



Evaluation of Critical Infrastructure in the Event of Earthquake: A Case Study of Delhi

Suraj prasad

India (surajprasad27@gmail.com)

With changing paradigms of disaster preparedness, the safety and security of critical infrastructure in the event of a geo-hazard has become increasingly important. In a developing and densely populated country like India, which is vulnerable to many different geo-hazards, a lack of clear policy directive regarding safety of such infrastructure could be especially damaging both in terms of life and property. The problem is most acute in India's mega cities, where inefficient infrastructure means that facilities like transportation, communication, and electricity generation are obsolete and vulnerable to sudden disruptions. The present study takes the case of the National Capital Territory of Delhi and attempts to examine the critical infrastructures of the city in the event of an earthquake. Delhi lies in a very active seismic zone with various faults in and around the city. The Government of India has classified Delhi in Zone 4 (High Risk Zone) based on past and expected seismic activities in the Indo-Gangetic Plains. With a population of over 20 Million in the Urban Agglomeration of Delhi, any major earthquake in an already overstretched infrastructure could have a devastating impact. This study will test the critical infrastructures of the city in terms of their disaster preparedness and suggest ways and measures to increase the same.

Keywords: Geo-hazards, Critical Infrastructure, vulnerable, Earthquakes, Delhi