



## **Eliciting knowledge on soft flood-risk management strategies in the Ukrainian Tisza river basin**

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This paper focuses on a participatory knowledge elicitation process (KnETs) to explore decision-making criteria regarding 'soft' techniques for flood risk management in the Ukrainian Tisza river basin. Communities in this region are faced with frequent floods and limited governmental budgets to cope with flood impacts. To identify the potential for soft flood protection measures as opposed to traditional technical solutions, we explored the decision-making heuristics of village council heads and the conditions under which they do or do not prepare for a flood event.

Tacit knowledge, which is often unconscious and therefore difficult to describe, is complex to uncover through conventional interview techniques. To address this issue, a participatory process has been designed to reveal this knowledge without losing its connection to the context in which it is applied. That is, the KnETs process has been designed to understand context-relevant adaptive strategies and the reasons they are chosen in a natural resource management context. The process can be adapted to explore the contextual specificities of many situations ranging from flood and drought risk management to livelihood choices and the adaptation options considered in each set of circumstances. This interdisciplinary approach integrates ethnographic methods from the social sciences domain with classical computer science knowledge engineering techniques to address current bottlenecks (related to time and resource requirements) in both areas of research.

This provides a participatory process, from knowledge elicitation to knowledge representation, verification and validation, providing a greater clarity of local data and thus possibly a greater understanding of social vulnerability and adaptive behaviour in flood situations.