

Governance Issues Related to the Management of Disaster Risk in The City of İstanbul

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Deputy Secretary General

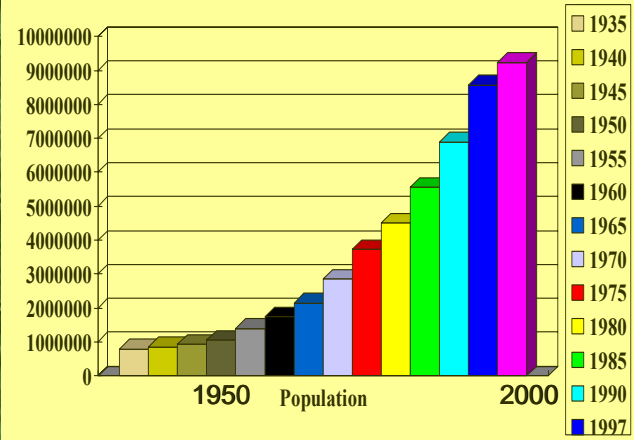
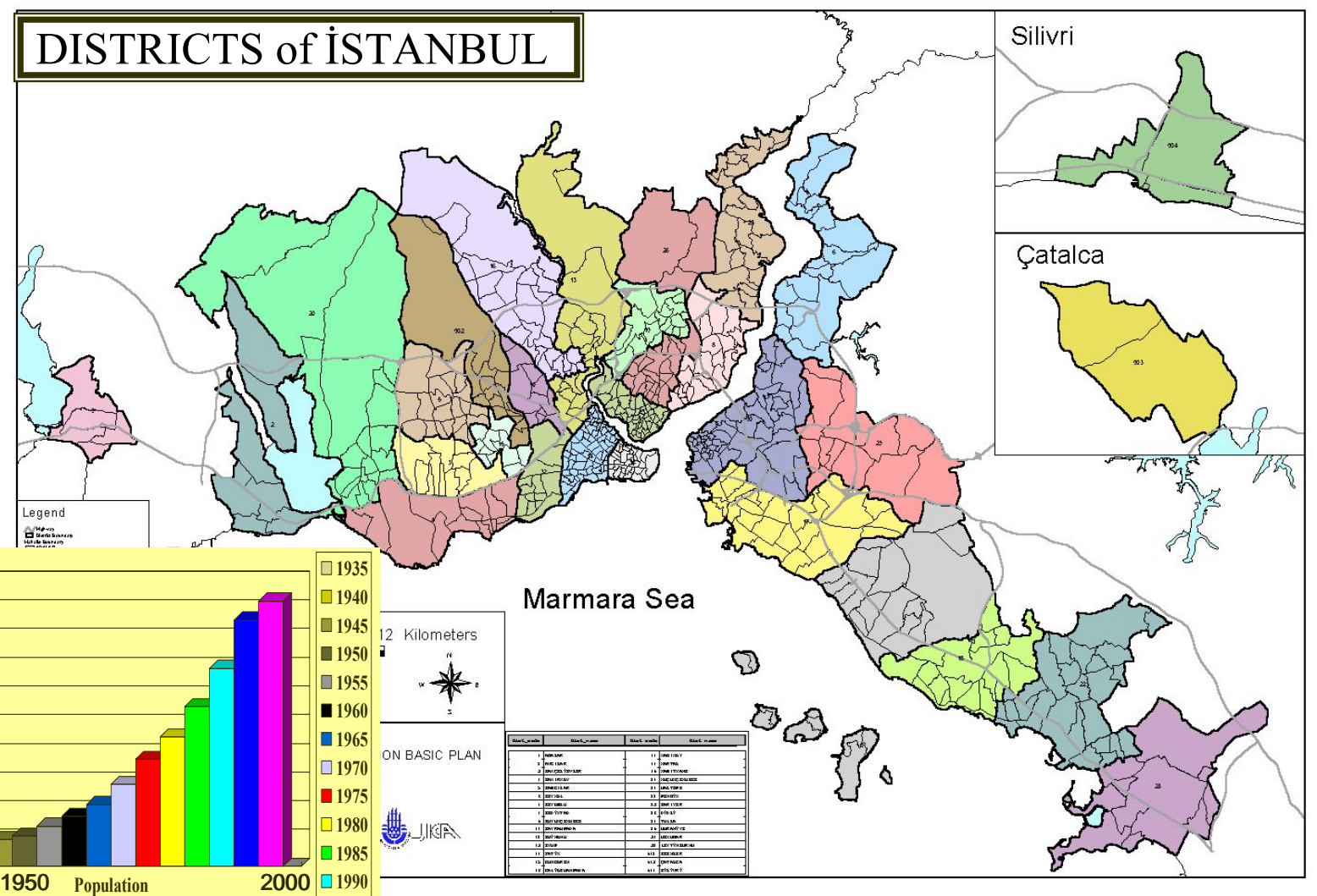
İstanbul Metropolitan Municipality

World Conference on Disaster Reduction

Thematic Session 1-10 on

18-22 January 2005, Kobe, Japan

As a result of the growth of the cities in number and population, which led to increase the number and complexity of the buildings therein, the vulnerability in disasters are much more aggravated today than those in past.



İstanbul's population increased from 1 million (in '50s) to 10 million today and there are about 1,000,000 buildings in İstanbul as of 2004.

Basic Data on Istanbul

- 10 million of inhabitants; 2000 km² area; >8000 kms of roads and water pipes, etc
- 25% of economic/income of Turkey
- 73 District Municipalities
- Elected Lord Mayor and District Mayors; with city council
Authority over: Transportation; urban planning; lands and construction etc.
- Appointed Governor;
Authority over : Civil protection and public safety, schools, hospitals, telecommunication etc.
- 16 municipality-owned enterprises: Including gas, water, transportation companies.

- **73 district municipalities who have their own elected officials and are responsible for several services within their districts**
- **Municipal Authority, which encompasses all the districts and has authority over all of them**
- **Provincial government with appointed governor who represents central government institutions in the province and who is responsible for ruling the city**
- **Central government who has ultimate authority over all executive powers**

Legislative Structure

- The institutional reform of September 2004 provides much more authority of the Municipalities to:
 - Cover much larger area
 - To control most of the transportation system
 - To demolish unsafe buildings (in the case of earthquake)
- Prior to this reform, the Municipality has little, if any, authority related to disaster management except for civil protection, also for urban planning
- But, the 1999 Marmara Earthquakes were the event that pushed the Municipality to take over ownership over the issues of disaster risk management for the City

The Lessons learned from 1999 Marmara Earthquakes

- Government and Municipality not prepared from a major urban earthquake
- Not a good understanding of the earthquake risk to the city and its impact on the populations, services, and institutions
- Need for
 - better knowledge on risk
 - better disaster management capabilities
 - integration of risk factors in management of the city
 - new and specialized resources (at all levels)
 - better coordination among sectoral institutions
 - participation, partnerships
 - communication and advocacy

Adoption of Disaster Management Principles

- Immediately after the Marmara earthquake, the Municipality adopted the *Protection of the Citizens* as an over-riding principle to govern its disaster management policies and actions
- That required taking a pro-active attitude towards mitigation, but it also meant integrating disaster risk management in the elementary functions of the Municipality
- It also required the involvement of many stakeholders
- Municipality benefited from the advice of EMI and the academic leadership of Istanbul and of Turkey to develop the overall guidelines for implementing this policy

Disaster Coordination Center - AKOM

Deputy Secretary General

AKOM SECRETARY GENERAL
(Head of Fire-brigade Directorate)

AKOM DIRECTORATE
(Fire-brigade Manager)

ADVISORS

FIRE BRIGADE
Dept.

HEALTH
Dept.

TRANS PORTATION
Dept.

ENTERPR.
Dept.

CIVIL DEFENCE

TECHNICAL AFFAIRS

SOIL&EQ. INVEST.
Dept.

FOREIGN RELATIONS

NATURAL GAS

WATER & SAWAGE

EMERGENCY FACILITIES

- Fire Stations
- Schools / Dormitories
- Hospitals
- Police Stations
- Bakeries
- Storage Facilities
- Open Areas
- Public Administration Buildings
- Pools of Emergency vehicles
- Banks, etc.



Emergency Management

Communication

Fire Brigade

Search and Rescue

Emergency Aid

Transportation

Shelter

Water and Food



Improvement of Knowledge

- The need for better knowledge was evident and urgent
- Several studies were undertaken, including
 - Risk and Vulnerability Study funded by JICA
 - Risk study undertaken by Bogazici University and funded by the American Red Cross
 - Also, many district municipalities undertook building inventory studies and zonation studies
- These studies provided a much better understanding of the vulnerability of the city and its population and provided the basis for planning preparedness and mitigation activities

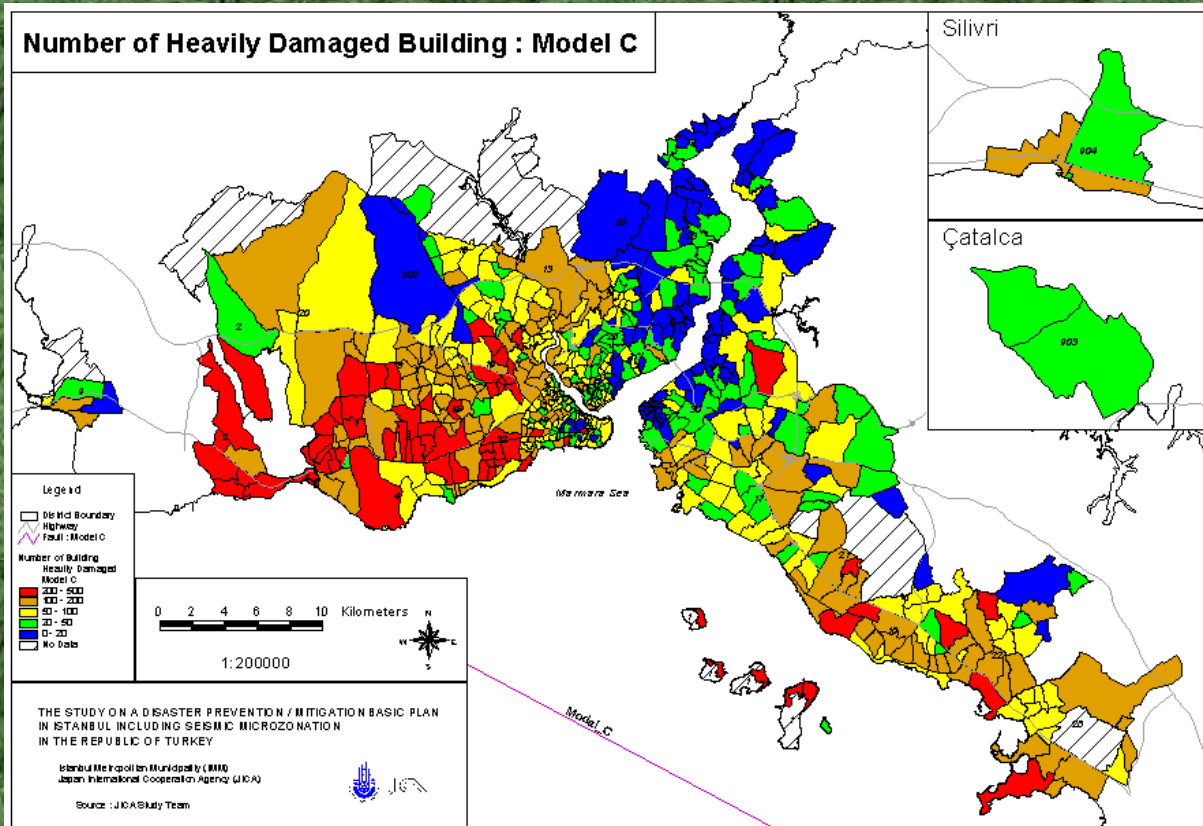
The Study on A Disaster Prevention/Mitigation Basic Plan in İstanbul including Seismic Microzonation in the Republic of Turkey

OBJECTIVES

- Disaster prevention/mitigation program
- Seismic microzonation
- Technology transfer

CONTENTS

- Earthquake Analysis
- Disaster Management
- Damages and Casualties
- Urban Vulnerability
- Preparedness



Improvement of Knowledge

Scenario Studies were helpful in understanding the risk to the study

- ❑ **A total of 35,000 buildings were found to be completely damage (about 3 % of the buildings).**
- ❑ **A total of about 70,000 buildings (% 6) would be extensively and 200,000 (25%) buildings would be moderately damaged.**
- ❑ **Number of deaths would be about 40,000 with 200,000 injuries.**
- ❑ **About 500,000 households will be in need of shelters**
- ❑ **Business Interruption losses, expressed as a ratio of annual turnover, will vary between 5%-10% for all sectors.**
- ❑ **The monetary losses are estimated to be 40 Billion Euros**

Identification of Gaps and Needs

- As the studies and knowledge was progressing, it was becoming clear that the issues were much more than just technical, in particular:
 - Legal and institutional issues needed to be clarified
 - Better understanding of the gaps and needs
 - Also a better understanding of the resources
 - Better understanding of the stakeholders
- An overall plan that adresses all the issues and provided a framework for implementation was required
- The Municipality launched the Istanbul Earthquake Master Plan (IEMP) as a comprehensive study covering all the issues

“act now to prevent future disaster losses”

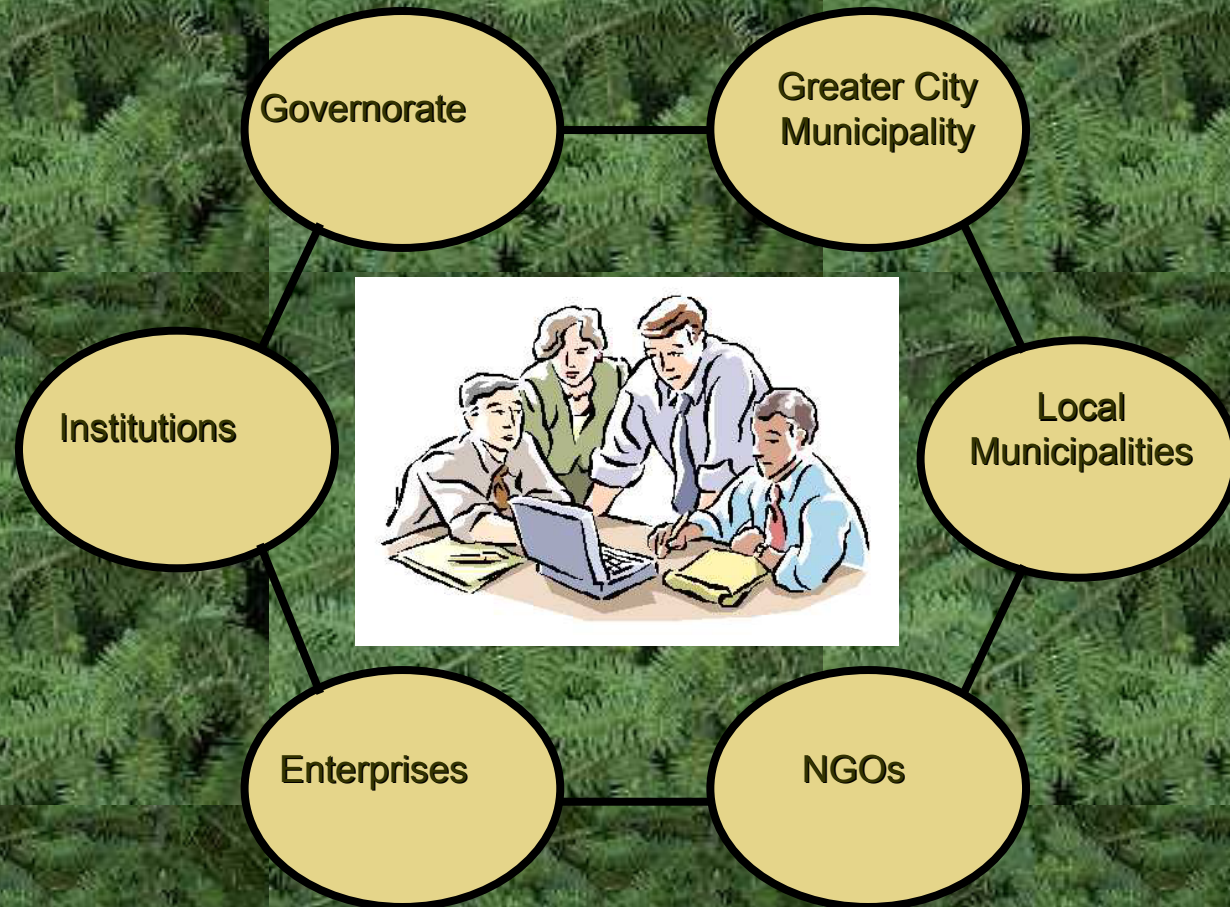
It often takes a long time for the benefits of mitigation to be achieved, however. Laws, policies, and programs must be thought through carefully to achieve their desired results, and they must be modified periodically to reflect current conditions. While ideas and knowledge about successful mitigation programs can be transferred easily, their adoption and implementation must be acceptable in particular social, economic, cultural, and political environments.

The Istanbul Earthquake Master Plan

- Comprehensive study of all DRM aspects, including:
 - ✓ Assessment of the current situation
 - ✓ Seismic assessment and rehabilitation of existing buildings
 - ✓ Urban planning issues
 - ✓ Legal issues
 - ✓ Financial issues
 - ✓ Educational issues
 - ✓ Social issues
 - ✓ Risk and disaster management issues
- And three implementation plans:
 - *The Contingency Plan*: Outlines the instruments for managing risks (avoidance, mitigation, or sharing)
 - *The Local action plan*: Project activities or implementation packages in high-risk areas including urban transformation actions
 - *Research and Activity Programs* that will facilitate sustaining or completing of the first two sets of actions

Earthquake Master Plan for Istanbul

is essentially a social contract between



identifying responsibilities, commitments,
and methods of supervisory functions

Governance Issues

- The Istanbul risk management and mitigation program impacted governance in many aspects:
 - ✓ *Initiated and lead by the local government but owned by all levels of government (district, municipal, provincial and national)*
 - ✓ Impacted the relationship between Central and Local Government and the distribution of ownership and responsibilities
 - ✓ *It involved almost the entire Turkish academic leadership – and by nature opened up the access to information*
 - ✓ Completely open process to stakeholders (professional, business, media) – Public forums and public workshops
 - ✓ *Open to the scrutiny of international experts*
 - ✓ Constant process of consultation and negotiation

Governance Issues

- The Istanbul risk management and mitigation plan has been the driver behind several constitutional, legislative and institutional reforms (see next slide)
- The funding is a sharing process between
 - ✓ Municipal and district governments
 - ✓ Central and provincial governments
 - ✓ Private citizens and civil society organizations
 - ✓ Grants from foreign countries
 - ✓ Loan from International Financing Organizations – the World Bank ISMEP consists of about \$400 billion in its current phase

LEGAL ISSUES

- Disaster Law
- Construction Law
- Technical assessment and strengthening of buildings
- City rehabilitation projects
- Laws and regulation concerning financing
- Laws and regulation concerning requirements

Legislative Reforms since 1999 EQ

- Revision of Law on Engineering and Architecture
- Building Design and Construction Control Law (construction control and prof. licensing)
- Standard Land Use Management and Development Regulations for Municipalities
- Compulsory Earthquake Insurance
- Amendments to Penal Law (No: 5237)
 - Heavy penalties for constructing, overlooking and providing services to illegal buildings
- Municipalities Law (No: 5215, Pending)
 - Authorization of municipalities for emergency management
 - Authorization of municipalities for urban rehabilitation and transformation for earthquake risk mitigation
- Metropolitan Municipalities Law (No: 5237)
 - Authorization for disaster risk management
 - Authorization of metropolitan municipalities to condemn and demolish buildings that poses earthquake risk

Conclusions

- **The reduction of disaster risk is an endless challenge:**
 - **it raises difficult legal, institutional, social and financial issues**
 - **It requires constant advocacy and awareness efforts**
 - **It is difficult to implement and to show benefits**
- **But, it is also an opportunity for**
 - **Improving governance and building better institutions**
 - **Stimulating the economy**
 - **Improving trust between government and its citizens**
 - **Improving knowledge and enhancing structures**
 - **Improving the safety and welfare of the citizens.**



Thank You for Your Kind Attention

The End

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