# 3. Collection and Dissemination of Disaster Information

ADRC has been disseminating a wide range 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 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 from the ADRC member countries and UNOCHA Office in Kobe. ADRC will continue collecting and sharing with member countries information on the following items, in particular:

1) Disaster management systems (legal frameworks, organizations, basic plans, and disaster management manuals), 2) Experiences of disaster response (emergency response activity in affected area/country), and 3) Information on natural disasters (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 2018, 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**

In fiscal year 2018, as in the previous year, ADRC collected disaster risk reduction-related information on member countries through the following methods.

**(2) Collecting Information through Participation in International Conferences**

ADRC has been working to collect disaster risk reduction-related information about current status, challenges, policies, actions and others in related countries and organizations. ADRC held, in particular, the Asian Conference on Disaster Reduction 2018 Awaji Island in Hyogo, Japan, from 30 October to 1 November 2018. And ADRC had been working to provide and share the information such as national or local DRR strategies on implementation of the Sendai Framework, the effective emergency response to survive mega disasters and advanced technologies facilitating DRR and climate change adaptation.

**(3) Utilization of Internet**

Taking advantage of internet, ADRC has been collecting disaster related information efficiently. Internet will become more and more 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 as one of the major social network services for providing latest activities of Visiting Researchers.

In fiscal year 2018, ADRC continued gathering information on disaster risk reduction systems of member countries through requesting information, field surveys, international conferences, and internet. Furthermore, ADRC updated country reports in cooperation with Visiting Researchers.

Table 3-1-1 lists the reports provided by counterparts in member countries. All these reports are made available on ADRC website. Over recent years, disaster risk management organizations in many countries have been actively promoting information dissemination on the internet. ADRC website developed direct links to these websites which offer access to the latest information.

Table 3-1-1 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 |
| 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 |
| 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 |
| Tajikistan | 1998, 1999, 2003, 2005, 2006 |
| Thailand | 1998, 1999, 2003, 2004, 2005, 2006, 2008, 2010, 2011, 2012, 2016, 2017, 2018 |
| 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 (HFA)

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, 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 disasters, which hit its member countries while annual Natural Disaster Data Book covers disaster characteristics in the world.

ADRC continues to provide basic data on natural disasters and making efforts to facilitate use of data.

### (2) Natural Disaster Data Book 2017

This section presents a summary of Natural Disaster Data Book 2017, which covers regional and disaster-specific issues of the year and long term.

The following Figures 3-1-2 and Tables 3-1-3 depict the results of analyses of national disaster and impacts in 2017 and in the long term.

According to EM-DAT recorded in 2017, 366 disaster events occurred, 11,843 people were killed, more than 90 million people were affected.

In year 2017, nearly 3,000 people were killed by the earthquakes that hit Indonesia in September. Followed by the above-mentioned earthquakes, flood left 2,248 people killed in India.

By disaster type, flood and storm topped in each categories. As for occurrence and economic damage, flood topped by 35.2%, and 84.6% (Fig. 3-1-2, Table 3-1-2).
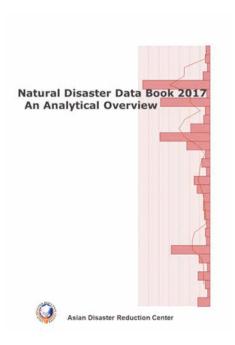


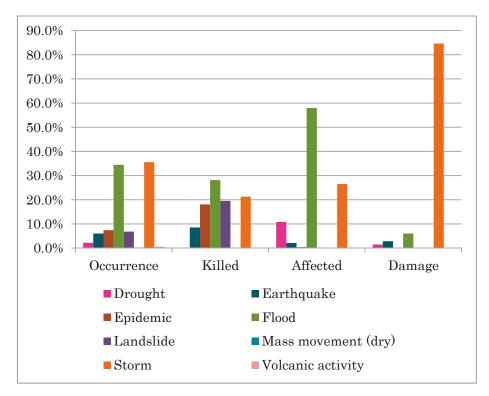Fig. 3-1-1 Natural Disaster Data Book 2017

Fig. 3-1-2 Impacts of Natural Disasters by Disaster Type 2017

Table 3-1-2 Impacts of Natural Disasters by Disaster Type 2017

| Disaster Type | Impact | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Occurrence (share in %) | | Killed (share in %) | | Affected (share in %) | | Damage (US$ million) (share in %) | |
| Drought | 8 | (2.2%) | 0 | (0.0%) | 10,331,874 | (10.8%) | 4,922 | (1.5%) |
| Earthquake | 22 | (6.0%) | 1,012 | (8.5%) | 2,006,792 | (2.1%) | 9,613 | (2.8%) |
| Epidemic | 27 | (7.4%) | 2,140 | (18.1%) | 359,031 | (0.4%) | 0 | (0.0%) |
| Flood | 126 | (34.4%) | 3,331 | (28.1%) | 55,586,840 | (57.9%) | 20,339 | (6.0%) |
| Landslide | 25 | (6.8%) | 2,312 | (19.5%) | 201,573 | (0.2%) | 147 | (0.0%) |
| Mass movement (dry) | 1 | (0.3%) | 8 | (0.1%) | 200 | (0.0%) | 0 | (0.0%) |
| Storm | 130 | (35.5%) | 2,516 | (21.2%) | 25,410,994 | (26.5%) | 285,599 | (84.6%) |
| Volcanic activity | 2 | (0.5%) | 0 | (0.0%) | 144,349 | (0.2%) | 0 | (0.0%) |
| Wildfire | 15 | (4.1%) | 165 | (1.4%) | 88,278 | (0.1%) | 16,922 | (5.0%) |
| Extreme temperature | 10 | (2.7%) | 359 | (3.0%) | 1,827,759 | (1.9%) | 0 | (0.0%) |
| Total | 366 | (100.0%) | 11,843 | (100.0%) | 95,957,690 | (100.0%) | 337,543 | (100.0%) |

## 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. Please find more information on GLIDE at the section "2-2. Study of GLIDE spread."