# 4-2-3. SUMA Project in the Philippines

# 1) Organizers

Co-hosted by: WHO West Pacific Regional Office (WPRO), Office of the National Disaster Management Council of the Philippines, ADRC, UN Office for the Coordination of Humanitarian Affairs (UN OCHA) Kobe Office

## 2) Basic Concept

One of the lessons from large-scale natural disaster experiences of the Philippines, including Mt. Pinatubo Volcanic Eruption in 1991 (900 death tolls), is that the lack of effective distribution means of humanitarian aid and relief supplies leads to confusion in relief and support activities. It frequently is the case in major natural disasters that relief supplies and financial aids do not reach affected communities and people in need of them.

Based on these experiences, the Office of the National Disaster Management Council of the Philippines urged the member organizations of the Council to exchange memoranda for eliminating possible problems in disaster control. In addition, the Office has organized the International Humanitarian Assistance Network in order to facilitate activities of overseas relief teams and acceptance of relief supplies. However, the health-related emergency supplies distribution system is not managed effectively enough to cope with a large-scale natural disaster. Against this background, ADRC in cooperation with the WHO West Pacific Regional Office (Manila) invited the local disaster prevention officials to a five day induction program for introducing and implementing the WHO-developed Supply Management System (SUMA), which has been successful particularly in South America, as a model for the relief supplies distribution system in the Philippines.



Fig.4-2-3-1 Lecture by Dr. Jean Marc Olive, WHO Philippine representative

### 3) Dates

October 20 - 24, 2003

## 4) Participants

Thirty-three individuals from the Government of the Philippines (Department of Health, Department of Social Welfare Development, Office of the National Disaster Management Council, Department of Defense), Philippine Red Cross, Custom Bureau, UNDP, NGOs, the Government of East Timor, etc.

### 5) Details

This training project provided the following programs as an opportunity for governmental and non-governmental organizations responsible for emergency disaster response

to learn.

- · Software operation skills for the Relief Supply Management System (SUMA)
- · Total Supply Management technique

#### Day 1: Oct. 20

1. Total Disaster Risk Management Approach

Mr. Satoru Nishikawa, executive director of ADRC

2 Current Humanitarian Aid Supply System in the Philippines

Dr. Jean Marc Olive, representative of WHO Philippine

3. OCHA's Organizational Structure, Disaster Preparedness, and Disaster Response Activities

Ms. Takako Izumi, Humanitarian Affairs Officer, OCHA Kobe

- 4 Open Forum
- 5. Outline of the Relief Supply Management System (SUMA)
- 6. SUMA Operation (SUMA software operation exercises at the Headquarters and fields)

Ms. Ardı Voets, FUNDESUMA Consultant

### Day 2: Oct. 21

1. SUMA Operation (SUMA software operation exercises at the Headquarters and fields)

Ms. Ardi Voets, FUNDESUMA Consultant

### Day 3: Oct. 22

1. Total Logistics Management in relief supplies distribution (Logistic chain for relief supplies)

Mr. Gerardo Quiros Cuadra, FUNDESUMA Consultant

### Day 4: Oct. 23

1 SUMA Operation (Warehouse Management Exercise)
Ms. Ardi Voets, FUNDESUMA Consultant

# Day 5: Oct. 23

- I. Field Exercise (visits to warehouses of customs, Philippine Red Cross, and the National Disaster Management Center)
- 2 Wrap-up and Proposals from the Participants

# 6) Proposals from the Participants

- To use and develop SUMA on a long-term basis, it is necessary to hold regular meetings after the completion of the course.
- To facilitate effective relief supplies distribution, the National Disaster Management Council and the Custom Bureau should exchange a memorandum of understanding on smooth customs clearance of relief supplies from overseas.
- Successful cases of application of SUMA in different countries should be introduced into lectures.
- It is necessary to promote the application of SUMA at both national and regional levels



Fig.4-2-3-2 Group photo of the seminar participants



Fig.4-2-3-3 Lecture by Mr. Satoru Nishikawa, Executive Director of ADRC



Fig.4-2-3-4 Snapshot of SUMA software operation exercise



Fig.4-2-3-5 Snapshot of the field exercise

# 4-2-4. Flood Management Training in Vietnam

# 1) Organizers

UNDP Project VIE/97/002, the Central Committee for Flood and Typhoon Control, the Ministry of Agriculture and Rural Development of Vietnam

Co-sponsored by: ADRC, and UN OCHA Kobe

## 2) Basic Concept

Vietnam is a country prone to water-related disasters including floods, landslides, and typhoons. The country stretchs long from north to south. The South Region frequently suffers from water disasters centering around the Mekong Delta. The Middle Region often has water disasters along short and rapid rivers similar to those in Japan. The North Region experinces frequent floods in the Hong Delta.

As part of its water disaster reduction efforts, Vietnam started to construct dykes along the River Hong more than 1000 years ago. Today, the dykes extend more than 3,000 km along the river.

Vietnam has shifted weight in disaster management from post-event measures to preventive measures based on disaster forecasts. Now, Vietnam recognizes the importance of getting the whole picture of the situation at the occurrence of a disaster, and the importance of monitoring the course of the development of a disaster in order to prevent the spread of damages and to collect data for disaster forecasts. The idea is based on the concepts of disaster management information systems and the Total Disaster Risk Management (TDRM).

As a model project for alleviating damages from flood and typhoon disasters, ADRC jointly with the local counterparts co-hosted a four-day intensive training seminar for technocrats of Vietnam's national agencies and research institutes. The seminar consisted of lectures and trainings on the basic concept of TDRM and the application of remote sensing technology to disaster reduction.



Fig.4-2-4-1 Group photo of the Vietnam Seminar Participants

#### 3) Period

November 17th to 20th, 2003

#### 4) Participants

30 individuals from the Vietnam Government and Vietnamese public research institutes, and two individuals each from neighboring Thailand, Cambodia, and Laos.

#### 5) Details

Day One - November 17th (Mon)

(Theme: Disaster Information System and Disaster Management)

1. Living with Flood Risks

Mr. Le Xuan Truong, Deputy Director, Disaster Management Center, Department of Dyke Management and Flood Control & Typhoon Committee (DDMFC)

2. Disaster Information Systems in Cambodia

Mr. Khun SoKha and Mr. Cheng Nhan, National Committee on Disaster

Management (NCDM) of Cambodia

3. Disaster Information Systems in Laos

Mr Thonephokham Inthasone and Mr. Kindavong Luangrath, Disaster Management Bureau, Ministry of Labour and Social Welfare, Lao PDR

4. Disaster Information Systems in Thailand

Mr. Damri Thaikam and Mr. Chanarong Vasanasomsithit, Department of Disaster Prevention and Mitigation, Ministry of Internal Affairs, Thailand

5 Disaster Information Systems in Japan

Mr. Masaru Arakida (Chief researcher, ADRC)

6. Estimation Method for Floods in Central Hanoi

Mr. Nguyen Tat Thang, Researcher, Division of Fluvial and Marine Disasters. Disaster Prevention Research Institute, Kyoto University

7 Flash Flood Warning System

Prof. Phan Anh, Research Center for Electronics and Communication, Hanoi National University

8. Integrated Modeling Using Environmental Data and GIS System

Ms. Le Thi Quynh Ha, Institute of Applicable Mechanics

9. GLIDE - for Effective Disaster Information Sharing

Mr. Masaru Arakıda (Chief researcher, ADRC)

10. Flood Management in Plains

Prof. Dao Xuan Hoc, University of Water Resource

11. DMU Vietnam Disaster Information System

Mr. Duong Tat Toan, Project VIE/97/002 - DMU

### Day Two - November 18th (Tue) (Theme: Floods and TDRM Approach)

1. Concept of TDRM - Theory and Application

Ms. Takako Izumi (UN OCHA Kobe)

2. Flood Forecast Models for the Hong Delta

Dr. Hoang Van Lai, Chief of Hydro informatics Department, Institute of Mechanics

3. Torrential Rain Forecasts for the Hong Delta

Mr. Le Van Thien, Institute of Hydrology and Meteorology

4 Flood Control in the Hong River Basin

Dr. Le Minh Nhat, Eng., Dyke Management Division, MARD

5 Floods in Central Vietnam

Ass. Prof Cao Dang Du

6. Disasters in Central Coast Areas and Transitions of Vegetation

Dr. Nguyen Van Viet, Director of Research Center of Agricultural Meteorology, Institute of H&M

7. Transformation of Bays caused by Coastal Floods

Mr. Tran Van Dien, Department of Marine Remote Sensing, Hai Phong Institute of Oceanology

8 Flash Flood Warning System for the Tuy Loan River

Ass. Prof. Cao Dang Du

9 Flow Rate Monitoring in the 2001 Mekong Flood

Ass. Prof. Vu Van Tuan, Ph.D., Institute of Hydrology and Meteorology.

10 Quantitative Rainfall Estimation

Mr. Do Ngoc Thang, Engineer, National Center of M&H Forecast

11. Rapid Assessment of Flood Prevention in terms of Emergency Healthcare in Giang Province for Year 2000

Dr. Le Van Tuan, Pasteur Institute (HCMC)

12. Flash Flood Management in Mountain Regions

Mr Dang Quang Minh, DDMFSC

### Day Three - November 19th (Wed)

# (Theme: Use of Remote Sensing and GIS for Disaster Management)

- 1. Remote Sensing and GIS Technologies for Disaster Management
  - Dr. Kıyoshi Honda, Associate Professor. Space Technology; Applications and Research Program (STAR), School of Advanced Technologies (SAT). Asian Institute of Technology (AIT).
- 2. GIS Tools for Flood Forecasts for the Mekong Delta
  - Dr. Nguyen Huu Nhan, Southern Station of Hydro-meteorology
- 3. Remote Sensing and GIS Technologies for Disaster Management in Asia and Japan Dr. Ono, Senior Researcher, Remote Sensing Technology Center of Japan (RESTEC)
- 4. Monitoring and Forecasting of Central Vietnam Coastal Floods Using ALOS Satellite Imagery
  - Mr Tran Van Dien, Institute of Oceanology, Hai Phong Institute of Oceanology
- Integrated Remote Sensing GIS System for Forecasting Floods in Hoa Binh Province Dr. Ass. Prof. Nguyen Ngoc Thach, Vice Director, Department of Geography, HUS-VNU
- 6. Application of GMS Technology to Rainfall Estimation
  - Mr. Nozomu Ohkawara, Senior Scientific Officer, Data Processing Department, Meteorological Satellite Center (MSC), Japan Meteorological Agency (JMA)
- 7 Flood Forecast Mapping System at TPHCH
  - Mr. Nguyen Duc Vu, Engineer, Water Management and Storm and Flood Control Department, Ho Chi Minh City
- 8. Application of MODIS Data to Flood Monitoring
  - Dr. Kıyoshı Honda, Associate Professor, Space Technology; Applications and Research Program (STAR), School of Advanced Technologies (SAT). Asian Institute of Technology (AIT).
- Web-based Simulation Modeling for Floods and Other Disasters Mr. Nguyen Hoa Binh, PeaceSoft Solution Corp.

#### Day Four - November 20th (Thr)

#### (Theme: Use of Remote Sensing and GIS for Disaster Management)

- 1. Preliminary Study on the Use of MODIS Data for Monitoring and Management of Environment and Natural Resources of Vietnam
  - Mr. Nguyen Dinh Duong, Director, Department of Environmental Information Study and Analysis, Institute of Geography
- 2 Linear Models Based on Rainfall Measurements for Assessing Erosion Risks Using NOAA-AVHRR data
  - Dr. Bhuwneshwar Prasad Sah, Chief Researcher, Environment Group, Technical Dept., Central Government Ministries and Agencies Division, PASCO Corporation
- 3. Total Approach to Flood Management in the Ha Thanh River Basin Using Remote Sensing, GIS, and Hydraulic Technologies
  - Dr. Tran Cong Yen, Ph.D, Ministry of Science and Technology
- 4. Use of Remote Sensing Data in Flood Monitoring and Flood Management
  - Dr. Ono, Senior Researcher, Remote Sensing Technology Center of Japan (RESTEC)



Fig.4-2-4-2 Snapshot of the Seminar

# 5) Evaluations by Seminar Participants

All participants were asked to evaluate the seminar. 90% of the respondents answered that the seminar should be followed up with similar seminars and trainings. There were also opinions that they would like to be joined by participants from neighboring countries in addition to Cambodia, Laos, and Thailand.

Members from all the participating countries commented that they hoped that countries suffering from similar disasters would hold joint seminars and field projects as a driving force for increasing such opportunities, sharing knowledge and promoting intra-regional cooperation.

It is necessary to continue support to Vietnam for improving the country's disaster response capabilities.



Fig.4-2-4-3 Group Photo of the Seminar Participants