

2 Formation of a Network for Sharing Information on Natural Disasters and Disaster Reduction

2-1 Formation of a Human Network

At the ADRC, we strive to establish a human network, which is the basic element in network formation from the viewpoint of the availability of common information on disasters in the Asian region.

2-1-1 International Conferences

With the belief that the formation of a human network with counterpart member nations, advisory nations, and observers is indispensable in the promotion of cooperation in disaster management in the Asian region, we held the second international meeting in Kobe in December 1999, during the fiscal year to follow the first one held in February. Vice-ministers, heads of bureaus and departments, and other high-level officers in charge of disaster management from various countries came together to actively exchange their opinions. (Tables 2-1-1-1, 2-1-1-2, 2-1-1-3, 2-1-1-4).

Such relationships between people are expected to lead to the prompt and effective gathering of information in the future.

✿ Table 2-1-1-1 Member countries
 Classification: (1)Supervisor (2)Contact person (3)Attended 1st Intl. Expert Meeting (4)Attended 2nd Intl. Expert Meeting
 <The titles of the participants of (3), (4) are as of the time of participation.>

Country	Classify	Name	Titles
Bangladesh	(1)	Mr. Azad Ruhul Amin	Secretary, Ministry of Disaster Management and Relief, Bangladesh Secretariat, Dhaka
	(2)(3)(4)	Mr. Mohammad Shamsul Islam	Director General Directorate of Relief & Rehabilitation, Government of People's Republic of Bangladesh
Cambodia	(1)	Dr. Uy Sam Ath	Director, Disaster Management Dept., Cambodian Red Cross
	(3)	Mr. Ouk Damry	First Vice President, Cambodian Red Cross
	(4)	Mr. Samy Peou	Secretary General, National Committee on Disaster Management
China	(1)(4)	Mr. Liugen Xu	Director-General, Department of International Cooperation, Ministry of Civil Affairs
India	(1)	Mr. Bhagat Singh	Additional Secretary & Central Relief Commissioner, Ministry of Agriculture
	(2)(3)	Mr. Anil Kumar Sinha	Joint Secretary & Additional Central Relief Commissioner, Natural Disaster Management, Dept. of Agriculture & Cooperation, Ministry of Agriculture
	(4)	Mr. U.S. Tandon	Counselor, Science & Technology, Embassy of India
Indonesia	(1)	Mr. H.B.Burhanudin	Assistant Disaster Management, Coordinator Ministry for People's Welfare and Poverty Alleviation
	(2)(4)	Mr. Budi Atmadi Adiputro	Ir., Disaster Management Division, Office of the Ministry for People's Welfare and Poverty Alleviation
	(2)	Mr. Adang Setiana	Coordinator Ministry for People's Welfare and Poverty Alleviation
Indonesia	(3)	Mr. Aunur Rofiq Hadi	Director of Technology Policy for Regional Development, Agency for the Assessment and Application of Technology, Ministry for Research and Technology
Japan	(1)	Mr. Osato Ikuta	Director-General, Disaster Prevention Bureau, National Land Agency
	(2)(4)	Mr. Toshiyasu Noda	Director, Disaster Prevention Coordination Division, Disaster Prevention Bureau, National Land Agency
	(3)	Mr. Shigemasa Kuromoto	Director, Disaster Prevention Coordination Division, Disaster Prevention Bureau, National Land Agency
	(3)	Mr. Hisashi Kidera	Councilor, Disaster Prevention Bureau, National Land Agency
	(3)	Mr. Yoshinobu Fukasawa	Senior Staff Member, Secretariat of the Headquarters for Reconstruction of the Hanshin-Awaji Area, Prime Minister's Office

	(4)	Mr. Isao Kubota	Administrative Vice-Minister, National Land Agency
	(4)	Mr. Masashi Tamura	Councilor, Disaster Prevention Bureau, National Land Agency
Kazakhstan	(1)(4)	Mr. Alexander Kravchuk	Director, Department for Emergency Prevention, Emergency Agency
	(2)	Mr. Nurlan Panzabekov	Head, International Cooperation Office, Emergency Committee
	(4)	Mr. Shalbay Kulmakhanov	Chairman, Emergency Agency
Lao PDR	(1)	Mr. Soukata Vichit	Director General, Department of Environmental Quality Development and Promotion, Science Technology and Environment Organization (STENO)
	(2)(3)(4)	Mr. Sitha Phouyavong	Acting Director-General of Cabinet, Science Technology and Environment Agency
Malaysia	(1)(3)	Mr. Mohamad bin Haji Yaakub	Director, Crisis and Disaster Management Unit, National Security Division, Prime Minister's Department
	(2)(4)	Mr. Abdul Khadir Othman	Deputy Director, Crisis and Disaster Management Unit, Division of National Security, Prime Minister's Department
Mongolia	(1)(4)	Mr. D. Enkhbold	Officer, Department of Strategic Management and Planning, Ministry for Nature and the Environment
	(2)	Mr. T. Enebish	Director, Department of Strategic Management and Planning, Ministry for Nature and the Environment
	(3)	Mr. Bandi Ganbaatar	Director, International Cooperation Department, Ministry of Nature and the Environment
Myanmar	(1)	Colonel Myint Htun	Director General, Fire Services Department (H.Q), Ministry of Social Welfare, Relief and Resettlement
	(2)	Mr. U Zaw Win	Director, Fire Services Department (H.Q), Ministry of Social Welfare, Relief and Resettlement
Nepal	(1)	Mr. Kul Chandra Shrestha	Joint Secretary, Disaster Relief Section, Ministry of Home Affairs
	(2)(3)(4)	Dr. Meen Bahadur Poudyal Chhetri	Under Secretary, Disaster Relief Section, Ministry of Home Affairs
Papua New Guinea	(1)	Mr. Collin Travertz	Secretary, National Disaster and Emergency Services, Dept. of Provincial and Local Level Government
	(2)(3)(4)	Mr. Ludwick Kembu QPM	Director General, Department of Provincial and Local Level Government, National Disaster and Emergency Services
Philippines	(1)	Mr. Jaime E. Manalad	Regional Director, Office of Civil Defense, Department of National Defense
	(2)(3)	Dr. Melgabal Sta.Barbara Capistrano	Administrator, Office of Civil Defense, Department of National Defense
	(4)	Ms. Priscilla Duque	Director I , Office of Civil Defense, Department of National Defense
Korea	(1)	Mr. Sung-Duck Park	Director-General, Disaster Prevention and Preparedness Bureau, Ministry of Government Administration and Home Affairs
	(2)	Mr. Hyun-Deok Kim	Director, Disaster Prevention Planning Division, Disaster Prevention and Preparedness Bureau, Ministry of Government Administration and Home Affairs
	(3)	Dr. Dugkeun Park	Project Manager, National Institute for Disaster Prevention, Ministry of Government Administration and Home Affairs
	(3)(4)	Mr. Ki-Sung Bang	Director, Disaster Preparedness Division, Ministry of Government Administration and Home Affairs
	(4)	Mr. Jong Su Kim	Deputy Director, Disaster Preparedness Division, Ministry of Government Administration and Home Affairs
Russia	(1)	Mr. Yury Brajnikov	Chief, Dept. Of International Cooperation, EMERCOM of Russia
	(2)(3)	Dr. Vladimir Kuvshinov	Deputy Chief of Desk, Dept. of International Cooperation, EMERCOM of Russia

	(4)	Ms. Svetlana Bandurkina	Senior Expert, International Department, EMERCOM of Russia
Singapore	(1)	Mr. Comr James Tan Chan Seng	Commissioner, Singapore Civil Defence Force, Ministry of Home Affairs
	(2)(3)	Mr. Tham Sek Khaw Philip	Head Planning Branch, Singapore Civil Defence Force, Ministry of Home Affairs
	(3)	Mr. Anbalagan Thangarajah	Deputy Head Joint Emergency Planning (EP), Ministry of Home Affairs
	(4)	LTC-Muthu Subramaniam Ramasamy Puniamorthy	Head Operations Department, Ministry of Home Affairs, Singapore Civil Defence Force
	(4)	CPT-Yap Kok Boon	Officer-in-Command, Alexandra Fire Station, Ministry of Home Affairs Singapore Civil Defence Force
Sri Lanka	(1)	Mr. Amara Hewamadduma	Secretary, Ministry of Social Services
	(2)(4)	Mr. W.B.J. Fernando	Director, National Disaster Management Centre, Ministry of Social Services
	(3)	Mrs. Vijeyalakshmy Jegarasasingam	Additional Secretary, Ministry of Social Services
Tajikistan	(1)	Mr. Bobogado Boltaev	Chief, State Emergency Committee
	(2)(3)	Mr. Bahrom Mamadaliev	Head, Dept. of the Territory and Population Protection, State Emergency Committee
	(4)	Mr. Abdurakhim Radjabov	First Deputy Minister, Ministry for Emergency Situation of the Republic of Tajikistan
	(4)	Ms. Louise Khadzieva	Interpreter/Assistant, Ministry for Emergency Situation of the Republic of Tajikistan
Thailand	(1)	Mr. Pramuan Ruchanaseree	Director-General, Local Administration Dept., Ministry of Interior
	(2)(3)(4)	Mr. Chainarong Vasanasomsithi	Chief of Planning Section, Civil Defence Division, the Department of Local Administration, The Ministry Interior
	(3)	Mr. Pricha Rakskhid	Deputy Director-General, Dept. of Local Administration, Ministry of Interior
	(4)	Mr. Suwat Promsuwan	Deputy Director of Civil Defence Division, The Department of Local Administration, The Ministry of Interior
Uzbekistan	(1)	Mr. Sosnovsky Valentin Olegovich	Leader, Dept. Of Emergency Situation, Cabinet Ministry
	(2)(3)	Mr. Abdullaev Zafar Azizovich	Chief of Staff, Secretariat of the Dept. of Emergency Situation, Cabinet Ministry
	(4)	Mr. Sharaf Kochkarov	First Secretary, Embassy of the Republic of Uzbekistan
Viet Nam	(1)	Mr. Nguyen Sy Nuol	Deputy Director, Standing Office of the Central Committee, for Flood and Storm Control, Dept. of Dike Management & Flood & Storm Control, Ministry of Agriculture and Rural Development
	(2)	Mr. Nguyen Huu Phuc	Deputy Director, Disaster Management Center, Dept. of Dike Management & Flood & Storm Control, Ministry of Agriculture and Rural Development
	(3)	Mr. Nguyen Ngoc Dong	Director, Disaster Management Center, Dept. of Dike Management & Flood Control, Ministry of Agriculture and Rural Development
	(3)	Mr. Hoang Thanh Tung	Disaster Information Engineer, Dept. of Dike Management & Flood Control, Ministry of Agriculture and Rural Development
	(3)	Mrs. Bui Thi Bich	Division Head of Flood and Storm Control, Dept. of Dike Management & Flood Control, Ministry of Agriculture and Rural Development
	(3)	Mrs. Nguyen Thi Tuyet Hoa	Legislation Expert in charge of Disaster Management, Dept. of International Cooperation, Ministry of Agriculture and Rural Development
	(4)	Mr. Tinh Dang Quang	Deputy Director, Department of Dike Management & Flood Control, Standing Office for Flood & Typhoon Committee
	(4)	Mr. Ban Le Huu	Deputy Director, Department of Dyke Management &

✿ Table 2-1-1-2 Advisory Countries
Classification: (1)Supervisor (2)Contact person (3)Attended 1st Intl. Expert Meeting
(4)Attended 2nd Intl. Expert Meeting

Country	Classify	Name	Titles
Australia	(1)	Mr. Alan Hodges	Director General, Emergency Management Australia
	(2)(3)	Mr. Rod McKinnon	Director, Policy, Planning and Coordination, Emergency Management Australia
France	(1)	Mr. Didier Montchamp	Directeur de Cabinet, Direction de la Securite Civile, Ministere de l'Interieur
	(2)	Mr. Michel F, Morin	Directeur, Direction de la Defense et de la Securite Civiles, Ministere de l'Interieur
	(4)	Mr. Alain Nahoum	Consul General de France a Osaka et Kobe
	(4)	Mr. Jean Blattes	Consul de France a Osaka et Kobe
New Zealand	(1)	Mr. John Norton	Director, Emergency Management and Civil Defence, Office of Emergency Management & Civil Defence
	(2)(4)	Dr. Neil Britton	Manager, Sector Development and Education, Office of Emergency Management & Civil Defence
Switzerland	(1)	Mr. Beat Kuenzi	Program co-ordinator MS geologist, Humanitarian Aid and Swiss Disaster Relief
	(3)	Dr. Dieter Wepf	Chief Security Officer, Representative SDR, Division of Humanitarian Aid and Swiss Disaster Relief Unit
	(4)	Mr. Thomas Wenk	Dipl. Bau-Ing. ETH, Swiss Agency for Development and Cooperation, Humanitarian Aid and Swiss Disaster Relief Unit
	(4)	Mr. Daniel Aviolat	Consul General de Swiss

✿ Table 2-1-1-3 Observer
Classification: (1)Supervisor (2)Contact person (3)Attended 1st Intl. Expert Meeting
(4)Attended 2nd Intl. Expert Meeting

Country	Classify	Name	Titles
ADPC	(1)	Dr. Suvit Yodmani	Executive Director, Asian Disaster Preparedness Center
	(2)	Mr. David Hollister	Acting Director and Senior Manager, Asian Urban Disaster Mitigation Program, Asian Disaster Preparedness Center
	(3)	Prof.Dr. Krasae Chanawongse	Chairman, Board of Trustees, ADPC Foundation
	(3)	Mr. Aloysius J. Rego	Acting Director & Senior Manager, Learning and Professional Development Unit, Asian Disaster Preparedness Center
	(4)	Mr. Kamal Kishore	Senior Manager, Information and Research Program, Asian Disaster Preparedness Center

✿ Table 2-1-1-4 International Organizations

<The titles of the participants of (3), (4) are as of the time of participation.>

	Classify	Name	Titles
Worldbank	(4)	Dr. William Anderson	Senior Advisor, Disaster Management Facility, World Bank
UNCHS (Habitat)	(4)	Mr. Disa Weerapana	Deputy Director, UNCHS(Habitat) Fukuoka Office
UNOCHA	(4)	Ms. Sabine Metzner-Strack	Senior Humanitarian Affairs Officer, Office for the Coordination of Humanitarian Affairs(OCHA)

The second international conference is outlined in the following:

1) **Duration: December 6 (Monday) and 7 (Tuesday) 1999**

2) **Place: Asian Disaster Reduction Center**
(International Health Development Center Building: Chuo-ku, Kobe, Japan)

3) **Participants: Total of 65 persons, including 36 international experts of disaster reduction from 24 nations and 4 organizations (Table 2-1-1~4).**

4) **Outline of Conference**

At this conference, along with the themes on "Sharing Information on Natural Disasters and Disaster Reduction," "Cooperation on Disaster Prevention in Asia" and "Settlement of Common Issues at Disaster Areas", various activities ADRC has handled since its establishment were introduced, and future collaboration systems were further reinforced. In addition, sincere opinions were exchanged on various issues concerning the disaster prevention facilities in each country and the projects on which our Center should focus with other countries.

For the first time, it has become possible to promote the ADRC's collaborations on disaster management between multiple countries more actively, due to the participation of the United Nations Office for the Coordination of Humanitarian Affairs, the United Nations Centre for Human Settlements, and the World Bank.

5) **Results of Conference**

(1) Establishment of a cooperative system with international organizations

With regard to the promotion of the joint project against disaster in the Asian region by the ADRC and the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), it was the opinion of each member nation that the disaster management capabilities in each country could be reinforced by linking OCHA's disaster management know-how with ADRC's information network in the Asian region.

The World Bank gave an explanation of the "International Disaster Reduction Consortium" which will serve international organizations, control disasters with the cooperation of governments, NGO and scientific research organizations: ADRC was requested to join the consortium since we share a network with countries in the Asian region. Additionally, we will also be cooperating with the United Nations Centre for Human Settlements (HABITAT) in the preparation of residential regions that are resistant against disasters.

(2) Practical use of new technology for transmitting disaster prevention information

To further advance the existing disaster reduction information transmitting system using the Internet, we developed "VENTEN," a system that enables each country to access our Geographical Information System (GIS), which is useful for speedy understanding of disaster relief information via the Internet. This makes the use of geographical information possible without having to obtain expensive software or consider data compatibility problems, which were obstacles in introducing the geographical information system in the past. The GIS is scheduled to operate from April 2000, gathering the expectations of member countries for early introduction.

ADRC has grasped the comprehensive information of disasters that had occurred in this century in the Asian region, and has established a concrete cooperation system of participating countries towards the construction of the "Comprehensive Database on Asian Natural Disaster in the 20th Century", which will serve as an asset for fortifying disaster prevention in Asian countries in the next century. During its construction, we will be collaborating on data preparations and information transfer with the Center for Research on the Epidemiology of Disaster (CRED), Louvain Catholic University, Belgium, which is the only organization with a natural disaster database in the world.

(3) Promotion of international cooperation in the field of disaster reduction

Learning from the Tsunami disaster in Papua New Guinea that occurred in July 1998, ADRC and Papua New Guinea completed the preparation of material for disseminating information including Tsunami disaster control textbooks for primary and junior high school students. We have decided to provide the results to various countries with high Tsunami disaster incidences, including Indonesia and the Philippines.

The Asian countries requested the following from the ADRC. After deliberation, we have decided to consider each one, beginning in the year 2000.

*Technical support for disaster control information systems in Bangladesh, Papua New Guinea, Kazakhstan, Tajikistan

*Flood management system: Sri Lanka

*Early warning system: Cambodia

*Disaster assessment technology: Russian Federation

In order to solve the common issues at disaster areas that arose in major earthquakes such as Hanshin-Awaji, Turkey, and Taiwan, we plan to proceed with our investigations while cooperating with Asian countries. Specifically, we have agreed to share our emergency risk evaluation guidelines for buildings, and policies for cooperation with disaster area NGOs and overseas NGOs on our homepage.

Further cooperation between Hyogo Prefecture and the ADRC for the design and construction of the Hanshin-Awaji Earthquake Memorial Center in Hyogo Prefecture was met with much approval, as the lessons learnt from the earthquake are expected to be useful for international disaster relief cooperation.

(4) General summary

We will continue to hold regular meetings on reducing the damage done by natural disasters in the Asian region after 2000, even when the "10 years of international disaster reduction" have ended.

ADRC will continue to expand its network with the UN and related organizations in order to support the improvement of disaster prevention in the Asian region.

2-1-2 Receiving Visiting Researchers

Based on the agreement of member countries at the First Expert Meeting, ADRC has been receiving visiting researchers. So far, we have received 3 persons, and continuing into 2000, researchers from Sri Lanka and Bangladesh are scheduled to arrive.

We have visiting researchers understand the activities of the ADRC and work with them on projects. By planning tours of related organizations for the visiting researchers to enhance their experience and knowledge in their field of specialty, we believe that we can contribute to disaster reduction measures with each respective member. The following outlines our program for accepting visiting researchers.

1)Korea

Shim Kee-Oh

Title at the time of visit: Project Manager, Nation's Institute for Disaster Prevention (Drought control), Ministry of Government Administration and Home Affairs.

Duration: August to October 1999

Conducted research on drought control in Japan. In addition to the introduction of drought control in Korea, he has investigated and reported on recent drought disasters that hit Viet Nam and Papua New Guinea.

2)Viet Nam

Ngo van Sinh

Title at the time of visit: Water-related Disaster Management Specialist, Disaster Management Center, Committee for Flood and Storm Control, Department of Flood Management, Flood and Storm Control, Ministry of Agriculture and Rural Development of S.R. Viet Nam

Duration: December 1999 to March 2000

Apart from presenting information concerning the disaster reduction system and flood control in Viet Nam, he has studied flood measures in Japan while visiting related organizations. He researched under Professor Takara and Assistant Professor Toda, Disaster Reduction Institute, Kyoto University, in the area of water-related disasters.

3)Nepal

Lek Nath Pokharel

Title at the time of visit: Section Officer, Disaster Relief Section, Ministry of Home Affairs

Duration: January to May 2000

Apart from presenting information on the disaster relief system in Nepal, he has studied soil- and sand-related disasters in Japan while visiting the relevant organizations. He researched under Assistant Professor Nakagawa, Disaster Prevention Institute, Kyoto University.

He has also compiled a report on the collapse and flood management of the Tsho Rolpa Glacier Lake in the Himalayas and researched under Professor Ueda (cryospheric variation) at the Atmosphere-Hydrosphere Science Institute, Nagoya University

4)Sri Lanka (Scheduled to arrive)

Nimal Dharmasiri Hettiarachchi

Title at the time of visit: Deputy Director for Disaster Relief, Department of Social Services, Ministry of Home Affairs

Duration: April to October 2000

5)Bangladesh (Scheduled to arrive)

M. Babul Akhter

Title at the time of visit: Assistant Manager, Palli Karma Shayak Foundation, Treasury Department

Duration: May to November 2000

2-1-3 Joint Projects between UN.OCHA and ADRC

The mission of the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) is to mobilize and coordinate the international community and United Nations organizations, particularly to respond thoroughly and precisely to the needs of victims of disasters or urgent situations.

Recently, regional units have been set up in the South Pacific region (Suva, Fiji) and Latin America, Caribbean region (Quito, Ecuador) to facilitate appropriate countermeasures when disaster-prone countries are hit.

Alternately, since Asia is said to be the most disaster-prone region in the world, OCHA has been placing priority on considering the establishment of these units in the Asian region.

In July 1999, ADRC visits to OCHA in Geneva served a joint project between OCHA and ADRC, promoting the sharing of mutual disaster reduction information in order to contribute to disaster management and disaster mitigation in the Asian region. OCHA consequently set up an Asia Unit inside the ADRC and sent a disaster management regional advisor. The "Opening Ceremony for the Asia Unit (ADRU) of the United Nations Office for the Coordination of Humanitarian Affairs" was held on February 7, 2000.

This endeavor will further reinforce the networks of both sides as well as enable mutual use; it will allow ADRC to access information on various disaster measures accumulated at OCHA, and OCHA to employ ADRC's human network in the Asian region to collect information on disasters which have occurred in an Asian country far away from the headquarters, as well as to reinforce the conveyance system.

2-1-4 Cooperation with Other International Organizations

1) World Bank

With the participation of the World Bank as well as OCHA, it was decided at the Second International Meeting that ADRC would join the "International Disaster Reduction Consortium" to control disasters, which is led by the World Bank in collaboration with governments, international organizations, NGO's, and academic research organizations. On January 13, 2000, the ADRC attended the consultation meeting for the "ProVention Consortium" held at the Paris office of the World Bank, which resulted in the cooperation of the ADRC with the World Bank and member countries to support projects appropriate to the disaster prevention needs of members.

2) Centre for Research on the Epidemiology of Disaster, Louvain Catholic University, Brussels (CRED)

The ADRC and Centre for Research on the Epidemiology of Disaster, Louvain Catholic University, Brussels (CRED) agreed on the "MOA between CRED and ADRC on the collaboration of information and data on disasters, concerning cooperation in collecting disaster prevention information" on November 5, 1999. Its aim is to comprehensively track information on disasters which occurred in the Asian region in the past century, and to construct the "Comprehensive Database on Asian Natural Disasters in the 20th Century", which will serve as an asset for reinforcing disaster prevention in each Asian country in the next century. CRED is the only organization in the world with a general natural disaster database. The two parties will disseminate disaster information while sharing and supplementing the data.

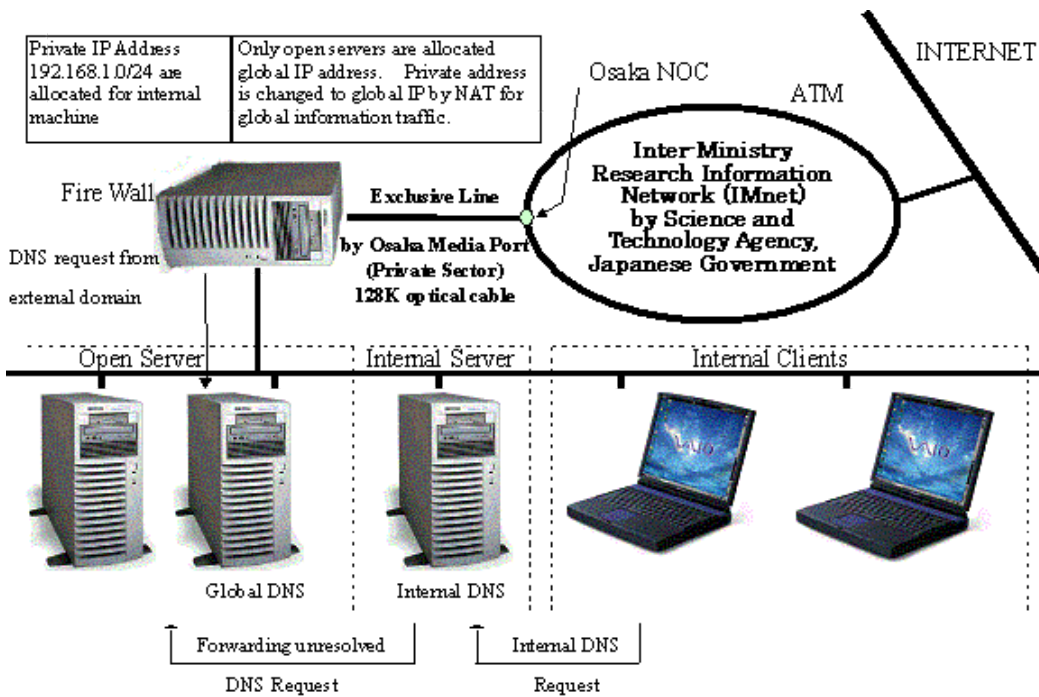
2-2 Formation of Network for Sharing Information on Natural Disasters and Disaster Reduction

2-2-1 Configuration of ADRC Network and Information Equipment

Fig. 2-2-1-1. shows the construction of the ADRC network and information equipment. The Internet is reached via the inter-ministry information network (IMnet) and private lines connected to the Osaka OCN IMnet access point. The IMnet promotes the flow of information required for studies carried out between national research centers, special foundations, and research organizations which conduct joint research projects with these organizations, to contribute to the sharing of research information infrastructures at these organizations and the international flow of research information. In consideration of security, the ADRC separates its network inside and outside the center, and installs a firewall in between. The intra-network is connected to the laptop computers of employees, and desktop PCs with various server functions. Each of these PCs is assigned a private IP address which is valid only inside the center. When a server inside the center is accessed, the built-in address converter function in the firewall converts it to the private address inside the center so that it can be sent to the server requested. The firewall converts global IP addresses to private IP addresses, as well as controls the passage of packets based on the rules that deal with protocol and the source and destination of packets. This enables minute restriction of accesses to the internal systems of the ADRC, as well as the monitoring of illegal accessing.

Peripheral equipment installed include backup devices such as CD-ROM, MO, and DAT; printer related equipment such as black-and-white laser printers, color laser printers, etc., and raster image readers such as flat head scanners, film scanners, etc.

Fig. 2-1-1-1 Configuration of ADRC Network and Information Equipment



2-2-2 ADRC Homepage

As shown in Fig. 2-2-2-1, the ADRC homepage provides information on the following: Latest Disaster Information, Disaster Reduction Specialist information, Great Handshin-Awaji Earthquake Information, Disaster Reduction Training Information, Member Country Report Information, Disaster Reduction Training Information, Disaster Reduction System Information, and Disaster Reduction Calendar Information (URL.https://www.adrc.asia). These seven subject areas are accumulated in the form of corresponding databases. When accessed through the Internet, the information is searched from the database, and sent in hypertext format to the user while referring to instructions on what color and layout the information should be displayed to the user. By adopting separate systems for the information and layout, etc., such as a database for information, and instructions for the layout, etc., the data administrator is released from complicated tasks such as layout settings. At the same time, layout can be changed freely and collectively according to user needs and progress of technological innovation. By providing two types of doors for the users according to information category through this data management method, directories for facilitating the access of information can be used.

As one example, "Latest Disaster Information" is described here. The purpose of this category is to provide the latest information on disasters currently occurring as soon as possible. Reports provided by the UN and WebSite of other media are picked up and summarized. The site also includes links to the original information. As shown in Fig. 2-2-2-2, this information is managed by two tables; a table by disaster and a table by report. Based on the information accumulated in this table, the information requested by the user (display the report of which disaster) is extracted, and a report is compiled according to the layout instructed.

Information can be updated remotely via the Internet as shown in Fig. 2-2-2-3. Currently, the latest information and disaster prevention calendar in the database are subject to remote updating considering the frequency and necessity of updating. "Topics" (latest news) and "Links" at the top page of the ADRC homepage can also be changed remotely. In the future, we are planning to apply the remote updating function to the whole database, and to improve the system for more accurate information service and prompt information updating upon careful consideration of security.

The data collection and registration operation for the "Latest Disaster Information" is run by ten center staff and graduate student part-time employees. They are assigned day and night shifts to collect information, in order to expedite the information collection and registration time when a disaster hits. During Taiwan's Chi-chi earthquake, despite the fact that the disaster occurred at midnight Japan time, we were able to register the first report just four hours later. For the next three days, the ADRC WebSite was accessed more than 4,700 times.

Fig. 2-2-2-2 Latest Disaster Prevention Information Database and Screen Layout

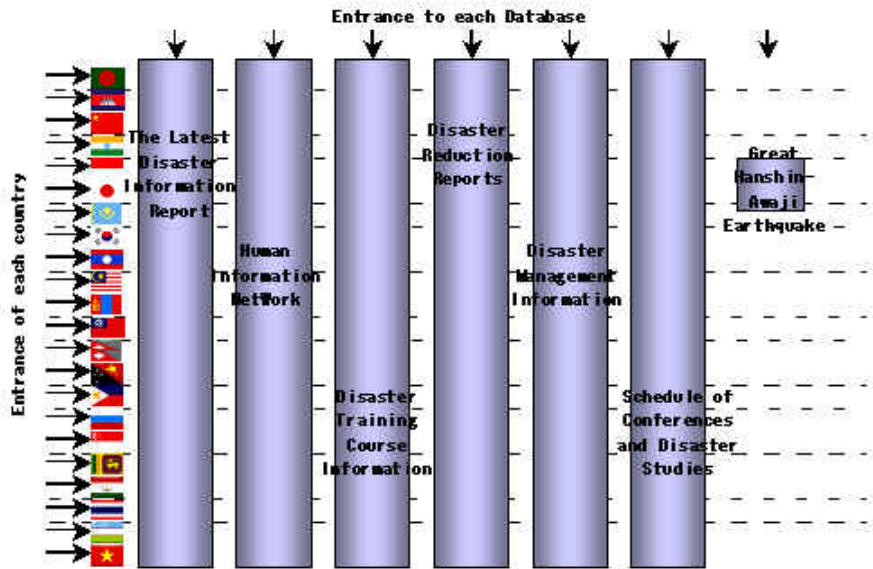


Fig. 2-2-2-3 Information Updating from Remote Areas Using the Internet

