# Webinar #8: Innovations in soil health monitoring for nature and people

Thursday 28 October, 2–3pm CEST | **register here**

## Speaker and panelist biographies

**Dr Rattan Lal** is Distinguished University Professor of Soil Science at Ohio State University and Director of the College of Food, Agricultural and Environmental Sciences Rattan Lal Center for Carbon Management and Sequestration. He is also co-lead of the Coalition of Action 4 Soil Health as part of the United Nations Food Systems Summit, and the 2020 World Food Prize Laureate – attaining the award for developing and mainstreaming a soil-centric approach to increasing food production that restores and conserves natural resources and mitigates climate change. Over his career spanning more than five decades and four continents, Dr Lal has promoted innovative soil-saving techniques benefiting the livelihoods of more than 500 million smallholder farmers, improving the food and nutritional security of more than two billion people and saving hundreds of millions of hectares of natural tropical ecosystems. Dr Lal, whose mantra is "healthy soil = healthy food = healthy people = healthy ecosystems = healthy planet", is honored to be ranked among the top 2% of scientists in the world.

**Dr Viridiana Alcantara-Shivapatham** is Senior Program Officer for Agriculture Innovations in the organization Verra. She supports her team to advance Verra's work in the agriculture sector, specifically through the development and implementation of new agricultural methodologies and projects for verified carbon standards, as well as by exploring opportunities to promote regenerative agriculture within Verra's other frameworks. Dr Alcantara-Shivapatham provides technical guidance to Program Team colleagues and to users of Verra programs in the agriculture sector, including on the use of emerging measurement, reporting and verification technologies and approaches.

**Dr Paul Luu** is Executive Secretary of the international initiative 4 per 1000, launched on 1 December 2015 at COP 21, to federate all voluntary stakeholders of the public and private sectors relating to food security and climate (national governments, local and regional governments, companies, farmer and forestry organizations, non-governmental organizations, research facilities, etc.). The aim of the initiative is to demonstrate that agriculture, and in particular agricultural soils, can play a crucial role where food security and climate change are concerned.

**Dr Brent Swallow** is Professor of Resource Economics and Environmental Sociology at the University of Alberta, Canada. Dr Swallow earned BSA and MSc degrees from the University of Saskatchewan and a PhD from the University of Wisconsin-Madison. His major fields of study were resource economics and development economics; he has continued to study the nexus between agricultural development and environment throughout his career. Dr Swallow was made a Distinguished Associate of the World Agroforestry Centre and is a member of the WLE Independent Steering Committee. He teaches courses on food systems, the economics of world food and agriculture, environmental policy and development economics.

**Dr Leigh Winowiecki** is Soil and Land Health Global Research Leader at the world agroforestry organization CIFOR-ICRAF. A soil systems scientist, Dr Winowiecki focuses her research on farmer-centered landscape restoration, regenerative agricultural practices to build soil health, and soil organic carbon dynamics. She is based in Nairobi, Kenya and, since 2009, has co-developed and implemented ICRAF's Land Degradation Surveillance Framework in over 40 countries. This framework is a systematic methodology to assess soil and land health and track restoration efforts across landscapes. Dr Winowiecki co-leads the Coalition of Action 4 Soil Health which evolved out of the United Nations Food Systems Summit engagement process and aims to catalyze investments in soil health for human wellbeing and climate.

**Dr Job Kihara** is an expert in soil health with over 20 years' experience and a team leader on soil and water management within the Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT). He is a passionate agronomist focused on improving crop productivity through integrated soil fertility management approaches and cropping systems improvements mostly within sub-Saharan Africa. Recent research interests include addressing the limitations of micronutrients in soils and the relations necessary to produce quality and soil-based climate change adaptations.

**Dr Ermias Betemariam** is a land health scientist with a research interest in land degradation, landscape ecology, restoration ecology, soil carbon dynamics and spatial sciences. He has worked as a watershed management expert in small- and medium-scale irrigation projects in Ethiopia and has served as a lecturer in Mekelle University, Ethiopia. Currently, Dr Betemariam is a land health scientist at World Agroforestry (ICRAF) with major responsibilities for leading a land health surveillance team under the "land health decisions" theme. He is involved in the development of land health measurement and monitoring protocols, lead research projects across Africa, resource mobilization and capacity development. He is also a focal point for the United Nations Convention to Combat Desertification at ICRAF.

**Dr Wei Zhang** is a research fellow at the International Food Policy Research Institute in the Environment and Production Technology Division. She leads a research program on ecosystem services under the theme of natural resource management, and conducts policy-relevant research on the intersection between agriculture, development and nature. Dr Zhang's research interests include valuing and modeling ecosystem services in relation to land cover/use and management practices, managing landscape-based ecosystem services for sustainable agriculture and livelihoods, and understanding the socio-economic and behavioral factors in decisions relating to ecosystem services and natural resource management. She has extensive experience leading and implementing multidisciplinary research projects in Africa, South Asia, East and Southeast Asia and has actively engaged in a number of global research initiatives and working groups.