



JICA Hyogo

Disaster Reduction Learning Center (DRLC)



KOBE City Fire Bureau (KCFB)

# "BOKOMI" Guidebook

*- Sharing Lessons Learned by the City of Kobe from the Great Hanshin-Awaji Earthquake -*

## Community Emergency Drill Programs and School Disaster Prevention Education Programs



PORT OF KOBE



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Kobe City calls community-based disaster prevention organizations "Disaster-Safe Welfare Communities."  
The short name for a Disaster-Safe Welfare Community is "**BOKOMI**".





# **“BOKOMI” Guide Book**

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from  
the Great Hanshin-Awaji Earthquake

**Community Emergency Drill Programs  
and  
School Disaster Prevention Education Programs**

January 2010



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## Acknowledgements

In recent years, we have witnessed an increasing number of natural disasters around the world. These disasters seem to be closely related to climate changes on a mass global scale, and the damage seems to be mounting. It is said that 90% of the death toll from natural disasters is concentrated in developing countries. In this background, at the United Nations World Conference on Disaster Reduction (Hyogo Conference), held in Kobe City in January 2005, it was agreed that developing countries' disaster response ability must be strengthened through international cooperation.

Japan, a country that experiences natural disasters most frequently in the world, has gained knowledge and developed the skills of responding to and preparing for disasters through its past experiences. In January 1995, Hyogo Prefecture experienced an unprecedented disaster, the Great Hanshin-Awaji Earthquake, which registered as many as 6,400 deaths with the greatest total amount of damage at approximately 10 trillion yen. Through the recovery process, Hyogo learned many lessons and acquired much knowledge on disaster management.

On April 1, 2007, the Japan International Corporation Agency (JICA) and the Hyogo Prefectural Government jointly established the "Disaster Reduction Learning Center (DRLC)" inside the JICA Hyogo International Center, as a base of effectively developing human resources who engage in disaster prevention in developing countries. DRLC conducts the overall planning and coordinating activities for JICA training programs on disaster prevention, in cooperation with other resource agencies in Hyogo, and they disseminate information to the rest of the world about Japan's knowledge and experiences on disaster prevention.

In recent years, "community-based disaster management" has drawn people's attention in the field of international cooperation, in terms of disaster management. This is an idea that it is important not only to provide support for developing countries to implement sabo works and build levees, as well as to improve their disaster specialists' technical skills, but also to provide support for the improvement of the ability of their local communities to prevent disasters in order to reduce damages.

In FY2007, in cooperation with Kobe City (Kobe City Fire Bureau), DRLC launched the JICA Training and Dialogue Program, "Community-Based Disaster Prevention - Introduction of Kobe's Efforts," for developing countries in Asia that frequently experience natural disasters. Through this training program, participants can learn the importance of "self-help and mutual assistance" that Kobe City has learned from its experience with the Great Hanshin-Awaji Earthquake. The participants will also learn how to organize a voluntary organization for disaster prevention, "Disaster-Safe Welfare Community," which was originally formed as a practical example of mutual assistance, how to manage the groups and how to conduct practical disaster prevention activities.

The systems of the "Disaster-Safe Welfare Community" were created by Kobe citizens with the hope that "we will not suffer again or let other people suffer from such disasters." During the past 15 years after the earthquake, Kobe citizens have developed these systems by continuous trial and error. This is a good example of "community-based disaster management" that Kobe City can proudly present in the world.

In order to share the Kobe City's examples with many people in the world, not only with those who participated in JICA training programs, the DRLC has published this guidebook, in cooperation with Kobe City Fire Bureau.

Special thanks go to the Kobe City Fire Bureau and the Kobe citizens for their supports in issuing this guidebook.

I hope that this guidebook, which was created based on the precious lessons learned through the experience of the Great Hanshin-Awaji Earthquake, will contribute to disaster prevention and reduction in your country and your community, sending the message of Kobe citizens to people all over the world and for future generations.

January 2010



***Eizen IREI***  
Director General, JICA Hyogo  
(Director General, Disaster Reduction Learning Center)

## Foreword

In January 1995, we, the citizens of Kobe City, experienced a massive earthquake. Through our own experience, we have learned how important it is to be “prepared for emergencies.”

The greater the disaster, the larger the damage the local government suffers from. The deterioration of administration systems caused by such a huge disaster can lead to delays in providing support for citizens. Therefore, during the primary stage of a disaster and during the first few days following a disaster, citizens may also need to respond on their own.

In such cases, the “preparations” for emergencies that have been made on a regular basis will be greatly valued. Various preparations can be made for disasters, such as improving earthquake-proof equipment in houses, preparing emergency goods that can be easily carried out in case of a disaster, and preparing the necessary materials and devices to directly respond to the disaster. And, last but not least, conducting regular emergency drills is very important for being prepared for natural disaster situations.

Kobe City, based on the lessons learnt from the earthquake, established voluntary organizations for disaster prevention in communities, “BOKOMI,” or Disaster-Safe Welfare Communities. BOKOMI perform disaster drills on a regular basis, to be prepared for an emergency.

When we look at the world, various forms of abnormal weather patterns are occurring that are caused by global warming, due to the emission of greenhouse gasses such as carbon dioxide, and the destruction of forests, which naturally absorb the carbon dioxide that is emitted into the air. Large-scale natural disasters, including earthquakes and volcanic eruptions, have also been witnessed each year in various areas around the world.

How can we tackle the disruption to our daily lives that these natural disasters potentially present? Preventive measures that we take against natural disasters may be minuscule in the face of the tremendous power of Mother Nature.

It is impossible to stop “natural disasters” from happening, but at least we can “prepare” for them. Recently, the new term, “gensai,” or “to reduce disasters” has commonly been used in Japan. We cannot reduce the damage from disasters to zero but we can do our best to reduce the destruction to a small amount. I believe that it is community-based disaster prevention led by citizens that plays the central role in reducing disasters.

In this guidebook, we have introduced some activities of BOKOMI (the voluntary organizations for disaster prevention in Kobe City), hoping that their activities will inspire people around the world who are interested in community-based disaster prevention. We have also included the information on school disaster prevention education programs that we created.

In Japan, disaster education in schools is mostly teacher-oriented. In our city, we offer educational programs that are resident-oriented and that involve the entire community in preparing for and working toward disaster prevention. It will be my great pleasure if this guidebook encourages people in your country to engage in community-based disaster prevention activities. We, those who have experienced the destructive effects caused by the great earthquake, hope to contribute to “reducing the number of disasters” in the world.

January 2010



***Toshiyuki ONODA***  
Director General, Fire Bureau, CITY OF KOBE

## 1. Background to the Creation of the Guidebook

The Great Hanshin-Awaji Earthquake which occurred at 5:46 a.m. on January 17, 1995 caused devastating damage in the Hanshin-Awaji region including Kobe City.

The earthquake destroyed a large number of houses and fires broke in many parts of the city. This made it nearly impossible for rescue units and firefighting units to reach and operate at all the disaster sites.

Therefore, rescue operations were conducted by citizens at many disaster sites in the city.

Citizens also battled the fires by forming bucket brigades to carry water to the fires.

However, they did not have enough equipment to act in an organized manner nor did they get appropriate training routinely.

Kobe City learned lessons from the earthquake and the city government has focused on establishing and developing voluntary organizations for disaster prevention in communities. It is also distributing various disaster prevention equipment and materials, assisting the organizations in conducting different emergency drills and offering them subsidies to conduct disaster prevention activities.

Kobe City calls these community-based disaster prevention organizations “Disaster-Safe Welfare Communities.” The short name for a Disaster-Safe Welfare Community is BOKOMI, which is the abbreviation of its Japanese name “*Bosai Fukushi Komyunithi*”.

The Kobe City Board of Education is also developing various educational materials on disaster prevention which can be used in schools, in order to pass on the lessons learned from the earthquake to young people.

This guidebook introduces a series of emergencies drill programs which can be conducted by community-based disaster prevention organizations and a series of disaster prevention education programs mainly targeting elementary schools. (The content is taken from a booklet produced by the Kobe City Fire Bureau.)

The Kobe City Fire Bureau (**KCFB**) is assisting with training projects conducted by JICA (Japan International Cooperation Agency) as part of human resource development in the disaster prevention field in developing countries. In the JICA training and dialogue program “Community-Based Disaster Prevention - Introduction of Kobe’s Efforts” which is jointly conducted by JICA Hyogo and KCFB, we introduce the system of BOKOMI, community-based disaster prevention organizations in Kobe and explain their specific activities to the training participants who are involved in disaster management in disaster-prone countries such as Turkey, Sri Lanka, Indonesia, Vanuatu and China. When they return to their countries, they take back what they have learned in Japan and implement BOKOMI activities in a way which are suitable for their country or region.



We hope that this guidebook can provide useful information for conducting emergency drills and techniques to connect community-based disaster prevention activities and disaster prevention education at school, when you establish and nurture community-based disaster prevention organizations in your country.

We hope that usage of this guidebook can contribute to limiting damage caused by disasters in your country.

[Cases of Disaster Prevention Activities Conducted by Ex-participants]



A drill involving bucket brigades as part of disaster prevention education at school (Vanuatu)



A first aid workshop conducted for community residents (Turkey)

## 2. Kobe's Community-Based Disaster Prevention Organization—BOKOMI

Kobe's community-based disaster prevention organizations "Disaster-Safe Welfare Communities" are nicknamed BOKOMI which is the abbreviation of its Japanese name "*Bosai Fukushi Komyunithi*".

The establishment of BOKOMI was promoted after the Great Hanshin-Awaji Earthquake. Model organizations were established in 11 districts in the city starting from 1995. Currently (2009), 191 districts in the city have their BOKOMI, covering the whole area of Kobe City (BOKOMI have been organized in 100% of the Kobe City districts).

BOKOMI are established based on municipal elementary school district by the residents.

The reason why BOKOMI are based on elementary school districts is because there is an existing "Welfare Community" organization established for welfare-purposes in each elementary school district and a disaster-prevention (*bosai*) organization was integrated into the existing organization.

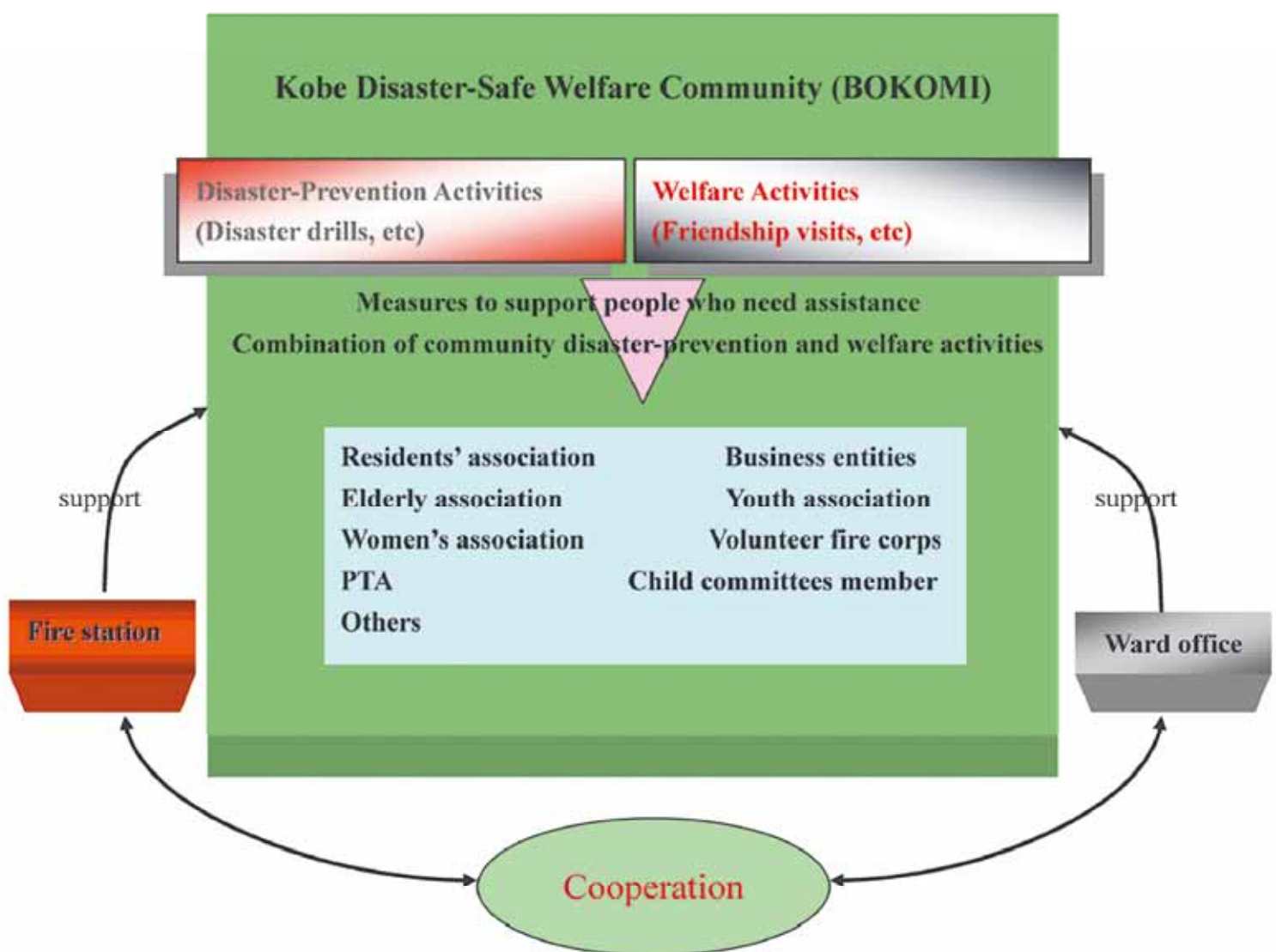
Also elementary schools serve as evacuation sites for communities in emergencies (such as disasters and crimes) in Japan. This is another reason why BOKOMI is established in each elementary school district, so that each BOKOMI can operate their evacuation site in the case of emergency.

The process of establishing BOKOMI in local areas is the following. Firstly, the establishment of a community-based disaster prevention organization is discussed and decided on by local government organizations including the local city office (ward office) and the local fire station, together with leaders of local residents' associations, women's associations, elderly associations, volunteer fire corps, PTAs, etc.

Once the establishment of BOKOMI is decided on, the equipment and materials needed for the activities are distributed from the local government (Kobe City) and storehouses are installed in local parks, in preparation for emergencies.

In normal times, each BOKOMI conducts various emergency drill programs as explained in later pages including how to use the provided equipment and materials, as part of the activities for preparing for major disasters.

In order to enable the utilization of people's networks in case of emergency, BOKOMI also conduct welfare activities (such as keeping in touch with and holding lunch gatherings for the elderly who live alone) as an effort to cover both community welfare activities and community disaster prevention activities. This is a characteristic feature of the community-based disaster prevention organizations in Kobe City which were established based on the lessons learned from the Great Hanshin-Awaji Earthquake.



### 3. Kobe's Disaster Prevention Education (Collaboration between Community-Based Disaster Prevention Activities and Disaster Prevention Education at School)

#### Cooperation between BOKOMI and a School

In Japan, “disaster prevention education” is not a specific single subject unlike “arithmetic” or “Japanese.”

Disaster prevention education in Japan includes: learning about the mechanisms of volcanic eruptions and earthquakes, the weather, etc. in “nature study” lessons; learning about natural disaster prevention, the roles of the police, the fire service and community-based disaster prevention activities, etc. in “social studies” lessons; and learning about the importance of lives and the spirit of mutual help in “ethics” lessons and “integrated learning” lessons. In addition, students typically learn about disaster prevention through emergency drills which prepare them for disasters and fires, together with evacuation drills which schools are required to conduct by law in Japan.

In Kobe City, local BOKOMI assist with these emergency drills at school, because cooperation between schools and communities has the following advantages.

*Advantage 1* BOKOMI can give advice and guidance to schools because they conduct emergency drills in their community regularly and they have the know-how, equipment and materials for the drills.

*Advantage 2* The community residents experienced the Great Hanshin-Awaji Earthquake and therefore they can directly pass on lessons learned from the earthquake to children who did not experience it. In addition, school teachers who did not experience the earthquake are also increasing in number. Community residents who participate in school activities can assist teachers who have not experienced earthquakes and enable more effective disaster prevention education through which children can really understand its importance.

*Advantage 3* Children's parents and the PTA who do not often participate in community drills are more likely to participate in emergency drills held at school. This provides a chance for them to become interested in participating in community-based disaster prevention activities and this can lead to the revitalization of the BOKOMI.

## Cooperation among Local Government Organizations and their Assistance to Communities

Kobe City Board of Education and KCFB (which supports BOKOMI) jointly developed a series of disaster prevention education programs which can be used at schools (mainly elementary schools) and other educational situations. These programs were then compiled in a booklet. (The series of school disaster prevention education programs explained in this guidebook is taken from that booklet.)



[KOBE City Disaster Prevention Education Support Programs ]

This booklet includes a host of education programs through which children can obtain knowledge including techniques for disaster prevention while thinking on their own and enjoying at the same time.

In addition to a series of disaster prevention education programs, the booklet also explains how schools can cooperate with the local BOKOMI when conducting each program.

The booklet is distributed to BOKOMI as well as to schools with the aim of promoting integrated disaster prevention education activities by communities and schools.

It is expected that using the same booklet on disaster prevention education will promote coordinated activities between communities and elementary schools.

KCFB also coordinates schools and communities by deploying a person in charge of community-based disaster prevention to each fire station, who is responsible for giving advice on disaster prevention education and drills, renting educational materials and other equipment and materials, as well as dispatching fire station staff to communities and schools.

**Framework for Cooperation among Various Sectors in Hyogo Prefecture and Kobe City  
(Local Government Organizations, Universities, Communities, Schools, Private  
Companies, NGOs, etc.)**

Since the Great Hanshin-Awaji Earthquake which occurred 15 years ago, people in Hyogo Prefecture and Kobe City have learned the importance of cooperation among various sectors (“horizontal” relationship) for improving the disaster prevention capabilities of communities and promoting disaster prevention education at schools, rather than each sector individually conducting their activities (“vertical” relationship).

Through the 15 years of experience, the cooperative framework has been developed as shown below, through which various sectors in Hyogo and Kobe are now supporting the activities of communities and children.

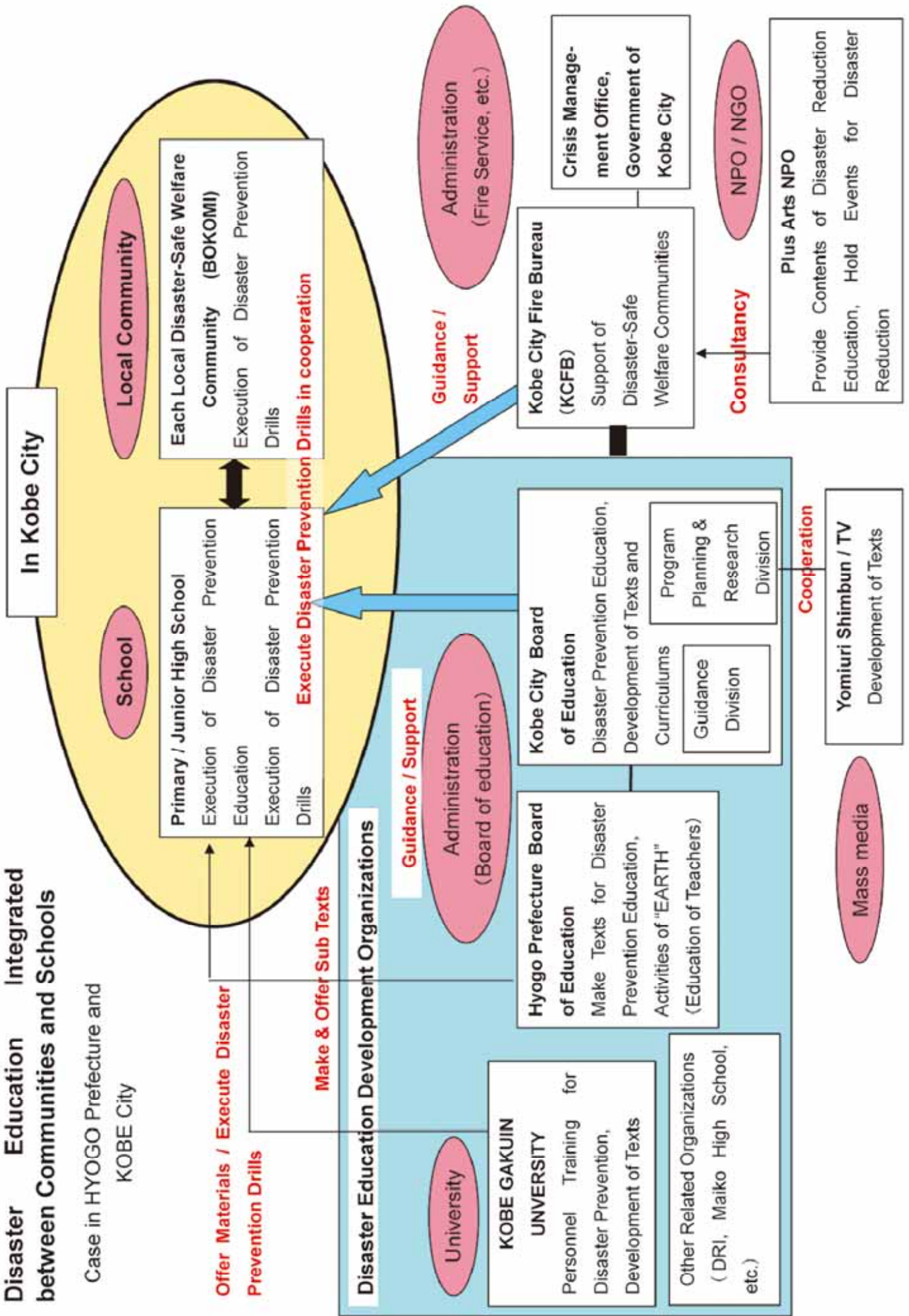
**(See the diagram in the next page [Disaster Education Integrated between Communities and Schools].)**

We hope that you will use this information when you promote disaster prevention in communities in your country, because establishing collaboration between community-based disaster prevention activities and disaster prevention education at schools can lead to both the revitalization of the community activities for disaster prevention and better quality disaster prevention education at schools.



# Disaster Education Integrated between Communities and Schools

Case in HYOGO Prefecture and KOBE City



## 4. How to Use This Guidebook

### (1) Community Emergency Drill Programs

This part explains various drill programs which can be conducted by local community residents, as guidance for community-based disaster prevention organizations.

This part also includes the information about how to develop a drill plan and how to conduct emergency drills when implementing drills in local communities.

When you instruct local communities to conduct emergency drills, you can utilize the programs in the guidebook and share the content with community members.

If no specific framework for disaster prevention exists in the area, you could utilize existing districts and different actors in the districts (such as residents' organizations, religious institutions, women's associations and mutual support groups). If there are groups which are working on specific issues in the community (such as welfare, the environment and healthcare), you could work with these groups and foster them so that they can work on disaster prevention activities in addition to their current activities.

For example, groups which work on

“	welfare	+ disaster prevention”
“	the environment	+ disaster prevention”
“	healthcare	+ disaster prevention”

can be considered.

It is also recommended that you will check and discuss with related organizations in advance on which government organizations can assist disaster prevention activities in what ways (in terms of drill guidance, renting equipment and materials, providing a place for the activities, financial support, etc.) so that you can present the information to residents.

### (2) School Disaster Prevention Education Programs

This part explains various disaster prevention education programs which mainly target elementary schools. This part also includes examples of a school disaster management plan and a school annual disaster prevention education plan.

The programs (and descriptions and references of the programs) are designed to be instructed and utilized mainly by teachers, but most programs can be conducted in cooperation with local communities. So you can utilize the information for implementing community-and-school joint educational activities.

In Kobe, local communities (BOKOMI) assist schools in conducting emergency drills which are normally held following evacuation drills at the schools. Local government organizations including fire stations also assist in the emergency drills.



**(3) Points to Note**

The program content is mainly for activities involving earthquake preparedness. The emergency drill programs and disaster prevention education programs are also based on conditions in Japan. Therefore, please modify the content to meet your country's actual conditions when you use the information.

In Japan, governmental support for emergency drills and first aid training is mainly provided by fire stations. Any governmental support suited for the actual condition of each country should be provided through appropriate frameworks.

It is also a good idea to review and discuss among government organizations on the cooperative framework of government organizations in this field.



