Risk-KAN Working Group: *Nature-Based & Community-Led Climate Risk Strategies*

Working Group leads

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Rational

Sustainability is generally knowledge-intensive, thus requiring constant reiteration and production of new knowledge. One area where this has become critical is in the nexus of climate change and systemic risks. Climate change and its related impacts pose significant socio-economic challenges to the contemporary global community. As climate change and related systemic risks are projected to increase in frequency and intensity, it has become necessary to explore novel approaches to address their multidimensional impacts.

Among the approaches that have gained global recognition, **nature-based and community-led solutions stand out as promising pathways for both disaster risk reduction and climate adaptation**. These approaches **integrate ecological and social systems, drawing on local knowledge and natural processes to build resilience**. Such strategies harness the key role of ecosystems to mitigate hazards like flooding, heatwaves, and erosion while enhancing biodiversity and local livelihoods. They also prioritize the knowledge, leadership, and participation of local communities, ensuring that solutions are culturally appropriate, socially equitable, and sustainable over the long term.

A key rationale of this working group is to **advance inter- and trans-disciplinary research on the effectiveness, scalability, and governance of these strategies**. By integrating insights from different disciplines, the group aims to **bridge knowledge gaps and support evidence-based decision-making** for more resilient and adaptive communities.

Aims

- Advance scientific understanding of the role, effectiveness, and limitations of nature-based solutions in managing systemic disaster and climate risk across diverse ecological and socio-economic contexts.
- Foster interdisciplinary exchange and collaboration on the topic of nature-based solutions and community-led disaster risk management, and climate change adaptation.
- Facilitate mutual learning through the sharing of practices among different geographic and socio-economic contexts, exploring their transferability while acknowledging and

respecting context-specific limitations and the importance of community-led approaches.
- Identify key enablers and barriers to the implementation of nature-based solutions and community-led disaster risk management and climate change adaptation.
- Support the development of tools, methods, and frameworks to enhance assessment, monitoring, and decision-making.
- Providing more actionable scientific evidence to reduce the science-to-practice gap in the field.
- Promote inclusive governance models that empower local communities, Indigenous knowledge systems, and multi-stakeholder partnerships.

Planned Activities

- Organize regular online seminars to share research insights and foster discussions (one every 3 months - around 4 per year).
- Participate in events/workshops (e.g., Splinter Meeting at EGU26).
- Organize dedicated scientific sessions at EGU26 (under NH9, NH10, or ITS) and other relevant policy dialogues.
- Contribute to debate in the field through journal articles, policy briefs, and blog posts.