RiskKAN Working Group: *Warnings & Preparedness for a Riskier World*

Working Group Leads

- **Robert Sakic Trogrlic**, International Institute for Applied Systems Analysis, Austria (trogrlic@iiasa.ac.at)
- **Marleen de Ruiter**, Vrije University Amsterdam, Institute for Environmental Studies, the Netherlands (m.c.de.ruiter@vu.nl)
- **Andrew Kruczkiewicz**, Columbia University, United States (andrewk@iri.columbia.edu)

Rationale

As climate change, urbanisation, land degradation, and systemic interdependencies intensify the frequency and complexity of disasters, there is a growing need to strengthen multi-hazard early warning systems (MHEWS), anticipatory action and preparedness strategies that enhance resilience across scales and different contextual settings. While early warning systems have advanced significantly for single hazards, they remain fragmented and insufficient in addressing compound, cascading, and interacting risks, leading to potential trade-offs in preparedness and response options. This working group responds to the call to address that gap by providing a collaborative platform for researchers, practitioners, and policymakers to co-develop novel insights and knowledge on risk-informed, people-centered MHEWS and preparedness approaches. By connecting diverse actors across sectors and geographies, the group seeks to accelerate science-policy-practice linkages in early warning and preparedness, in alignment with the Sendai Framework for Disaster Risk Reduction, the UN Early Warning for All initiative, and broader climate adaptation and sustainable development agendas.

Aims

- Advance scientific understanding of multi-hazard early warning systems (MHEWS), anticipatory action and preparedness, focusing on their effectiveness, limitations, and role in enhancing resilience to complex, cascading, and compound risks.
- Bring together diverse disciplinary perspectives and practitioner knowledge to foster integrated thinking and innovation around early warning and preparedness, including overlapping communities of EWS, anticipatory action, and forecast-based financing.
- Encourage cross-regional dialogue and reflection by exchanging practical experiences from varied institutional, socio-economic, and cultural contexts, while being attentive to the importance of locally-grounded approaches.

- Make progress toward first describing the intersections across research, policy and practice, and then addressing identified gaps by generating actionable knowledge that supports timely, informed, and inclusive risk reduction efforts.
- Support inclusive and participatory models of early warning governance, promoting the meaningful involvement of local actors, at-risk groups, and underrepresented voices in the design and operation of warning and preparedness systems.

Planned activities

- Host quarterly online knowledge-sharing sessions to present ongoing research, case studies, and emerging practices in multi-hazard early warning and preparedness (approximately 4 per year).
- Engage in key conferences and workshops (e.g., EGU, AGU, Adaptation Futures) to connect with wider communities of practice, including coordination of thematic sessions in these events.
- Produce and disseminate outputs such as peer-reviewed articles, practice briefs, and blog posts to stimulate debate and inform policy and implementation communities.
- Organize targeted online and in-person workshops to facilitate in-depth exchange, co-production of knowledge, and capacity strengthening among researchers, practitioners, and policymakers.
- Serve as a liaison between practitioners and the research community by providing support and a space for identifying research and practice priorities.