3. Collection and Dissemination of Disaster Information

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 appropriate disaster response, mitigation, and preparedness activities.

3-1. Disaster Risk Reduction Activities of Member Countries

With assistance from its 30 member countries, the Asian Disaster Reduction Center (ADRC) has been collecting information on systems, plans, and specific measures of each country's disaster risk reduction as well as the situation of natural disasters. ADRC has also been collecting information from related materials, various countries/organizations and through Visiting Researchers from the ADRC member countries and UNOCHA Office in Kobe.

ADRC will continue collecting and sharing information on the following items mainly:

1) Disaster management systems (legal frameworks, organizations, basic plans, and disaster management manuals), 2) Experiences of disaster response, and 3) Information on natural disasters (descriptions of natural disasters such as earthquakes, floods, cyclones, etc., and resulting damages).

3-1-1. Information Collection from Member Countries

In fiscal year 2013, as in the previous year, ADRC collected disaster risk reduction-related information on member countries through the following methods.

(1) Information Provided from ADRC Member Countries

Besides the voluntary provision from the member countries, ADRC collected the information on systems, plans, and specific measures of each country's disaster reduction as well as situations of ongoing natural disasters through Visiting Researchers (VR).

(2) Collecting Information through Participation in International Conferences

ADRC collected relevant information by participating in international conferences such as the 1st Executive Committee of 6th Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR). In addition, ADRC, in collaboration with the Government of Japan (Cabinet Office), held the Asian Conference on Disaster Reduction in Tokyo, Japan from 4 to 6 February 2014 in order to discuss and share progresses, issues, and challenges in implementing disaster risk reduction polices.

(3) Utilization of Internet

Taking advantage of internet, the ADRC has been collecting disaster related information efficiently. Internet will be more important to facilitate technical support and construct disaster information databases. The internet also helps ADRC to collect related information provided

by academic research institutions and international organizations.

In fiscal year 2013, ADRC continued gathering information on the disaster risk reduction systems of member countries through information requests, field surveys, international conferences, and internet. Furthermore, ADRC updated country reports in cooperation with Visiting Researchers.

Table 1-2-1-1 lists the reports provided by counterparts in member countries. All these reports are available on ADRC website. Over recent years, disaster risk management organizations in many countries have been actively promoting information dissemination over the internet. Therefore, the ADRC website developed direct links to these websites which offer access to the latest information.

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

Country	Year prepared
Armenia	2001, 2002, 2003, 2005, 2006, 2010, 2012
Azerbaijan	2011
Bangladesh	1998, 1999, 2001, 2003, 2005, 2006, 2010, 2011, 2013
Bhutan	2008, 2013
Cambodia	1998, 1999, 2002, 2003, 2005, 2006, 2013
China	1998, 1999, 2005, 2006, 2012
India	1998, 1999, 2002, 2005, 2006, 2008, 2012
Indonesia	1998, 1999, 2002, 2003, 2004, 2005, 2006, 2012
Iran	2013
Japan	1998, 1999, 2002, 2005, 2006, 2012
Kazakhstan	1998, 1999, 2002, 2005, 2006
Korea	1998, 1999, 2001, 2002, 2005, 2006, 2008
Kyrgyzstan	2005, 2006, 2012
Laos	1998, 1999, 2003, 2005, 2006
Malaysia	1998, 1999, 2003, 2005, 2006, 2008, 2009, 2011
Maldives	2013
Mongolia	1998, 1999, 2002, 2005, 2010, 2011, 2013
Myanmar	2002, 2005, 2006, 2013
Nepal	1998, 1999, 2005, 2006, 2009, 2010, 2011
Pakistan	2005, 2006, 2009
Papua New Guinea	1998, 1999, 2005, 2006
Philippines	1998, 1999, 2002, 2003, 2005, 2006, 2009, 2010, 2011, 2012
Russia	1998, 1999, 2003, 2005, 2006
Singapore	1998, 1999, 2001, 2002, 2003, 2005, 2006
Sri Lanka	1998, 1999, 2003, 2005, 2006, 2009, 2010, 2011

Tajikistan	1998, 1999, 2003, 2005, 2006
Thailand	1998, 1999, 2003, 2004, 2005, 2006, 2008, 2010, 2011, 2012
Uzbekistan	1998, 1999, 2005, 2006, 2013
Vietnam	1998, 1999, 2005, 2006
Yemen	2009, 2012

Country Reports include the following topics provided by each member country.

I. Natural Hazards in the Country
   1.1 Natural Hazards Likely to Affect the Country village
   1.2 Recent Major Disasters
     (basic data of disasters, damage situation, response and recovery information)

II. Disaster Management System
   2.1 Administration System
   2.2 Legal System and Framework
   2.3 Structure of Disaster Management
   2.4 Priorities on Disaster Risk Management

III. Disaster Management Strategy, Policy and Plan

IV. Budget Size on National Level

V. Progress of the Implementation of Hyogo Framework for Action (HFA)

VI. Recent Major Projects on Disaster Risk Reduction

VII. Counterparts of ADRC

3-1-2. Natural Disaster Data Book

ADRC publishes analyses on disaster impacts based on the data of EM-DAT provided by the Centre for Research on the Epidemiology of Disasters (CRED), Brussels. For instance, 20th Century Data Book on Asian Natural Disasters, and its revision released in 2000 and 2002 respectively featured disasters which hit its member countries while annual Natural Disaster Data Book covers disaster characteristics in the world.

This section introduces the excerpts from Natural Disaster Data Book 2012, which covers regional and disaster-specific issues of the year and long term.

According to EM-DAT recorded in 2012, 328 disaster events occurred, 10,783 people were killed, more than 104 million people were affected and economic damage reached 142billion USD.

In 2012, Typhoon Bopha (Typhoon No.24 in Japan) brought about largest impacts, killing 1,900 people, affecting more than 6 million people and damaging 1.7 billion USD. Also several floods in China affected 17 million people in July and caused economic damage 8 billion USD in November.

In 2012, Asia had largest shares in disaster occurrence (39.3 %), fatalities (55.9%) and affected people (69.2%) while Americas topped in the amount of damages (61.1%) followed by Asia's 23.0% (Figure 3-1-2-2 and Table 3-1-2-1). This is attributed to severe storms including hurricanes and droughts in the United States.

Regarding disaster types, flood topped in disaster occurrences (36.9%), the number of killed and affected (31.6% and 58.6% respectively). On the other hand, storm shared highest in economic damage (52.8%).

Compared with the previous year, the year 2012 saw decline in the numbers of disaster occurrences, people killed and affected, and the amount of economic damages.

In the medium and long term, the number of disaster occurrences is declining trend though the other indices show increasing trend.
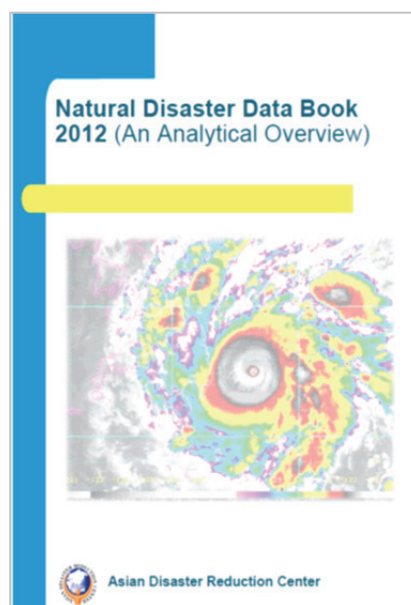

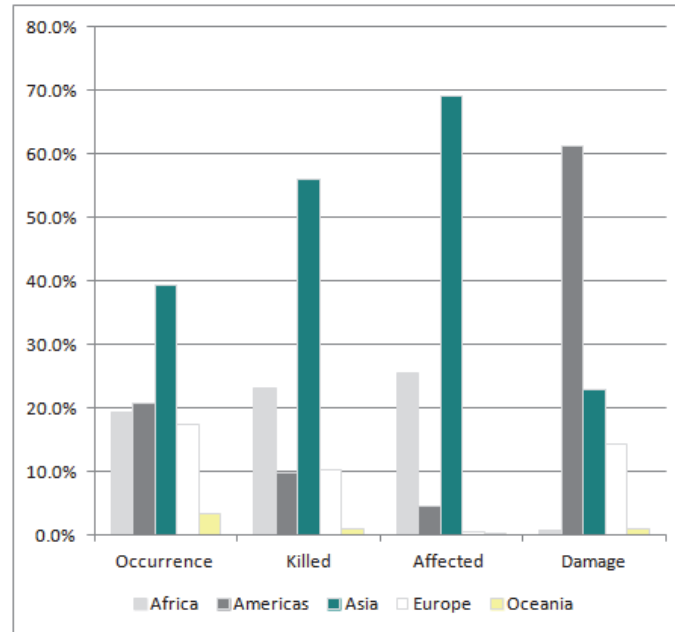Fig. 3-1-2-1 National Disaster Data Book 2012

Fig. 3-1-2-2 I mpacts of Natural Disasters by Region 2012

Region	Impact							
	Occurrence (share in %)		Killed (share in %)		Affected (share in %)		Damage (US$ million) (share in %)	
Africa	63	(19.2%)	2,489	(23.1%)	26,532,108	(25.4%)	1,084	(0.8%)
Americas	68	(20.7%)	1,051	(9.7%)	4,749,370	(4.6%)	87,063	(61.1%)
Asia	129	(39.3%)	6,032	(55.9%)	72,178,335	(69.2%)	32,687	(23.0%)
Europe	57	(17.4%)	1,111	(10.3%)	557,319	(0.5%)	20,346	(14.3%)
Oceania	11	(3.4%)	100	(0.9%)	258,229	(0.2%)	1,208	(0.8%)
Total	328	(100.0%)	10,783	(100.0%)	104,275,361	(100.0%)	142,387	(100.0%)

Table 3-1-2-1 Impacts of Natural Disasters by Region 2012

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

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.

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 →→→→→→→

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 3-1-3-1 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.