Towards a Culture of Resilience and Earthquake Disaster Risk Reduction – “Lessons-Learned” from Earthquake Disasters

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We have a seismically active planet (Bilham, 2009) and earthquakes are geological phenomena which are an integral part of the course of nature and life on Earth. However, earthquakes are also events which dramatically affect our complex societies. Earthquakes make people terrified about it as they strike suddenly at unpredicted times and places (Mokhtari, 2010). Nevertheless, society has the potential to influence the consequences of earthquakes and the frequency and severity of the earthquake disasters. In this regard, earthquake disaster preparedness is a vital matter and the shift from reaction to pro-action is highly encouraged. The focus is needed not only on emergency response and relief, but as well on the mitigation of earthquake risk, building resilience, learning from experiences, avoiding the repetition of past mistakes, implementing earthquake disaster prevention and preparedness measures (Alexander, 2000; Cutter, et al. 2013; Lacasse and Nadim, 2011; Lacasse et al., 2012).

In the last decades, within disaster risk reduction arena and implicit earthquake disaster risk reduction, speaking and writing about “Lessons” and especially “Lessons-Learned” became a common phenomenon (Alexander, 2012a; Alexander, 2012b). However a persistent question still remains: Are the lessons from earthquake disasters really learned and can be truly considered as “Lessons-Learned”? Trying to answer to this question, Iranian seismic space and two of its earthquake disasters were chosen as the scope of our paper. Iran is situated in a highly seismic part of the Alpine-Himalayan belt and has a long history of frequent earthquake disasters that caused a large number of death, injuries and massive destruction (Berberian, 2014; Ambraseys and Melville, 1982). In this study the “Lessons-Learned” from Rudbar earthquake in 1990 and Bam earthquake in 2003 having large amount of data were chosen as case studies.

The main objective of the paper is to investigate and deconstruct “Lessons” and “Lessons-Learned” from the earthquake disasters of Rudbar and Bam and to analyse their contribution towards earthquake disaster risk reduction and resilience of communities. Moreover, in order to offer also a broader international perspective, various insights into “Lessons” and “Lessons-Learned” from other six worldwide earthquake disasters are being presented.
Based on comparisons, the findings of the paper underline similarities among the “Lessons” and “Lessons-Learned” from Iranian earthquake disasters and other six worldwide earthquake disasters, in Armenia, Japan, Turkey, India, Pakistan and China. Learning from earthquake disasters in Iran and worldwide is a dynamic and complex process that needs to be put in practice for a long term, in a sustainable way.

In this presentation, the main results achieved within the process of transfer and application of “Lessons” and “Lessons-Learned” from one place to another, within Iran or from one country to another, it is important to adapt the lessons to local/national cultural-social contexts and parameters will be discussed. Furthermore, academia, experts, policy and decision makers, communities, organizations, institutions and various other social actors need to collaborate within an integrated and interdisciplinary approach. “Lessons” and “Lessons-Learned” from earthquake disasters in Iran and worldwide have great potential to make a sound contribution to learning to live to earthquake hazard and the methodology used will be elaborated. A boost of a culture of resilience and earthquake disasters risk reduction needs to be in place, if the moral responsibilities for present generations and those yet to come, do not remain just simple metaphors.

REFERENCES

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