RISK GOVERNANCE: A NEW APPROACH TO HANDLE GEOHAZARDS AND ENVIRONMENTAL AND CLIMATE CHANGES

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Environmental and climate changes are part of a new set of risks that are characterized by incomplete understanding of their causes and consequences, by the fact of being incalculable, impossible to compensate, and often invisible, uncontrollable and irreversible (Beck, 1992, 1995). The challenges these risks pose are shifting because of evolving patterns of vulnerability and limitations of existing approaches to mitigating or reducing risks (Walker, 2010). Recent examples of environmental and climate changes, such as floods and landslides in different countries (including Brazil), have highlighted that established models of risk assessment/management and ways of thinking and acting over geohazards may not be sufficient for mitigating risks. Official authorities and experts, including Medical Geology researchers, have noted that dealing with these risks requires specialized knowledge to recognize and measure them; meanwhile it demands a collective and participative process to handle them – particularly considering that events associated with environmental and climate changes have highlighted that individual perceptions have an important role in ways in which individual attitudes and actions of mitigation/adaptation are defined and practiced (Hogan and Marandola Jr, 2009). For geohazards associated with environmental and climate changes the Risk Governance (RG) approach have become increasingly important. RG is a collective learning process to implement policies for mitigating risks and for a sustainable future, which involves representatives of all actor groups (scientists, affected public, authorities, agencies), and takes account of the social/cultural factors that influence individualized and collective answers to risks. RG includes scientific assessments of the risks to human health and the environment, and scientific assessment of related concerns, as well as social and economic implications (Renn, 2008). Considering all challenges involved with studies on geohazards and environmental and climate changes, we endorse a need for a debate about RG between Medical Geology researchers. We encourage thinking that the risk assessment/management require co-design the framing of the problem in an open and effective dialogue with different actor groups; recognize the limits of expert knowledge and the importance of the lay knowledge to generate a common understanding of the magnitude of the risk, as well as the potential risk management options.

Keywords: risk governance, climate change, environmental changes