

5-2. Capacity Building in Member Countries

5-2-1 ADRC Cooperative Project and Peer Review for Promoting the Implementation of the Sendai Framework for Disaster Risk Reduction (SFDRR)

ADRC conducts DRR Policy Peer Reviews to help develop the DRR capacity of ADRC member countries by promoting information sharing and strengthening of relationships among member countries. The project adopted this year, the seventh year since the program was launched, is a cooperative project entitled "Nationwide Promotion of the Sendai Framework for Disaster Risk Reduction (SFDRR)" undertaken by the government of Philippines in collaboration with ADRC. The reviewer team visited Manila on 20-22 March, examined the progress of the cooperative project, and provided relevant advice. The activities covered by the review in the Philippines included the formulation of educational materials and the implementation of activities to raise disaster awareness. The purpose of the cooperative project under review was to effectively raise awareness of the SFDRR among those responsible for disaster reduction in the national and subnational governments and in the private sector.



Fig. 5-2-1-2: The presentation of the reviewers



Fig. 5-2-2: The explanation of aim on design of Information Education Communication material

ADRC invited two peer reviewers to visit the Philippines: (1) Dr. Satoru Nishikawa, Executive Director of Research at the Japan Center for Area Development Research and former Executive Director of ADRC, who had been deeply involved in the development of the SFDRR, and (2) Dr. Raditya DJati, Deputy Director for Disaster Prevention at the National Disaster Management Authority (BNPB) in Indonesia. ADRC Researcher Mr. Kazuhito Ueda also joined the mission from ADRC.

The reviewer team, together with their counterpart organization, the Office of Civil Defense in the Philippines, organized a workshop on 21 March in Manila for officials from relevant government organizations. Participants discussed Japan's disaster experience and lessons learned in the formulation of the SFDRR, key elements for effective education and outreach, the disaster

situation in Indonesia, and challenges in promoting the SFDRR there. The Office of Civil Defense explained their plans to design and produce public awareness raising materials such as brochures and posters, and gave a presentation on the country report used as the background material. The reviewers then gave their feedback and comments on these items. This project aims to provide a mutual learning process among ADRC member countries, enabling reviewer and reviewee countries alike to learn from one another throughout the peer review process. The reviewer team submitted a report to the reviewee country and the Philippines then provided a final report.

5-2-2. Technical Cooperation Project in Indonesia

5-2-2-1. Background of the Project

Indonesia is a disaster prone country which is frequently affected by various types of natural disasters, such as earthquakes, volcanic eruptions, and Tsunamis. Examples of such disasters and the damage in recent years include: the Indian Ocean earthquake and tsunami in December 2004 and the Java earthquake in May 2006. These disasters have raised awareness of disaster management. The government of Indonesia, upon these occasions, enacted Law No. 24 on Disaster Management in 2007, and strengthened the disaster management systems of the country through establishing BNPB (National Agency for Disaster Management).

However, BNPB, which has only a short history, does not have an adequate organization structure, budget, skills, knowhow or staff, and it is difficult for BNPB to give directions or sufficiently support the local governments in establishing BPBD (the Regional Agency for Disaster Management) or in formulating the Regional Disaster Management Plans. In addition, although each local government established its own BPBD primarily responsible for disaster risk reduction as a permanent organization, it seems difficult for many of local BPBDs to perform their duty effectively due to lack of knowledge and experience on disaster management.

Against this background, the JICA Technical Cooperation Project “the Project for Enhancement of the Disaster Management Capacity of BNPB and BPBD” was formulated with a goal of enhancing disaster management capacity of BNPB, provincial BPBDs in North Sulawesi and West Nusa Tenggara provinces, and regency/municipality BPBDs in both provinces for reducing damage from disasters in Indonesia.

ADRC with the Oriental Consultants Global Co., Ltd, a partner agency was commissioned the Project and started the project activities based on the proposal from November 2011.

5-2-2-2. Outline of the Project

The outline of the project is as shown in the below table.

【Project Period】	November 2011 – December 2015 (4 years)
【Project Purpose】	Enhancement of the disaster management capacities of BNPB, the provincial BPBDs, and the regency/municipality BPBDs in the pilot area
【Project Target Areas】	1. Jakarta (BNPB), 2. provincial BPBD of North Sulawesi province and regency/municipality BPBDs within it, 3. provincial BPBD of West Nusa Tenggara province and those of its regencies/municipalities.
【Expected Outputs】	[Output 1]: Improvement of the capacity for the regency/municipality BPBDs to accumulate disaster data/information that is fundamental for disaster risk management and improvement of the accuracy of such data/information. [Output 2]: Creation of Hazard and Risk Maps at the regency/municipality level in the pilot area. [Output 3]: Formulation of Regional Disaster Management Plans for regency/municipalities in the pilot area. [Output 4]: Disaster Management Drills are to be conducted in the pilot provinces as well as in regencies/municipalities in the pilot provinces

Two experts of ADRC joined the activities on “Disaster Information System” for Output 1 and “Community Based Disaster Risk Management” for Output 4. In the fiscal year 2014, the activities for the first pilot province, North Sulawesi province, were finalized in April 2014. (The activities of the Output 1 were only for the first pilot province and completed.) Those for the second pilot province (for Output 4), the CBDRM activities for the Tsunami risk reduction were conducted, based on which the draft village disaster management plan (including of community DRR map and early warning system) was formulated by March 2015.

In September 2015, the final reporting sessions of the project activities were held in the second pilot province and Jakarta. The Indonesian counterparts of the project expressed their intention to continue the disaster risk management (DRM) activities using the outputs and what they learned through the project. Further the staff members of BNPB mentioned their willingness to disseminate the project outputs in the other provinces to improve their DRM activities.



Community Evacuation Drill under the Output 4 activities in West Nusa Tenggara



Final Reporting Session in West Nusa Tenggara

(Source: JICA Project for Enhancement of the Disaster Management Capacity of BNPB and BPBD)

5-2-3. Technical Cooperation Project in Nepal

5-2-3-1. Background of the Project

Nepal, located in the area where Indian plate and Eurasian plate hit, is one of the frequent earthquake occurrence areas in the world. Kathmandu Valley, which includes the capital city of Nepal, has experienced several disastrous earthquakes, including the Bihar-Nepal earthquake of magnitude 8.4 which occurred in 1934 with approximately 20% of all buildings in Kathmandu Valley were destroyed and 9,040 people were killed. Comparing with the high risk of a future earthquake in Kathmandu Valley, countermeasures such as retrofitting of buildings for seismic resistance, land use control and observance of the National Building Code have not been promoted enough. Further, the rapid increase of population of Kathmandu Valley would make more people facing the risk with extension work on current buildings and non-engineered buildings that constructed without the participation of knowledge and skilled architects and engineers. The Government of Nepal has been tackling the issue with the formulation of laws and strategies but lack of basic risk information for the valley.

The project “The study on Earthquake Disaster Mitigation”, conducted by JICA in 2002, estimated the damage based on the Bihar-Nepal earthquake scenario that 53,000 buildings will be destroyed, 18,000 people will be killed. Since then, population has been increased by a factor of 1.5 and the number of buildings increased up to 1.7 times. Therefore the potential damage must be much more serious if the same scenario is considered now and might be even worse in the future.

With the background, it becomes a necessary and urgent issue to update the risk assessment for the future development plans and policies concern on the disaster risk management. Under the request from the government of Nepal, JICA formulated the “Project for Assessment of Earthquake Disaster Risk for the Kathmandu Valley” and decided to start the project activities from the end of April 2015.

On April 25, 2015, just before the commencement of the project, the Gorkha earthquake of Mw7.8 (USGS) occurred at the boundary of Indian Plate and Eurasian Plate with its epicenter approximately 76km west of Kathmandu. This earthquake brought heavy damages in a wide range of area; 8,790 people were killed and approximately 500,000 buildings were totally destroyed. Through a series of discussions with counterparts, the project component was partly modified in order to follow the changed situation and respond to the rehabilitation and recovery needs.

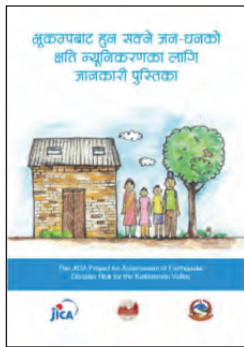
5-2-3-2. Outline of the Project

The outline of the project is as shown in the below table.

【Project Period】	April 2015 – October 2016 (Term 1) October 2016 – April 2018 (Term 2) (Total 3 years)
【Project Goal】	To implement the earthquake risk assessment for future scenario earthquakes with considering the earthquake environment after the Gorkha Earthquake, and to develop the DM plan for concrete and effective promotion on disaster risk management for future earthquakes.
【Project Target Areas】	Kathmandu Valley
【Expected Outputs】	[Output 1]: To conduct seismic hazard analysis based on scenario earthquakes utilizing the latest knowledge and create detailed ground model for Kathmandu Valley. [Output 2]: To conduct seismic risk assessment based on the results of seismic hazard analysis (Output1), and summarize as damage estimation by considering several occurrence scenes (time, date, season, etc.) [Output 3]: To enhance skills for updating risk assessment results in accordance with the social environment change in the future. [Output 4]: To formulate BBB recovery and reconstruction plan utilizing the results of hazard analysis, and disaster management plan based on the results of seismic risk assessment for the pilot municipalities.

ADRC has dispatched the experts on “Standard Operation Procedure Planning” and “Community Based Disaster Risk Management/ Community and Social Analysis” to conduct some activities related to formulation of disaster management plan, a part of the above-mentioned expected output 4 of the Project.

In the fiscal year 2015, as one of the activities on “Standard Operation Procedure Planning”, a chronological survey was conducted for the purpose to review the emergency response activities of the disaster management organizations at national level and in the pilot municipalities in the case of the Gorkha Earthquake. Also, as the activities on the “Community Based Disaster Risk Management”, urgent resilient and safe Kathmandu campaign was organized. The campaign activities included development of the brochure, implementation of the community workshops and radio broadcasting for enhancing earthquake risk and risk reduction knowledge and awareness.



Brochure on Earthquake Risk and Risk Reduction



Community Workshop on Earthquake Risks

(Source: JICA Project for Assessment of Earthquake Disaster Risk for the Kathmandu Valley in Nepal)