Geoparks as Geoscientific Laboratories – Rising Public Awareness on Natural Hazards

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The European Geoparks Network - EGN founded in 2000 is a European network of cooperation among Geoparks supported by the E.U. to promote rational management of geosites, education in earth sciences as well as sustainable local development through geotourism.

Educational activities lie in the core of the Geoparks interest and operation. Within this framework Geoparks may function as natural outdoor laboratories that contribute raising public awareness on natural disasters by explaining to the public major geological events and natural phenomena (earthquakes, volcanic eruptions).

Public rarely pays attention to the Earth processes unless there is a catastrophic event. Many people never heard before that Iceland sits on an upraised magma plum originated from a divergent tectonic plate boundary until 14 April 2010 when the Eyjafjallajokull volcano began to spew huge ash clouds as high as 11 kilometers into the stratosphere quickly hindering flights across Europe. The Lesvos Petrified Forest, the very first Greek Geopark, already counts one decade of successful operation including educational activities to enhance public awareness geodynamic processes and natural hazards. During the last 2 years more than 6.000 students participated in the program "Earthquakes: natural processes and hazards on planet Earth - Living on an earthquake island" aiming to familiarize students and citizens living on the Aegean islands with earthquakes, active faults and seismic hazard.

Lesvos Petrified Forest Geopark is organizing educational activities on volcanic hazards as well. Lesvos Island suffered from a series of volcanic eruptions during Miocene which led to the creation of many volcanic geosites and the Petrified Forest. Lesvos geopark can be considered as an open-air volcanological museum presenting paleo-volcanic activities thus offering through its interpreted volcanic geosites and exhibition models, unique educational tools to explain the ongoing volcanic explosion in Iceland, as there are remarkable similarities between active processes like the ongoing pyroclastic flows and floods of Eyjafjallajokull with the paleo-mudflows in the Lesvos Petrified Forest area.

Lesvos Petrified Forest Geopark is a good example of using Geoparks as natural laboratories on Planet Earth processes to educate the public in order to reduce the consequences of natural disasters.

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