
4-1-6-2. 31st session of the WMO/ESCAP Panel on Tropical Cyclones

ADRC participated in the 31st session of the WMO/ESCAP Panel on Tropical Cyclones held on 1-6 March 2004 in Colombo, hosted by the Government of Sri Lanka. The main objective of the session was to promote and coordinate measures designed to reduce the negative impact caused by tropical cyclones in the Bay of Bengal and the Arabian Sea. Despite modern technological advances, countries in the region continue to suffer from violent vagaries of tropical cyclones. Therefore, capacity building of Panel Members aiming at enhancing regional cooperation and coordination of activities for mitigation of tropical cyclones is crucial. A representative of ADRC presented its activities in the field of disaster reduction and proposed the areas of possible cooperation with the Panel.

4-1-7. Collaboration with WHO/WPRO

ADRC and the World Health Organization Regional Office for the West Pacific (WHO/WPRO) have been closely working in the field of disaster reduction. The activities jointly carried out are described below.

4-1-7-1. Training on Supply Management (SUMA) and Logistics Management of Humanitarian Supplies

ADRC jointly organized the Training on Supply Management (SUMA) and Logistics Management of Humanitarian Supplies with the World Health Organization Regional Office for the West Pacific (WHO/WPRO), and the National Disaster Coordinating Council (NDCC) of the Philippines in Manila on October 20-24, 2003. It was innovative in a sense that it was the first of its kind in the Philippines and Southeast Asia, and the training was geared towards improving the management of humanitarian assistance by strengthening national capacity to manage effectively the aid supplies and bring them to the affected people in an adequate and convenient way. For further details regarding the Training on SUMA and Logistics Management of Humanitarian Supplies, see Chapter 4-2-3.

4-1-7-2. Third Regional Consultative Meeting

Based on the results of the Second Regional Consultative Meeting held in Bangkok on XXX June 2002, the third Regional Consultative Meeting with a theme "Mainstreaming Disaster Risk Management into Development Practice in Asia" was held in Makati, Philippines on 24-25 February 2004, co-organized by WHO/WPRO and the Asian Disaster Preparedness Center (ADPC). The meeting aimed to review the activities carried out by the regional and international organizations actively involved in disaster reduction in the region and to plan further collaborative work, especially in view of the World Conference on Disaster Reduction to be held in Kobe, Hyogo in January 2005. ADRC contributed to the deliberations of the meeting through emphasizing the promotion of the TDRM approach, in particular, the result of the International TDRM Conference held on 2-4 December 2003 in Kobe.

4-2. Cooperative Projects with Member Countries

Based on the Asian countries' needs identified through its network with member countries, ADRC has been providing technical and financial support in the form of cooperative projects to disaster reduction programs implemented by governments of member countries and international organizations.

Through these collaborative projects, ADRC has contributed to the improvement of disaster reduction capabilities of member countries, and disseminated information on the achievements and lessons of the projects to member countries as well as the rest of the world.

Table below lists the cooperative projects implemented so far.

Table.4-2-1 List of Cooperative Projects

| Fiscal Year | Country | Project Name |
|-------------|------------------|---|
| 1999 | Papua New Guinea | Public Awareness of Tsunami Reduction in PNG |
| 2000 | Cambodia | Disaster Management Training for Local Government Official |
| 2000 | Nepal | Disaster Reduction Awareness-raising Project for Community Leaders |
| 2000 | Indonesia | Community-based Flood Disaster Mitigation Project |
| 2001 | India | Multinational Investigative Mission to Quake-stricken Areas in India |
| 2001 | Sri Lanka | Disaster Management Training for Local Government Official |
| 2001 | Singapore | Urban Search-and-Rescue Training |
| 2001 | Philippines | School Educational Program for Disaster Reduction |
| 2002 | Singapore | Urban Search-and-Rescue Training |
| 2002 | Bangladesh | Workshop of Early Warning System |
| 2002 | Laos | Disaster Reduction Training for Media Staff |
| 2003 | Cambodia | Training Workshop for Cambodia Provincial Committee for Disaster Management |
| 2003 | Sri Lanka | Disaster Prevention Investigation Mission |
| 2003 | Philippines | SUMA Project |
| 2003 | Vietnam | Flood Management Training Project |
| 2003 | Singapore | Urban Search-and-Rescue Training Project |
| 2003 | Mongolia | Earthquake Disaster Management in Mongolia |

4-2-1. Training Workshop for Cambodia Provincial Committee for Disaster Management

1) Purpose

This workshop toured five locations (Kandal, Prey Veng, Kampong Cham, Kratie, and Kampong Speu Provinces) in order to enhance the disaster management capabilities of local government officials in municipalities (Provinces, Districts, and Communes in the order of size) other than the capital city of Phnom Penh.

2) Dates

April 1 - 3, 2003 (Kandal Province), April 22 - 24, 2003 (Kampong Cham Province), May 6 - 8, 2003 (Kratie Province), May 27 - 29, 2003 (Kampong Speu Province), June 2 - 4, 2003 (Prey Veng Province)

3) Participants

ADRC and NCDM personnels and disaster managers in the respective host local governments: 40 people per location

4) Contents

- Disaster Management Policy and Preparedness

- Lessons from Japan's Typhoon and Flood Experiences
- Information Delivery and Communications
- Lecture on Disaster Prevention Terms and Concepts
- Post-disaster Damages and Necessary Measures
- Training for Determining the Extent of Damages after a Disaster (Flood/Drought)
- NCDM's Disaster Preparedness Scheme
- Damage Assessment Methodologies and Document Formats
- Documentation of Damage Status Reports
- Importance of Food, Water, and Sanitation and Health Situation Assessment
- Disaster situation Investigations at Different Administrative Levels (Commune, District, and Provincial Levels)

5) **Programs of the Workshop**

| Time | Day 1 | Day 2 | Day 3 |
|---------------|---|---|---|
| 08.00 - 08.30 | Registration and Reception | Summary of Day 1 | Summary of Day 2 |
| 08.30 - 09.45 | Opening Ceremony, Lecture on Disaster Prevention (Lecture) | NCDM's Disaster Preparedness Scheme (Lecture) | Steps of Damage Assessment (Lecture) |
| 09.45 - 10.00 | Break | Break | Break |
| 10.00 - 11.00 | Presentation by ADRC Researchers (Lecture) | Damage Assessment Procedures and Document Formats (Exercise) | Food, Water, and Public Health Security (Lectures) |
| 11.00 - 12.00 | Communications Training (Exercise) | Risk Assessment (Discussion and Exercise) | Food, Water, and Public Health Security (Lecture) |
| 12.00 - 14.00 | Lunch Break | Lunch Break | Lunch Break |
| 14.00 - 15.00 | Disaster Prevention Terminology (Lecture) | Emergency Reporting (Discussion and Exercise) | Damage Assessment at Different Administrative Levels (Lecture) |
| 15.00 - 15.30 | Break | Break | Break |
| 15.30 - 16.30 | Flood and Drought: Post-Disaster Responses (Lecture) | Initial Reporting (Discussion and Exercise) | Closing Ceremony and Completion Ceremony |
| 16.30 - 17.30 | Post-Disaster Damage Assessment Methods (Exercise) | Damage Assessment at Local Levels (Lecture) | |



Fig.4-2-1 Snapshot of “Workshop on Disaster Damage Assessment”
(Kampong Cham Province)

6) Summaries of Workshop Sessions

The workshop sessions are summarized as follows:

- ① Presentation on the Total Disaster Risk Management Approach by ADRC
The lecturer outlined the activity principles of Asian Disaster Reduction Center (ADRC) and ADRC projects, and explained the importance of the Total Disaster Risk Management approach based on Japan's lessons from typhoon and flood experiences before 1960, using video materials.
- ② Communications Exercise
Bearing in mind the importance of information management and communications, the participants studied how to select reliable information sources without prejudice in order to grasp the situation for efficient delivery, sharing, and management of accurate information.
- ③ Concepts, Principles, Objectives, and Terminologies
The participants comprehensively studied the definition and concepts of natural disasters, the missions and activities of NCDM and local governments in disaster emergencies, and the methodologies, principles and terms relating to disaster assessment.
- ④ Flood and Drought: Post Disaster Damages and Needs
The participants studied about assessment plans to be prepared at the occurrence of a flood or drought. The lecturer explained how to create assessment plans including essential entries such as purposes, detailed schedules, assessment items (security, food, water, health care, education, etc.), necessary logistics support, possible difficulties, and essential post-assessment entries at the occurrence of a disaster.
- ⑤ Post-Disaster Assessment Planning Exercise
Post-disaster situation assessment is one of the important components of disaster prevention. While examining its effectiveness, the participants studied about points to consider, information collection and report preparation methods.
- ⑥ NCDM Legal System for Disaster Management
The participants studied the structure of NCDM disaster management scheme, the procedural flow to be followed at the occurrence of a disaster and after, and the nature of reports to be made to the Disaster Response Headquarters.
- ⑦ Disaster Damage and Need Assessment Procedure and Format (Exercise)
The focus of the exercise was placed on floods and droughts, which Cambodia more frequently suffers than any other form of natural disasters. Consulting actual Situation Reports, the participants tackled the exercise tasks to develop ability to identify important information to include in reports.

⑧ The Risk Monitoring Report (Discussion and Exercise)

On the assumption that a natural disaster happened, the participants had a group exercise to identify risk assessment criteria that should be defined beforehand. Then, they gathered to have a discussion on the exercise results.

⑨ The Initial Report (Discussion and Exercise)

The participants considered what should be coordinated at the time of emergency, what could be the key elements for effective coordination, and especially what should be coordinated at the initial stage

⑩ Steps of Damage and Needs Assessment

The participants studied procedural steps that local governmental organization staff should follow in order to rapidly collect and forward disaster information to the central government, and to assess damage information and needs of the affected population, using standard report forms.

⑪ Disaster Damages and Needs: Food, Water and Sanitation and Health

In disaster emergency, it immediately becomes necessary to control food and water supply, and public sanitation and health. The participants absorbed the skills and knowledge, required of local government disaster control personnel, which include examination of relevant checklists, establishment of the emergency medical support system, psychological stresses and their influences, etc.

⑫ Exercise in Damage and Need Assessment and Reporting

-Commune Level, District Level, Provincial Level

The participants studied the characteristics of disaster prevention plans at different levels of administrative units, i.e., communes, districts, and provinces, the purpose and essential items of a disaster prevention plan (situation, purpose, framework, details of tasks, etc.), and planning know-how. Then, they worked in groups to prepare and present activity plans, assuming that a disaster had happened.

7) **Achievements of the Workshop**

Now considered to be qualified for disaster assessment activities for future natural disasters such as floods and droughts in Prey Veang Province, which hosted this workshop, the participants in the workshop are expected to make great contribution to the improvement of disaster management capabilities in Cambodia.

4-2-2. Disaster Prevention Investigation Mission in Sri Lanka

1) Summary

The monsoon rainstorm hit the mid-western part of Sri Lanka on May 17 - 18, 2003, causing the most devastating large scale landslide disaster in the post-colonial history of the country, which killed 252 people and affected approximately 600,000 people (more than 150,000 households). Landslide damages concentrated in the Matara and Ratnapura districts, where many houses were damaged

At the request from Sri Lanka's National Disaster Management Centre (NDMC), ADRC dispatched a mission to conduct a field investigation into the feasibility of constructing a disaster prevention system for reducing meteorological disasters in Sri Lanka.

2) Dates

August 4 - 9, 2003

3) Investigation Mission

| | |
|--|-------------------------------------|
| (Name/Title, Organization) | : (Field of Investigation) |
| Fumiaki Yoshimura (Chief researcher, ADRC) | : Disaster Reduction Administration |
| Tetsushi Kurita (Chief researcher, ADRC) | : Disaster Reduction Systems |
| SriGowri Sanker (Visiting researcher, ADRC) | : Binational Cooperation |
| Hiroaki Minakami (Engineer, Japan Weather Association) | : Meteorological Systems |

4) Details

Table.4-2-2-1 Details of the Field Investigation

| Date | Locations | Activities |
|-------|------------------------------------|--|
| Aug 4 | Arrival in Colombo | — |
| | NDMC | Was briefed on <ul style="list-style-type: none"> • Natural disasters in Sri Lanka • Damages from the flood disaster in May • Disaster prevention system in Sri Lanka |
| Aug 5 | Meteorological Agency | Investigated the current meteorological system |
| | JBIC | Gathered information on the current situation of Sri Lanka |
| | JICA | |
| | Japanese Embassy | |
| | Ministry of Social Welfare | Paid a courtesy visit to the minister and vice-minister |
| | Sri Lanka Telecom | Investigated public communication network (fixed and mobile phones) |
| | Ministry of Irrigation | Investigated flood prevention measures |
| Aug 6 | Geography Bureau | Investigated the progress in map data collection |
| | National Institute of Architecture | Investigated the status of the sediment disaster hazard map |
| | Meteorological Bureau | Exchanged views on the system to be constructed in future |
| Aug 7 | National Institute of Architecture | Had hearings for sediment disaster investigation |
| | Japanese Embassy | Reported the findings of the investigation |
| | JBIC | |
| Aug 8 | Ratnapura district | Investigated sediment disaster sites |
| Aug 9 | Departure from Colombo | — |



Fig.4-2-2-1 Meeting with the Social Welfare Minister (center)

5) Findings

(1) Sediment Disaster Damages in Ratnapura district

The mission visited the landslide disaster sites in the Ratnapura district, where damages from the sediment disaster in May concentrated, to be briefed on the damage situation by district administrators. Each victim household who lost their house would receive 100,000 rupees and land to build a new house on from the Government. Households who had their houses half-destroyed would respectively receive 40,000 rupees to have their houses repaired. However, half-destroyed houses located on hazardous areas were deemed as completely-destroyed. This allowed their owners to secure new housing with no financial burden. Reconstruction works were scheduled to complete by October.

Compulsory relocation of residents had already been under way in the hazardous spots (designated by the Government) around the sediment disaster areas. Evacuees were temporarily staying at refugee camps while waiting for their houses at new locations to be completed.



Fig.4-2-2-2 Landslide Site

(The whole area was designated as a hazard area. The occupants of the house had already moved out)

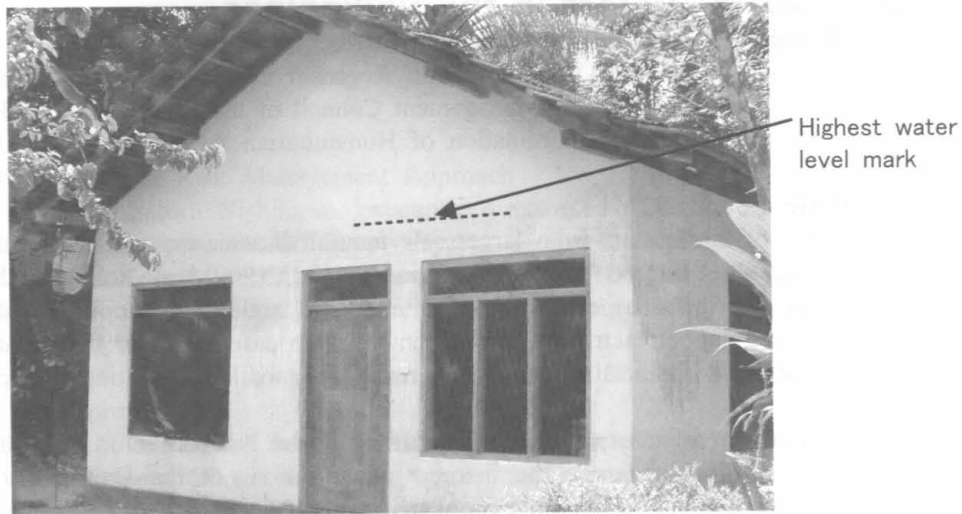


Fig.4-2-2-3 A house with the highest water level marked on its wall

(2) Necessity of Developing a Disaster Reduction System

The hearing survey with Sri Lankan disaster reduction-related organizations revealed that installation of measuring equipment such as rain gauges and weather radars would not automatically lead to reduction of meteorological disasters, and that it was necessary not only to develop human resources for the operation of such equipment but also to establish a sustainable disaster reduction framework including financial aspects.

The mission explained these facts to Sri Lankan disaster managers, and proposed to develop a disaster reduction system consisting of the following components:

- Monitoring and forecasting systems for rainfall, landslides, etc.
- Training programs for disaster managers
- Creation of community-by-community hazard maps and evacuation plans