4. Promotion of Disaster Reduction Cooperation

4-1. Cooperation with the United Nations

4-1-1. Opening of the UN OCHA Relief Web

1) Provided Information

The ReliefWeb of the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) has been promoted with fund aid from member countries since 1996. Its mission defined by the UN General Conference resolution is "to contribute humanitarian aid applied by an international society by means of providing prompt and reliable information". The ReliefWeb is currently providing information related to humanitarian aid and disaster via the Internet.

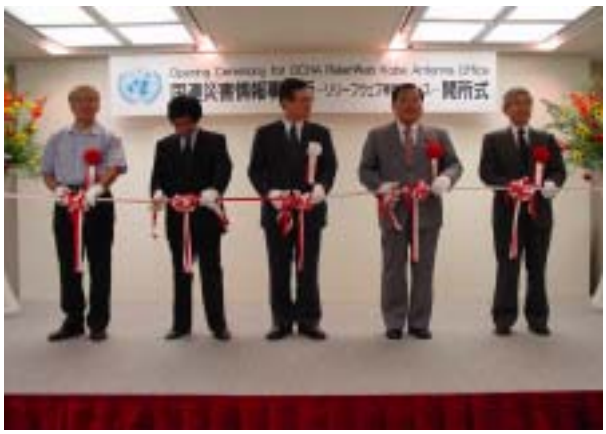
2) Opening of the Relief Web Kobe

The ReliefWeb provides information on international humanitarian aid applied by the UN OCHA for regions damaged by natural disasters and local conflicts including local condition, need, actual situation of aid activities, dispersal of financial aid, etc, which are collected from more than 600 relevant organizations.

3) Opening of Relief Web Kobe

With the funds donated by "the UN Fund for Human Security" established by the Japanese government and support from the Japanese government, the ADRC and Hyogo prefecture, OCHA established the Kobe office within the ADRC and dispatched personnel in charge of information. The opening ceremony for the Kobe office was held on August 16, 2001. Together with the offices in New York and Geneva, the Kobe office became the third base for ReliefWeb, which made it possible to provide the latest information covering a 24-hour period.

Together with the OCHA Asian Unit established within the ADRC in February 2000, the ADRC now have a wide range of human networks with the Asian region as a core. By utilizing these human networks, it can be expected that the ADRC will make great contributions to a more active and efficient sharing of information on disaster reduction and emergency aid in the Asian regions.



Opening ceremony for the UN OCHA ReliefWeb

4-1-2. Cooperative Projects between UN OCHA and ADRC

ADRC and the Asian Disaster Response Unit of OCHA Kobe (ADRU/OCHA Kobe) have developed the partnership through implementation of the cooperative project since ADRU/OCHA Kobe was established in February 2000 in Kobe.

Based on the cooperative project, on 4-6 July 2001, ADRC and ADRU/OCHA Kobe co-organized the Consultative Meeting on Regional Cooperation in the Field of Natural Disasters in Kathmandu, Nepal. The meeting was attended by the representatives from ADB, ADPC, ICIMOD, USAID/OFDA, UNDP Nepal, WFP, WHO, OCHA Geneva.

The aims of the meeting were to:

(1)Enhance and strengthen regional cooperation in the field of natural disasters, including preparedness, reduction, capacity building, response and recovery

(2)Provide a forum for regional organizations and regional offices of international organizations to share views and experiences related to natural disasters

(3)Achieve a shared vision of regional cooperation

At the Meeting, following the presentations by the participants on their organizations and activities, they shared views on the main issues and outlined the common concerns in regional cooperation in the field of natural disasters. The meeting concluded with concrete future actions to be taken by group. The actions include the following: 1) advocating a holistic approach to disaster management-Total Disaster Risk Management, 2) developing an inventory or database of who is doing what, where in disaster management, by agency, disaster type, sector, hazard should be created and 3) preparing for a calendar of key disaster management events through the web. For these projects, ADRC will play a leading role in cooperation with other organizations. Due to the insightfulness of this forum, all the participants agreed to have the second consultative meeting. The next meeting was proposed to be co-hosted by ADPC and ADRC in Bangkok during the second quarter of 2002.

Table 4-1-2-1 Participants

Name	Position	Organization
Manny de Guzman (Resource person)	Vice President & Chief Executive Officer	Alliance for Emergency Response and Training
Nick Russell (Resource person)	Chief Technical Advisor	UNDP Bangladesh
Thomas O. Brennan	SR. Regional Advisor	Office of Foreign Disaster Assistance /USAID
Binayak Bhadra	Director of Programmes	International Center for Integrated Mountain Development (ICIMOD)
Li Tianchi	Hazard Mitigation Specialist	International Center for Integrated Mountain Development (ICIMOD)
Kathie M. Julian	Program Officer/ Economist	Asian Development Bank (Katmandu)
Aloysius J. Rego	Director Planning, Development & Partner Relations Division	ADPC
Man B. Thapa	National Program Manager	UNDP
Erik Kajaegarrd	Technical Officer	WHO
Yoshihiro Takashima	Regional Coordinator	Emergency and Humanitarian Action, Regional Office for the Western Pacific, WHO
John Aylieff	Regional Program Advisor	WFP
Rudolf Muller	Humanitarian Affairs Officer	OCHA Geneva
Feng Min Kan	Regional Disaster Response Advisor	OCHA Asian Unit
Yujiro Ogawa	Executive Director	ADRC
Akiko Nakamura	Researcher	ADRC

4-2. Cooperative Projects with Member Countries

By utilizing the network among member countries, the ADRC has been identifying needs of Asian countries and providing support mainly in the form of technology and funds to disaster reduction projects applied by governments of member countries or international organizations

Through these collaborative projects, the ADRC has made efforts to improve capabilities of member countries to reduce disasters. Furthermore the dissemination of information regarding its achievement and knowledge gained through the projects has been implemented not only by member countries, but all over the world.

Collaborative project list follows.

Table 4-2-1 Lists of Joint Projects

Fiscal Year	Country	Contents of Project
1999	Papua New Guinea	Project for Public Awareness of India of Tsunami Disaster Reduction Awareness Project
2000	Cambodia	Disaster Management Traning Project for Local Goverenment Official
2000	Nepal	Project for Public Awareness of Dosaster Reduction by Community Leaders
2000	Indonesia	Communitiy-based Flood Disaster Mitigation Project
2001	India	Multinational Investigation of India Earthquake
2001	Sri Lanka	Disaster Management Traning Project for Local Goverenment Official
2001	Singapore	Urban Search-and-Rescue Training Project
2001	Philippines	School Educational Program for Disaster Reduction

4-2-1. Multinational Investigation of India Earthquake

1) Background

On January 26, 2001, at 8:46 am, a large scale earthquake measuring 6.9 on the Richter scale with the epicenter 20 km north-east of the city of Bhuji in Gujarat occurred, and more than 20,000 were reported killed. Damage was centered on the epicenter of the Kachchha district, which accounted for 90% of the total deaths and 80% of the injuries. Ahmadabad, the densely overpopulated center of commerce in the state suffered major damage, it lies 300 km from the epicenter.

In Asian regions, it is difficult to freely cross borders due to political or religious reasons. Even for the aim of research for disasters, it's sometimes difficult to obtain a visa. Also there are many countries that cannot dispatch their inspection teams even if they want to, because of their government's financial situation.

On the other hand, for the disaster stricken area, it's very troublesome to receive investigation teams dispatched from different countries.

Considering these backgrounds, the ADRC proposed to send multi-national mission to the stricken area in India partially at the ADRC's expense. The Indian government accepted this proposal and invited personnel in charge of disaster reduction from member countries of the ADRC.

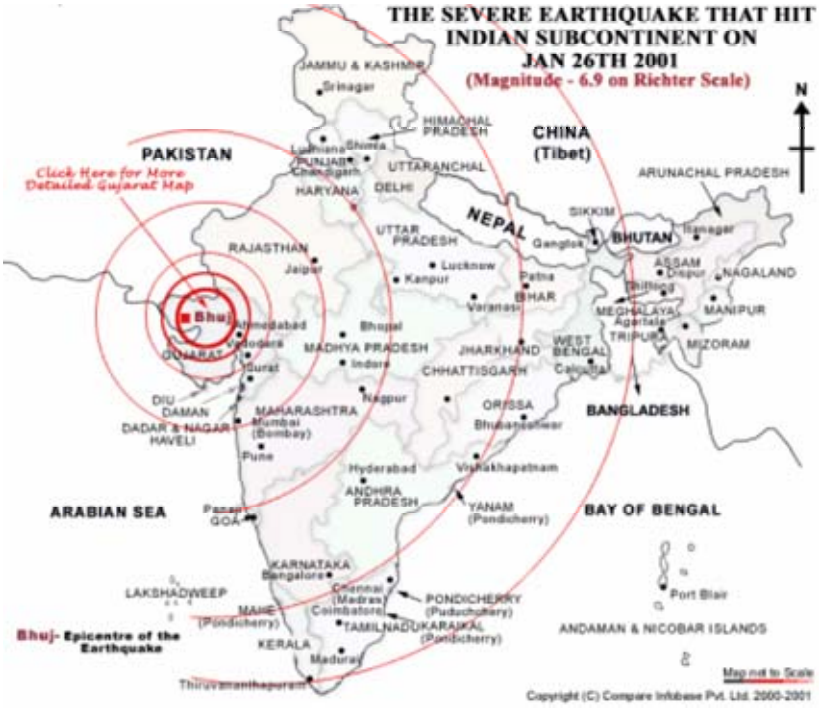


Table 4-2-1-1 Epicenter of Gujarat, India

2) Purposes

①By directly inspecting the stricken area, disaster reduction specialists from member countries could learn lessons from the earthquake which actually hit India, and will be able to utilize and reflect on these lessons to plan for disaster reduction in their own countries

②In return, member countries will propose knowledge of and experiences in their countries to restore stricken areas or to reduce disasters.

3) Itinerary

June 4, 2001	Briefing of Earthquake hit Gujarat at National DisasterReduction Institute of Indian Ministry of Agriculture
June 5	Briefing of countermeasure taken by state government at Bhuji branch of Gujarat State government
June 6- 7	Inspect the stricken area in Gujarat State
June 8	Wrap-up meetings among participants and the Indian Ministry of Agriculture

4)Participant countries

Participants included India, Armenia, Australia, China (two persons), Japan, Malaysia and Russia, for a total of seven countries. They visited the Kachchha district of Gujarat State, which experienced the highest incidence of damage among the stricken areas. Participants were as follows.

Table 4-2-1-1 Lists of Participants

Country	Name	Title/Organization
Australia	Mr. Dudley McArdle	Director, Australian Emergency Management Institute
Japan	Mr. Masanori Uno	Deputy Director for Post-Disaster Recovery and Restruction, Cabinet Office
Malaysia	Mr. Major Suhaimi	Assistant Director, Crisis and Disaster Management Unit
China	Prof. Zhang	Institute of Engineering Mechanics,

	Minzhen	China Seismological Bureau
China	Prof. Gao Mengtan	Deputy Director, Institute of Geophysics
Armenia	Mr. Simon Papyan	First Vice President, National Survey for Seismic Protection
Russia	Mr. Vladimir Boreyko	Chief of Desk, International Department, EMERCOM (Ministry of Russia)
ADRC	Mr. Yujiro Ogawa	Executive Director
ADRC	Mr. Masaru Arakida	Senior Researcher
ADRC	Mr. Fumiaki Yoshimura	Senior Researcher
ADRC	Ms. Sonoko Tanaka	Administrator

Table 4-2-1-2 Lists of participants from Indian government

Name	Title/Organization
Shri. Naved Masood	Joint Secretary, Ministry of Agriculture
Shri. S.・K・ Swami	Director, Department of Agriculture & Cooperation, Ministry of Agriculture
Shri. V.・P・ Pasrija	Assistant Director, Department of Agriculture & Cooperation, Ministry of Agriculture
Shri. S.・Janakiraman	Under Secretary, Department of Agriculture & Cooperation, Ministry of Agriculture
Shri. Om Prakash	Technical Officer, Department of Agriculture & Cooperation, Ministry of Agriculture
Prof. Vinod K Sharma	Professor, NCDM
Dr. Alok Gupta	Research Associate, NCDM
Shri. Amir Ali Khan	Researcher Officer, NCDM

The scene of investigation

5) Results

The participants concluded the following comments on lessons learnt from the earthquake in India. Furthermore, after this project was implemented, joint investigations and workshops were conducted between China and India, and between Armenia and India.

(1) Disaster Reduction Plans

To enhance the preparation for disaster and to minimize damages, the following plans should be inacted.

- Secure the capability to manage risks accompanied by all kinds of disasters among all the governments and various organizations.
- Improve management plan in the case of an emergency and develop its capability.
- Plan to train personnel at all levels including community.
- Prepare for risk reduction management by local governments in times of an earthquake.
- Set up a task force consisting of various specialists for the swift management of the emergency situations.
- Prepare plans for the emergency management at regional or city/town levels.
- Reinforce preparedness in the medical field

(2)Educational programs

The following dissemination and awareness activities are indispensable to minimize disaster damages.

- Raise public awareness and educate them about vulnerability to the natural disaster, restoration capability, technology for disaster reduction, etc.
- Increase public interests in the issues related to earthquake and other risks.

(3) Plans for utilizion of lands and zoning

In order to develop towns resistant to disaster, it is necessary to identify hazards, scheme plans to utilize lands, and zone under the strong initiative of governments.

- Implement earthquake risk assessment and earthquake micro zoning prior to restoration of the area.
- It is indispensable to make specific land use plan for utilizing lands especially in the urban areas or big cities. Construction of houses or apartments around the dislocation or bad soil must be avoided.
- Reassessment of risk in cities, towns or villages

(4) Structure and residence

- Introduce strict regulation on land use plan and construction of buildings, which includes earthquake resistance under strict regulation of construction materials and its methods.
- Improve earthquake-resistance of existing buildings
- Enhance laws regarding buildings

(5) Infrustructure

- Governmental system, public utility works, reinforcement of quake-resistance of transportation system
- Improve standard of quake-resistant design for existing infrastructure and life line system

(6) Surveillance and Early Warning System

- Introduction of earthquake surveillance system in the areas where earthquake is active
- Development of Early Warning System
- Establishment of National Center to reduce risks accompanied by earthquake

4-2-2. Disaster Management Traning Project for Local Goverenment Official

1) Basic concept

Since fostering local government staff in charge of disaster reduction is urgent issue in Sri Lanka, this training program was conducted for personnel involved in disaster reduction activities at the regional level of districts and divisions for the second straight year.

2) Costs borne by the ADRC

US$10,000

3) Date of Implementation

July 2001 and November 2001

（Succeeded from the program implemented in March, 2001）

4) Details

①Subjects

Leaders of the divisions from respective district, which are especially vulnerable to disaster

②Examples of training program

- Concept of disaster management
- Organization, laws, plans, education, training
- Disaster reduction technology, warning, decision-making
- Orientation, formation of organization
- Mobilization immediately after disaster, damage evaluation, maintenance of lifeline, evacuation sites
- Procurement, storage and distribution of goods
- Transition to recovery and restoration

5)Explanation

Sri Lanka is prone to natural disasters such as floods, landslides, cyclones, and droughts, and nurturing of local staff to handle these disasters is an urgent task. This project was succeeded from last year and conducted at the capital Sri Jayawaredenapura Kotte with presence of heads and deputy heads of provincial governments. The training centered on lectures, and was comprised of about 20 courses such as field trips, tours of international organizations, etc. The lectures incorporated a group discussion as well as the showing of self-made awareness videos to avoid one-way style lectures. Field trips were made more interesting by incorporating town-watching trips together with the villagers of flood-prone regions. The diverse courses offered and resource persons who made these possible were both impressive.

The training was held at a government-training center equipped with various equipment, accommodations and canteen, in consideration of functionality and economic merits available. Participants highly evaluated the training, and further enhancement of disaster reduction efforts at the regional government level can be expected in Sri Lanka.

Training in Sri Lanka

4-2-3. Urban Search-and-Rescue Training Project

1) Basic concept

Singapore government conducts training every year for personnel in charge of search and

rescue activities in developing countries. In an effort to utilize these resources, ADRC called for member countries to participate in the training, and as a result, search and rescue officers from Philippines, Myanmar and South Korea participated.

2) Cost borne by ADRC

Approx.US$5,000

3) Date of Implementation

October 8 and 9, 2001

4)Details

①Subjects

Total 23 of search and rescue officers from Africa, South America, Asia, etc (Of those, costs for three persons from Philippines, Myanmar and South Korea respectively were borne by ADRC.)

②Lecturers

Staff from Singapore Civil Defense Force

③Example of training program

a) Lecture

Evaluate damages
Search and rescue in the closed space
Rescue activities
Type of buildings prone to collapse
Carrying equipments for search and rescue
Action management in the event of large-scale disaster and small one
Rescue dog

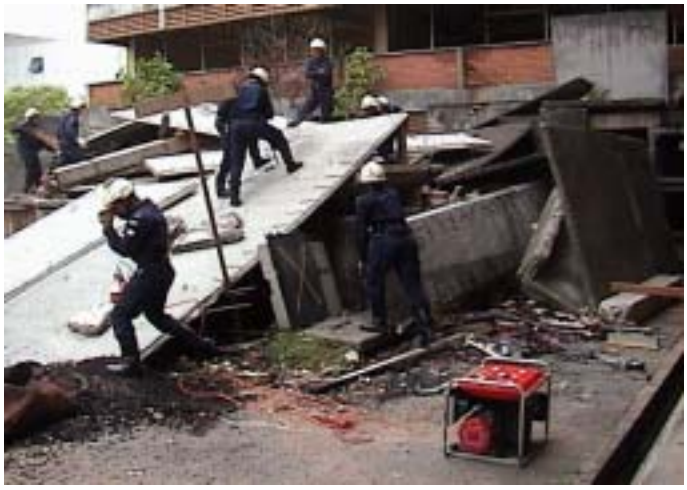
b) Practical training

Search training in the closed space
Search training in the crop storage tank (simulation facility)
Search training in the collapsed building (simulation facility)
Search training at the underground (simulation facility)
Search training at the ruined military facility

5)Explanation

Search and rescue training facility in Singapore is equipped with simulation facility such as 10-story fire building, chemical plant, refinery, debris area, closed space, etc., and also with lecture rooms, reduced scale facility, canteen, the administration, etc.

The first week of the training centered on lecture, and the second week on practical trainings for search and rescue at the simulation facilities. During training, a commander was selected from participants in the respective lesson so that participants were required to use their judgment.



Training in Singapore

Since the facility like in Singapore is rare, the needs for efficient training in developing countries are very high. It seemed at first a little difficult to conduct the training for people from different countries and different cultural and habitual background. However it was impressive to see the discipline of Singapore Civil Defense Force officers was so severe that they instructed all the participants in the firm manner despite their positions at home countries It demonstrated clearly that Singapore has appropriate human resources as well as facilities

for search and rescue training. The objective of this program is to utilize resources owned by member countries to meet needs of other member countries. The ADRC is determined to promote this type of project in the future.

4-2-4. School Educational Program for Disaster Reduction

1) Basic Concept

The purpose of this workshop is to increase awareness of disaster reduction and to improve abilities for education of disaster reduction by means of creating model curriculum for disaster reduction education at school.

This project was co-hosted by Philippine Institute of Volcanology and Seismology (PHIVOLCS) and Asia/Pacific Cultural Center for UNESCO (ACCU)), and the ADRC bore part of the cost for training together with Philippine High Education Committee and University of United Nations as one of cooperative organization. Furthermore, the ADRC recruited and selected 10 specialists in disaster reduction from Asian Nations. Besides, 10 specialists in the field of education from Manila in Philippine also participated in the program. Total of about 40 people always got together at this workshop including participants from other relevant organizations.

6 goals of the workshop are:

①Provide opportunity for exchanging information among participants including lecturers

②Improve capabilities of participants for disaster reduction management

③Raise awareness of importance to consider what school can do to reduce disaster

④Create and inspect the model curriculum to increase awareness of disaster reduction in the school education, and inspect these curriculum

⑤Create and inspect the model for evacuation training in times of earthquake at school

⑥Raise awareness of actual conditions, and teach the importance of cooperation for problem-solving

2)Date of Implementation

December 1 to 17, 2001

3)Details

Subjects

・Experts on disaster reduction from Asiancountries ：10 Participants

・Experts in educational field from Philippines ：10 Participants

Examples of Training Program

a) Lecture

- Geological hazard
- Risk and vulnerability
- Disaster reduction management policy and preparation
- Dissemination and awareness through education

b) Inspection tour and practice

- Inspection tour to school, evacuation training simulation
- Town watching
- Creation of curriculum for disaster reduction at school

4) Explanation

This workshop program centered on lecture in its initial phase, providing explanation on natural disasters, example of disaster caused in Manila, reports from participant countries, etc, where they actively exchange opinions from the beginning.

Fieldwork was mainly conducted in the middle phase, visiting private school, public high school and elementary school, where we held interview to teachers and students. Based on this information, we discussed both good and bad points. We especially took deep observation around the public elementary school facilities and surrounding areas, and also conducted evacuation training there for the event of earthquake.

Through school inspection tour and town watching, we picked up problems and dangerous points concerning disaster reduction, and made presentation by each group using map and pictures. Each group has made careful inspection, and many pointed out that there were little

vacant lots except school and church expressing their concerns about shortage of shelter in times of large scale disaster.

The first evacuation training was conducted without giving any preliminary knowledge to the teachers. Even though they experienced the earthquake evacuation training for the first time, it was conducted comparatively smoothly. Then based on the first training, we discussed with the teachers over what should be improved and introduced actual cases in Japan before the second evacuation training was implemented. Some classes made evacuation very calmly by faithfully complying with the Japanese evacuation guidelines. This training was made very successful as a result of involving teachers in charge of instructing evacuation into discussion to seek improvement of evacuation manner.

The last phase of the program centered on wrap-up meeting, verifying the activities we proceeded.

The results of this workshop were:

① Framework of curriculum for school education for disaster reduction was created.

② Based on what was discussed at workshop, we provided a statement stipulating the current situation of disaster risk, the importance of raising awareness through school education, consideration to be taken in the future system and policy.

Participants brought the framework of curriculum and the statement back to each country, and it is expected these curriculum and statement will be modified in accordance with the condition of each country and be utilized.

Training in Philippine