

JICA Kansai and Hyogo Prefecture established the “Disaster Reduction Learning Center (DRLC)” and, in cooperation with organizations related to disaster management and reduction, provides training for effective development of human resources engaged in disaster management and reduction in developing countries.

In the future, we will also contribute to the creation of disaster resilient societies and the development of human resources through training program, with Japan’s accumulated knowledge.

**Creation of disaster resilient societies for the next generation**



Website of JICA Kansai/DRLC  
<http://www.jica.go.jp/kansai/drlc/>

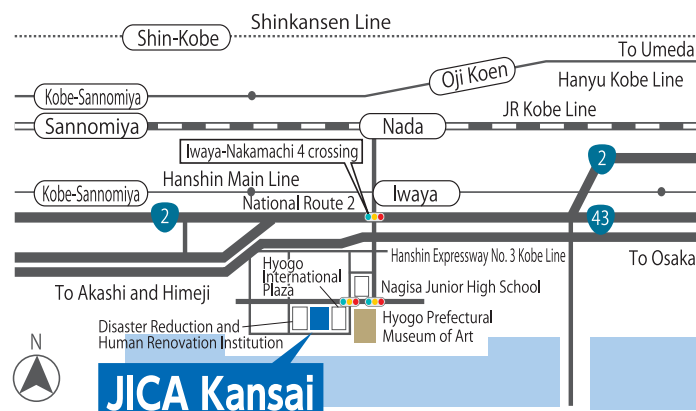


DRLC Facebook  
<http://www.facebook.com/jicadrlc/>



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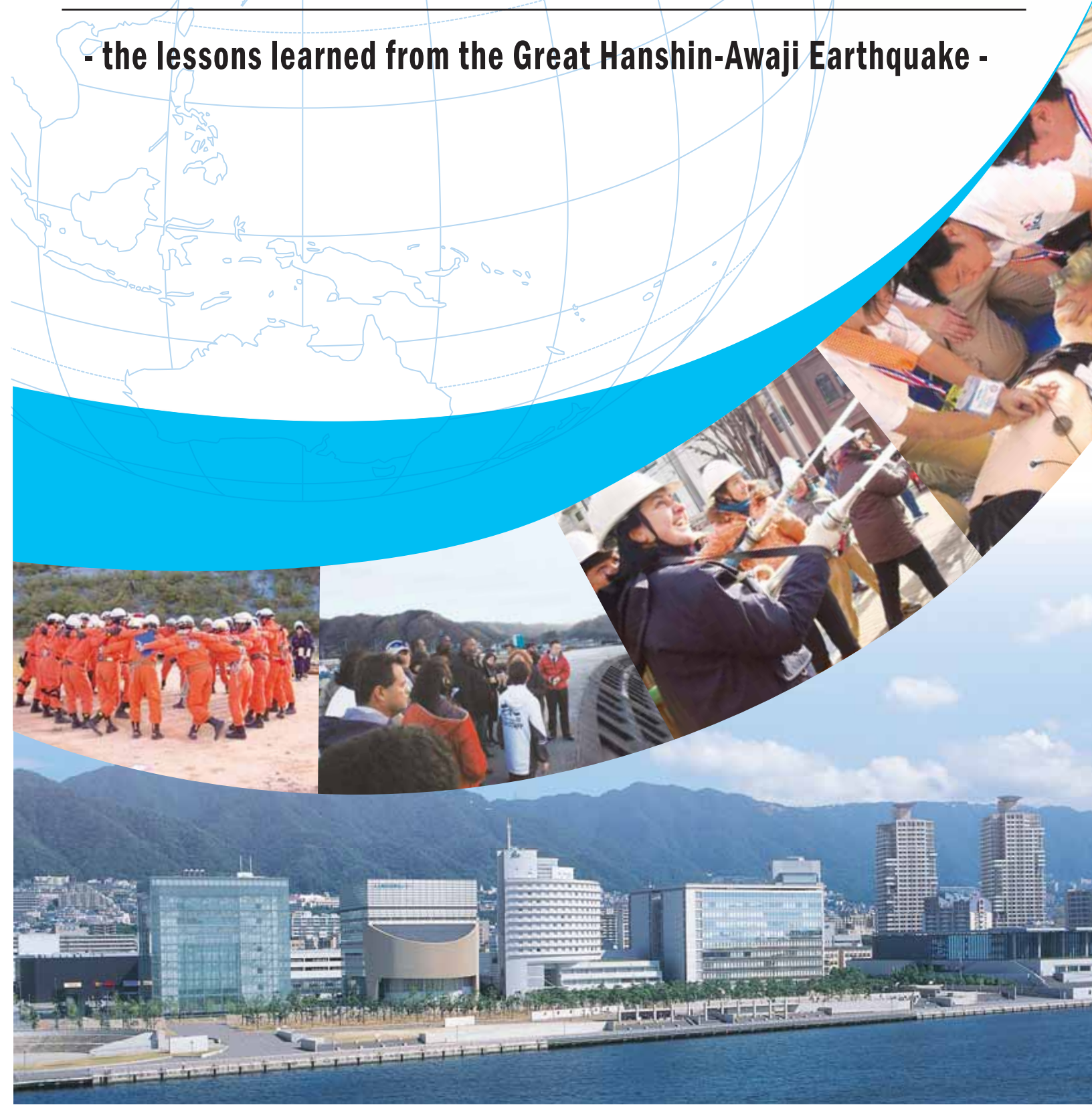
**JICA Kansai**

About 12 minutes walk from JR Nada Station  
 About 10 minutes walk from Hanshin Iwaya Station



**“Japanese Disaster Management System used in the WORLD”**

- the lessons learned from the Great Hanshin-Awaji Earthquake -





# Training

Provision of disaster management know-how through course, etc.



Learning how to prepare a hazard map



Participating in community disaster drills and experiencing firefighting training



"Iza! Kaeru Caravan!," makes it possible to learn about disaster management with fun

## Development of various educational materials

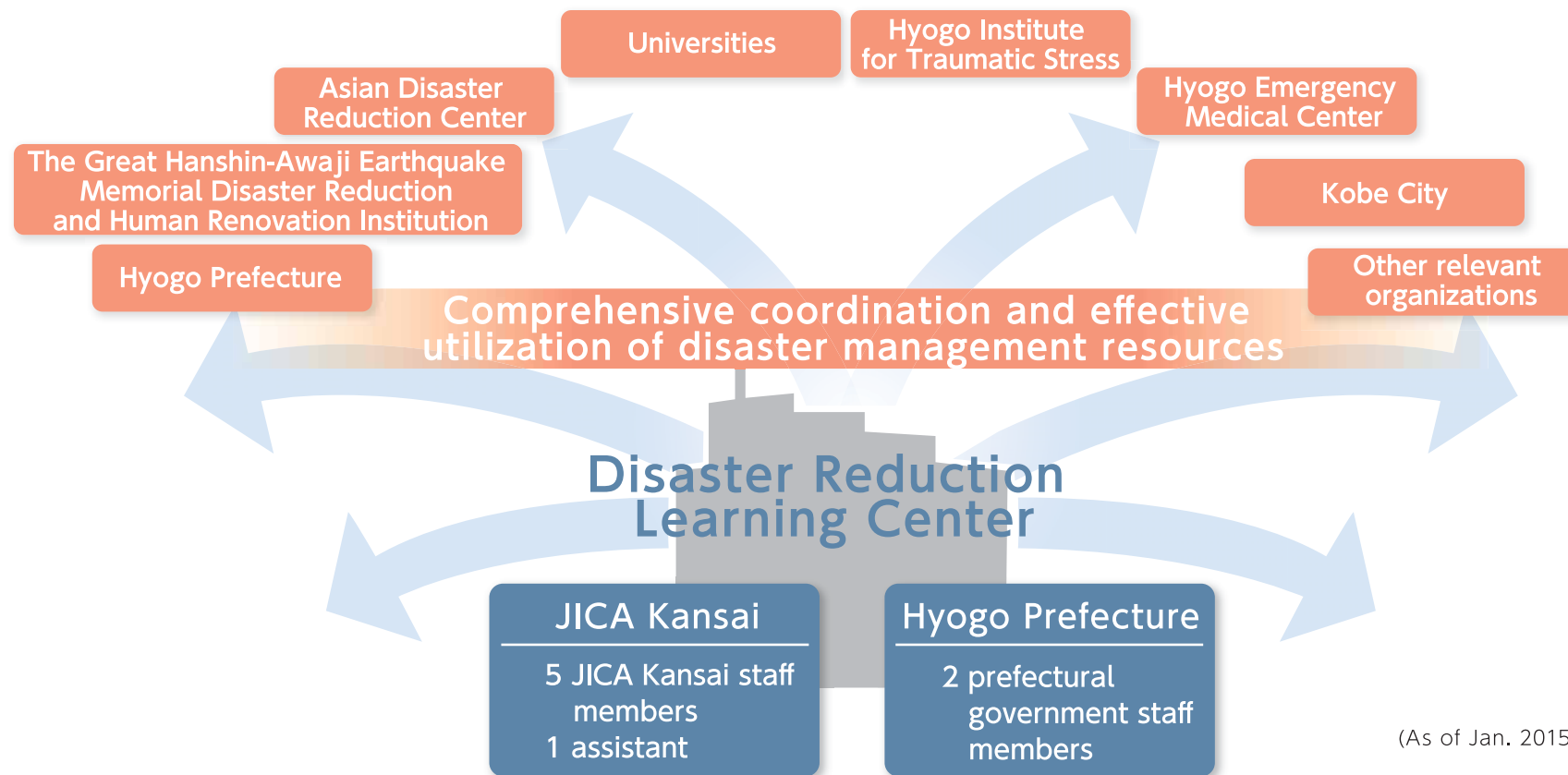
Development of various training materials with the cooperation of disaster management/reduction organizations in Hyogo Prefecture and using them for training



# Coordination

## Functions as a base for comprehensive coordination of disaster management and reduction training programs

DRLC plays a role as a coordination base for JICA's disaster management and reduction training program, using experience and lessons learned especially from the Great Hanshin-Awaji Earthquake and accumulated knowledge



## What is the Disaster Reduction Learning Center (DRLC)?

Provision of disaster management know-how through the use of lessons learned from the Great Hanshin-Awaji Earthquake

At the "World Conference on Disaster Reduction" held in Kobe in 2005, the Hyogo Framework for Action was adopted to express the necessity of improving developing countries' capacity to cope with disasters through international cooperation. Responding to this, JICA and Hyogo Prefectural Government established the Disaster Reduction Learning Center (DRLC) in FY2007 to develop human resources engaged in disaster management and reduction in developing countries through the use of experience and lessons learned from the Great Hanshin-Awaji Earthquake. DRLC has been giving training to developing countries in cooperation with disaster management and reduction organizations both inside and outside of Hyogo Prefecture and has been making efforts to raise people's awareness of disaster reduction and share knowledge of disaster management,

preventing the lessons learned from past disasters and memories of them from fading.

Disaster management measures and cases of support related to the Great East Japan Earthquake have been introduced and used in many developing countries through each JICA training program participant. Moreover, the acceptance of participants from developing countries which have had challenges in their disaster management measures has provided opportunities for disaster stricken local governments and disaster management/reduction organizations, not only in Hyogo Prefecture but also in other prefectures, to raise people's awareness of disaster reduction through the sharing of new experiences and lessons.

# Networking

## Cooperation with disaster stricken local governments

DRLC has created a network with Hyogo Prefecture, which was stricken by the Great Hanshin-Awaji Earthquake, and local governments and various disaster management organizations all over Japan in order to promote collaboration among them.

## Accumulation of disaster management and reduction know-how

DRLC has accumulated various kinds of know-how regarding disaster management from local governments, disaster management organizations, and civic groups, and has created a database of various kinds of information for effective utilization.

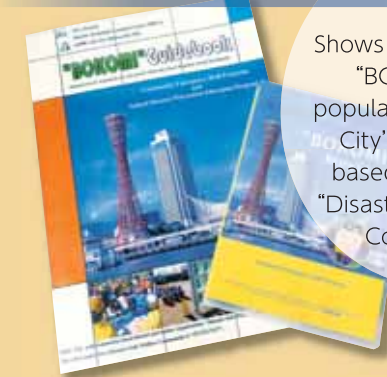
## Creation of an international human network of participants

DRLC has been developing a network that connects participants, implementing partners, and JICA by improving the database of ex-participants and sharing information from the website.

# Products

## Development and provision of useful tools for disaster management

### BOKOMI Guidebook/DVD



Shows the activities of "BOKOMI," the popular name of Kobe City's community based organization "Disaster-Safe Welfare Community."

### Compilation of announcements at the time of disaster occurrence in nine languages

Includes announcements for a variety of situations, such as "An earthquake with a seismic intensity of 6 has just occurred."



### "Living for Tomorrow," materials for disaster prevention education

English version of materials for disaster prevention education used by junior high schools in Hyogo Prefecture

### Compilation of lessons learned from the great earthquake

An easy-to-understand compilation of lessons learned from the Great Hanshin-Awaji Earthquake

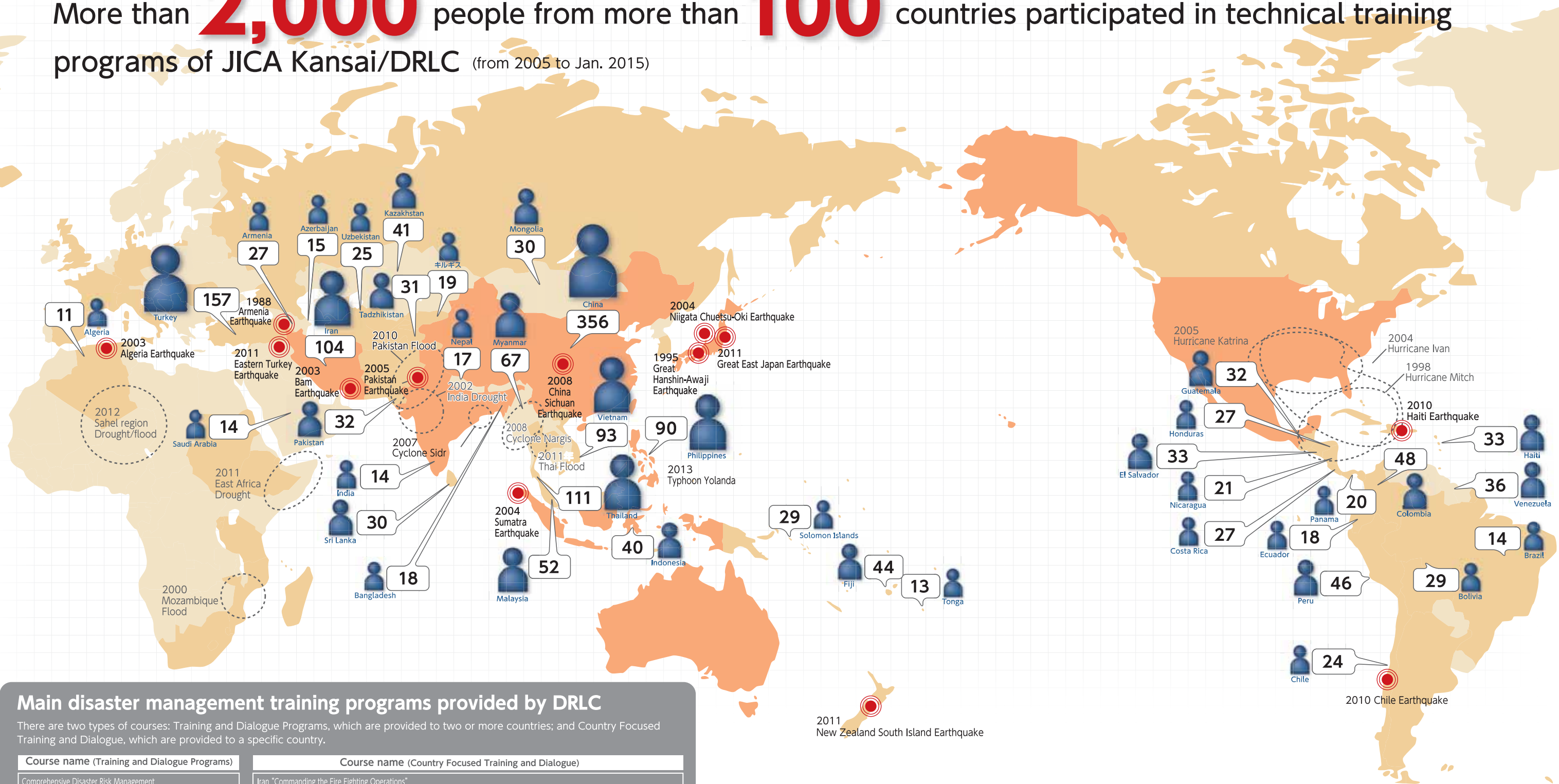


Educational materials can be downloaded from the JICA Kansai website, whose address is shown on the back cover.



# Introducing lessons learnt from the Great Hanshin-Awaji Earthquake and knowledge about Japanese disaster management and recovery to the world

More than **2,000** people from more than **100** countries participated in technical training programs of JICA Kansai/DRLC (from 2005 to Jan. 2015)



## Main disaster management training programs provided by DRLC

There are two types of courses: Training and Dialogue Programs, which are provided to two or more countries; and Country Focused Training and Dialogue, which are provided to a specific country.

Course name (Training and Dialogue Programs)	Course name (Country Focused Training and Dialogue)
Comprehensive Disaster Risk Management	Iran "Commanding the Fire Fighting Operations"
Comprehensive Disaster Management for Central Asia and Caucasus	Iran "Capacity Building for Earthquake Risk Reduction and Disaster Management in Tehran (Road Management)"
Raising Awareness of Disaster Reduction	Iran "Capacity Building for Earthquake Risk Reduction and Disaster Management in Tehran (Disaster Prevention Education, Museum)"
Community Based Disaster Risk Management	Thailand "Capacity Development in Disaster Management"
Pre-Recovery Planning from Natural Disasters	Philippines "Disaster Management Administration"
Strategy for Resilient Societies to Natural Disasters	China "Mental Health in Education"
Disaster Medicine	China "Mental Health Care"
Management of Medical Service in Disaster for Andean Countries	Turkey "Training of Trainers"
Controlo de Desastres	Turkey "Training for Bursa DRR Centre"
Disaster Management on Infrastructure (River, Road and Port)	Turkey "Capacity Development and Mutual Cooperation in Urban Transformation for Disaster Mitigation"
Rescue Techniques	Chile "Project for adopting Kokoronokea to a model of protection and care of mental health emergencies and disasters"

**Legend**

- Country from which JICA Kansai accepted ten or more participants (only in the field of disaster management)
- Large-scale natural disasters in the past two decades
- Large-scale earthquakes in the past two decades

**Number of large-scale natural disasters in the world (1976-2005)**

- 0~30
- 31~120
- 121~

Reference: "The World and Japan Confronting Great Disasters - Disasters and International Cooperation" (Saiki Printing), ECRD Disaster Database (EM-DAT)





## Ex-participants' activities

# Measures against earthquakes and tsunamis

The Great Hanshin-Awaji Earthquake was an urban epicentral earthquake the first of its kind experienced by modern Japan. In the Kansai region, which had not been regarded as an earthquake-prone zone, sufficient measures had not been taken beforehand, resulting in heavy damage and serious issues and lessons to be learned. Not only the fire service and the police but also the local residents played

important roles in rescue operations. Moreover, the importance of activities by many volunteers who hastened to the stricken area was recognized and an opportunity arose to take measures for providing "mental health service" to the victims. Such lessons from the earthquake have been used for earthquake preparations in various countries by participants in DRLC's training.

## 1 Establishment of disaster management parks in Turkey

Turkey Istanbul Fire Department

Having been inspired by the disaster management park and stadium in the Rokkomichi district of Kobe City which the participant visited, he is now planning to establish similar facilities in the city. Even after the training, he has carried out activities for turning the plan into reality. For example, he voluntarily revisited Japan several times to collect more information and carry out more research, conducting field surveys and exchanging opinions with Japanese experts.



## 2 Capacity building of rescue personnel

Pakistan Rescue 1122

Because of the participant's encouragement after returning to Pakistan, it was decided that ideas and techniques learned through JICA training will be incorporated in part of the training program for the Rescue 1122 members. In 2014, ideas and techniques from Japan were taught to 192 training instructors in 36 areas in the State of Punjab, who then taught them to all the Rescue 1122 members, across about 9,000 teams.



## Detailed and concrete cases →P.15



## 3 Holding disaster prevention seminars

Kazakhstan Ministry of Emergency Situations

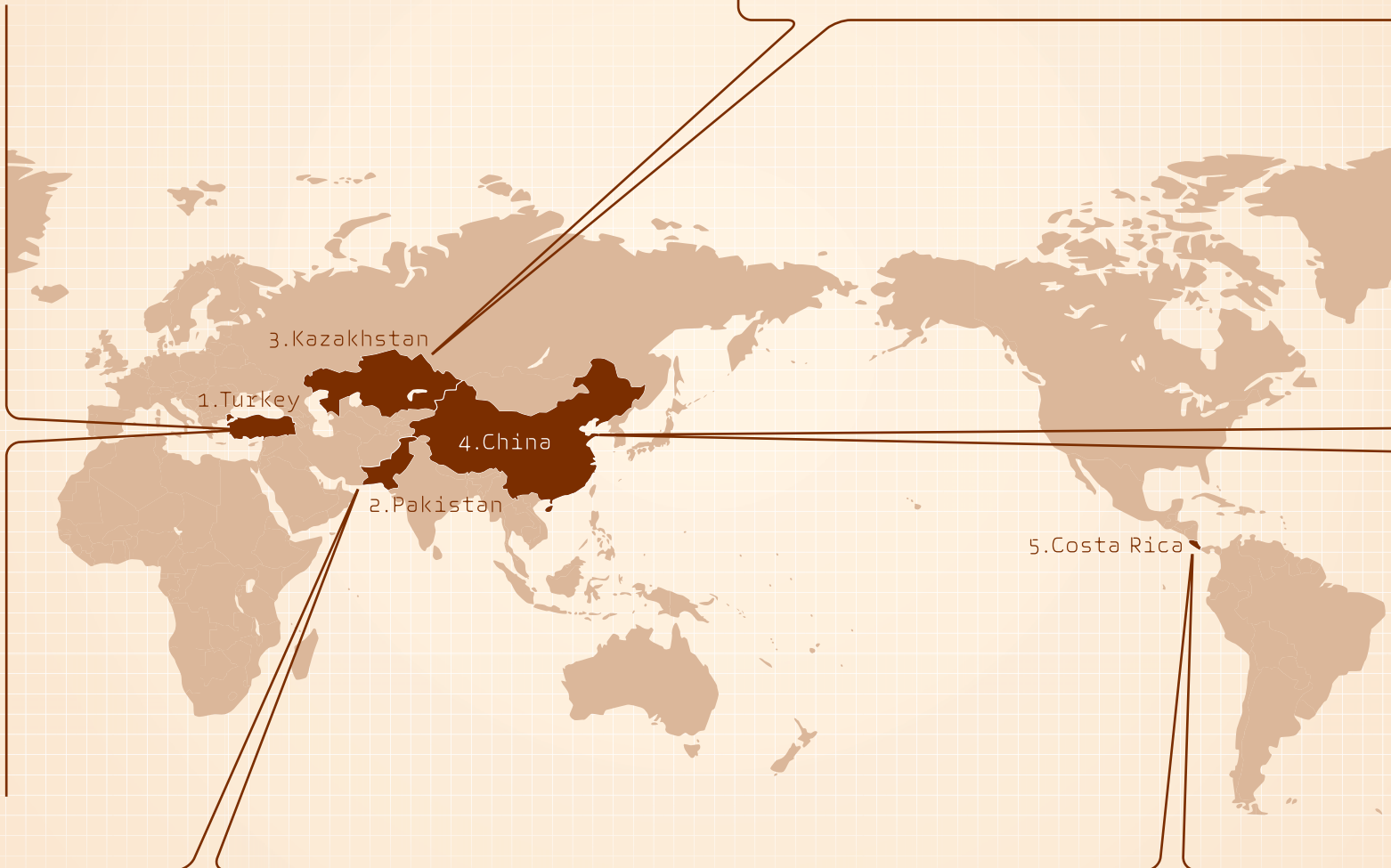
Having been impressed with the seismic strengthening works in Japan, the ex-participant held seminars for administrative officers in cooperation with JICA in Almaty, the former capital. Together with Japanese experts, she strongly advocated the necessity of making buildings earthquake-proof. They introduced aseismatic technology, which caused a great impact on Kazakhstan, where many buildings were built in the former USSR era and require urgent measures to be taken.



## 4 "Mental health service" after the Sichuan Earthquake

China Institute of Psychology, Chinese Academy of Sciences

In the Project for Capacity Development on Mental Health Services for Reconstruction Support of Sichuan Earthquake, which was carried out between 2009 and 2014, many human resources were developed to be engaged in the "mental health service" in stricken areas as local experts. After completion of the project, they have carried out PTSD measures all over China, cooperating with NGOs.



## 5 Predict major earthquakes to make preparations.

Costa Rica Earthquake Department of Costa Rican Electricity Institute

In the training, the participant examined the prediction of damage from a major earthquake that might occur in Nicoya, in the north western part of the country, and the Costa Rican Electricity Institute's preparations for such an earthquake. After returning to the country, his department examined the weakness of the electricity power supply and the telecommunications networks and held workshops. As a result, Costa Rica was able to respond accurately to an earthquake with a magnitude of 7.6 in September 2012. After the earthquake, the department conducted a field survey to develop measures against an earthquake that might occur in the southern part of the country.





## Ex-participants' activities

# Measures against sediment and volcanic disasters

In areas around Kobe City, where sediment disasters frequently occurred in the past, various measures against sediment disasters, such as sand erosion control, were carried out. Moreover, in volcanic countries, such as Japan, not only volcanic mudslides but also the formation of unstable grounds frequently occurs, increasing

the risk of landslide and slope failure. Japanese know-how in disaster management is used for disaster management activities in such highly risky areas.

## 1 Development of residents' self-help

Philippines Municipality of Guagua in the Province of Pampanga

In Kobe City, after the Great Hanshin-Awaji Earthquake, the city government together with the residents made a recovery plan through the Community Development Conference which they had established. To incorporate a similar element of community development in the Philippines, self-help groups of residents were strengthened. This effort to make preparations for an eruption of Mt. Pinatubo drew the attention of the Philippine Department of Interior and Local Government, which had been considering drawing up a similar plan for other local governments.



## 2 Disaster management for traditional events

India State of Himachal Pradesh

The idea was taken from a local festival in Kobe City, into which elements of disaster management training was incorporated. A disaster management program was included in a memorial ceremony for the independence of India on August 15 to raise residents' awareness. Support is given for training and the supply of equipment and materials to improve residents' capacity to cope with disasters in mountainous areas where various types of disasters occur.



## Detailed and concrete cases →P.16

## 3 Improvement of the capacity to deal with volcanic risks

Ecuador National Risk Management of the Ministry of the Public Health

After the training, the department established activities to raise awareness and preventive measures, and carried out special activities for measures against the risk of an eruption of Mt. Tungurahua. It has organized a small team in charge of emergency medicine to provide training for improving their capacity to cope with disasters. Similar activities have been carried out at Riobamba, the capital city of the Province of Chimborazo. Knowledge from Japan, which the participants learned through the training, has been shared widely in Ecuador.



## 4 Handing down the disaster experience to the next generation

El Salvador Municipality of Santa Tecla

Based on lessons learned from the landslide disaster that occurred due to the El Salvador Earthquake in 2001, the city hands down the experience to the next generation and sponsors a memorial event every year. The scale of the memorial event has recently become so large as to attract visitors from neighboring countries. When heavy rain fell in the area, early evacuation was carried out under the leadership of the city government, which was reported on TV.



Photo source: Santa Tecla <http://www.santatecladigital.gob.sv>

## 5 Foundation of a volcanic disaster museum

Guatemala National Coordinator for Disaster Reduction (CONRED)

The agency got their idea from Mt. Usu in the Hokkaido region and museums in Japan, such as the Disaster Reduction and Human Renovation Institution, and founded a volcano museum in Ciudad Vieja City with the cooperation of the city government. At present, the museum is managed by the city government. The museum plays an important role in handing down the disaster experience to future generations in the city, which is surrounded by three volcanoes and has suffered from them since early times.





# Ex-participants' activities

## Measures against flood and typhoon disasters

Global warming has resulted in frequent occurrences of damage due to tropical depressions, such as cyclones, hurricanes, and typhoons. Resultant heavy rain causes river flooding, and so flooded houses and industrial sites. To reduce such damage, it is essential to carry out the construction of embankments and other structures and measures for the prevention of

flooding and the evacuation of people by monitoring the river level. Participants have adopted Japanese know-how in disaster management for damage due to wind and flood in various countries.

### 1 Comprehensive river management

Vietnam Province of Thua Thien Hue

The participants received training in Japan because Vietnam was developing their Law on Natural Disaster Management and Control for the first time. Japanese legal system for disaster management which the participants learned through the training – especially, the Disaster Countermeasures Basic Act and the central and local governments' disaster management systems – were widely used for the establishment of the Law on Natural Disaster Management and Control.



### 2 Improvement of residents' disaster management capacity

Timor-Leste Ministry of Social and Solidarity, National Directorate of Disaster Management

Workshops on disaster management are held as a part of the activities to improve local residents' disaster management capacity. Adopting Kobe City's efforts which they learned through the training, the bureau carried out "Town mapping for disaster prevention" together with participants from local governments, communities, universities and NGOs, etc. The bureau picked out dangerous local places and drew up hazard maps from a variety of viewpoints.



## Detailed and concrete cases →P.17

### 3 Disaster reduction through early warning

El Salvador Municipality of San Pedro Masahuat

After the participants returned from the training in Japan, the city established a disaster management division. This division has carried out activities in cooperation with JICA and the Japan Overseas Cooperation Volunteers. When Hurricane Ida hit the city in 2009, the city appropriately supplied information and instructed all residents of the relevant villages to evacuate, resulting in zero deaths.



### 4 Connecting volunteer activities to disaster management

Philippines Risk Management Office of San Jose de Buenavista

The office revised San Jose de Buenavista's disaster response manual, referring to the method they learned during the training to manage volunteer activities at the time of a disaster occurrence, and have made efforts to improve the management of the existing volunteer centers. Since Typhoon "Yolanda" in 2013 in particular, there has been an increasing momentum for volunteer activities, such as the organization of teams and the provision of training for volunteers' to appropriately perform their roles at the time of a disaster.



### 5 Raising people's awareness of disaster reduction through radio

Solomon Islands National Disaster Management Office

To raise awareness among the people about disaster reduction through local media, the office purchased broadcast time from the national radio station. Referring to the activities of Kobe City's community radio station, the office broadcasts a daily 15-minute program to provide the residents with the information about the importance of disaster reduction, gaining cooperation from domestic and foreign NGOs which have rich experience in disaster management and reduction activities.







## Ex-participants' activities

# Disaster prevention education

The need to raise peoples' awareness of disaster reduction was reconfirmed after the Great Hanshin-Awaji Earthquake. The Hyogo Prefectural Government has improved and expanded disaster prevention education for children throughout the prefecture. Effective promotion of disaster reduction awareness-raising activities through children also

widely affects parents and neighboring residents, resulting in an increase in the whole community's awareness of disaster reduction. Participants who learned about efforts for disaster prevention education in the Kansai region have spread their awareness-raising activities all over the world.

## 1 Disaster prevention education through Kuma (Bear) Caravan

Turkey Ataturk Elementary School in Sakarya City, Province of Sakarya

Having been influenced by Japanese card games for coping with disasters and "Iza! Kaeru Caravan," a disaster prevention education event for children, the school carried out "Kuma (Bear) Caravan" using the Province of Sakarya as their base.

The school held lectures on emergency rescue and an exhibition including earthquake-simulation vehicles, rescue vehicles, ambulances, and other vehicles, cooperating with relevant government agencies, such as Ministry of Health and the Fire Department, and private companies.



## 2 Disaster management card game

Myanmar Department of Relief & Resettlement, Ministry of Social Welfare, Relief and Resettlement

Inspired by Japanese card game for coping with disaster responses, the participants developed a Myanmar version of educational cards after returning to the country. When the "Youth Volunteer Team for Disaster Management" was established in Myanmar, the cards were also distributed as educational material and have been widely used for local disaster prevention education.



## Detailed and concrete cases →P.18

## 3 Provision of support for female victims

Turkey Kaynasli Emergency Response Support Foundation

Through the training, the foundation strongly felt the importance of community based disaster risk management as well as self-help, public-help, mutual-help activities. The foundation secured a space to display scenes of damage from the Marmara Earthquake in 1999 and give disaster prevention education to visitors in the government office of Kaynasli County of Duzce Province, which was isolated when the earthquake occurred. A meeting place that had been constructed in the county using donations from the Nippon Foundation has been used as a base for providing support to women and has promoted support for women through embroidery and handicraft.



## 4 Raising awareness of local residents through elementary schools

Chile Municipality of Talcahuano

The participants took training to learn about disaster management from the aspects of both structural and non-structural measures for disaster management, then after returning to Chile, established the Disaster Risk Management Department in the municipality. Throughout 2014, they carried out activities to raise awareness of disaster reduction among the elementary school children in the city. They independently held events for disaster prevention education, using what they learned in Japan, and are also planning to continue these activities to raise awareness in the future.



## 5 Introduction of disaster management in school curriculums

Solomon Islands Education Bureau of the Guadalcanal Provincial Government

The participants were impressed with the preparation of disaster management plans by each local government and school in Japan. After returning to their country, they began to carry out activities to reduce the risks in school zones. They started to introduce disaster prevention education into the school curriculum, and acquire properly understanding to the extent of each school's risks in the event of a disaster, and to prepare hazard maps.





## Ex-participants' activities

# Community Based Disaster Risk Management

When the Great Hanshin-Awaji Earthquake caused damage to such a wide area, police and fire rescue teams were delayed and many victims were rescued by neighbors or local people. This gave an opportunity for many people to realize the importance of community capacity in protecting residents from large-scale disasters. For example, in Kobe City, a community based organization called "Disaster-Safe Welfare Community," which is commonly known as "BOKOMI," was established in 191 districts all over the city. Local characteristics are utilized for BOKOMI's activities,

which include emergency drills, firefighting training, and efforts to teach children about lessons they learned from the earthquake disaster. The Community Based Disaster Risk Management training program, which summarizes BOKOMI's know-how and their activities, is in high demand in many countries all over the world. Those participants who returned to their home countries have been making efforts for disaster management, concentrating on community capacity.

## 1 Raising awareness of disaster reduction widely for residents offered by the fire department

Algeria Fire service of Mostaganem Province

Civil protection has carried out various activities to raise the awareness of residents living in the provinces, including disaster prevention education for children through the use of disaster management leaflets and local hazard maps, and seminars for local residents. In addition, in order to teach local residents about what the participants learned during the training program in Japan, a local radio station broadcasted a program about the initial response to a disaster, and the civil protection held a rescue drill in case of a large-scale disaster.



## 2 Training of local leaders

Moldova Civil Protection and Emergency Situations Service

During the training program in Japan, the participant strongly felt that local leaders play an important role in disaster management. Moldova is putting a great deal of effort into the training of local leaders. Total 81 leaders were selected from the members of the community associations and technical training was given. Now training to school teachers is planned to continue such activities.



## Detailed and concrete cases →P.19

## 3 Establishment of disaster response teams from community

Pakistan Rescue 1122

Referencing what the participant learned during the training program, disaster response teams were established with the participation of the community members. In cooperation with the rescue teams, the participant has been carrying out activities to raise awareness among residents about disaster management in the Rawalpindi district. Since 2013, school safety programs have been promoted in cooperation with the Ministry of Education and safety surveys of school buildings and disaster prevention education have been carried out.



## 4 Promoting raising awareness of disaster reduction at elementary schools

Philippines Department of Education

When the division in charge of disaster management was established in the Department, a meeting was held for government employees and teachers in charge of disaster management all over the country. Each barangay, the smallest self-governing unit in the Philippines, has carried out activities to raise awareness of disaster reduction at elementary schools and surrounding areas, in cooperation with community leaders.



## 5 Community disaster management associations of young people

Myanmar Department of Relief & Resettlement, Ministry of Social Welfare, Relief and Resettlement

Having been impressed with Kobe City's improvement of communities' capacity development in disaster management through "BOKOMI," the participants promoted community based disaster management activities after returning to Myanmar. They established community based disaster management groups called "Youth Volunteer Teams for Disaster Management" in 2013 and have managed the teams as a Myanmar version of "BOKOMI" to carry out their activities.





Colombia 

## Toward the creation of "disaster-resilient hospitals"



Ms. Marcela Carbonell  
University Hospital of Santander

### Colombia, a country abundant with nature

Colombia, which is located in the northwestern part of South America, suffers from many disasters, such as volcanic eruptions, landslides, and floods. Although Colombia suffers damage from natural disasters every year, its measures against disasters focused only on the response after the occurrence of a disaster, whereas preventive measures were hardly taken. Ms. Marcela Carbonell, who is working as an emergency coordinator at the University Hospital of Santander was worried whether the hospital could fully function if a major disaster struck the region.

### "Disaster-resilient hospital" studied in Japan

When Ms. Carbonell participated in JICA training program entitled "Management of Medical Service in Disaster for Andean Countries" in 2006, she wondered at the fact that a culture of "prevention" had been firmly established across a wide range of levels in Japan, from the administration to the residents. With regard to disaster medicine, Japan established a system that makes it possible for hospitals to cooperate with administrative

agencies, universities, and local communities to carry out comprehensive measures when a disaster occurs. At the presentation on the final day of the training program, she presented an action plan on the theme of "Creation of Disaster-Resilient Hospitals." The plan advocates the importance of strengthening hospitals from the aspects of both structural and non-structural.



Training in case of a disaster

### Steady step-by-step progress

Ms. Carbonell's plan paid attention not only to hospital buildings but also to the activities of hospital workers. She formed an emergency response team of hospital workers and made daily efforts to clarify and strengthen the role at each stage after the occurrence of a disaster. She steadily created a "disaster-resilient hospital" system, implementing things she had learned in Japan one after another, such as an in-hospital stock warehouse, a disaster manual with easy-to-understand illustrations, and a disaster management center that could serve as headquarters in case of emergency. Mr. Juan Carlos, who participated in the project together with her said, "Because her plan was too magnificent, I felt at first that it would be impossible to realize it. But, she used the Japanese examples one by one to establish their own systems in the hospital, sowing the seeds of "prevention." I feel the seeds growing steadily."

The results of her efforts were presented at the "Seminar on Disasters in Andean Countries" that JICA held in Lima, Peru in 2008. In the seminar, she also emphasized the importance of "the establishment of a culture of prevention" which she had learned in Japan, stating that daily activities will lead to improvements in on-site measures in case of emergency. It is about ten years since she took the training in Japan. Although the Santander Hospital developed remarkably as a "disaster-resilient hospital," Ms. Carbonell humbly says that "The achievement rate of the plan is still only 75%." Her major objective for the future is the foundation of an "emergency response training center" in the hospital. She is aiming to spread the culture of prevention by the hospital's initiatives to wider areas than just the hospital.



In-hospital emergency response team



### A word from a key person of training program

She has steadily utilized her experience in Japan.

The Hyogo Emergency Medical Center has accepted a dozen participants from Andean countries every year since 2003 to give them training in disaster medicine. The number of participants has accumulated to 157 as of 2014. What can we offer them during two months in Japan, a country whose language, culture, and regime differs from theirs? Although every participant returns to his or her country after

making an action plan, I can easily guess that he or she will have difficulties in realizing it. In this situation, Ms. Carbonell has been steadily realizing her plan to improve her hospital and community's ability to carry out measures against disasters. I am very pleased to hear this. I would like to offer my sincere gratitude and heartfelt cheers to her.



Dr. Shinichi Nakayama  
Director of Hyogo  
Emergency Medical Center

Honduras 

## Increase in communities' disaster management capacity



Ms. Lidia Torres  
The National Autonomous  
University of Honduras

### Residents in the capital city of Tegucigalpa feel fear of landslides

Heavy tropical rain and hurricanes frequently occur in Honduras, a Central American country. Because the capital city of Tegucigalpa is located in a basin surrounded by many slopes, landslides occur frequently making the residents feel fear. When Hurricane "Mitch" attacked the city in 1998, more than 13,000 people died. A memorial service for the deceased has been held every year. It is estimated that the number of victims could be more than 50,000 if a landslide occurs in the Reparto and Berrinche districts, where the houses are crowded. Japan dispatched a disaster relief team just after the occurrence of "Mitch" and has given various types of support for reconstruction from disasters. From 2001 to 2002, JICA carried out "The Study on Flood Control and Landslide Prevention in the Tegucigalpa Metropolitan Area of the Republic of Honduras" as a part of the activities and supported the formulation of a disaster management master plan for Tegucigalpa City. In 2011, based on the plan, landslide countermeasure works began in the landslide-vulnerable Reparto and Berrinche districts with Japan's grant aid.

### Learning in Japan, a leader in disaster management

Ms. Lidia Torres, who is studying and teaching risk control and risk management at the Institute of Earth Science of The National Autonomous University of Honduras, experienced JICA's activities when she cooperated with the above-mentioned study, and came to know about training program entitled "Community-Based Disaster Risk Management" to be held in Kobe. With a great expectation that "In Japan, a leading country in disaster management, I would be able to learn the necessary knowledge to teach in my own

country," she participated in the training in the fall of 2012. She was awakened to the community's capacity displayed at the scene of a disaster. "During the training, I was convinced that the key to Japanese people's early response to and recovery from a disaster is the discipline and the spirit of mutual help and self-help which communities display in times of emergency. People in the community take action, already knowing what they should do in case of a disaster before the government's intervention."



Emergency drill training for volunteer students

### Increasing the Tegucigalpa residents' disaster management capacity

Soon after returning to her country, Ms. Torres began to carry out activities to teach people about what she learned in Kobe. She planned to carry out activities together with the Tegucigalpa Disaster Prevention Committee and children to increase the disaster management capacity of communities in the Reparto and Berrinche districts, which are at high risk of a disaster and socially vulnerable. First, she held a seminar for the administrative agency in charge of disaster management, the committee members, and the community leaders in the two districts. She explained the importance of community response to a disaster, introduced tools useful for disaster management activities, and held a discussion about an action plan to increase the disaster management capacity of communities in the two districts. Moreover, to train future leaders in disaster management activities, she

held a seminar to teach the disaster management training and educational methods she learned in Japan to about 30 students studying social work at The National Autonomous University of Honduras. After that, gaining cooperation from the elementary schools in the two districts, together with administrative agencies and university volunteers, she raised awareness of disaster management in about 1,300 children through disaster drills and other activities. A change was visible in the residents' awareness. Mr. Lazarus, a community leader who carried out activities together with Ms. Torres, said, "Whenever winter came, the residents became uneasy because of their fear of disasters, but now they have become much more composed. This is because of their increasing confidence in disaster management and Japan's landslide countermeasure works."



Drills at an elementary school



### A word from a key person of training program

The key to activities is community leaders

During the "Community-Based Disaster Risk Management" training program, Ms. Torres attended my lecture concerning "Iza! Kaeru Caravan!," a disaster prevention education program which can be learned while having fun. Her activities are wonderful in that she does not directly teach children the know-how and knowledge she has learned, but teaches them to the disaster prevention education leaders, who

then take leadership roles in carrying out the program. Disaster prevention education consists of activities that need to be independently continued by people in the community. I would like to pay my respects to Ms. Torres, who has fully understood this and made efforts for disaster prevention education.



Mr. Hirokazu Nagata  
Chairman of NPO Plus Arts



## Making care victim-friendly



Dr. San San Oo

Myanmar Mental Health Society

### Myanmar, the last frontier in Asia

Myanmar, which has been rapidly developing, is located to the east of the Bay of Bengal and prospered as a trading base from ancient times. The country was then under a military regime for an extended period. Although a shift to a civil government was announced in 2008, just after that Cyclone Nargis directly struck Myanmar and combined with high tides caused serious damage. Because Myanmar had hardly experienced cyclones in the past, and because disaster prevention infrastructures such as warning systems were not fully developed, the number of dead or missing reached 140,000. The cyclone caused unprecedented damage to Myanmar, which had aimed to start again through democratization.

### Utilizing her experience in Japan for Myanmar

Dr. San San Oo, who is working as a psychiatrist in Yangon, strongly felt the need for "mental health care" in Myanmar, where many cyclone victims were psychologically injured. At that time, however, Myanmar did not place importance on "mental health care," which frustrated her. What gave her great momentum was the JICA training program entitled "Mental Health Services after Disaster for Asian Countries" held with the cooperation of "the Hyogo Institute for Traumatic Stress." It was just six months after the occurrence of the

cyclone that she decided to participate in the program. Through the training program, she studied the PTSD (post-traumatic stress disorder) measures which Japan carried out after the Great Hanshin-Awaji Earthquake and other natural disasters occurred. She strongly realized that the most important thing is to give close and friendly care to each victim through continuous conversations. The positive and proactive attitude of Japan, which had recovered from frequent natural disasters, overlapped with Myanmar's future. She considered how to apply what she learned in Japan to Myanmar and began to carry out her activities soon after returning to her country.



Training in Japan

### Activities for spreading information on PTSD measures in Yangon

Dr. San San Oo spread information on what she learned in the training not only within her organization but also to universities and NGOs in order to develop cross-sectional PTSD measures that can be carried out jointly by several organizations. She was also thinking that effective measures cannot be carried out without knowing the actual situation of the victims. With this concept, to fully understand the actual needs of affected people, in 2009, as a follow-up program to the training program, she carried out a survey in the delta area damaged by Cyclone Nargis together with the Director of the Hyogo Institute for Traumatic Stress, who was dispatched from Japan.

They interviewed victims in about 200 villages. In future, she is planning to cooperate with two pharmaceutical universities in Yangon to develop a new program for treating victims through the use of a psychometric method and also train experts on PTSD measures. Mr. Soe Tet Tun, a deputy chief counselor of Johns Hopkins University who has experience as a disaster victim and participated in the survey, said, "The importance of "mental health care" should increase more and more, because it is necessary for a traumatized persons' life recovery."



Counseling of victims is continuing



### A word from a key person of training program

#### Mental health care at the recovery stage

After the earthquake and tsunami in the Indian Ocean off Sumatra in 2004, JICA held training program "Mental Health Services after Disaster for Asian Countries" for five years, inviting those persons concerned in the disaster stricken Asian countries. When Cyclone Nargis occurred, activities were carried out in the stricken areas mainly by psychiatrists who had participated in the training. In developing countries in Asia, people are strongly prejudiced against

psychiatrists, and psychiatric systems are underdeveloped. I have also heard that the number of psychiatrists was only a little more than 60 when the cyclone occurred. Dr. San San Oo informed me later that organized activities had been carried out at an early stage with the full mobilization of stake holders, despite of limited manpower. I would like to continue to support her self-devoted activities.



Dr. Hiroshi Kato  
Hyogo Institute for  
Traumatic Stress

## "BOSAI" School Project



Ms. Leslie Centeno

Ministry of Public Education of  
Costa Rica

### Costa Rica, a treasury of life

Costa Rica is the most stable democratic country in Central America and is famous for a high level of education. Ecotourism is prospering because the rich natural environment can be used as tourism resources. All the Central American countries have natural disaster risks, such as earthquakes, windstorm, flood, landslide, and volcanic disasters. To make themselves resilient to disasters, in 1993 they established the Center for the Prevention of Natural Disasters in Central America (CEPRENAC) as an organization specialized in disaster management under the umbrella of the Central American Integration System (SICA). After Hurricane "Mitch" in 1998, which caused serious damage to Central America, each of them established a disaster management system mainly at the central government level, based on a strong political initiative to improve their disaster management capabilities. The problem in the future will be how to increase the disaster management capabilities of each local government or community.

### The key is to raise residents' awareness of disaster reduction.

Ms. Leslie Centeno, who is a teacher at an elementary school in Cobano City in the Nicoya Peninsula in the western part of Costa Rica and a member of the city's emergency response committee, participated in JICA training program entitled "Controlo de Desastres" which JICA carried out in cooperation with the "Disaster Reduction and Human Renovation Institute" in 2009. She studied various efforts, including the disaster management administration of the central, prefectural, and municipal governments in Japan, DIG (Disaster

Imagination Game), card games for disaster management, the communities' creation of hazard maps, and the role of mass media in times of disaster. Moreover, throughout the training, she was impressed by the Japanese people's attitude of handing down lessons from the past to the next generation without forgetting them and thought it essential for Costa Rica, where earthquake and other disasters occur frequently, to increase the general public's awareness of disaster reduction.



Drill at an elementary school

### Aiming to improve the disaster management capabilities of communities using schools as the starting point

"To improve residents' awareness of disaster reduction, it may be effective to educate children first. Through children, the importance of disaster reduction can be conveyed to their families and people of the community." Ms. Centeno thought in this way. After returning to Costa Rica, to apply what she studies in Kobe to her country, she launched the BOSAI school project. Main activities are the holding of disaster management seminars, the preparation of hazard maps, the establishment of plans for disaster management activities, the holding of disaster drills, and the inspection of school equipment in

case of a disaster. She also aims to raise parents' awareness through the provision of disaster prevention education to children. In the Nicoya Peninsula, where Cobano City is located, the possibility of an occurrence of a major earthquake has been known for a long time. Because these efforts produced a successful outcome, when an earthquake with a magnitude of 7.6 occurred on September 5, 2012, children evacuated appropriately which led to a reduction in damage. "I think that communities' efforts to improve their disaster management capacity have been steadily achieving good results through the provision of disaster prevention education to children. I would like to spread the project to other schools." said Ms. Centeno with great enthusiasm.



Presentation by children

### A word from a key person of training program

#### The BOSAI school saves communities

Ms. Centeno showed an enthusiastic attitude of participation during the training. For example, she briskly asked questions and drew up a highly concrete action plan. I met her when I was in Costa Rica, from 2007 to 2009, acting as a long-term expert for a disaster management project in Central

America. At that time, I also strongly felt her strong consciousness, understanding, and energy. I expect that the BOSAI school in Costa Rica will develop further.



Mr. Masaru Arakida  
Senior Researcher, Asian  
Disaster Reduction Center



Iran



## Toward the Creation of a Safe Society



Mr. Hossein Joveini

Safety Service Authority,  
Surrey City Fire Service

### To improve the disaster response capacity in Iran

In Iran, which is located in the Alpine-Himalayan belt, the threat of natural disasters always exists and earthquake disasters in particular frequently occur. The Bam Earthquake in 2003 caused about 43,000 deaths. Although improvement of their disaster response capacity was one of the issues that Iran had to solve, the government's disaster reduction system in case of emergency was not established. The establishment of a command system, a rescue system in case of emergency, a system for raising residents' awareness of disasters and a system for community based disaster risk management in times of emergency became a huge issue. Against this background, Iran requested JICA to hold training program so that that the Iranian fire service could increase the disaster management capacity of the communities. As a result, country-focused training program entitled "Commanding the Fire Fighting Operations" started in 2012.

### To utilize the power of residents for disaster response

Although the training program covered a wide range of the fire service's operations from organizational operation to rescue techniques, the participants were most interested in that Japan encouraged residents to take part in disaster management. Mr. Hossein Joveini participated in the training program in FY2013, and realized that in Japan, the power of local residents is added to the capacity of the overall disaster response through volunteer fire brigades and volunteer disaster management organizations. He was impressed when he saw their activities. Mr. Joveini said that "To reduce damage, it is necessary to

incorporate residents' power in disaster management activities. When I studied this concept, I felt that a new world emerged before my eyes." After the completion of the training program, Mr. Joveini returned to his country and founded a residents' volunteer firefighting team inspired by "BOKOMI," the abbreviation of Kobe City's community based disaster management organization, "Disaster-Safe Welfare Community." He has been making daily efforts to activate the team in a variety of ways, such as holding disaster response training, preparing teaching materials, and launching a cell-phone mailing service to disseminate all over Iran the idea he learned in Japan, "community safety should be protected by the residents of the community themselves."



Emergency response training

### To utilize "BOKOMI Guidebook"

Mr. Hassan Jafari, who participated in the training program in FY2012, also was impressed by Japan's disaster management. Mr. Jafari was surprised that, in Japan, the culture of disaster management is recognized naturally in everyday life and preventive measures were carried out according to plan in every aspect. What especially drew his attention was the disaster management training manual that the Kobe City Fire Bureau created for the local residents.

Based on the manual, JICA prepared educational material called the "BOKOMI Guidebook" together with the Kobe City Fire Bureau for the training program. After returning to Iran, Mr. Jafari translated it into Persian to utilize in his organization. The final goal shared by Mr. Joveini and Mr. Jafari is "disaster-resilient and safe society." There is no end of measures for achieving the goal. Cooperation between firefighters in Japan and Iran will continue in the future, from now on as well.



Volunteer team



Volunteers' firefighting drill

### A word from a key person of training program

#### Utilization of Kobe's experience for Iran

Since 2012, The Kobe City Fire Bureau has participated in the training. In 2013, our employees were dispatched to Iran to inspect the local firefighting systems. In that year, based on the results, we prepared a training curriculum and held training in Kobe mainly concerning local disaster prevention

and disaster prevention education. We hear that after returning to Iran, the participants have been using what they studied in the training. We expect that the efforts to carry out community based activities for disaster management will continue to spread all over Iran.



Ms. Yumi Mashiba  
Chief of Community  
Disaster-prevention Support Team  
Prevention Section, Prevention Division,  
Kobe City Fire Bureau

Turkey



## A disaster prevention education center modeled on the Disaster Reduction and Human Renovation Institution

### Bursa Province located on active faults

The Republic of Turkey is located to the east of the Mediterranean Sea. The country received great damage from the Marmara Earthquake in 1999 and is still located on active faults which are likely to cause earthquakes. Bursa Province, where two active faults exist, has a disaster prevention education center called the "Bursa Disaster Training Center." When Mr. Sahabettin Harput, ex-deputy minister of the Ministry of the Interior, visited Japan for training, he was impressed by "The Great Hanshin-Awaji Earthquake Memorial Disaster Reduction and Human Renovation Institution (DRI)" and later founded the Training Center during his time in office as Bursa Province Governor. Although there was a museum in Sakarya Province that displayed materials concerning the Marmara Earthquake at that time, it was necessary to found a center that could improve the disaster management capacity of the residents through education. To protect Turkey from disaster risks, Mr. Harput decided to found the "Bursa Disaster Training Center."



Mr. Sahabettin Harput  
Minister of the Interior's Secretariat Governor  
(ex- Governor of Bursa Province)

### Disaster preparations learned in Japan

The DRI was founded to hand down the experience and lessons of the Great Hanshin-Awaji Earthquake in 1995 to future generations. It is a comprehensive disaster management center that not only displays materials concerning the earthquake but also carries out research, trains experts, and collects materials. The DRI plays a variety of roles, including the dispatch of researchers in case of a disaster to give advice and collect information. Mr. Harput looked back, stating that "We referred to the various roles of the DRI when founding the Bursa Disaster

Training Center, such as managing the risk management system, handing down experience and lessons from disasters of neighboring countries, and raising children's awareness of disaster reduction." What he learned in Japan greatly influenced him. In particular, when the emphasis of disaster management shifted from a viewpoint of "emergency response" to one of "preparation," he was given an opportunity to further consider how to provide disaster prevention education to residents and children.



Display space in the Bursa Disaster Training Center



Uniquely developed simulation of carbon monoxide poisoning

### Turkish version of the DRI established by ex-participants

Recently, Turkey has become urbanized and its economy has grown considerably. Bursa Province, where industries have accumulated, has a high risk of disaster. It is essential to take disaster management measures from aspects of both structural and non-structural. Thinking that "disaster prevention education should always evolve based on any new information," Mr. Harput has endeavored to improve the management capacity of the "Bursa Disaster Training Center" even after completion, having the management staff participate in training program in Japan and having Japanese experts give advice to the management staff. At present, many children visit the Center from elementary schools in the Province. The Center also aims to take a leadership role in the disaster management of neighboring countries in the future by acting as a model disaster prevention education institution. "I'll be glad if I can further deepen the relationship between the two centers in Bursa Province and Hyogo Prefecture," says Mr. Harput, who does not stop taking steps toward the realization of the dream.



Disaster model in the Bursa Disaster Training Center

### Key person in the foundation of the Disaster Reduction and Human Renovation Institution

Creation of a cooperative relationship between institutions in Bursa Province and those in Hyogo Prefecture

Improvements to the environment for developing disaster management human resources in both countries and in both prefectures is expected through the promotion of disaster management exchanges among the local governments of "Hyogo Prefecture," an advanced prefecture in disaster management in Japan, and "Bursa Province," an advanced province in disaster management in Turkey, and through the deepening of exchanges between the "Disaster Reduction and Human Renovation Institution" in Japan, and the "Bursa Disaster Training Center" in Turkey.

Moreover, I expect that the "Bursa Disaster Training Center" will improve and display its function as a disaster management base in Turkey, and hope that it will take a leadership role in disaster management not only within Turkey but also in neighboring countries.



Mr. Tomio Saito  
Chairman of the Board of the Hyogo International Association  
(Ex-Vice Governor of Hyogo Prefecture)



# Activity reports have arrived from **ex-participants!**

**Pakistan**  
We formed residents' disaster management teams and are providing training.  
FY2012 "Community Based Disaster Risk Management"

**Myanmar**  
We took the Japanese disaster management card game and arranged the development of a Myanmar version.  
FY2012 "Community Based Disaster Risk Management"

**Vietnam**  
We founded a disaster management association and a river irrigation and flood control center.  
FY2010 "Vietnam Rivers"

**Peru**  
We drew up a plan for medical services in times of emergency and after the occurrence of a disaster, and gave training to medical teams.  
FY2006 "Management of Medical Service in Disaster for Andean Countries"

**Honduras**  
We are promoting awareness-raising activities along with maintaining the physical aspects of our activities.  
FY2007 "Controlo de Desastres"

**Guatemala**  
The contents of the disaster prevention education in Japan were very helpful for us.  
FY2011 "Community Based Disaster Risk Management"

**Turkey**  
We are conducting an event called "Kaeru Caravan" inspired by "Kaeru Caravan" in Kobe.  
FY2012 "Disaster Prevention Education"

**Bhutan**  
We are promoting disaster prevention education at local high schools.  
FY2009 "Comprehensive Disaster Risk Management"

**Macedonia**  
We made a Macedonia version of the BOKOMI Guidebook.  
FY2014 "Community Based Disaster Risk Management"

**Panama**  
Kaeru Caravan was held twice at a local university.  
FY2011 "Community Based Disaster Risk Management"

**El Salvador**  
We try to hand down experience of the landslide disaster in 2001 to the next generation and we hold a memorial event every year.  
FY2003 "Controlo de Desastres"

**Costa Rica**  
We are carrying out disaster management activities at elementary schools and provide disaster prevention education to children and parents.  
FY2009 "Controlo de Desastres"

**Myanmar**  
We will utilize the rescue techniques learned in Kobe.  
FY2012 "Emergency Rescue Techniques for Natural Disaster"

**Philippines**  
What we learned from Kobe City's recovery was used for recovery planning from a storm surge disaster.  
FY2010 "Recovery Planning from Natural Disasters"  
FY2010 "Comprehensive Disaster Risk Management"

**Myanmar**  
What I learned through the training is useful for my work as Director of the local office.  
FY2011 "Comprehensive Disaster Risk Management"

**Costa Rica**  
Earthquake safety measures carried out after the training were effective at the occurrence of earthquake.  
FY2009 "Comprehensive Disaster Risk Management"

**Philippines**  
We have adopted the system of "community development conferences" of Kobe City to Philippines.  
FY2012 "Pre-Recovery Planning from Natural Disasters"

**Colombia**  
We are drawing up a road development plan, taking into consideration the residents living in disaster-prone areas.  
FY2013 "Community Based Disaster Risk Management"

**Turkey**  
We aim to establish disaster management parks in Istanbul, following the example of Kobe.  
FY2012 "Pre-Recovery Planning from Natural Disasters"

**Afghanistan**  
We are strengthening community development to make Afghanistan the safe country.  
FY2013 "Community Based Disaster Risk Management"

**China**  
The contents of the training were useful for providing mental health services to Sichuan Earthquake sufferers.  
FY2009 to FY2014 "Project for Capacity Development on Mental Health Services for Reconstruction Support of Sichuan Earthquake"

**Indonesia**  
We are utilizing the techniques and knowledge learned through the training for rescue activities.  
FY2004 "Rescue Techniques"

**Mexico**  
In Mexico, we also aim to form strong communities like those in Japan.  
FY2009 "Community Based Disaster Risk Management"

**Colombia**  
We have prepared a pamphlet about emergency disaster response.  
FY2013 "Community Based Disaster Risk Management"

**El Salvador**  
We are carrying out activities under JICA's disaster management project.  
FY2011 "Controlo de Desastres"

**Turkey**  
We will strengthen regional development to make the country safer.  
FY2013 "Capacity Development and Mutual Cooperation in Urban Transformation for Disaster Mitigation"

**Zambia**  
We would like to introduce new training for children.  
FY2014 "Rescue Techniques"

**Mexico**  
What we learned through the training has been utilized in our policy for reducing risks in Metropolitan Mexico City.  
FY2006 "Mitigation Strategy for Mega-Urban Earthquake Disaster"

**Honduras**  
We made a review on national universities' disaster management plans.  
FY2013 "Community Based Disaster Risk Management"

**Honduras**  
We are teaching disaster management to residents through elementary schools together with university student volunteers.  
FY2012 "Community Based Disaster Risk Management"

**Bolivia**  
We learned many things through the training in Japan.  
FY2011 "Management of Medical Service in Disaster for Andean Countries"

**Guatemala**  
Utilizing the contents of the training program, we developed an early warning system.  
FY2009 "Controlo de Desastres"

**Solomon Islands**  
We installed water-level gauges and equipment for collecting river hydrological data, etc.  
FY2011 "Pacific Region Community Disaster Risk Management"

**Myanmar**  
We are promoting disaster management activities in various regions, aiming to make the Myanmar version of BOKOMI.  
FY2010 "Comprehensive Disaster Risk Management"  
FY2011 "Community Based Disaster Risk Management"

**Fiji**  
We have introduced Japanese techniques into our country to improve our disaster response capacity.  
FY2014 "Rescue Techniques"

**Costa Rica**  
We visited all the households in Nicoya City, carrying out disaster activities. What we learned through the training was of great use when an earthquake occurred in 2012.  
FY2007 "Controlo de Desastres"

**Brazil**  
As a firefighter, I have endeavored to raise awareness of disaster reduction in residents.  
FY2013 "Raising Awareness of Disaster Reduction"

**Chile**  
We held an event for disaster prevention education on our own, following the example of Kobe.  
FY2013 "Raising Awareness of Disaster Reduction"

**Moldova**  
Utilizing the experience in Kobe, we are providing training to community associations.  
FY2013 "Community Based Disaster Risk Management"

**Samoa**  
We are using techniques learned at the training to make up for the lack of materials and equipment.  
FY2014 "Rescue Techniques"

**Algeria**  
We raised awareness among residents concerning disaster management and drew up hazard maps.  
FY2010 "Recovery Planning from Natural Disasters"

**Honduras**  
We established a disaster management division in the city government to promote activities for raising awareness of residents.  
FY2011 "Controlo de Desastres"

**Brazil**  
We introduced Kobe City's disaster management at the central disaster management council.  
FY2013 "Community Based Disaster Risk Management"

**Mexico**  
We held a disaster management fair!  
FY2008 "Mitigation Strategy for Urban Earthquake Disaster"

**Colombia**  
Examples in Kobe were useful for preparing our city's disaster management plan.  
FY2008 "Mitigation Strategy for Urban Earthquake Disaster"

**Costa Rica**  
We promote to disseminate disaster management information that everyone can easily understand.  
FY2009 "Controlo de Desastres"

**Solomon Islands**  
We supported schools' preparation of evacuation plans.  
FY2012 "Pacific Region Community Disaster Risk Management"

**Philippines**  
We cooperated with local residents to teach disaster prevention at elementary schools.  
FY2012 "Pre-Recovery Planning from Natural Disasters"

**Myanmar**  
I was engaged in mental health care services in an area stricken by Cyclone Nargis.  
FY2008 "Mental Health Services after Disaster for Asian Countries"

**Ecuador**  
We formed a medical team in our organization and increased our disaster response capacity.  
FY2009 "Management of Medical Service in Disaster for Andean Countries"

**Chile**  
We improved our disaster response capacity by integrating a series of response measures, such as trauma treatment, public health, reconstruction support, and emergency medicine.  
FY2008 "Mitigation Strategy for Urban Earthquake Disaster"

**Peru**  
We are planning to provide a wide range of training to our rescue staff and also carry out public relations disaster will occur in the future.  
FY2010, FY2011 "Management of Medical Service in Disaster for Andean Countries"