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Societal transformation and adaptation necessary to manage dynamics in flood hazard and risk mitigation (TRANS-ADAPT)

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Facing the challenges of climate change, this project aims to analyse and to evaluate the multiple use of flood alleviation schemes with respect to social transformation in communities exposed to flood hazards in Europe. The overall goals are: (1) the identification of indicators and parameters necessary for strategies to increase societal resilience, (2) an analysis of the institutional settings needed for societal transformation, and (3) perspectives of changing divisions of responsibilities between public and private actors necessary to arrive at more resilient societies. This proposal assesses societal transformations from the perspective of changing divisions of responsibilities between public and private actors necessary to arrive at more resilient societies. Yet each risk mitigation measure is built on a narrative of exchanges and relations between people and therefore may condition the outputs. As such, governance is done by people interacting and defining risk mitigation measures as well as climate change adaptation are therefore simultaneously both outcomes of, and productive to, public and private responsibilities. Building off current knowledge this project will focus on different dimensions of adaptation and mitigation strategies based on social, economic and institutional incentives and settings, centring on the linkages between these different dimensions and complementing existing flood risk governance arrangements. The policy dimension of adaptation, predominantly decisions on the societal admissible level of vulnerability and risk, will be evaluated by a human-environment interaction approach using multiple methods and the assessment of social capacities of stakeholders across scales. As such, the challenges of adaptation to flood risk will be tackled by converting scientific frameworks into practical assessment and policy advice. In addressing the relationship between these dimensions of adaptation on different temporal and spatial scales, this project is both scientifically innovative and policy relevant, thereby supporting climate policy needs in Europe towards a concept of risk governance.

Key words: climate change adaptation; transformation; flood risk management; resilience; vulnerability; innovative bottom-up developments; multifunctional use