

Integration of Natural Hazard Governance: A Historical Analysis in a Swiss Alpine Region

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Abstract : This research delves into the evolution of natural hazard management policy in Switzerland through the lens of policy integration, a crucial concept for addressing complex, cross-cutting issues like natural hazards. Through a descriptive case study approach focussing on the Canton of Grisons, the research explores how policy integration has evolved between 1870 and 2020 alongside with specific contextual conditions characterizing the complex relation between humans and nature in Alpine areas subject to natural hazards with high damage potential, such as landslides, avalanches and floods. The primary objective of the research is to evaluate the changes in policy integration that can be observed across the study period and discern the key drivers behind these transformations. Employing a mixed-method qualitative approach, the research begins with a semi-systematic literature and document review, examining the legislative context in a historical perspective. Subsequently, policy integration is analysed using an established conceptual framework that distinguishes between four crucial dimensions: policy frames, subsystem involvement, policy goals, and policy instruments. Lastly, expert interviews were conducted to validate and enrich the findings from the analysis. The study reveals a discernible increase in policy integration across all dimensions analysed. Among the drivers of such change, the study highlights key factors that can be categorized as follows: (i) socio-political factors, (ii) advancements in technical and scientific knowledge, (iii) federal legislation and guidelines, as well as (iv) natural events. This study - conducted as part of a Master's programme in the Department of Environmental Systems Science of the Swiss Federal Institute of Technology (ETH) in Zurich - contributes to policy integration research by offering valuable insights into the evolving landscape of policy integration and the pivotal role played by contextual conditions. By casting light on the interconnectedness between policy evolution and contextual factors, this study offers insightful perspectives on how natural hazard management policy can adapt and respond to dynamic socio-political, technical, and environmental challenges.

Keywords : natural hazard management, policy integration, policy coherence, alpine region

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