

## **3. Accumulation and Provision of Information on Natural Disasters and Disaster Reduction**

### **3-1. Policy and Methods**

#### **3-1-1. Policies on Accumulation**

Based on the resolutions of 23 countries in the Asian region, ADRC has been collecting and organizing information on the situation of natural disasters in each country, as well as information, knowledge of and experiences with the systems, plans, and specific measures of each country for disaster reduction. This is to facilitate the sharing of information between countries. The development of such fundamental information network has been carried out with the aim of promoting the establishment of national disaster reduction framework in each country, and multinational cooperation for disaster reduction in Asia.

In addition, ADRC collected information from the disaster reduction officers of various countries and other related organizations, and constructed a database of the latest information on recent natural disasters and human resource information on specialists of disaster reduction, with the intention of disseminating the information.

Furthermore, it has also become possible to acquire more detailed and definite information, which is reflected in disseminated information, more quickly and clearly, through collaboration with visiting foreign researchers, the Asian Unit of the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), and OCHA ReliefWeb Office in Kobe.

ADRC plans to continue collecting detailed information on the following, and release the information through the Internet and other media:

- ① Disaster management systems (judicial systems, organizations, basic plans, and manuals on managing disasters, etc.)
- ② Actual cases of disaster countermeasures
- ③ Information on natural disasters (descriptions and damage incurred by earthquakes, floods, cyclones, and other natural disasters)
- ④ Human resource information (disaster reduction administrators, experts, international organizations, private companies, NGO members, etc.)

#### **3-1-2. Collecting Information from Member Countries**

In fiscal 2001, as in the previous year, ADRC collected disaster reduction related information on various countries through the following methods:

##### **1) Requesting information from member countries**

While gaining the understanding of each member country on the purposes of establishing the ADRC and the need for multinational disaster reduction cooperation, ADRC has been asking member countries to provide natural disaster information, as well as information on actual disaster cases and disaster reduction systems, and have been receiving such information from these countries.

##### **2) ADRC International Meeting**

At the Fifth ADRC International Meeting (January 15 to 17, 2003), member countries, and advisor countries, and countries and organizations participating as observers provided reports and other materials that included natural disaster information, actual case studies for dealing with disasters, and disaster reduction systems. They also voiced their requests concerning the activities of ADRC.

During the Fifth ADRC International Meeting hosted by ADRC, two other important meetings – the International Disaster Reduction and Humanities Symposium hosted by the Disaster Reduction Alliance (DRA) and the ISDR Asia Meeting hosted by ISDR and Japanese government (Cabinet Office) – were held at the same conference center focusing on the common theme “Coping with the Earth: towards disaster-resilient society.” Taking the advantages of this opportunity, the Fifth ADRC International Meeting was attended by many

disaster-related organizations from all over the world and achieved a broader understanding among the participants for the need of building an international system facilitating strong cooperation and collaboration through effective disaster information sharing.

### 3) Use of WWW (World Wide Web)

#### (1) Disaster reduction information in each country

Following the last fiscal year, ADRC has been using the Web to collect information on the disaster reduction systems of various countries, as well as related information from administrators in charge at international organizations and countries. In particular, India has been sending e-mails and disaster management information via the Web since the Gujarat earthquake, which the ADRC places, on its homepage as needed.

In the future, it will be important to track the trends of disaster reduction information supplied in various countries, as well as support the active construction of information supply systems from various countries through technical support for the construction of mirror sites and disaster information databases.

#### (2) Disaster reduction information of academic research institutions and international organizations

In addition to these efforts, international organizations and research centers are actively collecting and providing disaster reduction information from various perspectives. Through the spread of Internet services, there has been a gradual establishment of systems able to share this information over the Internet.

However, information is circulated via different and independent channels. As a result, it is not always easy to access the exact information needed. To resolve this problem and promote disaster-related information sharing, ADRC has proposed the use of common disaster IDs. The disaster database (EM-DAT) run by CRED of Louvain Catholic University in Belgium provides statistic data of disasters all over the world and is available over the Internet. While the EM-DAT serves as a database on statistical figures, OCHA provides information on natural disasters and reliable information on disaster countermeasures and management in an effort to support humanitarian activities during disasters at its Relief Web site on the Internet. Using common disaster IDs for the disaster reduction information will facilitate easy access to information of both EM-DAT and OCHA. Promotion of the GLIDE (GLObal unique disaster IDentifier number) ID project launched last year is effective in integrating a variety of information generated for the same disaster by different organizations concerned.

## 3-2. Information on Disaster Management Systems

### 3-2-1. Scope of Information

#### 1) Judicial systems

Not all countries have fundamental laws like Japan's "The Disaster Countermeasures Basic Act." Some countries prescribe disaster management systems in accordance with government decrees and rules of specified organizations. The background and process of formulating laws and regulation vary from country to country, thereby there is no "Best way" common to all countries. However, the sharing of national information concerning laws and regulations is considered a useful reference to countries that are attempting to establish legal systems or improve their current systems.

#### 2) Organization

Similar to the legal systems, organizations in charge of disaster reduction vary from country to country. In addition, restructuring of these organizations is not unusual even when a fundamental legal system concerning disaster reduction is maintained unchanged. Referring to organizational systems of other countries may be useful because the purpose "disaster reduction" is common to all countries despite the differences in natural environments and social and cultural backgrounds. Further, understanding of the roles of organizations and process flow of other countries is useful to promote international collaboration for disaster reduction.

3) Basic plans

Among the member countries, not many have systematic and strategic disaster management systems based on a comprehensive disaster reduction plan. Disaster reduction plans opened to and shared by other countries will be good references for countries attempting to formulate or revise their disaster reduction plan. Feedback and review from those countries will also be expected and will be useful in promoting multinational disaster reduction collaboration.

4) Disaster manuals

Most disaster manuals or hazard maps are compiled by countries and regions based on the natural disasters that the region or country has experienced, or by the type of natural disaster specific to that country or region. However, the manuals and hazard maps developed specifically for each country or region are not always capable of sharing the experiences and measures against disasters common to different countries and regions, thus preventing international or inter-regional collaboration. ADRC has been making efforts since the previous fiscal year to collect information to enable the sharing of these existing disaster countermeasures and disaster manuals and hazard maps. Situations change at an accelerated speed due to urbanization and globalization and ADRC will continue promoting the inter-regional and international sharing of experience, knowledge, and views on measures for specific disasters that have been formed and accumulated in different countries and regions.

### **3-2-2. Level of Information Source**

It is important to collect information not only at the national government level but also at local government (city, town and village) and community levels. This is because that the first to cope with a disaster is the individuals, and then local communities and local government such as city, town or village. Assistance at the national government or international level is given only when the disaster exceeds the capability of the local government. Establishment of legal systems and an organization at the national government level does not always mean the improvement of actual and practical capabilities of disaster reduction and preparedness at regional and community levels including individual residents. To build a society prepared for disasters, collaboration beyond the framework of different organizations is indispensable. Integrating and sharing information of all levels is the first step to this goal.

### **3-2-3. Information Accumulation Methods**

As indicated in 3-1-2, since the last fiscal year, ADRC has been accumulating information on the disaster reduction systems of different countries by requesting information from member countries, implementing field surveys, holding international conferences, and by its own unique methods using the Internet.

Table 3-2-3-1 lists the reports provided from counterparts of member countries. All such reports are available on the ADRC website. In recent years, disaster reduction organizations of many countries are actively providing information over the Internet. Therefore, the ADRC website has links to some of these websites where the latest information is available in a more effective manner than viewing the reports on our website.

Table. 3-2-3-1 List of reports from ADRC member countries

No.	Country	Year prepared
1	Armenia	2001, 2002
2	Bangladesh	1998, 1999, 2001
3	Cambodia	1998, 1999, 2002
4	China	1998, 1999
5	India	1998, 1999, 2002
6	Indonesia	1998, 1999, 2002
7	Japan	1998, 1999, 2002
8	Kazakhstan	1998, 1999, 2002
9	Korea	1998, 1999, 2001, 2002
10	Kyrgyzstan	Now Preparing
11	Laos	1998, 1999
12	Malaysia	1998, 1999
13	Mongolia	1998, 1999, 2002
14	Myanmar	2002
15	Nepal	1998, 1999
16	Papua New Guinea	1998, 1999
17	The Philippines	1998, 1999, 2002
18	Russia	1998, 1999
19	Singapore	1998, 1999, 2001, 2002
20	Sri Lanka	1998, 1999
21	Tajikistan	1998, 1999
22	Thailand	1998, 1999
23	Uzbekistan	1998, 1999
24	Vietnam	1998, 1999

### 3-2-4. Future Tasks

Concerning future tasks, ADRC plans to further reinforce and expand its database, analyze information collected, and based on the data acquired, pinpoint the needs of different countries to promote multi-national disaster reduction cooperation.

#### 1) Reinforcement and expansion of the disaster reduction database

In order to share the information between countries concerning disaster reduction systems accumulated at ADRC, the Center constructed a database on its homepage to enable free retrieval and access of information on disaster reduction systems. It enabled many countries and regions to establish and improve their own national or regional disaster reduction systems while referring to actual examples from other countries. ADRC will continue its efforts in updating and enhancing the contents of the database with the cooperation of member countries to realize a more user-friendly disaster reduction database.

#### 2) Analysis of information and dealing with the needs of countries

Analysis of information collected helps clarify the specific situations and needs of various countries. It is apparent that several countries already have national level disaster reduction systems, while others are currently preparing to establish disaster reduction systems. We believe that the former countries need to make various improvements to enhance and reinforce their existing systems, and that priority should be given to help the latter group of nations to complete disaster reduction system development, which is the common challenge of intra-region collaboration.

In order to reduce Asia's vulnerability to natural disasters, it is essential for countries to consider disaster reduction measures in their basic national long-term plans. To realize this, it is first necessary to heighten the disaster reduction awareness of the government as well as among the population. To attain the goal of building societies fully aware of importance not only of post-disaster emergency assistance but also of their own disaster reduction activities, lawmakers, policy makers, and planners should appropriately prioritize and continue to always include the disaster reduction issue in the basic plans of their country and region.

#### 3) Promotion of cooperation

As agreed at both the 5<sup>th</sup> ADRC International Meetings (Jan. 15 and 16, 2003), it is vital that disaster reduction administrators and specialists of member countries exchange the latest information on disaster reduction systems and measures by continuing to hold regular meetings. It is equally important that researchers from member countries working at ADRC help to promote active personnel and information exchanges in the Asian region taking advantage of the visiting researcher program, which started in July 1999. In addition, to reduce the damage from natural disasters in Asia, while serving as a mediator, the ADRC is required to form a network of personnel involved in disaster reduction, technologies, and physical resources between Japan and the other countries of Asia, in order to stimulate exchanges.