4. Human Resource Development

ADRC enhances the DRM capacities of member countries through the Visiting Researcher (VR) Program, seminars, workshops, training events, and other DRR-related human resource development activities.

4.1 Visiting Researcher (VR) Program

As of March 2025, a cumulative total of 138 VRs from 28 countries had participated in the programme since it started in 1999 (Table 4.1). This programme aims at achieving the following objectives:

- To accumulate information on the latest disasters, disaster management policies, laws, plans, budget, and progress of the Sendai Framework for Disaster Risk Reduction of member countries to strengthen their disaster resilience;
- To compose an effective human resource development programme in accordance with the needs and priorities of member countries and VRs, and seek improvement measures for specific issues through training with experts;
- To continue improving the VR Program through their feedback and evaluation; and
- To maintain communication with alumni of the VRs and establish communication with new VRs.

Each year, six officials or practitioners in disaster risk reduction and management visit Japan to gain greater understanding of disaster management systems and to contribute to the implementation of the Sendai Framework for Disaster Risk Reduction in their respective countries. In this context, the VR Program is aimed at developing human resources, strengthening disaster response capabilities, and enhancing the ties between member countries and ADRC.

Table 4.1 Cumulative total of VRs as of March 2025

Armenia	9
Azerbaijan	3
Bangladesh	6
Bhutan	4
Cambodia	4
China	3
Fiji	1
India	10
Indonesia	3
Iran	1
Republic of Korea	4
Kyrgyz Republic	2
Lao PDR	3
Malaysia	5
Maldives	6
Mongolia	6
Myanmar	5
Nepal	9
Pakistan	6
Papua New Guinea	1
Philippines	9
Sri Lanka	11
Tajikistan	2
Thailand	12
Türkiye	2
Uzbekistan	2
Viet Nam	6
Yemen	3
Total	**138**

4.1.1 Activities During the Programme

In FY2024, six VRs from Fiji, India, Republic of Korea, Malaysia, Maldives, and Türkiye came to Japan to participate in the programme (Figure 4.1). During their stay, the VRs learned about innovative and practical DRR technologies and established greater cooperation and collaboration with other national governments, international organizations, and DRR agencies.

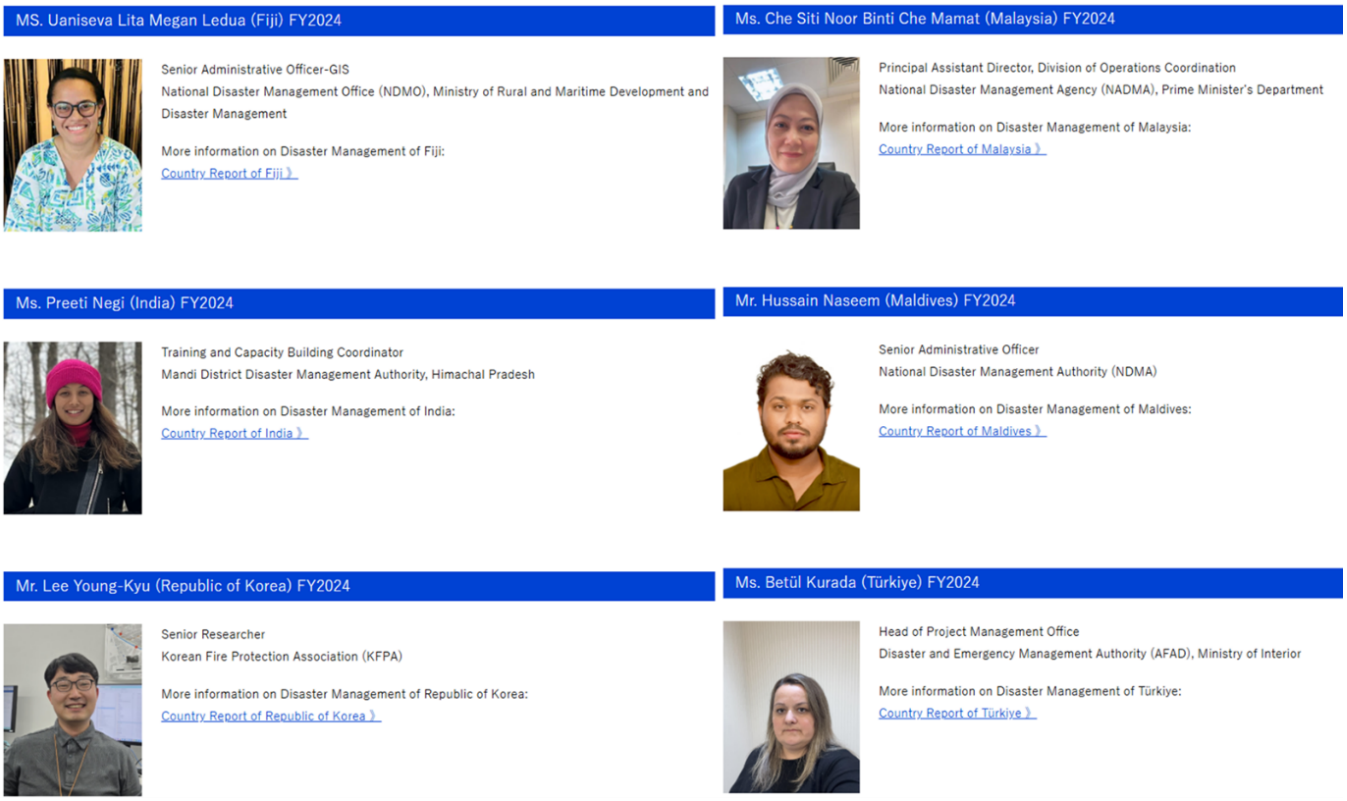

Figure 4.1 ADRC VRs for FY2024

On 21 March 2024, all six VRs presented the outcomes of their research activities. Their final reports reflected the accumulation of DRR knowledge, the characteristics of latest disasters and disaster management policies/ laws/plans/budget, and the measures to strengthen resilience in each of their countries. The topics of their respective researches are as follow:

Fiji: Enhancing Flood Management and Mapping in Fiji through GIS

India: Strengthening Community Disaster Preparedness Capacity in India

Republic of Korea: Building a Database of Disaster Propagation Patterns for Strengthening Disaster Response Capacities

Malaysia: Improving Disaster Preparedness in Malaysia

Maldives: Community Practices for DRR in Maldives

Türkiye: Adaptation and Risk Reduction to Disasters Caused by Climate Change

In conducting their research activities, ADRC assigned a mentor to each VR to guide and assist in the entire process.

4.1.2 Networking of Visiting Researchers

After completing the programme, the participants are automatically enrolled in the network of former VRs. ADRC cooperate in various ongoing projects through this network for effective and efficient implementation. Additionally, VRs are engaged to design new projects tailored to the local conditions. Furthermore, former VRs are contacted whenever ADRC intends to suggest policy updates or extends support to their home countries

based on the request or information they provided. New VRs are encouraged to contact former VRs to establish communication, share experiences, and insights.

During the Sentinel Asia activity in Kyrgyz Republic on 10 October 2024, ADRC and JAXA representatives visited the Ministry of Emergency Situations (MoES) facilitated by Mr Karybai uulu Kanatbek, 2007 VR, to introduce and discuss new project that utilizes satellite data in disaster management (Figure 4.2). As indicated earlier, Sentinel Asia provides satellite imagery and analysis maps at the request of its members. To improve the service, Sentinel Asia gathers feedback on how data is actually utilized for DRR activities.

Figure 4.2 Mr Kanatbek (second from left) during ADRC and JAXA's visit

Many of the former VRs also participate in the annual Asian Conference on Disaster Reduction (ACDR), where they are given opportunity to make presentations (Figure 4.3).

Figure 4.3 Ms Thai Minh Huong (VR in FY2022) and Ms Vu Doung Thuy (VR in FY2023) at ACDR2024 in Hanoi

4.2 JICA Knowledge Co-creation Program

Under the Knowledge Co-creation Program, Japan International Cooperation Agency (JICA) commissioned ADRC to conduct comprehensive training courses on DRR based on the "themes of interest" of each region/ country. As shown in Table 4.2, ADRC implemented six training courses in FY2024, namely: 1) Comprehensive DRR for Central and South America, 2) Comprehensive DRR for Central Asia and Caucasus; 3) Malaysia "LEP 2.0 Enhancement of the Disaster Risk Management Capacity of the National Disaster Management Agency (NADMA)" Pre-Disaster Investment and Risk Understanding; 4) Promotion of Mainstreaming Disaster Risk Reduction toward a More Resilient Society; 5) Comprehensive DRR Considering Climate Change for the African Region; and 6) Comprehensive Disaster Risk Reduction (Toward a Resilient Society).

Table 4.2 JICA KCCP implemented by ADRC in FY2024

No.	Dates	Number of Countries	Number of Participants
1	20 May – 11 Jul 2024	12 countries: Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Panama, and Peru	14
2	17 Jun – 8 Aug 2024	4 countries: Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan	6
3	2–13 Sep 2024	1 country: Malaysia	14
4	30 Sep – 18 Oct 2024	6 countries: Egypt, Georgia, Indonesia, Mongolia, Pakistan, and Sri Lanka	7
5	25 Nov 2024 – 4 Feb 2025	8 countries: Cabo Verde, Kenya, Madagascar, Mauritius, Mozambique, Rwanda, Senegal, and Somali	8
6	9 Dec 2024 – 20 Feb 2025	5 countries: Kosovo, Pakistan, Türkiye, Viet Nam, and Yemen	6

4.2.1 Comprehensive DRR for Central and South America

This course was conducted from 20 May to 11 July 2024 with 14 participants from 12 Central and South American countries: Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Panama, and Peru. It consisted four weeks of online learning and four weeks of face-to-face activities in Japan, learning about innovative technologies in disaster risk reduction. It also included site visits to Hyogo, Tokyo, and Iwate Prefectures to observe various countermeasures including sediment-related disaster countermeasures at the Nigawa Landslide Museum and flood control measures at Kitakami River in Ichinoseki City. At the end of the course, the participants developed a draft local DRR plan using the 8-Step Approach. After returning to their respective countries, they are expected to actively engage in DRR measures to reduce humanitarian and economic losses due to disasters.

Figure 4.4 Study visit to the Nigawa Landslide Museum (catchment well) in Hyogo Prefecture

4.2.2 Comprehensive DRR for Central Asia and Caucasus

This course was conducted from 17 June to 8 August 2024 with six participants from four countries: Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan. Participants learned how to formulate and implement local DRR plans for their respective home countries.

Figure 4.5 Participants observing flood control measures along Joganji River

The first four weeks of the course consisted of online lectures and exercises, and in the latter three weeks, face-to-face programmes were conducted in Japan. The programmes in Japan included lectures at DRR-related organizations in Hyogo, Osaka, and Nara Prefectures. During the field observations, participants learned about 1) landslide countermeasures after the 2004 Niigata Chuetsu Earthquake, and 2) erosion and flood control measures for the Joganji River basin in Toyama Prefecture. In addition, the participants formulated a draft local DRR plan through the exercises and discussions. Participants were expected to apply what they learned from the course to their future work.

4.2.3 Malaysia "LEP 2.0 Enhancement of the Disaster Risk Management Capacity of the National Disaster Management Agency (NADMA)" Pre-Disaster Investment and Risk Understanding

This course was conducted on 2–13 September 2024 with 14 officials from the National Disaster Management Agency (NADMA) Malaysia. After completing the course, participants were able to: 1) systematically learn about disaster risks and understand disaster risk reduction methods by attending lectures and visiting sites related to pre-disaster investment and response to residual risks implemented by national and local governments, especially for flood and sediment disasters, and 2) develop an action plan for their organization to accelerate disaster mitigation.

Figure 4.6 Participants visited Arakawa-Karyu River Office

Participants generally learned about the DRR policies and practices in Japan through their visit to Tokyo, Ibaraki, Shizuoka, and Kobe.

4.2.4 Promotion of Mainstreaming Disaster Risk Reduction toward a More Resilient Society

This course was conducted from 30 September to 18 October 2024 with seven participants from six countries: Egypt, Georgia, Indonesia, Mongolia, Pakistan, and Sri Lanka. Participants visited agencies in Tokyo to deepen their understanding of DRR measures in Japan as well as efforts of the private sector and the media. They also visited the Tajimi Erosion Control Dam (Gifu Prefecture), the Nigawa Landslide Museum (Hyogo Prefecture), and the Disaster Reduction and Human Renovation Institution (DRI, Hyogo Prefecture) to learn various examples of Japan's disaster experiences and lessons. After the course, participants are

Figure 4.7 Participants during one of the lectures at JICA Kansai

expected to gain greater understanding of the importance of DRR investment and the lessons learned from Japan's experiences and also to be able to build strong bonds that transcend national boundaries.

4.2.5 Comprehensive DRR Considering Climate Change for the African Region

This course was conducted from 25 November 2024 to 4 February 2025 with eight participants from eight countries: Cabo Verde, Kenya, Madagascar, Mauritius, Mozambique, Rwanda, Senegal, and Somalia.

Each participant formulated a draft local DRR plan using 8-Step Approach to be applied in their respective countries. The participants attended lectures, conducted site visits, and made a community-based hazard map through town watching approach. All participants also drafted an action plan, applying what they learned in the course, to be implemented in their respective countries.

Figure 4.8 Participants making hazard maps through town watching exercise

4.2.6 Comprehensive Disaster Risk Reduction (Toward a Resilient Society)

This course was conducted from 9 December 2024 to 20 February 2025 with six participants from five countries: Kosovo, Pakistan, Türkiye, Viet Nam, and Yemen. Participants learned how to formulate and implement local DRR plans for their respective home countries. It was conducted in a hybrid format, where participants attended online programmes before coming to Japan for the in-person programme. During the five-week programme in Japan, the participants attended site visits and lectures at disaster-related organizations/facilities in Hyogo, Nara, and Kumamoto Prefectures, and participated in events related to the 30th commemoration of the Great Hanshin-Awaji Earthquake, to learn about Japanese experiences and countermeasures. Participants also exchanged information and discussed each country's budget and policy issues to promote DRR. At the end of the course, they presented a draft local DRR plan, which they formulated through the programme.

Figure 4.9 Participants sharing ideas on their challenges in DRR

4.3 Short-Term Programmes

ADRC regularly conducts short-term training events promoting DRR. In FY2024, government officials, academics, and students from overseas and Japan participated in the short-term training programmes.

4.3.1 BMKG Training in Japan

Through the request of the Indonesian Agency for Meteorology, Climatology and Geophysics (BMKG), ADRC conducted a training programme to improve the capabilities of 30 BMKG officers in earthquake early warning systems from 17 November to 14 December 2024. Participants visited DRR institutions involved in disaster management and undertook practical training. They attended lectures on seismology, Japan's early warning

system, and recent research cases from the University of Tokyo, Tohoku University, and Kyoto University. Participants also learnt about the government's DRR efforts at the Cabinet Office of Japan, and in Fujisawa City. They toured areas affected by the 2011 Great East Japan Earthquake and visited earthquake ruins and museums related to the disaster. There were also lectures on the latest earthquake disaster prevention measures from private companies involved in railroads, disaster maps using satellite images, warning devices, and communications. Participants were able to learn about disaster prevention in Japan and the latest efforts in the development of earthquake early warning systems, which was one of the main themes of the programme. We hope that their experience and knowledge will contribute to the development of a system in Indonesia in the future.

Figure 4.10 Tour at TOA Knowledge Square (left), Lecture by Dr KODERA Yuki, Meteorological Research Institute (right)

4.3.2 AHA Centre ACE-LEDMP: Study Visit to Japan

From 13 to 20 October 2024, ADRC coordinated the Study Visit to Japan for the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) Executive Leadership in Emergency Management Programme (ACE-LEDMP) Executive Level organized by the AHA Centre.

Figure 4.11 ACE-LEDMP Participants at the Cabinet Office Japan

The study visit welcomed 20 prospective executive level officials with less than five years' experience in disaster management organizations from 10 ASEAN Member States (AMS) and Timor-Leste, along with four staff members from the AHA Centre. They received lectures from the Cabinet Office, Kobe City, the Arakawa Karyu River Office, JICA and ADRC. They also visited the Disaster Reduction and Human Renovation Institution (DRI), the Tsunami and Storm Surge Disaster Prevention Station, the Nojima Fault Preservation Museum, and Kyoto University's Ujigawa Open Laboratory to deepen their understanding of Japan's disaster management policies.

At the end of the visit, the participants presented their findings and shared ideas on how to advance disaster management efforts in their respective countries. Upon their return to Indonesia, the participants continued to review and reflect on their experiences from the visit in Japan.

4.3.3 Crash Course on Implementing DRR in Post-event Scenario

On 20–21 February 2025, the head of the Global Education and Training Institute of the United Nations Office for Disaster Risk Reduction (UNDRR/GETI), Mr Sanjaya Bhatia, visited ADRC to conduct a two-day workshop on “Implementing DRR in Post-event Scenario”. After the facilitators presented the scenario on extreme flooding, the current VRs of ADRC discussed the anticipated impacts flooding on various sectors such as housing, infrastructure, and livelihoods. During the workshop, the VRs worked on the following in their respective groups: 1) identifying the areas of DRR interventions; 2) identifying the support functions; 3) identifying the national and local support partners; and 4) listing of strategies and actions for DRR in post-event scenario. The groups presented their respective outputs followed by discussions further inputs from the facilitators.

Figure 4.12 Mr Sanjaya Bhatia of UNDRR/GETI during his lecture at ADRC

4.3.4 Internships at ADRC

During his internship from 1 to 19 July 2024, Mr Tatul Atalyan (a PhD student from Armenia specializing in Disaster Risk Management at Ehime University) contributed to the development of the Natural Disaster Databook 2023. His role involved analysing and comparing data on natural disasters in 2023 with the past 30 years (1993–2022). His analysis was focused on occurrences, deaths, affected populations, and economic losses. He also analysed climate-related disasters during the same periods. Throughout his internship, Mr Atalyan said, “I gained valuable insights and developed key skills. I adopted the discipline, time management, and teamwork practices inherent in the Japanese work environment, enhancing my understanding of Japanese working culture.” Mr Atalyan chose to intern at ADRC reading the institution’s background. “I improved my ability to produce insightful tables and graphs from complex datasets and strengthened my analytical skills by interpreting and presenting detailed information effectively,” Mr Atalyan added.

Figure 4.13 Mr Tatul Atalyan during his internship at ADRC