







21st RUFORUM Annual General Meeting

CONCEPT NOTE

KNOWLEDGE MANAGEMENT AND POLICY INTEGRATION FOR TRANSFORMATIVE AGRI-FOOD SYSTEMS

Date: 21st November 2025 Time: 08.00-17:20 EAT

Venue: Online

Registration Link: https://bit.ly/43WVRnc

Contact: Prof Majaliwa Mwanjalolo (m.majaliwa@ruforum.org)

BACKGROUND

Evidence-based policymaking is a cornerstone of effective governance in agri-food systems, particularly in contexts of rapid environmental, economic, and social change. To achieve inclusive, resilient, and sustainable agricultural transformation, decision-makers at all levels require access to timely, reliable, and context-specific data and knowledge (FAO, 2021). Yet, many African countries continue to face persistent gaps in agricultural data systems, weak institutional capacities for policy analysis, and limited mechanisms for cross-sectoral knowledge integration (ReSAKSS, 2022).

This theme emphasizes the critical role of data governance, policy research, and knowledge-sharing platforms in shaping policies that are responsive, equitable, and aligned with long-term development goals. Strengthening regional knowledge hubs and observatories such as those developed under the Comprehensive Africa Agriculture Development Programme (CAADP) can enable evidence-based monitoring of food systems, support cross-country learning, and guide resource allocation for maximum impact (NEPAD, 2019).

Policy research and advocacy are equally important in bridging the gap between scientific knowledge and political action. When grounded in rigorous data and participatory processes, research can highlight policy trade-offs, evaluate program impacts, and surface local innovations that inform adaptive strategies (Birner et al., 20211). This is particularly crucial in areas like education reform, agricultural R&D, and climate-smart agriculture, where multi-sectoral collaboration and political will are essential. In addition, knowledge management systems that incorporate diverse voices including women, youth, indigenous communities, and private sector actors help democratize the policy process. These systems promote transparency, accountability, and inclusiveness, which are foundational to achieving the African Union's Agenda 2063 and the Sustainable Development Goals (SDGs). By investing in institutional data capabilities, policy engagement tools, and open knowledge platforms, African countries can accelerate evidence-driven transformation of agri-food systems at the national, regional, and continental levels.

Sub-Themes:

- **Development of Knowledge Hubs and Regional Observatories:** Platforms for collecting, curating, and disseminating data, evidence, and innovations across countries and institutions.
- Policy Co-creation and Stakeholder Engagement: Participatory policy processes that engage farmers, researchers, private sector actors, and policymakers in agenda setting and decision-making.









• Evidence Synthesis and Policy Advocacy: Approaches for aggregating scientific and practice-based knowledge to inform policies on food systems, climate, and rural livelihoods.

OBJECTIVES

To strengthen knowledge management and policy integration frameworks that drive the transformation of agrifood systems towards sustainability, inclusiveness, and resilience.

Specifically, the event seeks to:

- To provide a platform for researchers, policymakers, private-sector actors, and development partners to share knowledge, innovations, and experiences that enhance the transformation of agri-food systems.
- To explore mechanisms for translating scientific evidence and local knowledge into coherent policies that support resilient, equitable, and sustainable agri-food systems.
- To identify priority research areas and policy actions necessary for achieving transformative, inclusive, and climate-resilient agri-food systems in line with the SDGs and the African Union's Agenda 2063.

APPROACH

The event will commence with a keynote address that provides an overview of the themes and aims to inspire participants. Participants will be allowed to present and receive a maximum of three questions from the audience.

EXPECTED OUTCOMES

- a. A platform for researchers, policymakers, private-sector actors, and development partners to share knowledge, innovations, and experiences that enhance the transformation of agri-food systems provided.
- b. Mechanisms for translating scientific evidence and local knowledge into coherent policies identified.
- c. Priority research areas and policy actions necessary for achieving transformative, inclusive, and climate-resilient agri-food systems identified

PARTICIPANTS

Participants will include researchers, scientists, academics, development partners, policy makers and Government Officials, industry representatives, Non-Profit Organizations, professionals, and graduate students.

ORGANIZERS

The event is organized by RUFORUM, with support from the Government of Botswana and RUFORUM member universities in Botswana.









PROGRAMME

PARALLEL SESSION 1

Registration Link: https://bit.ly/43WVRnc

Knowledge Management and Policy Integration for Transformative Agri-Food Systems

Session Chair: Prof Crispen Murungweni

Rapporteurs: Dr Paul Mukwaya,

Time			
08.00-08:10	Welcome Remarks from the Chair: Prof Crispen Murungweni		
	Topic	Presenter	
08:10-08:25	Harvesting innovation: Integrating knowledge and policy for transformative agrifood system	Keynote Speaker: Dr Florence Nakayiwa	
08:25-08:40	Knowledge management and policy integration for transformative agri-food systems: From data neglect to data respect: a framework for institutionalizing a sustainable research data management culture in Kenyan Universities	Joel Nakitare	
08:40-08:55	Empowering Transformation: Innovative Policies and Governance for Sustainable and Inclusive Agri-Food Systems in Tanzania	Kayombo Aneth	
08:55-09:10	Knowledge Management and Policy Integration for Transformative Agri-Food Systems	Kutlwano Jairos	
09:10-09:25	Knowledge management and policy integration for transformative agri-food systems	Levi Abote Monyane-Pheko	
09:25-09:40	From consultation to co-ownership: ensuring impactful stakeholder influence on final policy	Prince Muzuva(PhD),	
09:40-09:55	Participatory Policy Co-creation for Inclusive Agri-Food Transformation through Engagement of Farmers Researchers and Policymakers in Kenya with Implications for Sub-Saharan Africa	Fauzia Shani	
09:55-10:10	Resilience through policy intervention: impact of the anchor borrowers' programme on smallholder farmers' livelihoods in Southeast Nigeria	Clement Okechukwu Attamah	
10:10-10:25	Informing policy on antibacterial resistance and foodborne zoonoses: A systematic review evidence from Sub-Saharan Africa food systems	Kedir A. Hassen	
10:25-10:40	Factors influencing extension service delivery on greenhouse gas (GHG) emissions mitigation in Uganda	Patrick Ssenyondo	
10:40-10:55	Strain-Specific Nutritional and Bioactive Profiling of Oyster Mushrooms for Climate-Resilient Functional Food Policy in Malawi	Rita Kumwenda	
10:55-11:20	Tea Break		









11:20-11:35	Effects of Climate Variability on milk Trade Flows in East Africa	Aisha Namirembe
11:35-11:50	Harnessing Digital Livestock Monitoring for Climate-Smart Rangeland Management: Insights from Communal Grazing Systems in Malawi	Denis Luwaga
11:50-12:05	Enhancing the Success of Community-Based Bull Breeding Programs for Climate-Resilient Livestock Systems in Uganda.	Gonzaga Ssekibaala
12:05-12:20	Development of biochar-based controlled release fertilizer for improved irish potato production	Turinayo Emmanuel
12:20-12:35	Evaluating the Significance of Vegetation Cover on Soil Health	Anwar Haruna
12:35-12:50	Adoption of Bundled Drought-Tolerant Maize and Index Insurance in Manica Province, Mozambique.	Mary Gorrette Asiimwe
12:50-13:05	Indigenous Fruit Trees in Malawi's: Assessing carbon sequestration and economic benefits for climate policy	Benjamin Banda
13:05-13:20	Strengthening Policy and Institutional Frameworks for Climate- Resilient Agri-Food Systems in Malawi	Stella Jumbe
13:20-13:05	Strengthening Participatory Approaches for Farmer Engagement in Complex Contexts: Insights from Malawi's Farmer-Managed Seed Systems	Ipyana Forlsman Mwangomba
13:05-14:00	Health Break	
14:00-14:15	Strengthening Human Resource Capacity and Institutional Frameworks for Climate-Resilient Agri-Food Systems in Malawi	Gilbert Mwavula
14:15-14:30	Evaluating the Agronomic Performance of Conservation Agriculture Practices Across Farm Typologies in Mixed Farming Systems: A Case Study of Mtunthama Extension Planning Area, Malawi	Florence Kamwana- Ngwira
14:15-14:30 14:30-14:45	Agriculture Practices Across Farm Typologies in Mixed Farming Systems: A Case Study of Mtunthama Extension Planning Area,	Florence Kamwana- Ngwira Tikhala Chakalamba
	Agriculture Practices Across Farm Typologies in Mixed Farming Systems: A Case Study of Mtunthama Extension Planning Area, Malawi Climate change and ecosystem management in Malawi and	
14:30-14:45	Agriculture Practices Across Farm Typologies in Mixed Farming Systems: A Case Study of Mtunthama Extension Planning Area, Malawi Climate change and ecosystem management in Malawi and Tanzania Harnessing Gullies as Biodiversity Sanctuaries for Climate-	Tikhala Chakalamba
14:30-14:45 14:45-15:00	Agriculture Practices Across Farm Typologies in Mixed Farming Systems: A Case Study of Mtunthama Extension Planning Area, Malawi Climate change and ecosystem management in Malawi and Tanzania Harnessing Gullies as Biodiversity Sanctuaries for Climate-Resilient Watersheds in the Ethiopian Highlands Harnessing black soldier fly technology for climate-resilient	Tikhala Chakalamba Akuku James
14:30-14:45 14:45-15:00 15:00-15:15	Agriculture Practices Across Farm Typologies in Mixed Farming Systems: A Case Study of Mtunthama Extension Planning Area, Malawi Climate change and ecosystem management in Malawi and Tanzania Harnessing Gullies as Biodiversity Sanctuaries for Climate-Resilient Watersheds in the Ethiopian Highlands Harnessing black soldier fly technology for climate-resilient agri-food systems in Ghana: A policy perspective Resource use from adopting cattle manure management	Tikhala Chakalamba Akuku James Francis Padi Lamptey
14:30-14:45 14:45-15:00 15:00-15:15 15:15-15:30	Agriculture Practices Across Farm Typologies in Mixed Farming Systems: A Case Study of Mtunthama Extension Planning Area, Malawi Climate change and ecosystem management in Malawi and Tanzania Harnessing Gullies as Biodiversity Sanctuaries for Climate-Resilient Watersheds in the Ethiopian Highlands Harnessing black soldier fly technology for climate-resilient agri-food systems in Ghana: A policy perspective Resource use from adopting cattle manure management practices that mitigate greenhouse gas emissions in Uganda Indigenous Fruit Trees in Malawi: Assessing carbon	Tikhala Chakalamba Akuku James Francis Padi Lamptey Joan Namakula









16:30-16:45	Reforming Uganda's Agro-Industrialization Policies for Inclusive and Climate-Resilient Agri-Food Systems	Moses Mwesige Lukwago
16:45-17:00	From Seeds to Systems: How Institutions Shape Climate-Smart Agriculture and Resilience in Ghana	Michael Yaw Gariba
17:00-17:15	Roles of Socio-cultural Practices and Policies for Biodiversity Conservation, Climate Resilience and Conflict Resolution in Ethiopia	Ibsa Aliyi Usmane
17:15-17:20	Closing Remarks from the chair and RUFORUM Representative	









PARALEL SESSION 2

Registration Link: https://bit.ly/4oVzA1g

Knowledge Management and Policy Integration for Transformative Agri-Food Systems

Session Chair: Dr Alice Bonou

Rapporteurs: Prof Lourenco Manuel

Time			
08:00-08:10	Welcome Remarks from the Chair: Dr Alice Bonou	ome Remarks from the Chair: Dr Alice Bonou	
	Topic	Presenter	
08:10-08:25	Harnessing Mushroom-Based Surfactants to Combat Aflatoxin Contamination and Strengthen Climate-Resilient Agri-Food Systems in Northern Uganda	Kilama Godfrey	
08:25-08:40	Climate-Safe Agriculture: Strengthening Mycotoxin Policy for Climate- Resilient Food Systems in Ghana	William Appaw	
08:40-08:55	The Role of Climate Smart Agriculture Practices in Promoting Women's Livelihoods (a case study of Lilongwe)	Natasha Ngwiri	
08:55-09:10	Building Climate-Resilient Agri-Food Systems through Biodigesters: Powering Clean Energy, Enhancing Forage Productivity, and Reducing Greenhouse Gas	Zenebe Amele Sahile	
09:10-09:25	Exploring Indigenous Knowledge and Gendered Strategies to Strengthen Climate-Resilient Agri-Food Systems in Kaabong District, Uganda	Angelline Kisaakye	
09:25-09:40	Spatial Quantification of Carbon Sequestration in Non-Forest agricatual Land: A Case Study of Zomba Introduction	Margret Chituwa	
09:40-09:55	Drying for reduced food waste and sustainability	Jean Pankuku	
09:55-10:10	Integration of Azotobacter and Pseudomonas inoculant on to Bokashi manure to enhance soil fertility and bioremediation in Uganda.	Jasper Oculi	
10:10-10:25	Machine Learning-Enhanced Climate Risk Modeling for Financial Resilience in Malawi's Agriculture Sector	Secret Kambwiri	
10:25-10:40	Towards Inclusive Climate Resilience: Enhancing the participation of women with disabilities in Malawi's Agri- food systems	Mayamiko Chibowa	
10:40-10:55	Application of deep learning models for fall armyworm damage detection and segmentation using UAV imagery in smallholder farmers in Malawi	Emmanuel Ngalande	
10:55- 11:20	Health Break		
11:20-11:35	Data-Driven and Innovative Climate-Smart Risk Management: Linking Sustainable Intensification with Crop Insurance for Resilient Wheat Systems in Ethiopia.	Mohammed Ebrahim Mohammed	
11:35-11:50	Smart Solar-Electric Tunnel Dryer System (SSETDS): An IoT-Driven Leap Toward Climate-Resilient Chili Processing in Malawi	Kelvin Chimbalu	









11:50-12:05	Genetic diversity and optimisation of tissue culture protocol for local banana germplasm in Malawi	Harlod Katondo
12:05-12:20	Scaling dual stress resistant maize: Integrating low Striga hermonthica	Simon Zziwa
	germination stimulants and drought tolerance into seed systems for smallholder farmers in Uganda	
12:20-12:35	Risk and time preferences and their influence on the adoption of	Chimwemwe
	conservation agriculture in selected districts of Malawi	Ng'ong'ola
12:50-13:05	Harnessing climate-smart agricultural practices for improved coffee productivity and resilience to climate change in high land areas of Uganda	Phiona Mwogeza
13:05-13:20	Optimization of Irrigation Scheduling Using Real-Time Climate Data for Sustainable Crop Production in Uganda	Peter Okello
13:20-13:05	Unlocking Technology Adaptation in Mzimba District, Malawi: An Exploratory Analysis of Sustainable Land Management Practice	Dennis Kawonga
13:05-14:00	Health Break	
14:00-14:15	Bridging Gender Gaps in Climate Resilience: Data-Driven Approaches for Empowering Women and Youth in Malawi's Agri-Food Systems	Hope Simwaka
14:15-14:30	Policy and Regulatory Gaps in the Use of Non-Nutritive Sweeteners:	Turyatunga Sam
14.13-14.30	Implications for Building Climate-Resilient Agri-Food Systems in Uganda	Turyaturiga sam
14:30-14:45	Impact of Climate-Smart Agriculture (CSA) Adoption on Multidimensional Poverty in Rural Malawi	Ben Lwanja
14:45-15:00	Assessing the impact of digital climate smart agriculture on farmers' livelihoods in Malawi	Twaha Msume
15:00-15:15	Improved Climate Resilience through Climate-Smart Agricultural Practices: Analysis of Profit and Environmental Efficiencies among Smallholder Bean Farmers in Malawi	Vincent Chisomo Mulenga
15:15-15:30	Solar-driven photocatalytic water purification for climate-resilient irrigation in small holder agri-food systems	Moses Kinabeyo
15:30-15:45	Enhancing Mineral Bioavailability in Millet-Based Foods through Fermentation and Enzyme-Assisted Processing.	Paul Okello
15:45-16:00	Beyond the bucket: decentralized solar-powered water harvesting for youth-led market gardening resilience in Malawi	Clighton Kuluwani
16:00-16:30	Health Break	
16:30-16:45	Adoption of Climate-Smart Agriculture Practices Among Smallholder Farmers in Malawi: Opportunities and Barriers.	Linda Mwahave
16:45-17:00	Natural Resources Governance and Agricultural Policies in Mali: Institutional Pathways toward Sustainable Agriculture.	Yacouba Sissoko
17:00-17:05	Closing Remarks from the chair and RUFORUM Representative	<u>I</u>
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