

## **Disaster Management in Turkish Case: Politics, Institutions and the Process of (UN) Learning**

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### **Abstract**

*Disaster management is not addressed the issue of a development in our country and this issue is always tackled as recovery management after disasters. Whereas in this study the disaster management is assessed a fact that is closely related to development problem in terms of both organizational and legal arrangements. Its main argument is that disaster management is a process which depends on political decisions, level of development and the existing social and political culture. The problems that Turkey faces in disaster management are typical of a developing country. In other words, the disaster management is not only evaluated as within the framework of existing organizational arrangement and the steps that should be taken are analyzed within the framework of the existing problem areas.*

**Key Words:** Disaster, management, development, organizational, politics.

### ***1. Introduction***

A devastating earthquake hit eastern part of Istanbul in August 1999, leaving thousands dead and injured. Almost exactly ten years later, in September 2009, this time in the western part of Istanbul was swept by massive floods taking the lives of 32 people, and damaging thousands of houses and business premises. Ten years after the earthquake it has been exposed that the huge city is still not prepared for disasters. The heated public debate that ensued brought political bickering but less concrete action. It has become clear that despite rapid developments in communication technologies, there was no public awareness, no warnings and very inefficient emergency assistance for those affected by the disaster.

Disasters are exceptions in human lives, but once its occur its bring radical changes not only for individuals, but to societies at large, to perceptions and anticipations. These changes are not only physical, but there may also be deep psychological effects that linger on for years. Because disasters raise the physical, economic and social losses for community as a whole or its certain sections (Ergünay 2008: 97).

Almost all parts of the planet are subject to various kinds of disasters, but every nation, society or group of people prepare, respond or react to these disasters in a different way, shaped by their history, culture and consciousness. Some societies learn from disasters, and some do not. Some societies develop better ways to deal with disasters, some attribute them to mystic forces, considers it an act of God. Some blame governments, some blame nature (Abney; Hill 1966: 980).

This study deals with the Turkish experience in disaster management. Its main argument is that disaster management is a process which depends on political decisions, level of development and the existing social and political culture. The problems that Turkey faces in disaster management are typical of a developing country. Countries like Turkey suffer mostly from the problems stemming from their level of development. Issues like domestic migration, urbanization, wide settlements in and around big cities, lack of efficient city planning, lack of accountability, especially for local governments, and little interest in public resilience are some of the problems Turkey shares with developing countries.

### ***2. Politics of Disasters and Disaster Management***

Natural disasters are beyond man's capability to prevent. But dealing with disasters has been part of human endeavor for ages. Modernization has provided societies with tools to tackle disasters.

It also brought some more vulnerability due to population density, inadequate housing, and lack of awareness. Preparedness efforts and response to disaster require human intervention and involvement which necessitates decisions. Who will decide and define what a disaster situation is? Which institutions will deal with disasters? What will be the financial resources to be allocated for disaster preparedness and response? (Comfort 1988: 5)

Disasters, whether natural or man-made, are usually technical in character. But response to them involves human perceptions, attributions and meanings (Porifiev 1998: 56-72). This can vary according to the nature of the disaster, the character of the public authority and the state of society. Response to disasters requires decisions, made by political bodies, taking into account political considerations. The term disaster politics is used here covers various state practices as related to public activities. As politics is about who gets what and when, and who governs a specific society, disaster politics is about who decides what precautions will be taken, who decides what to do, by which means, and who is going to pay for it. In other words, politics is an integral element of the disaster management. Political considerations are a significant factor in the preparation for, response to, recovery from and mitigation of disaster events.

Disasters in modern societies require highly developed organizational capabilities. It is the state and its bureaucratic institutions that develop legal, and organizations to manage disasters. Dealing with disasters requires complicated and developed organizational skills, and in today's complicated social life the national and local governments have to take the leading role (Freeman 2004: 197). Different political systems may react and handle disasters in a different way. For instance, the Soviets usually refrained from releasing information about the man-made and natural disasters, because they feared that it may be considered as a weakness of their political system. It was alleged that after the Chernobyl disaster, the Soviet authorities did not inform other countries, or people living in close areas, about the accident and the danger of radiation released (For instance see. *Los Angeles Times*, April 8, 1993).

The politics of disaster management has several dimensions to it. First, it involves national level politics. In normal times, disasters are not the main or even the secondary theme of interest and discussion. Politicians pay attention to disasters only when they occur. They pay visits to the disaster sites, making general statements that the government will do whatever at its disposal and will enhance relief works. For most countries, traditional security concerns have precedence over disasters. Governments would rather build a big fleet of attack helicopters instead than one of search and rescue helicopters. Disasters may occasionally have political consequences as well. Public may punish a local or national government due to its lack of ability to handle a disaster in the next elections. On the other hand, their success in disaster relief efforts may pay off in the next elections. Sometimes, disasters, like other crises, may create leaders or increase the popularity of political figures, as in the case of Rudy Giuliani's growing popularity following the 9/11 attacks in New York. Hence, also on the local level, politics is an integral part of disaster management.

### **3. Major Types of Disasters in Turkey**

Turkey is a disaster prone country. Turkey's geography, topography and climate make it vulnerable to various natural catastrophes. Most of the natural hazards that the country faces are earthquakes, which are followed by landslides, floods, snow avalanches, rock falls, soil erosions, and forest fires. Since the beginning of the 20<sup>th</sup> century, approximately 87,000 people have lost their lives and nearly 300,000 people have been injured in natural disasters. The total number of houses damaged is nearly 700,000. Turkey lies on one of the most seismically active part of the world. The North Anatolian fault line is quite active and can generate up to 7.2 Richter scale earthquakes. This line crosses the country from the east to the west in the northern part of the country. Other fault lines in the Aegean Sea also cause smaller but devastating earthquakes. Around 95 percent of Turkey's land surface lies in high-risk areas. 98 percent of the population and 97 percent of the industry is located in these areas, as well as most of the Turkey's dams. Earthquakes have so far caused 61 percent of the total damage as a consequent of natural disasters (Turkish Republic Country Report 2009). During the last century, 130 earthquakes were recorded, leaving 80,000 people dead and nearly 200,000 injured, with 600,000 buildings damaged (Keleş 2006: 655). It is estimated that economic losses due to natural disasters amount to around 1 percent of the annual GNP, 80 percent of this is due to earthquakes. The Marmara region, with Turkey's largest city of Istanbul, is located on the active fault line, where the economic heart of the country is, with most of the industrial infrastructure, as well as the financial and tourist centers.

Landslides and floods pose the second and third biggest risks in terms of natural disasters, occupying 15 and 14 percent of losses in disasters respectively. The Black Sea region is most vulnerable to landslides and floods. Between 1955 and 2007, there have been 1400 floods recorded, which caused 1400 deaths. In the same period, landslides affected 4500 settlements and took the lives of 200 people (Turkish Republic Country Report 2009).

#### **4. Major Challenges of Disaster Management in Turkey**

The biggest problem of disaster management in Turkey is that it is not an issue of priority for national and local authorities, despite the fact that Turkey is a disaster prone country. The other associated problems lie in the vast continuous migration of people to big the cities, and especially to Istanbul, which is home now for more than 12 million people. The domestic migration places pressure for housing, which leads to vastly illegal settlement (building houses on state property without permission by local authorities) in risky areas, such as river basins. These areas become extremely vulnerable in times of flood, when these newly poorly constructed houses in shanty towns are beyond the control and inspection of local governments. Local authorities usually refrain from taking serious actions, partly because of political considerations, regarding these areas as their voting base in return for neglecting the implementation of construction code regulations. Even in more established districts the public is not interested to take measures and prepare for disasters, which is also a reflection of a prevailing fatalistic culture. Public resilience is still a big problem and neither local nor national governments have so far taken necessary steps to increase public awareness for disasters.

Another issue is the lack of national strategy for managing and reducing disasters (Akay 2005). Consequently, the legal and institutional frameworks of disaster management have become extremely complicated, leading to serious problems of coordination and duplication (Keleş 2004). The legal framework for disaster reduction, developed in 1959, has been outdated and had not been changed until the 1999 earthquakes. In 2000s, following the large disaster, there were at least eight national and regional processes related to disaster management, some of them were assigned to deal with the task of coordination. Turkish disaster management system is still designed primarily for disaster relief and respond. Disaster preparedness and precautions are quite weak at both local and national levels. Local governments are poorly equipped to provide guidance and control over building and settlement activities, even under normal conditions. Consistent under-funding is another permanent problem.

#### **5. The Legal Framework of Disaster Management in Turkey**

##### **5.1. The 1923-1999 Period**

Disasters are usually significant turning points in generating judicial rearrangements. In the Turkish case, the 1939 Erzincan earthquake has spawned the first legal arrangements. Law No. 3773 passed in 1940 was the first bill that envisaged disaster mitigation, to cover both financial assistance and housing for those affected by the disaster (Akdağ 2004: 44). It is interesting that the first cautionary law was not about earthquakes but about floods, which passed in 1943 (Law No. 4373). One year later another bill was approved, to empower the local governments to take necessary measures, to include assignment of responsibilities to municipalities, ban on issuing housing permissions in regions where no geological surveys were made, and the promulgation of earthquake directives (*The Official Gazette* (hereafter RGT): 21.01.1943, 5310). These regulations enacted in 1944 allowed the preparation of the first earthquake map in Turkey (State Planning Organization (DPT) 2000: 22-23).

The next stage was the 1956 Structure Inspection Law, which was followed by the 1959 Law (No. 7269) that assigned the government, for the first time, to generate a disaster fund with the aim to provide assistance for those who were affected by disasters (Öztürk 2003: 51; Yılmaz 2002: 162.). This Law had a critical place in the codification of the legal regulations in terms of disaster management in Turkey, since it functioned as a blanket law to and form the basis for disaster management works in Turkey until 1999 (Uzunçubuk 2005: 17). However, this law had only focused after disaster and the main objective was met post-disaster losses (Aktel 2010: 171). A similar law passed in 1972, but it covered disaster aid and foundation of a public fund only in case of earthquakes. However, after the Erzincan earthquake in 1992 a new law (No. 3838) passed to abolish these public funds.

## 5.2. The Regulations in the 1999-2012 Period

The August 17, 1999 earthquake in Istanbul clearly showed the inefficiency, shortcomings, and lack of preparedness of the system to face the disaster. The earthquake has made new regulations an imminent necessity and paved the way to restructure the disaster management system and institutions in Turkey. The first bill which passed in August 1999 (No. 4452) envisaged the broad framework for the ensuing legal regulations, stipulated that the Council of Ministers will be responsible for the arrangement of the necessary measures. The most important part of the Law was article 1, which entrusted the Council of Ministers to issue a decree with an aim to organize disaster management and disaster mitigation, to form necessary funds, to initiate an insurance system, and to establish new municipalities in disaster stricken areas if necessary. There are two additional legal regulations about disaster management, both passed in 1999, as government decrees, not subject to parliamentary approval. The first aimed to organize government assistance and measures for the damaged houses (Decree No. 574), and the other was about the establishment of the district level search and rescue missions (Decree No. 576). The latter also stipulated the formation of regional disaster coordination offices under the Ministry of Interior.

Another important legal development after the 1999 earthquake was the initiation of Decree No. 580, which assigned the Office of the Prime Minister for the control and allocation of the aid coming from the World Bank, and allowed the disaster stricken families to build houses on areas that are designated as public property. The government tried at the time to mitigate the sufferings of those families by allowing them to use public property for the construction of new houses. The other decree (No. 587) on the “Compulsory Insurance for Earthquakes” was intended for the application of compulsory insurance for houses, business premises and other buildings. It was the first of its kind, and indicated that the governments have waited a dramatic event like the 1999 earthquake for imposing such an insurance system. The last legal regulation in this framework is the allowance given to the private companies for the inspection of houses for standardization, which passed in 2001.

## 6. The Institutional Framework in Turkey

Turkey is a unitary state (as opposed to federal states), with a highly centralized and hierarchical administrative structure. Power resides in the center, in Ankara, and the central government has extensive powers. As a traditionally defined “strong state”, (Heper 1985) the civil society has been weak and the state has accumulated and centralized most of the political power. The state has been reluctant to share power and responsibilities with local governments. This governmental structure and tradition has its profound effects on the disaster management system. In case of disasters, it is only the Council of Ministers that can declare a state of emergency, subject to the approval of Parliament. During a state of emergency, the Council of Ministers may issue decrees with the force of law on matters related to the state of emergency, without prior parliamentary authorization (Keleş 2004: 4).

### 6.1. The National and Local Level

Historically, the Ministry of Public Construction has been the main government body for disaster management activities. In 1953, an office for earthquakes was set up within this ministry. With the establishment of the Ministry of Public Works and Settlement in 1958, these two ministries began to share responsibilities for disaster management (Yılmaz 2002:161). As a result, the disaster management system has been highly complicated until 2009, to include several bodies with limited degree of coordination.

- The first of those was the *Prime Minister’s Office of Crisis Management Center*: This Center is operated by the prime minister (to orchestrate other agencies, like the National Security Council, the Council of Ministers, related other Ministers, Undersecretary of Prime Minister), if there is a clear sign of crisis. The center was established in 1997, to prevent crises, to direct necessary precautions in line with national interests, and to coordinate with the Chief of Staff of the Armed Forces and other related ministries. According to its regulation, it has a limited staff in normal times, to be activated by the members of related ministries and institutions. It also had the power to propose the declaration of state of emergency. It is interesting to note that the Center was set up during the “soft” military intervention in 1997. It was perceived as a political move by the military, to be criticized on the grounds that it was an instrument of deeper military involvement in politics (Insel 1997). Initially placed under the National Security Council, the Center was moved to the Prime Minister’s Office and it functioned not as a political institution, but as one of the coordinating agencies under the Prime Ministry.

- Another organization is the *Crisis Coordination Council* (CCC): The CCC has the power to offer the establishment of regional crisis centers. It coordinates disaster management efforts among various institutions, and has the capacity to offer emergency situation and martial law.
- Yet another is the *Crisis Evaluation and Follow up Council* which processes the information about the crises and takes initiatives for their implementation. It also provides coordination among related agencies, including the Chief of the General Staff. It directs the procurement of equipment and follows up the implementation of the decisions taken by the Council of Ministers and Crisis Coordination Council.
- The *Natural Disasters Coordination Council* is composed of the Ministries of Interior, Finance, Construction, Housing and Health. It operates under the presidency of a state minister, with the task to plan the allocation of assistance during disasters.
- The *Central Disaster Coordination Council* is officially placed under the Prime Ministry, but the undersecretary of the Minister of Public Works and Settlement is its chair. Its members are undersecretaries of the Ministries of National Defense, Foreign, Interior, Finance, Education, Health, Industry, Energy and Environment and Forestry, and the president of Turkish Red Crescent Society. Its main task is to organize the allocation of assistance including foreign disaster aid. This committee is only established when a disaster exceeds the limits of the province.
- The *Prime Ministry Emergency Situation Coordination Council* was established in 1984. It is composed of representatives of related ministries in the case of an emergency.
- The *Turkey Emergency Management General Directorate* was set up under the Office of Prime Ministry after the 1999 earthquake, as a precondition of a credit agreement with the World Bank (Akdağ 2002: 44-45, 48.). Its main task is not only to coordinate disaster management among related institutions, but also to engage in disaster preparedness.
- The *General Directorate of Civil Defense* is placed under the Ministry of Interior, and is the oldest governmental organization related to disaster management. It is entitled to set up civil defense services nationwide, to plan and execute emergency rescue operations and to provide training for public and private organizations.
- The *General Directorate of Disaster Affairs* is operating under the Ministry of Public Works and Settlement, and has the task of undertaking research for disaster prevention, to detect disaster risk areas and to work on disaster recovery works.

What is noteworthy here, from both public management and disaster management perspective, is that many of the agencies assumed similar tasks and there is a clear overlapping of responsibilities between the multiple government bodies. On the one hand, different ministries established centers and councils, while the office of the Prime Ministry also set up several agencies which in turn required coordination among them, and led to the establishment of coordination councils. Over all, at the end of the 1990s, there had been an inflation of public agencies to deal with disasters, which required a new arrangement in 2009.

In this period, the first regulations related to disaster management at the local level dates from the 1930 municipality law. This law doesn't give a direct mandate to the municipalities related to disasters. The municipalities were only entrusted with settlements and housing responsibilities with this law, which was followed by the 1933 municipality structure and roads law (No. 2290). However, the provinces and districts have also duties and powers outside of municipalities in disaster management. In that case, the governors in provinces and district governors in districts have some responsibilities through the rescue and relief committees (No. 12777).

## **6.2. The Istanbul (Marmara) Earthquake as a Turning Point**

In 1999 two successive massive earthquakes hit the northwest part of Turkey. The epicenter of the first earthquake, which caused most of the damage in Istanbul, was Izmit (90 km east of Istanbul), with the magnitude of 7.4 in Richter scale. The second earthquake occurred on November 12, to hit Düzce (200 km east of Istanbul) with 7.2 Richter scale. Although caused the lives of nearly 900 people and injured the other 5000, it was a small disaster when compared with the devastating effects of the Istanbul earthquake.

The earthquake near Istanbul struck at 3:00 am, making any escape almost impossible. The human loss was about 18,000 dead, 32,000 injured, around 70,000 buildings destroyed or heavily damaged and 600,000 people were forced to leave their homes (Prime Ministry Crisis Management Center) . Many schools, bridges, pipe lines, factories, and public buildings were destroyed. Seven provinces that are central to the Turkish economy were affected by the earthquake. The disaster management in the early days of the earthquake was a total failure. The communication lines were collapsed, even the prime minister could not get through to the local authorities by phone. Because of the collapsed bridges and traffic accidents, the roads, including Istanbul-Ankara motorway, and railways were closed. There were practically no effective search and rescue operations in the first days of the disaster. Many of the survivors tried to save the injured from the debris by their own means.

In general terms, the government failed in every aspect to manage the disaster. Coordination could not be established between national and local authorities, or between the various emergency and response agencies. The local authorities were almost helpless, with hardly any necessary emergency equipment. It took several days for the government to take the lead and to operate search and rescue missions somewhat effectively. As part of the recovery efforts, the government provided temporary housing for those who lost their houses. The economic cost of the disaster is estimated between 12-17 billion US dollars. While TUSIAD (Turkish Business and Industrialist' Association) estimates the aggregate cost of the two earthquakes to reach 17 billion dollars, the State Planning Organization submits the number between 9-13 billion dollars, and the World Bank's estimation was 5-9 billion dollars (Bibbee 2000 and Kotil, Konur and Özgür 2007).

### **6.3. The Post Disaster Period**

The two huge earthquakes were perceived as traumatic defining events for the Turkish public. The government at that time was under severe criticism for its incapacity to deal with the crisis, was compelled to take steps to reorganize the disaster management system, its legal framework and its institutional structure. The government was quick to introduce new taxes, in order to finance the relief and recovery efforts. In the ten years period from 1999 around 18 billion dollars were gathered as revenues from taxes levied following the earthquakes (Radikal 2008). The Parliament formed an investigative commission for the Istanbul earthquake in August 1999. It submitted its findings and suggestions in February 2000. The report focused on deficiencies in disaster management, primarily the lack of coordination, illegal housing and inadequate inspection of buildings. Its primary recommendation was that the local governments would be given more authority to organize disaster management, that civil society organizations should be encouraged to participate in this effort and that a disaster information system should be set up. The next section will provide details of the new system that ensued.

An important measures taken by the government after the 1999 earthquakes was the introduction of compulsory earthquake insurance (DASK) in December 1999. According to this measure, the government will not be liable for assisting those whose houses were destroyed or damaged by future earthquakes if they are not insured. In fact, nearly ten years after the disaster, only 32 percent of Turkish people insured their houses under the DASK scheme. Another development following the earthquakes was the growing association between the government and the universities in the field of disaster management. Within this framework, several agreements were signed between Istanbul Technical University and the Ministry of Interior in 2001, to include training, development of emergency management system and most importantly to create a "Turkey Disaster Information System" (TABIS), which aims to develop a national database using GIS and remote sensing system and standards for a disaster management decision support system (Karaman *et al.* 2006).

### **7. The New Institutional Structure**

The most significant development in terms of disaster management, following the big 1999 earthquakes and the Parliamentary report was the establishment of a new Disaster and Emergency Situation Administration. Mentioned in the 8<sup>th</sup> Five Year Development Plan (to cover 2001-2005), for the first time, the aim of the newly proposed arrangement was to bring various related disaster management agencies into a single overarching organization. The new law, passed on June 17, 2009, aims to reorganize the complicated and over bureaucratic disaster management system and turn it into a more manageable mechanism.

The existing structure is based on two supreme councils, to correspond with the general national scheme to set up autonomous councils for designated public services, such as the Higher Council for Energy Markets, or the Higher Council for Broadcasting. The unique nature of the new system is that whereas in the previous one all agencies were placed under a related ministry, in the new system they will be inspected by councils which are autonomous and theoretically free from the government's jurisdiction. These two new agencies are the "Disaster and Emergency Situation Higher Board" and the "Earthquake Advisory Board." Besides these, the "Provincial Disaster and Emergency Directorate" and the "Civil Defense Search and Rescue Directorate" were established. Inspired by the US FEMA organization, the new system is designed to solve coordination problems among various agencies. In this respect General Directorate of Turkey Emergency Management, General Directorate of Disaster Affairs and General Directorate of Civil Defense were also removed.

However, a close scrutiny reveals that the new board for disaster management suffers from some serious setbacks. The basic problem is that it neglects the disaster preparedness phase, as was the case with the previous system. It is interesting that while the US FEMA system has been criticized in the US following Katrina, it was still a source of amelioration for the Turkish model of disaster management (Carafano; Weitz 2005). However, this structure has also exists of several subunits in itself and how to be a coordination among these units are not clearly defined. However, one of the most positive aspects of this law is the establishment of the Provincial Disaster and Emergency Directorate within provincial special administration. When these directorates were established, the directorates of provincial defense were also abolished. In this condition the governors were directly responsible for disaster management in province. Moreover, the directorates of provincial are included a number of tasks in disaster education is a positive step. In 2011, an amendment to the act were attempted to solve the problem of sources for the directorate and it is cited that the expenditures will be made from allocation which is put in budgets of provincial special administrations for this purpose.

Thus the disaster management is not only evaluated in the axis of the central government and it also has been aimed an effective structure within the also special provincial administrations. But the provincial administrations shares only a one percent proportion of their budget allocations show that sufficient material conditions for disaster management could not be achieved in our country. Simultaneously, the Independent National Earthquake Council was established, to be comprised of twenty experts specializing in geology, engineering, seismology and urban planning, with the task of assessing seismic risks, identifying priority research areas, and informing the public with reliable data and information (Keleş 2004: 6-7). This Council was abolished by the government in 2007 with no clear explanation (Radikal, February 3, 2007.)

The important legal changes have occurred in the 2000s at the local level. The basic characteristic of these laws, the local governments are making disaster and emergency planning at the local level and are giving the support services. In other words, the local governments undertake the roles after disasters. Whereas, the local governments should have the various powers especially before disasters (Akdağ, 2002: 42). Because the fact is named disaster has actually a local identity. But at this point, the problem was pointed out the source of local governments. The only way to overcome this problem empowers local governments financially. Currently, the tasks of the local governments in case of disasters are based on the municipalities' and provincial special administration laws. What is significant about this system, which operates since 2005, is that local governments have begun to exercise the right to purchase services from private companies instead of providing them through public means.

The main tasks and responsibilities of local governments in case of disaster are to provide or organize the deliverance of infrastructure services, such as construction, water, sewage, and transportation; information; protection of the environment, cleaning, inspection, fire, emergency services, search and ambulance; and social work. The local governments have to take necessary precautions to prevent fire and industrial accidents, to destroy houses which pose risks in case of disasters, to engage in emergency and contingency planning and to prepare the necessary equipment. They also have to coordinate their emergency planning with related ministries, and other public agencies, civil society organizations, and to provide training for local personnel. But, local governments fulfill these duties to the extent of their financial possibilities and this subject isn't regulated in detail in the legislation.

## **8. International Dimensions of the Disaster**

The two earthquakes of 1999 drew a considerable amount of international attention. While several countries, including the US, Israel, and Greece offered aid in the early days of the earthquake, it also paved the way for deeper cooperation between Turkey and other countries and international organizations. The most striking development in terms of disaster diplomacy was the impact of the earthquake on Turkish relations with Greece. These two neighboring countries have been in a troubled relationship for about a century. Following the 1999 earthquakes Greek search and rescue teams were among the first to come for relief efforts, which created a friendly atmosphere between the two societies. Later that year, in October 1999, Athens was struck by an earthquake and Turkish rescue teams summoned for assistance, contributing to the already positive climate in public perceptions (Kadriztke 2000 and Kerides 2006). Although it is difficult to substantiate that these earthquakes by themselves have made the difference, it is generally agreed that they played a critical and positive role in changing the public perceptions on both sides, which in turn enabled the politicians to take steps for further amelioration in bilateral relations.

One of the important international organizations that provided assistance to Turkey during the earthquake was NATO. Along with its transformation for new missions in the 1990s, the Euro-Atlantic Partnership Council of Ministers endorsed the establishment of Euro-Atlantic Disaster Response Capability in May 1998. Based on this decision the Euro-Atlantic Disaster Response Unit (EADRU), a non-standing, multi-national force of civil and military elements to be deployed in the event of a major natural or man-made disaster was formed. One day after the earthquake, Turkey appealed for assistance from EAPC countries through the EADRCC. In total, 33 NATO and partner countries reacted by providing search and rescue teams, winterized tents, blankets, field hospitals, field kitchens, medical aid, clothing, water-sanitation equipment and post-traumatic stress assistance.

International cooperation on disaster management between Turkey and some of its allies has intensified following the earthquakes. This is especially the case with the US, particularly between FEMA and Istanbul Technical University. A project named ACHIEVE (A Cooperative Hazard Impact Reduction Effort via Education) was initiated, with the financial support of the US State Department. This project envisaged a training mission designed to train the trainers in disaster management at the Istanbul Technical University (ITU). The idea was that the trainers would provide training to local officials, and other individuals from civil society organizations. Consequently, while a Center of Excellence for Disaster Management was established at ITU, the project led to the establishment of the first master's course in Disaster Management in Turkey (Ural). Other countries also developed various programs of disaster management cooperation. The case of Japan is mostly conspicuous. Also, the World Bank provided various training and technical projects (like TABIS), and France send a research vessel to the Sea of Marmara to probe the fault line off the coast of Istanbul.

## **9. Conclusion**

Despite legal and institutional developments, disaster management system in Turkey still suffers from fundamental flaws. The modern disaster management moves from disaster mitigation to disaster preparedness and public resilience. The Marmara region, where Istanbul lies at its heart and Turkey's economic activities, is still vulnerable to earthquakes. Experts consistently warn of a coming earthquake in 20 years with a possible magnitude of 7 or above. Both the national and local governments seem to be reluctant to take concrete and efficient steps in terms of raising public awareness, training, education, and procurement of necessary equipment for search and rescue operations.

The Turkish governments have a tendency to be reactive in handling of issues. To some extent this is an understandable phenomenon of politics. There seems to be an on-going learning process, and new institutions have established in an evolving nature to answer some of the challenges posed by the severe disasters. However, what is saliently different about disasters is that they call for practical and flexible response to fit the diverse character of the different episodes. In the case of Turkey, a developing country with a strong state tradition, the response to the challenges of disasters, is in mostly manifested by producing new laws and institutions. In other words, passing new laws and creating new or renewed institutions have become more important than tackling the core of the issues. However, creating new agencies and regulations do not suffice to stand up to the challenges. They do not, by themselves, address the problems.



Disaster management requires more active and comprehensive approach to cover many areas. The new approach has to be holistic in nature, to include the integration of development programs, the social and physical implications of urbanization, from city planning to inspection and law enforcing, from raising public awareness to exercises in public places like schools. Necessary funds and other resources have to be allocated to deal seriously and systematically with the hazardous consequences of non-regulated industrial development. In Turkey, perhaps as the case in other countries, the lessons are usually learned after the occurrence of disasters. They frequently strive to supply new solutions to the previous episode. It is somehow ironic that after the floods in September 2009, the Ministry of Public Works and Settlement declared that it will set up a coordination council to address the possible floods and to prepare Turkey's disaster map, an initiative which should obviously be made long before.

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