

## The Earthquakes in the area around Adriatic Sea, the causes and measures to reduce their negative consequences

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### Abstract

Earthquakes are a shake or movement of Earth that are caused by large splits of the under Earth rocks, under the effect of different forces, in the vast majority of cases it is caused by the movement of tectonic plates of the Earth's lithosphere. The scientific evidence to understand the cause of earthquakes is found in the theory of "The movement of tectonic plates", refined by the known German geophysicist Venger and is presented in his book "The Origin of Continents and Oceans".

The scholars confirm that during their movement, in the meeting lines, tectonic plates create erosion and breakage of great dimension that are accompanied by a large release of energy which is transmitted to the Earth surface through seismic waves causing massive damage. One of these areas is also the region in the both sides of Adriatic that corresponds with the suburb of Adria mini plate.

According to scientists, in the West of Adria plate, passes through Apennine peninsula beginning from Sicilia, Calabria, in the Apennine slopes to Padane lowland, passes in Europe Alps, Dinarid, Albanid to the Greek territory. The Apennine peninsula and especially the central part is continuously struck by earthquakes, because according to researches, Adria plate under the pressure of African plate, is moved towards North and Northeast creating longitudinal cracks that generates strong seismic shaking. This is confirmed from the numerous studies that known personalities of seismology and INGV specialists in Rome have carried.

Another area with high seismic level is Padane lowland, which is also under the effect of Adria plate movement towards Northeast, that causes the closure of Padane lowland. Apennine move towards Southern Alps creating the conditions for earthquakes emerge. The high seismic level is also noticed in the eastern suburb of Adria plate that corresponds with the territories of our country, the Dalmat coast in the North and Helenide in south. According to researchers, in Albanian lands are two longitudinal areas and some cross sections: the longitudinal areas: Janine-Korce-Diber-Peje; Sarande-Vlore-Durres-Shkoder-Ulqin. Whereas the cross sections are the areas: Lushnje-Elbasan-Diber; Vlore-Tepelene-Erseke; Shkoder-Kukes-Prizren.

The precautions to be taken in reducing the negative effects of earthquakes might be classified in three directions:

The assignments of scientific ents;

The assignments of legislative and enforcement state institutions;

The education of population in how to act during and after an earthquake.

**Keywords:** the earthquake, the movement of tectonic plates, Adria mini plate, African plate, Eurasian plate, areas with high seismic level.

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European Journal of Economics, Law and Social Sciences ISSN 2519-1284 (print) ISSN  
2510-0429 (online)

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