Table 2-9 List of Training Programs on Disaster Management

(1999 or later)

		(1999 or later)
Name of Training Program	Years	Organizer
Top Manager's Seminar/Fire Control Administration	1999-2002	Fire and Disaster Management Agency
Fire Prevention Techniques	every year	Nagoya City Fire Bureau (before 2000, in alliance with Fire and Disaster Management Agency)
Rescue Techniques	every year	Osaka Municipal Fire Department (before 2000, in alliance with the Fire and Disaster Management Agency)
Fire Fighting Techniques	every year	Kitakyushu City Fire and Disaster  Management Department (before 2000, in alliance with the Fire Agency)
Maritime Search & Rescue Operations and Maritime Disaster Prevention Course for Policy Planners	every year	Japan Coast Guard
Seminar on Emergency/Disaster Medicine I	1999-2002	Senri Critical Care Medical Center (Osaka)
Seminar on Emergency/Disaster Medicine II	2003	Senri Critical Care Medical Center (Osaka)
Comprehensive Health and Medical Care in Disaster	2002, 2003	Graduate School of Medicine, Kobe University
Intro to Japan Disaster Relief Activities & Disaster Prevention System (Middle east)	1999-2001	Japan International Cooperation Agency
Meteorology	every year	Japan Meteorological Agency
Volcanology and Volcanic Sabo Engineering	every year	River Bureau. Ministry of Land, Infrastructure and Transportation (until 2000, River Bureau, Ministry of Construction)
River and Dam Engineering II	1999-2002	River Bureau, Ministry of Land, Infrastructure and Transportation (until 2000, River Bureau, Public Works Research Institute, Ministry of Construction; In 2001, River Bureau, Ministry of Land, Infrastructure and Transportation, National Institute for Land and Infrastructure Management)
River and Dam Engineering III	2003	River Bureau, Ministry of Land, Infrastructure and Transportation
Seismology and Earthquake Engineering II	1999	Building Research Institute, Ministry of Construction
Seismology and Earthquake Engineering	since 2000	Independent Administrative Institute Building Research Institute (in 2000, Building Research Institute, Ministry of Construction)
Global Seismological Observation II	since 2002	Independent Administrative Institute Building Research Institute
Seminar on Disaster Management	every year	Asian Disaster Reduction Center
Disaster Mitigation and Restoration	1999, 2000	River Bureau, Ministry of Construction
System for Infrastructure (for Civil Engineers)	2002-2003	Japan Construction Training Center Foundation

Note: Compiled by ADRC based on information from the Ministry of Foreign Affairs of Japan

Italic: Former names

Table 2-10 List of Third Country Training Programs on Disaster Reduction

(1998-2002)

Nation	Years	Training Topie	Organizer			
Egypt	1998-1999	Seismological	National Research Institute of			
Egypt	1996-1999	Observation	Astronomy and Geophysics, Helwan			
	1998–2002	Sabo Engineering and Water Induced Disaster Countermeasures	SABO Technical Centre, Ministry of Settlement and Regional Infrastructure (KIMPRASWIL) (In 1999, SABO Technical Centre, Directorate General of Water Resource Development, Ministry of Public Works)			
Indonesia	1998, 1999	Sustainable Structural Safety Design For Building Engineers	Research Institute for Human Settlement (RIHS), Directorate General of Research and Development Agency, Ministry of Public Works			
	2000–2002	Building Foundations	Research Institute for Human Settlement (RIHS), Ministry of Regional Development Directorate General of Research and Development Agency, Ministry of Public Works			
Mexico	1998–2001	Earthquake-Resistant Design and Construction of Structures	National Center for Prevention Disasters (CENAPRED)			
Peru	1998, 1999	Earthquake-Resistant Design and Construction of Structures	National University of Engineering, Lima (Peru) Japan-Peru Center for Earthquake Engineering and Disaster Mitigation (CISMID)			
	2000–2004	Mitigation Measures for Natural Disaster Reduction	Japan-Peru Center for Earthquake Engineering and Disaster Mitigation (CISMID)			
Fiji	2001–2004	Meteorological Warning Message and Cyclone Disaster Prevention	Fiji Meteorological Service			
Turkey	2002, 2003	Earthquake Engineering	Istanbul Technical University (Education and Training Sub-Center of Earthquake Disaster Prevention Research Center)			

Note. Compiled by ADRC based on information from relevant agencies

# (b) Dispatching Experts, Japan Overseas Cooperation Volunteers and Senior Overseas Volunteers

JICA sends experts to developing nations to transfer disaster reduction technique to local communities (Table 2-11). It also runs the Japan Overseas Cooperation Volunteers (JOCV) program that encourages and assists young people with technical skills to contribute to the social and economic development of developing countries while living and working with local people. Under another program, middle-aged and senior

volunteers who have a wealth of knowledge, experience and technical skills, as well as strong spirit of volunteerism, are sent overseas to contribute to the development of developing countries (Table 2-12).

Table 2-11 Past Delegations of Experts of Disaster Management (2002)

Country	New/ Continued	Long/short Tern	Instrucction Topic	Assigned to
China	new	short	Fire Fighting and Prevention	Beijing Municipal Education and Training Center for Fire Fighting and Prevention
	continued		Strengthening Flood Warning Systems (telecommunications, raising public awareness, 2 delegations)	Philippine Atmospheric, Geophysical and Astronomical Service Administration (PAGASA), Department of Science and Technology (DOST)
Philippines	new	short	Seismology	Science and Technology Agency Philippines Volcanic Earthquake Institute
	new	short	Seminar on Flood Policy and Facilities Management in Local Arcas	Department of Public Works and Highways (DPWH)
	new	short	Forest Fire Prevention Management Project 2	Directorate General of Forest Protection and Natural Conservation, Ministry of Forestry
	new	short	Integrated Sediment Disaster Management Project for Volcanic Area (10 delegations)	SABO Technical Centre, Ministry of Settlement and Regional Infrastructure (KIMPRASWIL)
Indonesia	continued	short	Integrated Sediment Disaster Management Project for Volcanic Area (2 delegations)	SABO Technical Centre, Ministry of Settlement and Regional Infrastructure (KIMPRASWIL)
	new	short	Analysis and Operation of Seismograph Data	Geological Research and Development Centre, Directorate General of Geology and Mineral Resources (DJGSM), Ministry of Mine & Energy (DESDM)
Fiji	continued	short	Meteorological warnings and cyclone disaster prevention (Third Country Training)	Fiji Meteorological Service
Nepal	new	short	Disaster Mitigation Support Programme Project (2 delegations)	Department of Water Induced Disaster Prevention, Ministry of Water Resources
	new	short	Road Disaster Reduction	Department of Road, Ministry of Physical Planning and Works
India new short		Earthquake Disaster Mitigation (seismic resistance evaluations, damage estimate map preparation, 3 delegations)	Central Building Research Institute (CBRI)	

Figure 2-11 Past Delegations of Experts of Disaster Management (2002) (continued)

Country	New/ continued	Long/short Tern	Instruction Topic	Assigned to
Kazakhstan	new	short	Team dispatch [Improvement in earthquake disaster prevention and earthquake risk evaluation monitoring in Almaty city] (GPS quake observation, high sensitivity earthquake observation, 3 delegations)	Institution of Seismology, Ministry of Education and Science
Turkey	new	short	Earthquake Engineering	Third country trainer
	new	long	Reduction of Seismic Risk for Buildings and Structures (3 delegations)	Seismologic Disaster Mittigation Planning Center, Ministry of Public Works, Transport, and Housing (MLPTL)
Romania	new short		Reduction of Seismic Risk for Buildings and Structures	Reduction of Seismic Risk for Building and Structures Center, Ministry of Public Works, Transport, and Housing (MLPTL)
Costa Rica	new	short	Crustal Structure and Subduction Process	Observatory Volcanology and Seismology, National University (OVISICORI-UNA)
Barbados	new	short	Caribbean Disaster Management Project (3 delegations)	Caribbean Disaster Emergency Relief Agency (CDERA)
Barbauos	new	long	Caribbean Disaster Management Project	Caribbean Disaster Emergency Relief Agency (CDERA)
Panama	new	long	Enhancement of Central American Disaster Mitigation Implementation Structure	Coordination Center for the Prevention of Natural Disaster inCentral America (CEPREDENAC)
- Simila	new	short	Disaster Mitigation map Information System	Coordination Center for the Prevention of Natural Disaster inCentral America (CEPREDENAC)
El Salvador	new	short	Earthquake Engineering	Centre of Geotechnical Research (CIG), Ministry of Public Works
Venezuela	new	long	Disaster Mitigation projects (Sabo, landslide measures)	Protection Civil and Administration for Disaster, Ministry of Internal Affairs and Justice(MIJ)
Peru	new	short	Mitigation Measures for Natural Disaster Reduction	Japan-Peru Center for Earthquake Engineering and Disaster Mitigation (CISMID)

Note: Compiled by ADRC based on information from the Ministry of Foreign Affairs of Japan.

**Table 2-12** Recent Programs on Disaster Reduction Associated with Japan Overseas Cooperation Volunteers and Senior Overseas Volunteers

(April 1, 2001-November 30, 2003)

# Japan Overseas Cooperation Volunteers

Country	Topic	Assitance Overview				
Papua New Guinea	Computer Technology	Database and network development and management for agencies managing information on regional government and natural disasters.				
Bhutan	Geology	Field surveys for mapmaking at survey sites where terrain mapping, mining resource surveys, landslide predicting, and mining permits take place.				
Bhutan	Mining	Mining materials from field surveys for mapmaking at survey sites where terrain mapping, mining resource surveys, landslide predicting, and mining permits take place. Atomic diffraction analysis on riverbed samples.				

Note: There were no activities in FY 2002 and 2003

# Senior Overseas Volunteers

Country	Topic	Assitance Overview
Dominican Republic	Safety Control of Hazardous Materials	Survey and management of hazardous materials, preparing for emergency situations
Dominican Republic	Earthquake Disaster Mitigation Measures	Creation of a network for nationwide and local earthquake data, establishing strategies for disaster reduction following earthquakes.
Dominican Republic	Creation of Atmospheric Analysis Charts	Organization of collection of atmospheric data to contribute to analysis of the el Niño phenomenon, scientific analysis of atmospheric data, and creation of atmospheric distribution charts.
Thailand	Weather Information	Creation of atmospheric data network for regional countries, implementation of system support for a heavy rainfall early warning system.
Indonesia	Volcanic Earthquake Monitoring	Research into the mechanisms and occurrence of volcanic earthquake in Indonesia, data analysis to reduce natural disaster impact, and assistance with impact minimization research.
Cambodia	Airborne Meteorological System	Collection of atmospheric data, creation of airborne meteorological system and measurement of data to support agricultural predictions. October 2003 to October 2005.
Sri Lanka	Weather Forecasting	Collection of atmospheric data with modern equipment, and instruction in the use of said data for short- to long-term forecasting purposes. October 2003 to October 2004.
Samoa	Weather Observation	Instruction in meteorological systems, introduction to the latest technologies and equipment, and implementation of maintenance for existing equipment. April 2003 to April 2005.

Note. Compiled by ADRC based on information from the Ministry of Foreign Affairs of Japan.

# (c) Technical Cooperation Projects

JICA's technical cooperation projects encompass three forms of assistance, dispatch of field specialists, organization of training programs, and provision of equipment and materials (see Table 2-13).

 Table 2-13 Recent Examples of Technical Cooperation Projects on Disaster Reduction

			Occupation ( Topcols on Dipaster ( Cadabier)
	1991-1997	Mexico-Japan Earthquake Disaster Prevention Center	Joint research on earthquake disaster prevention technologies, development and implementation of research projects, more information provided on earthquake disaster prevention technologies
Мехісо	19972-001	Earthquake-Resistant Design and Construction of Structures	After completion of the former project, new cooperation was requested by CENAPRED, as well as technical transfer in the field of earthquake resistance due the fact that earthquake engineering was also desired in neighboring countries.
Turkey	1993–2000	Earthquake Disaster Prevention Research Center in Turkey	Data measurement and research to acquire seismic data and predict damage at Earthquake Data Collection and Vulnerability Evaluation Subcenter, Ankara (EDCVE), and research on the design of earthquake-resistant homes and structures at the Earthquake Data Collection and Vulnerability Evaluation Subcenter, Ankara (EDCVE).
Nepal	1991–1999	The Water Induced Disaster Prevention Technical Center Project	Construction of regional disaster prevention and recovery models, a disaster prevention network for related agencies, and increased awareness of disaster prevention.
Тчераг	1999–2004	Disaster Mitigation Support Programme Project	Development and application of disaster prevention methodology specific to Nepal, promotion of resident-participation disaster prevention activities, education, and training.
	1992–1997	Project Manager in the Sabo Technical Center	Training of erosion prevention technicians, development of erosion prevention technologies specific to Indonesia.
	19931995	Forestation Technology Support Plan for South Sulawesi	Transfer of forestry technologies, development and improvement of forestation technologies, training of technicians for these disciplines
Indonesia	1996–2001	Forest Fire Prevention Management Project	Monitoring of forest fires using satellite data, proposed improvements for forest fire early response system, support for information on forest fire prevention, proposed resident-participation forest fire prevention methods using forest management technologies.
	2001–2006	Integrated Sediment Disaster Management Project for Volcanic Area	Creation of guidelines to prevent natural disasters with the cooperation of residents, NGOs and onsite consultants, education in disaster prevention for residents and schoolteachers.

Note: Compiled by ADRC based on information from the Ministry of Foreign Affairs of Japan

**Table 2-13** Recent Examples of Technical Cooperation Projects on Disaster Reduction (continued)

	1989–1994	Watershed Management Training Project on the Loess Plateau Aftercare	Development and improvement of technologies for halting erosion and recovering wastelands. The project contributed to flood plain management in the Loess (Huangtu) Plateau.
	1993-2000	The Pilot Scheme for Technological Development on River Information System Project	Development of river management and flood prediction systems, network improvements, database creation for flood and water damage reduction
China	1997–2002	Project for the Beijing municipal education and training center for fire fighting and prevention	Dispatch of fire prevention specialists, provision of materials needed for researchers, contribution to the improvement of fire prevention technologies in Beijing. (See evaluation online at http://www.jica.go.jp/evaluation/end/files/13_1_13.html.)
	2000–2005	Human Resource Development Project for Water Resources, P.R.C	Cooperative efforts to improve the training system at the Personnel Labor Education, Ministry of Water Resource for topics on water resource management, construction management, erosion and training management.
Philippines	1999–2003	Establishment of Flood Control and Sabo Engineering Centre in the Philippines	Established a technological baseline and conducted training as a means to improve the level of technology to enable the appropriate construction and maintenance of flood control and erosion prevention projects. (See evaluation online at www.jica.go.jp/evaluation/end/files/14 1_66 html.)
Barbados	2002–2005	Caribbean Disaster Management Project	Formulation of a hazard map and disaster prevention plans for its use.
Romania	2002-2007	The Reduction of Seismic Risk for Buildings and Structures	Development of low-cost seismic retrofitting technologies to reduce structural collapse during earthquakes, revision of building standards, and support for awareness to reduce earthquake disasters.

Note: Compiled by ADRC based on information from the Ministry of Foreign Affairs of Japan.

# (d) Development Survey Projects

To contribute to the promotion of development plans in developing countries, Japan conducts various disaster reduction projects including the implementation of feasibility surveys and formulation of basic plans within development survey projects.

# (e) International Emergency Assistance

When a massive natural disaster occurs overseas, international emergency relief, including the dispatch of Japan Disaster Relief (JDR) teams and/or emergency relief supplies, is provided in response to a request from the country affected.

The Foreign Minister, at the request of an affected country, will review the content of the request, the scale of the disaster, the type and amount of relief needed, and other information, and will determine the support to be extended in consultation with the Ministry of Finance Discussions are then held with the relevant ministries to seek cooperation for dispatching relief teams according to the assistance to be provided.

JDR teams include rescue teams, medical teams, expert teams and Self-Defense Force units, alone or in combination, depending on the request made by the affected country and the type and scale of the natural disaster that has occurred (Tables 2-14, 2-15).

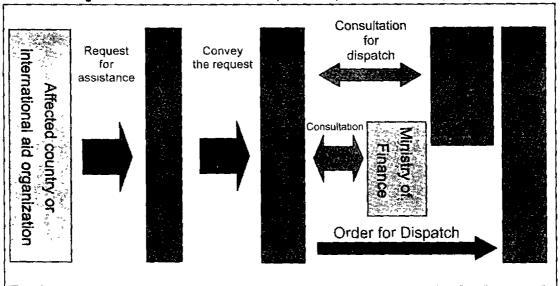


Figure 2-4 Decision Process for Dispatch of Japan Disaster Relief (JDR) Teams

Table 2-14 Past Dispatch of JDR Teams and Provision of Emergency Relief Supplies (1)

	TABIC Z-14 1830	Dispaton of COT It		Tor Emergency Ner	ior ouppiloo (1)
- ALER					
		general and the state of the st			
1987	3	The result state of the state o		2	
1988	12	4	-	2	
1989	7	2	· -	-	
1990	14	2	2	3	
1991	19	7	1	1	
1992	19	1	-	2	-
1993	18	1	1	1	-
1994	14	-	-	1	
1995	16	-	-	1	
1996	24	1	1	<del>-</del>	-
1997	19	-	<u>-</u>	4	-
1998	30	4	1	1	1
1999	22	5	2	3	(1)
2000	11	3	-	-	1
2001	9	-			
2002	22	-	-	2	-
2003	15	2	2	22	(1)
Total	274	32	10	25	2 (2)

Note: Compiled by ADRC based on information from JICA. Figures subsequent to the enactment of the Law Concerning the Dispatch of Japan Disaster Relief Team

Table 2-15 Details of Past Dispatch of JDR Teams and Provision of Emergency Relief Supplies (2)

	a sa Mainte Maria de la Carlo de la Car Maria de la Carlo de la Ca				
	Iran	Earthquake	June 2002	Provision of emergency relief supplies	
i	Micronesia	Earthquake	June, July 2002	Provision of emergency relief supplies	
] [	Peru	Storm	July 2002	Provision of emergency relief supplies	
	Nepal	Flood	July 2002	Provision of emergency relief supplies	
<u> </u>	Tajikıstan	Landslide	August 2002	Provision of emergency relief supplies	
}	Papua New Guinea	Volcanic eruption	August 2002	Provision of emergency relief supplies	
]	The Czech Republic	Flood	August 2002	Provision of emergency relief supplies	
	Republic of Korea	Water Damage	August 2002	Provision of emergency relief supplies	
<u> </u>	Burma	Flood	August 2002	Provision of emergency relief supplies	
	Papua New Guinea	Earthquake	September 2002	Provision of emergency relief supplies	
2002				8/25-9/3 (5-person expert team)	
[ [	Albania	Flood	September 2002	Provision of emergency relief supplies	
i i	Ecuador	Volcanic eruption	November 2002	Provision of emergency relief supplies	
; ļ	Morocco	Flood	November 2002	Provision of emergency relief supplies	
ļ	Guam	Typhoon	December 2002	Provision of emergency relief supplies	
i l	Solomon Islands	Cyclone	December 2002	Provision of emergency relief supplies	
] ,	Mexico	Earthquake	January 2003	Provision of emergency relief supplies	
] 1	Malawi	Floed	January 2003	Provision of emergency relief supplies	
1	Peru	Flood	January 2003	Provision of emergency relief supplies	
] '	Madagascar	Flood	January 2003	Provision of emergency relief supplies	
L	China	Earthquake	February 2003	Provision of emergency relief supplies	
	Argentina	Flood	April 2003	Provision of emergency relief supplies	
}	Kenya	Flood	April 2003	Provision of emergency relief supplies	
•	Madagascar	Storm	May 2003	Provision of emergency relief supplies	
	Sri Lanka	Flood	May 2003	Provision of emergency relief supplies	
·	Algeria	Earthquake	May 2003	Dispatch of JDR Team	
				5/22-5/29 (61-person rescue team)	
			[	5/25-6/7 (22-person medical team)	
	L	<u> </u>		6/12-6/19 (7-person expert team)	
[	Pakistan	Flood	July 2003	Provision of emergency relief supplies	
2003	Republic of Korea	Typhoon	September 2003	Provision of emergency relief supplies	
	The Philippines	Landslides, etc,	December 2003	Provision of emergency relief supplies	
{ ;	Iran	Earthquake	December 2003	Provision of emergency relief supplies	
]		}	ļ	Dispatch of JDR Team	
		1	<b>{</b>	Dispatch of JDR Team (Japan Air	
<u> </u>			†	Self-Defense Force Units)	
				12/28-1/11 (23-person medical team)	
	Могоссо	Earthquake	February 2004	Provision of emergency relief supplies	
}		ĺ	†	Dispatch of JDR Team	
L		<u> </u>	<u> </u>	2/25-3/1 (23-person rescue team)	

Note Compiled by ADRC based on information from the Overseas Disaster Assistance Division, Economic Cooperation Bureau, and the Ministry of Foreign Affairs of Japan. Excludes vaccination efforts.

Japan also provides emergency relief supplies, including blankets, tents, water purifiers, water tanks, generators, medical supplies and medicines for the victims of natural disasters. To enable swift, sure provision of these materials to the areas affected, storehouses of such materials are located in Singapore, London and Miami.

After the February 2003 earthquake in China's Xinjiang Uygur Autonomous Region, emergency grants totaling US\$150,000 were provided, and a total of ¥12.7 million (approx. US\$117,600) worth of materials (including 40 tents, 1,200 blankets, three water tanks, five generators and five cord reels) was sent, for a total emergency aid package of roughly ¥30 million (approx. US\$277,700).

Following the flood disaster in May of 2003 in Sri Lanka, roughly ¥19.8 million (approx. US\$ 183,300) was provided for relief supplies (tents, plastic sheeting, water tanks, generators, etc.), and US\$100,000 was offered in emergency grants.

After the earthquake that struck Algeria in May 2003, a Japan Disaster Relief (JDR) rescue team, medical team, and expert team were dispatched in order to assess the seismic resistance of buildings. The rescue team found one survivor in the rubble in Zemmouri, Boumerdes Province in Algeria.

#### II. Grant Aid

Grant aid is financial assistance that imposes no repayment obligation on the recipient country (developing country). Grant aid consists of grants to developing countries and is offered primarily as a means of purchasing the materials that are needed once the details of a natural disaster are known, as rapidly as possible. Grant aid is also made available for development and improvement of facilities and equipment for disaster reduction and recovery.

The total amount of aid offered for disaster reduction in FY2002 was approximately ¥29.7 billion (approx. US\$ 275,000,000), which was mainly allocated to general projects and food assistance. Japan has also provided ¥5.1 billion (approx. US\$ 47,222,200) in support for increased food production as a means of indirectly reducing the social and economic impact of disasters by helping to increase the food supply.

#### III. Loan Aid

Loan aid (yen loans) is used to lend development funds to developing countries under

relaxed long-term, low-interest conditions Loan aid for disaster reduction is used primarily for flood control, seismic retrofitting projects, and so on.

Results in the field of disaster reduction to date have been seen consistently in the Philippines and Indonesia, where flood control efforts have been effective. In addition, both China and Brazil have been offered a relatively large amount of support for flood control efforts. International yen loans agreed with Turkey in FY2002 are being used to reinforce three large bridges in Istanbul against a possible major earthquake in the near future (Table 2-16).

Table 2-16 Status of International Yen Loans for Disaster Reduction

(unit: ¥ million)

FY	Argentina	Indonesia	Sri Lanka	China	Tunisia	Turkey	Pakistan	Brazil	Philippines	Mauritius	TOTAL
1989	0	7,574	0	0	0	0	0	0	9,088	0	16,662
1990	0	12,562	0	0	0	0	0	0	0	0	12,562
1991	0	7,043	0	0	0	0	8,230	0	0	0	15,273
1992	0	0	0	0	0	0	0	0	0	0	0
1993	0	3,165	0	0	0	0	0	0	0	0	3,165
1994	8,150	0	0	0	0	0	0	0	0	2,922	11,072
1995	0	25,561	0	0	0	0	0	49,427	15,223	0	90,211
1996	0	9,506	0	0	0	0	0	0	17,390	0	26,896
1997	0	31,745	0	0	3,130	0	0	0	0	0	34,875
1998	0	0	0	6,436	0	0	0	0	10,567	0	17,003
1999	0	0	0	48,000	0	0	0	0	10,180	0	58,180
2000	0	0	0	0	0	0	0	0	8,929	0	8,929
2001	0	0	6,906	0	0	0	0	0	25,244	0	32,150
2002	0	0	0	0	0	12.022	0	0	0	0	12.022
Total	8,150	97,156	6,906	54,436	3,130	12,022	8,230	49,427	96,621	2,922	339,000

Note: Compiled by ADRC based on information from the Ministry of Foreign Affairs of Japan.

#### (4) Partnerships with Countries and Organizations

During the Third World Water Forum held in Japan in March 2003, the Ministry of Land, Infrastructure and Transport, aiming to reduce the increasing damage from flood worldwide, established the International Flood Network (IFNet). This network brings together different countries and related organizations for the purpose of raising international awareness of the need for information sharing on flood-related topics and efforts to address flood problems. It also engages in activities to increase public awareness of the hazards of flood.

A new project developed by the International Flood Network to reduce the damage from flood promotes the construction of a system (Global Flood Alert System) that uses satellites to collect and analyze data on rainfall volumes for the world's rivers in real time, automatically predict floods, and provide support for flood control and warning systems in each country. This system makes it possible for developing countries that lack water level telemetry equipment to produce flood warnings. Much is hoped from this project in terms of future achievements.

#### 2-4 United Nations World Conference on Disaster Reduction

a. Each year approximately 200 million people are affected by natural disasters around the world, 60,000 of whom lose their lives. The cost of these disasters is upwards of US\$37 billion (see Figure 1-1).

Of particular concern are victims in the developing countries, as approximately 80% of disaster-related deaths occur in low-income countries. In addition, in some cases a single natural disaster can consume more than half of a single country's annual GDP, thereby making natural disasters a major impediment to economic development in these countries.

b. Given these conditions, and under a Japanese initiative, the 1990s was identified as the International Decade of Natural Disaster Reduction (IDNDR) The world's first conference on disaster reduction, the UN World Conference on Natural Disaster Reduction, was held in Yokohama in May 1994. The result of the Yokohama Conference was the adoption of the Yokohama Strategy.

The Yokohama Strategy presupposes that (1) prevention, in addition to post-disaster response, is critical for dealing with natural disasters and (2) given the fundamental understanding that there is a need for a disaster reduction system on a global scale, action plans that increase disaster prevention at all levels, link development and disaster reduction efforts, and call for coordinated efforts by governments, the media, academia, businesses, NGOs, and other institutions are needed for the implementation of early warning and disaster reduction information systems.

c. Although the Yokohama Strategy stipulates several potential action options, there are no practical indications as to the media, methods, objectives, timing and monitoring methods needed. Thus, although it has been ten years since the Yokohama Strategy's

inception, it has yet to lead to any practical action on the part of any country.

d. To provide the momentum needed for each country to move forward with practical efforts, Japan proposed to the UN General Assembly that the UN World Conference on Disaster Reduction be held in Kobe on January 18 to 22, 2005, commemorating the 10th anniversary of the Great Hanshin-Awaji Earthquake (Kobe Earthquake).

This proposal was made jointly by 141 countries, including the U.S.A., Switzerland, and Australia, and it was unanimously accepted at the 58th General Assembly of the UN on December 23 (December 24, Japan time), 2003.

e. An important theme for this conference will be the discussion of future global directions, and the delineation of objectives as a means of promoting practical activities to reduce the number of natural disaster victums.

Furthermore, although natural disasters bring greater suffering to the people of the world than conflicts, they attract little attention on the part of policymakers and the mass media. Holding a global disaster reduction conference would serve to stimulate interest in the problems these disasters pose.

f. This conference will also give Japan an opportunity to communicate the means by which the number of typhoon victims has been dramatically reduced here, as well as the lessons learned from the Great Hanshin-Awaji Earthquake (Kobe Earthquake). This will allow Japan to make key contributions to the promotion of disaster reduction efforts in developing nations.

In addition, the conference will serve as a venue for introducing the advances made in Japan in the field of disaster reduction to the international community. It is important that Japan increases its perceived reliability as an international contributor to risk management and disaster measures.

## Reference 1: The Yokohama Strategy and Subsequent Involvement

# (1) The Yokohama Strategy

Although the content of the Yokohama Strategy is very complex, it contains the following key points.

I. It pointed out that unless countries can implement effective disaster management countermeasures (prevention measures) to reduce disaster-related damage, sustainable development will not be achieved.

Until then, the focus had been on emergency response subsequent to natural disasters, and there was insufficient involvement in prevention.

II. It pointed out the need for establishing disaster reduction systems in each country to bolster prevention countermeasures.

At the time, there were many countries, especially developing countries, with no government agency dedicated to disaster reduction. There was thus a need to establish a disaster reduction system at the national level that could not only provide emergency response, but also engage in disaster prevention activities on a regular basis.

The Strategy also pointed out the need to establish an international system of cooperation on disaster reduction efforts.

#### (2) Other Involvement

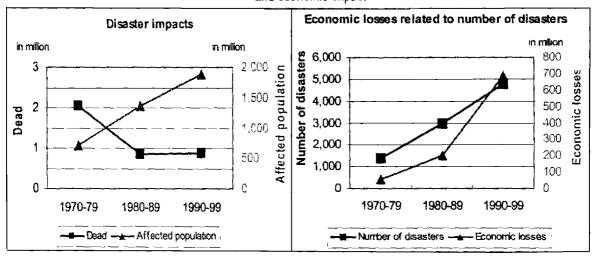
After the Yokohama Conference, countries began to confront the reduction of victums from natural disasters as a global issue, and to base their disaster response efforts on the Yokohama Strategy.

The establishment of disaster reduction systems included the establishment of disaster management agencies in each country and assistance systems at the regional level. Given the regional cooperation within Asia, ADRC was founded in 1998 at the initiative of Japan. In terms of disaster relief, the establishment of the UN-OCHA demonstrates that progress has been made. However, damage from natural disasters in the 1990s, compared with data from the 1970s and 1980s, shows that in spite of the decrease in fatalities, the number of disasters, number of people affected, and economic impacts are all increasing rapidly (see

the figures below).

According to the UN-ISDR, the cause of this trend lies in the increased residential use of flood plains and landslide areas that has accompanied increasing urbanization. This is increasing social vulnerability. Most development activities, rather than reducing risks, increase vulnerability to hazards, and it is therefore necessary to further broaden and strengthen disaster reduction activities.

**Figure:** Trends in the numbers of natural disasters and the resulting fatalities, number of people affected, and economic impact



Source: "Living with Risk -A global review of disaster reduction initiatives", UN-ISDR

Reference 2: Living with Risk - A global review of disaster reduction initiatives

At the 2001 UN General Assembly it was resolved that a review of the Yokohama Strategy be carried out.

The ISDR Secretariat, with support from the government of Japan, compiled the first comprehensive review of these issues in an UN report on global disaster reduction entitled Living with Risk: A Global Review of Disaster Reduction Initiatives in August 2002 In addition to analyses of a variety of examples, Living with Risk offers a conceptual understanding of the practical implementation of the Yokohama Strategy, and establishes natural and social conditions that need to be fulfilled for governments to produce visible results, along with policies to achieve them. It also provides common standards for evaluating those results.

(The complete text of Living with Risk can be found at http://www.unisdr.org.)

## Reference 3: Overview of the World Conference on Disaster Reduction

- (1) Name: World Conference on Disaster Reduction (WCDR)
- (2) Dates: January 18 (Tues.) to 22 (Sat.), 2005
- (3) Venue: Kobe, JAPAN
- (4) Participating Organizations: UN member states, UN agencies, relevant international organizations, NGOs, academic societies, private sector, etc.

#### (5) Objectives of WCDR

The UN General Assembly adopted resolution A/RES/58/214 on 23 December 2003, stating the Conference objectives as follows:

- a. To conclude and report on the review of the Yokohama Strategy and its Plan of Action, with a view to updating the guiding framework on disaster reduction for the twenty-first century;
- b. To identify specific activities aimed at ensuring the implementation of relevant provisions of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development<sup>1</sup> on vulnerability, risk assessment and disaster management;
- c. To share best practices and lessons learned to further disaster reduction within the context of attaining sustainable development, and to identify gaps and challenges;
- d. To increase awareness of the importance of disaster reduction policies, thereby facilitating and promoting the implementation of those policies;
- e. To increase the reliability and availability of appropriate disaster-related information to the public and disaster management agencies in all regions, as set out in relevant provisions of the Johannesburg Plan of Implementation.

# (6) Format of the Conference

The Conference will be organized around three main processes.

<sup>&</sup>lt;sup>1</sup> Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26
August-4 September 2002 (United Nations publication, Sales No. E.03.II A.1 and corrigendum), chap. I, resolution 2, annex.

- a. Intergovernmental process to engage the attention and participation of national and international authorities to formulate and ensure the adoption of expected outcomes, as guided by the UN General Assembly and to be discussed with the Bureau (comprising five UN member states) during the Preparatory Committees.
- b. Knowledge exchange (technical and policy developments): A number of parallel events on specific thematic issues and good practices, organized by sponsoring and participating organizations (international, regional, sub-regional, national, local, governments, NGOs, academic, private sector) in the form of:
- Panels and roundtables (as appropriate with ministers, parliamentarians, mayors, business and community leaders, heads of UN agencies and other organizations)
- · Poster sessions
- Workshops/seminars/symposia (key technical and scientific experts and local/community practitioners)
- · Field visits
- c. Public participation promoting awareness to the wider public: Activities to be carried out in the preparatory phase, during and as a follow up to the Conference, to be organized by Hyogo Prefecture, Japanese institutions, other organizations, governments, academic institutions, UN public information services and the ISDR Secretariat
- Public forums (e.g. open debates)
- · Japanese public events (e.g. involving schools)
- · Media events, coverage and campaigns
- Public exhibition open to the general public (particularly school and university students) and Conference participants

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