

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

HFA
Priorities for Action 1, 5
-Community Participation

1 Great Hanshin-Awaji Earthquake,
1995, Kobe, Hyogo

HFA
Priority for Action 3
-Training on DRR

2 What is BOKOMI ?

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

3 Sustainable Education on DRR

4 Community Disaster Management
Plan

HFA 2
International Cooperation

5 BOKOMI on abroad





Kobe, Hyogo, Japan
5:46 AM 17 Jan 1995



After the EQ only in 14 mins.



54 fires

V.S.



38 pumpers



Outline of Great Hanshin-Awaji Earthquake

1 Occurrence

Time & Date	5:46 am, Tuesday, January 17, 1995
Depth	Approximately 16 km
Magnitude	7.3 on the Richter scale
Seismic intensity	7 on the Japanese scale
Characteristics	Directly below the metropolitan area Simultaneous occurrence of horizontal and vertical shaking

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

Dead	6,434 persons (including 3 missing persons)
Injured	43,792 persons
Completely or partially collapsed	249,180 buildings



[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 person (22.5%)

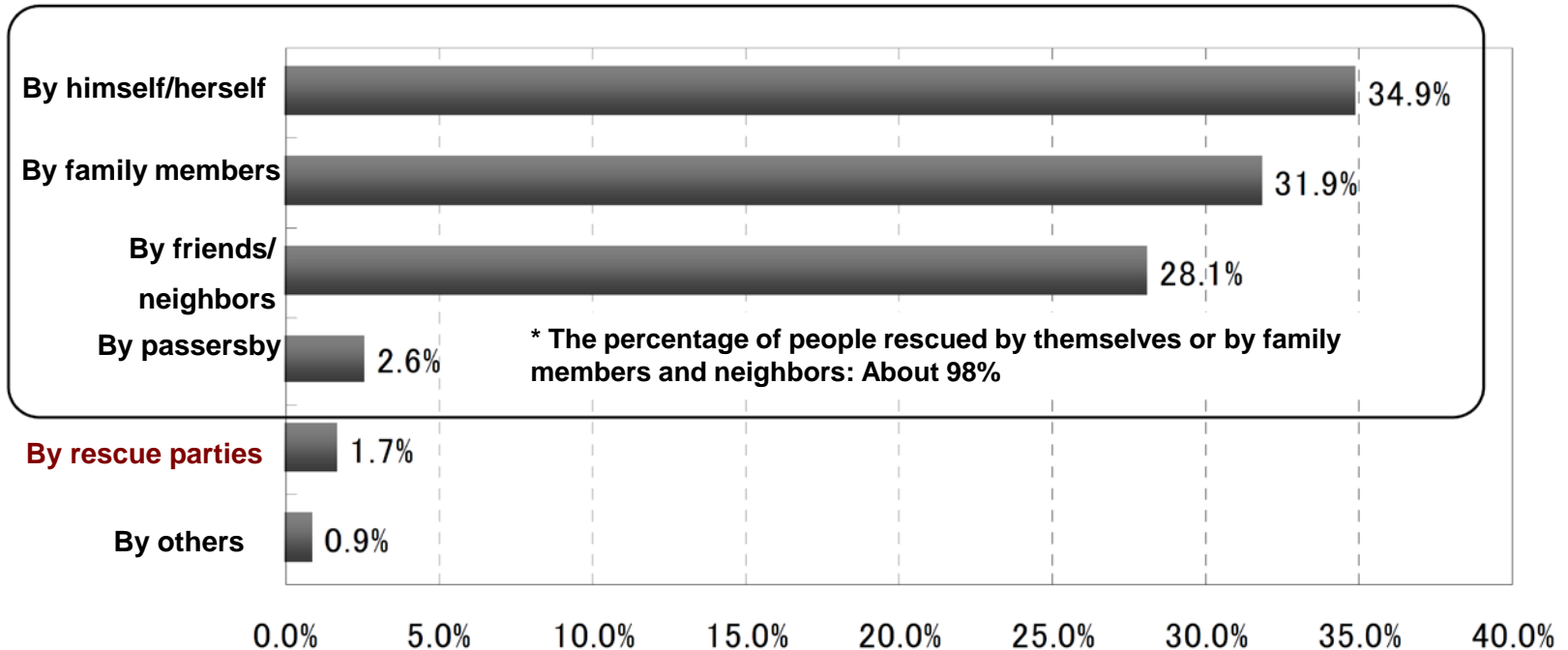
© Rescued by citizens 27,100 persons (77.5%)

[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?



Source: "Survey report on fires in the Hyogo-ken Nanbu Earthquake" by Japan Association for Fire Science and Engineering

Number of firefighters
1,329 → 1,486



Bulk water transportation system



"Super Eagle Kobe"
special high-level rescue team

Naturally, even after the
forces remain strong



Command unit

disaster, firefighting



"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

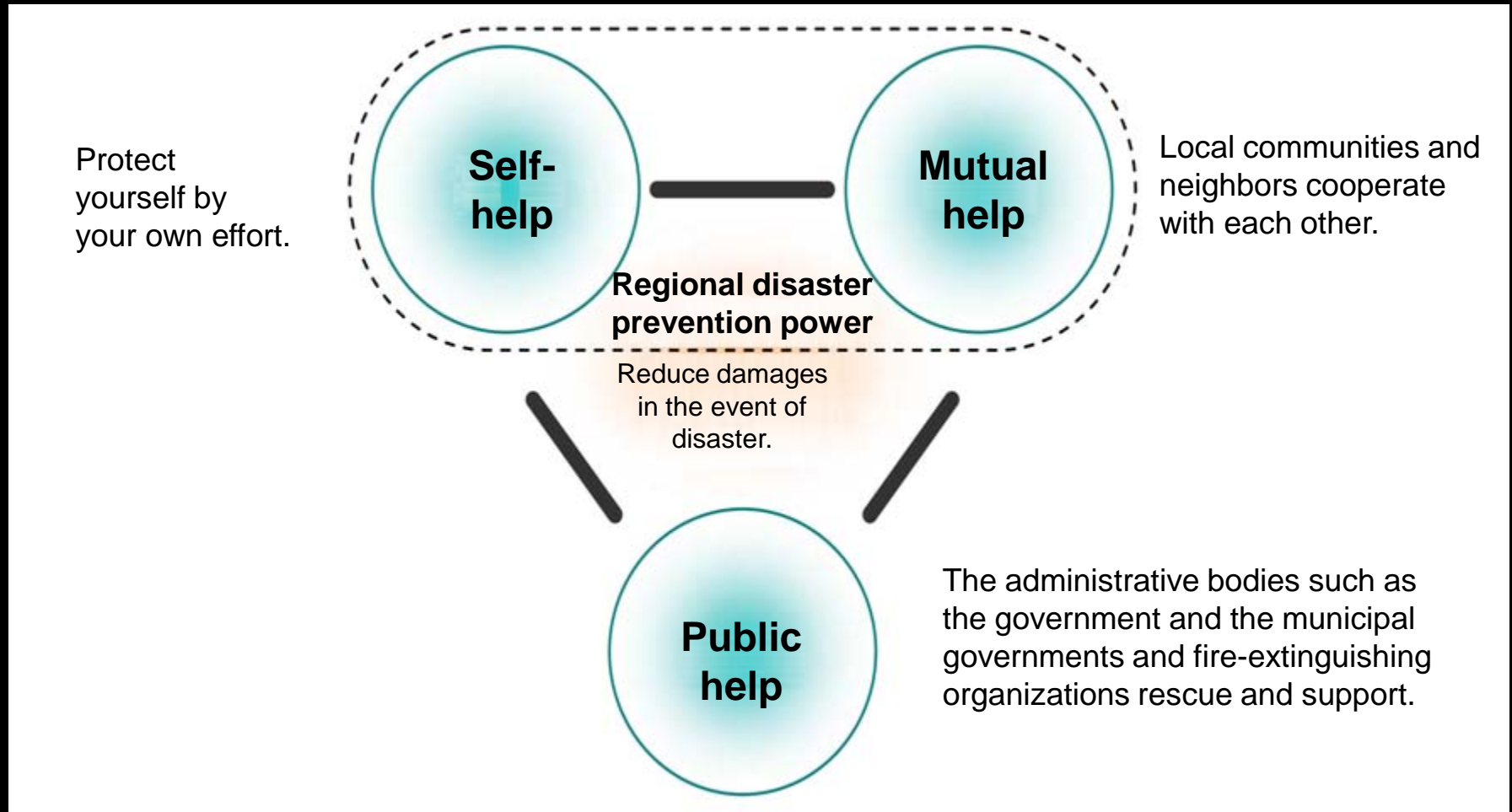
- Training and instruction
- Leader development
- Distribution of materials and equipment

“Organization by the citizen and for the citizen”
+
“Administrative support”



Basic principle of voluntary disaster prevention organization

“Self-help/Mutual help/Public help”



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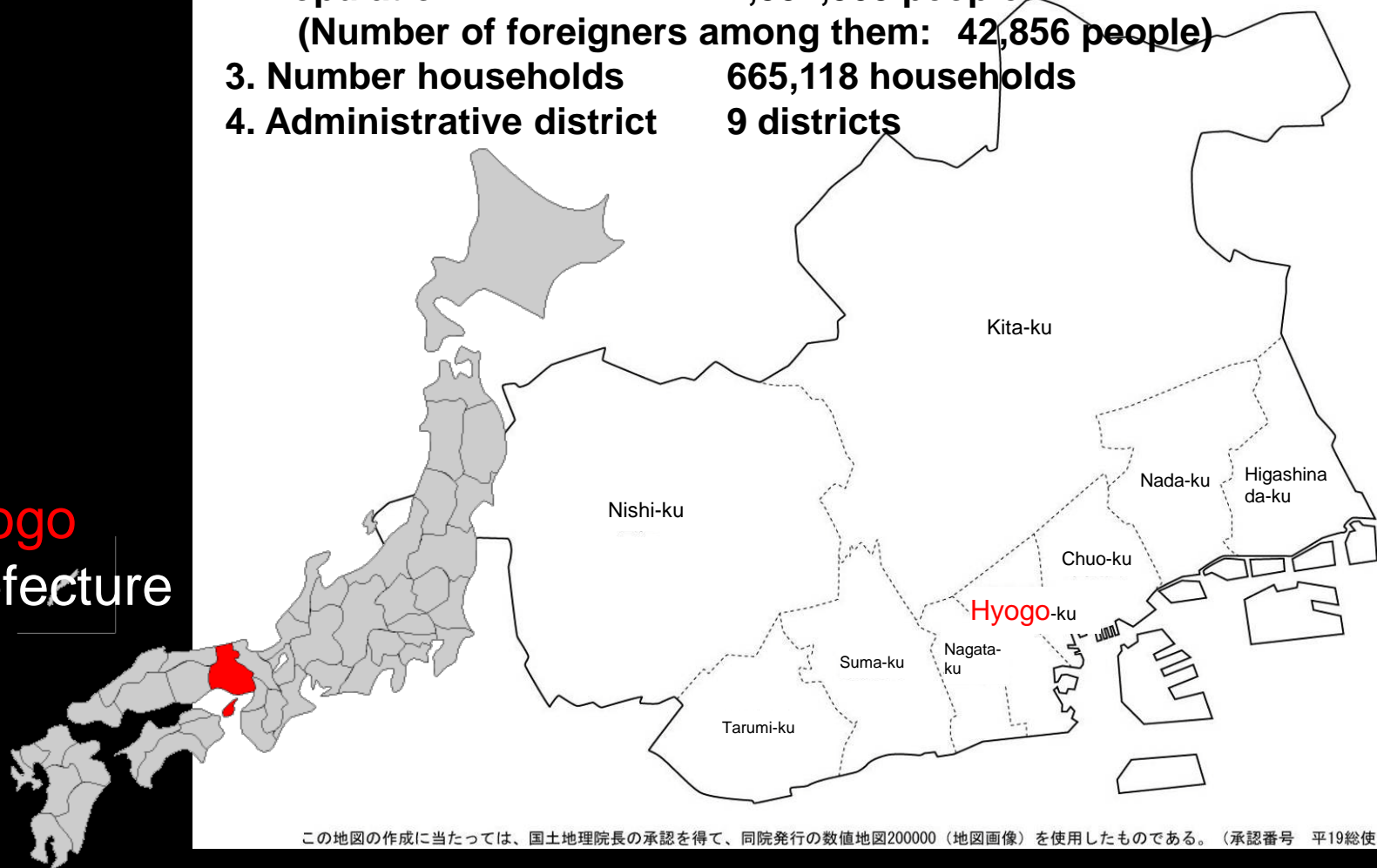
5 BOKOMI on abroad

HFA 2
International Cooperation



Outline of **Kobe** city

- | | |
|----------------------------|--|
| 1. Area | 552.80 Km ² |
| 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 |



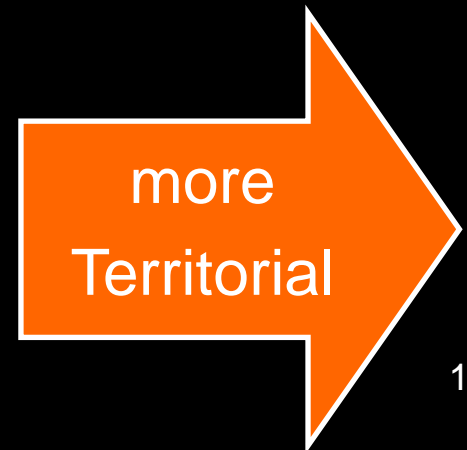
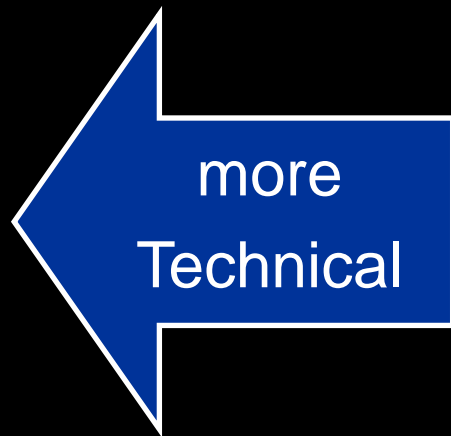
この地図の作成に当たっては、国土地理院長の承認を得て、同院発行の数値地図200000（地図画像）を使用したものである。（承認番号 平19総使、第82号）

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



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.)**

**Welfare activities (fraternity
visit, etc.)**

Disaster prevention based on daily welfare activities

- | | |
|-----------------------------------|------------------------|
| • Resident's association | Business establishment |
| • Aging association | Youth association |
| • Women's association | Volunteer fire corps |
| • PTA | Others |
| • Welfare children's commissioner | |

Examples of activities in normal times

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.

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.

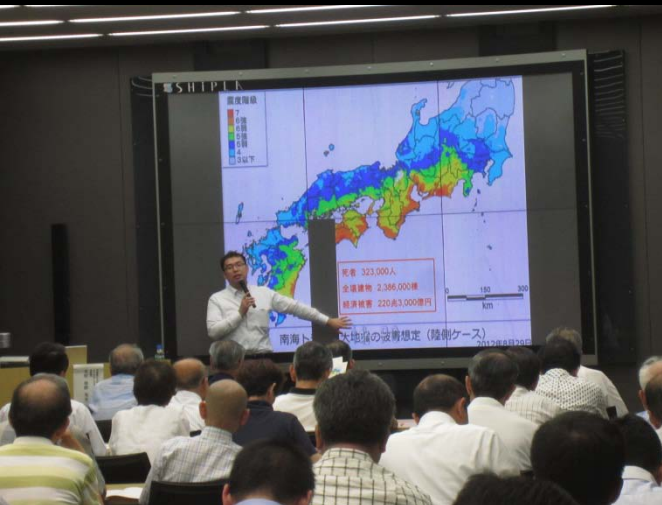
(3) Training for “Civil Disaster Reduction **Leader**” (Training of trainers)



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.

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“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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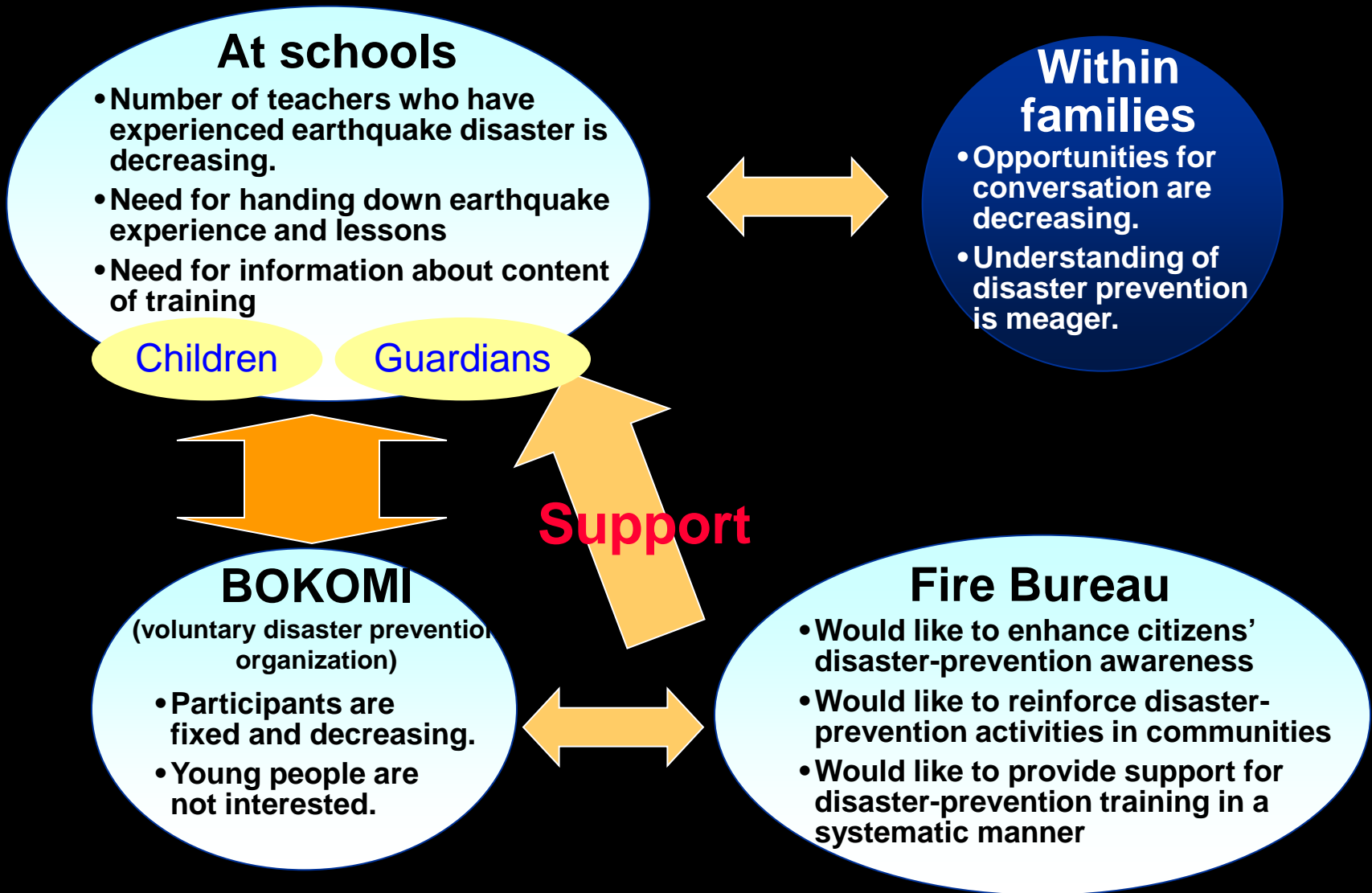
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Effects of cooperation between “BOKOMI” and “School”



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



Bucket relay training



Smoke experience



Training for calling 119
(emergency call) together with
community people

- 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

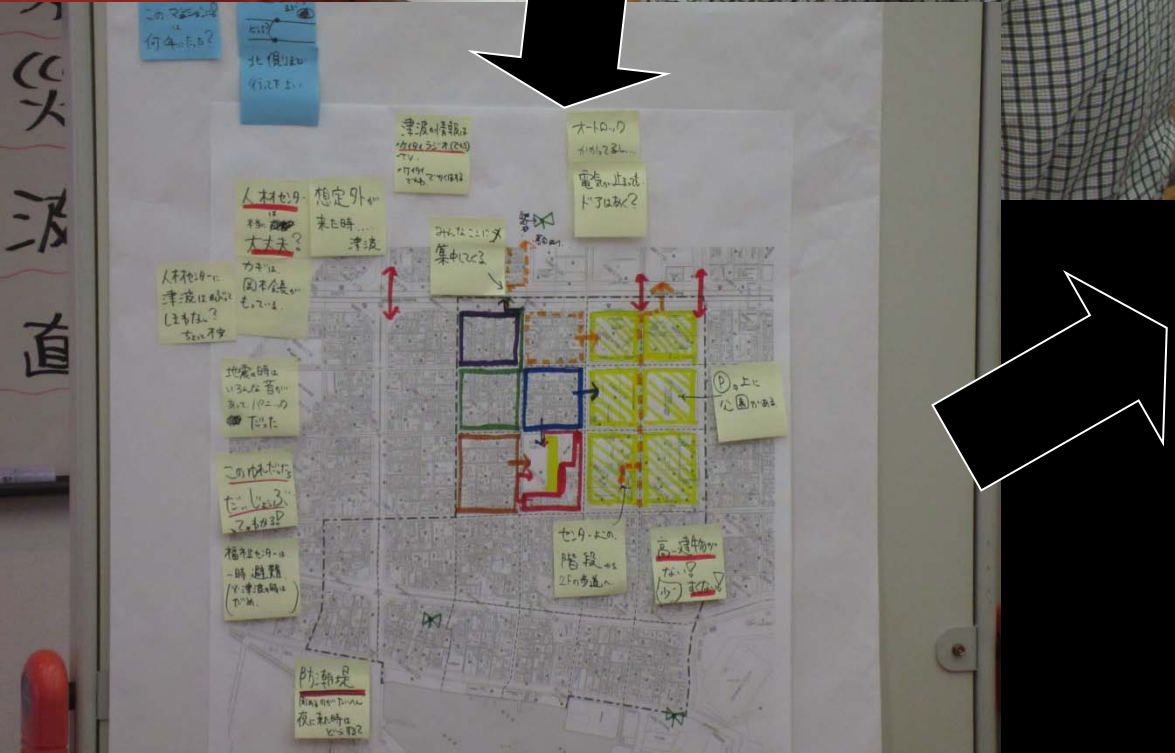
Relay race to prepare for possible
evacuation from smoke



Relay race to experience rucksack packing

Relay-style competition to pack as
many useful goods for evacuation as
possible

Making tsunami hazard map



二葉地区 東南海・南海地震津波防災計画 津波防災安全マップ



二葉地区防災福祉コミュニティ
(二葉ふれあいのまちづくり協議会)



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



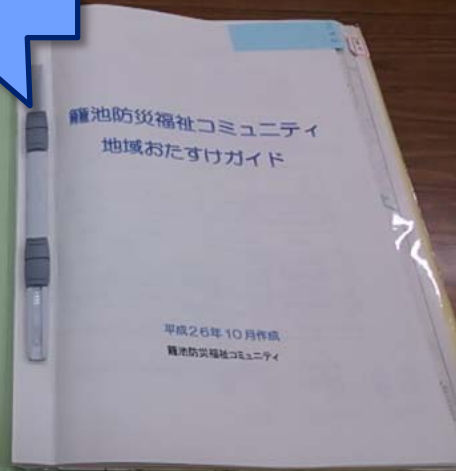
Where to have
HQ of Bokomi on
disaster ?



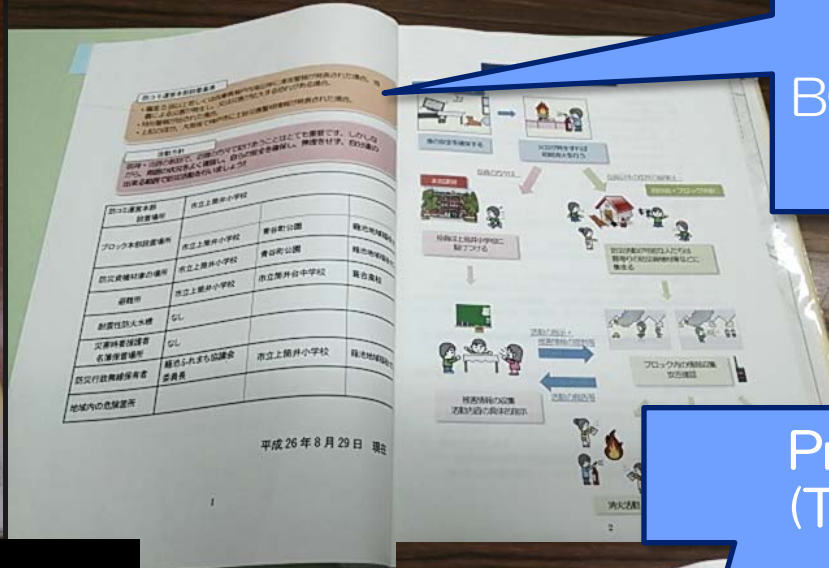
Where is the
storage ?
To where Tsunami
run up ?

“Community OTASUKE Guide” Community Disaster Management Plan

Looseleaf



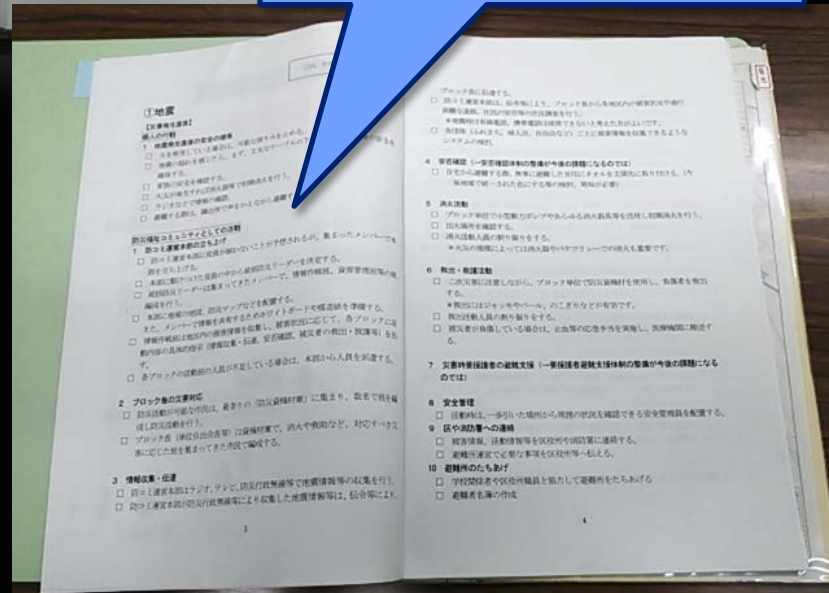
BOKOMI Policy



Procedure
(To do list)

大地震発生時の防コミ活動フローチャート

Flowchart



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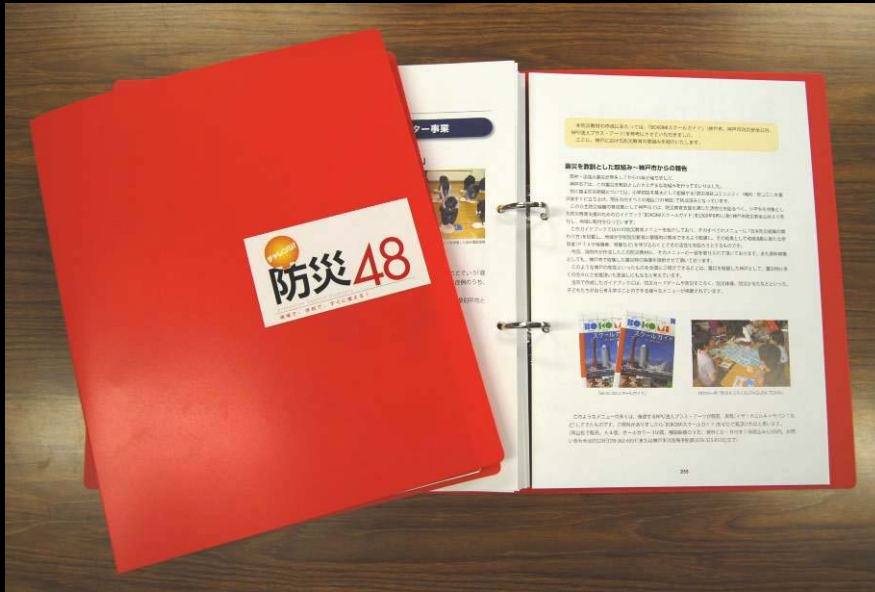
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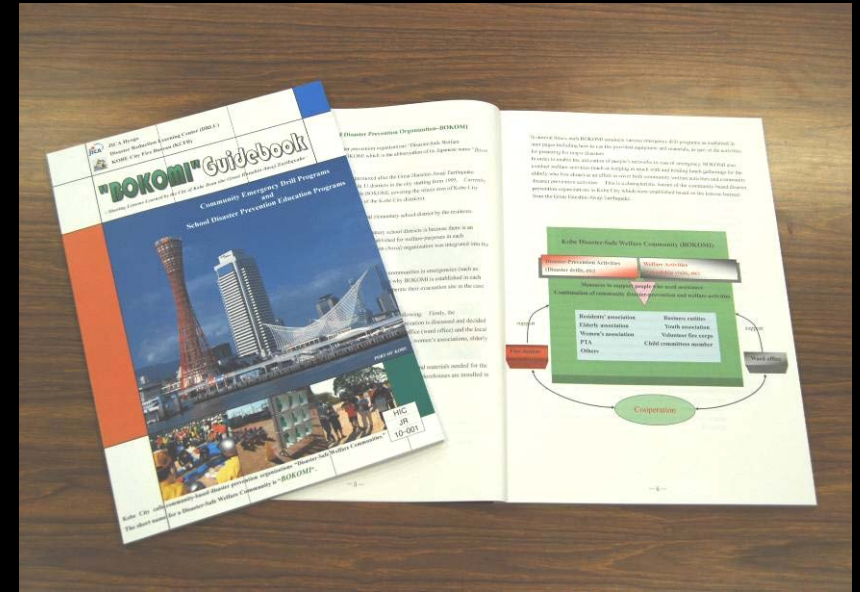
Providing of information about Kobe's challenges

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)



Materials warehouse



Leader



Pennant



T-shirts



Deputy Mayor



Speech by Fire Chief

BOKOMI Completion Ceremony and first large-scale drill (IKC)



Bucket relay



Spraying with fire pump



Water extinguishers



Women's Association preparing meals



Making cloth stretchers



BOKOMI Completion Ceremony and first large-scale drill (IKC)



Display of emergency goods



Volcano evacuation drill



Treating injuries



Disaster preparation game

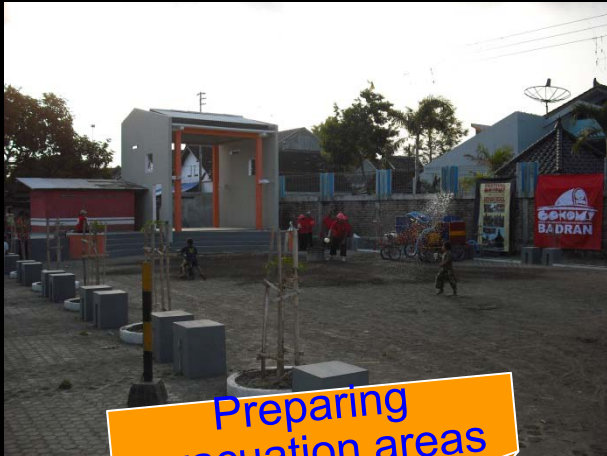


Smoke experience tent



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...



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Thank you very much!

Fire Lieutenant
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