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## 2. Building a Network for Sharing Information on Natural Disasters and Disaster Reduction

### 2-1. Formation of a Human Network

A network is needed to share information and people are a key component in network building. Therefore, at ADRC, we are devoting a lot of energy to finding and networking the human resources that will make it possible to share information on natural disasters and disaster reduction in Asia.

#### 2-1-1. ADRC International Meetings (Member Country's Meetings)

Since it is necessary to network human resources in order to promote disaster management cooperation in Asia, ADRC has held annual meetings of its member countries, advisor countries and observers since our inception. The first meeting was in February 1999, the second in December 1999 and the third in December 2000. The fourth was co-sponsored by the Indian government and, like those before it, brought vice-ministers, bureau chiefs, department heads and others under one roof to actively exchange thoughts and opinions. (Tables 2-1-1-1, 2-1-1-2, 2-1-1-3 and 2-1-1-4)

Through these contacts, we expect information gathering to become even swifter and more effective in the future.

**Table 2-1-1-1 Member Countries**

**Classification: Supervisor Contact person Attended 4<sup>th</sup> Intl. Meeting**

Country	Classification	Representative	Position
Armenia		Dr. Serguei Balassanian	President, National Survey for Seismic Protection, Government of the Republic of Armenia
		Simon PAPYAN	Vice-President, National Survey for Seismic Protection, Government of the Republic of Armenia
Bangladesh		Mr. BMM Muzharul Haque	Secretary, Ministry of Disaster Management and Relief, Bangladesh Secretariat, Dhaka
		Mr. A.S.M. Abdul Haque Chowdhury	Joint Secretary, Ministry of Disaster Management and Relief, Government of the People's Republic of Bangladesh
Cambodia		Mr. Samy Peou	Secretary General, National Committee for Disaster Management
China		Mr. FANG Zhiyong	Director Division of Disaster Reduction, Department of Disaster and Social Relief
		Ms. Mei CHAI	Director Section Two Department of Foreign Affairs Ministry of Civil Affairs

Country	Classification	Representative	Position
India		Ms. Bino Sen	Special Secretary and Central Relief Commissioner, Department of Agriculture & Cooperation, Ministry of Agriculture
		Mr. S. K. Swami	Director, Department of Agriculture & Cooperation, Ministry of Agriculture
		Mr. Ashok PRADHAN	Former Special Secretary and Central Relief Commissioner, Department of Agriculture & Cooperation, Ministry of Agriculture
		Mr. Naved MASOOD	Joint Secretary and Additional Central Relief Commissioner, Ministry of Agriculture
		Mr. Anil SINHA	Head, National Centre for Disaster Management
		Dr. V.K.SHARMA	Professor, National Centre for Disaster Management
		Mr. V.P.PASRIJA	Assistant Director, Department of Agriculture & Cooperation, Ministry of Agriculture
		Mr. OM PRAKASH	Technical Officer, Department of Agriculture & Cooperation, Ministry of Agriculture
		Mr. JANAKIRAMAN	Under Secretary, Department of Agriculture & Cooperation, Ministry of Agriculture
Indonesia		Mr. H.B.Burhanudin	Assistant Disaster Management, Coordinator Minister for People's Welfare and Poverty Alleviation
		Mr. Sugeng TRIUTOMO	Deputy Assistant, Emergency Response, National Disaster Management Coordinating Board (Bakoronas PBP)
Japan		Mr. Takefumi TAKAHASHI	Director-General for Disaster Management, Cabinet Office
		Mr. Toshiyasu Noda	Director for Disaster Preparedness, Cabinet Office
		Mr. Shigehiko OKUYAMA	Parliamentary Secretary, Cabinet Office
		Mr. Setsuo OHTSU	Executive Assistant to the Parliamentary Secretary, Cabinet Office
		Mr. Toshiaki KITAZATO	Councilor for Disaster Management, Cabinet Office
		Mr. Masaaki NAKAGAWA	Deputy Director, Disaster Reduction Bureau, Cabinet Office
		Mr. Kenji OKAZAKI	Director Building Reduction Office, Housing Bureau, Ministry of Land, Infrastructure and Transport

Country	Classification	Representative	Position
Japan		Mr. Yasushi SHIMOYAMA	Deputy Director, Disaster Risk Management Office, Disaster Reduction and Relief Division, River Bureau, Ministry of Land, Infrastructure and Transport
		Mr. Katsuo SASAHARA	Deputy Director, Sabo Planning Division, Sabo Department, River Bureau, Ministry of Land, Infrastructure and Transport
		Mr. Yasushi Taguchi	Director, Office of Disaster Reduction Research, Research and Development Bureau, Ministry of Education, Culture, Sports, Science and Technology
Kazakhstan		Mr. Nurahmet Bijanov	First Deputy of chairman, Emergency Agency
		Ms. Laura H.LUKPANOVA	Main Expert, International Cooperation Office, Emergency Agency
		Mr. Marat ASHIMBAYEV	Director of Institute, Kazakh State Scientific Project, Experimental Institute Aseismic Building & Architecture
Laos		Mr. Phetsavang SOUNNALATH	Director, National Disaster Management Office, Ministry of Labor & Social Welfare
		Mr. Vilaphong Sisomvang	Training Manager Department of Social Welfare, National Disaster Management Office
Malaysia		Mr. Mohamad bin Haji Yaakub	Director, Crisis and Disaster Management Unit, National Security Division, Prime Minister's Department
		Mr. Abdul Khadir Othman	Deputy Director, Crisis and Disaster Management Unit, Division of National Security, Prime Minister's Department
Mongolia		Dr. H. YKHANBAI	Director, Department of Strategic Management and Planning, Ministry for Nature and the Environment
		Mr. Namjildorj Nyamdorj	Officer, Department of Strategic Management and Planning, Ministry for Nature and the Environment
Myanmar		Colonel Myint Htun	Director General, Fire Services Department (H.Q), Ministry of Social Welfare, Relief and Resettlement
		Mr. U Zaw Win	Director, Fire Services Department (H.Q), Ministry of Social Welfare, Relief and Resettlement
Nepal		Mr. Kumar Prasad POUDYAL	Director General, Dept. of Narcotics control and Disaster Management, Ministry of Home Affairs
		Dr. Meen Bahadur Poudyal Chhetri	Director, Dept. of Narcotics control and Disaster Management, Ministry of Home Affairs
Papua New Guinea		Mr. Leo Meninga	Secretary, Chairman of National Disaster Committee, Dept. of Provincial and Local Government Affairs
		Mr. Kaigabu Kamnanaya	Assistant Director (Risk Management), National Disaster Management Office, Department of Provincial and Local Government Affairs
Philippines		Mr Melchor P Rosales	Administrator, Office of Civil Defense, Department of National Defense
		Col. Elma ALDEA	Civil Defense Deputy Administrator, Department of National Defense

Country	Classification	Representative	Position
Korea		Mr. Jong-Pal Lee	Director-General, Disaster Reduction and Preparedness Bureau, Ministry of Government Administration and Home Affairs
		Mr. Byung Rok Lee	Director, Disaster Reduction Planning Division, Ministry of Government Administration and Home Affairs
		Mr. CHUNG Song	Former Director, Disaster Reduction Planning Division, Ministry of Government Administration and Home Affairs
		Mr. PARK Dugkeun	Senior Analyst, National Institute for Disaster Reduction, Ministry of Government Administration and Home Affairs
		Mr. HWANG Hayong	Assistant Deputy Director, Disaster Reduction Planning Division Ministry of Government Administration and Home Affairs
Russia		Mr. Yury Brajnikov	Chief, Dept. Of International Cooperation, EMERCOM of Russia
		Dr. Vladimir Kuvshinov	Deputy Chief of Desk, Dept. of International Cooperation, EMERCOM of Russia
		Ms. Svetlana Bandurkina	Senior Expert, Dept. of International Cooperation, EMERCOM of Russia
Singapore		Mr. Tan Chan Seng	Commissioner, Singapore Civil Defense Force, Ministry of Home Affairs
		Mr. Khaizal Kalil	Staff Officer, Overseas Training Management, Singapore Civil Defense Force
		Mr. ANG Tse Meng	Head of Operations, Singapore Civil Defense Force
		Mr. Puniamoorthy RAMASAMY	Director Singapore Civil Defence Force, Civil Defense Academy
Sri Lanka		Mr. Amara Hewamadduma	Secretary, Ministry of Social Services
		Mr. W.B.J. Fernando	Director, National Disaster Management Centre, Ministry of Social Services
		Mr. W. A. Chulananda Perera	Deputy Director, National Disaster Management Centre, Ministry of Social Services
Kyrgyzstan		Dr. Abdurakhim Radjabov	First Deputy Minister, Ministry of Emergency Situation and Civil Defense
		Ms. Shakhnoza KHAIDAROVA	Ministry of Emergency Situations and Civil Defense of the Republic of Tajikistan
Thailand		Apai Chandanachulaka	Director-General, Local Administration Dept., Ministry of Interior
		Mr. Udomsak USWARANGKURA	Deputy Director-General, Administrative Affairs, Department of Local Administration, Ministry of Interior
Uzbekistan		Mr. Sosnovsky Valentin Olegovich	Leader, Dept. Of Emergency Situation, Cabinet Ministry
Vietnam		Mr. DANG Quang Tinh	Director, Department of Dike Management and Flood Control, Ministry of Agriculture and Rural Development
		Le Xuan Truong	Deputy Director, Department of Dike Management and Flood Control, Ministry of Agriculture and Rural Development
		Mr. DO Huy Thinh	Chief, Bac Giang Province's Committee for Flood and Storm Control
		Mr. NGUYEN Xuan Thiep	Chief Day River Diversion Management Board, Department of Dike Management and Flood Control, Ministry of Agriculture and Rural Development

**Table 2-1-1-2 Advisor Countries****Classification: Supervisor Contact person Attended 4<sup>th</sup> Intl. Meeting**

Country	Classification	Representative	Position
Australia		Mr. David Templeman	Director General, Emergency Management Australia
		Mr. Morris Bradley	Director of Business Management, Emergency Management Australia
		Mr. Rob LEE	Assistant Director Information Management & Business, Emergency Management Australia
Switzerland		Mr. Beat Kuenzi	Senior Program Officer, Division for Humanitarian Aid and Swiss Disaster Relief
		Dr. Markus Zimmermann	Member of SDR, Member of the Specialized Group "Reduction/Preparedness"
France		Mr. le Prafet Michel SAPPIN	Directeur , Direction de la Defense et de la Securite Civiles
		Colonel Philippe NARDIN	Chef de la Mission des relation internationaux, Direction de la Defense et de la Securite Civile
New Zealand		Mr. John Norton	Director, Ministry of Civil Defense and Emergency Management
		Dr. Neil Britton	Manager, Sector Development Unit, Ministry of Civil Defense and Emergency Management

**Table 2-1-1-3 Observer****Classification: Supervisor Contact person Attended 4<sup>th</sup> Intl. Meeting**

Country	Classification	Representative	Position
A D P C		Dr. Suvit Yodmani	Executive Director, Asian Disaster Preparedness Center
		Mr. David Hollister	Deputy Executive Director, Asian Disaster Preparedness Center
		Ms. Lolita Caparas Garcia	Program Manager, Regional Program, Asian Disaster Preparedness Center

**Table 2-1-1-4 Other Organizations****Classification: Supervisor Contact person Attended 4<sup>th</sup> Intl. Meeting**

	Classification	Representative	Position
UN / I S D R		Mr. Salvano BRICENO	Director Inter-Agency Secretariat of the International Strategy for Disaster Reduction United Nations
UN / I S D R		Ms. Etsuko TSUNOZAKI	Economic & Social Issues, Inter-Agency Secretariat of the International Strategy for Disaster Reduction, United Nations
UN O C H A New York		Mr. Kenzo OHSHIMA	Under Secretary General, Office for the Coordination of Humanitarian Affairs
UN O C H A New York		Ms. Coco Hiroko USHIYAMA	Special Assistant to the Under-Secretary-General, Office of the Under-Secretary-General, Office for the Coordination of Humanitarian Affairs
UN O C H A KOBE		Ms. Feng Min Kan	Regional Advisor, Asian Disaster Response Unit, United Nations Office for the Coordination of Humanitarian Affairs (OCHA)
UN O C H A KOBE		Mr. Shuichi ODAKA	Information Manager, Office for the Coordination of Humanitarian Affairs, United Nations

	Classification	Representative	Position
UNOCHA INDIA		Dr. Rajan GENGAJE	National Disaster Response Officer, UN OCHA - New Delhi
UNOCHA INDIA		Ms. Arundhati RAO	National Disaster Response Assistant, UN OCHA - New Delhi
UNCRD KOBE		Mr. Rajib Kumar SHAW	Associate Expert, United Nations Centre for Regional Development Disaster Management Planning Hyogo Office
UNDP INDIA		Mr. Dennis LAZARUS	Deputy Resident Representative, United Nations, Development Programme
UNDP INDIA		Mr. Prishant GIRBANE	Project Officer, United Nations Disaster Management Team, United Nations Development Programme
UNDP INDIA		Mr. G. Padmanabhan	Programme Officer, United Nations Development Programme
FAO		Mr. Naoki MINAMIGUCHI	Vulnerability Analysis Coordinator, Global Information and Early Warning Service, Food and Agriculture Organization of the United Nations
UNCHS (Habitat)		Mr. Ramanath Jha	Regional Adviser, South Asia Urban Management Programme, Regional Office for Asia and the Pacific-South Asia Sub-Office, UNHABITAT
ADB		Mr. Joseph A.WEINSTOCK	Senior Environment Specialist, Environment & Social Safeguards Division, Regional & Sustainable Development Department, Asian Development Bank
PHIVOLCS		Dr. Maria Leonila P. Bautista	Associate Scientist, Department of Science and Technology, Philippine Institute of Volcanology and Seismology

<Positions (titles) at time of the meeting are given. >

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## **2-1-2. Outline of Fourth ADRC International Meeting**

The 4<sup>th</sup> international meeting is described below.

### **1 ) Date: January 22 (Tues) - 23 (Wed), 2002**

### **2 ) Place: Hotel Metropolitan Nikko, Delhe, India**

Participants: Total 80 including governmental officials and experts on disaster reduction from 22 nations and 10 organizations (Table 2-1-1-1 through 2-1-1-4) and other participants.

### **3 ) Outline**

Up until last year, three annual international meetings had been held in Kobe, Japan, but this year's meeting was hosted by the Government of India and ADRC because of the significance it had with the Gujarat Earthquake that had struck western India a year earlier.

A special session on the "Lessons Learned in Gujarat" was held and gave the host Indian government, member countries and participating organizations a chance to reconfirm the importance of disaster reduction systems, disaster reduction education and emergency response. The Indian government also reported that the human resource network built through ADRC international meetings and the trust shared with member countries was proved to be extremely effective in handling emergency aid acceptance and other operations.

Sessions were also staged on "International Cooperation Projects for Building Disaster Reduction Capacity" and "Promotion of Information Sharing in Disaster Reduction Fields". Both sessions confirmed the importance of "total disaster risk management" and participants agreed more cooperation should be directed at developing the proper human resources for the particular situation in each individual country and, in support of these activities, more information on natural disasters and disaster reduction could be shared by effectively utilizing new technologies including satellite communications and the internet.

It was reiterated throughout all aspects of the meeting that cooperation based on efficient utilization of the human resources, hardware assets and ideas of member countries and assisting organizations should be promoted in the Asian region in order to reduce the damage and suffering from natural disasters in the 21<sup>st</sup> century.

### **4 ) Results**

Member countries reported that ADRC's activities were very effective towards building disaster reduction capacity and recovering from natural disasters in Asia.

There has been a worsening pattern of natural disasters seen in the Asian region as it is being hit by frequent earthquakes, tsunami and volcanic eruptions as well as larger floods and typhoons that are being spurred by global climatic change.

In light of the situation, the participating countries and organizations agreed the following activities are necessary in order to ensure sustainable development in the region. These activities will depend greatly on cooperation, for which much hope and expectations have been placed on ADRC.

#### **(1) Assessment of Specific Activities**

Cambodia, Sri Lanka, Nepal and Indonesia reported that they were seeing steadfast results from the disaster reduction awareness activities that were implemented last year to build disaster reduction capacity, and expressed their gratitude to ADRC for the contribution to these efforts.

Also, as of this year, a new trial program in capacity building was imparted for member countries with the cooperation of expert organizations from Singapore and the Philippines and employing assets and capacities of other member countries. For example, the Philippine project applied the knowledge of The United Nations University, UNESCO, ADRC and the Philippine Institute of Volcanology and Seismology to enhance the disaster reduction awareness of school administrators and elementary schools from member countries. Participants highly evaluated this kind of training program for the effective use of diverse assets.

Member countries and the United Nations strongly requested that member countries, advisor countries and organizations continue to cooperate in disaster reduction capacity building programs in the future.

### **(2) Visiting Researchers From Member Countries**

ADRC has so far welcomed 11 persons in charge of disaster reduction from member countries to do research in Japan. These member countries included in their reports that this program contributes greatly towards developing human resources and building disaster reduction capacity in their home lands. ADRC agreed to continue with this program and to work with member countries on capacity building and human resource development.

### **(3) Sharing Information on Natural Disasters and Disaster Reduction**

Information sharing is absolutely indispensable towards reducing damage from natural disasters, taking emergency action in a disaster situation, and recovering and rebuilding from a disaster. As information can make a country stronger against disaster, there is a need to gather and share more of it.

Participants once again highly evaluated ADRC's efforts to create a platform for sharing information made available through websites operated for member countries. They also expressed strong hopes in further development of functional aspects that would evolve the platform from pure information gathering to information dissemination and analysis in the future, as well as our development as a disaster reduction portal with the capacity to operate as a powerful clearing house of natural disaster and disaster reduction information.

To encourage information sharing on a higher level, ADRC is advocating a standardized ID number for coding disasters worldwide as well as the effective use of new technologies such as satellite communications and the Internet. ADRC will build more links to websites of member countries and related organizations in order to make more information on natural disasters and disaster reduction available for access. It is hoped that these efforts and others will contribute to the development of a disaster warning system and ultimately the reduction in disaster-triggered damage and suffering.

### **(4) Lessons Learned from the Gujarat Earthquake**

ADRC was commended for its programs designed to share the experiences of disaster-stricken areas with member countries. With regards to the Gujarat Earthquake, ADRC co-sponsored along with the Indian government a multinational mission of member countries to Gujarat in June and staged this year's annual international meeting in India so that member countries could see for themselves the recovery process one year after the quake. ADRC has been requested to develop and implement programs that would enable stricken countries to share their experiences as well as provide their knowledge to other areas hit by a disaster.

### **(5) Expectations As the Focal Point for UN International Strategy for Disaster Reduction in Asia**

Following the 4<sup>th</sup> annual international meeting, the United Nations held an Asian meeting on International Strategy for Disaster Reduction (ISDR). ADRC is utilizing the knowledge of its network of human resources to develop activities as the center for ISDR in Asia.

## **5 ) Summary**

To help the nations of Asia build up their disaster reduction capacity, ADRC will continue to act as an information center for Asia, gathering and disseminating information on natural disasters and disaster reduction in the region, and seek greater information sharing amongst member countries and related organizations by effectively utilizing new technologies and promoting the use of a standardized ID number for coding disasters worldwide. ADRC wants to make an even greater contribution to member countries in their efforts to build disaster reduction capacity by further developing cooperative projects with member countries and related organizations. In addition, ADRC will take on more responsibility in reducing the damage and suffering from natural disasters in 21<sup>st</sup> century Asia by working more closely with UN organizations OCHA and ISDR, and others.



**Fig. 2-1-2-1** Participants to ADRC's 4<sup>th</sup> annual members' meeting

## **2-1-3. Asian Meeting on the UN International Strategy for Disaster Reduction (UNISDR)**

ADRC supports the activities of the UN International Strategy for Disaster Reduction (ISDR) as the operational center for Asia. The 4<sup>th</sup> ADRC International Meeting was followed by a meeting of UNISDR in Asia held under the co-host of the Japanese government and the ISDR Secretariat. An outline of the meeting follows.

**1 ) Date: January 24 (Thur), 2002**

**2 ) Place: Hotel Metropolitan Nikko, Delhi, India**

**3 ) Participants:**

Total 80 including governmental officials and experts on disaster reduction from 22 nations and 10 organizations (Table 2-1-1-1 through 2-1-1-4) and other participants.

**4 ) Outline**

The meeting opened with a keynote address on future ISDR activities by Kenzo Oshima, Under Secretary General of the UN Office for the Coordination of Humanitarian Affairs (OCHA). In his talk, Oshima stated that "disaster reduction management is an indispensable element of sustainable development," adding that "it was the duty of ISDR to bring together disaster reduction bodies." Following his discourse came a panel discussion on the theme of "Disaster Reduction and Sustainable Development."

Each of the participating countries reported on disaster reduction efforts and ISDR activities in their home countries. In particular, it was noted that "a multilateral approach to disaster reduction management was necessary." Alleviating poverty, cooperation with local communities, scholastic education and cooperation of the media were all cited as essential to success.

Because of common and overlapping issues amongst the various countries, there was much to learn. Member countries voiced their hopes that the ISDR Secretariat and ADRC would continue to fulfill their roles in fomenting information sharing in this and other ways.

**5 ) Results**

Serving as moderator was Ashok Pradhan, Former Special Secretary and Central Relief Commissioner of the Indian Ministry of Agriculture. He pointed out the need for the following activities in order to reduce and prevent the damage and suffering from natural disasters deeply related to environmental problems such as global warming.

### **(1)Cooperation in Disaster Reduction**

Natural disasters are an obstruction to socio-economic development in Asia. For this reason, all countries in the region should make it an important policy to strengthen their disaster reduction management and capacity.

### **(2)Lessons Learned in Gujarat**

While still fresh in our minds, the sheer memory of such a devastating earthquake must be applied to developing future preventative measures. Sadly, it has taught us many lessons about the role of emergency relief, earthquakes in general and being prepared.

### **(3) Natural Disasters in the 21<sup>st</sup> Century**

The increasing new dangers mankind faces are directly linked to the global population explosion. We must recognize the growing need for far-reaching preventative measures in order to reduce the physical destruction and loss of life.

### **(4)Promoting ISDR Activities**

ISDR activities must be promoted particularly for the following reasons.

- To develop local communities for dealing with natural disasters
- To support international cooperation in disaster reduction fields so countries may be prepared for natural disaster and can properly manage their disaster preparedness

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**(5) International Cooperation to Prevent Natural Disasters**

Disaster reduction and reduction activities could be strengthened in Asian countries through efficient and effective international cooperation.

**(6) Support for International Cooperation in Disaster Reduction Fields**

As countries in other regions around the world are building tighter relations in disaster reduction efforts, it is indispensable for the nations of Asia to forge a solid partnership that can make the region safe.

Lastly, Shigehiko Okuyama, Parliamentary Secretary and Cabinet Official of Japan, expressed his deep concerns about the Asian region's growing fragility against natural disasters. A large natural disaster could obstruct the socio-economic development of the entire region, hence Okuyama called upon the nations of Asia to formulate a common strategy. He emphasized the necessity of prioritizing efforts in seeking a balance amongst the environment, disaster management and economic development, in order for the Asian region to attain a level of sustainable development.

The results of this meeting will be reported at the World Summit on Sustainable Development slated for this August in Johannesburg, South Africa.

## 2-1-4. Visiting Researchers from Member Countries

In line with agreements made at the 1<sup>st</sup> International Meeting, ADRC has been welcoming individuals from member countries to do research in Japan. To date, 11 individuals have taken part in this program and it is believed that this kind of activity is helping to strengthen disaster reduction management in their native countries. The individual projects are outlined below.

### (1) Korea

- Shim Kee-Oh
- Position at the time of visit: Project Manager, Nation's Institute for Disaster Reduction (Drought Control), Ministry of Government Administration and Home Affairs.
- Duration: August - October, 1999
- Researched drought control in Japan and reported on drought control in Korea. Additionally, researched and reported on recent drought disasters in Vietnam and Papua New Guinea.

### (2) Vietnam

- Ngo van Sinh
- Position 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. Vietnam
- Duration: December 1999 - March 2000
- Reported on the legal system surrounding disaster reduction as well as floods in Vietnam, studied flood reduction measures in Japan and visited concerned facilities. Conducted research under Professor Takara and Assistant Professor Toda, Disaster Reduction Institute, Kyoto University, in the area of water-related disasters.

### (3) Nepal

- Lek Nath Pokharel
- Position at the time of visit: Section Officer, Disaster Relief Section, Ministry of Home Affairs
- Duration: January - May 2000
- Reported on the legal system surrounding disaster reduction as well as natural disasters in Nepal, studied landslide reduction measures in Japan and visited concerned facilities. Conducted research under Assistant Professor Nakagawa, Disaster Reduction Institute, Kyoto University.
- Reported on the possible collapse and flood management of the glacial lake Tsho Rolpa in the Himalayas and conducted research under Professor Ueda (cryospheric variation) at the Atmosphere-Hydrosphere Science Institute, Nagoya University.

### (4) Sri Lanka

- Nimal Dharmasiri Hettiarachchi
- Position at the time of visit: Deputy Director for Disaster Relief, Department of Social Services, Ministry of Home Affairs
- Duration: April - October 2000
- Reported on a basic disaster reduction bill in Parliament and natural disasters in Sri Lanka. Exchanged opinions with researchers from the UN Regional Development Center at Nagoya University and ADRC about sustainable development and its relations to disaster reduction.

### (5) Bangladesh

- M. Babul Akhter
- Position at the time of visit: Assistant Manager, Palli Karma Shayak Foundation, Treasury Department
- Duration: May - November 2000
- Reported on disaster reduction systems, natural disasters and the significance that a small business support program for women has with regards to disaster reduction in Bangladesh. Studied flood reduction and river management in Japan at the Ministry of Construction (now Ministry of Land Infrastructure and Transportation) and River Information Center because of the many flood disasters in his country.

### **(6) Sri Lanka**

- Chulananda Pelera
- Position at the time of visit: Deputy Director, Sri Lanka Ministry of Social Welfare, National Disaster Management Center
- Duration: November 2000 - April 2001
- Reported on natural disasters, the legal system surrounding disaster reduction, and organizations such as the National Disaster Management Center in Sri Lanka. Prepared a training manual in disaster reduction needed in his country.

### **(7) Armenia**

- Ripshima Bardanyan
- Position at the time of visit: Secretary to Director, Armenia National Earthquake Center (NSSP)
- Duration: March - June 2001
- Reported on disasters in Armenia including the Spitak Earthquake and disaster reduction organizations such as NSSP. Visited the Cabinet Office and disaster reduction organizations in Hyogo and Shizuoka, to research disaster reduction in Japan.

### **(8) Papua New Guinea**

- **Filomena Miria**
- Position at the time of visit: Director Education & Training, National Disaster Management Organization (NDMO)
- Duration: June-December 2001
- Reported on recent disasters in Papua New Guinea including tidal waves and the eruption of Mt. Rapowl, as well as disaster reduction organizations such as NDMO. Visited Sanriku and other locations to research tidal wave reduction measures in Japan. Prepared a training manual in disaster reduction for his country.

### **(9) Cambodia**

- **So Ban Hin**
- Position at the time of visit: Secretary-General, National Council on Disaster Management Organization (NDMO)
- Duration: June-December 2001
- Reported on flood disasters and measures in Cambodia, as well as NCDM. Visited Kamiya Dam and Kisosansen River Basin in Hyogo, as well as the Cabinet Office, NHK and the Japan Red Cross, to study flood reduction measures in Japan.

### **(10) Bangladesh**

- **Mohamed Atikzaman**
- Position at the time of visit: Deputy Director, Bangladesh Provincial Administration Training Center (BPATC)
- Duration: January - July 2002
- Reported on recent cyclones and flood disasters in Bangladesh, as well as training by BPATC. Attended JICA Disaster Reduction Training Seminar for Administrative Officers organized by ADRC in cooperation with JICA. Researched all types of disaster reduction in Japan.

### **(11) Armenia**

- **Tigran Saiyan**
- Position at the time of visit: Chairman, Subcommittee for South Region Work, Armenia National Earthquake Center (NSSP)
- Duration: February - August 2002
- Reported on antiseismic construction after the Spitak Earthquake and other earthquake measures, and activities of NSSP. Visited the Phoenix Plaza, seismic test lab and other disaster reduction organizations in Hyogo, to study disaster reduction measures in Japan.
- As of March 2002, *ADRC Highlights* is being published in Russia.

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## **2-1-5. Cooperation with Other International Organizations and Initiatives**

### **1 ) United Nations Office for the Coordination of Humanitarian Affairs (OCHA)**

As a joint project of the UN Office for the Coordination of Humanitarian Affairs (OCHA) and ADRC, the OCHA Asia Unit (renamed OCHA Kobe in 2001) opened offices in ADRC in February 1999. Since that time, our two offices have been sharing information and, this year, we co-hosted an international conference in Katmandu and a disaster NGO workshop in Kobe, Japan (described later).

### **2 ) ReliefWeb (OCHA)**

Relief Web is the information net of OCHA. It provides reliable information on natural disasters and disaster reduction over the Internet, to support humanitarian aid activities in times of disaster. Since its launch, ADRC has linked its homepage to Relief Web and built a system, which allows UN information to be browsed efficiently via our site. Also, because of the vast amount of information available from member countries, Relief Web established a link to ADRC's website to add another source of disaster reduction information to its library. As such, information can be accessed from either site hence efficiently provided to respective users.

Relief Web opened an office in Kobe (ADRC) in August 2001. The reason for this was that their New York and Geneva offices that gathered and disseminated information could not cover the business hours of Asia because of the time difference. This move has meant increased information sharing with ADRC than ever before.

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

ADRC signed an agreement with the Centre for Research on the Epidemiology of Disaster (CRED) of Louvain Catholic University in Brussels, Belgium, to collaborate on collecting disaster reduction information, on November 5, 1999. Its aim was to comprehensively track information on disasters which occurred in the Asian region during the past century, and construct the "Database on Natural Disasters in Asia in the 20<sup>th</sup> Century", which will serve as an asset for reinforcing disaster reduction in each Asian country in the next century. CRED is the only organization in the world with a general natural disaster database. Our two parties are sharing disaster information with each other while also making it available to others.

ADRC is also involved in a joint project with Relief Web to promote the use of a unique ID number for coding natural disasters around the world. The project was reported at the Global Disaster Information Network (GDIN) meeting in March 2001 and officially launched in January 2002.

### **4 ) Global Disaster Information Network (GDIN)**

The Global Disaster Information Network (GDIN) is a project advocated and launched by the United States Department of State. The goal is to build a framework for systematically implementing international cooperation in the sharing of disaster information. It is expected to improve access to existing information and enable its effective use, hence "providing accurate and reliable information promptly to those who need it in a format they can use."

A particularly big issue is how to quickly obtain reports of disasters in their early moments. For this reason, consideration is being given to the use of satellite communications and GIS. Accordingly, this initiative aims not to compete with existing information centers but to collaborate with them and make it possible to effectively utilize each other's assets, a goal very similar to the purpose of ADRC.

Four international conferences have been held so far.

1<sup>st</sup>: July 16 - 17, 1998 in Washington DC, USA

2<sup>nd</sup>: May 11 - 14, 1999 in Mexico City, Mexico

3<sup>rd</sup>: April 26 - 29, 2000 in Ankara, Turkey

4<sup>th</sup>: April 20 - 23, 2001 in Canberra, Australia

ADRC has attended GDIN conferences since Ankara and is actively taking part in this global initiative to share information on natural disasters.

## **5 ) Asian Disaster Preparedness Center ( A D P C )**

The Asian Disaster Preparedness Center ( A D P C ) was founded in Bangkok, Thailand, in 1986, as a private international disaster reduction organization. Their operations go beyond education and training in their field of activities to include consulting and information services in line with requests from countries and regions, as well as a number of programs designed to build provincial disaster reduction capacity.

Because we share the common goal of reducing damage and suffering from natural disasters in the Asian region, ADRC signed an agreement in June 2001 to cooperate on the following.

- International disaster reduction activities such as ISDR
- Technical development for disaster management information systems
- Techniques in disaster reduction training
- Joint projects

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## 2-2. Regional Workshop on Networking and Collaboration among NGOs of Asian Countries in Disaster reduction and Response

### 2-2-1. Purport

To reduce the damage and suffering of natural disasters in Asia, not only governments and international organizations but also NGOs have to play a constructive role. These NGOs implement support activities on the local community level, including relief activities in the early moments after a disaster strikes, recovery and reconstruction activities in the rebuilding stages, and even education and awareness activities imparted in calmer times from the perspective of disaster reduction. However, they have their limits and there is a need to build capacity and cooperate with other organizations.

To build a network of Asian disaster NGOs and promote cooperation beyond borders, ADRC held the “Regional Workshop on Networking and Collaboration among NGOs of Asian Countries in Disaster Reduction and Response” described below.

### 2-2-2. Outline

#### 1 ) Dates

February 20 - 22, 2002

#### 2 ) Place

Kobe Portopia Hotel

#### 3 ) Organized by

ADRC, OCHA Kobe and ASEAN Foundation

#### 4 ) Supported by

Cabinet Office of Japan, Ministry of Foreign Affairs, Great Hanshin-Awaji Earthquake Memorial Institute

#### 5 ) Participants

Tsui Edo Secretary-General, OCHA New York  
Salvano Briceno Director, UN ISDR Secretariat(Geneva)  
Ruben Umaly Executive Director, ASEAN Foundation (Indonesia)

35 persons from NGOs in 16 Asian countries

UN, Cabinet Office (Japan), Ministry of Foreign Affairs, Hyogo Prefecture, Red Cross, Red Crescent, Orissa State(India), etc.

Total: 80 persons

#### 6 ) Results

The process of networking beyond borders was recognized as necessary for NGOs to operate, as networking would allow them to cooperate and share information and experiences with one another.

The participating NGOs will attempt to form a network amongst themselves with ADRC and OCHA Kobe as acting secretariat.

The individual NGOs will in the meantime continue building networks in their individual countries and compile a list of NGOs in their respective countries. They will publicize this list on ADRC's website as the start of a database of Asian disaster reduction NGOs.



A committee **will** be created to promote cooperation amongst NGOs and organize the next NGO meeting within one year's time.

**Table 2-2-1 Participants**

**1.Member**

**Countries**

Country	NGO	Representative	Core activities
Bangladesh	1. Association of Development Agencies in Bangladesh (ADAB)	Mr. Shamsul Huda	NGO network building, disaster reduction, disaster reduction management, etc. (Founded in 1974)
Bangladesh	2. Bangladesh Disaster Preparedness Center (BDPC)	Muhammad Saidur Rahman	Disaster reduction management, training in disaster reduction and recovery, etc. (Founded in 1991)
Cambodia	1. Aphiwat Strey	Mr. Chin Vuthy (Project Manager)	Disaster risk management
Cambodia	2. Nak Akphivath Sahakum (NAS)	Mr. Savun Sam Ol (Executive Director)	Flood reduction and recovery, irrigation system repairs, etc. (Founded in 1995)
China	1. Foreign Affairs Division of China Charity Federation	Mr. Ma Guilin (Deputy Director)	
India	1. UNNATI Organisation of Development Education	Binoy Acharya	Earthquake damage assessment, local counseling, etc. (Founded in 1990)
India	2. Karuna Foundation		Disaster damage reduction, disaster reduction management, etc.
India	3. SEEDS	Manu Gupta (Program Director)	Local disaster reduction management, disaster reduction, recovery, etc. (Founded in 1993)
Indonesia	1. Posko Informasi Rawan Pangan	Ms. Yanne Tamonob	Information sharing, early reporting, etc. (Founded in 1998)
Indonesia	2. Yayasan Lestari Hutan Indonesia	Dr. Rizaldi Boer	
Indonesia	3. KPPALA Indonesia	Mr. Eko Teguh Paripurno	
Country	NGO	Representative	Core activities
Japan	1. Japan Red Cross	Masanao Mori (International Relief Director)	Emergency aid, disaster relief, disaster reduction volunteer activities, etc. (Founded in 1877)
Japan	Rotary Yoneyama Scholarship Fund	Yukio Miyazaki (former General Affairs Director, Operations Director)	((Japan YMCA) life-long pursuit of learning, volunteer activities, Wellness International activities, etc. (Founded in 1880)
Japan	3. Kobe YMCA	Hiroshi Oe (LETS Director)	International understanding and education, life-long pursuit of learning, (Founded in 1886)
Japan	4. Shanti Volunteer Association	Hitoshi Ichikawa (Global Action Network Division Chief)	Emergency relief, education and cultural activities, etc (Founded in 1980)
Japan	7. AMDA	Tsukasa Konishi (Director, Emergency Response Division)	Medical aid, etc. (Founded in 1984)
Korea	1. Korean Sharing movement	Lee, Jong-Moo	Emergency relief, etc. (Founded in 1996)

Country	NGO	Representative	Core activities
Malaysia	1. Malaysian Medical Relief Society (MERCY)	Dr. Jemilah bt. Mahmood (President)	Volunteer medical aid, emergency medical activities, etc. (Founded in 1999)
Mongolia	1. Mongolian Association of Private Herders Coops	Mr. Radnaabazar Amarbayasgalan	Supplemental transportation, etc. (Founded in 1991)
Mongolia	2. Environment-21 NGO	Jadamba Batbayar (Executive Director)	Counseling services, disaster reduction management, disaster reduction strengthening and backup activities, etc. (Founded in 1998)
Nepal	1. Nepal Geological Society	Mr. Rajendra Prasad Khanal (General Secretary)	Disaster reduction awareness, seismic research, etc. (Founded in 1979)
Philippines	1. Tabang Mindanaw	Ms. Merlie B. Mendoza (Executive Coordinator)	Sustainable agriculture, forestry, etc. (Founded in 1991)
Philippines	2. Philippine Rural Reconstruction Movement (PRRM)	Honorable Congressman Mr. Wigberto Tanada	Disaster response, etc. (Founded in 1952)
Singapore	1. Singapore International Foundation	Dr. Tan Chi Chiu (Executive Director)	Humanitarian relief (Founded in 1991)
Sri Lanka	1. Sarvodaya Shramadana Movement	J.D. Gunasena (Head of International Division)	Drought relief, food aid, etc. (Founded in 1950)
Sri Lanka	2. Consortium of Humanitarian Agen.	Mr. Jwevan Thiagarajah (Executive Director)	Database creation of emergency response NGOs, mapping of disaster-prone areas, etc. (Founded in 1999)
Sri Lanka	3. Emace		Disaster damage reduction (Founded in 1997)
Thailand	1. Catholic Office for Emergency Relief and Refugee (COERR)	Rev. Fr. Pibul Visitnondachai	Food aid, humanitarian aid for disaster victims, etc. (Founded in 1978)
Vietnam	1. Center for School Equipment Cooperation and Humanity Education	Mrs. Nguyen Thi Kinh	Awareness activities, etc. (Founded in 2000)
Vietnam	1. Center for School Equipment Cooperation and Humanity Education	Ms. Le Quyen Nhi	Awareness activities, etc. (Founded in 2000)

## 2. Observers

Country	NGO	Representative	Core activities
China	2. Disaster Relief and Social Relief Department of the Ministry of Civil Affairs	Mr. Li Baojun (Deputy Division Chief)	
Laos	IFRC Lao	Dr. Keedeng Thammalangsy (Secretary General)	
Vietnam	2. Officer Organization Department of Vietnam	Ho Tran Sy (Manager of Disaster Reduction & Estimation Division)	

The workshop was partially funded by the ASEAN Foundation as a "Human Resource Development Project for Disaster Response and Coordination". The ASEAN Foundation is an organization that aims to develop human resources.

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## **2-3. GIS International Meeting --- International Symposium on Internet based Disaster Information (ISIDI)**

### **2-3-1. Outline**

#### **1 ) Purpose**

The International Symposium on Internet based Disaster Information (ISIDI) was held to promote Internet based Mapping or GIS for Disaster Management by sharing information among the related institutions and in order to utilize the technique toward disaster mitigation.

#### **2 ) Date**

August 27, 2001

#### **3 ) Place**

Conference Hall, International Health Development (IHD) Center Building (Kobe, Japan)

#### **4 ) Organized by**

ADRC (Contribution from Japan Science and Technology Corporation (JST))

### **2-3-2. Program**

- 9:00~9:05 Opening Address ... Yujiro Ogawa, Exective Director, ADRC  
9:05~9:15 Welcome Address by co-host ... Michiko Mizuno, Department of Research promotion, Office of Basic Research, JST  
9:15~9:35 Internet GIS for Disaster Reduction Management ... Bambang Rudyanto, ADRC  
9:35~9:55 HAZPAC: A GIS of Natural Hazard Exposure in the Pacific Rim ... Brynn Bemis, USGS  
9:55~10:05 Coffee Break  
10:05~10:25 Global Mapping - Development of Global Geographic Dataset ... Hiroshi Une, GSI  
10:25~10:45 Asian Pacific Health Information ... Yoshihiro Takashima, WHO  
10:45~12:00 Decision Support Tool for Disaster Management in the Case of Strong Earthquakes ... Nina Frolova, Russian Academy of Science  
11:00~12:00 Discussion on Internet based GIS  
12:00~13:30 Lunch Break  
13:30~13:55 Relief Web ... Pablo Ricardo, OCHA  
13:55~14:15 Social Mapping for Disaster Mitigation and the Internet: Tracing the Use of Internet based Maps for Social Learning ... Teti Argo, ITB  
14:15~14:35 Remote Sensing Clearing House ... Yasunori Terayama, Saga University  
14:35~14:55 Disaster Data from Satellite ... Atsushi Takeda, Tohoku Bunka Gakuen University  
14:55~15:05 Coffee Break  
15:05~15:25 i-Space Application Experiments ... Takashi Moriyama, NASDA  
15:25~15:45 Japan Disaster Relief Team and Disaster Information ... Hideo Morikawa, Disaster Assistance Division Secretariat of Japan Disaster Relief Team, JICA  
15:45~16:45 Discussion on disaster information and joint projects  
16:45~17:00 Closing Address  
17:00 Close

Acronyms for organizations

- JST = Japan Science and Technology Corporation
- GSI = Geographical Survey Institute, Ministry of Land, Infrastructure and Transport, Government of Japan
- ITB = Bandung Institute of Technology (Indonesia)
- WHO = World Health Organization
- USGS = U.S. Geological Survey
- OCHA = (United Nations) Office for the Coordination of Humanitarian Affairs
- NASDA = National Space Development Agency of Japan
- JICA = Japan International Cooperation Agency

### **2-3-3. Summary and Declaration**

The symposium pointed out that internet based GIS and disaster management information are effective towards preparing for and responding to disasters. One example of a new internet based GIS tool is VENTEN (Vehicle through Electric Network of disasTer gEographical informationN) developed by ADRC. The remote sensing and the latest information technologies which are applications of basic ones should be useful to end-users.

Nonetheless, something must be done to solve the following problems before any of new technologies can be actually used.

- Development and launch of satellites for high-speed Internet use
- Guidance that enables end-users to easily and quickly access information (Explanations of how to use)
- How to provide information to countries those are hard to use the Internet
- How end-users can find truly necessary information

New technologies might resolve these problems. But, technical experts and end-users must understand each other in order to use information technology in disaster reduction more than before. For this reason, one must approach the other; the technical experts must access the end-users, and the end-users must provide the technical experts with what they really need.

Internet based information can be used not only in an emergency situation but also to assess preparation and weaknesses in pre-disaster times. To promote this kind of application, high-speed communication satellites and global mapping are necessary as a technological base.

To achieve this target, international organizations, governments and research institutes should cooperate with one another. The private sector also must play a constructive part in disaster reduction. Finally, we must never forget to seek and understand what end-users need and continually share information with them.

(The results of this symposium have been published in the report, *Information Technology for Disaster Management* [ISBN 4-901614-00-2]).

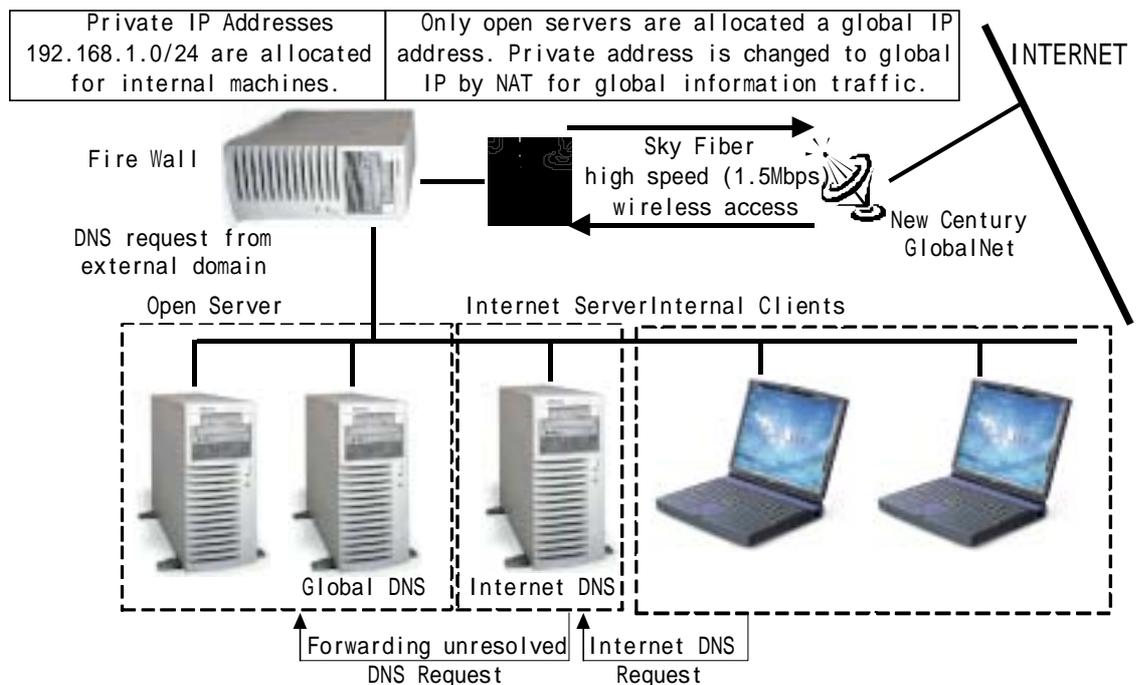
## 2-4. ADRC's Network for Information on Natural Disasters and Disaster Reduction

### 2-4-1. Configuration and Hardware

The configuration and hardware of ADRC's network is shown in Fig. 2-4-1-1. We have a wireless connection to the Internet of about 1.5 Mbps through New Century GlobalNet (<http://www.ncgnet.co.jp>). We chose not to go with ADSL despite its rapidly growing popularity because of the asymmetrical upload and download speeds, and the few providers offering services with stationary IP addresses.

IMnet, which we used until last year, was a network for research institutes, such as national test labs and institutes involved in joint research with them, to share information on research and circulate research information around the world. It aimed to promote the sharing of information required by research. The nearest node to us was in Osaka and Kobe was connected to it by a 126 kbps dedicated line. This created a bottleneck and defeated the purpose of the high speed IMnet, so we changed to a wireless high-speed network. We will keep an eye out for other networking opportunities and will jump at the first viable network that offers faster speed and cost advantages. We are building a platform to share a diversity of information including still images and moving pictures, and which will enable easy access from the outside.

Fig. 2-4-1-1 Configuration and hardware of the ADRC network



For security reasons, ADRC separates the internal and external networks, and has a firewall between the two. The internal network consists of laptops used by researches and desktop PCs that act as servers. Each server has a private IP address that enables only internal use. When attempting to access an internal server from the outside, the firewall converts the global address to the private address of the server to enable the connection. The firewall not only converts global addresses to private addresses, but it also routes packet transfer in consideration of the protocol, source and destination of the packet, whereby restricting access to internal servers and monitoring any attempts at illegal access.

As peripherals, ADRC is equipped with backup devices such as CD-R, MO and DAT, printers including a B/W laser printer and color printer, and raster image devices such as a flat bed scanner and film scanner.

## 2-4-2. ADRC's Website

As shown in Fig. 2-4-2-1, the ADRC's website (URL <http://www.adrc.or.jp/>) consists of the following 12 databases plus access to VENTEN, our internet-based GIS.: Recent Disaster Information, Disaster Information from Member Countries, Training Information Database, ADRC E-Net, Conference and Disaster Studies, Internet Exhibition, Glossary on Natural Disasters, The Great Hanshin-Awaji Earthquake Database, ADRC Highlights, Archives, Disaster Reports from Member Countries, and Center Information..

As shown by Fig. 2-4-2-2, information is made available through the diverse databases. When a request is made from the Internet, the information is retrieved from the corresponding database and sent to the user in a hypertext format based on instructions for determining display color and layout. Because information is stored in the database and layout is individually controlled by instructions, administrators are free of complicated layout settings and layouts can be changed easily in batch to keep pace with user needs and technological innovation. By managing databases in this way, users are given two ways to access information: by content or by country. Therefore, a directory can be provided to facilitate access.

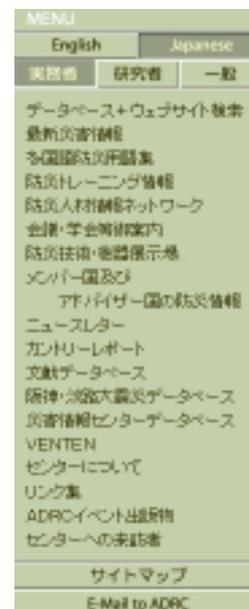


Fig. 2-4-2-1 Homepage menu

As an example of information access, here is information on how to access our Recent Disaster Information database. This particular database gathers and releases information on ongoing natural disasters as quickly as possible. It collects web reports from the UN and media, summarizes the content and establishes a link to the original text. As shown in Fig. 2-4-2-3, the information is managed in both a disaster event table and report table. Information requested by the user (which report the user wants to see) is extracted from these tables and a report is created with a textbook layout.



Fig. 2-4-2-2 Linked Database Website

Remote updating is possible over the Internet as shown in Fig. 2-4-2-2. Currently, considering how frequently information needs to be updated, the Recent Disaster Information and the Conference and Disaster Studies database are designed for remote updating. Other than that, the Topics and Links pages accessed from our top page can also be updated remotely. With due consideration to security, ADRC plans to upgrade the system to enable remote updating with all databases to make updating easier and, as a result, provide even more accurate information.

Information on recent disasters is collected and recorded by ADRC staff in order to limit the lag time from when a disaster occurs until information is made available as short as possible. When the earthquake struck Jiji, Taiwan, for example, it was in the middle of the night, but the first bulletin was posted within 4 hours and, over the next 3 days, ADRC's website had received over 4,700 hits.

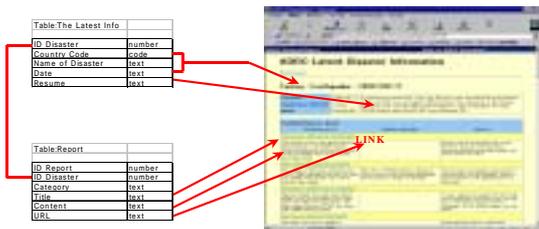


Fig. 2-4-2-3 Recent Disaster Information and window layout

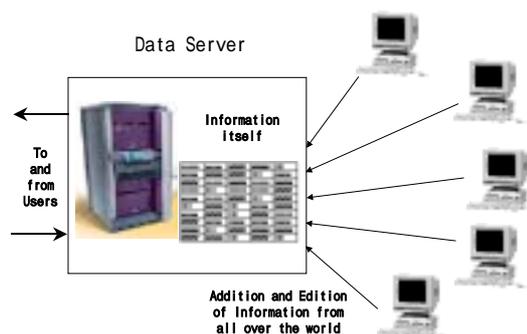
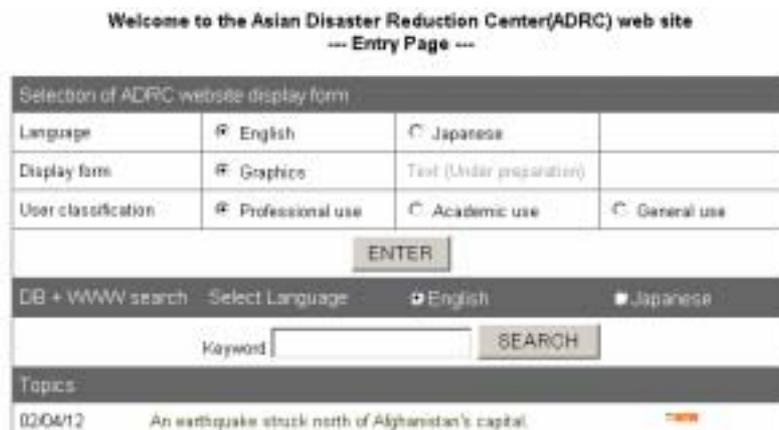


Fig. 2-4-2-4 Remote updating over the internet

To make our website easier to use, we completely redesigned it. The 4 main changes were easy-to-use menus for the three categories of users (Professional, Academic and General), a dual structure of image-embedded pages and text-only pages which can be selected in accordance with the kind of communication infrastructure on the user's end, a dual structure of English and Japanese pages, and a platform that lets the user select the aforementioned ~ conditions. To make these changes, we added an entry page prior to accessing our top page (Fig. 2-4-2-5).

Fig. 2-4-2-5 Newly added entry page



We also redesigned each of the homepages on our site. The key changes were to add a highly visible clickable<sup>1</sup> map 1 to our top page and a powerful search engine for searching both within our site and outside it (Fig. 2-4-2-6).

<sup>1</sup> Clickable map: A feature of web browsers that locates multiple links in an image that transfer the user to the link destination when clicked on. An image with such a feature is also called a "clickable map". By setting multiple links in a single image, a web site with a map as well as menus above and below it can be used.

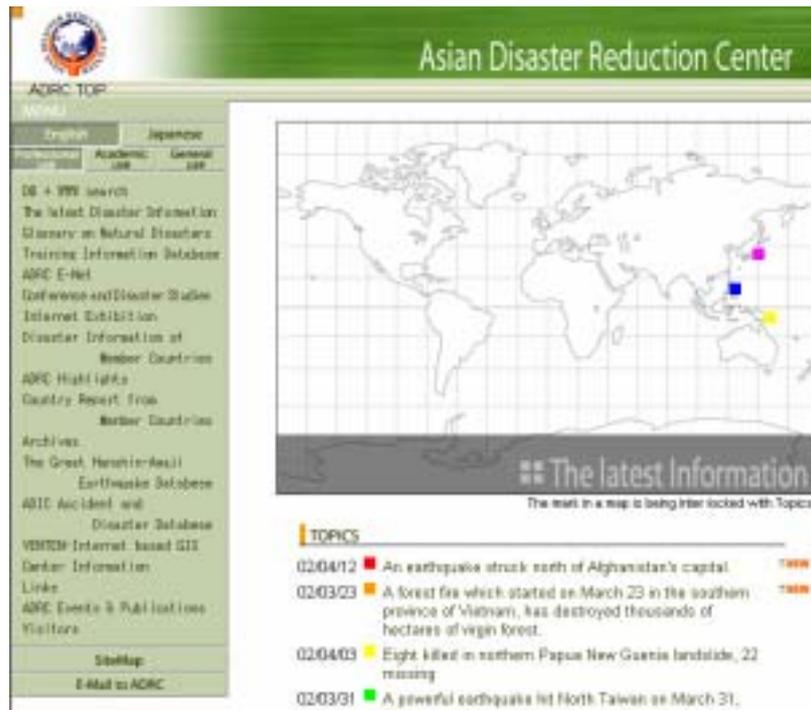


Fig. 2-4-2-6 ADRC top page

## 2-4-3. ADRC Highlights

In addition to providing information over the Internet, ADRC shares information with member countries and others by publishing an annual report and staging meetings, etc. However, amongst the developing nations of Asia, there are many without internet access and even governmental organizations haven't had yet an environment that enable staff to regularly access the internet. The situation is, however, improving through e-mail as more and more individuals in developing nations are acquiring personal addresses.

Because of the situation, ADRC started publishing a biweekly newsletter -- *ADRC Highlights* -- on June 1, 1999, to circulate the information we had primarily made available since our inception through our website, in detail and in a timely fashion. Though *ADRC Highlights* can be read on our website, we also send it by e-mail to some 300 persons in Japan and some 600 persons around the world, amongst which some are our counterparts, participants to international meetings and symposiums, associates, visitors to our offices, and others whom we have met through our participation in international conferences. Also, visitors to our offices can get back issues upon request.

Content-wise, *ADRC Highlights* carried in the first year of print information made available by ADRC, but as of this year, we've added articles on recent activities, topics and reports on international conferences that staff attends, as well as profiles of ADRC staff (Table 2-4-3). By introducing staff that has been for all practical purposes unknown to counterparts in member countries, we've seen a positive reaction from our members, which is helping to strengthen our system of cooperation. From the latter half of this year, we'd like to start publishing profiles of counterparts in member countries so as to make us more familiar with one another and further boost cooperation between us.

Another interesting point is that, because information we provide is often sent to persons involved with disaster reduction outside of counterpart organizations, many people attending the same international conferences have told us that they know about *ADRC Highlights* and many have said favorable things about it even though we have never met these people before. The impression this gives us is that the newsletter has made our organization better known.

ADRC will be looking to upgrade the content of *ADRC Highlights* both quantitatively and qualitatively, broaden circulation and provide accurate information in a more timely fashion.

**Table 2-4-3 2001 ADRC Highlight Articles**

	Issue Date	Main Articles	Other Articles	Asia Disaster Information
Vol. 21	Apr. 2	Promotion of disaster information sharing by standardized codes.	ADRC Visiting Researcher Program	Geiyo Earthquake
Vol. 22	Apr. 16	Disaster information sharing using standardized codes...	1. ADRC Regional Cooperation Project Situation (Sri Lanka) 2. Visiting Geiyo Earthquake site	
Vol. 23	May 1	2000 Disaster Data Analysis	ADRC Mission for Seibu Earthquake in India Visitor to ADRC	PNG Oil Explosion
Vol. 24	May 16	ADRC Visiting Researcher Report Ms. Hripsime Vardanyan (Armenia)	Report on ADRC Visit to the Seibu Earthquake site in India	
Vol. 25	Jun. 1	Research and development for "Asia Regional Disaster Information Network System" - "JST Sendai Meeting"-	1. Introduction of ADRC staff assignment by country 2. International symposium on the Internet based disaster information (ISIDI) 3. Introduction of ADRC staff Yujiro Ogawa	1. Flood in Far East Russian Region 2. Draught in India

Vol. 26	Jun. 18	ADRC multiple-country survey mission for Seibu Earthquake in India	Introduction of ADRC staff Taichi Kushakabe	1. Draught in the Central Asia 2. Flood in China
Vol. 27	Jul. 2	ADRC Visiting Researcher Report Ms. Philomena Miria (Papua New Guinea)	1. WHO Consultation on Developing EHA Regional Information System 2. Hanshin-Awaji Earthquake Memorial Center 3. Visitor to ADRC	
Vol. 28	Jul. 18	ADRC Visiting Researcher Report Mr. So Ban Heang (Cambodia)	1. Promotion of cooperation with ADPC 2. Symposium on Best Practices in Humanitarian Information Exchange	1. Flood in Korea 2. Typhoon in the Philippines and China 3. Flood in India
Vol. 29	Aug. 1	Disaster in the first half of the year in 2001	1. 2001 Earthquake Volcano/World Children's Summit 2. Regional Cooperation Conference on Natural Disaster	
Vol. 30	Aug. 17	Visit on ADRC Cooperative Project (Indonesia)	1. Opening of OCHA ReliefWeb Kobe Office 2. Introduction of ADRC staff Vice Chairman, Satoru Nishikawa 3. Participated in Crowding Summit	
Vol. 31	Sep. 3	Promotion of Unique ID Project	Introduction of ADRC staff Ryosuke Aota	1. Flood in the northern part of Thailand 2. Torrential rain in the northern part of Iran 3. Damage all over Japan due to typhoon 4. Flood in Cambodia
Vol. 32	Sep. 17	International symposium on the Internet based disaster information (ISIDI)	Introduction of ADRC staff Bambang Rudiant 2. Minister of Defense of Philippine, Thomas Ledias visit the center 3. Accept university interns	
Vol. 33	Oct. 1	ADRC Visiting Researcher Report Mr. So Ban Heang (Cambodia)	1. Presentation Ceremony Hyogo Gujarat Benefit Society Fund 2. Introduction of ADRC staff Harumi Yashiro	1. Flood in Vietnam 2. Damage due to typhoon in Taiwan 3. Flood damage in India
Vol. 34	Oct. 16	Participated in United Nations ISDR World Disaster Reduction White Paper Planning Committee	1. ADRC Visiting Researcher Report (Iwate Prefecture, Tsunami Countermeasure Observation) 2. Introduction of ADRC staff Masaru Arakida	
Vol. 35	Nov. 1	ADRC Cooperation Project (ADRC members participated in the International Urban Search Rescue Training in Singapore)	1. Introduction of ADRC staff Masatoku Araki 2. Notice of Conference 3. Visitor at ADRC	Earthquake in Yunnan, China
Vol. 36	Nov. 16	International Disaster Cooperation Seminar sponsored by the Korean	1. ADRC Visiting Researcher Report 2. Introduction of ADRC	Damage by typhoon in Philippine and Vietnam

		government (ADRC assisted the seminar)	staff Bunsho Yoshimura	
Vol. 37	Dec. 3	ADRC Visiting Researcher Report	Introduction of ADRC staff Sonoko Tanaka	
Vol. 38	Dec. 17	Report on "Johannesburg Summit Asia Pacific Regional Preparation Meeting" in Cambodia	1. Report on JUSTSAP 2. Posting by Ms. Pokarel in Nepal	
Vol. 39	Jan. 16	New Year's greeting and notice of change of a chairman	1. Introduction of ADRC member country counterpart No.1, Japanese Cabinet Office 2. 34 <sup>th</sup> ESCAP-WMO Typhoon Committee Meeting 3. Notice of updated ADRC website 4. Notice of conference	1. Earthquake in Tajikistan 2. Flood damage in the southern part of Russia
Vol. 40	Feb. 1	Held the 4 <sup>th</sup> Asia Disaster Reduction Center International Meeting	Introduction of ADRC staff Noriko Osono	Extended damage of flood in Indonesia
Vol. 41	Feb. 18	ADRC Analysis Report on Disaster Impact and Sustainable Development	Introduction of ADRC member country counterpart No.2, Armenia NSSP RA	Further extended damage of flood in Indonesia
Vol. 42	Mar. 1	Held Asia Regional Disaster NGO Symposium	1. Introduction of ADRC staff Tomohiko Hatori 2. ADRC Member Country Report (Nepal)	
Vol. 43	Mar. 18	Held the JICA-ADRC Disaster Reduction Administrative Managers' Seminar	Held the International Disaster Reduction Expo for the first time in Republic of Kazakhstan. Held the 6 <sup>th</sup> Earthquake Countermeasure Technology Expo in Kobe. 2. ADRC Visiting Researcher Report (Md. Atikuzzaman)	