5-2. Promoting Cooperation with Member Countries, International Organizations and NGOs

ADRC places high priority on the development of institutional and human networks to share disaster information in Asia. Developing networks between professionals and their counterparts in member countries, adviser countries, and observer organizations is vital to promoting cooperation on disaster reduction efforts in Asia. Therefore, ADRC invites high level and management level officials, including deputy directors, directors, and managers, to its annual ADRC International meeting to encourage interpersonal exchanges.

5-2-1. 2018 Asian Ministerial Conference on Disaster Risk Reduction

ADRC participated in AMCDRR held in Ulaanbaatar, Mongolia on 3-6 July. ADRC participated in several ways:

- (1) Presentation on community resilience on a pre-conference event
- (2) Individual meetings with ministers of each member country and other organizations:
- Ministry of Social Welfare in Myanmar
- National Emergency Management Agency in Mongolia
- National Disaster Management Centre in the Maldives
- Asian Disaster Preparedness Center
- Delegation from Turkey
- (3) Announcement of the Official Statement
- (4) Thematic event: Presentation on Best Practices for Sentinel Asia in Technology and Innovation
- (5) Support for the Sentinel Asia exhibit
- (6) Presentation on GLIDE on the Ignite Stage

Before opening main conference, Mr. Suzuki, Executive Director of ADRC, gave a presentation on community resilience at the pre-conference event, as shown in (1). ADRC also had several individual meetings with ministers as shown in (2). In those meetings, ADRC expressed appreciation for the countries' support for the visiting researcher program, discussed DRR projects accomplished in each member country, and discussed future cooperative projects. In the Official Statement (3), Mr. Suzuki spoke about promoting efforts to achieve unified disaster information.

ADRC is a member of Sentinel Asia, and gave a presentation on the response to flooding in Myanmar and developing standard operating procedures (SOP) for Sentinel Asia activity during the Thematic Event on "Technology and Innovation" (4). ADRC also supported an exhibit on Sentinel Asia (5). Finally, ADRC has proposed the use of a globally common Unique ID code for disasters, known as GLIDE, and this was presented on the Ignite Stage (6).

The closing ceremony was held on 6 July, at which the Ulaanbaatar Declaration, which

included statements regarding the promotion of the use of science technology for DRR, was adopted.

It was also announced that the next AMCDRR will be held in Australia in 2020.



Fig. 5-2-1 Presentation on the Official Statement (left) and Ignite Stage (right)

5-2-2. ISDR Asia Partnership Forum

The ISDR Asia Partnership (IAP) Forum Meeting was held on 11-12 December 2018, and the Disaster Management Strategy Workshop was held on 13-14 December, at the UN Conference Center in Bangkok, Thailand. A total of 150 representatives participated in the forum, including government representatives, 15 specialized agencies of the United Nations, 15 intergovernmental and regional cooperation agencies and the private sector.

Ms. Loretta Hilder Giralde, Director General of the UNDRR Asia-Pacific Office, gave a greeting and briefing.

The need for more local action was highlighted as a key concern by delegates. Data in the region demonstrates an increase in local level disaster events, but many local communities lack the appropriate strategies, capacities and tools to manage the growing risks. Participants noted a need to focus on capacity strengthening but also delegation of authority and resources to local officials to strengthen disaster risk reduction at the sub-national and municipal levels.

Participants reiterated the need for more progress on reducing the impact of disasters on the most vulnerable groups, including the poor, women, children, people with a disability and older people. Steps for achieving this reduction include building their capacity, engaging them in DRR activities, and developing gender responsive DRR programming, such as risk communication geared toward the needs and preferences of vulnerable groups.

Additionally, delegates agreed on the need to simplify the language of disaster risk reduction to reach wider audiences.

Another recommendation was to proactively seek partnerships with new groups to solve specific implementation issues. These include partnerships with insurance companies for more accurate risk assessments; chambers of commerce to enhance private sector partnerships and business resilience; and partnerships with universities and schools of architecture to ensure a cadre of resiliency-trained architects.

In addition to the web monitoring the implementation status of each country, UNDRR

introduced the establishment of an online platform that allows non-national Stakeholders to commit (Sendai Framework for Voluntary Commitments: SFVC, https://www.unisdr.org/archive/64066)

The Disaster Management Strategy Workshop on 13-14 December was held with 115 participants from UN agencies, related organizations and international organizations in 20 countries and regions in the Asia-Pacific region.

They reviewed progress to date on Target E of the Sendai Framework. Target E, which calls for a significant increase in the number of national and local disaster risk reduction strategies by 2020, is the first milestone of the Sendai Framework, adopted in 2015.

The workshop provided an opportunity for governments including Indonesia, Bangladesh, Mongolia, and Pakistan to share innovative DRR financing solutions. For example, through a loan from the Asian Development Bank and grants from Switzerland and Australia, Pakistan established its National Disaster Risk Management Fund to support projects that enhance disaster resilience. In Bangladesh, the government has pursued a coherent approach that funds both DRR and climate change. Disaster risk management activities are part of the Bangladesh Climate Change Strategic Action Plan, and the annual budget provides for dedicated funds from for the Disaster Risk Reduction Fund.

A recommendation many echoed is the need to sensitize decision makers, especially donors and development actors, to the value of investing in disaster risk reduction. Several participants emphasized that opportunities for integrating DRR into sectoral strategies should also be actively pursued, while noting that coordination across sectors remains an institutional challenge.



Fig. 5-2-2 Group Photo

5-2-3. The 13th Meeting of Typhoon Committee Working Group on Disaster Risk Reduction

ADRC participated in the 13th annual meeting of the Working Group on Disaster Risk Reduction on "Public Understanding of Science in Disaster Risk Reduction: from desk to field" was organized by UNESCAP/WMO Typhoon Committee and the National Disaster Management Research Institute (NDMI) in Ulsan, Republic Korea from 29 May 2018 to 1 June 2018.

The main objective of the meeting was to share the information of members' typhoon-related technologies and policies. Some 30 participants from member countries and relevant organizations, including ADRC reported on their recent technologies and policies as well as updates on WMO and NDMI's DRR information system tools.

ADRC made presentation on the plan of GLIDE system renewal so that the system could facilitate developing the disaster data bases.



Fig. 5-2-3 Group Photo

5-2-4. 51st Session of the ESCAP/WMO Typhoon Committee

The 51st Session of the ESCAP/WMO Typhoon Committee was held at the Guangzhou, China, from 26 February to 1 March 2019.

More than 100 participants from 12 of 14 Members of the Typhoon Committee participated in the meeting. Those are namely: Cambodia; China; Hong Kong, China; Japan; Lao PDR; Macao, China; Malaysia; the Philippines; Republic of Korea; Thailand; USA; and Viet Nam. Representatives of UNESCAP, WMO and Typhoon Committee Secretariat (TCS) also attended the Session.

The other observers from Agency for Meteorology, Climatology and Geophysics of the Republic of Indonesia (BMKG), ADPC, ADRC, IFRC, International Centre for Water Hazard and Risk Management (ICHARM) and University of the Ryukyus of Japan were also joined the meeting and made presentations.

In the Committee meeting, the tropical cyclones occurred in 2018 were reviewed by the

participating agencies. And the Shanghai Typhoon Institute (STI) also made report on verification of tropical cyclone operational forecasts in 2018.

The members' reports 2018 highlighted the key tropical cyclone impacts in 2018 and the major activities undertaken by Members under the TC Priorities and components during the year.

Advisory Working Group recommended the Committee to consider the key tropical cyclone impacts in 2018 and review the initiatives and activities to be pursued to mitigate future impacts.

As for the early warning system, WMO introduced their initiative namely Global Multi-Hazard Alert System (GMHAS). In the GMHAS, WMO facilitates to establishing the centralized platform to provide official authoritative warnings and information issued by National Meteorological and Hydrological Services to general users. WMO considers applying CAP (Common Alerting Protocol) as an information format in GMHAS. They have not yet discussed the information disseminating system other than the ordinary information and telecommunication system. The positioning satellite-based early warning message platform, which ADRC made presentation on Day 1, would have a good opportunity to make collaboration with this GMHAS.



Fig. 5-2-4 Presentation by Mr. Suzuki, ADRC

5-2-5. ESCAP/WMO Typhoon Committee 13th Integrated Workshop

The ESCAP/WMO Typhoon Committee 13th Integrated Workshop "Technological Innovation for Typhoon related Forecasting and Disaster Risk Reduction" was held from 5 November to 9 November, in Chiang Mai, Thailand. From Japan, JMA, MLIT, ICHARM and ADRC attended the meeting. The workshop was opened by Mr. Suphachai Iamsuwan, Governor of Chiang Mai Province, Thailand, Mr. CHO Hyoseob, Han River Flood Control Office, Republic of Korea, Mr. Yu Jixin-Typhoon Committee Secretary, Typhoon Committee

Secretariat, Mr. Taoyong Peng, Chief of TCP Programme, WMO, Ms. Yuki Mitsuka, Associate Economic Affairs Officer, Disaster Risk Reduction Section, ICT and Disaster, UNESCAP, Dr. Phuwieng Prakhammintar, Deputy-Director General, Thai Meteological Department (TMD).

In the following plenary session, a series of keynote lectures were given on the main theme of "Technical innovation for typhoon related forecasting ad disaster risk reduction". One is "Advanced risk-based information leading to enhanced local disaster risk reduction through cross-cutting cooperation between Working Groups" by Mr. Eito, Head of the Regional Specialized Meteorological Center (RSMC) Tokyo and Ms. Igarashi, Japan Meteorological Agency (JMA).

On Day 2 and 3, three parallel sessions took place and participants attended individual working groups: JMA for working group for meteorology, MLIT for working group for hydrology and ADRC for working group for DRR.

The WGDRR Parallel Meeting started with attended by 20 participants from nine members including China, Hong Kong, DPR of Korea, Lao PDR, Macao, the Philippines, Republic of Korea, Vietnam, USA, Thailand, Malaysia and Japan. Participants presented their report on the activities on DRR in 2018 and typhoons.

On Day 4, in the plenary session, chairs of each working groups was reported and discussion on Cross-cutting Projects between working groups was done.



Fig. 5-2-5 Group Photo

5-2-6. 12th APEC Senior Disaster Management Officials Forum (Papua New Guinea)

The 12th Asia Pacific Economic Cooperation Senior Disaster Management Officials Forum (SDMOF) was held at Kokopo, East New Britain, Papua New Guinea on 25 and 26 September 2018.

The Forum was gathered more than 90 delegates including senior disaster management officials from 10 APEC member economies, namely Australia; China; Japan; New Zealand; the Philippines; Chinese Taipei; USA; Thailand; Viet Nam and Papua New Guinea as well as

representatives from UNDRR; ADPC; ADRC; UN agencies; international and local private sectors.

The 12th SDMOF focused on "Advancing the Multi Hazard Early Warning Systems for Emergency Preparedness and Disaster Risk Management".

The forum highlighted that timely hazard monitoring and warning, the efficient use of and practical research on digital and satellite technologies, and warnings which result in timely and effective action, have become increasingly important to enhancing disaster risk management that supports economic growth in the region.

During the 12th SDMOF, senior disaster management officials held four main discussion sessions, with recommendations following from each session.

The Forum identified four main considerations to improve the effectiveness of multi-hazard monitoring and warning systems to reduce disaster risk:

1. Collection and Synthesis of Research, Data and Analysis for Effective Warning, including approaches and experiences with the synthesis of hazard research, monitoring, horizon-scanning, data collection and analysis generation which yield effective seasonal and non-seasonal warnings, including the use of digital technologies.

2. Communicating the Warning Message, including research and global good practice on communicating effective and actionable warning messages that lead to timely action to avoid or reduce harm. This may include effective practices in pre-disaster community-level mobilization and education to enhance understanding of risks and warnings, as well as practical research on satellite technology applications for early warning platforms.

3. Delivery of Warning Messages, including approaches and experiences with the use of digital and other technologies to deliver targeted warning messages in a timely manner and to correct locations to enable actions that reduce or avoid harm to at-risk communities, while minimizing unnecessary concern to communities that are not at risk. This includes situations where digital and other modern technology has been successfully integrated or combined with traditional communication methods.

4. Localizing Warning, including approaches and experiences with localized warning systems where centralized warning systems are not effective due to time, distance and connectivity constraints. This includes how centralized and localized warning systems can be linked or networked to provide pre-warning synthesized analysis, with attention to digital and satellite technologies as appropriate.

Based on discussions held during the 12th SDMOF, senior disaster management officials recommend that APEC economies:

Promote disaster resilience by exchanging information on methods and disaster risk

communication strategies to enhance the efficiency and coverage of all-hazards early warning systems, as well as by supporting research on satellite technology applications for disaster early warning platforms.

Senior disaster management officials agreed to report the 12th SDMOF recommendations to the Concluding Senior Officials Meeting and the Ministerial Meeting to be held in Port Moresby in November 2018.

ADRC had an opportunity to make presentation on the new initiative of early warning message platform, which could work in the situation when and where information and telecommunication system of daily use is unavailable or temporary out of use.



Fig. 5-2-6 Group Photo