
3. Collection and Dissemination of Disaster Information

ADRC has been disseminating a wide range of information related to disaster risk reduction (DRR) 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 support by its 31 member countries, ADRC has been collecting information on systems, plans, and policy measures of individual countries' 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 (VRs) from the ADRC member countries and the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). ADRC will continue collecting and sharing with member countries information on the following items, in particular: 1) Disaster management systems (legal and institutional frameworks, disaster management plans, and manuals), 2) Disaster response and recovery activities (emergency response activities in affected area/country), and 3) Natural disaster events (descriptions of natural disasters such as earthquakes, floods, cyclones, and so on, and the damages).

3-1-1. Information Collection from Member Countries

In fiscal year 2019, as in the previous year, ADRC collected DRR-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 DRR systems, plans, and policy measures of individual countries as well as situations of ongoing natural disasters through VRs.

(2) Collecting Information through International Conferences

ADRC collected and updated DRR information about current status, challenges, policies, actions and others of countries and relevant organizations through international conferences. In particular, in the Asian Conference on Disaster Reduction (ACDR) 2019 held in Ankara, Turkey, from 25 to 27 November 2019, ADRC shared the information and knowledge on innovative approaches for disaster risk reduction, earthquake and tsunami risk management practices, promotion of school DRR education, development of strategy for regional sand storm disaster risk reduction, and recovery from mega disasters. See the details on ACDR 2019 in the Chapter 2-1.

(3) Utilization of Internet

Utilizing internet, ADRC has been collecting disaster related information efficiently. Internet became important to facilitate technical support and building disaster information databases. Internet also helps ADRC to collect related information provided by academic research institutions and international organizations. ADRC has been using Facebook for providing information on latest activities of ADRC and VRs.

(4) Country Reports of Member Countries

Table 3-1-1 shows the list of the country reports provided so far by counterparts in member countries, which are made available on ADRC website. The reports were also updated in cooperation with VRs from member countries. Over recent years, many disaster risk management organizations in Asia have been actively promoting information dissemination by effective use of internet. Therefore, ADRC website has also provided direct links with these websites, which offer easy access to the latest information of each country.

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

Country	Year prepared
Armenia	2001, 2002, 2003, 2005, 2006, 2010, 2012, 2015, 2016, 2017
Azerbaijan	2011, 2014
Bangladesh	1998, 1999, 2001, 2003, 2005, 2006, 2010, 2011, 2013
Bhutan	2008, 2013, 2014, 2017, 2019
Cambodia	1998, 1999, 2002, 2003, 2005, 2006, 2013
China	1998, 1999, 2005, 2006, 2012
India	1998, 1999, 2002, 2005, 2006, 2008, 2012, 2015, 2018
Indonesia	1998, 1999, 2002, 2003, 2004, 2005, 2006, 2012, 2016
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, 2018
Maldives	2013, 2014, 2015, 2018
Mongolia	1998, 1999, 2002, 2005, 2010, 2011, 2013
Myanmar	2002, 2005, 2006, 2013, 2018
Nepal	1998, 1999, 2005, 2006, 2009, 2010, 2011, 2014, 2019
Pakistan	2005, 2006, 2009, 2015, 2016, 2017

Papua New Guinea	1998, 1999, 2005, 2006
Philippines	1998, 1999, 2002, 2003, 2005, 2006, 2009, 2010, 2011, 2012, 2014, 2016, 2017, 2018
Russia	1998, 1999, 2003, 2005, 2006
Singapore	1998, 1999, 2001, 2002, 2003, 2005, 2006
Sri Lanka	1998, 1999, 2003, 2005, 2006, 2009, 2010, 2011, 2014, 2015, 2016, 2019
Tajikistan	1998, 1999, 2003, 2005, 2006
Thailand	1998, 1999, 2003, 2004, 2005, 2006, 2008, 2010, 2011, 2012, 2016, 2017, 2018, 2019
Turkey	2019
Uzbekistan	1998, 1999, 2005, 2006, 2013, 2015
Vietnam	1998, 1999, 2005, 2006, 2017
Yemen	2009, 2012, 2014

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

I. Natural Hazards in the Country

1.1 Natural Hazards that could Affect the Country

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 Frameworks

2.3 Structure of Disaster Risk Management

2.4 Priorities on Disaster Risk Management

III. Disaster Risk Management Strategy, Policy and Plan

IV. Budget at National Level

V. Progress of the Implementation of Hyogo Framework for Action, Sendai Framework for Disaster Risk Reduction

VI. Recent Major Projects on Disaster Risk Reduction

VII. Counterparts of ADRC

3-1-2. Natural Disaster Data Book

(1) Background

Past disaster records are critical in policy making, review, survey and analysis of disaster management plan. ADRC concluded MOU on disaster data utilization with the Centre for Research on the Epidemiology of Disasters (CRED) and has conducted analyses on disaster impacts based on the database, Emergency Events Database (EM-DAT) maintained by CRED.

For instance, 20th Century Data Book on Asian Natural Disasters, and its revision released in 2000 and 2002 respectively featured natural disasters, which hit its member countries while annual Natural Disaster Data Book covers disaster characteristics in the world as well.

(2) Natural Disaster Data Book 2018

This section introduces the excerpts from Natural Disaster Data Book 2018 (Fig. 3-1-2-1), which covers regional and disaster-specific issues of the year and long term.

The Data Book shows the disaster trend from Year 1989 to 2018. As for the number of occurrence, it has been seen a decreasing trend, but still high in number. The number of people killed has been drastically decreasing, while the amount of economic damage has been in the increasing trend. The number of people affected has been slowly decreasing, but it has been depending on impacts of disaster events occurred.

According to EM-DAT recorded in 2018, 331 disaster events occurred, 14,385 people were killed, more than 80 million people were affected, and the economic damage reaches to over 130 billion US dollars. By disaster type, flood topped in the number of occurrence, and earthquake in the number of people killed, and storm in the amount of economic damage in 2018 (Fig.3-1-2-2 and Table 3-1-2-1).

In year 2018, 4,340 people were killed by the earthquake and tsunami that hit Indonesia in September, over 23 million people were affected by a flood occurred in India, and more than 68 billion USD was economically damaged by storm and wildfire events occurred in the U.S.A.

Compared with the previous year, 2018 data shows small increase in the number of people killed, while the number of occurrence, people affected and the amount of economic damage have been decreased.

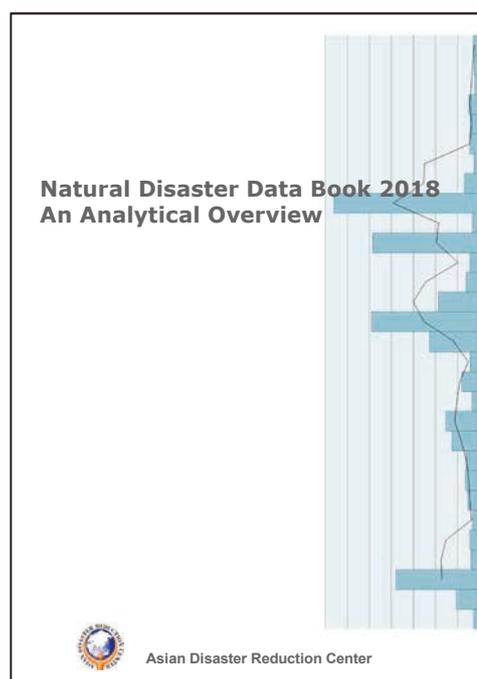


Fig. 3-1-2-1 Natural Disaster Data Book 2018

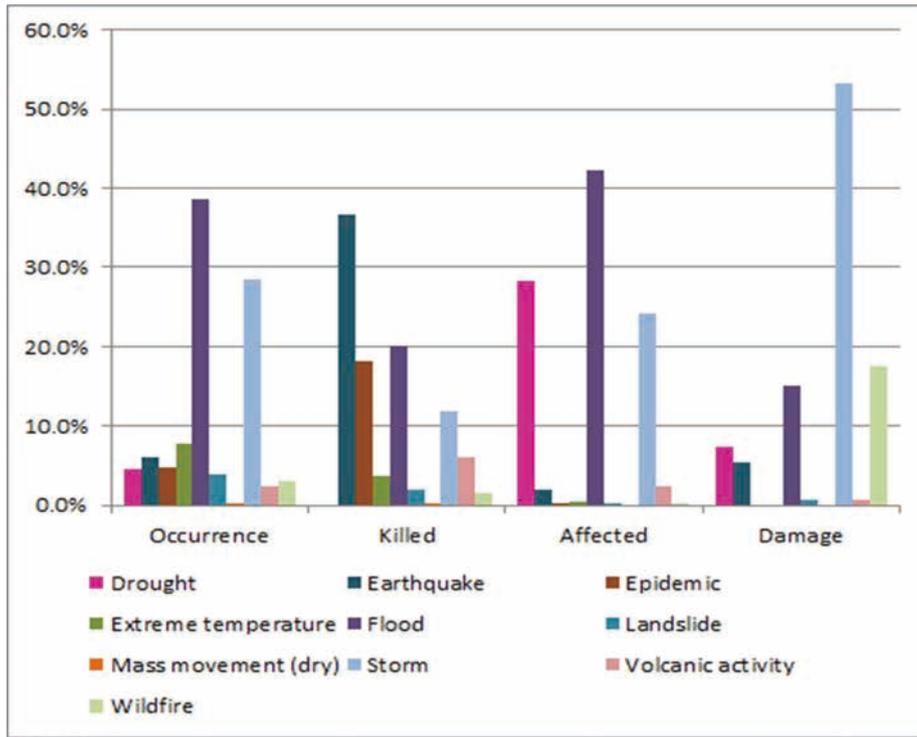


Fig. 3-1-2-2 Impacts of Natural Disasters by Disaster Type 2018

Table 3-1-2-1 Impacts of Natural Disasters by Disaster Type 2018

Disaster Type	Impact			
	Occurrence (share in %)	Killed (share in %)	Affected (share in %)	Damage (US\$ million) (share in %)
Drought	15 (4.5%)	0 (0.0%)	22,968,345 (28.3%)	9,554 (7.3%)
Earthquake	20 (6.0%)	5,264 (36.6%)	1,515,269 (1.9%)	7,114 (5.4%)
Epidemic	16 (4.8%)	2,601 (18.1%)	107,162 (0.1%)	0 (0.0%)
Extreme temperature	26 (7.9%)	536 (3.7%)	396,798 (0.5%)	0 (0.0%)
Flood	128 (38.7%)	2,881 (20.0%)	34,236,433 (42.2%)	19,692 (15.1%)
Landslide	13 (3.9%)	275 (1.9%)	54,908 (0.1%)	928 (0.7%)
Mass movement	1 (0.3%)	17 (0.1%)	0 (0.0%)	0 (0.0%)
Storm	94 (28.4%)	1,712 (11.9%)	19,693,372 (24.3%)	69,697 (53.3%)
Volcanic activity	8 (2.4%)	878 (6.1%)	1,909,098 (2.4%)	869 (0.7%)
Wildfire	10 (3.0%)	221 (1.5%)	261,287 (0.3%)	22,802 (17.5%)
Total	331 (100.0%)	14,385 (100.0%)	81,142,672 (100.0%)	130,655 (100.0%)

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

GLIDE is the acronym for the GLocal 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. Please find more information on GLIDE at Chapter 2-2.