

IITA Soil Scientist Presented Africa's Soil Information Systems at the 23rd World Congress of Soil Science in Nanjing, China



A delegation of African soil scientists at the 23rd World Congress of Soil Science, held in China, in June 2026

The Soils4Liberia Project marked another significant milestone on the global stage as its Soil Scientist, Dr. Samuel A. Mesele, participated in the 23rd World Congress of Soil Science (WCSS) held in Nanjing, China, from June 7 – 12, 2026.

Convened under the theme "Soils and the Shared Future for Humanity," the congress brought together thousands of scientists, researchers, policymakers, development practitioners, and agricultural experts from across the globe to discuss the future of soil science and its critical role in addressing some of the world's most pressing challenges, including food security, climate change, biodiversity conservation, and sustainable agricultural development.

As part of the scientific programme, Dr. Mesele delivered a technical presentation on lessons learned and application frameworks for soil monitoring in Africa, drawing extensively from experiences gained through the Soils4Africa project in developing continental soil information systems.

His presentation highlighted innovative approaches to soil data collection, monitoring, management, and digital information systems that are helping transform agricultural decision-making across Africa. By sharing practical experiences from large-scale soil mapping initiatives, Dr. Mesele demonstrated how reliable soil information is becoming an essential foundation for improving agricultural productivity, supporting climate adaptation, and promoting sustainable natural resource management.

The presentation also provided valuable insights into the work of the Regional Hub for Fertilizer and Soil Health for West Africa and the Sahel, where efforts are underway to strengthen regional soil information systems, promote digital soil mapping, and generate site-specific fertilizer recommendations that improve soil health and increase agricultural productivity.



Dr. Samuel A. Mesele (in blue African suit) sits attentively at the conference

Reflecting on the event, Dr. Mesele described the experience as an opportunity to celebrate Africa's growing contribution to global soil

Science, while exchanging knowledge with fellow scientists working across the continent.

"It was inspiring to have seen a strong African representation, share experiences, and discuss how soil science can better support food security, climate resilience, and sustainable land management across our continent," he noted.



Dr. Mesele presenting findings on soil organic carbon and soils health at the conference

Today, these same professionals are presenting their scientific work and sharing their experiences on a global stage, demonstrating how collaboration and collective learning can drive meaningful impact," he reflected.

These experiences closely align with the objectives of the Soils4Liberia Project, which is working to develop the Liberia Soil Information System, an integrated system that consolidates all data generated from the soil survey, sample soil testing, and analysis, as well as the final output generation for soil mapping and recommendations.

IITA Supports Soils4Liberia Field Campaign, Completes Data Collection in Grand Cape Mount, Bomi, and Parts of Gbarpolu and Montserrado Counties



IITA Staff in the field in Bomi County

The Liberia Land and Soil Resources Project (Soils4Liberia) continues to make significant progress in its nationwide soil data collection campaign, with the IITA-led Soils4Liberia Project technical teams joining the field operations after the successful Completion of the first phase by the Liberia Central Agricultural Research Institute (CARI) in Bong County.

As the lead institution for the field campaign, CARI completed the roll-out of soil data collection across 198 Tertiary Sampling Units (TSUs) in Bong County, laying a strong foundation for the project's nationwide effort to strengthen Liberia's soil information system.

Building on this momentum, IITA, the lead implementing partner for the Soils4Liberia Project, deployed its technical field team to Grand Cape mount, Bomi, and parts of Gbarpolu and Montserrado Counties as a means to support the field campaign activities.

Traversing difficult areas during the rainy season, the team encountered flooded roads, damaged bridges, impassable farm tracks, and remote forested landscapes in reaching the designated soil sampling locations.

These experiences offered a deeper appreciation of the resilience, commitment, and technical expertise required to conduct scientific fieldwork across diverse ecological zones.



IITA Staff in the field Carrying on profile description in Grand Cape Mount County