

Advancing Volcanic Risk Reduction through Science-Policy Integration: A UNESCO-IAVCEI Workshop

Volcanic risk represents a complex, multi-dimensional process that unfolds across diverse temporal and spatial scales, generating cascading impacts on numerous sectors including coastal systems, agriculture, water resources, cultural and natural heritage, aviation, marine and terrestrial transport, urban areas, and human health. Addressing these interconnected risks requires a coordinated, science-based, and multi-hazard approach, fully aligned with UNESCO's mandate across natural sciences, ocean science, water, heritage protection, and disaster risk reduction.

This IAVCEI-UNESCO workshop seeks to: (i) Gain deeper insight into IAVCEI's and UNESCO's current activities. (ii) Identify complementarities across IAVCEI and UNESCO, ensuring that volcanic risk is addressed in an integrated manner, from scientific observation and data standards to early warning systems, site protection, and geoparks tourism and geoeducation. (iii) Frame collaboration within the Early Warnings for All (EW4All) initiative, through access to cutting-edge volcanological expertise and global scientific networks. (iv) Position UNESCO as a strategic institutional platform for geohazards, leveraging IAVCEI's scientific leadership to reinforce UNESCO's role as a governance convenor, knowledge broker, and capacity-building partner for Member States.

Through this engagement, IAVCEI and UNESCO aim to move from an exploratory dialogue toward a more structured collaboration model that enhances scientific integration, strengthens multi-hazard early warning capacities, and supports Member States in reducing volcanic risk in line with the Sendai Framework and EW4All commitments.

The workshop will help identify practical entry points for collaboration between UNESCO and IAVCEI, including potential joint initiatives, scientific contributions to global early warning efforts, and opportunities for strengthening capacity-building and knowledge exchange.