## INTERNATIONAL MOUNTAIN CONFERENCE

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#IMC22

>> SYNTHESIZE MOUNTAINS OF KNOWLEDGE <<

# **Submitted Abstract**

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### **Abstract**

#### Research Topic and Problem Statement

Climate change, along with socio-economic and political pressures, represents a threat to community resilience and sustainable development processes. Due to mountains' topography and susceptibility to climate change, and limited access to external resources and critical infrastructure, mountain communities are particularly exposed to the adverse effects of these driving forces. If not adequately addressed, these dynamics can lead to poor land-management strategies further exacerbating social vulnerability to climate-related risks. Solutions to improving mountain communities' resilience very much depend on context-specific factors and governance models. Adaptation strategies developed in specific governance settings are not necessarily transferable to other case studies, and this represents a challenge to mainstreaming solutions and implementing international frameworks for sustainable development and disaster risk reduction.

### Research Objectives and Methods

Because of their model structure and the division into core, buffer and transition areas, Biosphere Reserves represent fertile ground for transdisciplinary research on the complex dynamics that guide the management of social-ecological systems. More specifically, such research is needed when developing adaptation pathways that respond to communities' needs in relation to their environment and land-use practices. Based on the question whether Biosphere Reserves model structure can facilitate transferability of research results and adaptation strategies, this research analyses the local governance structure of two selected UNESCO Mountain Biosphere Reserves, namely the Italian Julian Alps (Italy), registered in 2019, and Tadami (Japan), registered in 2014. The scope of the study is that of (1) identifying those implemented or planned measures contributing to enhancing community resilience to climate-related risks, (2) determining the level of engagement between the three levels of conservation (core, buffer, and transfer zone), and (3) investigate to what extent these measures are developed with the engagement of local communities and local actors. Adopted methodologies include literature review of available data and structured interviews with the representatives of the Biosphere Reserve management team for both case study areas. Results will feed into a broader research project for the co-creation of transformation knowledge into Biosphere Reserve's adaptation pathways.