3-2. Database on Disaster Risk Reduction

The ADRC has been disseminating many different types of information related to disaster risk reduction on its website (http://www.adrc.asia) aiming at ensuring an appropriate disaster response, mitigation, and preparedness activities.

3-2-1. Information on Disaster Management Systems in Member and Advisor Countries

The ADRC has been providing up-to-date information on disaster management systems in the member and advisor countries as useful references for planning and implementing disaster risk management activities in Asia and the world.

The webpage of "Information on Disaster Risk Reduction of Member Countries" outlines general information including a brief description of climate and geographical conditions, overview of disasters, and disaster management system including legal system, organizations for dealing with disaster risk management, basic plans for disaster risk mitigation and reduction in each country.

Further, the page provides country reports compiled by the member countries for more detailed information mentioned above. The reports also include progress of the implementation of the priority actions of Hyogo Framework for Action (HFA) 2005-2015. In 2009, the reports of Malaysia,

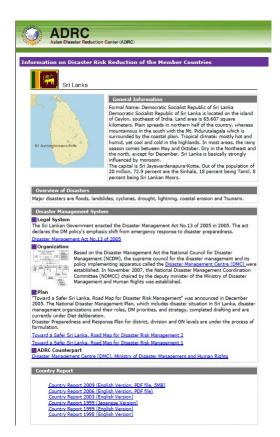


Fig. 3-2-1 Country Profiles on DRR http://www.adrc.asia/disaster/index.html

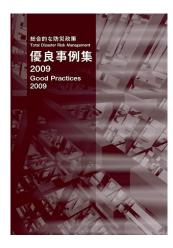
Nepal, Pakistan, Philippines, Sri Lanka, and Thailand have been updated.

3-2-2. Total Disaster Risk Management, Good Practices 2009

Since its inception in 1998, the ADRC has been pursuing safety and security fir those living in Asia through various means, including information sharing, human resource development, and community capacity-building. Further along this line, the ADRC has been collaboration with the UN and other international organizations/disaster management institutions in each country toward implementing the HFA.

"Total Disaster Risk Management: Good Practices" has been published annually since January 2005, when the United Nations World Conference on Disaster Reduction (WCDR) was held in Kobe, Japan. It is intend as a user-friendly publication and aims to further promote disaster risk reduction activities by demonstration positive examples collected from different countries.

The good practices in disaster risk management activities by governments, local governments, universities, international organizations, NGOs and the general public are distributed in ADRC website.







English version

3-2-3. Data Book on Asian Natural Disasters

Every year natural hazards hit the Asian region, causing tremendous loss of life and livelihood, and jeopardizing potential sustainable development. For example, in 2008, two historic disasters, Cyclone Nargis and Sichuan Earthquake brought about devastating impacts on Myanmar and China. A total of 226,000 people were killed by the disasters alone, accounting for 95 percent of the world's killed people in the year, while include other disasters that occurred in Asia, 97 percent of killed people in the year were from Asia. Similar trend is found in the number of the affected people and the amount of damage of the year, to show the vulnerability to disasters in the region.

As part of its information sharing activities, ADRC has been compiling a data book annually since 2002, which includes the overview of the disaster occurrences and impacts of the world and Asia, based on the data accumulated from EM-DAT, along with numerous other statistics and analyses. Now Data Book 2007 is available online at ADRC's website.

3-2-4. Current Status of "GLIDE"

GLIDE is the acronym for the GLobal unique disaster IDEntifier system, in which commonly formatted but unique numbers are assigned to disasters all over the world. The GLIDE system was first proposed by ADRC and has been adopted and used by more than 20 international organizations and research institutes.

ADRC has its own criteria for how new GLIDE numbers are generated. In Japan, a new GLIDE number will be generated if a disaster occurs in which either five or more people are killed or 100 or more people are injured. In other countries, a new GLIDE number will be generated if a disaster occurs in which either 10 or more people are killed or 100 or more people are injured.

3-2-4-1. Disaster Information Sharing Using GLIDE Numbers

There are many organizations around the world that design and develop their own disaster databases that are freely accessible online. When a disaster occurs, information is distributed over the Internet not only by organizations in the affected countries but also by organizations and the mass media in other countries. Whenever a disaster occurs in any part of the world, ADRC collects information from websites of relevant organizations and worldwide news agencies, or by sending e-mails to contact persons in the affected area. Over the course of its experience, ADRC has come up against several problems in collecting disaster information using these conventional methods, including the following.

- (1) Considerable manpower is needed to search the Internet for websites of relevant individual organizations every time a disaster occurs.
- (2) There is no standardized naming protocol for disasters. As many different names are given to a certain single disaster by various organizations, even search engines such as Google or Yahoo sometimes return no results.
- (3) Website links may be lost when the structure of particular organization's database or website is modified.

The GLIDE system offers a solution to these problems. It will significantly improve the efficiency with which information on historical and ongoing disasters can be retrieved from databases and websites.

At the Global Disaster Information Network (GDIN) Conference held in Canberra, Australia in March 2001, ADRC proposed the development of a standardized coding system for managing information on disasters around the world. This proposal was accepted for implementation as a pilot project by the GDIN. In 2004, glidenumber.net was jointly developed by the ADRC and OCHA ReliefWeb, with technical assistance provided by LaRED. It is designed to issue new GLIDE numbers to disasters immediately after they occur. Moreover, ADRC, the CRED, IRI/Columbia University, the USAID/OFDA, the WMO, IFRC, UNDP, and ISDR Secretariat have agreed to use the GLIDE number format as the standard for assigning disaster identification numbers.

The GLIDE number format was revised in 2004 as follows:

AA-BBBB-CCCCCC-DDD-EEE

AA: Disaster classification $\longrightarrow \longrightarrow \longrightarrow \longrightarrow \longrightarrow$

BBBB: Year of occurrence (4-digit numeric figure) CCCCCC: Serial number by year

DDD: Country code

(ISO code. e.g., JPN for Japan)

EEE: Region code

(e.g., 013 for Tokyo)

| Drought | DR |
|-----------------------|----|
| Heat Wave | HW |
| Cold Wave | CW |
| Tropical Cyclone | TC |
| Extratropical Cyclone | EC |
| Tornado | TO |
| Violent Wind | VW |
| Severe Local Storm | ST |
| Flood | FL |
| Flash Flood | FF |
| Land Slide | LS |
| Snow Avalanche | AV |
| Mud Slide | MS |
| Volcano | VO |
| Earthquake | EQ |
| Fire | FR |
| Tsunami | TS |
| Storm Surge | SS |
| Epidemic | EP |
| Insect Infestation | IN |
| Wild Fire | WF |
| Others | OT |
| Complex Emergency | CE |
| Technological | AC |

Fig 3-2-4-1 Structure of GLIDE

The local code at the end can be added for the convenience of user countries in organizing their national databases. This format is still in use among GLIDE-issuing organizations.

Databases that incorporate GLIDE numbers will have the following advantages:

- (1) A parameterized search function allows user organizations to easily connect pieces of disaster information archived by various organizations.
- (2) A search engine, developed to focus on particularly important information for user organizations, allows a one-stop search and display of all the necessary data, eliminating the need to conduct additional searches for data independently archived by individual organizations.

The current status of GLIDE use by partner organizations is described in the table below.

| | Name of organization | Status of GLIDE utilization |
|------------------|--|---|
| GLIDE number | Asia Disaster Reduction Center | Uses GLIDE numbers to report latest |
| issuance & | (ADRC) | disasters, in conjunction with ReliefWeb. |
| utilization on | OCHA ReliefWeb (Office for | Issues GLIDE numbers and creates |
| disaster | the Coordination of | linkages using GLIDE numbers. |
| website/database | Humanitarian Affairs) | |
| | LaRED | A disaster database in Latin America. |
| | | Issues GLIDE numbers to its own |
| | | database records. |
| | International Federation of Red | Issues GLIDE numbers when |
| | Cross and Red Crescent | transmitting disaster information for Red |
| | Societies (IFRC) | Cross activities. |
| | JRC/GDACS (EU) | Disaster information website in the EU |
| | Caribbean Disaster Emergency | GLIDE numbers are utilized in the |
| | Response Agency (CDERA) | disaster databases of Caribbean countries. |
| | OCD, NDCC (Philippines) | Issues GLIDE numbers to records on |
| | | disasters over the past 35 years in a joint |
| | | project with ADRC and publishes them |
| | | online. |
| GLIDE number | UN Food and Agriculture | Uses GLIDE numbers to link existing |
| utilization on | Organization (FAO) | disaster records to the FAO's Mapping |
| disaster | | System of agricultural disasters. |
| website/database | Japan Aerospace Exploration | Scheduled to provide satellite |
| | Agency (JAXA) | information linked to the latest disaster |
| | | information of ADRC. |
| | Dartmouth Flood Observatory | Uses GLIDE numbers to floods recorded |
| | (Dartmouth University, USA) | worldwide. |
| | UNOSAT | Utilizes GLIDE numbers in the provision |
| | 2 (11(211) | of satellite images. |
| | Benfield (UK) | Research agency of a reinsurance |
| | | company in UK that utilizes GLIDE |
| | | numbers on its disaster website |
| | CHELLIDUS (Const. Const. co. | (inTERRAgate). Uses GLIDE numbers to disaster data in |
| | SHELUDUS (South Carolina University, US) | US. GLIDE can be used as a search term. |
| | PDC (Pacific Disaster Center) | Uses GLIDE numbers to disasters on its |
| | PDC (Pacific Disaster Center) | website. |
| | National Research Institute of | Uses GLIDE numbers to disasters in its |
| | Earth Science & Disaster | database. |
| | Prevention (NIED) | damouse. |
| | United Nations Development | GLIDE propagation and promotion are |
| GLIDE-supporting | Programs (UNDP), | supported by these UN organizations. |
| international | International Strategy for | Tarra of most of organizations. |
| organizations | Disaster Reduction (ISDR), | |
| <i>G</i> | CRED, WMO | |
| | , | |

Fig 3-2-4-2 Current Glide Partnerships