

## **Development of the National Biodiversity Strategy of Japan**

(Revised in 2002)

### **(The “New Biodiversity Strategy”)**

- Counting only those species that have already been identified, at least 90,000 species inhabit Japan and its ocean areas, and many of these species are being threatened with extinction as a result of various human activities.
  - Japan’s socioeconomic conditions are making a transition from growth to stability, and this represents a major tuning point as the overall society becomes mature and environmental awareness increases. The Government of Japan has developed this new National Biodiversity Strategy of Japan based on a recognition of this pivotal change and of the importance of biological diversity as one of the significant elements for prosperity.
  - The goals of this New Biodiversity Strategy are to prevent species extinction, to promote conservation and restoration of nature throughout the country, including mountains, cities and ocean areas, and thus to devote 50 or 100 years to building up a verdant national land area in which all citizens can enjoy daily interaction with a wide variety of thriving life forms.
  - Accordingly, this New Biodiversity Strategy provides, as it were, a compass for national land development in the 21<sup>st</sup> century toward realizing a society where harmonious coexistence between human beings and nature is achieved and citizens can enjoy prosperity.
  - The policy measures under this New Biodiversity Strategy will be developed together with all relevant ministries and agencies and in partnership with various bodies including citizens, NGOs, experts and local governments. It will also be important to advance Japan’s international contributions consistent with domestic efforts from the perspective of the global environment.
- ◆ This New Biodiversity Strategy was adopted at the meeting of the Council of Ministers for Global Environment Conservation held on March 27, 2002.
  - ◆ This New Biodiversity Strategy is the revision of the former National Strategy of Japan on Biological Diversity adopted in October 1995.

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#### **Council of Ministers for Global Environment Conservation**

The Council of Ministers for Global Environment Conservation comprises Ministers from all Japanese government office and ministries concerned with global environmental conservation (actually these include all cabinet members except the Minister of State for Administrative Reform, Regulatory Reform). This Council was established to ensure close coordination among these bodies in policy measures to address environmental problems with serious global-scale repercussions, and to ensure efficient and comprehensive implementation of these measures.

## **Outline of the National Biodiversity Strategy of Japan (Revised in 2002) (The “New Biodiversity Strategy”)**

### **Preface**

- **Conditions Surrounding the New Biodiversity Strategy**
  - ① Japan’s socioeconomic conditions are making a transition from growth to stability, and environmental awareness is increasing.
  - ② All ministries and agencies have internalized the policies relevant to nature conservation and environmental protection.
  - ③ Responsibilities of Japan for conservation and sustainable use of biodiversity in the world are increasing from the perspective of addressing global environmental issues.
- **Characteristics and Roles of the New Biodiversity Strategy**
  - ① A total government middle to long-term plan to realize a society with harmonious coexistence between human beings and nature.
  - ② A practical action plan incorporating specific measures for new initiative.

### **Part 1: Current Biodiversity Conditions and Issues**

- The New Biodiversity Strategy summarizes “three crises” in the current biodiversity conditions and issues.

#### **Crisis 1**

The negative impact on life forms and ecosystems caused by reckless human activities, such as development and overharvesting. They have resulted in the threat of extinction of many species. Continuing loss of wetland ecosystems. Influence on fragile ecosystems such as island and mountain areas. Human activities remain the greatest cause of these harmful influences.

### **Crisis 2**

Influence from the reduction of necessary human activities and changes in lifestyles in countryside. Examples include the desolation of satoyama (areas located between urban areas and remote mountain areas, which have favorable environments developed and maintained by local people's harmonious lifestyle with nature, fostering variety of life forms. These areas are mainly comprised of secondary forests around villages, together with rice fields, other agricultural plots, reservoirs, grasslands, etc.). Neglect of secondary forests and secondary grasslands due to the reduction in their economic value. Expansion of abandoned crop fields. Expansion of artificial works is also a significant factor contributing to degradation of the quality of satoyama ecosystems. Loss of unique plant and animal species. Particularly conspicuous influence in hilly and mountainous areas. These trends will continue to intensify.

### **Crisis 3**

Negative impact of alien species introduced by human beings. Introduction of diverse species from overseas and from different domestic regions. They have caused such problems as threats to native species by alien predators or interbreeding, and disturbance of native ecosystems. Concerns regarding the influence of chemical substances on ecosystems, etc.

- Analyses of the present socioeconomic and biological diversity conditions and of the existing administrative systems for conservation that constitute the background to the problem awareness.

## **Part 2: Fundamental Concepts and Goals for Biodiversity Conservation and Sustainable Use**

The New Biodiversity Strategy stipulates the following five fundamental concepts regarding the roles of the environment (①~④) and the policy approach (⑤).

[Five Fundamental Concepts]

- ① **Foundation for Human Existence**
- ② **Foundation for Security and Efficiency Transcending Generations**
- ③ **Source of Utility**
- ④ **Basis for Rich Culture**
- ⑤ **Preventative and Adaptive Manner (“Ecosystem Approach”)**

- The New Biodiversity Strategy stipulates that biodiversity must be conserved not only as a “foundation for human existence” and as a “source of utility,” but also as a “foundation for security and efficiency” (from a comprehensive long-term perspective, respecting biodiversity ensures the safety and efficiency of human activities) and as a “basis for rich culture” (regional biodiversity, and the cultural diversity based on this biodiversity, are historical assets and their maintenance is the key to advancing unique regional character). These are summarized as the expansion of the Strategy’s fundamental concepts.
- The New Biodiversity Strategy positions the “ecosystem approach” as the basic manner to interact with nature.

[Three Goals]

- The New Biodiversity Strategy has maintained the basic concepts of the short-term and long-term goals specified under the former strategy, but organizes these objectives into three easily understandable goals.

① **Conservation of Species and Ecosystems**

Appropriately conserve the biodiversity of each region, which comprises the unique life forms and ecosystems that have been built up over historical time, in accordance with each region’s spatial characteristics.

② **Prevention of Extinction and Promotion of Restoration**

Work to prevent the extinction of species whose habitat is located in Japan and toward the restoration of species that are actually under threat of extinction.

③ **Sustainable Use**

Utilize the national land area and natural resources in a sustainable manner that will not result in a loss of biodiversity so they can meet the needs of future generations.

[“Grand Design”]

- The New Biodiversity Strategy states that the “grand design” should be expressed visually to show the future image of the national land area, of human relations with nature and of human activities that will result from the conservation of biodiversity. The New Biodiversity Strategy states that this “grand design” should not merely depict the surface land, but should also incorporate underground and aerial areas extending to subterranean water and oceans, and should consider all life forms ranging from microorganisms in soil to birds flying in the sky.

### Part 3: Basic Policy for Conservation and Sustainable Use of Biodiversity

#### [Three Policy Directions]

- The New Biodiversity Strategy stipulates the following three directions for the future development of policy measures, in accordance with its fundamental concepts and goals.

##### ① Reinforce Conservation Efforts

Reinforce the protected-area system, expand the designation of protected areas, improve conservation and management activities based on scientific data, prevent species extinction, respond to the problems of alien species, and so on. These reinforcement efforts must be in accordance with the conditions of biodiversity crisis risk.

##### ② Restore Nature

Achieve a transformation from the one-sided exploitation of natural resources and destruction of nature to a new way of interacting with nature whereby human beings contribute to nature. Promote the restoration of nature by having human beings assist with natural restoration processes through launching of nature restoration projects.

##### ③ Work Towards Sustainable Use

Skillfully adjust the conservation management of nearby satoyama and the necessities posed by human lifestyles and production activities. Positively review diverse social frameworks and methods, such as supporting NPO activities, forming management agreements with landowners and leaseholders, providing subsidies and tax system incentives, and giving through environmental consideration. Effectively utilize environmental assessment systems.

#### [Fundamental Perspectives]

- The New Biodiversity Strategy stipulates the following five fundamental perspectives as a basis for implementing these types of policy measures.

##### ① Scientific Knowledge

##### ② Integrated Approach

##### ③ Participation and Knowledge Sharing

##### ④ Cooperation and Joint Works

##### ⑤ International Awareness

① **Scientific Knowledge**

Dramatically deepen the level of survey and research, including the Basic Survey on Natural Environment, and utilize knowledge and understanding based on scientific data as the starting point for policy decisions.

② **Integrated Approach**

Grasp the problems in an integrated manner from socioeconomic and other points of view. Advance coordination with other plans on national land use and with efforts on reducing the environmental load in order to realize a society with an environmentally sound material cycle.

③ **Public Participation and Knowledge Sharing**

Promote public participation through proactive information disclosure. Share information with all concerned parties and form a consensus on the directions and goals for preservation and use of biodiversity as social choices. Recognize the importance of environmental education and environmental studies for boosting the level of environmental awareness.

④ **Cooperation and Joint Works**

One major function of the New Biodiversity Strategy is to ensure that all the concerned ministries and agencies promote unified and comprehensive measures in a cooperative and collaborative manner. It will be important to have local governments and citizens take the initiative in drafting and implementing biodiversity conservation plans in accordance with local characteristics. The national government should positively support these efforts by designing administrative systems, developing policy guidelines, subsidizing relevant projects, and providing information.

⑤ **International Awareness**

Japan has close relations with the rest of the world, and especially with the Asian region, both socioeconomically and in terms of the natural environment. Japan should actively contribute to biodiversity conservation in the world, especially in the Asian region. Recognize the relationship between biodiversity and other global environmental problems such as global warming. There is a growing need to manage and conserve Japan's domestic forests and to promote greening of urban areas as measures to reduce carbon dioxide to prevent global warming.

[Grasp of the National Land Area]

- As a new conceptual approach, the New Biodiversity Strategy proposes two perspectives of biodiversity for grasp of the national land area. They are aiming at determining the potential for enhancing biodiversity, while identifying the current conditions and characteristics.

① **Structural Perspective of the National Land Area**

The structural perspective breaks down the national land area into “remote natural mountain areas;” “hilly and mountain areas including satoyama;” “urban areas;” “rivers, wetlands and other water system areas;” “coasts, shallow coastal waters and ocean areas;” and “island areas,” and stipulates the characteristics and the policy directions for conservation and improvement in each of these areas.

② **Vegetational Perspective of the National Land Area**

The Degree of Human Disturbance of Vegetation, which was developed as an indicator of human influence on the natural vegetation, provides a useful index for the restoration of biodiversity and stipulates subjects that require consideration in order to improve the present conditions and qualities of vegetation for each index levels.

[Courses of Policy Implementation by Major Theme]

- The New Biodiversity Strategy stipulates the following seven major themes for implementing biodiversity conservation policies.

① **Conservation of Priority Areas and Formation of “Ecological Network(s)”**

- The basis is to reinforce the protected-area system. In addition to the perspective of conserving natural landscape of the Natural Parks, measures from the perspective of ecosystem conservation, especially of animal habitat conservation, should be institutionalized (revise the Natural Parks Law).
- Form “ecological network(s)” along the national land area, with organic linkages in the policy approaches to green corridors, agricultural land, roads, rivers, city parks and open spaces, ports, etc.

## ② Conservation and Use of *Satoyama*

- Categorize *satoyama* by their natural characteristics, and implement policy measures accordingly.
- Grasp problems in a comprehensive and unified manner including local lifestyles and culture.
- As primary policy measures, the New Biodiversity Strategy stipulates several measures for *satoyama* in both urban and rural areas, such as introducing an agreement system for *satoyama* management within Natural Parks (landscape protection agreements) and implementing nature restoration projects in *satoyama*. It also stipulates the launching of pilot projects for *satoyama* conservation with public participation, and studying practical approaches and systems to promote linkages with diverse bodies for the conservation and sustainable use of *satoyama*.

## ③ Conservation of Wetlands

- Identify 500 important wetlands nationwide from the viewpoint of the biodiversity conservation. <"Important Wetlands 500">
- Strengthen measures on conservation of important wetlands by promoting the designation of protected areas, as well as by incorporating thorough environmental considerations into all concerned construction projects.

## ④ Restoration of Nature

- The New Biodiversity Strategy explicitly stipulates that nature restoration projects are not compensation in exchange for development projects, but rather are projects directly linked to restoring the natural environment and the healthy ecosystems that have been lost in the past.
- The key points are the following: cautious and time-consuming implementation, including preliminary surveys and ongoing monitoring, taking into consideration of the adaptive management approach; strengthening of the linkages among all relevant ministries and agencies by promotion of the participation of diverse bodies such as local governments, experts, citizens, and NPOs.
- The Kushiro Wetlands Restoration Project is a pilot project. The procedures based on the experience in implementing the project will be compiled as a standard method called "Kushiro-type Nature Restoration Method." Disseminate information on this project and these procedures both domestically and overseas.



## ⑤ Conservation and Management of Wildlife

### (Reinforcing Countermeasures against Extinction of Species)

- In addition to urgent countermeasures from the perspective of avoiding the extinction of regional populations, develop precautionary measures to prevent extinction. These measures include: identifying the specific areas such as island, satoyama or wetlands, where endangered species are concentrated, or its ecosystems are conspicuously decreasing nationwide; and advance the conservation and restoration of these areas at an early stage. Promote the designation of domestic rare species and protected areas. Reinforce projects for rehabilitation of natural habitats and maintenance of viable population. Link these measures with Natural Park policies.

### (Countermeasures against Alien Species)

- In accordance with the Interim Guiding Principles introduced at the 5<sup>th</sup> Conference of the Parties to the Convention on Biological Diversity, advance the three-staged approach, as necessary, to ① prevent the invasions of alien species, ② promptly identify and implement countermeasures to alien species at an early stage of the invasion, ③ eliminate and manage alien species that have already settled. Particularly important tasks will include: rapidly conducting surveys on settlement of alien species and preparing lists of alien species that require special caution; conducting prior environmental impact assessments for the introduction of alien pets and other species and establishing control systems for their use; grasping the state of importation of the alien species and considering management measures at the Customs; and conducting thorough management of captive animals. It will also be essential to ensure a cooperation system among all concerned organizations to advance countermeasures against alien species in a comprehensive manner.

## ⑥ Development of Natural Environmental Data

- As a new development in the National Survey on the Natural Environment, the New Biodiversity Strategy proposes establishing 1,000 monitoring sites nationwide. Monitor the conditions of plants, animals and the other environment at every site continuously, in order to grasp changes and problems in ecosystems and biodiversity throughout Japan at an early stage. This will require implementation systems to ensure the participation and cooperation of local experts, NGOs, and others. <"Monitoring Sites 1,000">
- Start off the full-scale survey on tidelands and seaweed beds located in shallow coastal water areas, concerning which there is an extreme shortage of information. <"Ecosystem Survey on Shallow Coastal Water Area">

#### ⑦ **Effective Conservation Methods and Others**

##### **(Improvement of Environmental Assessments)**

- Implement measures to make the environmental assessment function more effective. Specifically, improving the technical and systematic methods for predicting, avoiding, reducing, and mitigating environmental impacts; and arranging and providing the information required for implementing environmental assessments.
- Taking the foreign countries' strategic assessment frameworks into account, promote examination of measures on the environmental considerations for superior administrative plans and policies, through trial implementation or preparation of guidelines.

##### **(International Cooperation)**

- The priority fields for international cooperation should be centered around the Asian region, and should include, for example, development of natural environmental data as a base for international cooperation; establishment of ecological networks at the national, international and other spatial levels through the cooperation of the conservation of migratory birds; the conservation and restoration of wetlands; and the conservation of environmental "hot spots" where rare species are

#### **Part 4: Development of Concrete Policy Measures**

- The New Biodiversity Strategy stipulates the concrete policy measures implemented by all relevant ministries and agencies by categorizing into the three fields of (1) forests, farmland and other measures based on the spatial characteristics and actual use of national land area; (2) wildlife conservation management and other cross-sectional measures covering diverse spaces and sectors; and (3) survey and research, personnel training, and other fundamental measures. Starting with indicating existing frameworks of the National Land Use Plan and other joint-jurisdictional tasks (for example, national plans for conservation and management of forests, rivers, and other areas have been developed by the Ministry of the Environment together with the relevant ministries and agencies), clearly specify the internalization of overall policy systems, linkages, cooperation, and appropriate environmental considerations within each ministry and agency.
- In Part 4, Chapter2, Section 2, "Sustainable Use of Biological Resources," the New Biodiversity Strategy presents the approach to securing safety in the use of genetically modified organisms, and specifically states that when organisms that have been modified using biotechnology are to be released into the environment the

potential risks should be evaluated beforehand based on the current scientific knowledge to give sufficient consideration to any potential harmful influence on ecosystems and other organisms. In Part 4, Chapter 3, Section 4, “International Approach,” the New Biodiversity Strategy states that the entire Japanese government should promote examination of all the required domestic measures toward the early ratification of the Cartagena Protocol on Biosafety.

**Chapter 1: Measures Based on Spatial Characteristics and Actual Use of National Land Area**

- ① Forests and forestry
- ② Farmland and farming
- ③ Cities, city parks, open space and roads
- ④ Rivers, erosion control, and coastlines
- ⑤ Ports, harbors, and oceans
- ⑥ Fisheries
- ⑦ Nature Conservation Area and Natural Parks
- ⑧ Scenic spots and natural monuments

**Chapter 2: Cross-sectional Measures**

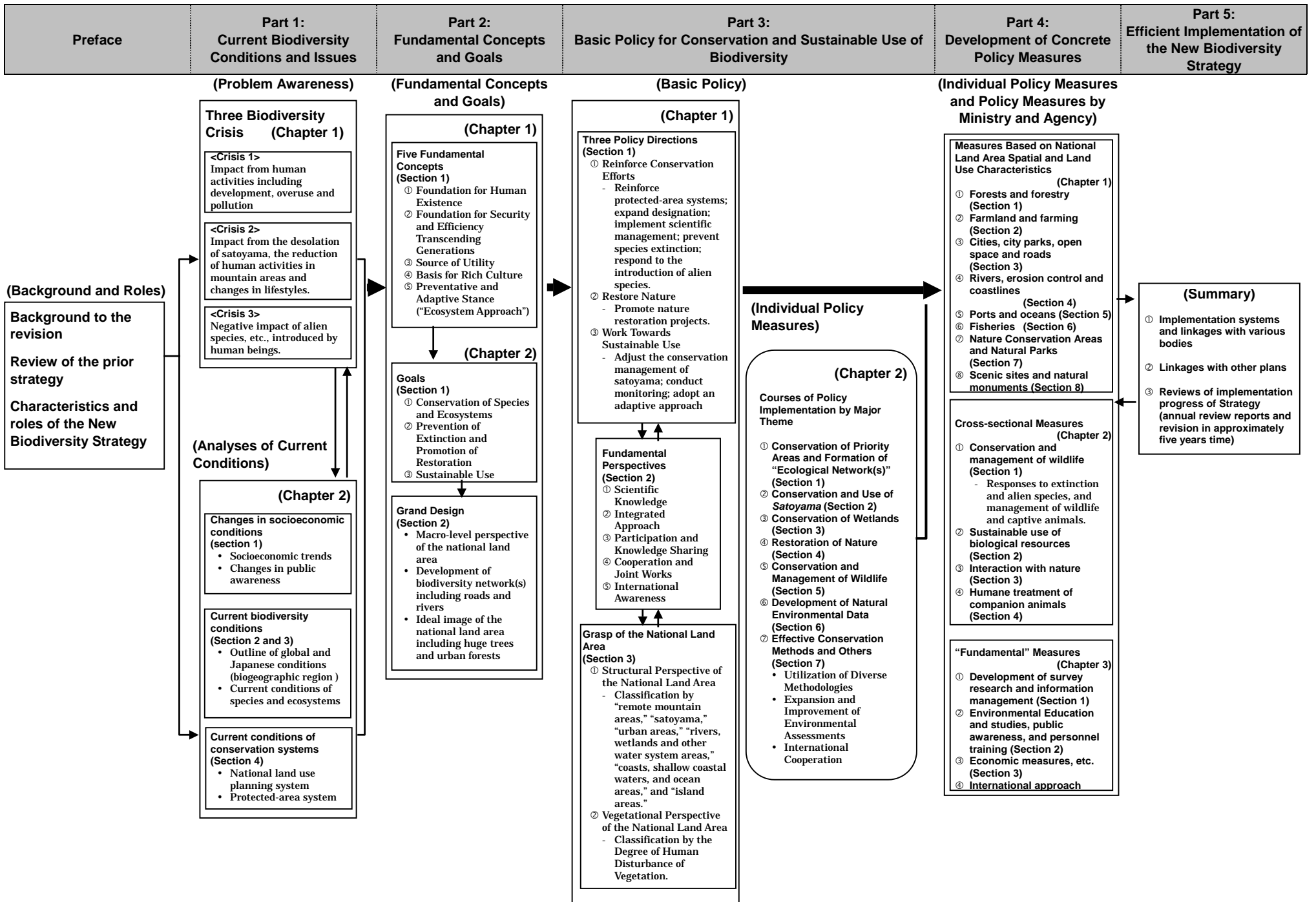
- ① Conservation and management of wildlife
- ② Sustainable use of biological resources
- ③ Interaction with nature
- ④ Humane treatment of companion animals

**Chapter 3: Fundamental Measures**

- ① Development of survey and research, and information management
- ② Environmental education and studies, public awareness, and personnel training
- ③ Economic measures, etc.
- ④ International approach

## **Part 5: Efficient Implementation of the New Biodiversity Strategy**

- The conclusion of the New Biodiversity Strategy summarizes its distinctive characteristics and stipulates implementation systems, linkages with other plans, and procedure of review and revision of the Strategy.
- In particular, as an ongoing follow-up to the Strategy implementation, the New Biodiversity Strategy stipulates that reports on the Strategy implementation progress be submitted to the Central Environment Council annually, and that this progress be examined from the perspective of biodiversity.



Structure of the Biodiversity Strategy of Japan (Revised in 2002)