



RESILIENT GRAIN MARKETS: **UNLOCKING AFRICA'S FOOD SECURITY POTENTIAL**

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Main Session 2

Innovating for productivity.

Scaling climate-smart technologies and practices for sustainable food systems

**Session
Sponsors:**



**Ronald
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**Program Coordinator Growing
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Rikolto International
Organization

Building Sustainability in Cereal Grain Food Systems





iikollo

Session Title: Innovating for Productivity - Scaling Climate-smart Technologies and Practices for Sustainable Food Systems

Case of Sustainable Rice Platform (SRP) standards & Eco-credity model: In Mbarali irrigation schemes in Tanzania since 2019.

Three (3) interlinked Strategies for food system Transformation



Sustainable production



Inclusive markets



Enabling environment



Our Good Food for Cities programme



Regenerative agriculture to preserve landscapes and enhance resilience to climate change



Innovative business models for the distribution of local, safe and healthy food in traditional markets



Improving urban food governance & boosting investments in sustainable food innovation



Our Sustainable Rice programme



Promoting sustainable practices to improve incomes, reduce environmental impact and adapt to climate change



Inclusive business relations that benefit producers, millers, wholesalers and consumers



Advocating for policies that support contract farming and the scaling out of sustainability standards



Linking rural production landscapes with urban markets is essential for building inclusive and resilient grain systems



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Especially in African countries like Tanzania and Ethiopia, where urbanization is accelerating and smallholder farmers dominate grain production.

- Linking Rural Production Landscapes to Urban Markets: A Pathway to Inclusive and Resilient Grain Systems in Africa.

1. Strengthening Farmer Organizations and Aggregation Models

- **Farmer Organizations (FOs) and AMCOS** serve as critical intermediaries between dispersed smallholders; 136 FOs in Mbarali and structured urban demand.
- By investing in **cooperative governance**, **post-harvest handling**, and **quality assurance**, these groups can meet urban buyers' standards while ensuring traceability and inclusiveness.
- **Aggregation centers** enables economies of scale, reduces transaction costs, and improves bargaining power.

2. Market-Oriented Production Planning

- Aligning rural production cycles with **urban consumption patterns** ensures a consistent supply and reduces waste.
- Use of **digital platforms**, **urban foodscape assessments**, and **demand forecasting** helps producers tailor volumes, vendors varieties/amount demands, and timing to urban needs.

3. Inclusive Value Chain Clustering

- Establishing **value chain clusters** around anchor SMEs (e.g., Ruaha Milling Co., KFS, AKM Glitters, KMC, LUNA, Phibela, etc) creates structured pathways from farm to city.

4. Logistics and Infrastructure Investment

- Efficient transport corridors, storage facilities, and market hubs are vital to reduce post-harvest losses and improve urban access.

5. Consumer Awareness and Demand Shaping

- Urban consumers play a role by valuing locally sourced, sustainably produced grains.
- **Campaigns and labelling** initiatives can encourage willingness to pay for inclusive and climate-resilient production.



Key Lessons from Rikolto's Experience

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Rikolto has gained valuable insights from years of working with farmer organizations (FOs) across Africa and beyond. The following are the key lessons learned on professionalizing FOs in Mbarali, Mbeya to drive **sustainability and fair farmer incomes at the production level**:

1. Professionalization Starts with Governance

- **Strong internal governance**—clear roles, transparent decision-making, and democratic accountability—is foundational to all prosperous FOs/Cooperatives/MSMEs to SMEs. Large number of private lead SMEs
- 246 FOs with robust leadership structures that are better positioned to **negotiate** with buyers, **manage finances**, and attract **investment**.

2. Market Orientation Is Essential

- 46 FOs that evolved from production-focused groups to **market-driven enterprises**.
- Training in **business planning, quality control, entrepreneurship mindset, and customer relations** helps FOs meet buyer expectations and secure premium prices.

3. Access to Finance Must be Tailored

- Many FOs struggle with **cash flow and collateral requirements**.
- Rikolto has piloted **Climate-Smart Lending** models and embedded finance through anchor SMEs to unlock working capital and input access in Mbarali District, in Mbeya Region.

4. Data-Driven Decision Making Enhances Credibility

- Tools like **SCOPE Insight Assessment**, approaches such as **ICRA ABC Cluster** help assess organizational maturity and guide tailored capacity building at cluster level.
- **Data transparency builds trust** with buyers, banks, and development partners.

5. Inclusive Models Drive Resilience

- **Gender-sensitive approaches** and **youth engagement** are not optional—they're essential for long-term viability.
- **Inclusive governance and benefit-sharing mechanisms** reduce conflict and improve FO cohesion.

6. Strategic Partnerships Multiply Impact

- FOs thrive when embedded in value chain clusters with processors, input suppliers, and off-takers.
- Rikolto's work with platforms like TASUPA, RCT, Nutrition & Urban food platforms, Processors Associations, and anchor firms; shows that multi-actor collaboration is key.



Consumer Readiness to pay for Eco-friendly and Climate-Smart Food Systems in Africa



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Is evolving steadily, though shaped by a complex mix of **Aspiration, Affordability, and Awareness**.

1. Growing Awareness and Aspirational Demand

- Across African urban centers, consumers—especially **youth and middle-income groups**—are increasingly aware of **sustainability and climate** issues.
- A 2025 global survey found that **55% of consumers are willing to pay more for eco-friendly brands**, and **78% consider sustainability important**.
- In Africa, this trend is emerging through **urban food movements, health-conscious purchasing, and demand for traceable, locally sourced products**.

2. Affordability Remains a Barrier

- Despite rising interest, **price sensitivity** remains a major constraint. Many consumers aspire to buy sustainably but are limited by **income levels** and **inflationary pressures**.
- A **PwC** report notes that while consumers globally are driving demand for sustainable food, **cost-of-living challenges** are curbing their ability to act on these preferences.

3. Influence of Social Networks and Local Identity

- In North and East Africa, studies show that **social networks** (family, community, and local influencers) play a key role in shaping consumer choices toward **fair and sustainable foods**.
- Products perceived as **local, traditional, or farmer-sourced** tend to attract more willingness to pay—especially when linked to health benefits or community impact. Like **Super Kyela Rice under GMT, Kamsamba Rice in Songwe-Stegraphet**

4. Urban Markets as Catalysts

- Urban centers like Nairobi, Addis Ababa, Kinshasa, Dar es Salaam are becoming **demand engines** for climate-smart food systems.
- **Eco-labelling, storytelling** around farmer impact, and **digital platforms** are helping bridge the gap between rural producers and urban consumers.

5. The Role of Policy and Retail Innovation

- Governments and retailers can accelerate readiness by:
- Offering **incentives** for sustainable purchasing
- Promoting **SRP labelling** and **eco-certification** products
- Supporting **inclusive pricing models** that reflect both sustainability and affordability

❖ What This Means for Rikolto and Partners

- **Consumer education** and **value chain transparency** are key to unlocking fair premiums.
- **Sector platforms** like **TASUPA, Millers Associations, and RCT** can help shape narratives and influence urban demand by promoting the **SRP Standards, fortified edible oil, and eco-credit products**
- **Pilot programs** that test consumer willingness to pay—especially in cereals and edible oil seeds—can inform scalable strategies.



Call to Action: Building Fair and Sustainable Food Systems Together

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❖ To the Private Sector:

You are the architects of tomorrow's supply chains. By embedding **sustainability** into your sourcing models, you are not only **future-proof your business**—you uplift the smallholder farmers who form the **backbone of Africa's food systems**. Invest in climate-smart production, reward regenerative practices, and build inclusive value chains that **recognize and value the efforts of farmers and their environmental stewardship**. Your procurement decisions can drive **systemic change in Africa**.

➤ To Consumers:

Every purchase is a vote for the kind of world we want. By choosing **eco-friendly, smallholder-grown** products—and being willing to pay a fair premium—you support livelihoods, protect ecosystems, and fuel resilient local economies. **Sustainability isn't a luxury; it's a shared responsibility**. Let's make conscious consumption the norm, not the exception.

✓ **Together, we can transform African food systems—one fair transaction at a time.**

❖ **Partnerships:** Rikolto collaborated with the Rice Council of Tanzania (RCT), CRDB Bank, Ecosystem Equity, and TARI Ifakara to pilot the Eco-credit model.

• **Model Design:** Credit disbursement is linked to sustainability benchmarks—farmers had to adopt climate-smart practices (e.g., improved seed varieties, water-efficient irrigation technology) to qualify for financing.

• **Impact:**

❖ Over **4,670 tonnes** of SRP-certified rice reached the local market.

❖ **304** farmers received CSL from CRDB bank from 2023 to 2025 season.

❖ Farmers accessed tailored financial products that incentivized sustainable practices.

❖ Over **480** TOT farmers received training on Good Agriculture Practices

❖ Improved water use efficiency by **20%**

❖ Reduction on Green House Gas emission by **51%**

❖ Increased productivity per hector by **12%**

✓ The model served as a blueprint for replication by local savings and credit organizations under the REDAA program.



Case: Sustainable Rice Project in Mbarali District, Mbeya Region:



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- ❖ This is part of a broader initiative to promote **climate-smart rice production** and enhance **ecosystem resilience**.
 - ❖ The project is implemented in partnership with **TARI-Ifakara and Ecosystem Equity**, and funded by the **Government of Flanders** under the Flemish International Climate Action Program.
 - ❖ The project aims at reaching out to **1750** with CSL mechanism and training them on GAP that are based on SRP standards while linking them to reliable markets.
 - ❖ The project objective is to contribute to Government of Tanzania's efforts to reach the **30-35% GHG** emissions reduction target that it has set out to achieve by 2030.
 - ❖ In the Mbeya region, the soil is extremely fertile, and the economy is based on rice production. Farmers in the **Usangu Plain** contribute **24% of the 2.2 million tonnes** of rice produced in Tanzania. They rely on precious water resources, which are threatened by increasing competition between farmers, livestock, and wildlife. In fact, they all depend on water from the same river systems.
 - ✓ Targeting **wetlands and forest ecosystems for conservation** alongside agricultural productivity.
- High dependency on water resources in the Usangu Plains, with increasing competition between farmers, livestock, and wildlife.
 - Limited awareness and incentives among farmers to adopt sustainable practices due to low cash flow and lack of understanding of long-term benefits.
 - Smallholder farmers (averaging 1.3 hectares) **produce 90%** of Tanzania's rice but face challenges accessing climate finance and technical support.
 - Without technologically innovative interventions, the government's goal to double rice productivity by 2030 could lead to **increased greenhouse gas emissions and biodiversity loss**.



Rikolto's Strategic Interventions:



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- **Climate-smart lending models** to unlock finance for smallholders (Eco-credit + the 40:60 subsidized solar pumps for horticulture irrigation).
- **Professionalization** for farmers and processors
- **Integration of sustainability standards (SRP)** into rice value chains
- **Policy alignment** with Tanzania's National Rice Development Strategy (NRDS II) through MOA, COPRA and RCT.



Testimony: Revocatus, *Rice farmer from Mbeya*



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Before, I used to apply fertilisers without really understanding the soil's needs, just guessing at what might work. I didn't know how much or when to apply it, so I wasn't getting the best results. Since the training, I apply fertilisers based on soil nutrient analysis, making sure I use the right type, at the right time, and in the right amounts. This has helped me optimize both my production and input efficiency.

Revocatus

Rice farmer, in Mbarali Mbeya



Field Experience in Mbarali, Mbeya Region





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What will we eat tomorrow?

THANK YOU.

