



## **Sectoral and Cross-Sectoral Integration of Biodiversity in Japan**

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## **1. Introduction**

Japan reported<sup>1</sup> that Japan has established the Inter-Ministerial Committee on the National Biodiversity Strategy. The Committee comprises thirteen ministries and agencies and performs necessary tasks for the implementation of the CBD, such as development and review of the National Biodiversity Strategy, in collaboration with other ministries and agencies. The National Biodiversity Strategy incorporates many examples of sectoral and cross-sectoral plans, strategies, measures, and individual projects. The report describes the cases related to biodiversity in the fields of agriculture, education, forestry, fisheries, tourism, landscape protection, and international cooperation. It introduces the sections in which those representative cases are provided, along with the Articles and fields of the Convention. It also introduces, in addition to governmental measures, the development of biodiversity strategies in local governments, the actions taken by the private sector, NGOs, scientific bodies and cooperation of diverse stakeholders to enhance biodiversity.

## **2. Examples of governmental measures**

### **Agriculture, Forestry and Fisheries**

The agriculture, forestry and fisheries sector is closely connected with biodiversity, as it contributes to provision of precious habitats for various wildlife species in nature, and formation and maintenance of unique regional ecosystems, making use of the natural circulation functions. Therefore, conservation of biodiversity is indispensable as the basis for maintenance and development of sustainable agriculture, forestry and fisheries.

In developing agriculture, forestry and fisheries policies, based on the “Ministry of Agriculture, Forestry and Fisheries’ Strategy for Biodiversity Conservation” formulated in July 2007 and “The Third National Biodiversity Strategy”, Ministry of Agriculture, Forestry and Fisheries (“MAFF”) has been working on promotion of the biological diversity in agriculture, forestry and fisheries, and has developed the quantitative indicators to measure the relationship between agriculture, forestry and fisheries and biodiversity, for conservations of:

- 1) countryside and Satochi-Satoyama areas (natural resources and human activities coexist in the rural/mountain region);
- 2) forests;
- 3) “Sato-umi” (the sea, in the coastal area, where high productivity and rich biodiversity have been conserved by the modification implemented while keeping harmony with natural ecosystems) and other sea areas; and
- 4) Genetic resources and sustainable utilization.

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<sup>1</sup> Japan (2009). Fourth National Report to the United Nations Convention on Biological Diversity, March 2009, 111 pp.

Moreover, in accordance with the recommendations submitted in July 2008 by the MAFF Biodiversity Strategy Working Group comprising of outside learned experts, the government promotes public understanding for the agriculture, forestry and fisheries sector contributing to the conservation of the nature and familiar living things through the symbol mark project of “living creature mark”.

## **Forests**

Japan is a country with rich green forests, which cover two-thirds of the total land area. The forests are important components of conservation of biodiversity in our country as various types of forests ranging from artificial forests planted to green the national land after World Wide War II to virgin natural ones designated as World Natural Heritage Site including Yakushima island, Shirakami mountain range and Shiretoko area serve as the habitats of a wide range of wildlife.

For this reason, MAFF has formulated “the Ministry of Agriculture, Forestry and Fisheries Biodiversity Strategy” as guidelines to strongly promote the biodiversity conservation-conscious agriculture, forestry and fisheries sector and will implement the measures and policies based on this strategy.

As efforts to conserve biodiversity in the field of forests and forestry, conservation and management of the precious nature as well as promotion of maintenance and conservation in order to sustain forests’ multiple functions have been underway. Those efforts include the “National Initiative of Creating Beautiful Forests” activities as a collaborative undertaking of public and private sectors, in so as to comprehensively perform maintenance and preservation of forests, utilization of domestic lumbers, fostering of forestry workers, and community vitalization with the understanding and cooperation of a wide range of people. As for Satoyama forests (community-based forests), which require appropriate care for maintenance of the nature, the efforts to disseminate the importance of forests and forestry are also promoted as well as maintenance and preservation by various entities in conjunction with the activation of rural areas.

In the meanwhile, the sustainable forest management in foreign countries has been promoted through international cooperation and multicounty support on forest conservation and reforestation.

For fiscal year 2008, since assessment of current status and trend of biodiversity for forests and simple reporting of it is an issue to be solved, development of indicators for biodiversity of forests, such as surveys to select indicative species including insects and plants to be used for assessment of biodiversity, has been launched.

Moreover, “Working group for promoting biodiversity conservation in forests” chaired by Takanori Arima (chief of Miyazaki Prefectural Wood Utilization Research Center), was set up so as to follow up the Ministry of Agriculture, Forestry and Fisheries Biodiversity Strategy and to make appropriate adjustments for tenth meeting of the Conference of the Parties to the Convention on Biological Diversity (“COP10”) to be convened in Aichi-prefecture in 2010.

## **Urban Areas**

Conservation, restoration and creation of green spaces in urban areas

- Building of Ecological Networks

Urban areas essentially give priority to human activities. In those areas, land use is dense and many burdens to the environment are concentrated therein. Natural spaces, such as the habitats of various organisms, have decreased; therefore, based on the Master Plan for City Planning Areas and the Green Master Plan of the Urban Green Space Act, important natural environments in urban areas are deliberately and effectively conserved and networked. Urban parks, rivers, roads, and water spaces are developed and conserved synthetically and the building of ecological networks in urban areas is promoted.

Currently, the Green Master Plans are formulated in about seven hundred municipal governments in the country and cover eighty percent of the Japanese population.

- Development of urban parks

Urban parks serve various functions, such as forming habitats for wild organisms and spaces for interacting with nature. Those are the core of their contribution to biodiversity in urban areas. In the five years of the Intensive Development Plan of Social Capital (2003-2007), the parks and green spaces that contribute to conservation and to the sustainable use of biological diversity would be increased by 2,100 ha. A record of 2,800 ha has been reported.

For example, “Biwako Chikyu Shimin-no-mori” in Shiga prefecture is a green restoration project in a disused river, in which tree planting has been supported by citizen participation. Moreover, Nagoya City, where COP10 will be held, has conducted restoration of Higashiyama Zoo and Botanical Gardens, and has revitalized the town.

- Conservation of green spaces

A Special Green Conservation Area contributes to the habitats of organisms; the government promotes the designation of such areas based on the Urban Green Spaces Act so as to conserve important green spaces in urban areas.

For example, Kawasaki City has actively designated those areas, which covered 28 ha in 2002 and had expanded about threefold to 78 ha in 2007.

- Promotion of greening

The promotion of greening is an important effort in urban areas that have few natural environments. Nagoya City is a pioneer in the designation of Greening Areas, which it first did in October of 2008 based on the Urban Green Spaces Act. That area equals all of the designated area for urbanization and covers 93% of the city. A Greening Area system is obliged to create a 10-20% green space based on building coverage ratio when new buildings or extensions to existing buildings are constructed in more than 300 square meter of land..

There is a test calculation that 35 ha in green spaces are created every year by the estimation of recent building statistics. Other cities are working on the designation of Greening Areas and more promotion is needed.

### **Sustainable use of genetic resources**

Use and conservation of genetic resources for agriculture, forestry and fishery

Genetic resources are presently facing increased danger of extinction, through human development activities such as reckless deforestation, agricultural modernization and so forth. So, it is getting more and more important that genetic resources are collected, conserved and then handed over to the next generation for ensuring their sustainable use.

The Ministry of Agriculture, Forestry and Fisheries, therefore, launched the Genebank Project in 1985. At present, the National Institute of Agrobiological Sciences (NIAS) is positioned as the center bank of the project (in the fields of agricultural plant, animal and microorganism genetic resources), under the sub banks, which consisting of five independent administrative institutions. They are engaged in the operations of search, collection, classification, identification, character assessment, multiplication and conservation of genetic resources inside and outside the country. In the forestry and fishery fields, operations are managed by the Forestry and Forest Products Research Institute (FFPRI) and the Fisheries Research Agency (FRA), respectively. Thus, Genebanks' operations in the fields of plant, animal, microorganism, forest tree and fishery genetic resources are underway.

Their projects have grown to have a huge collection of genetic resources, including 240,000 accessions of plant genetic resources for food and agriculture, and the entire collection under their projects is now one of the largest in the world. Those genetic resources are distributed to researchers as research samples, and information which collected and conserved resources is made available too.

Thereby the projects contribute greatly to development of new crop varieties. We are planning to further promote their projects, by collecting and receiving more genetic resources to improve our intellectual infrastructure to support research and development activities of biotechnology, etc.

Technology development for conservation of biodiversity Genetic resources are utilized for research and development projects in the life science field. Those genetic resources include mice and genetic samples used in animal experiments, as well as human or animal genes and standardized test samples of cells used to analyze genetic or biological functions. The appropriate collection and conservation of genetic resources and their subsequent availability for research activities are essential to the promotion of research and development in the life science field.

After the successful completion of the project of sequencing the human genome in April 2003—and with the recent rapid progress of other sequencing projects on diverse organisms—international competitions in post-genome research have been intensifying, and the importance of genetic resources is growing more significant. For this reason, the government will improve the information systems at the Center for Genetic Resource Information, the National Institute of Genetics, the Research Organization

of Information and Systems, and the RIKEN BioResource Center, all of which are engaged in the comprehensive collection, accumulation, and release of information on genetic resources. Based on the Intellectual Infrastructure Improvement Plan (issued in August 2001 by the Council for Science and Technology), which aims to raise the level of our country's intellectual fundamentals to the world's top class in ten years, the government has been making efforts to enhance its role as the national information center of genetic resources through the networking of groups of specialists and core organizations. The government will further improve the domestic systems of collecting, accumulating, and providing information on genetic resources.

### **Promotion and implementation**

Promotion of environmental education and learning At schools, it is important to deepen children's understanding of the environment (including biodiversity) and to nurture their willingness to take voluntary actions to protect the environment. Schools have been providing environmental education in their general curricula in a way that integrates with social studies, science, and moral education. According to the current official teaching guidelines, it is suggested that teaching about environmental issues should be promoted in each subject, including science, and that "classes of integrated study" should be utilized to enhance environmental education by giving students hands-on experiences or opportunities to make problem-solving efforts. The government continues to ensure that environmental education will be promoted at schools in accordance with the aims of the revised Fundamental Law of Education.

As out-of-school experience, Japan provides promote activities in a natural environment, provide opportunities to contact in nature, enhance promotion activities in various places including national parks. Furthermore, the Law for Promotion of Ecotourism evaluates those places as opportunities for environmental education. In response to the implementation of the Law, Japan will make efforts for educational promotion.

### **International Cooperation**

#### **Ramsar Convention**

The Convention on Wetlands of International Importance Especially as Waterfowl Habitats (Ramsar Convention) aims to promote the conservation and wise use of wetlands that are internationally important as habitats for wild fauna and flora. In order to implement the Convention, Japan works on the registration of internationally important wetlands as Ramsar sites and takes actions for the conservation, wise use, and promotion of wetlands.

In Japan, two wetlands were registered in 2002 after the Eighth Conference of the Parties to the Ramsar Convention (hereafter referred to as the "Ramsar COP"). As of 2005 (after Ramsar COP9 was held), a total of twenty wetlands in Japan had been registered. These included moorlands, paddy fields, lakes, karst landscapes, tidal flats, coral reefs, mangrove forests, algae, and neritic waters. In 2008 (after Ramsar COP10), four Ramsar sites in Japan were newly registered. The registered area of Lake Biwa was also expanded in 2008. As of November 2008, a total of thirty-seven Ramsar sites in Japan cover 131,027

ha, including Fujimae-Higata, Kabukuri-numa and the surrounding rice paddies, and Notsuke-hanto and Notsuke-wan.

In addition, at Ramsar COP10, the draft resolution “Enhancing biodiversity in rice paddies as wetland systems (so called “rice paddy resolution”)” was brought up by NGOs from Korea and Japan, presented together with Korean and Japanese governments, and adopted.

#### CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora)

Japan became a party to the Convention of International Trade in Endangered Species of Wild Fauna and Flora in 1980. Based on the Convention, Japan controls the import and export of the species listed in Appendices I, II, and III, in accordance with the Export Trade Control Ordinance and the Import Trade Control Ordinance of the Foreign Exchange and Foreign Trade Control Law and with the Customs Law. Furthermore, the species listed in Appendix I of the CITES are subject to the regulation of internal trade under the Law for the Conservation of Endangered Species of Wild Fauna and Flora. Thus, the implementation of the Convention is promoted by appropriate applications of related domestic legislation. In addition, Japan aids developing countries for their implementation of the Convention.

#### World Heritage Convention

Shiretoko (71,103 ha) was inscribed on the World Heritage List in 2005. This is the third world heritage site in Japan; the other two are Yakushima (10,747 ha) and Shirakami-sanchi (16,971 ha). Area of Ramsar site (ha) Number of Ramsar site Shiretoko was commended at the 32nd World Heritage Committee, when listed, for responding effectively to the recommendations made at the time of inscription.

#### International Convention on Oil Pollution Preparedness, Response, and Cooperation, 1990 (OPRC Convention)

The International Convention on Oil Pollution Preparedness, Response, and Cooperation, 1990 (OPRC Convention, adopted in 1990) aims to establish an international cooperation system to cope with large-scale oil spill incidents. Japan became a party to the Convention in 1995, and in 2007 signed the Protocol on Preparedness, Response, and Cooperation for Pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol), which expanded the scope of pollutants to hazardous and noxious substances other than oil. In order to deal with the OPRC Convention and the OPRC-HNS Protocol, Japan has formulated the Japanese National Contingency Plan for Oil Pollution Preparedness and Response (National Contingency Plan). With regard to the vulnerable coastal area map, although a system to prepare for oil spill incidents has been established, the vulnerable coastal environment needs to be enhanced and appropriately managed in the future, since hazardous liquid substances have become the object of a National Contingency Plan by the OPRC-HNS Protocol and the coastal terrain of various regions is changing due to projects such as reclamation. Furthermore, based on the National Contingency Plan, Japan will establish a system to appropriately perform wildlife relief and impact assessment.

## Bilateral conventions and agreements for the protection of migratory birds

Based on the Convention between the Government of Japan and the Government of the United States of America for the Protection of Migratory Birds and Birds in Danger of Extinction and their Environment (entered into force in 1974), the Convention between the Government of Japan and the Government of the Russian Federation for the Protection of Migratory Birds and Birds in Danger of Extinction and their Environment (entered into force in 1988), the Agreement between the Government of Japan and the Government of Australia for the Protection of Migratory Birds and Birds in Danger of Extinction and Their Environment (JAMBA, entered into force in 1981), and the Agreement between the Government of Japan and the Government of the People's Republic of China for the Protection of Migratory Birds and Their Environment (JCMBA, entered into force in 1981), Japan is implementing measures to protect migratory birds their habitat environments, including research on birds' migration between countries, information exchange, restrictions on capture, and establishment of protected areas. Furthermore, trade in species of birds that are in danger of extinction is controlled in Japan based on the Law for the Conservation of Endangered Species of Wild Fauna and Flora (enforced in April 1993).

## Conservation of migratory waterbirds in the Asia-Pacific region

The Asia-Pacific Migratory Waterbird Conservation Strategy was adopted in 1996 under the leadership of Japan and Australia as an international framework to conserve migratory waterbirds and their habitats in the Asia-Pacific region. Based on this Strategy, Flyway Site Networks were established for shorebirds, cranes, and Anatidae in collaboration with the governments of related countries, international organizations, NGOs, and experts. International cooperation among Flyway Site Networks had been implemented, including information exchange, research, and surveys on the conservation of migratory birds and their habitats. In 2006, with the expiration of the Strategy, the Partnership for the Conservation of Migratory Waterbirds and the Sustainable Use of their Habitats in the East Asian-Australasian Flyway (Partnership for the East Asian-Australasian Flyway) was established. Japan has twenty-seven sites that participate in the Flyway Networks based on this Partnership.

## International Coral Reef Initiative (ICRI)

As one of only a few developed countries that have coral reefs, Japan has been promoting, in cooperation with other countries, the International Coral Reef Initiative (ICRI): an international framework created in 1994 (Heisei 6) for the purpose of conserving coral reefs and related ecosystems, such as mangroves and seaweed beds. The government of Japan cooperated with the Secretariat of the ICRI and the government of Palau for two years, from July 2005 to June 2007. In 2008 (Heisei 20), the International Year of the Reef, Japan held an International Coral Reef Marine Protected Area Network Meeting / 4th ICRI East Asia Regional Meeting and launched the development of the regional strategy for coral reef MPA Networks focused on East Asia.

## Man and the Biosphere (MAB) Program

The Biosphere Reserves is the most important pillar of the Man and the Biosphere (MAB) Program, which is one of the international cooperation programs of the United Nations Educational, Scientific, and Cultural Organization (UNESCO). In Japan, four areas—Yakushima Island, Mount Odaigahara/Mount Omine, Mount Hakusan, and Shiga Highland—have been designated as Biosphere Reserves by UNESCO.

### **Official Development Assistance (ODA)**

The Official Development Assistance (hereinafter referred to as “ODA”) Charter decided by the cabinet in August 2003 was set up so that “environmental conservation and development can be pursued in tandem.” This was one of four principles of ODA implementation, along with the priority of “addressing global issues.” Furthermore, in the Medium-Term Policy on ODA established in 2005, “conservation of the natural environment by means such as the management of nature reserves, conservation and management of forests, measures against desertification, and natural resources management” were positioned as priority fields in the approach to addressing environmental problems and specific actions.

Japan released its Environmental Conservation Initiative for Sustainable Development (EcoISD) in 2002. This was an initiative aiming at extending environmental cooperation, mainly through its ODA, in an efficient and effective manner. Its philosophy included Human Security, Ownership and Partnership, and Pursuit of Environmental Conservation and Development, and Conservation of Natural Environment was positioned as one of its priority areas.

Based on these initiatives, the Government of Japan has been actively contributing to the worldwide conservation of biodiversity through the conservation and sustainable use of biodiversity in developing countries. The following are positive manners of assistance carried out through ODA.

- Palau: Palau International Coral Reef Center Strengthening Project (Grant Aid/Technical Cooperation)

The Palau International Coral Reef Center was opened with the support of a Japanese grant aid in January 2001 with the goal of conducting research activities for coral reefs and related marine life, and awareness activities for their conservation. In order to support the enhancement of the structure and its autonomous development, a four-year assistance plan was implemented from October 2002 to September 2006 in accordance with the Center’s mid-term strategy, and the Center’s functions for research as well as for raising public awareness and education were strengthened.

The Center assumes the role of focal point for the global coral reef monitoring network in the Micronesia region, and the contribution for worldwide conservation of coral reefs is expected.

- Malaysia: Technical Cooperation Program for Bornean Biodiversity and Ecosystem Conservation in Sabah (Technical Cooperation)

Technical Cooperation Program for Bornean Biodiversity and Ecosystem Conservation in Sabah was started as a five-year program in 2002. The purpose of this project is to establish comprehensive measures and systems for a more sustainable approach to the environment in and around Sabah by integrating education, research, administration, and public environmental awareness. After the

launching of this cooperation, enhanced coordination among the institutions concerned and increased awareness of the people in Sabah towards natural environment were identified. New developments, such as the construction of people-friendly parks, the preparation of management strategy for protected areas and the establishment of new protected areas are found as concrete outcomes of this program.

#### Convention on Migratory Species

In addition to the steady implementation of bilateral agreements for migratory birds, the Ramsar Convention, and the CITES, which Japan has already ratified, the government seeks to conserve migratory species of wild animals by examining the necessity of dealing with the Convention, including Agreements and MoUs, based on the trend in international engagements with regard to this Convention.

#### Environmental Impact Assessment

The Environmental Impact Assessment Law (enforced in June 1999) prescribes that, for large-scale projects, among thirteen categories of projects for roads, dams, railways, airports, power plants, and waste final landfill sites, which could have a serious impact on the environment, a proponent that is undertaking a project needs to conduct an environmental impact assessment of the project in advance by surveying, predicting, and assessing the likely impact, and must reflect the results of such environmental impact assessments in determining the content of the project, thereby giving proper consideration to environmental conservation.

The Basic Guidelines—which prescribe the matters common to all types of projects related to the practical method of environmental impact assessment based on the Law—dictates that it is necessary to select the items and methods of environmental impact assessment in an appropriate manner based on the characteristics of the relevant project and of the related area. With regard to the “securing of biodiversity and systematic preservation of the natural environment” and the “rich and harmonious contact between people and nature” pointed out as parts of assessment categories, proponents are requested to form the content of the project with better consideration for environmental conservation; this includes not only valuable matters such as important fauna and flora from academic or scarcity-value viewpoints or outstanding landscapes but also contact with the nature close at hand and familiar living organisms that characterize the regional ecosystem. With regard to environmental preservation measures, it is prescribed that, rather than taking compensatory measures by creating an similar environment equal to the one that would be lost by the project, the avoidance or reduction of the environmental impact itself should be given priority for consideration.

In addition, forty-seven prefectures (these are all prefectures in Japan) and seventeen ordinance-designated cities, fourteen ordinance designated cities (the number of ordinance designated cities in Japan are seventeen) have their own environmental impact assessment ordinance, and appropriate environmental consideration should be taken based on the conditions of the regions.

The number of projects for which proponents took the procedure of environmental impact assessment based on the Environmental Impact Assessment Law (projects for which the procedure either has finished or is underway) was one hundred seventy-seven as of March 2008. In implementing each project, opinions about the Environmental Impact Statement will be given by the Minister of the Environment as necessary. The Ministry of the Environment will strengthen the follow-up system for the projects (especially projects for which the Minister of the Environment stated his opinion) after the completion of procedures.

In addition, the Ministry of the Environment currently examines the situation of the enforcement of the Environmental Impact Assessment Law, and will enhance the assessment system by taking necessary measures, including a revision of the law and carry out a review of the Basic Guidelines.

#### Strategic environmental assessment

“The Guidelines for the Introduction of Strategic Environmental Assessment (SEA Guidelines)” were made in March 2007 by the Advisory Body of academics and experts to the Environmental Policy Bureau of the Ministry of Environment on Strategic Environmental Assessment, which was established by the Ministry of the Environment.

The SEA Guidelines describe common procedures and assessment methods to avoid or reduce serious environmental impacts caused by the implementation of projects. These are completed by measuring significant environmental impacts, comparatively assessing the environmental aspects of alternatives, summarizing the items to consider for the environment, and reflecting them in the examination of the plan at an early stage planning location, size and so on in higher-level plans before starting the project. The SEA Guidelines point out the “protection of biodiversity and orderly conservation of the natural environment” and the “rich and harmonious contact between people and nature” as parts of categories for assessment items. The ministries concerned will examine the implementation and accumulate implementation samples based on the characteristics of the project, the SEA Guidelines, etc. In addition, based on the condition of those implementations, the Ministry of the Environment will constantly revise the SEA Guidelines.

As for actual implementation, in response to the SEA Guidelines, “The draft of the Guidelines for the Introduction of Strategic Environmental Assessment about final landfill sites” was compiled in March 2009 based on the examination conducted by the Advisory Body of academics and experts established by the Ministry of the Environment.

In addition, the Ministry of Land, Infrastructure, and Transport has carried out advance implementations related to SEA about public works for roads, rivers, airports, ports, and harbors. Those measures include the disclosure of information in their planning process and the presentation of guidelines for public participation. The Ministry created “The guidelines for the planning process on the designing stages about public works (plan-making process guidelines). The plan-making process guidelines aim to introduce the standard concepts of planning process on the designing stages about public works from the experiences of earlier implementations and accumulated implementation examples in each project.

The plan-making process guidelines prescribes that the process should be examined thoroughly from various perspectives—including social, economic, and environmental—and must be developed rationally with resident participation. That means this plan-making process incorporates strategic environmental assessments.

### **3. Efforts by local governments**

#### **Local biodiversity strategy**

It is not possible to conserve biodiversity based on only the national strategy established by the central government; instead, it is important to link biodiversity conservation with local activities. Local governments, including prefectural governments, are required to develop biodiversity strategies according to their regional traits, in order to concatenate and mainstream the importance of biodiversity conservation in their communities. Local governments also need to promote various actions taken by public administrations, businesses, NGOs, and residents of the region in order to realize a society that coexists with nature through the conservation of biodiversity. These local biodiversity strategies are necessary to enhance collaboration among agencies related to local biodiversity. In Japan, the red databook and the Red List had already been created by every prefectural government as basic materials for biodiversity conservation. Similarly, it is expected that all prefectural governments create local biodiversity strategies.

The “Basic Act on Biodiversity” was established and put into practice in June 2008. In Article 13, the Act prescribes that prefectural and municipal governments are obligated to endeavor to establish local biodiversity strategies. Such local strategies or plans have been already developed in Shiga, Chiba, and Nagasaki.

Furthermore, the Ministry of the Environment has been creating guidelines for the establishment of local biodiversity strategies and will promote the effective formation of those strategies.

### **4. Efforts by private enterprises**

As an example of efforts by economic organizations focused on the conservation of nature and biodiversity, Nippon Keidanren (Japan Economic Federation) established the Nature Conservation Fund Steering Committee in 1992 (which changed to the “Nippon Keidanren Committee on Nature Conservation” in 2000), through which Nippon Keidanren has supported nature conservation projects mainly for the Asia-Pacific region.

In 2003, they announced a declaration on nature conservation. In order to facilitate the realization of an economic society in harmony with nature, they declared their mission and advocated the significance of nature conservation efforts, stating that the business world must work on nature conservation with confidence and asserting that a great contribution to nature conservation can be made through proactive activities at enterprises and cooperative efforts by the business world. As examples of efforts at private enterprises, descriptions of attempts to conserve nature and biodiversity appear in the

environmental reports of three hundred sixty-five companies (nearly 80%) of the four hundred eighty-one companies reviewed in the 2005 environmental reports.

Among these efforts, cleaning and beautification activities are prominent, but there are many other activities in place for greening, creation/conservation of biotopes, maintenance/conservation/restoration of satoyama and national forests, awakening of environmental awareness, contribution to/support for other entities, etc. For example, a fishery company attaches MSC ecolabels on the aquatic products that it distributes in order to show that they originate from sustainable fisheries. A livelihood cooperative association has been conducting research on organisms living in paddy fields in order to promote the use of organic farming, which enriches biodiversity.

There is a company that is lending cooperation to the conservation of overseas tropical forests, from which it procures its raw materials. Another company is restoring paddy fields along the valley streams in cooperation with an NGO as a recreational program in which employees can raise their awareness of environmental problems and participate in the biodiversity conservation activities. Major impacts on ecosystems and wildlife in the raw material procurement process and assessment of those impacts are described in the guidelines as an example of appropriate information. The document points out that the major causes of impacts on biodiversity are in the supply chain, ranging from the procurement of raw materials and manufacturing to distribution and sales; it also suggests the need for wide-range consideration of the supply chain.

The Ministry of the Environment will also establish a Guideline for Business and Biodiversity (tentative title) to promote actions taken by the private sector.

## **5. Efforts by nongovernmental organizations (NGOs) and other bodies**

NGOs and other citizens' groups also perform a wide range of activities for biodiversity conservation. One NGO is conducting biodiversity conservation activities in important areas concerning biodiversity, another NGO is performing citizen participation monitoring, and another is providing children with nature education.

They are also engaged in efforts to import and sell farm products that are produced with a foreign sustainable method, operate systems that authenticate sustainable forest management and forestry products, promote organic agriculture that does not use chemical fertilizers and agricultural chemicals, and conduct eco-tours with a guide to experience the region's rich biodiversity. Many of these are community-based activities that reflect citizens' needs, which cannot be fully conducted by the government. Such community-based activities are important in promoting the conservation of biodiversity in accordance with regional characteristics. The conservation of biodiversity can be developed through extensive activities by promoting these activities and exchanging information by developing close relationships.

Furthermore, community-based activities are also being conducted. One NGO working for communities is investing efforts for the forestation and conservation of fields in valleys in collaboration with

companies, and an international NGO is developing a project to conserve foreign forests and neritic areas with the cooperation of local NGOs and overseas companies. Although biodiversity conservation activities, including philanthropy, are drawing increasing attention from companies, there are few experts in these companies; therefore, some companies are in partnership with NGOs for the betterment of their activities. This is also beneficial for NGOs because they can develop their activities with financial aid from companies. It is essential for both NGOs and companies to experience benefits for continuous activities. The expansion of biodiversity conservation activities is expected to provide more opportunities for information exchange between companies interested in biodiversity conservation and NGOs working at home and overseas.

## **6. Efforts by scientific bodies**

In advance of the CBD COP9, a preliminary conference was held by scientists in Bonn, Germany. At this conference, issues such as the means to monitor the trend of global biodiversity were discussed. In December 2008, in response to the demands of the Ecological Society of Japan, relevant scientific bodies and organizations in Japan gathered together to establish a promotion committee for the CBD COP9 preliminary conference.

## **7. Cooperation of diverse stakeholders**

For the Tenth Conference of the Parties to the Convention of Biological Diversity (CBD COP10) and the 5th Meeting of the Conference of the Parties serving as the Meeting of the Parties to the Cartagena Protocol (COP-MOP5), the sharing and exchanging of information and the promotion of cooperation among various stakeholders are required.

Japan will prepare for the conference through a meeting such as a “round table meeting for CBD COP10 and COP-MOP5” established in February 2009.