Kobe’s CBDRM efforts after the Great Hanshin - Awaji Earthquake,

“BOKOMI”

=Kobe City Disaster-Safe Welfare Community

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“BOKOMI” = Kobe City Disaster-Safe Welfare Community

1. Great Hanshin-Awaji Earthquake, 1995, Kobe, Hyogo
2. What is BOKOMI?
3. Sustainable Education on DRR
4. Community Disaster Management Plan
5. BOKOMI on abroad

HFA Priorities for Action 1, 5
- Community Participation

HFA Priority for Action 3
- Training on DRR

HFA 2 Priority 1, 2 and 4
- Governance and Preparedness

HFA 2 International Cooperation
After the EQ only in 14 mins.

V.S.

54 fires

V.S.

38 pumpers
# Outline of Great Hanshin-Awaji Earthquake

## 1 Occurrence

<table>
<thead>
<tr>
<th>Time &amp; Date</th>
<th>5:46 am, Tuesday, January 17, 1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth</td>
<td>Approximately 16 km</td>
</tr>
<tr>
<td>Magnitude</td>
<td>7.3 on the Richter scale</td>
</tr>
<tr>
<td>Seismic intensity</td>
<td>7 on the Japanese scale</td>
</tr>
</tbody>
</table>
| Characteristics   | Directly below the metropolitan area  
Simultaneous occurrence of horizontal and vertical shaking |

## 2 Damage (including damages in the areas outside the city)

<table>
<thead>
<tr>
<th>Dead</th>
<th>6,434 persons (including 3 missing persons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injured</td>
<td>43,792 persons</td>
</tr>
<tr>
<td>Completely or partially collapsed</td>
<td>249,180 buildings</td>
</tr>
</tbody>
</table>
[Number who needed rescuing after the earthquake]

- Trapped 164,000 persons
- Escaped without assistance 129,000 persons
- Rescued 35,000 persons

◎ Rescued by firefighters or the police
    7,900 persons (22.5%)
◎ Rescued by citizens 27,100 persons (77.5%)

[Firefighting]
◎ Firefighting using bucket brigades and offering materials in various parts of the city
The percentage of people rescued by the rescue parties was **only 1.7%**. Most of the people was rescued by their family members and neighbors.

*Figure Who rescued buried or confined persons?*

- By himself/herself: 34.9%
- By family members: 31.9%
- By friends/neighbors: 28.1%
- By passersby: 2.6%
- By rescue parties: 1.7%
- By others: 0.9%

*The percentage of people rescued by themselves or by family members and neighbors: About 98%*

Source: “Survey report on fires in the Hyogo-ken Nanbu Earthquake” by Japan Association for Fire Science and Engineering
Naturally, even after the disaster, firefighting forces remain strong.

Number of firefighters: 1,329 → 1,486

Bulk water transportation system

“Super Eagle Kobe” special high-level rescue team

Command unit

“BLUE-CAT” rescue team for large-scale disasters
Efforts based on the experiences of the earthquake disasters

What should the administration do to make the city resistant to disasters?

Administration

① Strengthening of public fire-fighting power

② Strengthening of voluntary disaster prevention power by citizens

Insufficient

- Training and instruction
- Leader development
- Distribution of materials and equipment

“Organization by the citizen and for the citizen”

+ “Administrative support”
Basic principle of voluntary disaster prevention organization
“Self-help/Mutual help/Public help”

- **Self-help**
  - Protect yourself by your own effort.

- **Mutual help**
  - Local communities and neighbors cooperate with each other.
  - Regional disaster prevention power
  - Reduce damages in the event of disaster.

- **Public help**
  - The administrative bodies such as the government and the municipal governments and fire-extinguishing organizations rescue and support.
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HFA
- Priorities for Action 1, 5: Community Participation

HFA
- Priority for Action 3: Training on DRR

HFA 2
- Priority 1, 2 and 4: Governance and Preparedness

HFA 2
- International Cooperation
Outline of Kobe city

1. Area 552.80 Km²
2. Population 1,532,305 people
   (Number of foreigners among them: 42,856 people)
3. Number households 665,118 households
4. Administrative district 9 districts
1,5 million population in Kobe City

Kobe City Fire Bureau = full-time
1,400

Volunteer Fire Corps = part-time
4,000

191 BOKOMI = Citizens
More than 13,000 Citizen leaders.
800 drills/year

more Technical

more Territorial
Launch of voluntary disaster prevention organization by Kobe citizens (1995~)

“Kobe City Disaster-Safe Welfare Community”

Common name: BOKOMI

- Rate of formation 100%
- Area: Elementary school district
  *191 bodies in the city

Disaster prevention activities (disaster prevention training, etc.)

Disaster prevention based on daily welfare activities

- Resident’s association
- Aging association
- Women’s association
- PTA
- Welfare children’s commissioner

Welfare activities (fraternity visit, etc.)

Business establishment
Youth association
Volunteer fire corps
Others
Examples of activities in normal times

<table>
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<tr>
<th>Team</th>
<th>Activities</th>
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<tbody>
<tr>
<td><strong>Information team</strong></td>
<td>Utilization of information on people requiring assistance, implementation of information collection and transmission training, etc.</td>
</tr>
<tr>
<td><strong>Fire extinguishing team</strong></td>
<td>Implementation of fire extinguishing training, securing of fire extinguishing water, etc.</td>
</tr>
<tr>
<td><strong>Rescue team</strong></td>
<td>Learning of rescue technique, learning of first aid, etc.</td>
</tr>
<tr>
<td><strong>Escape guiding team</strong></td>
<td>Inspection of evacuation center/route, creation of safety map, etc.</td>
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<tr>
<td><strong>Life support team</strong></td>
<td>Procurement of rice cooking tools/food supply, etc. training of meals preparation/distribution, etc.</td>
</tr>
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Support measures implemented by Kobe City

(1) Provision of disaster prevention materials and equipment at the time of formation

(2) Subsidizing of activity expenses

(3) Support of development of citizen’s disaster prevention leader

(4) Support by the fire-fighting officer service system by district

(5) Support by volunteer fire corps
(1) Provision of disaster prevention materials and equipment at the time of formation
(1) Provision of disaster prevention materials and equipment at the time of formation
(2) Annual subsidizing activity expenses

Operating activity expenses (training expense, meeting expense, materials and equipment purchase expenses, etc.)

- 140,000 yen per BOKOMI

Activity expenses by proposal (For pioneering efforts)

- Up to 200,000 yen per BOKOMI

- The target of subsidy shall be examined by the examination committee.

- For this fiscal year, 29 projects among 49 applications were subsidized.
(3) Training for “Civil Disaster Reduction Leader”
(Training of trainers)

The disaster prevention leader gives guidance to citizens during training and makes training plans in normal times.

**Toward development of one citizen’s disaster prevention leader every 30 to 50 households in the whole city**
(3) Training for “Civil Disaster Reduction Manager” (Training of trainers)

Examples of activities in normal times

“Civil Disaster Reduction Managers”

- **Headquarters**
  - President/vice president
  - Development of training plan
  - Implementation of general training
  - Preparation of evacuation center support
  - Information exchange, etc.

- **Information team**
  - Utilization of information on people requiring assistance, implementation of information collection and transmission training, etc.

- **Fire extinguishing team**
  - Implementation of fire extinguishing training, securing of fire extinguishing water, etc.

- **Rescue team**
  - Learning of rescue technique, learning of first aid, etc.

- **Escape guiding team**
  - Inspection of evacuation center route, creation of safety map, etc.

- **Life support team**
  - Procurement of rice cooking tools, food supply, etc., training of meals preparation/distribution, etc.

“Civil Disaster Reduction Leaders” And Participants
(4) Support by the fire-fighting officer service system

Two to three fire-fighting officers take charge of one BOKOMI. (Aid in consultation, support of training, attending a meeting, etc.)
(5) Support by volunteer fire corps

Members of volunteer fire corps received training and have specialized disaster prevention knowledge and techniques, and they give disaster prevention guidance to citizens and BOKOMI as the local disaster prevention leader in normal times.
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HFA 2
- International Cooperation
Effects of cooperation between “BOKOMI” and “School”

At schools
- Number of teachers who have experienced earthquake disaster is decreasing.
- Need for handing down earthquake experience and lessons
- Need for information about content of training

Children

Guardians

Within families
- Opportunities for conversation are decreasing.
- Understanding of disaster prevention is meager.

BOKOMI (voluntary disaster prevention organization)
- Participants are fixed and decreasing.
- Young people are not interested.

Support

Fire Bureau
- Would like to enhance citizens’ disaster-prevention awareness
- Would like to reinforce disaster-prevention activities in communities
- Would like to provide support for disaster-prevention training in a systematic manner
Case Example of BOKOMI Activities

Evacuation center accommodation training
With the local community as a main body

Accommodating at the elementary school to experience activities and life at evacuation center in the event of disaster.
Case Example of BOKOMI Activities

Junior disaster prevention learning
With the local community as a main body

- The local community as a main body provides a disaster prevention training for elementary school children throughout the year.
- The certificate is issued at the end of the year (by the fire station).
Case Example of BOKOMI Activities

Disaster-prevention athletic meets
Local community and elementary school

People in the local community joined the disaster prevention training as an event of the athletic meets of the elementary school to learn about disaster prevention measures with fun.

Relay race to experience evacuation from smoke
Relay race to prepare for possible evacuation from smoke

Relay race to experience rucksack packing
Relay-style competition to pack as many useful goods for evacuation as possible
Making tsunami hazard map
Disaster Management Education for Children: Meishin Area
“Susano Junior High School Walking Around the City for Disaster Management”

Hyogo ward, Kobe city, Hyogo pref., Japan
Disaster Management Sports Assembly: Wadamisaki Area
“Run It’s Tsunami!!”

Hyogo ward,
Kobe city,
Hyogo pref.,
Japan
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Case Example of BOKOMI’s Activities

Training for rescue of people requiring assistance in the event of disaster (Support of evacuation)

Evacuation training of local residents for support of elderly people living alone and physically vulnerable persons who require assistance in evacuation and life in the event of disaster.
“Community OTASUKE Guide”
Community Disaster Management Plan

Where to have HQ of Bokomi on disaster?

Where is the storage? To where Tsunami run up?
"Community OTASUKE Guide"
Community Disaster Management Plan

Flowchart

Looseleaf

BOKOMI Policy

Procedure (To do list)
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Providing of information about Kobe’s challenges

**Japan**

Issued by Fire and Disaster Management Agency, Ministry of Internal Affairs and Communications

Provision of menus to “Challenge Disaster Prevention 48”

**Overseas**

Issued by JICA (Japan International Cooperation Agency)

Collection of English menus of “BOKOMI Guidebook”
Projects of Information Providing by BOKOMI

The Disaster-Safe Welfare Community created based on the lessons learned from the Great Hanshin-Awaji Earthquake and its activities and the city’s support measures have been getting a lot of attentions from other cities outside Kobe city and overseas.

Kobe city which was helped by all over the world at the time of the earthquake have the responsibility to transmit the lessons obtained from the earthquake in Japan and overseas to contribute to improvement of the global disaster prevention power.
BOKOMI in Badran, Indonesia
BOKOMI Completion Ceremony and first large-scale drill (IKC)
BOKOMI Completion Ceremony and first large-scale drill (IKC)
BOKOMI Completion Ceremony and first large-scale drill (IKC)

- Display of emergency goods
- Volcano evacuation drill
- Treating injuries
- Disaster preparation game
- Smoke experience tent
- Meal preparation experience
After BADRAN BOKOMI (June 2011)

Preparing evacuation areas

Pumps with handcarts developed locally

Group from far away here to observe

Firefighting with wet burlap sacks

Firefighting drill

Hose winding drill
Next BOKOMI may be in your country...
At the end of my presentation...
“BOKOMI”
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Thank you very much!

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