

Japan National Report

based on

***the United Nations Convention
to Combat Desertification
in those Countries Experiencing
Serious Drought and/or Desertification,
Particularly in Africa***

(UNCCD)

March 2005

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I. EXECUTIVE SUMMARY

1. Placement of the report

It is stipulated in Article 26 of the UNCCD that each party is to submit a report on measures taken to implement the Convention. Article 22 stipulates that the Conference of the Parties is to review such reports. Based on Decision 11 of the first session of the Conference of the Parties (COP1), reports from affected African country parties and affected country parties of other regions were reviewed at the Third Session of the Conference of the Parties (COP3) and the Fourth Session (COP4), respectively. Furthermore, from March to April 2001, an Ad Hoc Working Group was met to complete those reviews. The same Decision called for developed country parties to report, at each session of the COP, on the assistance they had provided or were providing to affected developing country parties that were reporting for that session. It states that the developed country parties' reports should contain information on the "consultative processes and partnership arrangements in which they are involved" and the "measures taken to support the preparation and implementation of action programmes at all levels, including information on the financial resources they have provided, or are providing, both bilaterally and multilaterally".

This Japan's National Report is being submitted prior to the third session of the Committee for the Review of the Implementation of the Convention (CRIC3), scheduled to be held in Bonn on 2-10 May 2005. It gives many examples of Japan's efforts, over the period between 2001 and 2002, to combat desertification and mitigate the effects of drought in Africa and other regions, particularly Asia and Latin America/Caribbean.

This report is compiled mainly based on data reported to Creditors Reporting System (CRS) of Development Assistance Countries (DAC) of OECD. Since the structure of national report is changed from the previous report (submitted in April 2002), which describes relevant examples implemented in and before 2000, Japan submits this new national report for the years 2001 and 2002 instead of revising the previous one. The exclusion of contributions through international organizations is one of the major changes. Whole Japanese supports related to UNCCD should be considered in conjunction with the previous report attached to the current report.

2. Efforts by both the international community and Japan regarding desertification

The international community has carried out a variety of activities for environmental conservation including holding the United Nations Conference on Human Environment in Stockholm in June 1972, which adopted the 'Declaration of the UN Conference on Human Environment'. In recent years, along with the expansion in the scope, scale, and types of human activities, various global environment issues have emerged, which are recognized as potential threats to human beings. International cooperation is essential in this regard, because the issue of desertification is related to the sustainable development of various developing countries. Since deterioration of the global environment will substantially affect the world's population, this problem cannot be effectively dealt with by a single nation. Japan regards global environmental issues, including combating desertification, as one of the most important areas in which the country should make an international contribution.

The United Nations Conference on Environmental Development (UNCED), held in Rio de Janeiro in June 1992, was the consummation gathering for related international efforts made up to that time. The outcome of the UNCED, the Rio Declaration on Environment and Development and "Agenda 21" detailed the comprehensive efforts related to global environmental issues. Chapter 12 of "Agenda 21" entitled "Managing Fragile Ecosystems: Combating Desertification and Drought" sets forth a specific action program to tackle desertification. At UNCED, basic agreement was reached on the establishment of an intergovernmental negotiating committee to draw up a convention to combat desertification. Japan positively participated in the drafting process and made efforts to formulate a consensus.

This convention was adopted at the fifth session of the negotiating committee in June 1994 and was signed by 86 countries, including Japan, in October of the same year. The Convention to Combat Desertification (UNCCD) entered into force in December 1996, and Japan became a party in December 1998. At COP2 in December 1998, Japan expressed its determination to continue its cooperation in the field of combating

desertification as the second largest donor country to the UNCCD.

At the 2002 World Summit on Sustainable Development (WSSD), Japan announced the policy for environmental cooperation mainly through its Official Development Assistance (ODA), entitled the "Environmental Conservation Initiative for Sustainable Development (EcoISD), as a revision of former Initiative, the "Initiatives for Sustainable Development toward the 21st Century (ISD)". The philosophy of EcoISD consists of "Human Security", "Ownership & Partnership", and "Pursuit of Environmental Conservation & Development". Environmental problems threaten the survival of human beings, so it is important to tackle them from the viewpoint of "Human Security". It is vitally important that developing countries assume primary responsibility and role for tackling such problems through their own "Ownership" and that the various stakeholders in the international community work together in a spirit of "Partnership". In order to facilitate the "Pursuit of Environmental Conservation & Development" in developing countries, it is extremely important that developed countries provide support for the necessary environmental considerations in development, and extend cooperation for environmental protection, taking into account the differing economic and social conditions of each country concerned. In this regard, Japan's environmental ODA amounted to 292.7 and 396.8 billion yen on disbursement basis in fiscal 2001 and 2002 respectively (accounting for 23.9% and 34.1% of the total ODA disbursed by Japan in the concerned year respectively).

Japan promotes actions in the four areas in the EcoISD, which are "Efforts to Address Global Warming", "Pollution Control", "Fresh Water Issues", and "Conservation of Natural Environment". "Conservation of Natural Environment" includes 'management of nature reserves, forest-related issues, prevention of desertification, and natural resources management'.

In addition to such bilateral ODA projects, Japan has been making financial contributions to relevant international organizations to support the fight against desertification. Furthermore, various study and research activities on desertification are being conducted by Japanese institutions. Activities of many non-governmental organizations (NGOs) both in Japan and overseas have been supported by a variety of sources.

3. Japan's efforts under the UNCCD process

Summary of Japan's implementations of the UNCCD is as follows:

(1) Consultative processes and partnership agreements

Japan had been actively making contributions to the UNCCD even before it officially became a party to the Convention in December 1998. During the intergovernmental negotiations for the UNCCD, Japan served as a bureau member and chaired the Second Working Group, positively participating in the drafting process.

(2) Measures taken to support the preparation and implementation of action programmes at all levels

i) Support through Official Development Assistance (ODA)

Japan has been implementing ODA projects that contribute to combating desertification, in areas such as conservation of water resources, reforestation and forest conservation, and agricultural development. There are various ODA schemes through which these projects have been implemented, including Development Studies, Technical Cooperation, Grant Aid for General Projects and Yen Loans. In addition, with a view to enhancing scientific and technical capabilities to combat desertification in various countries, Japan dispatches Japanese experts overseas and accepts trainees from abroad. Detail of each project is described in chapters III to VI. The total amount of ODA provided for the implementation of the UNCCD in 2001 and 2002 is summarized in the table below.

Table: Amount of ODA provided for the implementation of the UNCCD (million yen)

Projects not reported in the DAC/CRS report are included in parentheses.

Region	Africa	Asia/ Oceania	Latin America/ Caribbean	Central/ Eastern Europe	Total
2001	14825.232 (11.65)	40016.662	2225.581	111.752	57179.227 (11.65)
2002	7230.317 (31)	16316.727 (18)	1062.032	143.955	24753.031 (49)

ii) Support through financial contribution for the UNCCD Secretariat

Japan is the second largest contributor to the UNCCD activities. Japan's contributions to the core budget of the UNCCD for the years 2001 and 2002 are as follows: US\$1,340 thousand (2001) and US\$1,388 thousand (2002).

Japan also supports various UNCCD activities through its voluntary contribution. In 2001 and 2002, activities supported by Japan include: Thematic Programme Network from 3 to 5 (TPN 3-5) Launching Meetings; The third Asia-Africa Forum on UNCCD; Fourth and Fifth Asian Focal Points Meetings; Support for participation of affected developing country parties at the fifth session of the Conference of the Parties (COP5) and First session of the Committee for the Review of the Implementation of the Convention (CRIC); CST Ad Hoc Panel on Early Warning Systems; Support to the National Action Plan/ Policy Instrument Formulation by 7 Asian Countries; National Workshop on Synergies in Mongolia; National Workshops for Philippines and Papua New Guinea; and South Pacific Sub-Regional Workshop.

iii) Other Supports

Japan had been making substantial contributions to the implementation of the Convention with financial and technological support, organizing meetings, etc. even before officially becoming a party in December 1998. Through its contributions, Japan has been supporting, for example, various regional meetings in Asia such as ministerial meetings, focal point meetings, experts meetings and workshops; national awareness-raising seminars and regional activities in Latin America and the Caribbean; and national report preparation by African, Asian, Latin American and Caribbean country parties.

Since 1998, Japan has been promoting the implementation of the UNCCD in various ways through voluntary contributions. In particular, recognizing the importance of promoting the exchange of information and cooperation between Parties, Japan has provided support for all Asian National Focal Points Meetings. Japan has also provided support for three Asia-Africa Forums on UNCCD to promote information sharing and the strengthening of relationships.

Japan has been positively supporting the formulation of a national action programme by various countries. In particular, Japan supported 7 Parties to formulate their own national action programmes. Considering it important to enhance recognition of the UNCCD, Japan provided support for a workshop in the Philippines and PNG to raise awareness of the people there. Not only to promote cooperation within regions or between regions, but also to support sub-regional activities, Japan supported the organization of sub-regional workshops in the South Pacific.

Japan has been involved in the development of Asia's regional action program for UNCCD. In 2001 and 2002, Japan provided financial supports for the launching meeting of the Thematic Programme Networks (TPNs) such as the launching meeting of the Thematic Programme Network 3 (TPN3) (Iran, May 2001), the launching meeting of the Thematic Programme Network 3 (TPN4) (Syria, July 2002), and the launching meeting of the Thematic Programme Network 5 (TPN5) (Mongolia, July 2003). In addition, Japan participates in Thematic Programme Network 1 (TPN1) on desertification monitoring and assessment, and Thematic Programme Network 5 (TPN5) on strengthening capacities for drought impact mitigation and desertification control.

(3) Study and research on desertification

i) Contribution to the Committee on Science and Technology

Regarding the activities of the Committee on Science and Technology, Japan, with the Secretariat of the UNCCD, hosted an Ad Hoc Panel on Early Warning Systems, which was reestablished at COP4, in June 2001 in Fujiyoshida, Yamanashi Prefecture. The outcome of the Ad Hoc Panel was reported at COP5.

ii) Domestic research processes

A variety of study and research activities are being conducted by Japanese institutions. For example, the Ministry of the Environment conducts research on measures to combat desertification and also provides a Global Environment Research Fund to promote research on desertification. Japan's Ministry of Agriculture, Forestry and Fisheries and the Japan Green Resources Corporation are conducting a study on combating desertification in Asia and a study on preventing soil erosion in Latin America. The Ministry of Agriculture, Forestry and Fisheries and the Association for International Cooperation of Agriculture and Forestry are conducting research on the prospect of utilizing desert areas in Mongolia for agriculture. Study and research activities are also being carried out at the Arid Land Research Center, Tottori University.

(4) Support for NGO activities

In Japan, financial assistance has been provided to NGOs in and outside of Japan through various schemes including the Japan Fund for Global Environment (Environmental Restoration and Conservation Agency of Japan).

(5) Linkage and synergy with other environmental conventions

Based on the preamble of the UNCCD, which refers to the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity, Japan recognizes the importance of enhancing the synergies of environment-related conventions. Japan supported the National Forum on Combating Desertification and Promoting the Synergistic Implementation of Inter-Linked Multilateral Environmental Conventions in June 2001.

II. GENERAL COMMITMENT

1. Consultative process and partnership agreements

1.1. Ad Hoc Panel Meeting on Early Warning Systems (2001: Ministry of the Environment)

Japan held an Ad Hoc Panel Meeting on Early Warning Systems, which was reestablished under the Committee on Science and Technology of UNCCD at COP4, with the UNCCD Secretariat on 4-8 June 2001 in Fujiyoshida, Yamanashi Prefecture in Japan. There were about 30 participants from 12 countries including Ad Hoc Panel members, consultants, experts from relevant organizations and the UNCCD Secretariat. After reviewing existing early warning systems, recommendations were adopted: Early warning systems for drought can be applied to desertification monitoring by integration with the land degradation information, etc. These results were reported at COP5.

2. Support through financial contribution for the UNCCD Secretariat

Japan is the second largest contributor to the UNCCD activities. Japan's contributions to the core budget of the UNCCD for the years 2001 and 2002 are as follows: US\$1,340 thousand (2001) and US\$1,388 thousand (2002).

In 2001 and 2002, Japan supports the following programmes through its voluntary contribution to the UNCCD:

- Thematic Programme Network 3 (TPN3) Launching Meeting (Iran, April 2001): US\$30 thousand
- The third Asia-Africa Forum on UNCCD (and Fourth Asian Focal Points Meeting) (Ulan Bator, June 2001): US\$100 thousand
- Support for participation of affected developing country parties at the fifth session of the Conference of the Parties (COP5, 2001): US\$75 thousand
- CST Ad Hoc Panel on Early Warning Systems (2001): US\$90 thousand
- Support to the National Action Plan/ Policy Instrument Formulation by 7 Asian Countries (2001); US\$50 thousand.
- National Workshop on Synergies in Mongolia (2001): US\$20 thousand
- National Workshops for Philippines and Papua New Guinea (2001): US\$20 thousand
- South Pacific Sub-Regional Workshop (2001): US\$50 thousand
- Support for participation of developing country parties at the First session of the Committee for the Review of the Implementation of the Convention (CRIC, 2002): US\$50 thousand
- The fifth Asia Focal Point Meeting (2002): US\$30 thousand
- Thematic Programme Network 4 (TPN4) Launching Meeting (2002): US\$30 thousand
- Thematic Programme Network 5 (TPN5) Launching Meeting (2002): US\$30 thousand

III. AFRICA

1. Consultative process and partnership agreements

Japan has taken the initiative in the consultative processes and partnership agreements for development of Africa, such as;

- (1) the support for the "Asia-Africa Forum on Combating Desertification" for realizing cooperation between Asia and Africa concerning combating desertification which was held three times;
- (2) the Second Tokyo International Conference on African Development (TICAD II), which spelled out the direction of future African development in accordance with the principles of ownership and global partnership which builds the framework for cooperation among all actors, including governments of African countries, the private sector and civil society, donor countries and organizations; and
- (3) the Third Tokyo International Conference on African Development (TICAD III), which issued "TICAD Tenth Anniversary Declaration" and "Summary by the Chair" which presented the direction of future TICAD process, and recognized the importance of implementing support measures for assuring access to finance, land, technology and institutions, minimizing fluctuations in agricultural production and combating desertification.

2. Measures taken to support the preparation and implementation of action programmes at all levels

Japan's cooperative measures include bilateral Official Development Assistance (ODA) projects, study and research by Japanese institutions, and support for non-governmental organizations (NGOs) activities.

Japan's bilateral cooperation is multi-faceted. This report focuses on the following areas; conservation of water resources; reforestation and forest conservation; and agricultural development. Furthermore, Japan's activities regarding capacity building and education as well as study and research on desertification are described in this report. The report also explains financial assistance for NGOs provided through various sources in Japan.

It should be stressed here that efforts are being made in Japan to enhance the linkage between Japan's contributions through ODA and purpose of the UNCCD process with a view to further promoting more effective and efficient support for combating desertification.

2.1. Support through Official Development Assistance (ODA)

The Convention to Combat Desertification stipulates concrete measures for bilateral cooperation in the National Action Programmes (Article 10), Subregional and Regional Action Programmes (Article 11).

This paper contains a description of the results of Japan's efforts and assistance in fields related to action programmes of the Convention to Combat Desertification in the following areas; conservation of water resources, reforestation and forest conservation, agricultural development, capacity building and education; and study and research on desertification.

A. Conservation of water resources (including development of water for everyday living)

In arid regions where the annual precipitation is low, water is obtained by constructing shallow wells and using surface water in general. Chronic drought however tends to occur in these regions, requiring people to secure water for everyday living. Japan provides cooperation in securing a stable supply of safe water by constructing water supply facilities such as deep wells, thereby enhancing the living conditions for local inhabitants.

Angola

- Grant Aid Cooperation in Water Supply
(2001:45.539 million yen)
- Project for Water Supply in Luand Province
(2001:883 million yen)

Burkina Faso

- Grant Aid Cooperation in Water Supply

(2001:0.275 million yen)

Côte d'Ivoire

-Development Study in Water Resources Development

(2001:54.516 million yen)

-Study on Agneby River Integrated Development and Management Project

(2002:20.797 million yen)

Djibouti

-Project for Urban Water Supply for the Capital in Republic of Djibouti

(2001:820 million yen, 2002:485 million yen)

-Grant Aid Cooperation in Water Supply

(2001:65.21 million yen)

Egypt

-Project for Improvement of Water Supply System at the Northern Pyramids Area in Giza City-Detail Design
(2002:77million)

-Project for Rehabilitation of Floating Pump Stations in Upper Egypt (Phase3)

(2002:867 million yen)

-Project for Supply for Equipment for the Regional Environment Monitoring Network (Phase2)

(2002:548 million yen)

-The water Management Improvement Project in the Nile

(2001:99.086 million yen)

-Grant Aid Cooperation in Water Supply

(2001:29.07 million yen)

-The Water Supply Technology Training Improvement Project in Egypt

(2001:19.472 million yen)

-Technical Cooperation in Water Supply

(2001:1.327 million yen)

-Water Resources Development and Its Use in Arid Areas

(2002:2.134 million yen)

-Water Management and Improvement of Irrigation Facilities

(2001:1.014 million yen, 2002:4.746 million yen)

-Irrigation, Drainage and Water Management

(2001:0.922 million yen)

-Country focused Training Course on Participatory Irrigation Management

(2001:2.955 million yen)

-Water Treatment and Quality

(2001:1.785 million yen)

-Operation and Management of Irrigation Canal System

(2002:0.953 million yen)

-Non-revenue Water Management (Leakage Control)

(2002:0.56 million yen)

Ethiopia

-The Groundwater Development and Water Supply Training Project

(2001:109.06 million yen)

-Grant Aid Cooperation in Water Supply

(2001:15.981 million yen)

-Project-type Technical Cooperation in Water Resources Development

(2001:2.126 million yen)

-Welfare of Technical Cooperation Experts in Water Resources Development

(2002:0.165 million yen)

-Groundwater Development

(2001:2.523 million yen, 2002:0.985 million yen)

-Water Resources Development and Its Use in Arid Areas

(2001:1.263 million yen, 2002:1.354 million yen)

-Irrigation and Drainage 2

(2002:1.726 million yen)

Ghana

-Project for Rural Water Supply
(2001:511 million yen)

Guinea

-Groundwater Development and Water Well Drilling
(2002:0.766 million yen)
-Project for Provision of Drinking Water in Rural Coast Area of Guinea
(2001:419 million yen)

Kenya

-The Meru Water Supply Project
(2001:740 million yen, 2002:630 million yen)
-Grant Aid Cooperation in Water Supply
(2001:68.755 million yen)
-Technical Cooperation in Water Supply
(2001:1.162 million yen, 2002:0.286 million yen)
-Smallholder Irrigation Promotion for KENYA
(2001:8.39 million yen)
-Development Study in Water Supply
(2001:6.986 million yen)
-Water Resources Development and Its Use in Arid Areas
(2001:2.436 million yen, 2002:1.351 million yen)
-Non-revenue Water Management (Leakage Control)
(2001:1.516 million yen, 2002:0.815 million yen)

Madagascar

-Project for Exploitation of Ground Water in the Southwest Region(Phasell)
(2001:821 million yen)
-Technical Cooperation in Water Supply
(2001:3.513 million yen, 2002:1.59 million yen)
-Grant Aid Cooperation in Water Resources Development
(2001:29.175 million yen)
-Water Resources Development and Its Use in Arid Areas
(2001:1.279 million yen)

Malawi

-Project for Development of Groundwater in Lilonge-Dedza
(2001:498 million yen, 2002:518 million yen)
-Grant Aid Cooperation in Water Supply
(2001:63.752 million yen)
-The Capacity Building and Development for Smallholder Irrigation Schemes
(2002:9.669 million yen)
-The Capacity Building and Development for Irrigation Schemes
(2001:6.26 million yen)
-Irrigation and Drainage 2
(2001:1.114 million yen)

Mali

-Project for Water Supply in the Area of Kati, Koulikoro and Kangaba
(2001:446 million)
-Development Study in Water Resources Development
(2001:201.76 million yen, 2002:315.136 million yen)

Mauritania

-Project for Installation of Water Supply Facilities in Kiffa City
(2001:35 million yen, 2002:300 million yen)
-Technical Cooperation in Water Supply

(2001:5.104 million yen, 2002:0.183 million yen)
-Technical Cooperation in Water Resources Development
(2001:11.175 million yen, 2002: 2.18 million yen)
-Grant Aid Cooperation in Water Supply
(2001:68.97 million yen)
-Welfare of Technical Cooperation Experts in Water Resources Development
(2001:0.238 million yen, 2002:0.102 million yen)

Morocco

-Project for Water Supply in Southern Province
(2001:429 million yen)
-Development Study in Water Resources Development
(2001:214.2 million yen)
-Technical Cooperation in Water Supply
(2001:33.651 million yen, 2002:0.182 million yen)
-Technical Cooperation in Water Resources Development
(2001:7.529 million yen, 2002:0.858 million yen)
-Grant Aid Cooperation in Water Supply
(2001:22.655 million yen, 2002:2.86 million yen)
-The Development Study on Rural Community Development project in Semi-Arid East Areas
(2001:7.075 million yen)
-Water Resources Management
(2001:1.584 million yen)
-Water Resources Development and Its Use in Arid Areas
(2001:1.338 million yen)

Mozambique

-Project for Groundwater Development for Rural Water Supply in Zambezia Province
(2001:1497 million yen, 2002:428 million yen)
-Grant Aid Cooperation in Water Supply
(2001:40.327 million yen)
-Operation and Management of Irrigation Canal System
(2002:1.064 million yen)

Namibia

-Development Study in Water Resources Development
(2001:264.032 million yen)
-Groundwater management planning
(2001:0.493 million yen)
-Water Resources Development and Its Use in Arid Areas
(2001:1.134 million yen)

Niger

-Promoting of Aid Effectiveness and Efficiency in Water Supply
(2001:7.515 million yen)
-Water Resources Development and Its Use in Arid Areas
(2001:1.289 million yen, 2002:1.404 million yen)

Rwanda

-Irrigation and Drainage 2
(2001:1.68 million yen, 2002:1.724 million yen)

Senegal

-Programme de l'Eau Portable pour Tous
(2001:26.235 million yen)
Research for life improvement in the semiarid areas by construction of water supply facilities to provide safe water and assistance to community activities
-Project-type Technical Cooperation in Water Resources Development
(2001:1.129 million yen)

- Technical Cooperation in Water Resources Development
(2001:0.154 million yen, 2002:0.236 million yen)
- Irrigation and Drainage
(2002:0.831 million yen)
- Irrigation and Drainage 2
(2002:3.508 million yen)

South Africa

- Project for Rural Water Supply in the Eastern Cape Province
(2002:630 million yen)
- Grant Aid Cooperation in Water Supply
(2001:44.486 million yen, 2002:67.308 million yen)
- Agricultural and Rural Improvement
(2002:1.632 million yen)

Swaziland

- Technical Cooperation in Water Supply
(2001:21.331 million yen, 2002:0.114 million yen)
- Grant Aid Cooperation in Water Supply
(2001:18.027 million yen, 2002:19.145 million yen)
- Welfare of Technical Cooperation Experts in Water Supply
(2001:0.318 million yen, 2002:0.334 million yen)

Tanzania

- Project for Rural Drinking Water Supply in Harang, Singida Rural, Maryoni and Igunga District
(2001:410 million yen, 2002:375 million yen)
- Development Study in Water Resources Development
(2001:166.96 million yen, 2002:14.564 million yen)
- Grant Aid Cooperation in Water Supply
(2001:35.215 million yen, 2002:32.382 million yen)
- Sustainable Irrigation Development
(2001:0.629 million yen)
- Irrigation and Drainage
(2001:0.662 million yen)
- Irrigation, Drainage and Water Management
(2001:1.382 million yen)
- Agricultural and Rural Improvement
(2002:1.986 million yen)

Tunisia

- Development Study in Water Supply
(2001:275.951 million yen)
- Irrigation and Drainage 2
(2002:1.752 million yen)
- Water Supply
(2001:0.574 million yen)

Uganda

- Project for Rural Water Supply
(2001:828 million yen)

Zambia

- Project for Groundwater Development and Sanitation Improvement in Drought Prone Rural Areas
(2001:1,151 million yen, 2002:489 million yen)
- Development Study in Water Resources Development
(2002:48.39 million yen)
- Grant Aid Cooperation in Water Supply
(2001:38.999 million yen)
- Operation and Maintenance of Drilling Machinery (for water supply projects in arid areas)

(2002:0.978 million yen)

Zimbabwe

-International Telecommunication Services (Administration and Management) 2

(2001:0.866 million yen)

B. Forest conservation and re-forestation

Desertification is often accompanied by lack of precipitation as well as by deforestation due to population increase, overgrazing, etc. In order to promote re-afforestation, Japan has been assisting establishment of tree seedlings production system through construction of tree nurseries and training for the forest engineers. Also, some projects are in place for forest resources inventories and for developing forest management plans.

These initiatives eventually upgrade the standard of living for the local population. In addition, Japan has been hosting a series of international conferences to promote model forest projects that will facilitate implementation of sustainable forest management at the field level.

Algeria

-Reforestation Promotion Leader

(2002:1.35 million yen)

Benin

-Development Study in Forestry/Forest Preservation

(2001:65.053 million yen)

-Reforestation Promotion Leader

(2001:0.993 million yen)

Burkina Faso

-The Study on the Management of Forest Reserves in the Province of Comoe

(2001:9.654 million yen, 2002:52.164 million yen)

-Technical Cooperation in Forestry/Forest Preservation

(2001:0.203 million yen, 2002:0.104 million yen)

-Grant Aid Cooperation in Forestry/Forest Preservation

(2001:0.121 million yen, 2002:33.548 million yen)

-Japanese Technical Cooperation System and Ecology

(2001:1.099 million yen)

-Reforestation Promotion Leader

(2001:2.388 million yen)

Cameroon

-Forest Management and Planning

(2002:1.778 million yen)

Côte d'Ivoire

-Forest Soils

(2001:2.142 million yen)

Ethiopia

-Technical Cooperation in Forestry/Forest Preservation

(2002:9.983 million yen)

Ghana

-Technical Cooperation in Forestry/Forest Preservation

(2001:20.961 million yen, 2002:0.114 million yen)

-Forest Soils

(2001:1.375 million yen)

Kenya

-The Social Forestry Extension Model Development Project for Semi-arid Areas

(2001:118.17 million yen)

This project aims to develop a social forestry extension model through development of forests in agricultural areas by local people of semiarid areas.

-Project-type Technical Cooperation in Forestry/Forest Preservation

(2001:2.021 million yen)

-Technical Cooperation in Forestry/Forest Preservation

(2001:1.571 million yen)

-Welfare of Technical Cooperation Experts in Forestry/Forest Preservation

(2001:0.567 million yen, 2002:0.45 million yen)

-Forest Administration

(2001:1.374 million yen, 2002:0.845 million yen)

-Forest Research

(2001:0.974 million yen)

Madagascar

-Development Study in Forestry/Forest Preservation

(2001:49.223 million yen)

-Technical Cooperation in Forestry/Forest Preservation

(2001:44.256 million yen, 2002:0.45 million yen)

Malawi

-Development Study in Forestry/Forest Preservation

(2001:77.79 million yen, 2002:38.126 million yen)

-Reforestation Promotion Leader

(2001:0.951 million yen, 2002:2.184 million yen)

Mali

-Promoting of Aid Effectiveness and Efficiency in Forestry/Forest Preservation

(2001:3.115 million yen)

Namibia

-Development Study in Forestry/Forest Preservation

(2001:0.107 million yen)

Senegal

-The Integrated Community Forestry Development Project in Senegal

(2001:73.124 million yen)

-Grant Aid Cooperation in Forestry/Forest Preservation

(2001:39.293 million yen)

-Project for reforestation on the Coastal Sandy Area

(2001:309 million yen, 2002:274 million yen)

-Development Study in Forestry/Forest Preservation

(2002:3.04 million yen)

-Project-type Technical Cooperation in Forestry/Forest Preservation

(2001:1.066 million yen)

-Welfare of Technical Cooperation Experts in Forestry/Forest Preservation

(2001:0.461 million yen, 2002:0.156 million yen)

-National Forest Service Management

(2001:0.766 million yen, 2002:0.802 million yen)

-Nursery Management

(2001:0.778 million yen)

-Forest Soils

(2001:1.176 million yen)

Tanzania

-Sustainable Management of Mangrove Ecosystems

(2002:0.99 million yen)

-Practical Case Studies on Sustainable Forest Management

(2002:0.867 million yen)

- Reforestation Promotion Leader
(2001:0.963 million yen)
- Forest Research
(2002:0.934 million yen)
- Forest Soils
(2002:0.854 million yen)

Togo

- Forest Management and Planning
(2001:0.941 million yen)

Zambia

- Reforestation Promotion Leader
(2001:2.492 million yen)

Zimbabwe

- Development Study in Forestry/Forest Preservation
(2001:43.952 million yen)
- Forest Management Planning
(2001:0.573 million yen)

C. Agricultural development

In arid, semi-arid and dry sub-humid areas, rainfed agriculture is often damaged by drought due to limited and variable precipitation. Japan is involved in helping to improve the standard of living and help local people's settlement by cooperating with preparation of irrigation facilities by improving waterways and securing water resources through development of ground water and effective use of treated sewage to enable agricultural production and secure a stable water supply.

Côte d'Ivoire

- Technical Cooperation in Agriculture/General
(2001:0.171 million yen)
- The Farming System Improvement Project for Small-scale Irrigated Agriculture
(2001:2.868 million yen)

Egypt

- Project for Rehabilitation and Improvement of Mazoura Regulator on Bahr Yusef Canal
(2001:1300 million yen)
- Project-type Technical Cooperation in Agriculture/General
(2001:1.429 million yen)
- Technical Cooperation in Agricultural Engineering
(2001:10.232 million yen, 2002:0.576 million yen)
- Grant Aid Cooperation in Agricultural Engineering
(2001:20.46 million yen, 2002:1.407 million yen)

Ethiopia

- Agricultural & Rural Development with Environmental Conservation
(2001:2.698 million yen)

Ghana

- Project-type Technical Cooperation in Agriculture/General
(2001:0.338 million yen)
- The Small-scale Irrigated Agriculture Promotion Project in the Republic of Ghana
(2001:20.859 million yen)
- Research and Training Management (for small-scale irrigated agriculture)
(2001:0.91 million yen)

Kenya

- Technical Cooperation in Agriculture/General
(2001:1.809 million yen)
- Technical Cooperation in Agricultural Engineering
(2001:31.81 million yen)
- Welfare of Technical Cooperation Experts in Agricultural Engineering
(2002:1.201 million yen)

Malawi

- Technical Cooperation in Agricultural Engineering
(2002:1.07 million yen)

Mali

- Farm management and Agronomy
(2001:0.69 million yen)

Morocco

- Development Study in Agricultural Engineering
(2002:0.179 million yen)
- Agricultural Engineering
(2001:0.951 million yen)

Mozambique

- Project for Rehabilitation of Chokwe Irrigation Scheme
(2001:1311 million yen, 2002:885 million yen)
- Grant Aid Cooperation in Agricultural Engineering
(2001:74.868 million yen)

Niger

- Technical Cooperation in Agriculture/General
(2001:19.127 million yen)

Tanzania

- Project for Mweza Smallholder Irrigation in Morogoro Region
(2001:727 million yen)
- The Kilimanjaro Agricultural Training Centre Project in the United Republic of Tanzania
(2001: 1.647 million yen)
- Kilimanjaro Agricultural Training Centre Phase2 Project in Tanzania
(2001: 3.879 million yen)
- Sokoine University of Agriculture Centre for Sustainable Rural Development : SCS
(2001: 2.168 million yen)
- Technical Cooperation in Agricultural Engineering
(2001:1.221 million yen, 2002:0.142 million yen)

D. Capacity building and education

Training sessions for researchers, government administrators and local people of affected developing countries are provided on utilization of water resources and agriculture in order to enhance scientific and technical capacity for combating desertification in various countries. Japan also held a symposium to diffuse knowledge concerning desertification in Japan and to diffuse technology to combat desertification to the affected countries through the efforts of enterprises and NGOs.

Burkina Faso

- Technical Cooperation in Environment
(2001:17.72 million yen, 2002:1.031 million yen)
- Welfare of Technical Cooperation Experts in Environment
(2001:0.182 million yen)

Egypt

- Project-type Technical Cooperation in Environment

(2001:13.828 million yen)

Kenya

-Technical Cooperation in Administration/General

(2001:19.545 million yen)

-Long-term Training

(2002:2.229 million yen)

Tunisia

-Technical Cooperation in Environment

(2002:0.993 million yen)

E. Study and research on desertification

Japan contributes to obtain necessary knowledge through wide-ranging themes of study and research including conservation of soil and water resources, agricultural development, socioeconomic methods, etc, to effectively combat desertification according to the country or area.

Burkina Faso

-Model Project to Combat Desertification

In order to develop technology for the effective use of groundwater in arid and semi-arid areas, the Ministry of the Environment conducted a demonstration study on subsurface dam in Burkina Faso.

(2001:11.65million yen, 2002:21million yen)

(not reported in the DAC/CRS)

-Analysis of the Water Storage Mechanism of Subsurface Dam

The Ministry of the Environment analyzed the mechanism of groundwater storage of the subsurface dam in Burkina Faso, and examined its water balance.

(2002:10million yen)

(not reported in the DAC/CRS)

2.2. Support out of ODA

Japan also contributes to the implementation of UNCCD by measures out of ODA.

For example, Japan conducts various types of study and research on desertification using the "Global Environment Research Fund". Arid Land Research Center, Tottori University, is one of the major research institutes on desertification.

Japan also provides financial support for domestic and local NGOs through grant assistance for grass-roots projects, subsidy system for NGO Projects. In addition, Japan, in cooperation with private sector, supports NGOs through the Japan Fund for Global Environment established in Environmental Restoration and Conservation Agency of Japan. Furthermore, Postal Savings for International Voluntary Aid, which is provided by the post office, support NGOs by utilizing donations by depositors. Fields which Japan offers cooperation include:

Forest conservation including afforestation and sapling nurseries; agricultural development such as vegetable cultivation and agro-forestry, farm management by local people; securing water resources to raise the standard of living; and on. Japan International Forestry Promotion and Cooperation Center, etc, also support afforestation projects by Japanese NGOs in developing countries.

A. Training at Arid Land Research Center, Tottori University

The Arid Land Research Center of Tottori University is Japan's one and only research institute established for fundamental research concerning prevention of desertification, agricultural development and economical and practical use of arid land. At any time the center has a large number of researchers from countries all over the world, and conducts research both in Japan and abroad. The budget for each individual type of research or study conducted at the center cannot be specified.

Niger, Ghana, Kenya, Iran, China (Sustainable development of irrigated agriculture in arid land)

The following was carried out jointly with local researchers of various countries during 1995; explanation of the desertification mechanism having its source in the irrigation farming method; constriction of a

desertification and geographical information system; and construction of an efficient irrigation method.
Sudan (Desertification and its control in farmland)

Researchers from Agricultural Research Corporation of Sudan have been invited to participate in fundamental experiments at the Arid Dome experiment facilities since 1994, and joint research project has been conducted since 1997.

B. Support for NGO activities

-NGO Support by the Japan Fund for Global Environment

Japan, in cooperation with private sector, supports NGOs involved in environmental conservation including combating desertification through the Japan Fund for Global Environment established in Environmental Restoration and Conservation Agency of Japan (former Japan Environment Corporation).

2001: 3 cases, ¥10,159,000

2002: 2 cases, ¥6,295,000

Year	NGO name	Amount (Thousand Yen)	Country	Activities
2001	Association for the Cooperation and Rural Self-Support in West Africa	4,100	Mali	Promotion of afforestation through the introduction of agroforestry to the village people of Sahel
2001	Action for Greening Sahel (A.G.S.-Japan)	3,559	Burkina Faso	Flood control and afforestation along the Gorja River for the prevention of desertification
2001	Association for Auto-development of Dielibakoro	2,500	Guinea	Reforestation of the hills of Folonoug in Kankan, Republic of Guinea
	Subtotal	10,159		
2002	Action for Greening Sahel (A.G.S.-Japan)	3,295	Burkina Faso	Flood prevention and afforestation for preventing desertification at the Gorja river basin
2002	Association for Auto-development of Dielibakoro	3,000	Guinea	Carrying out reforestation of the hills of Folonoug in Kankan, Republic of Guinea
	Subtotal	6,295		

IV. ASIA/ OCEANIA

Japan's assistance in the Asian region is being implemented in a variety of realms, reflecting the diversity of the countries in the region. In East/Southeast Asia, the progress of industrial pollution, aggravation of the urban living environment, and decrease/deterioration of natural resources are seen in some countries, in line with their rapid industrialization. In Southwest Asia, forest destruction and deterioration of the urban living environment, resulting from population growth, poverty, and other factors, are proceeding. Central Asia, meanwhile, is in the stage of consolidating the foundation for self-supported economic development after independence. The Middle East region includes both oil-producing countries and Least Developed Countries, but because many countries in the region belong to the arid area, support for water resources development is particularly important. Amid this state of affairs, Japan has been extending assistance to support, for instance, poverty countermeasures, environmental conservation including forest conservation, and economic infrastructure improvement.

1. Consultative process and partnership agreements

Japan has been engaged in various consultative processes and partnership agreements with Asian countries. As for Japan's support provided through the secretariat of the United Nations Convention to Combat Desertification (UNCCD), examples in 2001 and 2002 include: the Asian National Focal Points Meetings (2001, 2002); National Forum on Synergies in Mongolia (2001); National Workshop for Philippines and Papua New Guinea (2001); South Pacific Sub-Regional Workshop (2001); and the Asia-Africa Forum meeting (2001). In addition, Japan supports the launching meetings of the Thematic Programme Network (TPN) 3 (2001), 4 (2002) and 5 (2003) through its voluntary contribution to the UNCCD. It is expected that these activities promote information sharing and communication, leading to furthering the efforts to combat desertification in Asia.

1.1. US EPA/APO Workshop on Sustainable Forest Management (Vietnam)

Asian Productivity Organization in Japan and the Environment Protection Agency of the US jointly held Workshop on Sustainable Forest Management in Vietnam (Aug. 2001). The workshop aimed at addressing issues related to sustainable forest management, community development, rural energy management and application of Green Productivity concepts and practices in these areas, and consisted of classroom lectures, field visits, group case work, and country paper presentations.

1.2. Workshop on Environmental Impact Assessment (EIA) and Green Productivity (Fiji)

Asian Productivity Organization held Workshop on Environmental Impact Assessment (EIA) and Green Productivity in Fiji (July- August 2001). The workshop sought to enable the participants to; understand the concept, importance and benefits of Green Productivity and the EIA; and to integrate the Green Productivity assessment tools and techniques in EIA methodology.

1.3. Seminar on Land and Water Resource Management (India)

Asian Productivity Organization held Seminar on Land and Water Resource Management in India (June 2001). The objectives of the seminar are to discuss issues and constraints in sustainable development of land and water resources, and to suggest strategies to address such issues; and to review the current status of government policies and programs for land and water resource management.

2. Measures taken to support the preparation and implementation of action programmes at all levels

Japan's cooperative measures include bilateral Official Development Assistance (ODA) projects, study and research by Japanese institutions, and support for non-governmental organizations (NGOs) activities.

Japan's bilateral cooperation is multi-faceted. This report focuses on the following areas; conservation of water resources; reforestation and forest conservation; and agricultural development. Furthermore, Japan's activities regarding capacity building and education as well as study and research on desertification are described in this report. The report also explains financial assistance for NGOs provided through various sources in Japan.

It should be stressed here that efforts are being made in Japan to enhance the linkage between Japan's contributions through ODA and the purpose of the UNCCD process with a view to further promoting more

effective and efficient support for combating desertification.

2.1. Support through Official Development Assistance (ODA)

A. Conservation of water resources

Bhutan

-Water Supply Technology
(2001:0.608 million yen)

Cambodia

-Operation and Management of Irrigation Canal System
(2001:0.907 million yen)
-Irrigation and Drainage 2
(2002:1.378 million yen)

China

-Xinjiang Water-saving Irrigation Project
(2001:14,400 million yen)
-Gansu Water-saving Irrigation Project
(2001:6,000 million yen)
-Model Planning Project for Water-saving Measures on Large-scale Irrigation
(2001:99.075 million yen, 2002:2.292 million yen)
-Integrated Development Project in the Waterlogged Area in the Four-Lake Area
(2001:97.565 million yen)
-Watershed Management Training Project on the Loess Plateau Aftercare
(2001:4.889 million yen)
-Project-type Technical Cooperation in Rivers/Sand
(2001:3.611 million yen)
-Irrigation Project Management
(2001:3.066 million yen, 2002:1.91 million yen)
-Training Program Management (for Utilization of Water Resources)
(2002:1.548 million yen)
-Irrigation and Drainage 2
(2002:1.349 million yen)
-Water Resources Development and its use in Arid Areas
(2002:0.935 million yen)
-Human Resource Development Project for Water Resources
(2001:0.827 million yen, 2002:32.249 million yen)
-Water Environment Restoration Pilot Project in Taihu Lake
(2001:0.31 million yen)
-Technical Cooperation in Water Supply
(2001:4.098 million yen, 2002:0.101 million yen)

India

-Water Resources Development and its use in Arid Areas
(2002:0.966 million yen)

Indonesia

-Project for Urgent Countermeasures for Sedimentation in Wonogiri Multipurpose Dam Reservoir
(2002: 258million yen)
-Water Resources Development and its use in Arid Areas
(2002:1.018 million yen)
-Technical Cooperation in Water Resources Development
(2002:0.178 million yen)

Jordan

-Project for Improvement of the Water Supply System for the Zarqa District
(2002: 968million yen)
-Development Study in Water Resources Development
(2001:166.079 million yen, 2002:70.453 million yen)

- Water Supply Management
(2001:1.606 million yen, 2002:1.548 million yen)
- Non-revenue Water Management (Leakage Control)
(2001:0.658 million yen, 2002:0.695 million yen)
- Technical Cooperation in Water Supply
(2001:0.172 million yen)

Kazakhstan

- Detailed Design Study of the Water Supply and Sewerage System for Astana City
(2002:136.245 million yen)
- Grant Aid Cooperation in Water Supply
(2001:18.8million yen, 2002:25.173 million yen)

Lebanon

- Development Study in Water Resources Development
(2002:2.868 million yen)
- Study on Regional Water Resources Master Plan in the Republic of Lebanon
(2001:0.912 million yen, 2002:104.884 million yen)
- Water Supply Management
(2001:0.893 million yen, 2002:1.972 million yen)

Mongolia

- Technical Cooperation in Water Supply
(2001:0.176 million yen)

Myanmar

- Study on Water Supply System in Mandalay City and in the Central Dry Zone
(2001:284.427 million yen, 2002:341.107 million yen)
- Irrigation Technology Centre Project Phase 2
(2001:133.402 million yen, 2002:3.028 million yen)
- Technical Cooperation in Water Supply
(2001:67.62 million yen, 2002:90.605 million yen)
- Human Resource Development Project for Water Resources, P.R.C
(2001:37.105 million yen)
- Water Supply Facilities Plan & Design
(2001:0.419 million yen, 2002:0.526 million yen)
- Irrigation and Drainage
(2002:0.421 million yen)
- Irrigation and Drainage 2
(2001:2.947 million yen, 2002:4.478 million yen)

Nepal

- Project for Improvement of Kathmandu Water Supply Facilities
(2001: 1040million yen, 2002: 927million yen)
- Feasibility Study on the Sunsari River Irrigation Project
(2001:47.88 million yen, 2002:166.638 million yen)
- Grant Aid Cooperation in Water Supply
(2002:29.649 million yen)
- International Telecommunication Services (Administration and Management) 2
(2001:0.634 million yen)
- Devastated Forest Restoration Technique
(2002:0.542 million yen)
- Irrigation and Drainage
(2002:0.395 million yen)

Oman

- Development Study in Water Resources Development
(2002:1.488 million yen)
- Non-revenue Water Management (Leakage Control)

(2001:0.61 million yen)

Pakistan

-Grant Aid Cooperation in Water Supply

(2002:6.706 million yen)

-Water Supply Technology

(2001:0.304 million yen)

-Irrigation and Drainage 2

(2001:1.984 million yen)

-Water Resources Development and its use in Arid Areas

(2002:0.591 million yen)

Saudi Arabia

-Water Resources Development and its use in Arid Areas

(2002:1.2 million yen)

-Non-revenue Water Management (Leakage Control)

(2001:0.668 million yen, 2002:0.691 million yen)

Sri Lanka

-Project for Improvement of Nuwara Eliya Water Supply

(2001: 481million yen, 2002: 555millio yen)

-Study on the Comprehensive Groundwater Resources Development for Hampantota

(2001:433.704 million yen, 2002:164.28 million yen)

-Detailed Design Study on Greater Kandy Water Supply Augmentation Project

(2001:154.05 million yen, 2002:322.476 million yen)

-Development Study in Water Supply

(2001:157.208 million yen)

-Grant Aid Cooperation in Water Supply

(2002:29.072 million yen)

-Technical Cooperation in Water Supply

(2001:1.399 million yen)

-Waterworks Engineering

(2001:0.649 million yen)

-Groundwater Resources Management and Development

(2002:0.644 million yen)

-Non-revenue Water Management (Leakage Control)

(2002:0.409 million yen)

-Welfare of Technical Cooperation Experts in Water Supply

(2001:0.3 million yen)

Syria

-Project for Improvement of Water Supply in the Rural Province of Damascus (Phase II)

(2002:440million yen)

-Project for Rehabilitation of Water Distribution Pipelines in Damascus City (Phase II)

(2002:796million yen)

-Establishment of the Water Resources Information Center

(2001:30.204 million yen)

-Technical Cooperation in Water Supply

(2001:4.916 million yen)

-Management of Water Resources Information

(2002:1.902 million yen)

-Water Supply Management

(2001:1.822 million yen, 2002:2.811 million yen)

-Irrigation and Drainage 2

(2001:1.634 million yen)

-Project-type Technical Cooperation in Water Resources Development

(2001:0.825 million yen)

Turkey

- Master Plan Study on Participatory Watershed Rehabilitation in Coruh River
(2001:1.664 million yen, 2002:48.858 million yen)
- Water Resources Development and its use in Arid Areas
(2002:1.469 million yen)
- International Telecommunication Services (Administration and Management) 2
(2002:2.154 million yen)

Vietnam

- Project for Expansion of Water Supply System in Hai Duong City
(2001:600million yen)

The West Bank and Gaza Strip

- Water Supply Management
(2001:1.704 million yen, 2002:1.482 million yen)

Yemen

- Water Supply Management
(2001:1.59 million yen, 2002:0.792 million yen)

B. Forest conservation and re-afforestation

China

- Shaanxi Loess Plateau Afforestation Project
(2001: 4,200 million yen)
- Shaanxi Loess Plateau Afforestation Project
(2001:4,200 million yen)
- Ningxia Afforestation and Vegetation Cover Project
(2002:7,977 million yen)
- Inner-Mongolia Loess Plateau Afforestation Project
(2001:3,600 million yen)
- Project for Afforestation for Conservation of Middle stream of Huang He
(2001:796 million yen, 2002:489 million yen)
- Project for Afforestation for Conservation of Middle Stream of Huang He (Phase II)
(2002:179million yen)
- Development Study in Forestry/Forest Preservation
(2001:232.975 million yen, 2002:79.36 million yen)
- Model Afforestation Project in Sichuan
(2001:169.215 million yen, 2002:1.639 million yen)
- Grant Aid Cooperation in Forestry/Forest Preservation
(2001:67.488 million yen, 2002:56.089 million yen)
- Japan-China Cooperation Science and Technology Center for Forest Tree Improvement
(2001:56.389 million yen, 2002:7.663 million yen)
- Master Plan Study on Afforestation and Management in Miyun Dam Watershed
(2002:36.408 million yen)
- Forest Protection Research Project in Ningxia-Hui Autonomous Region
(2001:15.225 million yen)
- Hubei Province Forest Tree Improvement Project
(2001:10.202 million yen)
- Research Project on Timber from Man-Made Forests in China
(2001:6.037 million yen, 2002:2.385 million yen)
- Development Cooperation in Forestry/Forest Preservation
(2001:6.342 million yen, 2002:1.273 million yen)
- Effective Utilization of Timber
(2002:3.912 million yen)
- Research Management of Forest Tree Breeding
(2002:3.648 million yen)
- Silviculture
(2001:1.988 million yen, 2002:1.62 million yen)
- Afforestation and forest management for shifting and control forest
(2002:0.798 million yen)

- Forestation Planning
(2002:0.7 million yen)
- Forest Soils
(2002:0.601 million yen)
- Technical Cooperation in Forestry/Forest Preservation
(2002:0.419 million yen)
- Application of Symbiotic Microorganisms in Tropical Agriculture and Forestry
(2001:0.632 million yen)

Indonesia

- Project for Improvement of Forest Fire Equipment
(2001:309 million yen)
- Project for Rehabilitation of the National Park Degraded by Forest Fire
(2001:48 million yen, 2002:111million yen)
- Development Cooperation in Forestry/Forest Preservation
(2001:39.926 million yen, 2002:21.055 million yen)

Iran

- Forest Soils
(2002:0.691 million yen)

Malaysia

- Pilot Project on Acacia Hybrid Plantation
(2002:80 million yen)

Mongolia

- Reforestation Promotion Leader
(2002:1.7 million yen)

Myanmar

- Project for Afforestation in Central Dry Zone
(2002:480 million yen)
- Grant Aid Cooperation in Forestry/Forest Preservation
(2001:36.618 million yen, 2002:51.72 million yen)
- Project-type Technical Cooperation in Forestry/Forest Preservation
(2001:22.837 million yen)
- Community Forestry Training and Extension Project in Dry Zone in the Union of Myanmar
(2001:10.509 million yen, 2002:93.439 million yen)
- Central Forestry Development Training Center Project in Myanmar
(2001:8.026 million yen)
- Pilot Project of Mangrove Afforestation
(2001:3.9 million yen)
- Social Forestry
(2002:1.068 million yen)
- Training & Extension of Community Forestry
(2002:0.982 million yen)
- Sustainable Management of Mangrove Ecosystems
(2001:0.69 million yen)
- Technical Cooperation in Forestry/Forest Preservation
(2001:0.286 million yen)

Nepal

- Community Development and Forest/Watershed Conservation Project Phase1
(2001:96.872 million yen, 2002:0.995 million yen)
- Project-type Technical Cooperation in Forestry/Forest Preservation
(2001:1.511 million yen)
- Social Gender (aimed for village promotion and forest preservation)
(2001:0.832 million yen, 2002:1.228 million yen)

Oman

-Sustainable Management of Mangrove Ecosystems
(2001:0.938 million yen, 2002:0.941 million yen)

Philippines

-Pilot Project on Plantation of Malapapaya
(2001:59 million yen)

Solomon Islands

-Development Study in Forestry/Forest Preservation
(2002:2.714 million yen)

Sri Lanka

-Sustainable Management of Mangrove Ecosystems
(2001:0.678 million yen)

Turkey

-Reforestation Promotion Leader
(2001:2.132 million yen)

Vietnam

-Project for Afforestation on the coastal Sandy Area in Southern Central Viet Nam
(2001:33 million yen, 2002:348million yen)

C. Agricultural development**Cambodia**

-Grant Aid Cooperation in Agricultural Engineering
(2002:20.884 million yen)
-Welfare of Technical Cooperation Experts in Agricultural Engineering
(2002:0.378 million yen)
-Project for Technical Service Center for Irrigation System in Cambodia
(2001:165.939 million yen, 2002:0.551 million yen)

China

-Grant Aid Cooperation in Agricultural Engineering
(2001:40.134 million yen)
-Promoting of Aid Effectiveness and Efficiency in Agricultural Engineering
(2001:7.118 million yen)
-Project-type Technical Cooperation in Agricultural Engineering
(2001:3.052 million yen)
-Technical Cooperation in Agricultural Engineering
(2001:1.795 million yen)

Indonesia

-Study for Comprehensive Recovery Programme of Irrigation Agriculture
(2001: 2.805 million yen)

Iran

-Study on Gharasu River Basin Agricultural Infrastructure Development Project
(2002:4.612million yen)

Myanmar

-Technical Cooperation in Agricultural Engineering
(2001:41.976 million yen)

Nepal

-Development Study in Agriculture/General
(2002:3.054 million yen)
-Technical Cooperation in Agricultural Engineering

(2001:0.443 million yen)
-Welfare of Technical Cooperation Experts in Agricultural Engineering
(2001:0.128 million yen)

Pakistan

-Technical Cooperation in Agriculture/General
(2001:16.281 million yen)
-Welfare of Technical Cooperation Experts in Agricultural Engineering
(2001:0.206 million yen, 2002:0.175million yen)
-Technical Cooperation in Agricultural Engineering
(2001:0.172 million yen)

Philippines

-Project for Development of Agrarian Reform Communities in Marginal Areas
(2001:711million yen)
-Project for Rehabilitation of Apron at Angat Afterday Regulator Dam
(2001:617million yen, 2002:686million yen)

Sri Lanka

-Development Study in Agricultural Engineering
(2001:33.748 million yen)
-Development Study in Agriculture/General
(2002:3.648 million yen)

Syria

-Technical Cooperation in Agricultural Engineering
(2001:1.438 million yen)

D. Capacity building and education

China

-Grant Aid Cooperation in Environment
(2002:3.958 million yen)

Jordan

-Technical Cooperation in Environment
(2001:26.809 million yen)

Syria

-Technical Cooperation in Environment
(2001:0.449 million yen)

Tonga

-Japan Overseas Cooperation Volunteers in Environment
(2002:0.243 million yen)

E. Study and research on desertification

Country not Specified

-Research for Supporting the Promotion of Combating Desertification
The Ministry of the Environment collected knowledge of experts to contribute to the discussion in the Committee on Science and Technology of UNCCD.
(2001:14million yen)(Included in the DAC/CRS)

North-east Asia

-Research on Integrated Sustainable Management of Natural Resources
In order to contribute to the discussion in the Committee on Science and Technology of UNCCD, the Ministry of the Environment examined conservation and management of terrestrial ecosystems in North-east Asia, utilizing knowledge of experts. Especially, benchmarks and indicators for desertification early warning systems were examined.
(2002:18million yen)(Not included in the DAC/CRS)

2.2. Support out of ODA

A. Arid Land Research Center, Tottori University

The Arid Land Research Center of Tottori University has also been conducting a joint research project with the Water and Soil Conservation Institute of the Chinese Academy Sciences and the Agricultural Research Corporation of Sudan through the Core University Program of Japan Society for the Promotion of Science (JSPS) since 2001 and the 21st Century Center of Excellence Program of MEXT since 2002.

B. Research on Desertification using the Global Environment Research Fund

The Global Environment Research Fund is provided by the Ministry of the Environment of Japan with a view to promoting global environment research, including that on desertification, from interdisciplinary and international perspectives by researchers in various fields at national research institutes and universities.

China, Kazakhstan, Pakistan

-Synthetic Studies on Evaluation and Monitoring of Desertification

Desertification processes were surveyed to extract desertification indicators in various desertification regions in Asia, and methods of evaluation and monitoring of desertification were examined.

(2001:71.794million yen, 2002:70.006million yen)

C. NGO Support by the Japan Fund for Global Environment

Japan, in cooperation with private sector, supports NGOs engaged in environmental conservation activities including combating desertification through the Japan Fund for Global Environment established under Environmental Restoration and Conservation Agency of Japan (former Japan Environment Corporation).

2001: 5 cases, ¥25,151,000

2002: 7 cases, ¥31,200,000

Year	NGO name	Amount (thousand Yen)	Country	Activities
2001	Hexy Desert Tree-Planting Association	4,100	China	Tree-planting in the Western Corridor of the Yellow River in Anxy Country
2001	Desert Planting Volunteer Association	5,600	China	Planting trees in forest plantations in the Gobi desert
2001	Japan Industry Development Youth Association	4,751	China	Making model farms to demonstrate both afforestation of desert area and agriculture and stock raising
2001	Japan Biovillage Association	5,600	China	Implementation and diffusion of environmental education in Elesun Zhen in the Horqin Desert of Inner Mongolia, China
2001	The Japanese Society of Irrigation, Drainage and Reclamation Engineering	5,100	China	Improvement of desertified agricultural lands and grasslands in cold, arid regions of Asia and countermeasures against poverty
	Subtotal	25,151		
2002	Desert Planting Volunteer Association	5,900	China	Planting trees in forest plantations in the Gobi desert
2002	Japan Industry Development Youth Association	5,300	China	Making model farms to demonstrate both afforestation of desert area and agriculture and stock raising
2002	Japan Biovillage Association	5,700	China	Implementation and diffusion of environmental education in Elesun Zhen in the Horqin Desert of Inner Mongolia, China
2002	The Japanese Society	5,300	China	Restoring farmland and grassland suffering

	of Irrigation, Drainage and Reclamation Engineering			from desertification in parts of Asia with dry and cold weather, and proposing measures to tackle poverty problems
2002	Organization for Child Development Harmony Center	3,000	Mongolia	Providing tree-planting guidance in Mongolia using a special kind of pot
2002	Green Earth Network	3,000	China	Reforestation with various tree species in China's Shanxi Province
2002	Friends of Nature	3,000	China	Implementing an environmental study program to examine the cause of sand storms
	Subtotal	31,200		

V. LATIN AMERICA AND THE CARIBBEAN

There are various kinds of serious environmental issues in the Latin American region, including the decline of Amazonian tropical rain forests, desertification in the northeastern part of Brazil, air pollution in major cities such as Mexico City, extensive water pollution, and conversion of urban areas into slums due to population concentration in cities. Concerning these environmental issues in Latin America, Japan has been actively cooperating in both technical and financial assistance.

1. Consultative process and partnership agreements

Japan-Central America Forum for Dialogue and Cooperation and Japan-CARICOM Consultations are examples of Japan's comprehensive consultations with Latin America and the Caribbean region. At the sixth Japan-Central America Forum for Dialogue and Cooperation in March 2002, consultations were held regarding Japan's cooperation for the environmental preservation of the region. It is expected that the consultation will be continued at the next meeting to be held in Central America. Also, the same topic was taken up for discussion at the Ninth session of Japan-CARICOM Consultation held in Japan in November 2002, and 13 members of the CARICOM participated in the meeting.

2. Measures taken to support the preparation and implementation of action programmes at all levels

With a view to assisting the efforts to combat desertification, Japan has been taking a wide range of measures through bilateral Official Development Assistance (ODA) projects in the following areas; conservation of water resources; reforestation and forest conservation; agricultural development, and capacity building and education.

It should be stressed here that efforts are being made in Japan to enhance the linkage between Japan's contributions through ODA and the purpose of the UNCCD process with a view to further promoting more effective and efficient support for combating desertification.

2.1 Support through Official Development Assistance (ODA)

A. Conservation of water resources

Bolivia

- Technical Cooperation in Water Supply
(2001:0.161million yen)
- Non-revenue Water Management (Leakage Control)
(2001:0.774million yen, 2002:0.836million yen)
- Prevention for Water Supply Leakage for Latin American Countries
(2001:3.33million yen, 2002:2.841million yen)
- Grant Aid Cooperation in Water
(2002:27.59million yen)

Chile

- Water Conservation and Hydrology Resources
(2001:0.846million yen, 2002:1.606million yen)

Colombia

- Study on Ground Water Development in the Bogota Plain in the Republic of Colombia
(2001:184.54million, 2002:156.84million yen)
- Operation and Management of Irrigation Canal System
(2002:1.216million yen)

Cuba

- Operation and Management of Irrigation Canal System
(2002:1.391million yen)

Dominican Republic

- Irrigation and Drainage II
(2001:3.366million yen, 2002:1.999million yen)
- Operation and Management of Irrigation Canal System

(2002:1.471million yen)
-The Watershed Management in the Upper Area of the Samana Yagua Dam
(2002:1.007million yen)
-Maintenance and Operation of Rural Irrigation System
(2002:1.894million yen)
-Grant Aid Cooperation in Water Supply
(2002:55.395million yen)

Ecuador

-Project for Development of Subterranean Water in the Loja Province
(2001:1028million yen, 2002:323million yen)
-Grant Aid Cooperation in Water
(2002:23.823million yen)

El Salvador

-Irrigation and Drainage II
(2001:1.606million yen, 2002:1.684million yen)
-Grant Aid Cooperation in Water Supply
(2001:35.248million yen)
-Non-revenue Water Management (Leakage Control)
(2002:0.746million yen)

Honduras

-Promoting of Aid Effectiveness and Efficiency in Water Supply
(2001:0.672million yen)
-Development Study in Water Supply
(2001:187.91million yen)
-Prevention for Water Supply Leakage
(2001:3.371million yen, 2002:1.236million yen)
-Operation and Management of Irrigation Canal System
(2002:1.131million yen)
-Grant Aid Cooperation in Water
(2002:23.319million yen)

Mexico

-Water Resource Development and Its Use in Arid Areas
(2001:2.692million yen)

Nicaragua

-Technical Cooperation in Water Supply
(2001:57.912million yen, 2002:3.694million yen)
-Welfare of Technical Cooperation Experts in Water Supply
(2001:0.333million yen)
-Non-revenue Water Management (Leakage Control)
(2001:0.711million yen)
-Irrigation and Drainage II
(2001:1.602million yen)

Paraguay

-Irrigation and Drainage II
(2001:1.731million yen)

Peru

-The Study on Integrated Water Resources Development in the Canete River Basin
(2001:26.176million yen, 2002:57.176million yen)
-Water Resource Development
(2001:0.662million yen)
-Irrigation and Drainage II

(2001:1.675million yen)
-Technical Cooperation in Water Supply
(2002:8.043million yen)
-Operation and Management of Irrigation Canal System
(2002:1.229million yen)

Venezuela

-Integral Management of Watershed with Emphasis on Soil and Water Conservation
(2002:0.138million yen)

B. Forest conservation and re-afforestation

Argentina

-Forest Management and Planning
(2001:2.024million yen, 2002:1.954million yen)

Bolivia

-The Afforestation and Erosion Control Project in the Valley of Tarija
(2001:25.78million yen, 2002:7.154million yen)
-Technical Cooperation in Forestry/Forest Preservation
(2001:4.344million yen)
-Conservation of Forest Soils
(2001:2.628million yen, 2002:1.552million yen)
-Forest Management and Planning
(2001:0.982million yen,2002:0.936million yen)
-Welfare of Technical Cooperation Experts in Forestry/Forest Preservation
(2002:0.16million yen)

Brazil

-Technical Cooperation in Forestry/Forest Preservation
(2001:4.512million yen)

Chile

-Technical Cooperation in Forestry/Forest Preservation
(2001:0.11million yen)
-Devastated Forest Restoration Technique
(2001:0.785million yen, 2002:0.931million yen)

Colombia

-Reforestation Promotion Leader
(2001:4.093million yen)

Dominican Republic

-Development Study in Forestry/Forest Preservation
(2001:167.832million yen, 2002:173.838million yen)
-Reforestation Promotion Leader
(2001:1.181million yen, 2002:1.302million yen)
-Maintenance and Operation of Rural Irrigation System
(2001:2.586million yen)
-Technical Cooperation in Forestry/Forest Preservation
(2002:0.114million yen)

Ecuador

-Devastated Forest Restoration Technique
(2002:0.797million yen)

Honduras

-Forest Management and Planning
(2001:0.878million yen)
-Devastated Forest Restoration Technique

(2002:0.794million yen)

Mexico

-Technical Cooperation in Forestry/Forest Preservation

(2001:14.243million yen, 2002:0.123million yen)

-Devastated Forest Restoration Technique

(2001:0.672million yen)

-Reforestation Promotion Leader

(2001:2.307million yen)

Nicaragua

-Forestry Promotion

(2001:0.594million yen)

-Forest Management and Planning

(2002:0.845million yen)

Paraguay

-Project-type Technical Cooperation in Forestry/Forest Preservation

(2001:0.536million yen)

-The Forest Extension Project in the Eastern Region of Paraguay

(2001:29.045million yen)

-Development Study in Forestry/Forest Preservation

(2001:216.765million yen, 2002:125.67million yen)

-Reforestation Promotion Leader

(2001:1.02million yen, 2002:1.126million yen)

-Devastated Forest Restoration Technique

(2002:0.93million yen)

-Forest Soil

(2002:0.988million yen)

Peru

-Devastated Forest Restoration Technique

(2001:0.776million yen)

-Reforestation Promotion Leader

(2001:1.921million yen, 2002:1.183million yen)

-Forest Research

(2002:0.984million yen)

Uruguay

-The Aftercare Program for Forest Tree Improvement Cooperation Project

(2001:92.22million yen)

-Establishment and Data analysis for the Provenance Test

(2001:1.898million yen)

-Forest Management and Planning

(2001:1.013million yen)

Venezuela

-Devastated Forest Restoration Technique

(2002:0.849million yen)

C. Agricultural development

Bolivia

-Technical Cooperation in Agricultural Engineering

(2002:29.69million yen)

Chile

-Project-type Technical Cooperation in Agriculture

(2001:0.338million yen)

-The Project on Conservation of the Environment and Rural Development with Farmer

(2001:8.872million yen, 2002:0.217million yen)

-Technical Cooperation in Agriculture/General
(2001:8.288million yen)

Colombia

-Technical Cooperation in Agricultural Engineering
(2001:2.575million yen)

El Salvador

-Technical Cooperation in Livestock Sanitation
(2001:2.464million yen)

Dominican Republic

-The Technology Improvement Project for Irrigated Agriculture in the Dominican Re.
(2001:35.895million yen, 2002:0.842million yen)

-Technical Cooperation in Agricultural Engineering
(2001:40.874million yen, 2002:6.136million yen)

-Technical Cooperation in Agricultural Machinery
(2001:0.126million yen)

-Development Study in Agriculture/General
(2002:0.243million yen)

Mexico

-Technical Cooperation in Agricultural Engineering
(2002:0.123 million yen)

Uruguay

-Project-type Technical Cooperation in Livestock Sanitation
(2001:1.328million yen)

D. Capacity building and education

Dominican Republic

-Development of Teaching Materials for the Education of Natural Science
(2002:1.422million yen)

Nicaragua

-Development Study in Environment
(2002:1.824million yen)

Paraguay

-Remote Sensing and GIS
(2001:0.759million yen)

IV. CENTRAL/EASTERN EUROPE

1. Support through Official Development Assistance (ODA)

With a view to assisting the efforts to combat desertification, Japan has been taking a wide range of measures through bilateral Official Development Assistance (ODA) projects in the following areas; conservation of water resources; reforestation and forest conservation; agricultural development, and capacity building and education.

It should be stressed here that efforts are being made in Japan to enhance the linkage between Japan's contributions through ODA and the purpose of the UNCCD process with a view to further promoting more effective and efficient support for combating desertification.

A. Conservation of water resources

Moldova

- The Study on Water Supply System in Northern Region in the Republic of Moldova
(2001:71.248million yen, 2002:139.86million yen)
- Planning for Waterworks
(2001:1.172million yen)
- Water Supply Planning
(2002:1.936million yen)

Romania

- The Irrigation System Readjustment Project
(2001:14.988million yen)
- Land Reclamation
(2001:1.598million yen)

Slovakia

- Water Management
(2002:0.864million yen)

Slovenia

- Technical Cooperation in Water Supply
(2001:18.353million yen, 2002:0.114million yen)

B. Forest conservation and re-afforestation

Czech

- Forest Management and Planning
(2002:1.181million yen)

Slovakia

- Technical Cooperation in Forest/Forest Preservation
(2001:4.393million yen)