

## عنوان مقاله:

Application of the (ETA) method for multi-hazard risk assessment (fire following earthquake) Case: regions 1 and 6 Shiraz Municipality

# محل انتشار:

دومین کنفرانس بین المللی توسعه پایدار، راهکارها و چالش ها با محوریت کشاورزی ، منابع طبیعی، محیط زیست و گردشگری (سال:

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نویسندگان: Leila. Eshrati - PhD Candidate of Urban Planning-, Research Institute of Shakhespajouh, University of Esfahan, ,Esfahan, Iran

Amir Mahmode zadeh - Assist . Prof, Dept . of Civil Engineer, Research Institute of Shakhespajouh, University of Esfahan, Esfahan, Iran

Masod. Taghvae - Professor, Dept. of Urban Planning, Research Institute of Shakhespajouh, University of Esfahan

### خلاصه مقاله:

The built environment has long suffered from natural and technological hazards that have often caused loss of life and buildings in the past. An earthquake causes large-scale damage and destruction resulting from ground shaking. Fires caused casualty after damages to oil and gas pipelines and to electrical power transmission lines damaged by an earthquake. In this study, we aimed to assess the risks of multi hazard, Use of Quantitative event tree analysis in physical and human vulnerability assessment (fire following earthquake). Methods used in this paper are based on quantitative approach and documentation. Quantitative risk assessment based on the Quantitative event tree analysis and HAZUS software. Domino effect in multi hazard vulnerability assessment based on event tree analysis. Two types of hazards will be assessed, namely earthquake, and fire following earthquake. The study estimated the direct physical vulnerability of buildings, Essential facilities and vulnerability to human (The casualties). The method is implicated with data collected in a part of Shiraz City. The results show that structural failure is the primary cause of earthquake built environment casualties and that physical damage potential should be the foundation of estimation fire following earthquake casualty. An attempt to develop ETA method based on interactions among hazards and/or .domino effects. To this task is to correlate second hazard casualties directly with triggering hazard

# كلمات كليدى:

quantitative assessment, risk, multi hazard, event tree analysis (ETA), regions 1 and 6 Shiraz Municipality

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