**Session Proposal**

# Session Title

Sculpted by stones, enriched by soils: Global trends on Historic Agricultural Terraces. First step towards building a research community

# Session Organizers

**Axel Cerón González**, FWO Individual doctoral fellow – Vrije Universiteit Brussel and KU Leuven, Belgium, [axel.ceron.gonzalez@vub.be](mailto:axel.ceron.gonzalez@vub.be), main contact person

**Javier Leonardo Toxqui Roldán**, Soil Genesis, Morphology and Classification Research Group, Colegio de Postgraduados Campus Montecillo, Mexico, [toxqui.javier@colpos.mx](mailto:toxqui.javier@colpos.mx)

**Yannick Devos**, AMGC - Archaeology, Environmental Change and Geochemistry Research Group, Vrije Universiteit Brussel, Belgium, [yannick.george.devos@vub.be](mailto:yannick.george.devos@vub.be)

**Ma. del Carmen Gutiérrez Castorena**, Genesis, Morphology and Soil Classification Research Group, Colegio de Postgraduados Campus Montecillo, Mexico, [carmen.gutierrez.castorena@gmail.com](mailto:carmen.gutierrez.castorena@gmail.com)

# Session Description

Terracing has been a fundamental agricultural practice for thousands of years, significantly transforming mountainous regions in diverse climates, from the tropics (e.g., southeastern China and the Peruvian Andes) to the Mediterranean (e.g., central Italy and southern Cyprus) and semi-arid zones (e.g., central Mexico). Beyond their role in improving food production, terracing systems are often overlooked as hotspots of socio-ecological heritage, preserving invaluable records of human agency and environmental change.

Recently, soil and social scientists have begun to study terraces more closely, recognizing these landscapes as unique features that alter the soil geography of mountain areas and present challenges to soil classification. At the same time, they reflect processes of inter- and transgenerational land management strategies. This raises many important questions: Why have rural communities invested in labor-intensive terracing systems? What socio-ecological services have they historically provided, and how can they inform contemporary land management? Are terrace soils repositories of 'soil memory'?

This session will explore recent trends in terraced landscape research, highlighting the links between historical land use strategies and current global challenges such as soil erosion, cultural heritage degradation, and the need to improve the connectivity of terrace soils. We welcome papers that employ transdisciplinary perspectives and innovative methodologies across multiple spatial and temporal scales, ranging from soil micromorphology to regional landscape studies and from Bronze Age terracing practices to modern applications. The session has two main aims. First, soils should be positioned as central actors in the history of terracing systems, emphasizing their role in preserving 'soil memories' and their conservation as part of cultural heritage. Second, to promote networking among terrace soil scientists, fostering greater collaboration and co-creating a community of scholars, possibly under the auspices of IUSS. This last initiative could be the basis for proposing a dedicated working group to ensure long-term commitment.

# Relevance

This session aims to attract a diverse audience, appealing to historians, archaeologists, soil micromorphologists, geographers, and cultural heritage specialists, particularly those focusing on stone structures. It is aimed at interdisciplinary scholars exploring innovative technologies for mapping, dating, analyzing, and dealing with terrace soil storytelling, as well as at identifying previously unreported gaps using established tools such as soil classification systems. In addition, the session aims to engage early-career researchers and social scientists, facilitating collaborative dialogues to address the socio-ecological significance of ancient and modern terracing systems. Align the rapidly growing interest in the topic with the goals of the 23WCSS, Terraced Soils for Future Generations.

# Format

The session will include oral presentations and a short final discussion. The final debate will focus on the proposal to co-create a community of soil terrace researchers.

# Proposed Speakers

Potential speakers from South America, Northern Europe, and the Eastern Mediterranean have been identified.