BP1

Introduction of soil and land use as elements at risk for flood and landslide risk assessment in the Romanian context of risk and agricultural land evaluation assessment

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Abstract

The Romanian methodology for risk assessment concerning landslides and floods mention land use as element at risk but it is not very specific in mentioning the details for the computation of risk. While for human and infrastructure elements at risk, actual and specific estimation on losses exists, for soils and land use, such an estimation is not specified. In this regard, our aim is to introduce a framework for the computation of the vulnerability and the risk regarding soil and land use in the Romanian context. In Romania, agricultural land evaluation is used to derive a score for the performance of soil for a specific land-use and crop. This score can be used to estimate the soil productivity for a specific land use/crop, and from the productivity the economic performance of a specific land use/crop of a terrain can be derived. Flooding and landslides are used in the agricultural land evaluation methodology as factors to lower the land evaluation score. By relating the scale used for flooding and landslide factors in the computation of the score, the impact of flood and landslide risk on soil and land-use losses can be quantitatively assessed.