International Seminar - Dr. Leigh Ann Winowiecki, Ph.D

Title: Advancements in soil health monitoring for ecosystem restoration, biodiversity, food and nutrition security and climate action.

Abstract: Healthy soil is the very foundation of our food systems and provides several vital ecosystem services, from carbon sequestration to improving food and nutrition security, to regulating the water cycle to hosting biodiversity. However, land degradation negatively impacts over 3.2 billion people, globally. Efforts to combat desertification, to move from scarcity to prosperity, will need to consider how to scale soil health, globally. Continuing business as usual is no longer an option. In order to both stop further degradation and prioritize interventions going forward, a robust evidence base is needed. At CIFOR-ICRAF, we recognize the critical role of science and the need to bridge the gap between research, development, and private sector to accelerate impact on the ground. This presentation will highlight advancements monitoring soil health, land degradation and vegetation diversity, with a focus on sub-Saharan Africa. We will highlight the combination of on-the-ground field assessments, advanced data analytics, Earth Observation and citizen science to track changes overtime, including of soil organic carbon. These methods have been implemented and scaled across agricultural landscapes, rangelands, and forests, with a myriad of partners across forty countries across the global tropics.

Time and date: Tuesday 30th April, 14:00-16:00 (CET)

Place: Online - Teams meeting

Teams link: Join the meeting now

Meeting ID: 367 441 874 322 - Passcode: cEWmtM

Bio and summary: 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. The framework is a systematic methodology to assess ecosystem health and track restoration efforts across landscapes. She has published widely on soil organic carbon,



ecosystem services and land degradation across sub-Saharan Africa and the tropics, including a coherent set of open access datasets. She co-leads the Coalition of Action 4 Soil Health (CA4SH) within the UN Food Systems Summit, which aims to catalyze investments in soil health for human well-being and climate. Leigh has a PhD from CATIE in Costa Rica in Tropical Agroforestry and in Soil Science from the University of Idaho. She was a postdoctoral fellow at Columbia University – Earth Institute. She joined CGIAR in 2011. She is on the Scientific Task Force and the Monitoring Task Force for the UN Decade on Ecosystem Restoration as well as the Scientific Steering Committee for the Global Soil Health Programme. She co-leads the Landscape Restoration Transformative Partnership Platform. She is also a founding Board Member of the International Union of Agroforestry (IUAF).

More info at: https://www.coalitionforsoilhealth.org/