## **International Conference**

## Analysis and Management of Changing Risks for Natural Hazards

18-19 November 2014 | Padua, Italy

BP3

[Influences of deforestation on human safety and quality of life]

[loana VLAD SANDRU, Alina RADUTU, Dragos BRATASANU, Ion NEDELCU]

[Romanian Space Agency, 21-25 Mendeleev str. 010362 Bucharest, Romania]

## **Corresponding author details:**

[ioana.vlad@rosa.ro]

**Keywords** (10 words max):

[Deforestation, landslide, satellite remote sensing, environment, human exposure]

Abstract (500 words max):

[Slope movement is a widespread hazard in mountainous regions around the world, major ecological, environmental problems and financial costs arising in larger geographical areas. Obvious, such landslides occur as a consequence of various triggering factors. One of these, deeply assessed in the present study, is human intervention like deforestation, which may cause capacity's soil lose and ultimately lead to landslides during heavy rainfall. The firm roots of the trees keep the soil in place, even when it absorbs water, thus diminishing the effects that gravity has on the soil. When the trees are removed, soil movement takes place more easily and rapidly resulting in deadly landslides.

The selected research area is located in the Carpathians, particularly in the mountainous and hilly region of the Buzau County, Romania, where the excessive pressure on the environment through deforestation, improper land use and unsuitable location of industrial activities makes the territory more prone to natural disasters (Bălteanu, 1997). Large deforested areas in intensely populated and managed areas lead to slope instability and rapid water runoff, resulting in increased landslide activities, mudflows, and flash floods (Micu 2011).

The fundamental purpose of this work is to reveal the necessity of establishing a quality framework for arguing on the connection and interrelation between the domino effect of deforestation, landslide occurrence and socio-economic vulnerability, as family structure, illiteracy, poverty, unemployment, supposing that on any kind of forecasting it is established the extent to which the past is likely to be an accurate guide for the future.

Therefore, by assessing historical series of satellite data, it will be draw out how the landscape has changed along time, due to aggressive forest cuts, pressing on a threaten to human safety.]