. Vulnerable ecosystems Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target As described in Section II and III (National Target B-5) ΕN

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

• Japan has provided with Palau support for building capacity to manage marine protected areas including to strengthen patrolling illegal behavior and conduct monitoring activities in coral reef areas within the marine protected areas. Furthermore, Japan has provided with Indonesia and Philippines support for the conservation of coastal ecosystems, such as mangrove forests, as well as their services, to promote sustainable use of aquatic resources.

ΕN

#### 11. Protected areas

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As described in Section II and III (National Target C-1)

ΕN

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

• In some developing countries including Vietnam and Uganda, Japan has contributed to sustainable use of natural resources through conducting projects which support the conservation of protected areas and buffer zones and the effective management of collaborative protection areas with the participation of local communities.

ΕN

## 12. Preventing extinctions

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As described in Section II and III (National Target C-2)

ΕN

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

- Japan has promoted the conservation of threatened species in the Anzali Wetland in Iran and Amazon River Basin in Brazil, through projects for the conservation of biodiversity in those areas.
- Japan assisted in establishing anti-poaching operations centers in Mana Pools National Park of Zimbabwe and Queen Elizabeth National Park of Uganda, through disbursement to the Monitoring the Illegal Killing of Elephants (MIKE) Programme under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and thereby contributed to combatting poaching and illegal trade of wildlife including African elephants.

# 13. Agricultural biodiversity

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

• As described in Section II and III (National Target C-2)

ΕN

# 14. Essential ecosystem services

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As described in Section II and III (National Target D-1)

ΕN

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

MOEJ contributed to the enhancement of public awareness on the importance of sustainable use of natural resources and the implementation of activities promoting sustainable use of natural resources, by supporting the activities of the IPSI as well as participating in its operation. The number of IPSI participating organizations has increased from 51 organizations at a time of starting to 220 organizations in total, including 20 governmental organizations from 19 countries. The number of activities for the maintenance and reestablishment of Satoyama/Sato-umi environments, in collaboration with IPSI participating organizations, became 46 cases as of March 2018. In addition, MOEJ supported activities of the Satoyama Development Mechanism (SDM) and participated in its operation, for the purpose of financial cooperation to any projects that could be good practices regarding the conservation of Satoyama/Sato-umi environments and their sustainable use. As of 2017, contributions have been made to the implementation of 24 projects in 14 countries and regions as well as the dissemination of relevant knowledge based on those projects. Furthermore, through the Japan Biodiversity Fund, MOEJ supported activities and participated in the operation of the project named "Community Development and Knowledge Management for the Satoyama Initiative (COMDEKS)", implemented by the United Nations Development Programme (UNDP) for the purpose of assisting local activities to maintain and reestablish Satoyama/Sato-umi environments and compiling and disseminating relevant knowledge based on their results. As of 2017, national landscape strategies in 20 countries were formulated, 221 local projects were implemented, and relevant knowledge based on them were disseminated. In addition, GEF-Satoyama Project has been funded by the Global Environment Facility and implemented in collaboration with Japanese organizations, to assist projects in 10 countries as well as to promote creating

global knowledge and capacity building.

 Japan has been promoting integrated conservation and management of forests, wetlands and coastal ecosystems in Solomon Islands, Vietnam and other developing countries and thereby contributed to the enhancement of livelihoods of local residents through sustainable use of biodiversity.

# 15. Ecosystem resilience

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As described in Section II and III (National Target D-2)

ΕN

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

• Japan has been assisting developing countries including Ethiopia and Vietnam in strengthening forest management systems and building capacity for the implementation of REDD+.

ΕN

# 16. Nagoya Protocol on ABS

Interim national report on the implementation of the Nagoya Protocol

ABSCH-NR-JP-238857-1 Japan's Interim National Reports on the Implementation of the Nagoya Protocol (NR)

Additional relevant information that has not been included in the interim national report

As described in Section II and III (National Target D-3)

ΕN

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

Japanese disbursement through the NPIF contributed to the establishment of one project at a global level (targeting 20 countries), one project at regional levels in Africa (targeting 10 countries) as well as a regional level in the Asia-Pacific (targeting 14 countries), and 11 projects at country levels. Projects at a global level and regional levels support the ratification of the Nagoya Protocol, and all of the 13 projects, including them, assist the establishment and operation of domestic systems for the purpose of fair and equitable sharing of benefits arising from the utilization of genetic resources.

• Japan conducted a project which supported the management of genetic resources and the capacity building in the field of life sciences in Indonesia, thereby contributing to the promotion of the global implementation of the Nagoya Protocol.

## 17. NBSAPs

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As described in Section II and III (National Target E-1)

ΕN

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

• The Japan Biodiversity Fund started its actual operation in March 2011, following the statement of the Minister of the Environment at COP 10 regarding making a contribution towards a fund for capacity building in developing countries to achieve the Aichi Biodiversity Targets. The disbursement amount has reached 5 billion yen in total. Various projects that contribute to capacity building in developing countries have begun to be implemented utilizing the Fund, including workshops organized by the CBD Secretariat, to support the formulation and revision of national biodiversity strategies. In the Work Plan of the Fund after 2015 that was the deadline of the achievement of Target 17, it was decided to provide assistance to the revision of strategies as well as capacity building in their implementation. Based on these commitments, the implementation of the formulation and revision of strategies as well as effective measures was advanced, which is required in Target 17.

ΕN

# 18. Traditional knowledge

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As described in Section II and III (National Target E-2)

ΕN

# 19. Biodiversity knowledge

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As described in Section II and III (National Target E-2)

Other activities contributing to the achievement of the Aichi Biodiversity Target at the global level

• Japan has contributed to establish and strengthen scientific foundations in developing countries, including through conducting a project in Vietnam to support the development of a biodiversity database, a project in Palau to support enhancing scientific knowledge regarding the impact of climate change on coral reefs and strengthening ties between science and policy, and a project in Costa Rica to assist in establishing and sharing a model of participatory management of protected areas, and in systematizing and sharing relevant knowledge concerning participatory conservation of biodiversity, based on Japanese experiences in participatory citizens' surveys.

ΕN

• Japan has been providing international assistance though contributing to the Global Environment Facility (GEF) and Japan Biodiversity Fund, in order to contribute to the achievement of Aichi Biodiversity Targets at a global level. In addition, Japan has disbursed funds to the Critical Ecosystem Partnership Fund (CEPF) since 2000 to contribute to the conservation activities of hotspots in developing countries where many threatened species live and their biodiversity is being threatened.

## 20. Resource mobilization

Financial Reporting Framework

https://chm.cbd.int/database/record/206692 Financial Reporting Framework: Reporting on baseline and progress towards 2015

Description how and to what extent the country has contributed to the achievement of this Aichi Biodiversity Target

As described in Section II and III (National Target E-2)

ΕN

Description of country's contributions to the achievement of the Aichi Biodiversity Targets, please describe how and to what extent these contributions support the implementation of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals:

• Biodiversity is the basis of sustainable development. Japan is contributing to the achievement of Sustainable Development Goals (SDGs) through efforts and contributions to biodiversity conservation towards achieving the Aichi Biodiversity Targets.

EN

Section V. Description of the national contribution to the achievement of the targets of the Global Strategy for Plant Conservation

### Japan has national targets related to the GSPC Targets

Details on the specific targets

Key Action Goals for Japanese National Targets towards the achievement of the Aichi Biodiversity Targets, in correspondence to the respective 16 targets of GSPC, are as follows. In addition, Biodiversity Network Japan has formulated and published Plant Conservation in Japan: Achievements of 2010 Targets and Steps Toward 2020 Targets, in cooperation with MOEJ and other entities.

• GSPC Target 1 related:

No specific target is set.

- GSPC Target 2 related:
- C-2-1: Accumulation of knowledge about threatened species, and the enhancement of red lists and their regular revisions, etc.
- GSPC Target 3 related:
- D-1-1: Establishment of sustainable forest management, the advancement of maintaining and conserving diverse and healthy forests, etc.
- D-1-2: Conservation and use of village environments through sustainable agricultural activities, the utilization of local resources, etc.
- GSPC Target 4 related:

C-1-2: Consideration of the designation of areas that contribute to the conservation of biodiversity and the promotion of their appropriate conservation and management

- GSPC Target 5 related: Ditto
- GSPC Target 6 related:

D-1-1 and D-1-2 (Reposted)

- GSPC Target 7 related:
- C-2-2: Designation of National Endangered Species, the advancement of measures for their protection and recovery, etc.
- C-2-3: Promotion to enhance habitat environments to prevent the extinction and decrease of threatened species, etc.
- GSPC Target 8 related:
  - C-2-5: Establishment of the network on the conservation of plant genetic

resources, etc.

- GSPC Target 9 related:
- E-2-1: Reevaluation of wisdom in traditional life cultures and their techniques of resources utilization, and the advancement of their succession and utilization.
- GSPC Target 10 related:
- B-4-2: Reorganization of concepts regarding priorities in the control of alien species by 2014, the promotion of systematic control, the formulation of the Action Plan to Prevent Damages and Risks caused by Alien Species in Japan (tentative name)
- GSPC Target 11 related:

No specific target is set.

- GSPC Target 12 related:
- A-1-4: Promotion of the formulation of strategies and plans with considerations for biodiversity by the national and local governments, the consideration of effects on biodiversity from incentive measures, and the implementation of incentive measures taking biodiversity into account
- A-1-5: Establishment and announcement of policies for sustainable business activities and encourage their implementation
- GSPC Target 13 related:

E-2-1: (Reposted)

- GSPC Target 14 related:
- A-1-1: Enhancement and consolidation of publicity, education, and public awareness on biodiversity
- GSPC Target 15 related: Ditto
- GSPC Target 16 related:

No specific target is set.

Information on any active networks for plant conservation

- Biodiversity Network Japan (http://www.bdnj.org/index E.html)
- Japan Association of Botanical Gardens

(http://www.syokubutsuen-kyokai.jp/outline/index.html. Japanese text only)

The Japanese Society for Plant Systematics (JSPS)

(http://www.e-jsps.com/wiki/wiki.cgi?page=FrontPageEnglish)

• National Network of Botanic Gardens for the Conservation of Plant Diversity(http://www.syokubutsuenkyokai.jp/business/conservation/dl\_files/conservation01 2.pdf. Japanese text only)

Major measures taken by your country for the implementation of the Global Strategy for Plant Conservation

- MOEJ prepared and published the Fourth Red List in 2012, in cooperation with the Japanese Society for Plant Systematics, and the Red List 2017 in 2017, encouraging development business operators to make considerations while notifying the general public about the lists. According to the Red List 2017, it was evaluated that 1,782 species of vascular plants in Japan are threatened to extinction.
- MOEJ, with the aim of designating around 700 species among National Endangered Species that are targets to be protected based on the law, by 2030, has promoted their designation sequentially, and since 2014, designated 96 species of vascular plants, mainly threatened plants distributed in remote islands (as of February 2018). Currently, plans for the protection and recovery programs have been formulated for 16 species, in addition to the implementation of the protection and recovery program.

ΕN

- MOEJ concluded a basic agreement, in 2015, with the Japan Association of Botanical Gardens with regard to the promotion of biodiversity conservation, thereby advancing ex-situ conservation in collaboration with botanical gardens. As of June 2017, the technological development of ex-situ conservation for 17 species has been conducted, together with relevant activities taking their reintroduction into consideration.
- MOEJ has disbursed to 4 large-scale research projects since 2014, as the Environment Research and Technology Development Fund, thereby promoting the technological development for plant conservation including rare plants in the Ogasawara Islands and Nansei Islands.

### 1. An online flora of all known plants

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

### On track to achieve target at national level

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

• Lists of angiosperms and ferns were updated, from 2016 to 2017, according to a new classification system.

Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description	
N/A	EN
2. An assessment of the conservation status of all known plant species, as far as possible, t guide conservation action	.0
Category of progress towards the target of the Global Strategy for Plant Conservation at the national leve	I
On track to achieve target at national level	
Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level	
• MOEJ prepared and published the Fourth Red List in 2012, in cooperation with the Japanese Society for Plant Systematics, encouraging development business operators to make considerations while notifying the general public about the lists. Red lists at the national level may be revised every year, if necessary, and in 2017, the Red List 2017 was published. Field surveys have been launched for the preparation for the Fifth Red List.	EN
Please describe how and to what extent your country has contributed to the achievement of this GSPC Tar and summarize the evidence used to support this description	rget
N/A	EN
3. Information, research and associated outputs, and methods necessary to implement the Strategy developed and shared	
Category of progress towards the target of the Global Strategy for Plant Conservation at the national leve	I
On track to achieve target at national level	
Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level	ne
• Vegetation surveys have been implemented in National Surveys on the Natural Environment and Monitoring Sites 1000, the results of which are published on websites, in addition to cooperating towards the provision of relevant data to GBIF.	EN
Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description	
N/A	EN

4. At least 15 per cent of each ecological region or vegetation type secured through effective management and/or restoration

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

• MOEJ conducted the Comprehensive Inspection Project on National Parks and Quasi-National Parks from JFY2007 to JFY2010, by extracting areas important in terms of natural environment, as ecosystems and for topological/geological characteristics, and analyzing the state of any duplications with areas that are already designated as national and quasi-national parks (gap analysis). As a result, it was confirmed that many important areas have already been designated as national and quasi-national parks. However, as to subtropical forests in the Ryukyu Islands, summer green forests in the western part of Hokkaido, coastal tidal flats and salt wetlands, it was revealed that they have been relatively less designated as national and quasi-national parks and the state of designation of protected areas has been insufficient. Based on these results, relevant measures are currently being undertaken to newly designate and expand national and quasi-national parks.

ΕN

• For plants, 3 sites were designated as Natural Habitat Protection Area, based on the Act on National Endangered Species of Wild Fauna and Flora, and their conservation has been continued.

Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description

N/A

ΕN

5. At least 75 per cent of the most important areas for plant diversity of each ecological region protected with effective management in place for conserving plants and their genetic diversity

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

• MOEJ conducted a gap analysis in JFY2011, concerning the state of duplications between important areas that are core for biodiversity conservation and protected areas, and confirmed that more than 50% of the important areas in terms of biodiversity conservation were included in the protected areas.

ΕN

• For plants, 3 sites were designated as Natural Habitat Protection Area, based on the Act on National Endangered Species of Wild Fauna and Flora, and their conservation has been continued.

Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description

N/A

ΕN

6. At least 75 per cent of production lands in each sector managed sustainably, consistent with the conservation of plant diversity

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

• The conservation management of local resources such as farmland, agricultural facilities, etc., which relevant organization comprising farmers work on, are conducted on land for agricultural purposes that covers 2.25 million ha.

ΕN

Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description

N/A

ΕN

7. At least 75 per cent of known threatened plant species conserved in situ

Category of progress towards the target of the Global Strategy for Plant Conservation at the national level

Progress towards target at national level but at an insufficient rate

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

• The area of 20.3% of the national land has been designated as protected zones including national parks, and in the areas accounting for 13.1% among them, it is prohibited to collect all kinds of plants in principle. In other areas as well, specified plants are designated based on the Natural Parks Act according to respective areas where their collection is in principle prohibited. In protected areas, nature restoration projects and vegetation recovery projects are being implemented, thereby undertaking measures for protecting plants from sika deer and alien species such as rodents, and so on.

EN

• As of February 2018, 122 species out of 1,782 threatened species of vascular plants are designated as National Endangered Species based on the Act on Conservation of Endangered Species of Wild Fauna and Flora. Protection and recovery programs have been implemented for 16 species out of them in their habitats.

Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description		
N/A	EN	
8. At least 75 per cent of threatened plant species in ex situ collections, preferably in the country of origin, and at least 20 per cent available for recovery and restoration programmes		
Category of progress towards the target of the Global Strategy for Plant Conservation at the national level		
Progress towards target at national level but at an insufficient rate		
Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level		
• In National Network of Botanic Gardens for the Conservation of Plant Diversity organized by the Japan Association of Botanical Gardens, participating gardens have undertaken efforts for collecting and preserving Japanese threatened plant species. As of March 2017, the ex-situ conservation has been conducted for 65% of Japanese threatened plant species. In addition, MOEJ concluded a basic agreement, in 2015, with the Japan Association of Botanical Gardens with regard to the promotion of biodiversity conservation, thereby advancing these initiatives in collaboration with the botanical gardens.	EN	
Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description		
N/A	EN	
9. 70 per cent of the genetic diversity of crops including their wild relatives and other socio- economically valuable plant species conserved, while respecting, preserving and maintaining associated indigenous and local knowledge		
Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level		
• The Genebank Project, NARO, stores around 87,000 plant genetic resources of Japanese origin. Plant genetic resources possessed by Genebank and their relevant information are publicly available through the database of the Project.	EN	
Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description		

N/A

ΕN

# 10. Effective management plans in place to prevent new biological invasions and to manage important areas for plant diversity that are invaded

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

• For the purpose of promoting measures against alien species in Japan, concepts on control priority were organized and systematic measures are promoted. In addition, the Action Plan to Prevent Damages and Risks caused by Alien Species in Japan was formulated in March 2015, for encouraging respective actors' actions regarding measures against alien species and spontaneous efforts at local levels.

ΕN

Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description

N/A

ΕN

# 11. No species of wild flora endangered by international trade

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

N/A

ΕN

Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description

N/A

ΕN

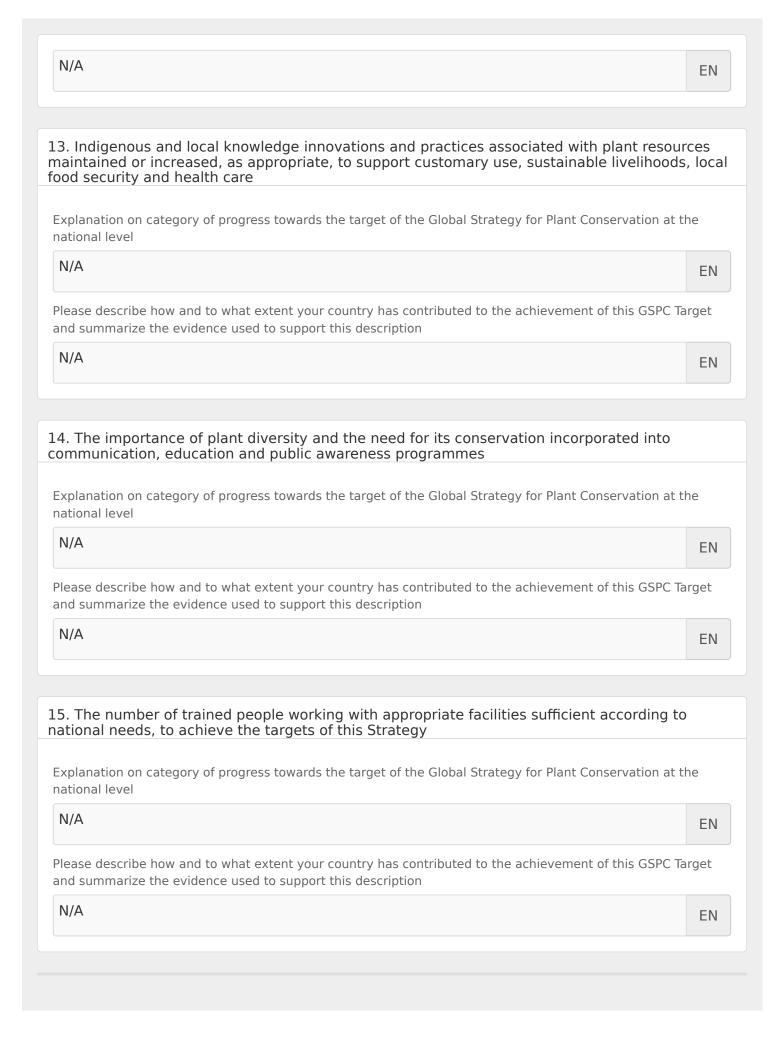
### 12. All wild harvested plant-based products sourced sustainably

Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level

N/A

ΕN

Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description



16. Institutions, networks and partnerships for plant conservation established or strengthened at national, regional and international levels to achieve the targets of this Strategy Explanation on category of progress towards the target of the Global Strategy for Plant Conservation at the national level N/A EN Please describe how and to what extent your country has contributed to the achievement of this GSPC Target and summarize the evidence used to support this description N/A EN Section VI. Description of the national contribution to the achievement of the targets of indigenous peoples and local communities N/A EN Section VII. Updated biodiversity country profile

Biodiversity facts: Status and trends of biodiversity, including benefits from biodiversity and ecosystem services and functions:

In addition to its four main islands – Hokkaido, Honshu, Shikoku and Kyushu – Japan has over 6,800 large and small islands. It is a small country with a land area of about 38 million ha, however it has a rich biosphere. The number of known species in Japan is estimated to be over 90,000 and to exceed 300,000 if unclassified species are included. The country also has a high rate of endemic species, including nearly 40% of land mammals and vascular plants, 60% of reptiles and 80% of amphibians. The surrounding seas also have a rich diversity of species, containing 50 species of the world's 127 marine mammals, 122 species of the world's 300 seabirds and 3,700 marine fish species. These unique ecosystems possess distinctive biota and are highly vulnerable, being affected by the destruction of habitats and introduction of invasive species.

ΕN

Between 2015 and 2017, the number of threatened species identified in the Japanese Red List increased from 3,596 to 3,634. Indeed, the Red List identifies, as threatened species, over 20% of mammals and vascular plants, over 10% of birds and about 30%

of reptiles, and 40% of amphibians and freshwater fishes.

According to the latest vegetation maps, forests account for 67% of the total land area, including 17.9% of natural forests. Much of the natural vegetation (consisting of natural forests and natural grassland), which currently accounts for nearly 20% of Japan's total land area, is distributed in the natural mountain area.

Satochi-Satoyama (socio-ecological production landscapes) areas have been formed as a result of human interactions over a long period of history, and are illustrative of people living in harmony with nature and being the beneficiaries of a variety of ecosystem services. These areas are large, comprising parts in which artificial forests take precedence and other parts that contain rice paddy fields, as well as agricultural village areas. In total, the Satochi-Satoyama areas account for about 40% of Japan's total land area. In Satochi-Satoyama, secondary forests surrounding communities account for about 20% of the country's total land area, and agricultural land, reservoirs and grasslands account for another 20%. According to research done by MOEJ, more than half of the habitats of threatened species and other species that used to be found easily are distributed in the Satochi-Satoyama areas. On the other hand, the number and distribution of large and medium-sized mammals, including sika deer, Japanese macaque and wild boar, in these areas, have increased.

Main pressures on and drivers of change to biodiversity (direct and indirect)

The main threats generated by human activities and development include illegal digging, overexploitation of resources for ornamental or commercial uses, destruction or deterioration of habitats due to land reclamation/development in coastal areas, and changes in land use. Recently, the negative effects associated with land use changes have begun to stabilize due to a decrease in reclamation of forested, agricultural and coastal areas for urban uses as compared to the level evidenced during the previous period of high economic growth.

ΕN

Coastal areas have been subject to severe environmental stresses such as land reclamation, water pollution, interruption or reduction of the water flow from rivers to estuaries and coastal waters, due to large concentrated populations and many industries. Marine ecosystems are disturbed by the introduction of alien species, wastes, harmful chemical substances and oil spills from ships and boats. In addition, coral bleaching, induced by climate change, is aggravating the negative impacts on marine biodiversity.

### Implementation of the NBSAP

The Basic Act on Biodiversity was enacted in 2008 to present basic policies for the biodiversity conservation and sustainable use. The Act requests the governments at all levels to formulate and implement biodiversity strategies, to promote initiatives and activities taking biodiversity into consideration, and to articulate basic policies in

environmental impact assessments. In addition, Japan is committed to the conservation of biodiversity based on legal systems through enactment of related laws and regulations, such as the Natural Parks Act, Nature Conservation Act, and Act on Conservation of Endangered Species of Wild Fauna and Flora.

In September 2012, the Japanese Cabinet endorsed the National Biodiversity Strategy of Japan 2012-2020 that was the Fifth National Biodiversity Strategy formulated by Japan based upon Article 6 on the CBD. Prior to this cabinet decision, there were two important events. The first event was an adoption of the Strategic Plan for Biodiversity (2011-2020), including the Aichi Biodiversity Targets, at COP 10 that was held in Nagoya, Aichi Prefecture, in 2010. The second event was the Great East Japan Earthquake that occurred in March 2011, forcing us to rethink the relationship between humans and nature. The current Strategy has presented the direction for realizing a vision of "Life in Harmony with Nature", together with a roadmap for Japan to achieve the Aichi Biodiversity Targets. That includes 13 national targets and 48 important action goals, setting the years for achieving targets. The achievements are supposed to be monitored by 81 indicators that were determined for this purpose. The Strategy also comprises around 700 concrete policies, functioning as a national action plan in the implementation of the roadmap. Based on the philosophy reflecting opinions from diverse stakeholders, activities enabling it were implemented. For example, there are various actions, including the organization of biodiversity coordination meetings among relevant government agencies, nationwide explanatory meetings, the implementation of public comments, opinion exchanges with related academia and NGOs, and consultation with the Central Environment Council.

Overall actions taken to contribute to the implementation of the Strategic Plan for Biodiversity 2011-2020

Japan was the host country for COP 10. There has been outstanding progress towards realizing the Aichi Biodiversity Targets. The Government of Japan has established important ecological networks at national and local levels, by expanding protected areas as well as setting the Green Corridors connecting protected forests. It designated 5 wilderness areas, reaching 5,631 ha in total, 10 nature conservation areas, and 546 nature conservation areas at prefectural levels, reaching 77,413 ha in total. Furthermore, it has designated 85 wildlife protection areas at the national level and 3,680 wildlife protection areas at prefectural levels, reaching 3,123,732 ha in total. Protected forests are the forests in National Forests where natural forests and habitats for significant wildlife species are protected by a management process utilizing natural transitions. National parks account for 14.7% of the entire national land area.

ΕN

In addition to various ecosystems, including forests, grasslands, Satochi-Satoyama areas, rivers, lakes and marshes, wetlands, tidal flats, and coral reefs, which have been targeted for the implementation plans for nature restoration projects (40 cases in total), cultural landscapes are also taken into consideration, by designating 408 scenic places, 1,025 natural monuments, and 51 important cultural landscapes.

With regard to Satochi-Satoyama areas, the Satoyama Initiative has been proposed, for collecting and analyzing sustainable utilization forms and social systems of natural resources, establishing a common philosophy for the sustainable management and utilization of natural resources according to potentials that local environments possess, and thereby utilizing them to realize societies in harmony with nature. In JFY2015, Japan positioned Satochi-Satoyama areas as part of the natural environment that should be inherited to the next generations and selected 500 locations as Important Satochi-Satoyama Areas for the Conservation of Biodiversity (Important Satochi-Satoyama).

As to wildlife control, for the purpose of scientific and systematic management, protection and control committee have been organized on specified wildlife species. The Type 1 Specified Wildlife Protection Plan refers to a plan for species of wildlife of which populations are significantly decreasing or habitats are shrinking (Type 1 specified wildlife species). The Type 2 Specified Wildlife Control Plan refers to a plan to control species of wildlife of which populations are significantly increasing or habitats are expanding (Type 2 specified wildlife species). The most updated information on their protection and control has been regularly compiled as Protection and Control Reports. Thus far, 147 plans have been reported in 46 prefectures.

As to 1,213 species that are threatened species to extinction, ex-situ conservation was implemented with wider stakeholders. In addition, the Japan Association of Botanical Gardens has aimed at a target to collect and preserve 75% of threatened plant species to extinction based on the Global Strategy for Plant Conservation. Furthermore, many local governments have formulated their own biodiversity strategies together with local red lists. As for MOEJ Red List, compared to the Fourth Red List that was announced in JFY2012, one species was moved to a category of lower threat in the Red List of 2015, announced in JFY2015. This was followed by 8 species that were transferred to categories of lower threat in MOEJ Red List 2017, announced in JFY2016, although 10 species were shifted to categories of higher threat at the same time. In addition, as a result of new assessments that included 28 species that were considered to be threatened species, 37 threatened species increased compared to the Fourth Red List. In March 2017, the first red list for marine species was formulated, thereby evaluating 56 species as threatened species. Up to the present time, red data books and red lists have been formulated by all prefectural governments in Japan and they are utilized as basic information for the conservation of biodiversity as well as references for the preparation of biodiversity strategies.

Relevant measures to control the utilization of living modified organisms have been undertaken based on the Cartagena Protocol as well as the Nagoya-Kuala Lumpur Supplementary Protocol. In order to prevent environmental contamination caused by chemical substances that may affect ecosystems, the Act on the Evaluation of Chemical Substances and Regulations of their Production was also revised. The

Japanese government seeks to preserve the genetic resources through the Genebank Project, in addition to protection and recovery programs. Measures on the access to genetic resources and sharing of benefits arising from their utilization have been taken based on the Nagoya Protocol.

Support mechanisms for national implementation (legislation, funding, capacity-building, coordination, mainstreaming, etc.)

Japan has undertaken a wide-range of economic measures, including subsidies, grants, and tax break systems by national government, funds by various foundations, charity funds and donations by civil organizations and business sectors, and forest environment taxes by local governments, for the purpose of supporting the implementation of biodiversity-related domestic policies as well as promoting spontaneous initiatives by various stakeholders in the field of biodiversity. In order to advance research and development as well as technological development, competitive research funds, including the Japan Fund for Global Environment and the Environment Research & Technology Development Fund, are available. As a result, various research institutes have conducted research activities on diverse themes.

Regarding policy and legislation, the implementation of a number of international conventions, including the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Ramsar Convention, the International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC), the United Nations Convention to Combat Desertification (UNCCD), and the Convention Concerning the Protection of the World Cultural and Natural Heritage, has been a means for Japan to incorporate the conservation of biodiversity into its own national target. Japan has progressively contributed to the conservation of biodiversity, in cooperation with other countries, addressing various issues such as the International Coral Reef Initiative (ICRI), UNESCO's Man and the Biosphere (MAB) Programme, the Group on Earth Observations (GEO), etc. In order to respond to issues in the preparation for projects, plans, and curriculums regarding environment and biodiversity, guidelines for Environment Impact Assessment (EIA) and Strategic Environment Assessment (SEA) were developed and implemented.

Main legislative tools aiming at the conservation of biodiversity at the national level include a series of laws and administrative regulations. For example, the regulation of import and control of invasive alien species that was implemented, based on the Invasive Alien Species Act in 2005, resulted in the management of ballast water and the release control of animals and plants in protected areas.

The Clearing-House Mechanism for Biodiversity, a meta-data searching system for promoting information exchange and distribution in bulk regarding biodiversity, started its operation in 2004.

Mechanisms for monitoring and reviewing implementation

In recent years, Japan has conducted large-scale surveys regarding natural resources and biodiversity. The government plans to continuously implement the National Surveys on the Natural Environment that have been conducted since 1973, for monitoring the current status and changes of biodiversity, while enhancing the rapidity in data providing. The Monitoring Sites 1000 Project that started in 2003 has conducted long-term monitoring of representative ecosystems in Japan, including forests, Satoyama, inland water areas, coastal areas, and so on, by the participation of researchers, local experts, NGOs, and citizens. As of January 2017, there are 1,033 survey sites. In addition, the Project monitors effects by the global warming on respective ecosystems and considers appropriate measures such as the establishment of ecological networks. Furthermore, the National Census on River Environments has been conducted in order to comprehend the state of habitats of organisms living in rivers. In addition, the National Survey on Biodiversity of the Forest Ecosystems has been also conducted for understanding the conditions of forest ecosystems.