# 3. Human Resource Development

# 3-1. Activities of Disaster Reduction

# 3-1-1. Study Tour on National Tsunami Warning System Implementation for High Level Administrators in the Indian Ocean Responsible for Tsunami Warning Activities

ADRC conducted the "Study Tour on National Tsunami Warning System Implementation for High Level Administrators in the Indian Ocean Responsible for Tsunami Warning Activities" organized by UN/ISDR and UNESCO/IOC.

During this study tour, participants are expected to acquire knowledge for identifying components of the national tsunami warning and mitigation systems to be built and strengthened. Study tour was held in two different countries: in Japan, in Tokyo and Shizuoka, on 11-14 July 2005, and in the USA, in Hawaii, on 26-29 July 2005 respectively.

The study tour in Japan was designed as a good example to countries vulnerable to tsunamis and countries with urbanized areas along the coast, while the one in Hawaii focused on an implementation where the risk from distant tsunamis is much greater than the local threat.

The participating countries in Japan consisted of Australia, Bangladesh, Comoros, Indonesia, Iran, Madagascar, Malaysia, Maldives, Mauritius, Oman, Pakistan, Singapore, Somalia, Sri Lanka, Tanzania and Thailand. From these 16 countries, 23 high-ranked administrators, responsible for tsunami warning activities, attended the tour.

Throughout the period, various lectures were made by UN/ISDR, UNESCO/IOC, and

WMO, International Tsunami Information Center (IOC/ITIC), and Pacific Tsunami Warning Center (PTWC) from Hawaii.

Tsunami disaster management related ministries in Japan introduced the the basic policy and tsunami warning and mitigation system in Japan. ADRC made a presentation on community based disaster reduction e.g. town watching method.

The participants also visited a water gate and signboards for tsunami disaster reduction in Numazu city, Shizuoka Prefecture, and studied countermeasures against tsunami disasters in local government.



Fig.3-1-1-1 Lecture at JMA

# 3-1-2. Disaster management Training Course for Central Asia and Caucasus

#### (1) Objectives

The ADRC conducted the training course on disaster management for Central Asia and Caucasus from August 22 to September 16, in cooperation with Japan International Cooperation Agency (JICA) this year sequentially in last years. The training course was designed to share the Japanese knowledge and experiences of disasters and disaster risk reduction to contribute to enhance the region's disaster resilience.

The course was conducted in the Russian language to facilitate the participation of representatives from Newly Independent States, where Russian remains the common language. This training course was the second this year, and the participants were most of administrative officers at level in charge of disaster risk management in each country. After the training we discussed the contents of the program of next year training course with them.

# (2) Dates

August 22 to September 16, 2005

# (3) Participants

Counry	Name	Title,Organization	
Armenia	Mr. Artur Vanush MANUKYAN	Deputy Head, National Survey of Seismic Protection Agency of EMA	
		Deputy Head of GIS Group, Emergency Situations and Civil Safety Service MIA of Georgia	
Kazakhstan	MR. Yerik Tuleuzhanov	Deputy of Chief, Department for Emergency Situations, Astana City	
Kyrgyztan	Mr. Djenishbek Oskombajevich DJUSUPOV	Deputy of Director of Department, Department of Prevention and Liquidation Disaster Consequences	
	Mr. Alexander Victorovich MELESHKO	The Chief of Northern Regional Management, Department of Earthquakes Monitoring and Forecasting and Minimize Failings, anagement Ministry of Ecology and Emergency	
	Mr. Marat ABDRAHMANOV	Senior Specialist, Ministry of Ecology and Emergencies Department of Emergencies Monitoring and Minimize Failings, Management	
	Mr. Khidoyatsho INOYATOV	Senior Specialist, Executive Department of the President of the Republic of Tajikistan	
Tajikistan	Mr. Isufali Jakoubovich RAHIMOV	Head of Mobile Mechanical Station, Ministry of Irrigation & Water Resources Trest Vachshvodstroy Moving Mechanical Station Huroson Region	
	Mr. Isrofil Ibrogimovich KUZBONOV	Deputy Head of the District, Khukumat of Sharinav Region	
	Mr. Shamsullo Fayzulloev RAJABALIEV	Deputy Head of Governmental Body of Khaflon Region	
Uzbekistan	Mr. Akram Mansurovich RIZAEV	Senior Inspector, the National Security Council under the President of the Republic of Uzbekistan	
	Mr. Isroiljon Isakovich KURBONOV	Institute of Civil Protection, Uzbekistan Republic Ministry of Emergency Situations, Institute of Civil Protection	
	Mr. Dilbar Qabilovich MUSAEV	Director of Training Center, Ministry of Emergency Situations, Andijon Regional Department, Training Center of Supervisors and People	

# (4) Program

After the trainees introduced the present conditions and the characteristic of disasters in their countries, they participated in a series of visits and lectures to learn the disaster management system in Japan.

The program of the training course consisted of contents of lecture by various stakeholders

so that they understood a concept of Total Disaster Risk Management deeply including the roles of the central and local governments, private sector, mass media, communities, international organizations, academia and schools in disaster reduction, as well as effective measures against specific hazards. The Total Disaster Risk Management is based on a holistic, comprehensive and integrated approach to disaster reduction involving all sectors and promoting cooperation among all stakeholders.

It should also be noted that the major natural hazards of earthquakes, landslides and mud flows have affected



Fig.3-1-2-1 Disaster Management Drill

negatively the economy and livelihood in Central Asia and the Caucasus. Therefore, the program of this year's training course focused on the measures that Japan has developed and implemented to deal with these specific types of hazards.

The Schedule of the Seminar is as follows;

Date	Contents (Responsible Agency)
8/22	Orientation (JICA-HIC)
8/23	Schedule & ADRC Activities (ADRC) Japan's Disaster Management (ADRC)
	Country Report (JICA-HIC)
8/24	Country Report (JICA-HIC)
8/25	The Great Hanshin-Awaji Earthquake and role of Disaster Reduction and Human Renovation Institute (DRI)
8/26	Role of NHK (NHK)
	Disaster Management of National Government (Cabinet Office)
	Emergency Countermeasures for Disaster (Cabinet Office)
	Demonstration of DIS (Cabinet Office)
	Countermeasure for Disaster by Police (National Police Agency)
8/29	Countermeasure and Recovery for Disaster (Ministry of Land, Infrastructure and Transport)
	Fire and Disaster Administration (Fire and Disaster Management Agency)
8/30	Forecast for Meteorology and Earthquake & Volcano (Japan Meteorological Agency)
	GIS for Disaster Prevention (Pasco)
8/31	Disaster Relief Act (Ministry of Health, Labor and Welfare)
9/1	Role of JICA (JICA)
9/2	Forecast for Earthquake (Research Center on Earthquake Forecast, DPRI, Kyoto University)
	Countermeasure for Landslides (Research Center on Landslides, DPRI, Kyoto University)

Date	Contents (Responsible Agency)
9/4	Participation in Disaster Drill on Hyogo Prefecture (Miki Disaster Memorial Park)
	Visit to Wide Area Disaster Prevention Center of Hyogo Prefecture (Miki Disaster Memorial Park)
0.45	Disaster Prevention for Road on Hyogo Prefecture (Hyogo Prefecture)
9/5	Countermeasure for Disaster on Kobe City (Kobe Municipal Government)
9/6	Recovery and Reconstruction from the Great Hanshin-Awaji Earthquake (Hyogo Prefecture Disaster Management Center)
9/0	Medical Care for Disaster on Hyogo Prefecture (Hyogo Emergency Medical Center)
	Earthquake Countermeasures on Private Company (Osaka Gas Co.Ltd)
9/8	Visit to Disaster Prevention Center Of Kyoto City (Disaster Prevention Center Of Kyoto City)
9/9	Countermeasure for Landslides and SABO Projects (Hyogo Prefecture)
9/9	Visit to SABO Project Site (Mt.Roko) (Hyogo Prefecture)
0/12	Education for Disaster Reduction (Maiko High School)
9/12	Visit to Nojima Active Fault (Nojima Active Fault Museum)
9/13	Community Participation in Disaster Reduction: Town Watching (Aotani, Nada District, Kobe City)
	Drawing up and Presenting Hazard Map (ADRC)
0/14	Trauma after Disaster, Addressing PTSD (Hyogo Institute for Traumatic Stress)
9/14	Discussion on the Training Program of the Following year (JADRC)
9/15	Drawing up and Presenting Action Plan (ADRC)
9/16	Visit to Construction Site of Transmission Tunnel of Water Supply Main of Kobe City (Oji, Kobe)
	Earthquake Countermeasures on Private Company (Kansai Electric Co)

# 3-1-3. JICA Seminar on Disaster Management

The ADRC has held a yearly disaster management seminar upon the request of JICA and with its full support since the fiscal year 2000. The seminar was held for the fourth time. Its outline was as follows:

#### (1) Overview

Title: Seminar on Disaster Management II Period: January 16 - February 24, 2006 Implementing Organization: ADRC Participants: 10 officials from 9 countries

Countries: Cameroon, Costa Rica, Djibouti, Pakistan, Philippines, Tajikistan, Thailand, Venezuela, Zambia

# (2) Objectives

Trainees are expected to:

- Study Japan's disaster management system to improve their disaster management capabilities
- Identify problems and challenges in the disaster management practice in their countries, and devise solutions to them

- Draft an action plan for improvement.

#### (3) Background

Japan is located in an area frequently hit by typhoons. Every year the country suffers from disasters such as typhoons and torrential rains. Moreover, Japan is located on part of the Circum-Pacific Earthquake and Volcanic Belt, where active earthquakes faults and volcanoes exist. Historically, there have also been numerous tsunami disasters, making Japan one of the most disaster-prone countries.

Having made efforts to improve disaster management based on lessons learned from numerous natural disaster experiences, Japan has become one of the most advanced countries in disaster management in the world today.

On the other hand, natural disasters continue to increase in the world, and many developing countries suffer massive human and property losses, which impede their efforts for social and economic development.

As part of Japan's international disaster reduction cooperation, this program was planned by JICA and the ADRC to share knowledge and experience, among disaster management officials from various countries in order to reduce the loss of lives due to natural disasters and contribute to the international community.

#### (4) Trainees

10 trainees from 9 countries

#### (5) Seminar program

To study the Japanese disaster management system comprehensively, the seminar program consists of the following modules:

- (1) Report on disaster measures of each country and exchange opinions
- (2) Study disaster management of the Japanese central government
- (3) Study disaster management of local governments including measures taken for the Hanshin-Awaji Earthquake
- (4) Study the role of the private sector in disaster management
- (5) Study actirities for disaster reduction international cooperation
- (6) Train and practice disaster management activities
- (7) Develop an action plan and report it

The topics and outline of each module are as follows:

- (1) Present situation and challenges of each country regarding natural disasters
- Topics (Implementing Organization)
- Country reports by trainees (ADRC)

#### ■ Outline

At the beginning of the seminar, the trainees presented their "Courtry Reports" on disaster management in their countries under the coordination of Mr. Anil K Sinha, ADRC Senior Technical Advisor. The "Country Report" session provided an opportunity for them to deepen their understanding of the disaster situations of other countries.



Fig.3-1-3-1 Country Presentation

- (2) Disaster management of the Japanese central government
- Topic
- Disaster Management at the National Government Level and International Cooperation (Cabinet Office)

- Emergency Relief Disaster Information Systems (Cabinet Office)
- Emergency Rescue and Relief (Fire and Disaster Management Agency)
- Tachikawa Disaster Prevention Base:
- Substitute Facility of the Government Headquarters for Disaster Response
- Role of the Hyper Rescue Team
- National Disaster Medical Center
- Flood Control Policy of the Japanese Government (Ministry of Land, Infrastructure and Transport)
- Meteorological Information for Disaster Prevention (Japan Meteorological Agency)
- Disaster Relief Law (Ministry of Health, Labour and Welfare)

#### ■ Outline

At the Cabinet Office, the trainees had lectures on fundamental topics such as the Disaster Countermeasures Basic Act, the Basic Disaster Management Plan, and coordination between the central and local governments, and the budget for disaster reduction measures.

At Tachikawa Disaster Management Base, the trainees visited three sites, Tachikawa

Disaster Management Headquarters, the Hyper Rescue Team Base and the National Disaster Medical Center.

At the Fire Rescue Team Base, the trainees observed a training of fire rescue team and visited various training facilities consisting of a fire fighting training building, high altitude rescue equipment, fire engines equipped with long-distance water supply capabilities, and rescue helicopters. Many of the trainees commented that they



Fig.3-1-3-2 Cabinet Office



Fig.3-1-3-3 Tachikawa Disaster Management Base



Fig.3-1-3-4 Meteorological Agency

would like to have similar training facilities in their countries.

This module was a very important opportunity for the trainees to learn about Japan's disaster management. Prevention and mitigation measures to minimize the impacts of disasters contribute greatly to the national economy. Therefore, it is very important for disaster-related organizations to cooperate with each other much closely.

#### (3) Disaster management by local governments in Japan

## ■ Topics

- Great Hanshin Awaji Earthquake (GHAE), Jan. 17, 1995 (Disaster Reduction and Human Renovation Institution)
- GHAE Nojima Fault Preservation Museum
- Disaster Management of Hyogo Prefecture

- (Hyogo Prefecture)
- Disaster Management by Kobe City (Kobe City)
- Disaster Management of Hokudan Town (Hokudan Town)
- Disaster Reduction Education at Schools (Maiko High School, Kita-Syukugawa Elementary School)
- Disaster Countermesures and Emergency Treatment Training at Fire Department (Countermeasures at Fire department, Himeji City, CPR and ADE training at Kobe City Central Fire Boreau )

#### ■ Outline

A visit was made to the Disaster Reduction and Human Renovation Institution (DRI), which gives a general overview of the 1995 Great Hanshin Awaji Earthquake.

Then, the trainees had lectures on local government's disaster management at the Disaster Management Center of Hyogo Prefecture, then at the Crisis Management Office of Kobe City, and at the Nojima Fault Museum in Hokudan Town, Awaji Island. They studied countermeasures taken by Hyogo Prefecture and Kobe City, such as emergency measures, resto-



Fig.3-1-3-5 Kita-Syukugawa Elementary School

ration and rehabilitation activities after the Great Hanshin-Awaji Earthquake. The Hyogo Prefectural Government constructed a large-scale disaster management base in Miki city, which serves as a back-up facility and as a fire and rescue training center. In Hokudan Town, some Great Hanshin-Awaji Earthquake survivors gave accounts on their experiences.

To see an example of disaster education at shools, they attended the evacuation drill at Nishinomiya City Kitashukugawa Elementary School. This evacuation drill was conducted with participation from not only the elementary school but also kindergartens and Nishinomiya Fire Fighting Station, Nishinomiya Police Station, and voluntary disaster management organizations, etc.

The drill consisted of various types of trainings such as fire rescue, fire fighting by students, and pick-up of kindergarten children by their parents. The trainees had a better understanding of importance of school as a disaster management base.

At Kobe City Central Fire Boreau, the trainees had a practical training for both CPR and AED and after finishing the trainings, they received a certificate of completion.

# (4) Roles of lifeline and insurance industries

# **■** Topics

- Disaster Management for Lifeline (1) (Osaka Gas Co., Ltd.)
- Disaster Management for Lifeline (2)
   (Kansai Electric Company, Central Supply Center,)
- Disaster Management for Comunication (NTT-West)
- Introduction to Risk Management & Insurance for Natural Disasters (Tokyo Marine Risk Consulting Co., Ltd.)

#### ■ Outline

To learn about disaster management practices in lifeline facilities, the trainees visited Kansai Electric Company and Osaka Gas Co.,Ltd. this year.

They visited the Head Office and Central Supply Control Office of Kansai Electric Company, where they learned that various kind of countermeasures are taken for stable supply

of electricity after the Great Hanshin Awaji Earthquake..

They also visited the control center of Osaka Gas, which is equiped with the damper in the building foundation, and learned about the measures of gas supply service in disaster.

The trainees saw various examples, which showed them how the private sector and lifeline campanies (including public corporation) play significant roles at the times of disaster.

Tokyo Marine Risk Consulting Co., Ltd. gave a lecture about risk manage-



Fig.3-1-3-6 Osaka Gas Company

ment and earthquake insurance of Japan, New Zealand and U.S.A. from the viewpoint of economic recovery.

## (5) Countermeasures by Disaster Type

#### **■** Topics

- Countermeasures for Sediment Related Disasters
   Sabo Works in Hyogo Pref. (Sabo=sediment control)
   Sabo Planning Workshop
   Nigawa Hillside Work
- Countermeasures for Road Disaster
  Road conservation works in Hyogo Prefecture
- Flood Countermeasures; "Flood Cotrol in Lake Biwa"
   (Flood Control Office at Lake Biwa, Aqua Biwa Museum)

#### ■ Outline

The theme of this training module was measures for floods, sediment-related disasters, road disasters, and other natural disasters besides earthquakes.

The Erosion Control Division of Hyogo Prefecutre provided a lecture on the Sabo (sediment control) dams and afforestation of Mt. Rokko. After the lecture, the trainees visited one of the Sabo dams in Mt. Rokko.

As for flood control, trainees visited Flood Control Office at Lake Biwa and Aqua Biwa Museum, where they learned flood control works and had a field trip to Sabo sites.



Fig.3-1-3-7 Filed trip to Sabo Site

For road disaster management, the trainees learned about the road information network for real-time disaster infomation acquisition, and the information dissemination system using electric bulletin boards for drivers, as well as the latest information management technology using GPS cameras.

#### (6) International Cooperation for Disaster Reduction

#### **■** Topics

- International Symposium "2nd Public Symposium on Disaster recovery"
- Activities of International Emergency Rescue Team (Japan International Cooperation Agency; JICA)
- Activities of Red Cross Society (Japanese Red Cross Society)

#### ■ Outline

The trainees attended "2nd Public Symposium on Disaster Recovery" in Kobe, Hyogo, Japan, to learn about the present and future trends in disaster management.

In the International Symposium panel discussion, the trainee from Pakistan joined the discussion as one of the panelists.

The trainees had lectures by the JICA Emergency Rescue Team on various rescue and relief operations. The team had participated in areas struck by the Sumatra Earthquake and in countries affected by the following tsunami.



Fig.3-1-3-8 Public Symposium on Disaster Recovery

This seminar program provided an excellent opportunity for the trainees to develop a human network that they will be able to rely on when playing important roles in international cooperation for disaster reduction back in their respective countries.

#### (7) Thematic Disaster Management

- **■** Topics
- New Technology for Disaster Reduction:
  - 3D Full-Scale Earthquake Testing Facility
- Protection of Cultural Heritage from Disasters Study Trip to Kyoto;
  - Kyoto City Disaster Prevention Center
  - Traditional Building Preservation Area
- First Aid Drill
  - (Hyogo Disater Medical Center)
- Public Awareness Raising Method: Town Watching (Fuji Tokoha Univ.)
- GIS System and its Application in Disaster Management (PASCO)

# ■ Outline

The trainees visited a newly completed full-scale 3D earthquake testing facility. The facility is large enough to perform an actual three-dimensional ground movement situation on a shake table. The trainees were surprised to see the high technology used for the facility.

As for the method of raising public awareness of disaster reduction, Prof. Ogawa of Fuji Tokoha University organized a "Town Watching" tour.

In this walking tour, the trainees walked around a town to assess the current level of potential disaster risks and



Fig.3-1-3-9 Town Watching Method

discuss what should be considered in the development of countermeasures. Then, the trainees prepared a Disaster Management Map based on the results of the Town Watching tour. Because this method can be easily implemented at the community level at low cost, it is expected that trainees will promote it among local communities of their respective countries.

PASCO, lectured them on the GIS system and its application to disaster management.

#### (8) Presentation of Action Plan and Evaluation and Closing Ceremony

#### ■ Presentation of Action Plan

At the end of the Seminar, the trainees made a presentation of action plan, which covers how they are going to find out specific solutions and countermesures for various kinds of problems in each coutry after going back home, based on knowledges and policies which they learnet through the Seminar. Each presentation was carried out in the order of current problems, solutions, plans and helpful lectures. We could find out the effct of the Seminar in each presentation, because each presentation included specific plan to be aimed at promotion of disaster capacity in each coutry.

#### **■** Evaluation

The trainees were asked to answer a questionnaire to give their general opinions about this training course. Most of the trainee answered the Seminar was very helpful and they are satisfied. They also answered that "there should have been general explanations on how central government and local Japanese colud coordinate in disaster management.", "wanted to reduce a time for traveling", or "wanted to reduce duplicated contents in lectures" As the organizer, we consider, in retrospect, that each week should have been organized by theme for higher effectiveness, and that there should have been a time for evaluation of each week. We will improve the course by incorporating these evaluation results and comments of the trainees into the course curriculum.

# ■ Closing Ceremony

Following the closing remarks by the organizer, the course certificates were presented to the respective trainees, and a group photo was taken. The representative of the trainees expressed their determination to use the knowledge and skills they learned in this course for the enhancement of their countries' disaster reduction capabilities.

#### (9) Others

As in the previous year, two ADRC visiting researchers (one from Nepal and another from Cambodia) participated in this program. This year, there was another participants from the staff of a Hyogo Prefecture's international cooperation program to exchange information with other participants.

Many of the trainees were impressed by the Japanese disaster management system, in which various efforts for disaster reduction are made not only by the central government but also by a wide spectrum of stakeholders in Japan. This ADRC-organized training program saw its fifth year, and further efforts will be made to make this program a better opportunity for the next year's trainees.

# 3-1-4. JICA Regional Seminar on Tsunami Early Warning System

Asian Disaster Reduction Center (ADRC), in cooperation with Japan International Cooperation Agency (JICA), conducted the second "JICA Regional Seminar on Tsunami Early Warning System" from 23 January to 10 February, 2006. The first seminar was held in March 2005, aiming to deepen high level officials' understanding on tsunami early warning system, to which 21 officials from 11 countries participated.

This time, the seminar shifted the target to operational managers and directors, aiming to develop the capacity of the Indian Ocean region countries at the operational level of tsunami early warning system. Participating countries were Bangladesh, India, Indonesia, Kenya, Malaysia, Maldives, Mauritius, Myanmar, Oman, Pakistan, Seychelles, Sri Lanka, Tanzania, and Thailand.

The 24 participants were divided into two groups, "Disaster Management Group" and "Tsunami Observation/Forecast Group", both of which were given lectures at relevant ministries in charge of tsunami countermeasures including the Cabinet Office of Japan. Japan Meteorological Agency (JMA) also demonstrated tsunami early warning system operation.

At the end of the seminar, the presentations on "Action Plan" were made, and the participants presented each of their future plan for establishing/enhancing tsunami early warning system. With TV conference system, this session was broadcasted at UN/ISDR, UNESCO/IOC, and JICA offices in Indonesia, Sri Lanka and Thailand, in order to share those presentations

with UN and JICA officers.





Fig.3-1-4-1 Lecture at the Meteorological Agency

Fig.3-1-4-2 Evacuation road at Kushimoto-cho in Wakayama Pref

# 3-1-5. JICA "Disaster Damage Mitigation" Training Course (for Trainees from Turkey)

#### (1) Course Outline

Course title: "Disaster Damage Mitigation" course

Period: January 30 to February 10, 2006

Implementing body: Japan International Cooperation Agency-Hyogo International Center

(JICA-HIC)

Number of trainees: 8 individuals Trainees' nationality: Turkey

## (2) Purpose

This course was intended to train instructor candidates to implement the earthquake disaster damage mitigation project planned by JICA Turkey Office. The Asia Disaster Reduction Center has taken over the provision of the training course for this year and after (from the Disaster Reduction and Human Renovation Institution).

#### (3) Course details

The course menu was designed and scheduled based on the response from JICA Turkey Office and trainees to a preliminary questionnaire on their needs. The resulting course menu was reviewed and approved by the domestic support committee for this project. The Turkey side requested that the first week consist of lectures and visits to learn about the general disaster reduction system in Japan, including disaster reduction activities and policies, disaster reduction functions of municipalities, hazard map preparation, disaster insurance system, and community-based disaster preparedness activities, and that the second week consist of two thematic courses, one on disaster resilient city planning and flood mitigation measures (Group 1) and another on disaster preparedness education and public disaster awareness raising (Group 2).

The course training mainly took the following two forms: lectures using PowerPoint slides and video materials, and visits to various sites.

#### (4) Achievements

The course trainees were administrators of the Ministry of Internal Affairs, academics, and NGO staff members. They were disaster reduction experts active in Turkey, and had sufficiently high-level knowledge in this field. Accordingly, the training course was primarily application-oriented with basic introductory portions omitted. As mentioned above, the trainees were divided into groups according to their specialties out of consideration to their goals in

the course. Thus, the training course programs were well-aligned with the purpose of the project and with the level of the trainees. The training contents were not only designed to meet the intended purpose of the project, but also arranged in an intuitively natural order, from general to specific, to make it easier for the trainees to follow. It is considered that these arrangements worked well as intended by the training curriculum designer.

Therefore, it can be concluded that the training course successfully accomplished its intended purpose. This conclusion is supported by the favorable responses from all the trainees to the course evaluation questionnaire prepared by the ADRC.



Fig.3-1-5-1 Lecture at River Bureau, Ministry of Land, Infrastructure and Transport

Fig.3-1-5-2 Visit to Nojima Fault Memorial Park in Awaji Island

# 3-1-6. Disaster Management Training Course for Iran

#### (1) Objectives

The ADRC conducted the first training course on disaster management for Iran from 20 February to 3 March, in cooperation with the Japan International Cooperation Agency (JICA). The training course was designed to share the Japanese knowledge and experiences of earthquakes and disaster risk reduction to contribute to enhance the region's disaster resilience.

The course was conducted in the Iranian language to facilitate the participation of representatives from Iran.

# (2) Dates

20 February to 3 March 2006

#### (3) Participants

11 officials responsible for disaster management in the central or local government from Iran participated in the training course. Their profiles are as follows;

Name	Organization	Job Title
Mr. Amir FARJAMI	Ministry of Housing & Urban Development	Deputy for Housing and Urban Development
Mr. Ali TABAR	Management & Planning Org. (MPO)	Deputy for Director General, Technical, Criteria Codification & Earthquake risk Reduction Affairs Bureau (TCERB)
Mr. Aliasghar SHAHABI	Management & Planning Org. (MPO)	Director General, Rural and Urban Development Affairs
Mr. Hamid POORASGHARI	Management & Planning Org. (MPO)	Director General, Health and Hygiene Affairs Bureau

Name	Organization	Job Title
Mr. Mohammad Mahdi KALANTARIYAN	Ministry of Health & Medical Education	Director General, Management and Physical Resources (and manger of Strengthening of Hospitals)
Mr. Davood BARATI	Tehran Fire fighting and Safety Services Org.	Manager of Disaster Committee
Mr. Kamran ROOZBEH	Management & Planning Org. (MPO)	Consultant of Deputy, Training & Culture
Mr. Javad BODAGHI JAMALI	Meteorology Org.	Director Assistant, Natural Disasters
Mr. Abdolali SAHEB MOHAMMADI	Ministry of Interior	Vice President, Municipalities Org.
Mr. Samad RAJAE	Ministry of Interior	Technical & Civil Deputy, Fars Governorship
Mr. Seyed Mohammad	Ministry of Interior	Technical & Civil Deputy, Khorasan Governorship

# (4) Program

After making presentations on the trends and impacts of earthquake disasters of Iran, the trainees participated in a series of visits and lectures to learn about the Japanese disaster management system and efforts by various stakeholders to reduce disaster risks.

The themes of the program included the roles of the central and local governments, private sector, mass media, civil society, international organizations, academia and schools in disaster reduction, as well as effective measures against specific hazards. In the region there is a pressing need to introduce a holistic, comprehensive and integrated approach to disaster reduction, involving all sectors and disciplines and promoting cooperation among all stakeholders. It should be noted that earthquakes appear to be a major natural hazards which negatively affect the economy and livelihood in Iran. Given this, the program of this year's training course focused on the measures that Japan has developed and implemented to deal with earthquakes.

Date	Content (Responsible Agency)
20 Feb	Orientation (JICA-HIC), Briefing (ADRC)
21 Feb	Country Report, Discussion on Earthquake Disaster Reduction (ADRC) Japan's Disaster Management (ADRC) Total Disaster Risk Management (TDRM) (ADRC)
22 Feb	Recovery and Reconstruction from the Great Hanshin-Awaji Earthquake (Hyogo Pref. Disaster Management Center)
	The Great Hanashin-Awaji Earthquake (Disaster Reduction and Human Renovation Institution)  Damage of the Great Hanshin Awaji Earthquake of Kobe city, Lessons Learned and Measures taken (Kobe Municipal Government)
23 Feb	Execise: Town Watching and Hazard Mapping (ADRC)
24 Feb	Disaster Management on Lifeline (Kobe University)  Earthquake Disaster Countermeasures by a private Company (Osaka Gas)
27 Feb	Tachikawa wide area base for disaster management (Tokyo Fire Department) Tachikawa wide area base (National Disaster Medical Center)
28 Feb	Structural Engineering for Earthquake (Building Research Institute, and NIEDO)

Date	Content (Responsible Agency)	
1 Mar	Earthquake Disaster Mitigation for Urban Regions (National Research Institute for Earth Science and Disaster Prevention)	
	Disaster Management of National Government (Cabinet Office) Disaster Reseponse of National Government (Cabinet Office) Disaster Information System (DIS) of National Government (Cabinet Office)	
2 Mar	Preparation for Action Plan Reporting (ADRC)	
3 Mar	Discussion on the program of the following year (ADRC) Action Plan Reporting (ADRC)	

The trainees had lively and constructive discussions for further improvement of the program based on the needs of Iran. What was discussed will be incorporated into the program of the upcoming years. The training course was concluded by the presentations on "Action Plans" consisting of specific proposals developed by the trainees to promote and enforce effective disaster reduction activities in Iran, applying what they learned in Japan.