



Earthquake Risk and Mitigation Studies in Istanbul

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

As an important social, economical and geopolitical centre, Istanbul has been the destination of the people emigrating from rural areas. This increased the need for housing and other infrastructural facilities. There are about 1,000,000 buildings in Istanbul as of 2004.

Istanbul and its surroundings are the settlements, which were damaged by many earthquakes along the history. According to historical records on earthquake, 120 earthquakes in destructive scales occurred in Istanbul over the last two millennia. Considering the local features of the ground of Istanbul where the buildings are situated, construction quality of the buildings, deterioration and corrosion problems related to the age of the buildings, the earthquake risk increasingly growing. To follow up studies on the "Assessment of Earthquake Risk in Istanbul" and to find proper solutions for complex "risk mitigation" issues, the "Earthquake Master Plan for Istanbul" has been commissioned by Istanbul Metropolitan Municipality (IMM) to a consortium involving four leading Turkish Universities. The implementation of EMPI was done in Zeytinburnu which was determined in JICA study and EMPI as one of the risky district in Istanbul.

As a result of these studies IMM is taking the necessary actions for earthquake mitigation and urban risk reduction. These measures are based on the redevelopment and retrofitment.