



# ADRC Highlights

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### Asian Disaster Reduction Center

Higashikan 5F, 1-5-2  
Wakinohamakaigan-dori,  
Chuo-ku, Kobe  
651-0073 Japan

Tel: 078-262-5540  
Fax: 078-262-5546  
editor@adrc.asia  
<https://www.adrc.asia>

## ● Promoting Cooperation with Affiliated Institutions

### Training in the Creation of Local Disaster Risk Reduction Plans Using the 8-step Method

ADRC has been providing administrative training in comprehensive disaster management since 2000 as a project commissioned by the Japan International Cooperation Agency (JICA). The year before last, ADRC was tasked with conducting training programs for the entire world, for Central Asia and the Caucasus, and for Africa, and also served as the course leader for the Latin America Regional Comprehensive Disaster Risk Reduction Training Program and the Promotion of the Mainstreaming of Disaster Risk Reduction Training Program for middle management level officials. While the training programs for Central Asia and the Caucasus, and for Africa were postponed in 2020 due to the global COVID-19 outbreak, the comprehensive disaster risk reduction training program for the entire world and for Latin America, and the training program for the promotion of the mainstreaming of disaster risk reduction, were conducted through a combination of video lecture materials and online exercises.

In the Sendai Framework for Disaster Risk Reduction adopted at the 3rd UN World Conference on Disaster Risk Reduction held in March 2015, the following four outcomes were set as the first global targets to be reached by 2030: (a) substantially reduce global disaster mortality, (b) substantially reduce the number of affected people globally, (c) reduce direct disaster economic losses in relation to global GDP, and (d) substantially reduce disaster damage to critical infrastructure, including health and educational facilities, and the disruption of basic services. An important element in achieving these goals is the global target of (e) significantly increasing national and local disaster risk reduction strategies and plans by 2020. For this reason, JICA developed eight steps for formulating a local DRR plan and introduced them in training programs and overseas projects. JICA have also been providing training guidance in comprehensive DRR training programs since FY2018.



Fig.1 Online lecture using ZOOM

Making a local DRR plan consists of the following 8 steps:

## Continued

- Step 1: Collect local hazard information
- Step 2: Understand local disaster risks
- Step 3: Confirm DRR plans developed by national and other authorities
- Step 4: Identify residual risks considering time-scale
- Step 5: List all necessary DRR measures by local governments
- Step 6: Prioritize DRR measures
- Step 7: Arrange budget allocations at the necessary levels
- Step 8: Implement DRR measures and review them periodically

In the training held this year, participants were guided in the creation of a zero draft of a local DRR plan using this 8-step exercise. The trainees prepared content and examples for each step in advance using video materials, and the lecturer conducted exercises for each step using ZOOM video conferencing (Fig.1) and the online whiteboard MIRO (Fig.2).

These were the first online trainings to be conducted by ADRC. Although it took some time to get used to developing teaching materials and managing exercises in a virtual environment, the training was highly rated in terms of offering useful teaching materials that can be used any time from any location. Based on this experience, ADRC hopes to utilize the virtual environment not only for training but also for various DRR cooperation activities.

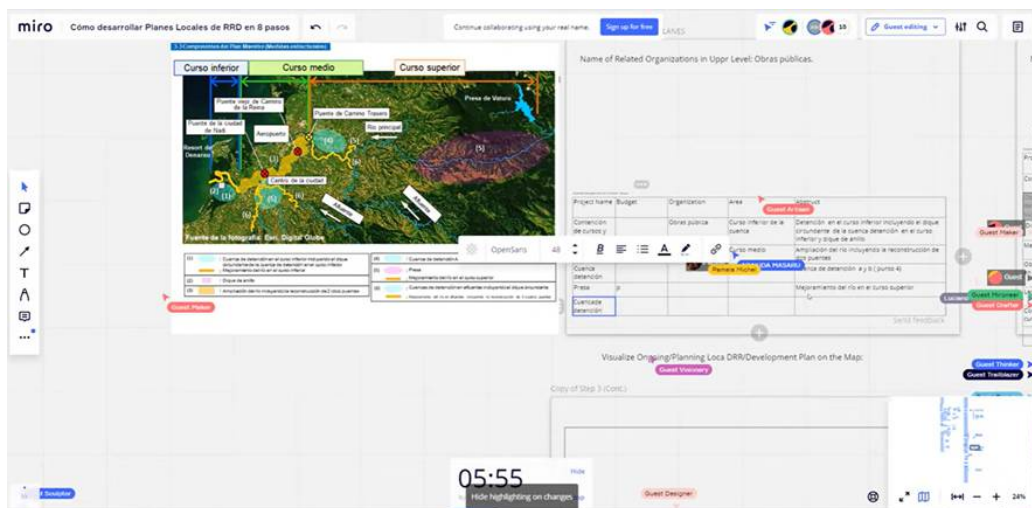


Fig.2 Instruction using the online whiteboard MIRO

## A Pilot Project in India to Visualize People's Movements for DRR

Whenever a mobile phone subscriber sends a message or makes a call, their location is indicated in the call detail record (CDR), which the telecommunications companies store in their databases. That CDR data can be used to visually depict people's movements on a computer dashboard. Seeing people's movements in near-real time could help inform a disaster risk management (DRM) agency's decisions to take appropriate actions, such as: (1) issuing early warnings to people moving toward hazardous locations, (2) monitoring disaster hotspots and infection outbreaks, (3) conducting evacuation



Visual representation of people's movements using *Mobipack*

## Continued

operations, and (4) guiding the distribution of relief supplies.

Considering the potential contributions of this technology application to disaster risk reduction (DRR), ADRC and the University of Tokyo are jointly piloting the use of *Mobipack* (an open-source software application), which can access and process CDR data from telecommunications companies, in Himachal Pradesh, India. The implementation of this project will start in April 2021, when the State Disaster Management Authority (SDMA) will coordinate the installation of *Mobipack* in local telecommunications companies covering all 12 districts of Himachal Pradesh. This pilot project will be conducted for nine months, and is supported by World Bank funding administered by the Asian Disaster Preparedness Center (ADPC).

## ● Participation in International Conferences

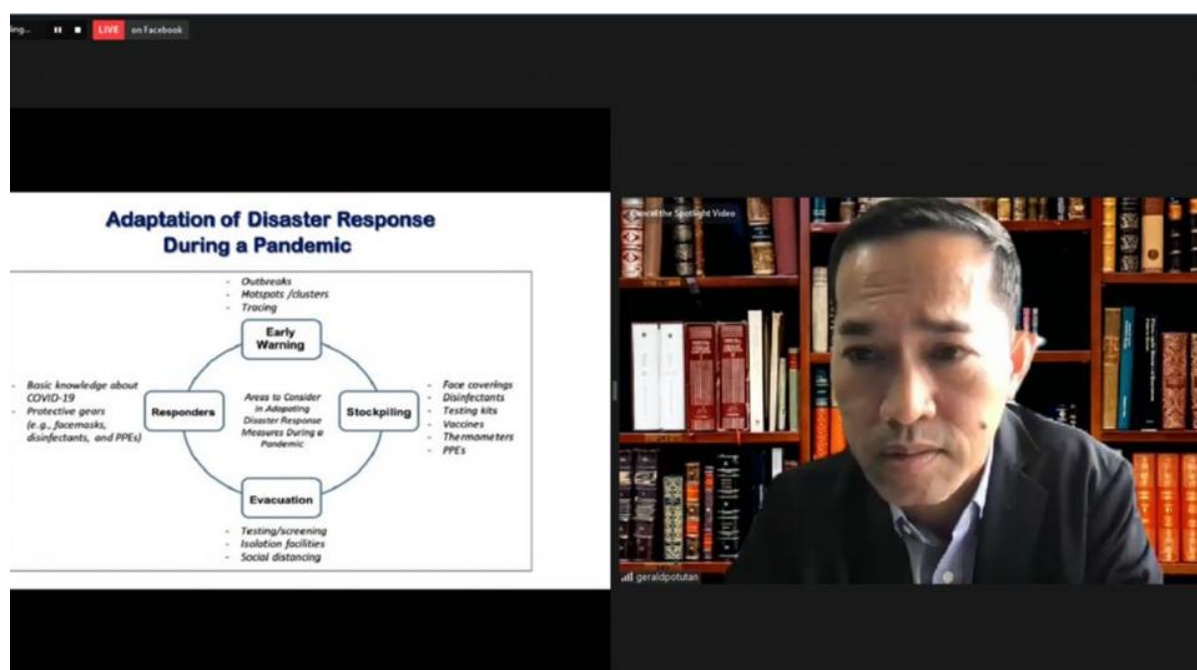
### ADRC Provided a Talk in SDRC-DLSU Webinar Series

At the invitation of the Social Development Research Center of the De La Salle University (SDRC-DLSU) in the Philippines, ADRC gave a talk on "Evolving Disaster Response Practices During the COVID-19 Pandemic" on 15 February 2021. In this webinar, ADRC highlighted three evolving practices, as recently observed in Asian countries:

- (1) *digitalization* of early warnings, surveillance, and impact assessments due to the enforcement of movement restrictions;
- (2) *dispersed evacuation*, where a 2-meter social distance between individuals is enforced, including other measures such as testing, tracing, and isolating cases to prevent the spread of coronavirus; and
- (3) *remote psychological first aid* provided to disaster-impacted individuals to calm the anxieties brought about by a disaster on top of a pandemic.

During the webinar, the outcomes of these evolving practices were discussed, including whether these could serve as entry points to transition from a single-hazard approach towards adopting a multi-hazard, multi-sector approach to disaster response. For details, check out this link:

<https://www.dlsu.edu.ph/its-not-complicated-how-to-take-action-in-the-face-of-compounding-disasters/>



ADRC Senior Researcher Mr. Gerald Potutan at the Webinar

## ● Announcement

### **ADRC Publication: "Natural Disaster Data Book 2019"**

Past disaster records are critical in policy making and in the review, survey, and analysis of disaster management plans. ADRC used disaster data from the Emergency Events Database (EM-DAT) developed by the Centre for Research on the Epidemiology of Disasters (CRED) to publish the *20th Century Data Book on Asian Natural Disasters* in 2000 (with a second volume released in 2002). Since 2002, the *Natural Disaster Data Book* has been published annually to provide useful information to stakeholders involved in disaster mitigation activities, such as policy makers, research institutions, and NGOs.

This year ADRC published the *Natural Disaster Data Book 2019* (Fig. 1), which covers regional and disaster-specific issues for 2019, and for the 30-year period from 1990 to 2019. Disaster trends since 2019 show that the number of incidents has been decreasing, but remains at a high level (Fig. 2). The number of fatalities has decreased drastically, while economic damages have increased. The number of people affected has decreased, relatively speaking, but has been dependent on the disaster trends in a given year.

In 2019, there were 440 natural disasters worldwide, resulting in 24,112 deaths, more than 100 million people affected, and economic damages valued at over US \$102 billion. In 2019, floods accounted for the highest percentage of all disasters, at 44.1%, and the number of people affected, at 34.5%, while epidemics were highest ranked in terms of fatalities, at 51.3%, and storms topped the rankings in terms of the value of economic damages, at 57.8%.

The 2019 data shows that the number of incidents, fatalities, and people affected increased from the previous year, while the value of economic damages decreased.

You can access the full report from the following website:

[https://www.adrc.asia/publications/databook/DB2019\\_e.php](https://www.adrc.asia/publications/databook/DB2019_e.php)

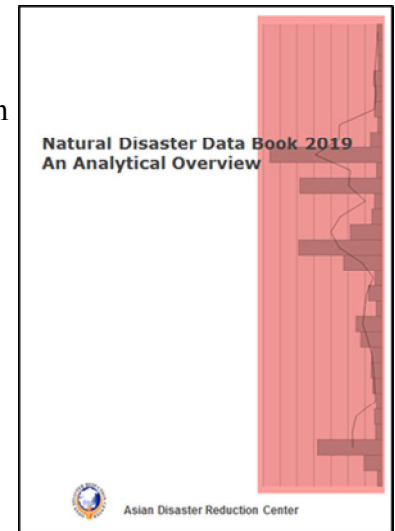


Fig.1

*Natural Disaster Data Book 2019*

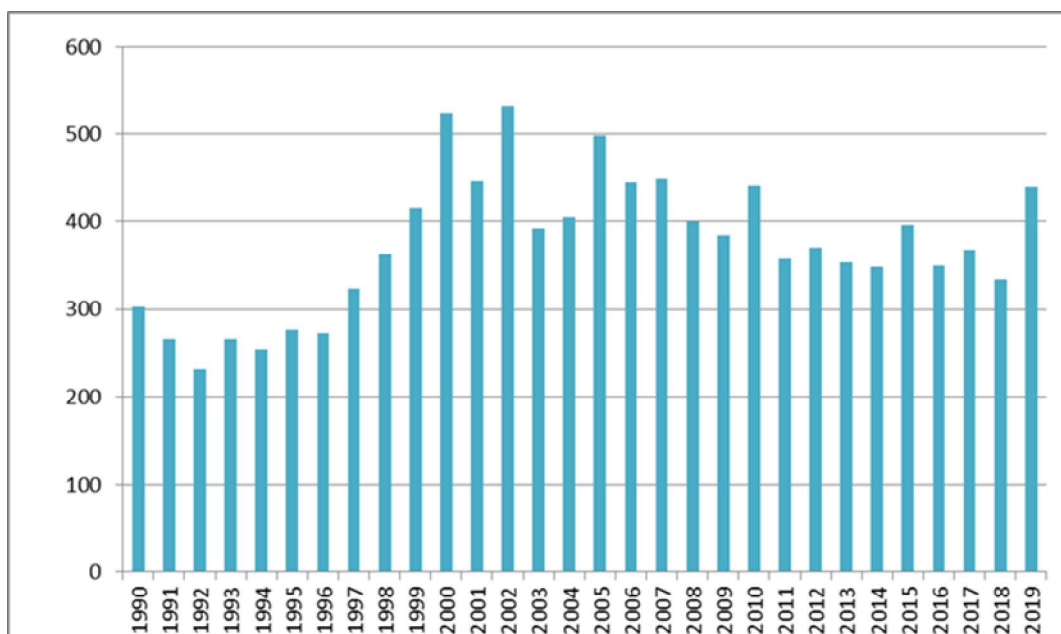


Fig.2 Disaster Occurrence (1990-2019)

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