

Chapter 4.
Civil Society Organizations for Disaster Management

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4.1. Turkish Civil Society Characteristics

4.1.1. Civil Society

In this chapter, civil societies are defined as autonomous social units and organisations, such as voluntary associations, private companies, family and professional associations, etc. These social units are based on the principles of basic human and civil rights. In each civil society, citizens act collectively in a public sphere to express their interests and ideas, exchange information, achieve mutual goals, and make demands of the public authorities.

4.1.2. Strong State and Emerging Civil Society Initiative

The Turkish government is often referred to as the “strong state,” and civil societies are still constrained by the state.¹ However, civil societies are growing in size and influence. To change the climate of the Turkish civil society, there were three major milestones: two major UN conferences, the Rio Summit in 1992 and HABITAT II in 1996, and the earthquakes in the Marmara region in 1999.

The Local Agenda 21 of the Rio Summit has been instrumental in promoting good local governance and local democracy. Moreover, formal and informal organisations, as well as grass-roots movements, were recognised as partners in the implementation of Agenda 21.

The action program passed by the HABITAT II Conference in Istanbul emphasises the significance of civil society: “The most efficient and effective disaster preparedness systems and capabilities for post-disaster response are usually provided through the contribution of volunteers and local authority action on a local level. Great importance is placed on international cooperation between cities in industrial and developing countries.” Being the first of its size in Turkey, preparation for the Habitat II Conference was a huge capacity-building exercise for Turkish civil society.

Civil society’s real contribution took place after the two earthquakes in the Marmara region. At the time, there was some hindrance of NGO activities by public authorities, such as NGOs being exiled from certain disaster affected areas by a provincial directorate whose power was stipulated by the Disaster Law. However, many Turkish civil society

¹ Civil Society and State: Turkey after the Earthquake, Rita Jalali, *Disaster*, 2002, 26(2): 120-139

organisations emerged, linking and coordinating remarkably well with international organisations, and developing networks.

4.2. Civil Society Organisations in Past Earthquakes

At the time of the two earthquakes of August 17th and November 12th in the Marmara region, many civil society organisations were newly established and existing ones became active and developed their capacities working with international development cooperation agencies and foreign civil society organisations. It is notable to point out that an umbrella coordination body, the Civic Coordination for the Earthquake, was founded to support and coordinate the activities of civil associations, state foundations, regional directorates, and professional associations. This organisation played an intermediary role in matching resources with people's needs. It also established a database wherein all data related to the structure and operation of governmental institutions, local administrations, professional organisations, NGOs, and civic initiatives was compiled, and the coordinates of intermediaries were stored whereby access to this database was immediately provided. This coordination body functioned very effectively.

For the rehabilitation phase, earthquake victims associations were established in many areas to provide solidarity and help to the earthquake victims, erasing negatives caused by the earthquake. They provided assistance such as trauma care, securing a united struggle, solving problems together, providing an income-generating opportunity for producing handicrafts, etc.

4.3. Disaster Management Activities of Civil Society Organisations

It being more than 3 years since the Izmit Earthquakes, some of the organisations expanded during the disaster, decreased the number of staff and limited their activities, or split up due to differing ideologies among members. However, civil society organisations overall have developed their capacities through the emergency response and recovery process of earthquake disasters. Some of the organisations that are sensitised to mitigation have commenced studies and activities for preparedness.

Some of the organisations are highly sensitised, saying that there is no time to lose in preparing for an impending earthquake in Istanbul. Actually, a large number of search and rescue organisations exist. Some are community-based self-reliant disaster management organisations, aiming to be prepared for the coming earthquakes. Public authorities, whether they are at the provincial or municipal level, that have directly experienced or responded to the real struggle of earthquake-affected areas tend to involve these organisations in their disaster management frameworks.

Kadikoy Municipality is one of the rare and precedent cases reflecting a participatory, bottom-up approach; it involves civil organisations in the planning process of disaster management. It also assists their activities by providing operational space free of charge. However, even such organisations are faced with insufficient operational expenses to just maintain the activities. In Turkey, civil society organisations are regarded as purely voluntary. Thus, most members have primary jobs to engage and have to find time and spend their own money on the organisations. Most members of newly emerged civil society organisations are more or less in managerial positions in private companies or qualified professions.

The photo (left) is one of the civil society organisations called, “Earthquake Committee of Moda Habitants,” whose operational space was provided by Kadikoy Municipality. The area where the office is located has characteristics of a community centre, where local people come and gather in a style of caravansary. Offices of locally based social organisations, along with small shops and a mosque, encircle the courtyard is an ideal physical setting for community-based activities (photo right).



Photo 4.3.1 Office of the Earthquake Committee of the Moda Habitants, Inside (Left) and Outside (Right)

4.4. New Municipal Approach of Community-based Disaster Management Activities

4.4.1. Basic Belief of the Local Municipal Initiatives

In this section, we will introduce participatory inter-disciplinary disaster mitigation and preparedness approach as a case of one of the best practices in Istanbul. The Kadikoy Municipality clearly states that the principle duty of municipalities is to meet the local needs of inhabitants and emphasises democratic and participatory approaches.

The UN Rio Summit of 1992 emphasised that local problems can be solved best with the corporation and coordination of the local administration. Kadikoy Municipality thinks that

disaster management should also be carried out by a local municipal initiative with coordination of the civil society, scientific society, central government and volunteer organisations. Thus, a disaster management program was started under the initiative of the Research and Planning Coordination Directorate of the municipality, and this directorate is in charge of disaster management before, during, and after an earthquake.

4.4.2. Best Practices: Institutional Arrangement and Practical Operation

The best practices of the Kadikoy Municipality can be summarized in two points. One is the coordination arrangement and the other is practical operation for earthquake disaster mitigation and preparedness. Three coordination bodies has been established; namely Institutional Planning Coordination, Physical Planning Coordination, and Participatory Planning Coordination.

As for operation, Municipality Disaster Management Center, which involves local NGOs and citizens, has been established and within the same compound, Concrete and Ground Testing Laboratory is functioning for safer construction. Figure 4.4.1 shows the municipal disaster management dtructure. It is a good combination of mitigation and preparedness, institutional management and physical enforcement, such as ground and building, which will directly, relates to earthquake disaster risks. With regards to the public involvement, municipality tries to empower both local civil organization and individuals. Furthermore, the municipality has set the institutional framework of disaster preparedness mechanism of being a mediator of the province-district government and civil society including NGOs and citizens.

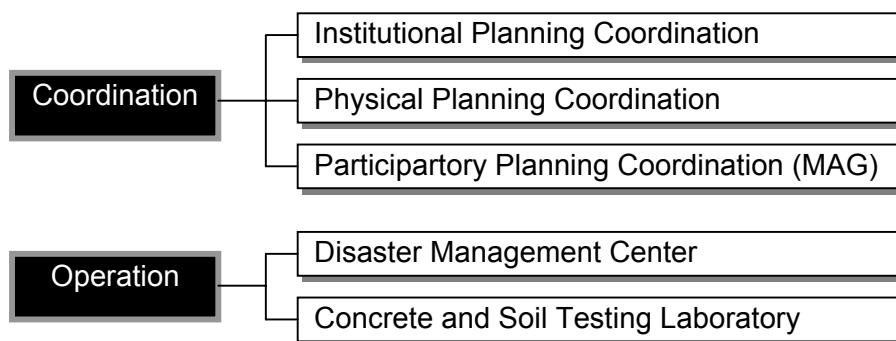


Figure 4.4.1 Municipal Disaster Management Structure

Institutional Planning Coordination was established to develop task force groups in the Municipality and to coordinate province-district task force groups and urban partners that are made up of members of central government, local government, university professors, business sectors, local volunteers, and NGOs. Physical Planning Coordination was

established to integrate a Disaster Settelement Plan in GIS and to submit it to urban partners. In this plan, the municipality was demarcated into 10 regions to balance population density, size of the area, and resources. Participatory Planning Coordination has been focused and Community-based Disaster Management Volunteers Program (MAG) has been organizing governmental rescue teams and 28 community volunteers, two of which are selected from each mahalle. The structure of the participatory planning coordination (MDV) is shown in the following chart. Participatory Planning Coordination is made up of 3 working groups: namely, volunteer training, logistic support, and local survey. Each working group has task forces such as search and rescue, first aid and health, distribution and relief, transportation security and shipping, correspondence and communication, data collection and preliminary inventory, and damage and temporary housing. (See Figure 4.4.2.)

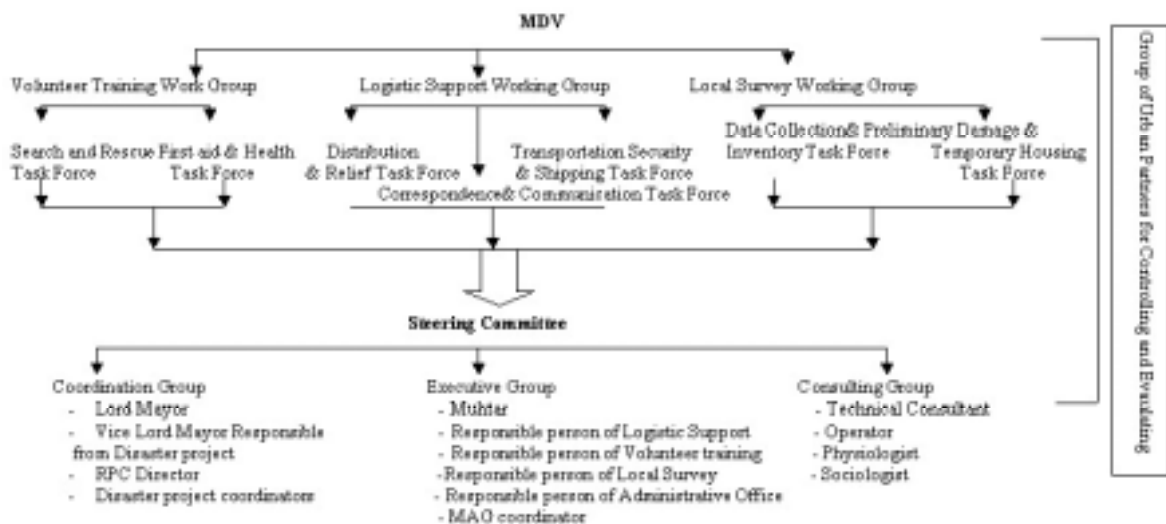


Figure 4.4.2 Participatory Planning Coordination in Kadikoy Municipality

For operation, Disaster Management Center has been operating to coordinate pre-and post-disaster activities and to store required equipments for post-disaster response activities. Concrete and Soil Testing Laboratory has been operating at the Disaster Management Center to develop a safer city and coordinate the studies to promote safe constructions. This laboratory examines soil properties to define foundation types that determines the Geological Land-use Map and eventually regulates the number of building floors, which is the practical approach in the current construction situation in Turkey that demanding the quantitative and qualitative structural requirements for safer buildings is difficult. Concrete strength analysis for existing buildings including reinforcing bar detection and carrot test are conducted. All the buildings can be checked by the request of the citizens, and there are

long waiting lists. However, examination for each building is provided, but providing the consultation service for safer construction has not started yet. The municipality is trying to provide such services and this initiative has indeed the great potential for strengthening the structures and safer environment for primary earthquake mitigation.

4.5. Status of Civil Society Organisations

Turkey is said to have approximately 4,500 foundations, 72,800 associations, and other organisations, including professional organisations, trade unions, employers unions, and cooperatives. Most of them were established after 1980, especially in recent years. The 1990s in Turkey have been a period of rapid expansion of civil society organisations. Recently in Turkey, newspapers frequently report on activities of civil society organisations, which both reflect and stimulate the public's interest in civil society.

As to the establishment of civic social organisations, state permission is required and criminal records are to be checked, but the state is generally negative about organising them. Most civil society organisation concerning disaster management can be roughly categorised as one of two types: foundations (vakif) or associations (dernek).

Foundations (vakif) have a long history, developed during the Seljuk period (1078-1293), and they were institutionalised and experienced their heydays during the Ottoman period (1299-1920). Foundation activities are based only on donations, which provide for the utilisation of private wealth for the public benefit to support public services and research in fields such as social welfare. Donations made to foundations are tax-exempt. Foundations are easier to establish, but their activities can only be focused on a single initiative at a time. Profit-making or religious activities are prohibited.

Although associations (dernek) are difficult to establish, multi-activities can be registered and financial resources are generated by membership dues, donations, and revenues collected from publications, lotteries, concerts, exhibitions, etc. Rights and liberties of associations are not sufficiently guaranteed. The following chart summarises the two organisation types.

Table 4.5.1 Civic Society Types

Status/Type	Legal background	Charged Min.	Registered activity	Numbers	Operation
Foundation (vakif)	Foundations Law (1935)	Prime Ministry	Single	4,500	Only donations
Association (dernek)	Dernek Law 2908 (1983)	Min. of Interior	Multiple	72,800	Membership dues and donations

Another form of disaster management civil society is chambers. Chambers are professional groups that stand rather neutral as public independent authorities and could serve as

pressure groups. There are different varieties of chambers, such as civil engineers, architects, urban planners, doctors, lawyers, commerce, and etc.

Although very rare, some civic society organisations have different status besides foundation, association, or chamber. One if them is a “cooperative.” Cooperatives can possess certain capital to fulfill their operational needs, and they operate for the economical benefit of their members. Cooperatives are often formed to build an apartment house or execute collective agricultural activities.

To avoid formalities and unnecessary control by public authorities, self-reliant neighborhood community organisations have a “committee” status. Committees can be established by the protocol of the local municipality.

4.6. Summary

As described above, civil society organisations have different legal frameworks. Despite their limitations, they are searching for the best solutions to fit their aim and goals. The complexities that arise from the variety of group types and status, and the limitations of their activities, are some reasons why civil societies have not matured.

In summary, the following recommendations can be made to increase the effectiveness of civil society organisations, with special reference to disaster management:

(1) Flexibility for civil society organisations

Disaster mitigation initiatives require a holistic approach, with participation from different parts of the society and strong networking among communities. The current legal status of “derneks” prohibits them from taking part in more than one initiative at a time, and, thus, constrains their effectiveness in being part of disaster management activities.

As stated above, the legal status of civil society organisations are rather complex in Turkey, which in turn cause problems and concerns with respect to the execution of their activities. A simplified legal framework for non-profit organisations should be developed, and all civil society organisations should considered as part of a single category to ensure their effective service to society, with reference to disaster management.

(2) Proper resource utilisation and management for civil society organisations

Most civil society organisations run on voluntary contributions from their members, in terms of time and resources. Most of their members have steady primary jobs, and civil society activities are part of their voluntary work. Any successful initiative needs

professional input and involvement, and resources are a key factor for its sustainability. Thus, proper resource utilisation and management will be the key factor for the sustainability of civil society organisation and their disaster management efforts.

(3) Appropriate allocation of responsibility

With a specific focus on disaster management, it has been observed that there exist a considerable number of civil societies with operation mandates of search and rescue (SAR). Also, with respect to SAR activities, there are overlaps of operational focii between government organisations like the fire brigade, civil defence, army, etc., and that of civil societies. There should be clear-cut and predefined roles for these public authorities and civil society organisations, where the latter can play more effective roles in the light aspects of SAR.

(4) Motivation for strengthening of buildings

It has been observed from recent earthquakes in Turkey and elsewhere that building collapse is the major cause of casualties; thus, it is necessary to strengthen buildings to save the maximum number of lives. This effort requires awareness raising initiatives in the communities, and civil society organisations can play a significant role in this aspect by motivating people to strengthen their buildings.

Chapter 5.
Public Awareness and Education for
Disaster Mitigation and Preparedness

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Public information and awareness raising are powerful tools for earthquake safety. Disaster education is considered an important and essential element of disaster preparedness and mitigation. Educational aspects have different target groups. Needless to say, school students are the first target group, and to promote disaster education in the future generation is the prime objective. Also, it is important to generate awareness in the communities for these to perceive their earthquake risk and to take effective measures to reduce their risks. Public administrators also play a very important role in disaster management, before, during, and after the event. Different approaches should be incorporated for different target groups. In the following sections, the current status of disaster management is described, followed by recommendations for future actions.

5.1. Governorship-Level Activities

5.1.1. Education for Students

In 2000, after the Izmit Earthquake, the Ministry of Education published 150 thousand copies of a textbook for school children on earthquakes. This textbook explains earthquake mechanisms and illustrates the way people can protect themselves from earthquakes. Each national primary school started teaching a subject on earthquake disaster management. At the high school level, earthquake disaster education is included in geography class. About 2,900 school teachers took a one-day basic seminar on earthquake disaster preparedness hosted by the “Istanbul Crisis Preparedness Education Project” of Bogazici University Kandilli Observatory in 2001. After the Duzce earthquake of 1999, the 12th of November was designated to be an earthquake memorial day, and each school conducts earthquake drills with a collaboration of civil defense.

5.1.2. Training for Disaster Management Centre

Most staff at the Disaster Management Centre are provided with search & rescue training, disaster management principles instruction, and disaster preparedness education incorporated with Civil Defence, the Ministry of Public Works, military, and the Red Crescent. However, specific responsibilities for emergency response have not clearly been defined and assigned. Accordingly, training for emergency response has not been conducted.

The Disaster Management Centre has been utilizing compact booklets and theme-wise leaflets, which the Civil Defence produced on first aid, fires, chemical warfare, and earthquake disaster.

It is notable that there is a disaster FM radio station located on the second floor of the Governorship Disaster Management Centre (see Photo 5.1.1). It has daily hour-long programs on earthquake disaster management. Each day of the week covers different topics with different guests, and the audience can participate in the discussions. Some of the programs include questions and answer sessions for children, discussions for students and teachers, introducing newspaper articles regarding earthquakes, general earthquake knowledge dissemination by invited scientists, and first aid explanation by the civil defence. (See Table 5.1.1..)

Table 5.1.1 Disaster Radio Programs

Day	Time	Contents
Monday	10:30-11:00	Q&A session for school children
	14:30-15:00	
Tuesday	14:00-15:00	Lessons on how to live with earthquakes
Wednesday	14:00-15:00	Lecture on earthquake disaster management
Thursday	14:00-15:00	Introducing newspaper articles on earthquakes
Friday	10:30-11:00	Q&A session for school children
	14:30-15:00	



Photo 5.1.1 Disaster FM Radio Station at DMC

5.2. Municipality

5.2.1. Citizen Education Activities

The municipality has published compact booklets for citizens on earthquake preparedness and mitigation in 2001. The Directorate of Ground and Earthquake Research also produced a leaflet illustrating basic tips on how to protect oneself from earthquakes that it aims to distribute to schools. However, the schools are not under the command of the municipality and it could not distribute them through the official channel, and the Istanbul Metropolitan Municipality (IMM) distributed them to schools and citizens upon request basis.

The Directorate of Press, Media and Public Relations under the Dep. of Cultural and Social Affairs has close ties with the media, and it issues monthly magazines for citizens. It can easily obtain information and become a good means to raise public awareness on earthquake disasters and publicise the mitigation and management activities the IMM has been working on.

The Directorate of Emergency Rescue Services under the Dep. of Health is organizing training programs and drills incorporated with the civil defence and fire brigades. It also targets training volunteers and certifies their accomplishments (see photos below).



Photo 5.2.1 Earthquake Drill Organized by IMM

The Civil Defence Directorate under the Defence Secretariat of IMM has been performing rescue training for high school and university students as well as ordinary citizens. Their training program is more professional rather than mere general awareness raising: the week-long program takes 25 hours and consists of both lectures and actual training. Three professional staff members train a maximum of 15 persons at one time. The Directorate issues a certificate to those who complete the course. Information on training activities is transmitted through the elected official district leaders (*muhtar*) and school and university heads.

Even though the civil defence serves citizens, the general public and municipality staff have little knowledge on the civil defence and its regular activities and services available to the general public.

5.2.2. Staff Education Activities

The Directorate of Education under the Dep. of Personnel and Training provides 2-5 days of general disaster management educational programs to IMM staff. For higher ranking officials, specific programs in outside countries are provided. Officials are sent to related earthquake disaster management conferences, workshops, and educational programs organised by universities and other organisations. The Directorate itself organises workshops and relays information on these activities on the IMM web page.

5.3. Non-government Initiatives on Disaster Education

5.3.1. Disaster Education Center

The private insurance company, Ak Insurance, has an education and simulation centre, which is open to school groups and citizens free of charge by appointments. The center is facilitated with earthquake and fire safety simulations and provides package programs for basic fire and earthquake disaster education twice a day (see photos below). The centre opened in 1996, and 30,000 people, mostly school children between 7 and 14 years old, have visited the centre since then.



Photo 5.3.1 Earthquake Simulation



Photo 5.3.2 Fire Extinguishing Exercise

5.3.2. University Initiatives

The Kandili Observatory of Bogazici University and the Earthquake Research Institute have jointly initiated the “Abcd of Basic Disaster Awareness” program, with funding from USAID. This program aims to provide correct and necessary basic information on earthquakes to communities, and provide training at the mahalle level. The major outputs of the training and capacity building programs are the production of educational booklets, posters, and fact-sheets related to earthquakes, and trained communities. Bogazici

University has recently constructed a shake table on its Kandili campus that will be used public awareness raising experiments, in addition to its civil engineering research programs.

Another interesting initiative is the planning of a disaster management graduate course at the Istanbul Technical University (ITU), proposed to begin in October 2002. The initiative is based on a collaborative program with the Federal Emergency Management Agency (FEMA) of the USA and aims to promote the development of human resources and expertise in the specified field.

5.3.3. Private Initiative of Building Improvement and Retrofitting

Seker Bank, a private bank, is preparing to disburse retrofit loans. It has an earthquake support Centre, which introduces technical assistance and helps project formulation. Professors of architecture, civil engineering, geology, and geophysics of Gazi University are involved in assessing the seismic condition of the buildings and designing the retrofit plan. After this preliminary phase, the actual retrofitting starts. The loan system excludes the preliminary study, which will roughly cost US\$300 for a 100m² apartment, and the actual retrofitting costs will be covered by the bank loan.

Kadikoy Municipality has a laboratory for concrete testing in its disaster management centre and has been checking the quality of existing buildings in the municipality. The municipality is projecting to be able to provide a solution for strengthening buildings.

In the community-based activities in Gayrettepe, a preliminary building survey has been done on the intervention of local civil engineers. One of the apartments was retrofitted as part of the efforts of residents. No public intervention to promote retrofitting has been done.

5.4. Media Initiatives on Disaster Education

The role of the media as a major instrument for promoting disaster education is very important. One of the major roles performed by the media during the Izmit Earthquake was to provide information on relief materials to the public. In the long-term recovery process, the media changed its role into that of an educator, rather than only providing information dissemination, and the media has developed several educational targeting school children of different age-groups. In addition, for communities, educational programs have been developed in terms of ‘dos and don’ts’ during the earthquake. Professor Ahmet Ishikara of the Kandili Observatory is known as an “earthquake father” and appears on a TV cartoon program to provide tips on disaster preparedness activities for common people. Memorial programs on August 16 and November 12 are also telecast on major TV channels.

5.5. Recommendation on Disaster Education

Disaster education is not just to acquire knowledge but to take concrete actions to increase resistance and resilience within the capacity and resources of each stakeholder. In summary, the following recommendations can be made for improvements on raising public awareness and education with regards to disaster mitigation and preparedness:

(1) Effective Utilisation of Media

One of the roles of the media is to provide public information and education. Because of the fatalism outlook society has, some people tend to distance themselves from information on disasters. However, ignorance is hazardous. The approach of the mass media needs to be encouraging; media information is recommended to be based on real implementations being carried out by various stakeholders that stimulate and motivate general citizens to be involved in synergetic efforts. It is recommended that newspapers publish a special series of earthquake disaster management columns on the occasion of pertinent conferences and memorial days.

(2) Development of Common Codes of Conduct for Mass Media

Common language, correct information and knowledge of earthquake disaster management on the part of media is essential and critical. It is recommended that common codes of conduct at the time of disasters be developed. These codes should be based on past devastating disaster experiences, so that the roles and responsibilities of the mass media can be clearly defined and more effective disaster management can be achieved.

(3) Extensive Information Circulation

It has been observed that many earthquake disaster mitigation efforts have been taking place, especially after the two earthquakes in the Marmara region. Many people are sensitised to be involved in disaster management activities, but public information distribution are apt to be on based on human networks, such as through the Muhtar, and not always distributed to the right people. Since information is the first source of judgment for further steps. Equal opportunity, easy access to information, and extensive information circulation need to be carefully considered, utilizing various media.

(4) Promotion of Earthquake Safety School Programs

Most children spend most of their time in school. The strengthening of the school building is important, but at the same time, school teachers and administrators need to be prepared to respond effectively. It is important to assist school boards and administrators in setting up an earthquake emergency procedure system. The school can also produce informational pamphlets to supplement a regular textbook produced by the Ministry of Education, to be

used in the classroom and later send home with students to share with their parents and families. Earthquake drills are important and should routinely be held in cooperation with the civil defense and fire brigade to train school children to stay safely within the buildings and evacuate when necessary.

(5) Capacity-building and Human Resource Development for Different Stakeholders

Capacity-building is critical for all stakeholders; however, it is a complex and long-term effort requiring human resource development, the establishment of well-functioning organisations within a suitable work environment, and a supportive socio-political environment, to improve the performance of institutions and personnel. Capacity-building needs to be done in terms of resources, skills, and information availabilities. The networking of resources and information is also critical to capacity-building for coordinated efforts. It is important for all stakeholders to complement each other's efforts to achieve an efficient overall disaster management system. There should be a strategic plan developed to utilise human resources for disaster management. A true enterprise of public-private partnerships is needed. To start these efforts, community-level disaster management activities should include all the concerned people and be realistic and practical.

(6) Increased Focus on Public Information to Address the Root Causes of Vulnerability

It has been observed that many efforts are being made to train ordinary citizens in search and rescue. However, strengthening buildings and civic structures is the most effective approach to solving the root causes of their vulnerability and to effect earthquake disaster mitigation. This initiative is the most time and resource intensive issue; thus, more involvement is needed to raise public awareness and ensure the support and intervention of various stakeholders.

5.6. Proposals for Future Actions

5.6.1. Necessity of Community-based Disaster Management Activities

Under the Disaster Law, the responsibilities of the provincial and central government agencies are defined, but the responsibilities of the district municipality, non-government organisations and the private sector are not included. While effective disaster management requires empowerment of local authorities and the local community, as well as a multi-sectorial inter-disciplinary approach, it is also necessary to institute community participation in the planning process to meet real needs and intentions, which will lead to mitigation of future disaster risks.

Moreover, national development plans specify effective decentralisation as a prerequisite for substantive progress in all fields. Complex institutional arrangements, legal regulations, inflexible budgetary practices, fragmented resources and authorities shared between the provincial government and municipalities, and constraining local initiatives need to be improved through public and private cooperative efforts. Local capacity-building and the enhancement of civic engagement need to be stressed.

After the last earthquakes in the Marmara region, it has been observed that there is a significant awareness among the common people regarding the possibility of a future earthquake in the Istanbul region. Many disaster mitigation and management efforts have been made at different levels, including various types of community activities. The community is the first to respond to a disaster, and community-based disaster management activities are more successful since community residents are deeply rooted in the society and culture of the area. They enable people to express their real needs and priorities, allowing problems to be correctly defined and responsive mitigation measures to be designed. A public-civil society synergetic network needs to be developed.

First of all, information sharing among public authorities, academic circles, private sectors, and civil society is the essential factor in beginning to develop this partnership. Secondly, existing resources and activities need to be managed and incorporated in the network. The creation of community space is an option to promote community-based activities to increase overall social resilience. Lastly, proper institutionalisation maximises the efforts made at different levels.

The following strategies and actions are recommended to promote effective community-based disaster management in Istanbul, with a focus on community participation and an interdisciplinary approach:

Basic strategies are summarised under three categories: information sharing, resource management and networking, and institutionalisation. (See Figure 5.6.1.)

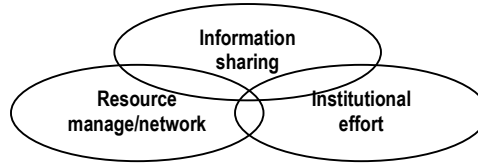


Figure 5.6.1 Strategy for Community Based Disaster Management

Strategy 1: Information Sharing

It has been observed that information sharing, especially between public authorities and citizens, is an important aspect for effective disaster management. Most importantly, citizens, need to be informed of the hazard and risk assessment for each district. Based on this information, a disaster management plan should be developed. Lessons learned from past earthquakes need to be input in the participatory planning process between not only the local public sectors and civil society, but also those in disaster affected areas and academic and professional societies. To achieve this, the following activities can be proposed:

Activity 1.1: Publicise information on hazard and risk assessment to citizens

Activity 1.2: Disseminate disaster maps and information at the community level

Activity 1.3: Document past earthquake experiences and lessons

Activity 1.4: Promote participatory planning processes at the citizen level

Activity 1.5: Use media to disseminate appropriate information and sensitise the community

Strategy 2: Resource management and networking

Appropriate resources in terms of personnel, funding, and space are necessary to promote community-based activities in disaster management. Open space and community space for local activities could include centre to promote community-based activities for the betterment of the local services, which will lead to an increase in the community's total resilience. Each district's Disaster Management Centreshould be linked with other DMCs as part of a larger area collaboration. Furthermore, local organisations need to be linked.

In general, there has been a strong focus on search and rescue as a community initiative. While search and rescue is undoubtedly an important tool more emphasis and resources to

strengthen buildings and motivate people to action to create safer living conditions is needed.

For effective disaster mitigation and management, a natural flow and linkage between activities during normal and emergency times needs to be designed. The following activities are recommended for this purpose:

Activity 2.1: Creation of community space for daily activities

Activity 2.2: Preparation of disaster mitigation tools at the community level

Activity 2.3: Promotion and implementation of retrofitting of buildings as a community initiative

Activity 2.4: Enhancement of networking with disaster management centres

Strategy 3: Institutionalisation efforts:

For the sustainability of community-based disaster management, it is important to institutionalise efforts by creating citizen groups and leaders. Muhtar, an elected chief of the mahalle, can play a key role as a network hub between several stakeholders. Since Muhtars have access to both the channels of the district municipality and the provincial government through the Kaymakam, he could act as hub for the provincial government, district municipality, local institutions, and academic and private sectors. The Muhtar can also make use of their own human network.

Some mahalles in the old city consist of a few thousand residents, whereas most mahalles have over ten thousand residents. Disaster management activities are effective in smaller units, where residents can recognise the units as their own and share and pursue common interests among the residents. Thus, a smaller unit than the mahalle, such as neighborhood, street, or apartment complex is recommended to be identified in a disaster management framework. It is also recommended that pertinent activities as be defined per the different units. Especially in Istanbul, collective housings are common and apartment complexes can be the smallest unit for community-based activities. Figure 5.6.2 shows proposed organizational structure for communitybased activities in which Muhtars can act as a network hub.

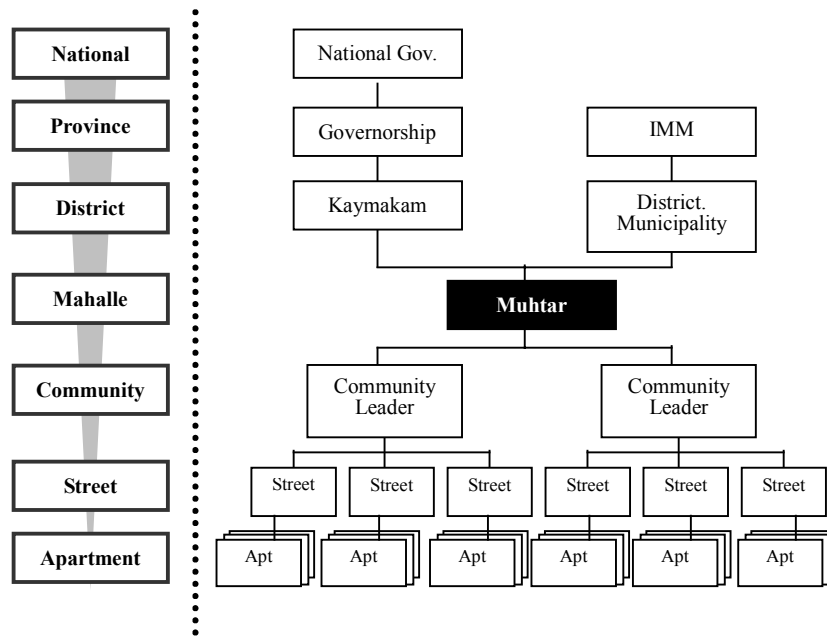


Figure 5.6.2 Organisational Structure of Network with the Muhtar as a Hub

Self-reliant social organisations based on human networks of the local area are a key driving force. It is ideal in terms of sustainability for these organisations to work on steadily improving local social welfare and living conditions, while including disaster management aspects.

To institutionalise community-based self-reliant organisations, first, three types of organisational structures can be identified: namely, the umbrella, core and network. Figure 5.6.3 illustrates three different types of local organizations. In the umbrella structure, a vertical chain of command is strengthened and a strong representative organisation coordinates all the organisations below. In the network structure, there is no hierarchy, but each organisation is inter-related with one another. The core structure can be described as one between the network and umbrella structures. A core organisation acts as a hub to combine all the organisations. The organisation structure type a community chooses depends on the style of existing organisations and the intervention of the district municipality of the area, but an important issue is how to inter-link the community activities effectively among community-based organisations and public authorities.

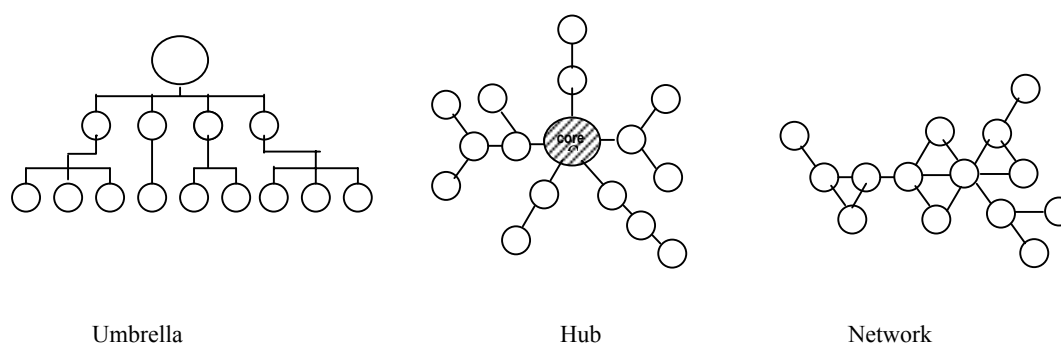


Figure 5.6.3 Different Structural Frameworks for Local Organisations

It is important to tap into university professors and professional society members, such as those belonging to chambers, for advice. It is recommended that district municipalities institutionalise a system of providing access to such professionals as part of community-based activities upon request.

The following activities are recommended for this purpose:

Activity 3.1: Identify smaller units than the mahalle, such as neighborhoods or streets to serve as potential disaster management units

Activity 3.2: Enhance activities at the neighbourhood level within each mahalle

Activity 3.3: Identify different stakeholders in the community and strengthen the network

Activity 3.4: Define role sharing and specify the responsibilities of each stakeholder

Activity 3.5: Enhance professional inputs for community-building and planning