



U.S. DEPARTMENT OF AGRICULTURE



# Building Smallholder Resilience Through Information and Communication Technology

September 14, 2021



## Moderator & Presenter

### Using Digital Technologies and Remote Sensing to Reshape Rural Finance for Smallholder Farmers

**Michael Carter**, Distinguished Professor of Agricultural and Resource Economics, University of California-Davis and Honorary Professor of Economics, University of Cape Town. Dr. Carter directs the BASIS Markets, Risk & Resilience Innovation Lab and the I4 Index Insurance Innovation Initiative. He is an elected fellow of NBER (the National Bureau of Economic Research), BREAD (Bureau for Research and Economic Analysis of Development) and the American Agricultural Economics Association.



## Quality Standards and Certification for Index Insurance to Underwrite Resilient Agriculture

**Lilian Ndungu**, Thematic Lead-Agriculture & Food Security, Regional Centre for Mapping of Resources for Development (RCMRD). Ms. Ndungu's career has focused on contributing to the change that is required for Africa to achieve agricultural transformation, through the use of geo-information technologies to develop appropriate, actionable, useful and efficient tools for agriculture decision making. She has been recognized as a Geospatial World's top 50 Rising Stars in 2021 and received a NASA award for her contributions in technologies for agriculture in East Africa.



## **The Promise and Limitations of a Mobile Phone-based Agricultural Commodity Exchange**

**Lauren Falcao Bergquist**, Assistant Professor of Economics, University of Michigan. A Development Economist, Dr. Bergquist's research interests focus on market efficiency, trade, and agriculture in sub-Saharan Africa. She is a Faculty Research Fellow at the National Bureau of Economic Research and involved with several projects through the Poverty Action Lab's joint Agricultural Technology Adoption Initiative.

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## **Effects of Soil Information on Smallholder Farmer's Agricultural Investment and Productivity**

**Christopher Magomba**, Lecturer, Sokoine University of Agriculture-Tanzania. Dr. Magomba's research interests include analyzing the pathways to agricultural commercialization in Tanzania and research on agricultural input suppliers and mineral fertilizer quality in Eastern Tanzania. Ongoing projects include assessing the use of Information Communication Technology (ICT) extension to farmer-centered agroecological approaches for conveying complex and context-specific information and facilitating deep cognitive engagement with new ideas in Tanzania.

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### **Forum themes**

- Farms and Farmers of the Future - **March 2 - 30, 2021**
- Innovations in Genetic Improvement of Agricultural Systems - **May 11 - June 8, 2021**
- Innovations in Post-Harvest Management – **July 13 - 27, 2021**
- Innovations in Information & Communication Technologies - **August 31-Sept. 21, 2021**
- Innovations in Entrepreneurship, Especially Among Youth – **October 5 - 19, 2021**
- Innovations in Scaling – **November 16 - December 7, 2021**

### **About the Global Agriculture Innovation Forum:**

The Global Agriculture Innovation Forum is a joint undertaking between USDA's Foreign Agricultural Service and Purdue University's Office of International Programs in Agriculture. The Forum will be valuable to entrepreneurs, producers, value-chain operators, service providers, and researchers, as well as donor agencies and implementing partners and consists of a series of virtual events held throughout 2021.

**globalaginnovationforum.org, Twitter: @PurdueIntlAg**

