**Session Proposal**

# Session Title

# Women in Soil Science: Closing Gaps and Strengthening Collaboration

# Session Organizers

1. **Prof. Dr. Wang Fang**, Institute of Soil Science, Chinese Academy of Sciences, wangfang@issas.ac.cn
2. **Prof. Dr. Daniela Sauer**, University of Göttingen, Daniela.Sauer@geo.uni-goettingen.de
3. **Prof. Dr. Sabine Grunwald, University of Florida,** sabgru@ufl.edu
4. **Dr. Laura Bertha Reyes Sánchez**, National Autonomous University of Mexico, lbrs@unam.mx

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# Session Description

Soil degradation is a global crisis that threatens food security, water quality, biodiversity, and human well-being. Addressing these challenges requires diverse expertise and inclusive collaboration. However, despite their growing contributions, women remain significantly underrepresented in soil science, particularly in leadership, research, and fieldwork. Globally, only 32% of soil science society members are women, and just 20% of national soil science societies under the International Union of Soil Sciences (IUSS) have female presidents—highlighting persistent gender disparities in decision-making and influence.

This session will explore how closing the gender gap can strengthen global efforts to protect soil health, advance sustainable agriculture, and address climate change, environmental degradation, and public health. It will emphasize the importance of fostering collaboration among women in soil science to drive innovation, mentorship, and collective action.

**Discussion Topics:**

* **Breaking Barriers**: Identifying gender disparities in education, research, and professional growth, and strategies to promote equity.
* **Women’s Contributions to Soil Sustainability**: Showcasing their impact on climate-resilient agriculture, conservation, and policy-making.
* **Strengthening Collaboration**: Building networks, mentorship programs, and institutional support to enhance women’s leadership and influence in soil science.
* **Policy and Institutional Actions**: Strategies to create inclusive opportunities and systemic changes for women in the field.

By fostering gender-inclusive collaboration, we can unlock transformative solutions for a more sustainable future. This session aims to inspire action, amplify women's voices, and build a stronger, more equitable soil science community.

1. **Relevance**

This session highlights the critical role of women in advancing soil science and addresses the barriers to their participation and leadership in the field. By fostering gender-inclusive approaches, it demonstrates how empowering women can drive meaningful progress toward key UN Sustainable Development Goals (SDGs), including Zero Hunger (SDG 2), Clean Water and Sanitation (SDG 6), Climate Action (SDG 13), and Gender Equality (SDG 5). Ensuring women's full involvement in soil science is not only a matter of equity but a strategic necessity for developing comprehensive and effective solutions to safeguard soil health and sustain life on Earth.

# Format

This session will include both a panel discussion and a roundtable discussion.

# Proposed Speakers

1. **Prof. Dr. Sabine Grunwald**

**University of Florida**

Ph.D., Professor Pedometrics, Landscape Analysis & GIS Laboratory

Soil and Water Science Department

Specialized in carbon quantification, carbon budgeting, and carbon simulation modeling in support of soil & crop health, carbon marketing, and carbon crediting --- to build a carbon-neutral future.

Email: sabgru@ufl.edu

1. **Prof. Dr. Xiaofeng Cao**

**Institute of Genetics and Developmental Biology, Chinese Academy of Sciences**

Specialized in epigenetic regulation mechanisms, using rice and grasses as models to study plant adaptation to low temperatures and saline-alkali soils.

Email: xfcao@genetics.ac.cn

1. **Prof. Dr. Florence Mtambanengwe**

**University of Zimbabwe**

Specialized in Participatory action research; gender-sensitive approaches to integrated soil fertility management; climate change adaptation; environmental impact assessment; and biodiversity conservation and management.

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1. **Dr. Leigh Winowiecki**

**World Agroforestry Centre (ICRAF), Nairobi**

Dr Leigh Ann Winowiecki is the CIFOR-ICRAF Soil and Land Health Global Research Lead. A soil scientist, her research focuses on scaling farmer-centered landscape restoration, understanding drivers of degradation, and quantifying the impacts of land management on soil organic carbon. She is based in Nairobi, Kenya. Since 2009 she has co-developed and implemented the Land Degradation Surveillance Framework (LDSF) in over 40 countries.

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1. **Prof. Dr. Lena Q Ma**

**Zhejiang University.**

A renowned expert in soil contamination and remediation, as well as land application of waste materials

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