The 6th International Forum on Big Data for Sustainable Development Goals (FBAS 2026)

Session Proposal Template

Session Title	Advances in soil mapping and monitoring for sustainable fertility management	
Session Chair(s)	*Name*	ZUO Lijun
	Affiliation	International Research Center of Big Data for Sustainable Development Goals (CBAS)
	Profile (200-word limit)	Dr. ZUO Lijun is professor of Aerospace Information Research Institute, Chinese Academy of Sciences (CAS), and global coordinator of SDG 2 for International Research Center of Big Data for Sustainable Development Goals. Her research focuses on remote sensing of land use change, and impact of land use change on food security and ecosystems. She hosted more than 10 major national science and technology projects, and has published more than 100 papers in journals including Nature Sustainability, Remote Sensing of Environment, etc.
	e-mail	zuolj@aircas.ac.cn
	Name	CHIOZZA Federica
	Affiliation	Land and Water Division, FAO
	Profile (200-word limit)	Land and Water Officer within the FAO's Land and Water Division, she has worked with the organization since 2004 as a geospatial specialist. With a background in Natural Sciences and specialization in Biodiversity Conservation and Management, she has extensive experience in GIS and remote sensing, applying Earth Observation data to land use assessment, agricultural monitoring, and biodiversity conservation. Since 2018, she has been part of the Geospatial Unit of the Land and Water Division, supporting land monitoring, crop suitability analysis, and agro-ecological zoning, working across FAO divisions and with international partners.

	e-mail	federica.chiozza@fao.org
	Name	LUOTTO Isabel
	Affiliation	Land and Water Division, FAO
	Profile (200-word limit)	Isabel is a Land and Water Officer who joined the FAO's Land and Water Division and the Global Soil Partnership in 2018. She holds a MSc from the University of Hohenheim in Tropical Agricultural Sciences. She has extensive experience in handling and extracting valuable information from large datasets and has developed a passion for making complex soil data related topics approachable and scalable. Over the years she has trained hundreds of national experts in digital soil mapping and modeling.
	e-mail	
Contact Person	*Name*	ZUO Lijun
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Preferred Topics	• Digital soil mapping for decision support on fertilizer and sustainable land management • Soil health monitoring through remote sensing and data integration •	
Session Description (200-word limit)	This session will explore recent advances in soil mapping and monitoring as key enablers of sustainable soil fertility management. It will highlight innovative approaches combining field data, remote sensing, and geospatial modeling to generate high-resolution soil information for improved agricultural planning. A central component of the session will be the presentation of results from the SoilFER project in one selected beneficiary country, showcasing practical applications of digital soil mapping in supporting soil fertility assessments and interventions. The session will also introduce decision support tools developed to translate soil data into actionable insights, including the SoilFER CropSuit App and the Fertilizer Recommendation Platform. The potential of soil monitoring based on multiple sources of remote sensing data will be specially discussed. The session aims to demonstrate how integrated soil information systems can enhance decision-making across multiple scales, from farm to landscape levels. It will also	

	provide a platform to discuss challenges related to scaling such tools, as well as ensuring their accessibility and usability across diverse contexts.
Expected outcomes (50-word limit)	Participants will gain insights into practical applications of soil mapping and monitoring for sustainable fertility management. The session will foster knowledge exchange on decision support tools, promote collaboration, and identify opportunities to scale digital solutions for improved soil health and agricultural productivity.

Please submit filled session proposal to fbas@cbas.ac.cn before **April 20, 2026**