(8) International Cooperation

8-3) ODA in Environment Conservation

a) Efforts in Environmental Conservation

During his address to the UN General Assembly Special Session on the Environment and Development in June 1997, then-Prime Minister Hashimoto announced the Japanese Government's "Initiatives for Sustainable Development toward the 21 St Century (ISD)", a comprehensive package of ODA-led undertakings in Japan's international environmental cooperation. The ISD plan comprises action programmes spanning five areas of environmental significance: (**i**) countermeasures against air pollution, water pollution, and industrial waste, (**ii**) global warming, (**iii**) water issues, (**iv**) conservation of the natural environment, and (**v**) an improved public environmental awareness. Also, in September 1998, Japan signed the Convention to Combat Desertification, and has been striving to build on its international contributions in environmental dimension.

At the 1992 UN Conference on Environment and Development (the UNCED, commonly known as the Earth Summit), Japan pledged to disburse between 900 billion and 1 trillion yen in environmental ODA over the ensuing five years. In reality, though, by the end of 1996 it had already disbursed 1.44 trillion yen (approx. $13.3 billion) – more than 40 percent over the pledged amount. (An additional 243 billion yen was disbursed in FY 1997.)

b) JICA's Environmental Conservation Projects

While the definition for "Environmental Aid" varies among the bilateral and multilateral aid organisations, the following are regarded as environmental aid projects by JICA: pollution control, improving living environment (water supplies, sewage and waste management), forest conservation / afforestation, conservation of the natural environment and biodiversity, disaster prevention, capacity development and improvement for solving environmental problems, energy conservation, protection of natural resources (agriculture, fishery and soil), and countermeasures against desertification.

1) Pollution control

Since Japan has considerable experience and accumulated knowledge regarding pollution control, JICA transfers these technologies to developing countries and Eastern Europe through dispatching experts, accepting trainees, establishing plans (air pollution control and mining pollution control), and providing equipment for monitoring pollution.

2) Living environment

Developing countries share common problems with living environment, due to a lack of urban infrastructures such as water supply facilities, sewage system and waste treatment

facilities. In particular, clean water supplies and sewage facilities are needed to reduce the infectious diseases which are troubling many developing countries. JICA is hoping to reduce the burden of women's water fetching in rural areas (one of the considerations for "Women in Development") by assisting in the development of ground water resources. JICA is trying to respond to the many requests for this particular type of assistance. Thus a large portion of our environmental assistance is in this area.

3) Forest conservation and afforestation

JICA's cooperation in forest conservation and afforestation extends to Africa, Central and South American countries based on more than 10 years experience gained in Southeast Asia. Most of these activities support the formation of forest conservation and afforestation plans as well as for the development of silvicultural technologies and human resources. Also, in order to prevent further desertification, JICA dispatches experts and members of the Japan Overseas Cooperation Volunteers (roughly equivalent to the Peace Corps in the US) to promote the planting of nurseries for dry resistant plants and to carry out forestry extension programmes. Recently JICA has been carrying out a social forestry project in Kenya in order to enhance the involvement of local people in afforestation and in the establishment of a nursery system. This is also aimed at strengthening the social welfare of the local people.

4) Conservation of the natural environment and biodiversity

JICA makes efforts to cooperate in this field through expert dispatch programmes, training programmes, and project type technical cooperation programmes. Specifically, JICA sends experts to assist in wildlife protection, nature conservation, and in the management of national parks and reserves. Also a project to develop a plant gene centre is being carried out as a project type technical cooperation programme. At present, Japan and the United States are implementing a joint biodiversity project in Indonesia.

5) Capacity development in Environment

Many developing countries have difficulty in dealing with environmental problems due to their limited capacity (organisations, system, human resources, training, research, monitoring, etc.). Aiming to improve these conditions, JICA is now promoting comprehensive projects such as environmental training and research centres in Thailand, China and Indonesia.

Ministry of Foreign Affairs (1998): Japan's ODA 1998, Association for Promotion of International Cooperation

Japan International Cooperation Agency (1999): The Environment and JICA, International Cooperation to Deal with Global Environmental Problems

(8) International Cooperation 8-3) ODA in Environment Conservation

Disbursements of Japanese Aid in the Environmental Field

1. Disbursements by aid type

(Unit: 100 million yen)

FY	Grant aid	Loan assistance	Technical cooperation	Multilateral assistance	Total
1993	377.1 (29.6)	1,562.5 (15.3)	214.1 (16.3)	162.0 (4.4)	2,280 (12.8)
1994	414.3 (33.6)	1,054.9 (12.4)	218.7 (15.9)	253.3 (6.5)	1,941 (14.1)
1995	428.2 (33.5)	1,708.2 (15.3)	222.9 (15.8)	400.3 (10.2)	2,760 (19.9)
1996	360.7 (27.8)	3,864.7 (29.7)	253.4 (16.9)	153.8 (11.3)	4,632 (27.0)
1997	360.7 (27.8)	1,623.4 (15.3)	300.7 (19.2)	158.1 (4.6)	2,443 (14.5)

Note:

1. Parenthetical figures other than those in the "Total" column represent the share (%) of each type of aid in that particular year. In the "Grant aid" column, the percentage of general grant aid extended that year is referred to (and does not include grant aid for debt relief, non-project grant aid for structural adjustments, or grant aid for grassroots projects). In the "Loan assistance" column, percentages of the total (excluding loan assistance for debt relief) in project and non-project loan assistance (e.g., commodity loan assistance and structural adjustments lending) are represented.
2. The parenthetical figures in the "Total" column represent the share of total ODA committed that year.
3. Amounts for grant aid and loan assistance were calculated on a commitment (Exchange of Notes) basis; technical cooperation, on a JICA disbursements basis; and multilateral assistance, on a budget basis for contributions to multilateral institutions.

2. Bilateral technical cooperation

(1) (Actual JICA disbursements, including aid to Eastern Europe)

FY	Project-type technical cooperation			No. of development surveys	No. of independent supply projects
	No. of projects	Trainees accepted	Experts dispatched		
1993	47	135	452	85	13
1994	48	143	457	79	18
1995	58	176	585	90	10
1996	74	160	545	98	10
1997	80	156	562	115	31

Note:

1. Project and personnel totals include figures for new as well as ongoing programs. Instances of project-type technical cooperation include post-project follow-up cooperation.
2. Project-type technical cooperation is a type of technical cooperation which bundles expert assignments, trainee programs in Japan, and the provision of equipment.

(2) (Actual JICA disbursements, including aid to Eastern Europe)

FY	Trainees accepted		Experts dispatched		JOCV	
	No. of trainees	Share (%)	No. of experts	Share (%)	No. of experts	Share (%)
1993	990	11.5	296	15.7	112	3.8
1994	1,192	12.7	325	10.9	116	10.3
1995	1,418	14.3	355	17.2	92	2.7
1996	1,559	14.5	284	9.4	116	11.7
1997	1,572	13.8	309	17.0	85	2.4

Note:

1. The annual personnel totals represent newly accepted trainees as well as new and continuing assignments for experts and JOCVs.
2. The percentages represent the share of all personnel in that category that year.

3. Bilateral disbursements by environmental sector

(including aid to Eastern Europe; unit: 100 billion yen)

FY	Living environment	Forest preservation	Antipollution measures	Disaster prevention	Other sectors
1993	1,374 (60.3)	169 (7.4)	391 (17.2)	136 (6.0)	48 (2.0)
1994	1,128 (66.9)	87 (5.2)	362 (21.5)	58 (3.4)	52 (3.1)
1995	1,296 (54.9)	252 (10.7)	183 (7.7)	453 (19.2)	176 (7.5)
1996	2,803 (62.6)	372 (8.3)	609 (13.6)	429 (9.6)	266 (5.9)
1997	993 (43.3)	223 (9.8)	345 (15.1)	384 (16.8)	341 (14.9)

Note:

1. Figures are totals for loan assistance, grant aid, and technical cooperation. Multilateral assistance is not included.
2. Percentages in parentheses represent the share of total ODA in the environmental field that year.
3. "Other sectors" include nature conservation, environmental administration, and seawater contamination.

Ministry of Foreign Affairs (1998): Japan's ODA 1998, Association for Promotion of International Cooperation

(8) International Cooperation

8-4) Conservation of Biological Diversity

8-4-1) Effective Use of ODA

a) Basic Concepts

Most of the developing countries possess natural environment with ample biological diversity, much of which plays an important role for the conservation of the global biological diversity. In the developing countries, subsistence of many people depends on biological diversity or biological resources for grounds for their life. Regrettably, for financial, technical, and socio-economic reasons, a number of these countries are unable to fully ensure the conservation and sustainable use of biological diversity by themselves.

The promotion of conservation and sustainable use of biological diversity in these developing countries is essential to the conservation of biological diversity at the global level. Developed countries including Japan thus actively support developing countries in various ways such as planning, drafting an executing programmes on the conservation and sustainable use of biological diversity, and development of human resources and facilities. In addition, these developed countries are also responsible for contributing to the world-wide conservation of biological diversity through the promotion of conservation and sustainable use of biological diversity in developing countries by utilising developing countries' knowledge and experience and cooperating with them.

Japan also needs to fully recognise that there are a lot of useful things to learn from traditional technologies and knowledge of these developing countries for the promotion of conservation and sustainable use of biological diversity in Japan.

Considering the following points, Japan will actively contribute to the conservation and sustainable use of biological diversity in developing countries, on the basis of above-mentioned fundamental recognition.

b) Effective Use of ODA

Japan is striving to enhance and reinforce Official Development Assistance I n each environmental field on the basis of the philosophy and principles of the "Japan's Official Development Assistance Charter" and presentations made at the United Nations Conference on Environment and Development. Various forms of support are given in fields related to biological diversity through Official Development Assistance. In the future, effective cooperation will be promoted by taking into consideration the following points.

1) Promotion of policy dialogues

Close policy dialogues will be promoted so that basic awareness of the conservation of biological diversity will be shared with developing countries, and appropriate priority will be given to the conservation of biological diversity in developing countries, and active measures will be promoted.

2) Transfer of technology and skills

Japan's technology and know-how will be transferred to developing countries to enhance information and facilities, etc. required in these countries for the development of systems and organisations to conserve biological diversity, and to support the capacity-building of these countries in such fields as training of personnel, management of basic information on biological diversity, and research on the sustainable use of biological diversity. Model projects for the conservation of biological diversity, etc. will also be carried out jointly with the developing countries by introducing methods compatible with the economic and social systems, and development plans of the developing countries.

3) Support for the activities of private sectors

The detailed activities of private sectors have played and effective role in the conservation of biological diversity, therefore the activities of private sectors in developing countries will be supported.

4) Collaboration with international organisations and support organisations of other developed countries

To support developing countries in their efforts to conserve biological diversify effectively, the know-how and techniques of international organisations and other developed countries should be utilised, and appropriate cooperation should take place between UN organisations, international financial organisations, and other support organisations.

Especially for the Global Environment Facility (GEF) designated as the interim institutional structure operating the financial mechanism of the "Convention on Biological Diversity ", since the pilot phase Japan has participated and contributed actively. In the negotiations of the replenishment of GEF 1 (July 1994 to June 1997), Japan displayed initiative in vies of the seriousness of global environmental problems. Japan's contribution to GEF 1 is about 45.7 billion yen (about 20% of the total), the second largest donor country after the U.S. Japan believes that the GEF should be designated as the institutional structure operating the permanent financial mechanism of the convention.

5) Improvement of domestic infrastructures

To provide assistance in the fields of biological diversity smoothly, it is vital to secure the personnel required. And to widely make use of human resources including experts from private sector and local bodes should be developed. Various systems such as personnel training programmes will also be enhanced.

In addition, information on the conservation and sustainable use of biological diversity, and technology and experience accumulated in Japan will be collected and arranged to establish the infrastructure for smoothly transferring the sound technologies according to the conditions and needs of the developing countries.

6) Considerations for biological diversity when providing Official Development Assistance

To ensure that appropriate considerations are given to biological diversity in providing official development assistance, appropriate and effective environmental consideration will be given by accurately following the Guidelines for Environmental Considerations in each organisation, and reinforcing the infrastructure for environmental consideration such as personnel development through collaboration with international organisations.

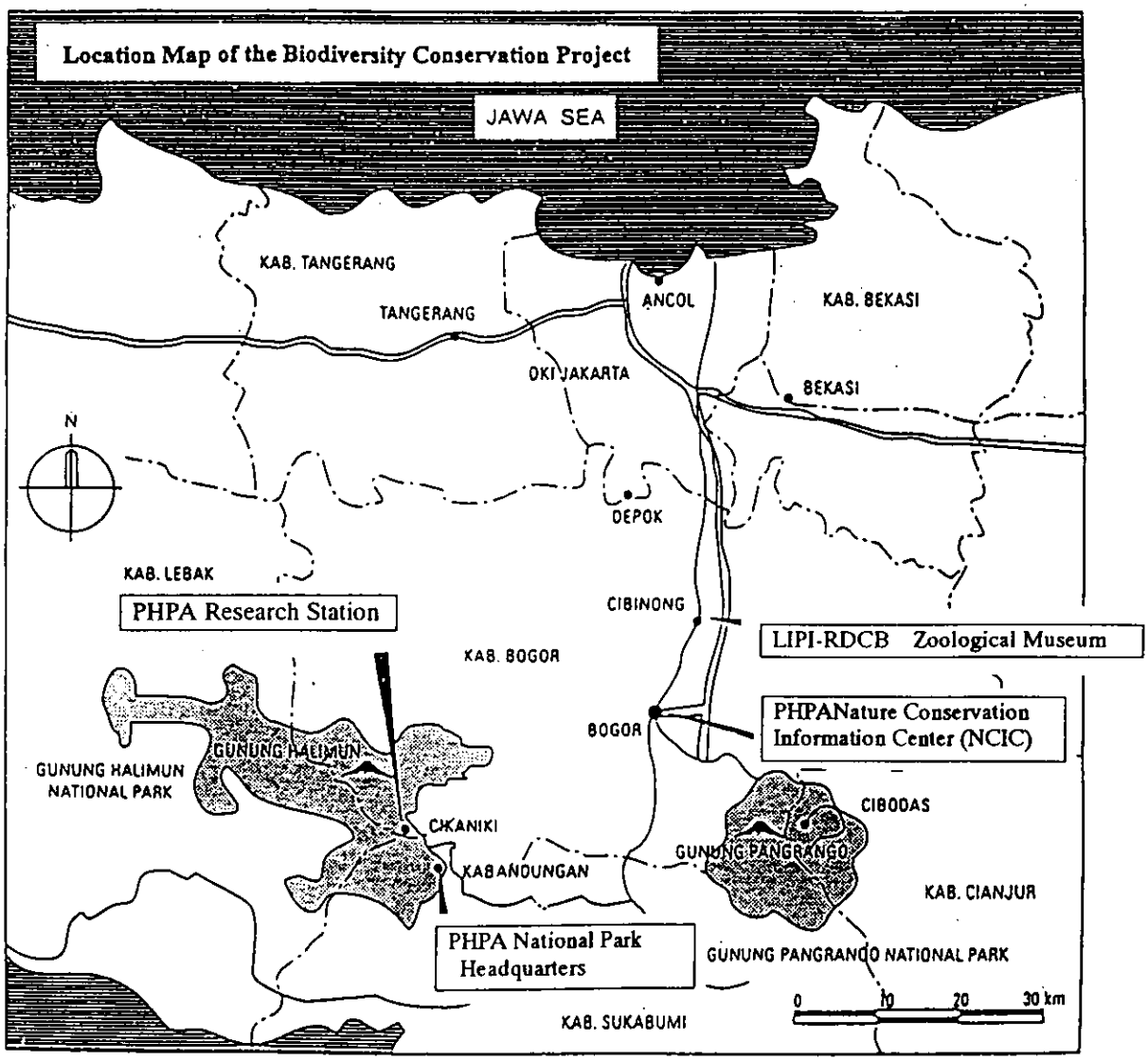
Furthermore, such assistance will be evaluated after its completion in addition to the review on the situation of assistance projects that are in progress. Efforts will also be make for appropriate environmental consideration to be given with regard to collaboration with other public funds and overseas activities of private companies.

Council of Ministers for Global Environmental Conservation, Government of Japan (1995): National Strategy of Japan on Biological Diversity.
(http://www.eic/or/jp/eanet/en/pol/nsj/index.html)

(8) International Cooperation 8-4) Conservation of Biological Diversity

8-4-1) Effective Use of ODA

Biodiversity Conservatio Project in Indonesia



Takahashi S. (1997): Review and Prospects of the Biodiversity Conservation Project, Research and Conservation of Biodiversity in Indonesia, Volume I , General Review of the Project, The Research and Development Center for Biology-The Indonesian Institute of Science, Japan International Cooperation Agency, Forest Protection and Nature Conservation-Ministry of Forestry

(8) International Cooperation

8-4) Conservation of Biological Diversity

8-4-2) Cooperation in Individual Fields

a) Wildlife Protection and Protected Area Management

In wildlife protection, cooperation has been implemented for the collection and preparation of fundamental information such as distribution and living conditions of wildlife, promotion of public awareness and education, and drawing up of plans for protection and management. Such cooperation will be enhanced. Cooperation will be expanded especially in the Asian region due to its relation closely interdependent with Japan in terms of the distribution and habitats of species such as common migratory birds. In other regions, cooperation will focus on the conservation of ecosystems, species, populations in areas important to the conservation of biological diversity.

One example of a general project on the conservation of biological diversity is a project which supports the management of protected areas and development and management of information, launched in Indonesia under trilateral cooperation among Japan, the U.S., and Indonesia.

b) Forestry

To contribute to the promotion of sustainable management of tropical forests, active support is given to the International Tropical Timber Organisation (ITTO) such as in the form of financial assistance. In addition, seminars on natural forest management, conservation of biological diversity, etc. are held jointly with ITTO to study technical and institutional aspects.

In addition, to establish the sustainable management of tropical forests, surveys are being conducted on forestry operation methods focusing on successive stage of vegetation changes, forest management methods for the conservation of wildlife habitats, and methods for establishing forest management plans taking into account the living the living condition of the local residents, etc.

Biological cooperation on conservation of biological diversity includes project-type technical cooperation such as the “Tropical Rain Forest Research Project (Phase Ⅲ) “ in Indonesia and the “Brazilian Amazon Forest Research Project”, and development surveys such as the “Development Survey on Sustainable Multiple-Use Resource Management in the Nkhotakota Game Reserve” in Malawi.

In the future, the following will be carried out:

ⅰ. Promote the systematisation of natural forest management techniques, through conducting fundamental research on the ecosystems of natural forests, develop systems for appropriately

applying these techniques at the actual sites, and expand and reinforce the technical and financial cooperation required for securing and training experts in forest/forestry sector who will serve as the key to these operations.

ⅱ. Promote technical and financial cooperation on the management of forests with typical ecosystems and scenic areas and those providing habitats for endangered species.

Council of Ministers for Global Environmental Conservation, Government of Japan (1995): National Strategy of Japan on Biological Diversity.
(http://www.eic/or/jp/eanet/en/pol/nsj/index.html)

Performance of Forestry Cooperation, Project-type Technical Cooperation

Forestry

Country	Project	Duration
Indonesia	Tropical Rain Forest Research Project in Indonesia	1995. 1. 1 ~ 1999.12.31
Indonesia	The Forest Fire Prevention Management Project in the Republic of Indonesia	1996. 4.15 ~ 2001. 4.14
Indonesia	The Forest Tree Improvement Project in the Republic of Indonesia	1997.12. 1 ~ 2002.11.30
Thailand	The Reforestation and Extension Project in the Northeast of Thailand in Thailand	1992. 4. 1 ~ 1998. 9.30
Thailand	The Research Project for Higher Utilization of Forestry and Agricultural Plant Materials in Thailand	1996. 8. 1 ~ 2001. 7.31
Thailand	After-Care Program for the Research and Training in Re-Afforestation Project in Thailand	1997.11.14 ~ 1999.11.13
Laos	The Forest Conservation and Afforestation in Lao People's Democratic Republic	1998. 7.16 ~ 2003. 7.15
Viet Nam	Afforestation Technology Development Project on Acid Sulfate Soil in the Mekong Delta	1997. 3.20 ~ 2000. 3.19
China	Forestry Development Project in Fujian Province of China	1991. 7. 1 ~ 1998. 6.30
China	Forest Protection Research Project in Ningxia Hui Autonomous Region	1994. 4. 1 ~ 1999. 3.31
China	Hubei Province Forest Tree Improvement Project	1996. 1.15 ~ 2001. 1.14
Nepal	Community Development and Forest / Watershed Conservation Project in Nepal	1994. 7.16 ~ 1999. 7.15
Papua New Guinea	Forest Research Project Phase2 in Papua New Guinea	1995. 4. 1 ~ 2000. 3.31
Panama	Forest Conservation Technical Development Project in the Republic in of Panama	1994. 4. 1 ~ 1999. 3.31
Bolivia	The Afforestation and Erosion Control Project in the Valley of Tarija in Bolivia	1998.10. 1 ~ 2003. 9.30
Brazil	Brazilian Amazon Forest Research Project	1995. 6. 1 ~ 1998. 9.30
Brazil	Brazilian Amazon Forest Research Project	1998.10. 1 ~ 2003. 9.30
Chile	The Erosion Control and Afforestation Project in Watersheds of Semi-Arid Aria in Chile	1993. 3. 1 ~ 1999. 2.28
Paraguay	The Forest Extension Project in the Eastern Region of Paraguay	1996. 4.24 ~ 2001. 4.23
Uruguay	Forest Products Testing Project	1998.10. 1 ~ 2003. 9.30
Kenya	The Social Forestry Extension Model Development Project for Semi-arid Areas in Kenya	1997.11.26 ~ 2002.11.25
Tanzania	The Kilimanjaro Village Forestry Project in Tanzania	1993. 1.15 ~ 2000. 1.14

Japan International Cooperation Agency (1998):Performance of Agriculture, Forestry and Fisheries Development Cooperation, Agriculture, Forestry and Fisheries Development Cooperation

(8) International Cooperation

8-5) Cooperation for Nature Conservation by Environment Agency, JICA and Other Organisations

8-5-1) Overview, Project Type Technical Cooperation

a) International Assistance by the Environment Agency

The Environment Agency assists developing countries of Asia-Pacific and others in Global Environmental Issues and consolidation of their administrative basis towards the implementation of Agenda 21. Main areas of assistance in nature conservation are as follows.

- Wetland Conservation in Asian Region
- Publication of Red Data Book for Birds of Asian Region
- Conservation Measures of World Natural Heritage in Asia
- Conservation of Coral Reefs
- Investigation of Biodiversity in Asia

b) International Assistance through technical cooperation of JICA

The Environment Agency also supports developing countries in their nature conservation efforts through international technical cooperation of Japan International Cooperation Agency (JICA). There are several types of the technical cooperation, for example, 1) Acceptance of Trainees for capacity building, 2) Dispatch of Experts for technology transfer, 3) Project-type Technical Cooperation combining various means of cooperation.

1) Acceptance of Trainees

Four Group Training Courses, "Nature Conservation and Natural Parks Management (for 30 days)", "Conservation of Wetland Ecosystem and Biological Diversity (for 30 days)", "Conservation and Sustainable Management of Coral Reefs (for 40 days)" and “Biodiversity Information System (for 60 days)” are implemented every year.

2) Dispatch of Experts

For technology transfer, Long-term or Short-term Experts in Nature Conservation, for instance, National Park Management, Wildlife Management, Natural Environment Survey are dispatched to developing countries in Asia, Africa and Latin America and so on.

3) Project-type Technical Cooperation:

There are several cases that Project-type Technical Cooperation, which combines the dispatching of experts, acceptance of trainees and other means, is carried out. For example, the cooperation for wildlife conservation in Yacyreta, Paraguay was implemented FY 1991 to 1994. And the project of conservation for biodiversity in Indonesia (Biodiversity Conservation Project in Indonesia) has been done since FY 1995.