I would like to express my sincere gratitude to the Government of Australia and the UNDRR Secretariat for organizing the 2022 Asia-Pacific Ministerial Conference on Disaster Risk Reduction and to congratulate you for the success of the event.

What is ADRC?

Asian Disaster Reduction Center (ADRC) is located in Kobe, Hyogo Prefecture, Japan. Kobe has a long history as the leading port city of Japan. One of the oldest Shinto shrines in Kobe, Ikuta Jinja Shrine, dates back to the third century. It was also one of the first ports to be opened to trade with the world which lead to the city’s economic and cultural development. Today, Kobe is a large city of 1,500,000 inhabitants.

27 years ago, on 17 January 1995, a wide area of Kobe was hit by the Great Hanshin-Awaji Earthquake measuring a magnitude of 7.3 on the Richter scale. The epicentre of the quake was only 16 km below the surface of the earth, and it struck the metropolis from a shallow depth. 6,434 lives were lost and it caused huge economic losses.

ADRC was established in Kobe on 1998, as a consequence of the Great Hanshin-Awaji Earthquake. Therefore, our work is backed by real experiences and we do not devote ourselves in armchair theories. Many of our staff members are from Kobe and the surrounding areas.

*ADRC Website (https://www.adrc.asia/)

What Japan Has Experienced

At the time of the earthquake, there were areas in Kobe where old wooden houses were densely built. There, many houses collapsed and fires broke out. Historically, Kobe has been a region with relatively few major earthquakes and tremors that are noticeable, so citizens and local authorities alike underestimated the damage earthquakes would cause. Although it is difficult to make a general comparison, the large number of existing nonconforming wooden houses may have made the city more vulnerable to earthquakes than many of the large cities in your country today.

The experience of the earthquake in Kobe led to a nationwide survey of the earthquake resistance of buildings and the promotion of subsidised reinforcement. In particular, the
government promoted the improvement of earthquake resistance and fire retardancy of public facilities such as schools, hospitals and city halls. Public infrastructure such as levees, quays, roads and piers were also targets of the seismic retrofitting.

Sixteen years later, in 2011, the Great East Japan Earthquake struck. The number of buildings that collapsed due to the earthquake was greatly reduced due to the investments in disaster prevention to improve earthquake resistance. However, the tsunami caused extensive damage that far exceeded the preliminary damage assessment. The experiences and lessons we have learned through the Great East Japan Earthquake were also leveraged in the formulation of the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030 agreed in 2015.

Under the Sendai Framework and Hyogo Framework, we have been witnessing to date significant global progress in DRR, especially in preparedness for emergency response such as early warning system (EWS) and evacuation. This is shown in the statistics. Based on the data from ADRC member countries, we have seen a downward trend in the number of people killed despite the increasing frequency and magnitude of weather-related disasters.

**What is Next?**

An EWS could save lives by allowing residents to evacuate before a tsunami or flood hits, even if they are residing in a low-lying area. But what would you do if there is an elderly bedridden mother in the house, or a younger brother who cannot evacuate quickly due to disability in a leg? It was reported that the mortality rate of people with disabilities was twice or more than the average in the Great East Japan Earthquake. DRR goals must be to save all lives. It is important that the measures taken consider those who have the most difficulties in evacuating. EWS alone is not sufficient to achieve “Leave No One Behind”.

Furthermore, if you are fortunate enough to save your family's life but return from the shelter to find that your home and place of work are all gone, how would you restart your life? Statistics show a continuing upward trend in terms of the number of people affected and amount of economic losses, indicating that we still have numerous challenges to face.

From this perspective, the Sendai Framework, particularly Priority Action 3: “Investing in Disaster Risk Reduction for Resilience” should be our major agenda for the remaining years up to 2030.

DRR investment is needed for urban fabric that encourages fundamental safety, such as building houses in safe locations and properly upgrading levees. Primary and secondary schools, hospitals and welfare facilities where disaster vulnerable people spend extended periods of time should be relocated to safe zones on higher ground. The same applies to administrative institutions that must continue to function in the event of a disaster. DRR investment can significantly reduce the frequency and intensity of the damages caused by
disasters, even if they cannot be completely eliminated. It can give people more time to escape when disasters do occur. Resilient urban structures will also significantly reduce economic losses.

The first things we have to do is to learn from past disasters and disasters that occur in different places, to collect local hazard information and to gain a proper understanding of local disaster risks. To realize this, it is necessary to identify based on evidence, which DRR measures have been successful in the past and what remain as challenges. Lack of data has always been a challenge in the implementation of DRR activities. Moreover, to promote evidence-based disaster management, we need people who can accurately analyse and utilise data.

**What ADRC Can Do to Contribute**

ADRC, as a hub for international disaster reduction cooperation in Asia, is promoting DRR based on the following three pillars: 1) sharing of disaster management information, 2) human resource development, and 3) enhancement of community disaster management capacity.

Here are some specific examples of the activities in each of the three areas, backed up by real experiences from Japan and Asia.

1) Sharing of disaster management information
ADRC has been promoting the GLIDE numbering system since 2002, which assigns unique numbers to disasters all over the world, so that agencies around the world can share data. The GLIDE system not only assists in the integration of DRR data from different countries, but also helps to improve the efficiency of retrieving information on past and ongoing disasters from various databases across countries and organisations.

ADRC also promotes the “Sentinel Asia” initiative since 2006, which provides disaster information using earth observation satellites of seven Asian countries and regions. Under this initiative, we provide satellite images of disaster sites to Sentinel-Asia members upon request, so that they can conduct emergency response operation effectively and efficiently by assessing the situation of the disaster based on the provided information.

2) Human resource development
ADRC hosts the Visiting Researcher (VR) programme which welcomes visiting researchers from its 31-member countries to Japan each year. Each VR sets his or her own research agenda and ADRC coordinates visits to DRR-related organisations and research institutions accordingly during their stay in Japan.

ADRC also conducts the comprehensive DRR training courses commissioned by Japan International Cooperation Agency (JICA) for central and local government officials
worldwide. These trainings are focused on proactive investment in DRR, including methods of developing local DRR plans and strategies.

3) Enhancement of community disaster management capacity
Due to the changing disaster situation caused by rapid urbanization and intensifying disasters, more communities are facing unprecedented life-threatening risks from disasters and have an increased need for strengthening disaster risk management capacities.

Cutting-edge ICTs provide added value to community-based DRR to support appropriate response and recovery operations. Mobile and web applications contribute to improvement of such activities as raising awareness, hazard mapping, evacuation drill, and crisis management in case of emergency. Local information from communities can be effectively collected by utilizing ICTs. Seamlessly linking daily activities and welfare/social protection in normal times with DRR efforts in emergency situations contributes to “Leave No One Behind”. Furthermore, the Quasi-Zenith Satellite System (QZSS) is being used to augment EWS and other services in small islands and mountainous areas where ground-based communication networks are limited, and also in the event of blackouts. The ADRC is promoting new community-based DRR activities using these ICTs.

A Brief Invitation

Before I conclude my statement, I wish to make a brief invitation to you all. ADRC will organize its annual conference, Asian Conference on Disaster Reduction (ACDR) in March 2023 in Sendai, Japan, in conjunction with the World BOSAI Forum. I invite you to take this opportunity to come to Japan. And, if you do come, please do not forget to stop by at Kobe. ADRC is ready to offer you opportunities to hear directly from those who actually experienced and responded to the disasters. Directly hearing their voices and stories will allow you to receive their thoughts and feelings beyond the language barrier. And once you have learned from them, please take them back to your homelands and convey the lessons to your people in your own words.