Post 2010 targets (Proposal by Japan)

1. Vision, Mid/long-term Target (2050)

Enhancing the harmony between human being and nature all around the world, to improve the state of biodiversity from the current level as well as to sustainably increase the benefits of ecosystem services.

2. Mission, Short-term Targets (2020)

To have the following actions taken by 2020, so as to halt biodiversity loss,

- (1) To conduct full observations and analyses on the state of biodiversity at global scale and on scientific justification. To make ecosystem services respected in every aspect of human society.
- (2) To expand activities for biodiversity conservation, to promote practical methods for sustainable use of biodiversity and to establish mechanisms for reducing adverse effects of human activities on biodiversity.
- (3) To mainstream biodiversity by ensuring new steps to be taken by various individuals.

3. Sub-Targets

(1) Sub-targets to address indirect and broad based drivers for biodiversity loss.

- Sub-target A: To invite the wider participation of various stakeholders in the conservation and sustainable use of biodiversity
- Sub-target B: To establish mechanism to ensure harmonized approaches between ecosystem conservation and other human activities such as development and poverty alleviation

(2) Sub-targets to address direct and specific drivers for biodiversity loss.

Sub-target C: To increase the ratio of production that is managed in sustainable manner in agriculture, forestry, fisheries and other activities which utilize biological resources

Sub-target D: To take urgent measures against threats to biodiversity

(3) Sub-targets to improve status of biodiversity itself.

Sub-target E: To promote the activities to conserve biological species and expand the areas to conserve ecosystems.

(4) Sub-targets to ensure the benefits of biodiversity for human being.

Sub-target F: To establish the mechanism to sustainably benefit from the ecosystem services and to ensure its contribution to human well-being.

(5) Sub-targets to address the effective achievement of above mentioned Sub-targets

- Sub-target G: To prepare systems to encourage more facilitated ABS (Access and Benefit Sharing) and protection of traditional knowledge
- Sub-target H: To conduct full observations and analyses on the state of biodiversity and eco-systems at global scale and scientific justification so that they are well perceived and understood by general public.
- Sub-target I: To provide financial and human resources as well as increase scientific and technical capacity in order to achieve the conservation and sustainable use of biodiversity

4. Means to achieve the Sub-Targets, their examples and numerical indicators

For each "Sub-Target", which is common to all parties, proposals are made for "Means to achieve the sub-target", "Example of measures" and "Numerical indicators" on the following understandings:

- 1. "Means to achieve the sub-target" are expected to be included in COP 10 decision among all parties, on condition that its implementation and application could be left to each country, region or organization, depending on their different situation.
- 2. "Examples of measures" are concrete examples of "Means to achieve the sub-target", which can be categorized into the following three groupings. These examples are also expected to be included in COP10 decision, to the extent that they will be supported by other parties.
 - (1) Measures encouraged to be taken by developed countries
 - (2) Measures that can be taken by developing countries with technical and financial assistances and
 - (3) Measures encouraged to be taken by international organizations or NGOs.
 - Some of these measures come from actual experience of Japanese government and domestic entities.
- 3. "Numerical indicators" are expected to be included in COP 10 decision among all parties, on condition that, depending on the situation of each country, region or organization, they will be:
 - set as target indicator,
 - utilized to measure progress in achieving the targets.

Sub-target A: To invite the wider participation of various stakeholders in the conservation and sustainable use of biodiversity

Means to achieve Sub-target (A-1)

Promote participation of international agencies, central and local governments, businesses, NGO, civil society and indigenous and local communities into their coordinated efforts.

<Example of measures>

- 1) Biodiversity Strategies and voluntary action plans to be prepared and implemented by various stakeholders,
- 2) Sector based/ across the sector based plan and program by major stakeholders,
- 3) Integration of biodiversity consideration into policy, 4) The city planning with consideration to ecosystems,
- 5) Promotion of mechanism to collaborate among various stakeholders,
- 6) Guidelines to encourage various stakeholders into biodiversity conservation,
- 7) Development and extension of the technologies that contributes to conserving biodiversity

(Numerical indicator)

- The number of formulated/revised biodiversity strategies,
- The number of voluntary action plans formulated and implemented on individual or cooperative base by various stakeholders such as business and NGOs

Means to achieve Sub-Target (A-2)

Encourage local governments to take various measures for biodiversity conservation, such as the alleviation of negative effect by human activities in urban areas and the provision of ecosystem services to urban citizens.

<Example of measures>

- 1) Waste control measures,
- 2) 3Rs (Reduce, Reuse, Recycle),
- 3) Sewage Treatment,
- 4) Payment mechanism for ecosystem services, such as local taxation and donations/ contributions to be used for forest management,
- 5) Rules of greening requirement for residents or private companies by local authorities,
- 6) "Restoration for familiar living things" i.e. projects to provide urban citizens with parks to enjoy nature,

(Numerical indicators)

 Number of local government's ordinances stipulating basic principle and measures on biodiversity conservation

Means to achieve Sub-Target (A-3)

Promote awareness raising and information dissemination and encourage residents and consumers to participate in the conservation and sustainable use of biodiversity.

<Example of measures>

- 1) Campaign for citizens to follow "the list of actions",
- 2) Encouragement for the purchasing of biodiversity friendly products,
- 3) Various activities for awareness raising,
- 4) information dissemination systems

(Numerical indicators)

 Percentage of citizens who take actions in their daily lives to conserve biodiversity

Means to achieve Sub-Target (A-4)

Promote education for environment protection and sustainable development.

<Example of measures>

- 1) School education on biodiversity,
- 2) Local efforts for ESD (education for sustainable development)

Sub-target B: To establish mechanism to ensure harmonized approaches between ecosystem conservation and other human activities such as development and poverty alleviation

Means to achieve Sub-target (B-1)

Promote poverty alleviation through more sustainable use of biodiversity, and give more consideration to biodiversity in implementing poverty alleviation programs.

<Example of measures>

- 1) Strengthened cooperation between CBD and international organizations implementing development programs,
- 2) Development program to facilitate provision of improved ecosystem services to the poor,
- 3) harmonization between poverty alleviation under the Millennium Development Goals (MDGs) and biodiversity conservation under the CBD,
- 4) Participation of the poor in the activity to maintain and manage ecosystem

Means to achieve Sub-Target (B-2)

Promote infrastructures which have positive effects on ecosystem through the provision and restoration of habitats to wildlife.

<Example of measures>

- 1) River projects creating habitats to wildlife,
- 2) The utilization of various environmental technologies for the purpose of water quality improvement in rivers and lakes,
- 3) Projects creating biodiversity-friendly environment in port area,

(Numerical indicator)

 Number of infrastructure development projects with measures for the provision and restoration of ecosystems

Means to achieve Sub-Target (B-3)

Take various measures to ensure appropriate consideration to biodiversity in implementing development projects.

<Example of measures>

- 1) Application of the Strategic Environmental Assessment (SEA) with consideration to each project's different nature,
- 2) Appropriate implementation of mitigation measures, including avoidance, reduction and compensation,
- 3) Development assistance projects ensuring consideration given to biodiversity conservation,

Sub-target C: To increase the ratio of production that is managed in sustainable manner in agriculture, forestry, fisheries and other activities which utilize biological resources

Means to achieve the Sub-Target (C-1)

Promote agricultural production methods that reduce adverse impacts on ecosystems

<Example of measures>

- 1) The extension of efficient and effective pests controlling methodologies that have positive effects on ecosystems,
- 2) The identification and extension of other ecosystem–friendly farming methodologies such as organic farming,
- 3) Certification and labeling of products from ecosystem-friendly farming,
- 4) UNDP's "Green Commodity Supply Chain" (Initiatives to assist the production and distribution of biodiversity-friendly agricultural products)

(Numerical indicator)

· The number of farmers who conduct ecosystem-friendly farming

Means to achieve the Sub-Target (C-2)

Provide habitats to wildlife in agricultural lands or its surrounding areas.

<Example of measures>

- 1) Creation of wetland and canals where animals live and move through in the areas surrounding paddy fields,
- 2) The development and extension of methodology to maintain paddy fields and canals in ecosystem-friendly manner,

Means to achieve the Sub-Target (C-3)

Promote sustainable use of forest resources

<Example of measures>

- 1) Establishment and enforcement of the plans for forest management and conservation, including forest zoning and practical codes for each zones,
- 2) Wide use of criteria for sustainable forest management and indicators to measure the achievement of the criteria,
- Taking measures to combat illegal logging (Ex: Establishment of verification scheme on legal compliance of timbers and encouragement for the use of verified timbers),

(Numerical indicators)

- Total growing stock of forest resources,
- Number and/or total areas of forests under the plans for forest management and conservation,

Means to achieve the Sub-Target (C-4)

Promote sustainable fisheries production and conservation of fishing ground environment.

<Example of measures>

- 1) The combination of appropriate conservation measures for sustainable fishery management depending on the resources status,
- 2) Fisher's voluntary measures for water quality improvement in aquaculture,
- 3) The conservation and restoration of seagrass/seaweed beds and tidal flats for improved environment for marine resources,

Sub-target D: To take urgent measures against threats to biodiversity

Means to achieve Sub-target (D-1)

Take necessary measures to address invasive alien species.

<Example of measures>

- 1) Effective control on the route of invasive alien species,
- 2) Management to alleviate the impact by existing invasive species

Means to achieve Sub-target (D-2)

Take effective measures to address climate change on both "mitigation" and "adaptation."

<Example of measures>

- 1) Prevention of ecosystem loss and degradation which results in the increased emission of CO2,
- 2) utilization of biomass with due consideration of biodiversity,
- 3) Conservation and restoration of fragile ecosystems and establishment of ecological networks, such as setting "conservation corridors", aiming to secure the means that wildlife can adapt to climate change,
- 4) Collaboration between Convention on Biological Diversity and its related international framework, such as UN Framework Convention on Climate Change

Means to achieve Sub-Target (D-3)

Reduce the damaging effects of hazardous chemicals and other pollutants upon biodiversity.

<Example of measures>

 Strengthened restriction of production, consumption and emission of hazardous chemicals

Means to achieve Sub-Target (D-4)

Reduce threats to endangered species.

<Example of measures>

- 1) Prohibition of the collection or capture of, and the damage to, endangered species,
- 2) implementation of the conservation breeding programs,
- 3) Restriction on international/domestic trade in endangered species

(Numerical indicator)

- · The population of each endangered species,
- the number of protected species,
- the number of ex-situ conservation cases,
- Total area of land for species protection,
- the number of species with conservation breeding programs formulated

Sub-Target E: To promote the activities to conserve biological species and expand the areas to conserve ecosystems.

Means to achieve the Sub-Target (E-1)

Expand the protected areas for terrestrial and marine ecosystems and strengthen the management therein in an appropriate manner, relying on the collaboration with local residents and other stakeholders for their management, as well as on the direct ownership and management by the governments.

<Example of measures>

- 1) Designation of protected areas for terrestrial and marine ecosystems where management is operated in collaboration and cooperation with local residents and other various stakeholders,
- 2) designation of protected areas by local governments

(Numerical indicator)

- · Hectare and the number of protected areas,
- number of people involved in management activities

Means to achieve the Sub-target (E-2)

Broaden conservation areas by establishing connection route between fragmented habitats of wildlife or protected areas into ecological networks so as to prevent fragmentation and diminishing of ecosystem and to ensure its integrity.

<Example of measures>

- 1) The river management using methodology to secure the connectivity of habitats,
- 2) Cooperation between stakeholders in watershed areas,
- 3) The national or municipal projects to connect fragmented ecosystem areas with "conservation corridors" by way of coordination among related stakeholders,
- 4) The conservation projects by establishing the networks of "flyways" for migratory birds,
- 5) The protection of the ecological habitats in the terrestrial and coastal areas with good understanding on the interaction between them,

(Numerical indicator)

Hectare of total ecosystem conservation areas and protected areas connected or interlinked

Means to achieve the Sub-Target (E-3)

Promote appropriate maintenance and conservation of the existing forest as well as forestation in a manner not to damage biodiversity, and reverse the loss of forest cover and forest degradation.

<Example of measures>

- 1) Establishment and enforcement of the plans for forest management and conservation, including forest zoning and practical code for each zones,
- 2) Wide use of criteria and indicators for sustainable forest management

(Numerical indicator)

- · Area of total forest cover,
- total growing stock of forest resources,
- · the number of native forest associated species,
- the ratio of forest cover to the total terrestrial area,

Means to achieve the Sub-Target (E4)

Promote ecosystem conservation by improving sewage treatment and improving the quality of surrounding water.

<Example of measures>

- 1) Provision and maintenance of sewage treatment facilities,
- 2) Sludge removal and sand capping at the seabed,
- 3) Water quality improvement projects at rivers and lakes

(Numerical indicators)

· Water quality of rivers, lakes and coastal areas

Means to achieve the Sub-Target (E-5)

Take focused approach on the conservation and restoration of areas which are fragile but critical for ecosystem, such as wetlands, coral reefs, and islands

<Example of measures>

The conservation and restoration of coral reefs, wetland, tidal flat, seagrass and seaweed beds

(Numerical indicators)

- Total hectare and the number of areas of restored coral reefs and wetlands,
- Total hectare of created seagrass/ seaweed beds and tidal flats,
- Hectare and number of registered wetlands under the Ramsar Convention,
- number of species specified for monitoring

Means to achieve the Sub-Target (E-6)

To expand the green space in biodiversity-friendly manner and provide habitats for wildlife in urban area

<Example of measures>

- 1) To conserve and create green spaces and to promote related activities in urban areas
- 2) To make ecosystem-networking plan in urban areas

(Numerical indicators)

Hectare of green space in urban areas

Sub-target F: To establish the mechanism to sustainably benefit from the ecosystem services and to ensure its contribution to human well-being.

Means to achieve Sub-Target (F-1)

Endeavor to evaluate the values of ecosystem services using the result of studies on the economic costs of the loss of biodiversity and ecosystem services, and enhance public understanding on these values, including spiritual and cultural ones which are difficult to quantify.

<Example of measures>

Develop methodology to evaluate economic value of ecosystem services, such as "The Economics of Ecosystem and Biodiversity (TEEB)"

(Numerical indicator)

Economic value of ecosystem services evaluated by TEEB

Means to achieve Sub-Target (F-2)

Further examine and develop mechanisms for various stakeholders to cooperate and contribute to maintaining ecosystem services.

<Example of measures>

- 1) Payment mechanism for ecosystem services, such as local taxation and donations/ contribution to be used for forest management,
- 2) Ecosystem conservation which is achieved through adequate farming,
- 3) Community activities for ecosystem conservation in rural areas,
- 4) Voluntary activities by private companies and NPOs for the forest conservation,
- 5) Promoting activities to conserve ecosystem services by way of using *Satoyama* initiative,

Means to achieve Sub-Target (F-3)

Further promote human activities that can both conserve ecosystem and enhance ecosystem services, example of which is the sustainable use of the secondary natural environment, paying respect to the cultural and spiritual elements that has contributed to conserving biodiversity

<Example of measures>

- 1) The *Satoyama* initiative,
- 2) The promotion of "eco-tourism" and "green tourism",

(Numerical indicator)

• The number and scale, i.e. total area and participants, of activities which achieve sustainable use of the secondary natural environment,

Sub-target G: To prepare systems to encourage more facilitated ABS (Access and Benefit Sharing) and protection of traditional knowledge

Means to achieve Sub-Target (G-1)

Take measures to assist domestic implementation of an international regime on ABS to be agreed.

<Example of measures>

Technical assistance to developing countries in providing domestic system to ensure their implementation of the regime,

(Numerical indicator)

Number of countries to introduce domestic systems on ABS

Means to achieve Sub-Target (G-2)

Encourage users and providers of genetic resources, through measures of public awareness, to conclude mutual agreements and to comply with domestic systems and agreements on ABS.

<Example of measures>

Various awareness raising activities on ABS

(Numerical indicators)

- 1) Number of seminars conducted on ABS,
- 2) degree of understanding on ABS

Means to achieve Sub-Target (G-3)

Provide assistance for potential providers of genetic resources to extract the value of unused genetic resources and to ensure the utilization and benefit-sharing thereafter.

<Example of measures>

- 1) Technical and research assistance to developing countries for the prospecting and exploration of genetic resources,
- 2) Establishment of facilities for R&D to promote the utilization in the area of genetic resources,

(Numerical indicator)

 Number of technical assistance projects to developing countries, such as genetic resource prospecting. Sub-target H: To conduct full observations and analyses on the state of biodiversity and eco-systems at global scale and scientific justification so that they are well perceived and understood by general public.

Means to achieve Sub-Target (H-1)

Introduce the advanced monitoring methodologies and strengthen their implementation system to conduct accurate and comprehensive observation of the state of biodiversity, whose results are to be publicly shared.

<Example of measures>

- 1) Promotion of GEO-BON,
- 2) The utilization of "Global Mapping project",
- 3) Development and transfer of advanced monitoring technology such as satellite monitoring,
- 4) Long-term periodic monitoring, such as national survey on natural environment and national census on water environment,
- 5) Human resources development for Global Taxonomy Initiative (GTI),
- 6) Monitoring by initiative of local residence whose attention is paid at daily base

Means to achieve Sub-Target (H-2)

Provide policymakers with the observation and analysis of the state of biodiversity and the evaluation of the ecosystem services, to be reflected to their policies

<Example of measures>

Enhanced interface between science and policy, such as an Intergovernmental Science-policy Platform on Biodiversity and Ecosystems Services (IPBES)

Means to achieve Sub-Target (H-3)

Promote observation and analysis in the areas where such activities have been insufficient.

<Example of measures>

The development of monitoring techniques and the promotion of research activities in ocean areas

Sub-target I: To provide financial and human resources as well as increase scientific and technical capacity in order to achieve the conservation and sustainable use of biodiversity

Means to achieve Sub-Target (I-1)

Enhance financial assistance by GEF and other financial organizations to developing countries by focusing on areas with strategic importance.

<Example of measures>

Mechanism for frequent and transparent exchange of information between GEF and CBD

Means to achieve Sub-target (I-2)

Provide effective and efficient bilateral assistance to countries and regions which need international assistance for their ecosystem conservation.

<Example of measures>

- 1) Coordinated approach among assistance agencies by sharing information with each other,
- 2) Voluntary financial assistance by private sectors for projects of conservation and sustainable use of biodiversity,

Means to achieve Sub-target (I-3)

Provide assistance to developing countries' efforts through human resource development, dispatch of experts and technical assistance

<Example of measures>

- 1) Technical assistance to projects on biodiversity,
- 2) Project based voluntary technical assistance by private sectors

Means to achieve Sub-target (I-4)

Strengthen information sharing and cooperation through multilateral networks which involve developed and developing countries as well as international organizations.

<Example of measures>

- 1) International Rice Paddy and Water Environment Network,
- 2) International Coral Reef Initiative,
- 3) East Asia- Australia Fly Way Partnership,
- 4) "Local Action for Biodiversity (LAB)" project,
- 5) DIVERSITAS Programme,

(Numerical indicator)

Numbers of international meetings and participants countries

5. Implementation, reporting and review of the targets

(1) Implementation

Parties reflect the targets into their newly formulated or revised national biodiversity strategies. The numerical indicators of the targets are incorporated in their national strategies to the great extent possible depending on the situation of each party.

(2) Reporting

Parties not only submit their national report, but also periodically report to the conference of the parties their progresses made, which are measured in terms of numerical indicators, regardless of whether those indicators were reflected into their strategies.

(3) Review

Individual means to achieve the sub-targets, their examples and numerical indicators will be reviewed and replaced by new ones, as new information and technology become available.

Progress made for each of the sub-target will be evaluated in 2020 to see if and how new targets for 2030 should be agreed, towards the achievement of the mid/long term target (2050).