

7. Understanding Tasks Related to Disaster Reduction Education and Training

7-1. Disaster Reduction Education and Training Programs by ADRC

7-1-1. JICA Seminar on Disaster Management

Objective

Improve disaster reduction measures and disaster countermeasures and reduce damage caused by natural disasters, through learning about disaster reduction measures and disaster countermeasures using Japan's disaster reduction system as a model case. Also, having trainees themselves understand the current situation, problems, tasks, and solutions of disaster reduction measures and disaster countermeasures in their countries and surrounding regions through the exchange of experience and opinions of participating countries, and reviewing the course of action for improvement

Background

Japan is located in an area frequently hit by typhoons. As seen by the recent Tokai torrential rains, every year the country suffers disasters such as torrential rains and floods, etc. Japan is also located in the Pacific earthquake and volcanic belt where earthquakes and volcanoes are active. Particularly after the Great Hanshin-Awaji Earthquake, earthquake activities such as the Tottori Seibu Earthquake, Geiyo Earthquake, and volcanic activities such as the eruptions of Mt. Usuzan in Hokkaido and Mt. Osuzan in Miyakejima have become marked. Historically, there have also been numerous tsunami disasters, making Japan one of the few disaster countries both meteorologically and geographically.

As a result of the country's efforts to improve disaster reduction measures and disaster countermeasures based on experience and lessons learned from damage caused by numerous natural disasters in the past, Japan is one of the top advanced disaster reduction countries in the world today. On the other hand, natural disasters continue to increase in the international community, and many developing countries suffer massive human and material damage, which impedes their social and economic development efforts.

The sharing of knowledge and experience with these countries to improve disaster reduction is the most important and essential duty of countries like Japan, which have extensive experience with disasters and are equipped with a consistent disaster reduction system. This is also in line with the efforts of various countries of various levels such as the UN; which has been promoting international disaster reduction cooperation since the 1990s. The reinforcement of such efforts needs to be continued in the 21st century, which is expected to see increased vulnerability to disasters in many countries due to climate changes on a global scale and rapid urbanization.

As part of Japan's international disaster reduction cooperation, this program is aimed at the sharing of knowledge and experience, with disaster reduction and disaster management officials from various countries to promote the reduction of damage incurred by natural disasters and contribute to the international community.

Goal

To understand the general disaster reduction measures and disaster countermeasures using Japan's disaster reduction system as a model case, grasp the current situation of disaster reduction measures in countries participating in training, and review the necessary procedures for disaster reduction measures and disaster countermeasures of respective countries, in order to improve the disaster reduction measures and disaster countermeasures of participating countries and reduce damage caused by natural

disasters.

- (1) Through the understanding of the mechanism, current situation, direction, and tasks of disaster reduction measures and disaster countermeasures of the Japanese government and local municipalities, understand the tasks for improving disaster reduction measures and disaster countermeasures in the countries of trainees.
- (2) Understand how international disaster reduction cooperation systems actually run, and study methods to apply these system to reduce damage from disasters in one's country and surrounding regions.
- (3) To achieve reduction of damages from disasters in one's country and surrounding regions, compile plans to improve disaster reduction measures and disaster countermeasures, and review implementation.

Training program

- a) The trainees shall report the disaster reduction measures and disaster countermeasures in their countries, exchange opinions, and understand the current situation of disaster reduction measures and disaster countermeasures in other countries.
- b) Understand the current situation and tasks of disaster reduction measures and disaster countermeasures of the Japanese government.
- c) Understand the current situation and tasks of disaster reduction measures and disaster countermeasures of local municipalities, particularly based on the experience of the Great Hanshin-Awaji Earthquake.
- d) Understand the current situation and tasks of international disaster reduction cooperation.
- e) Carry out practical training according to different themes and hold discussions on them.
- f) Compile and report on plans of action.
- g) Hold assessment meetings to hear the opinions of trainees and implement overall evaluation.

Trainees

There were applications from 13 countries, 20 persons of the 17 countries assigned. After screening, 14 disaster reduction administrative officers from 13 countries were accepted. Eventually, because one Pakistani trainee was unable to attend, 13 trainees from 12 countries participated in the training. (List of trainees provided separately)

Organizations implementing and running the training program

Training

The ADRC was commissioned by the Japan International Cooperation Agency-Hyogo International Center (JICA-HIC) to handle the overall coordination of the training program.

Supervision

The cooperation of the Japan International Cooperation Center was entrusted to supervise training.

Training schedule

Training was implemented according to the schedule on the attached sheet.

Training program

(1) Module 0: Orientation

Outline

During the general orientation, the JICA-HIC personnel and JICE training administrator gave a briefing dealing mainly with enrollment in the HIC, how to set up a bank account, etc. ADRC carried out a course orientation on training (buffet reception followed the briefing).

Evaluation

Though the briefing of the training tended to be slightly lengthy, it ended in about one hour including the welcome speech and Q&A, which was considered appropriate. Trainees were delighted at the food served which gave consideration to their food restrictions and practices. It was a good opportunity for ADRC staff who were going to conduct the training to get to know the trainees.

(2) Module 1 : Country Report

Coordinator: Professor Shiono, Nagaoka Industrial High School

Outline

After report on each country by the trainees under the coordination of Professor Shiono, a Q&S session followed. The aim of the session was to deepen their understanding of the natural disasters and disaster reduction measures in each country and to deepen mutual friendship during the training.

Professor Shiono coordinated the country report in the order of going round the globe in the east-bound direction (starting with Fiji and ending with the Philippines). The presentations were given using an overhead projector or PC. The trainees gave excellent presentations, showing their extensive experience. The many questions forwarded during the Q&A session again indicated the enthusiasm and high level of the trainees. At the end of the country report, Professor Shiono gave a list of the keywords on disaster management and asked the trainees for any keywords which could be added to the list. Discussions proceeded actively, and the added list was given to the trainees by Professor Shiono during the training.

Evaluation

Professor Shiono was also in charge of the country report in previous trainings which were then handled by the former National Land Agency (currently the cabinet office policy bureau-in charge of disaster reduction) and has extensive experience in coordinating trainees. He was also very popular among the trainees, and we would like him to handle coordination of the country report again in the future whenever possible.

Trainees Listening to Country Report



Kenyan Trainees Reporting



(3) Module 2: Disaster Reduction Measures of the Japanese Government

Lecturers

Cabinet Office Policy Controller in charge of disaster reduction and officials of disaster reduction related ministries, agencies, organizations (middle rank)

Outline

Lectures by officials from ministries, agencies, and organizations on disaster reduction measures by the Japanese government, and tours of disaster reduction related facilities were implemented.

Lectures and tours included the following:

(Lectures)

- Outline of disaster countermeasures in Japan

- Disaster management
- Communication systems such as Central Disaster Prevention Radio
- Disaster measures for earthquakes and volcanoes
- Disaster reduction measures by local governments
- Disaster measures of the Ministry of Land, Infrastructure, and Transport
- Japan Disaster Relief teams
- Rescue methods during disasters

Training at Cabinet Office



(Tours)

- Disaster management meeting room of cabinet office
- Prevention Radio
- Meteorological Agency Forecast Department and Earthquake and Volcano Department
- Tachikawa Disaster Management Headquarters Backup Facility
- Tokyo Fire Department, the 8th Fire Defense Rescue Task Force
- National Disaster Medical Center

Evaluation

The training on Japan's disaster reduction measures was very significant with lecturers describing the latest situation, and the trainees touring the Tachikawa Disaster Management Base, which functions when the central government is affected by disasters.

The one-week stay at the JICA Tokyo International Training Center also served as an opportunity for trainees to interchange. Meals served consisted of such a diverse variety that Muslim trainees and vegetarians were able to find dishes that suited their restrictions. This proved very popular amongst the trainees.

Though considerable information was provided to the trainees on the main natural disasters which occur in Japan such as earthquakes, volcanoes, and meteorological disasters such as typhoons, etc., one of the tasks for the future will be to provide information on floods, sand sedimentation, and drought disasters which occur frequently in the trainees' countries. Training on the role of mass media in disasters will also be important.

(4) Module 3: Disaster management by local governments

Lecturers

Officers of related organizations such as Hyogo Prefecture Disaster Management Bureau, The Great Hanshin-Awaji Earthquake Reconstruction Headquarters, Kobe City Fire Bureau, Kobe City Honjo Elementary School, Kagoshima Prefecture Fire Defense and Disaster Management Division, Ministry of Land, Infrastructure and Transport Kyushu Regional Bureau Osumi Construction Office, Kagoshima City Fire Department, Kagoshima Meteorological Observatory, etc.

Outline

As examples of disaster management by local governments, the disaster management of Hyogo Prefecture which experienced the Great Hanshin-Awaji Earthquake, and Kagoshima Prefecture which constantly faces volcanic, wind and flood damages, were described by the officers in charge, and trainees toured disaster reduction related facilities.

Lectures

- Disaster management by Hyogo Prefecture based on lessons learnt Great Hanshin-Awaji Earthquake

- Post-earthquake restoration and rehabilitation measures
- Rescue, relief, and fire control systems learnt through the earthquake

(Tours)

- Hyogo Prefecture Disaster Management Center
- Great Hanshin-Awaji Earthquake Reconstruction Promotion Center (Phoenix Plaza)
- HAT, Kobe Disaster Reconstruction Housings
- Honjo Elementary School (Kobe City up to here)
- Earthquake Disaster Mitigation Research Center
- 3-D Full-Scall Earthquake Testing Facility (Miki City up to here)
- Kagoshima Prefecture Disaster Management Center
- Sakurajima International Volcano Sabo Center
- Sakurajima Sabo Dam Facility
- Kagoshima Central Fire Station
- Kagoshima Observatory (Kagoshima Prefecture up to here)

Hyogo Prefecture Disaster Management Center



With Children of Honjo Elementary School



Evaluation

In Hyogo Prefecture, which experienced the massive disaster in the form of the Great Hanshin-Awaji Earthquake, trainees had the opportunity to acquire valuable knowledge on actual facts of the earthquake and the lessons learned, and the disaster management measures which have been reviewed based on these lessons. In Kagoshima Prefecture, which encounters disasters throughout the year, the tour of volcanic disaster measures of Sakurajima which is constantly on alert due to a live volcano and sand sedimentation dam, etc. was very valuable. Some of the tasks given were introducing more applicable measures in developing countries while learning the disaster prevention measures at local municipals and making efforts to enhance the disaster reduction capacity of each country as much as possible; also conducting training programs which focused on increasing understanding of the mechanisms by which natural disasters originate through actual visits, etc.

Explanation of Kagoshima Prefecture Disaster Countermeasures Department



Sakurajima International Volcano Sabo Center



(5) Module 4: Basic Concept of Disaster Management

Lecturers

ADRC staff (Director Ogawa and Komoto)

Outline

Lectures and discussions were divided into a morning (Basic Concept of Disaster Management I) and afternoon session (Basic Concept of Disaster Management II). During the morning session, opinions were exchanged on the definitions of “disaster” and the “disaster management cycle” concept. In the afternoon session, lectures were held on understanding concepts by examining specific cases, particularly concepts of urban disaster reduction and methodologies.

Evaluation

Because this module did not exist in training programs until now, there was a risk of inconsistency in the understanding of disasters and disaster management among trainees.

However, the adoption of this module could be assessed as promoting the same level of understanding among trainees. Because it is desirable for the trainees to understand this basic concept as early as possible, this module should be implemented in the initial stage as much as possible (for example, after the country report). In addition, looking at the importance of the module, further improvements are required to help understand its basic concept.

(6) Module 5: Practice by Theme

Lecturers

- Practice of GIS utilization for disaster management (ADRC)
- Participation program for raising public awareness of disaster reduction (ADRC)
- Disaster management in historic Kyoto (City, Kyoto City)
- Practice of dealing with injured immediately after disaster (Risk management countermeasure mechanism)

Outline

Basic course on use of Geographical Information System (GIS) for disaster management .

After a basic course on the GIS, practice on the use of the Internet GIS (VENTEN) developed by the ADRC for disaster reduction was carried out.

Programs on improving disaster reduction awareness attended by citizens

Under the guidance of ADRC director Mr. Ogawa, trainees conducted a program to improve disaster reduction awareness that was attended by citizens called “Disaster Reduction Watching” at the north side of Kobe City, Suma Ward, Sanyo Suma Station. Divided into three groups, each group walked around their designated area to survey and analyze dangerous zones in terms of disaster reduction and improvements, organized the data on a map and reported their findings later to all trainees.

Training on Disaster Reduction GIS



Disaster Reduction Town Watching Training



Disaster reduction countermeasures of historic Kyoto City

To learn the disaster reduction countermeasures of historic Kyoto City, which has many cultural assets and areas preserving traditional buildings and other structures, the trainees toured or surveyed the Kyoto Citizen Disaster Management Center, Shimizu Tera (temple), Sanneisaka (hill), and Hachiman Jinja (shrine) in the winter to learn about efforts in protecting cultural assets and disaster reduction.

Course on attending to injured victims immediately after disasters (Triage)

In major earthquakes, usually a small group of medical specialists need to attend to an overwhelming number of injured. The trainees learned simple triage, a method to rescue as many injured persons as possible at disaster sites. They were asked to observe several mock casualties and evaluate and determine the priority order of attending them.

Evaluation

All of these training courses were participated enthusiastically by the trainees and were very well received. The current GIS, town-watching, and Kyoto survey programs are satisfactory. With regard to triage, however, as some of the trainees questioned the medical skills of the staff in charge, there is room for considering improvements. Triage is nonetheless an indispensable concept in disaster medical care, and persons in charge of disaster reduction have no excuse in saying they “did not know” about this program. It must therefore be undertaken in one form or another. It should be noted that the trainees participated in this course very seriously, with triage being a theme related directly to handling lives, and mock casualties putting on realistic performances when asking for help.

(7) Module 6: International Cooperation

Lecturers

- Efforts of ADRC in reducing damage caused by natural disasters (ADRC)
- Efforts of UN in reducing damage from disasters (United Nations Office for the Coordination of Humanitarian Affairs (OCHA) Asia Unit)

Outline

- Efforts of ADRC for reducing damage from natural disasters

Trainees Surveying Kyoto Higashiyama Sanneisaka Area



Limit in medical resources in major disasters necessitates triage



Trainee from Rumania during Triage Training. Inspect Injury of Mock Casualty



With regard to ADRC activities in promoting the reduction of damage from disasters by gathering and providing information on natural disasters and disaster reduction in Asia and encouraging disaster reduction cooperation, specific examples of information services were shown to deepen understanding of multinational disaster reduction cooperation based on ADRC and the achievements. These include a database on natural disasters and disaster reduction techniques in the world, disaster reduction information of member countries like Indonesia, Sri Lanka, etc., the earthquake in Taiwan, and volcanic disaster measures in Japan recently.

- Efforts of UN in reducing damage from disasters

The OCHA Asia Unit explained their activities which include the assessment of damage when disasters occur and emergency aid coordination activities.

Evaluation

Though sufficient understanding of the efforts of ADRC in the reduction of damage from natural disasters was achieved, efforts to further enhance technicality and reliability for individual themes are necessary.

We hope to incorporate a more practical program for the OCHA training by including training of UNDAC (United Nations Disaster Assessment and Coordination) activities to learn disaster assessment and emergency aid coordination in affected countries.

Lecture on the Role of OCHA by Ms. Kan, Regional Advisor



(8) Module 7: Session on Compiling Action Plans

Plans

Lecturer: ADRC (Komoto)

Outline

The trainees spent a day drawing up plans of action to reduce damage from natural disasters in various countries, and presented them using power point.

Evaluation

We were able to have all trainees report on action plans specifying background, problems, solutions, and tasks in presentations using a PC. However, some action plans lacked concreteness, indicating the need to draw up plans which correspond to actual problems. For this, it is indispensable to first discover and understand the problems at hand, then review these problems.

(9) Module 8: Assessment Meeting and Closing Ceremony

Moderator: JICA-HIC

Outline

Assessment Meeting

We asked all trainees to comment on this seminar. Some of the main requests voiced were “training that corresponds to the actual situation in a given country (flood disasters, etc.)”, “explanation of roles of disaster reduction related organizations”, “longer discussion time”, “lectures on situations and culture of Japan”, “Visit Hiroshima”. Though there is a need to conduct training which takes into account the actual situation of various countries, lectures on the situations and culture in Japan and training in Hiroshima shall be considered separately and determined if necessary.

Closing Ceremony

With the flags of the twelve participating countries and Japan in the background, directors Kawai and

Ogawa gave speeches, certificates were presented to the trainees, and Mr. Ashwini of India gave a speech of appreciation on behalf of all trainees. This was followed by a farewell party.

Evaluation

Assessment Meeting

Trainees answered and submitted a questionnaire beforehand, after which an assessment meeting was carried out. The relation between the two was not necessarily clear. Since it may be difficult for trainees to speak out during the assessment meeting, it is important to particularly promote smooth communication with the trainees during these assessment meetings.

Closing Ceremony

The ceremony left a deep impression. Frankly, the preparations and hard work which had been put in for conducting this training program were well-merited and rewarding.

Words of appreciation by trainee from India



(9) Assessment

Overall assessment

In order to assess JICA's training goal "By understanding the general disaster reduction measures and disaster countermeasures with Japan's disaster reduction system as a model case, grasping the current situation of disaster reduction measures of countries participating in training, and reviewing the course of plan required for disaster reduction measures and disaster countermeasures in one's own country, improve the disaster reduction measures and disaster countermeasures of participating countries and reduce damage by natural disasters", it is necessary to consider future actions as well as the achievements of the trainees. The assessment at this point is as follows.

Preparation for training

Preparations were not perfect due to the change in lecturers following the reorganization of the central government while we were preparing for the training, and because we were unable to obtain all the required lecture materials beforehand, etc. Still, we were able to complete the training successfully, thanks to the understanding and support of all those who participated in the preparations, experts who agreed to give lectures, and all those who agreed to the visits and training of trainees. In this sense, we were very fortunate this time. In the future, without relying on luck, we will need to complete all the necessary procedures beforehand properly. For example, if interpretation is required, we will ask lecturers to send the lecture materials beforehand and inform the training supervisor.

Manner and teamwork of trainees

The age, experience, and technical level of trainees were higher than expected. Questions and discussions were active in each session, and no doubt those in charge saw the strong enthusiasm and high participation of the trainees during the training. At some points topics became heated and there were some uncomfortable scenes, but trainees were on the whole well-mannered and demonstrated excellent attitudes.

We will not forget the teamwork of the thirteen trainees and initiatives of each trainee that led to the success of this training. The trainees volunteered to prepare words of gratitude to lecturers and companies visited as well as the list of trainees, which left a good impression at each place of training. Regarding Q&A and exchange of opinions, as much time as possible was put aside to heighten the understanding of the trainees.

Enhancement of training contents

There is still more room for improving the training contents. Details are provided on the next page. As Japan is a country prone to earthquakes and volcanic eruptions, training contents tended to focus on relevant measures. Though this may be justifiable being a characteristic of Japan, this seminar is intended for natural disasters in general and not individual disasters, and should give more consideration to the needs of trainees. This is one of the difficult aspects of this training. It is important to take all natural disasters into view broadly, and incorporate disaster reduction measures which can be applied in all countries. Because the training system is not yet perfected, reviews should be implemented often to improve the contents.

Tasks

Based on the above, tasks in the implementation of training were clarified to be as follows:

- Disaster conditions of trainer's countries are diverse. Unlike Japan, which experiences frequent damage from earthquakes and volcanic eruptions, the main disasters of many of the countries are floods, sediment disasters, and droughts. It is necessary to devise training programs that correspond as closely as possible to the disaster conditions of such countries.
- It is not possible to ignore the role of the mass media in disaster management, let alone disaster reduction measures and disaster countermeasures. Training programs which can help deepen understanding of the roles of mass media, and how the government and related parties should deal with the mass media, are essential.
- Many countries already have organizations which deal with disaster reduction measures and disaster countermeasures one way or another, and these collaborate with each other to implement such measures at each level of the government. In this report, the disaster reduction system of Japan was discussed as a model, but it was felt that the relationship between the government, municipal, and disaster reduction related organizations should be organized clearly with the roles of disaster management headquarters, police, fire departments, and self-defense forces at each level and explained to the trainees.
- This time, tours of the affected sites of the Great Hand-Awaji Earthquake and Sakurajima Volcano disaster were planned. However, since it is meaningless to study disaster prevention and measures to reduce damage without first understanding the mechanism of how natural disasters occur, there is a need to increase opportunities to visit actual disaster sites and study them.

(10) Impression

Most impressive was the enthusiasm of the trainees as seen in their frequent questions and excellent teamwork, and the earnest lectures of the training side in response.

Despite the short period of one month, it is hoped that the training will help to an extent to reduce damage from natural disasters in the countries of the trainees.

There were no major illnesses or accidents during January and February, the coldest season in Japan, and we owe the success of this training to the support and cooperation of all at JICA-HIC, related organizations, lecturers, ADRC staff, and trainees. I would like to take this opportunity to express my sincere thanks.

Group Photograph at Closing Ceremony.



7-2. Short-term Training Programs by ADRC

The ADRC offers short-term training programs, both full and half-day. These programs were offered to personnel in various fields, from disaster reduction staff, the fire-fighting staff of local governments, and overseas disaster reduction experts, to the mass media, covering international disaster reduction cooperation, the present status of disaster reduction measures in Japan, the disaster reduction information network, and more. The following lists training courses for trainees from abroad.

Table 7-2-1 Short Term Disaster Reduction Training

Date	Place	Country	Participants/No.	Details
June 15, 2000	ADRC	Turkey	Survey Mission from Sakarya 17 members	ADRC organization and activities, etc.
July 19, 2000	ADRC	New Zealand	Defense Minister 5 members	ADRC organization and activities, etc.
August 9, 2000	ADRC	Turkey	Kobe City Restoration Support Training 3 members	ADRC organization and activities, etc.
August 16, 2000	ADRC	Senegal	JICA Senegal Trainees 2 members	ADRC organization and activities, etc.
August 17, 2000	ADRC	Turkey	Hyogo Prefecture Restoration Disaster Reduction Training 3 members	ADRC organization and activities, etc.
September 18, 2000	ADRC	China	Tenshin Earthquake Bureau 7 members	ADRC organization and activities, etc.
October 11, 2000	ADRC	China, Indonesia, Philippines, Thailand, Turkey	JICA General Health and Medical Training 5 members	ADRC organization and activities, etc.
October 19, 2000	ADRC	Korea	Administrative Agency 3 members	ADRC organization and activities, etc.
October 31, 2000	Kobe City, ADRC	Bahrain	Disaster Countermeasure Committee President-1 member	Disaster reduction measures after earthquake, ADRC activities
November 1, 2000	ADRC	China	China Szechuan Earthquake Disaster Reduction Survey-7 members	ADRC organization and activities, etc.
November 17, 2000	ADRC	Iran, Maldives, Marshall Islands, Panama, Finland, Philippines, Turkey, Vietnam	JICA Relief and Rescue Disaster Management Training 7 members	ADRC organization and activities, etc.
December 4, 2000	Kobe City	PNG, Switzerland	PNG 2 members, Switzerland-1 member	Kobe City disaster reduction measures after earthquake
December 19, 2000	ADRC	Turkey	JICA Turkey Earthquake Restoration, Disaster Countermeasures, Emergency Aid Measures Training 3 members	ADRC organization and activities, etc.
March 28, 2001	ADRC	Korea	Safety Management and Traffic Safety System Training Mission 16 members	ADRC organization and activities, etc.