

Landslide risk assessment and landslide disaster risk management: on the missing link between scientific knowledge, decision making and practice (Sergey Soloviev Medal Lecture)

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Different investigations have been developed to address the uncertainty and quality evaluations leading to improve landslide hazard and risk assessment. With no doubt, and by using a wide range of scientific and technical approaches, they have contributed to a major extent to the understanding of the dynamics of landslide processes at different scales. Nonetheless, in a similar fashion than other hazards, it has been rather difficult to assess in a precise manner the multi-dimensions of their associated vulnerability and what is more, to effectively link risk assessments with disaster risk management. Owing to the double-character of landslide events, as natural and socio-natural hazards, mass movements turn out to be very complex processes, as their occurrence is also enhanced by population growth, socio-economic inequality, urbanization processes, land-degradation, unsustainable practices and mounting hazard exposure.

Disaster Risk Management rope in the actions to attain Disaster Risk Reduction. The latter aims at decreasing existing hazard, vulnerability, and exposure, in addition to strengthening resilience, and very importantly, avoiding the construction of future disaster risk (UNISDR, 2015a). More specifically, and along the same line of ideas, the new-fangled Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030 (UNISDR, 2015b) points towards reducing disaster risk and losses by engaging in a series of actions at local, national and global levels. Among them and of utterly significance are those initiatives related to the need of moving from risk assessment into disaster risk management. Consequently, and beyond championing scientific and technical capacity to strengthen landslide knowledge to assess vulnerability, hazard exposure and disaster risks, the challenge remains in the realm of promoting and improving permanent communication, dialogue and partnership among the science and technology communities, policymakers and other stakeholders, including indeed society, with the intention of encouraging a science-policy interface for effective decision-making and practice within the sphere of landslide disaster risk management.

References

UNISDR (2015a) Global Assessment Report, Making Development Sustainable: The Future of Disaster Risk Management. Geneva, Switzerland.

UNISDR (2015b) Sendai Framework for Disaster Risk Reduction 2015-2030. Geneva, Switzerland.