INITIATIVE ON
Rethinking
Food Markets

CGIAR

The Initiative on Rethinking Food Markets
Science, Innovation and Policy Symposium

Moving beyond the piloting with scaling preparedness and feasibility: Experience from Ethiopia, Honduras, Nigeria, and Uganda

Thai Thi Minh, IWMI, t.minh@cgiar.org
Rajalakshmi Nirmal, IFPRI, r.nirmal@cgiar.org
Rob Vos, IFPRI, r.vos@cgiar.org

Key concepts

CGIAR | INITIATIVE ON Rethinking Food Markets

Scalability

Innovation's ability to adapt to the new scaling contexts and respond to changes during the scaling process, and anticipated performance, impact, and trade-offs when going to scale

Intervention

- Identifying
- Designing
- Bundling
- Piloting
- Scaling
- Strategizing
- Evaluating

Bundled innovations

Scaling feasibility

The possibility that the scalable innovation can be scaled to achieve larger-scale impacts

Scaling contexts

Bio-natural-physical-climatic features

Socio-economic-institutional characteristics

Challenges and opportunities

Existing partnerships, networks, investment

Available and resources needed for scaling

Scaling preparedness

The ability of food systems, market actors, and relevant stakeholders to scale and accelerate the scaling innovation

Identify scalable innovation/bundle

CGIAR | INITIATIVE ON Rethinking Food Markets

Dimensions	Indicators	Description
INNOVATION SCALABILITY		
Innovation	1. Type of innovation	Incremental, radical, disruptive
	2. Innovation attribute	Maturity, availability in the market, target value chains
	3. Intervention	Timing of intervention, investment needed, required resources, return on investment
	4. Desired impacts	Nutrition, health, and food security; Poverty reduction, livelihoods, and jobs; Gender equality, youth, and social inclusion; Policy and institution
Context	5. Potential new conditions	Demands, challenges, opportunities, potential risks in new scaling context/value chains
	6. Ability to adapt	Ability to adapt to new demands, challenges, opportunities, potential risks
Scaling status	7. Adoption status	Current users, their accessibility and affordability to the intervention, drivers to adopt
	8. Scaling extent and speed	Other user segments, potential geographical reach, time frame for scaling
	9. Unintended negative outcomes	Undesired impacts/trade-offs, possible adjustments of intervention to reduce the trade-offs
SCALING PREPAREDNESS		
Stakeholder engagement	10. Stakeholders involved	Diverse actors and stakeholders
	11. Engagement degree	Stakeholder interests, attitude, and acceptance to participate
Stakeholder commitment	12. Stakeholder ownership	Stakeholder participation in intervention activities, their commitment to the achievement of intervention goals, their demand for accountability regarding intervention
	Buy-in and continuation	Investment in innovation, intervention, and scaling
Stakeholder accountability	Resource contribution and investment	Available resources, time investments, budget and staff contribution, capacity

Identify scalable innovation/bundle

CGIAR | INITIATIVE ON Rethinking Food Markets

Dimensions	Indicators	Description
		INNOVATION SCALABILITY
Innovation	1. Type of innovation	Incremental, radical, disruptive
	2. Innovation attribute	Maturity, availability in the market, target value chains
	3. Intervention	required resources, return on investment
	4. Desired impacts	reduction, livelihoods, and jobs; Gender nd institution
Context	5. Potential new cor	l risks in new scaling context/value chains
	6. Ability to adapt	pportunities, potential risks
Scaling status	7. Adoption status	lity to the intervention, drivers to adopt
	8. Scaling extent an	each, time frame for scaling
	9. Unintended nega outcomes	ments of intervention to reduce the trade-
Stakeholder engagement	10. Stakeholders invol	
	11. Engagement degree	tance to participate
Stakeholder commitment	12. Stakeholder ownership	Stakeholder participation in intervention activities, their commitment to the achievement of intervention goals, their demand for accountability regarding intervention
	Buy-in and continuation	Investment in innovation, intervention, and scaling
Stakeholder accountability	Resource contribution and investment	Available resources, time investments, budget and staff contribution, capacity

Five levels scale to score scaling potential

1. Very low
2. Low
3. Neutral
4. High
5. Very high

Scalable innovation overview

Innovation	Innovation scalability	Scaling preparedness	Scaling potential
Ethiopia: Smart sesame marketing	3.8 Relatively high	3.5 Neutral to high	3.65 Relatively high potential
Honduras: Quality assessment for transforming private intermediation markets	4.3 High	3.6 Relatively high	3.95 High potential
Honduras: Women typology in coffee supply chains	3.7 High	3.1 Relatively high	3.4 Neutral
Honduras: Digital infrastructure	3.5 Relatively high	3.8 High	3.65 Relatively high
Honduras: Improving business relationship	4.1 High	4.2 High	4.15 High potential
Honduras: New food formulation and packaging	3.2 Neutral	3.3 Neutral	3.25 Neutral
Nigeria: Cool transportation and cold storage	4.2 High	4.4 High	4.3 High
Nigeria: Solar dryers	3.7 Relatively high	3.2 Neutral	3.45 Neutral
Nigeria: Plastic crate rental and market support	3.8 Relatively high	4.4 High	4.1 High
Nigeria: Digital financial services	4.3 High	4.0 High	4.15 High
Uganda: Milk analyzers	3.3 Neutral	4 High	3.65 Relatively high
Uganda: Ezy Agric digital platform	4.2 High	3.7 Relatively high	3.95 High potential

Ethiopia deep dive: Smart Sesame marketing bundle (1)

SSM scalability: Relatively high

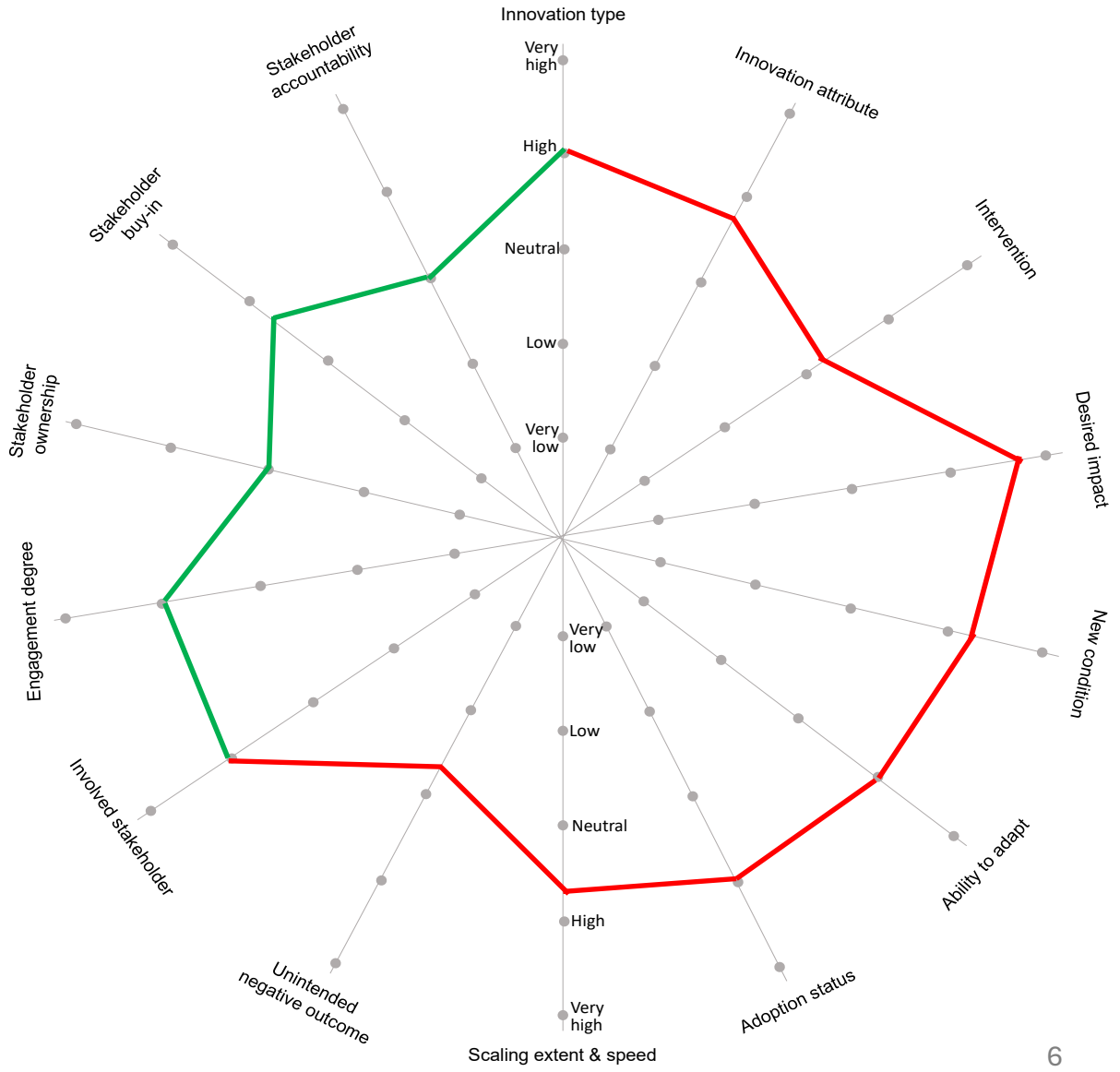
- SSM is understandable, compatible, timely, and easy for the cooperatives and traders
- Intervention's accessibility, acceptability, and affordability for smallholder farmers, partners, and stakeholders
- Requiring resources, project push, bundling-related technical assistance, and strong stakeholder support

Scaling preparedness: Neutral to high

- Diverse stakeholder Involvement with high interest, acceptance, loyalty to contribute, and commitment to achieving the goals
- Limited ownership, buy-in, and accountability

Scaling potential: Relatively high

It is scalable but requires technical backup and additional interventions to advance the technology while mitigating uncertainties due to collective action, organization dynamics, hoarding, and artificial shortages, which are unintended adverse outcomes.



Ethiopia deep dive: Pathways to scale SSM (2)

Critical contextual challenges:

- Climate hazards (e.g., heavy rains, unpredicted drought, and flood) and weather variation)
- Ongoing civil war, tensions between ethnic groups, displacement, political instability, and security
- Limited market access, low profitability, market saturation, and high inflation
- Resource gaps: limited access to loans/credits; staff changes, expectations, and availability, with limited expertise and know-how to design and bundle innovation; challenges for farmers to afford telecommunication services

Available resources and structures:

- Telecom infrastructure
- Existing networks/platforms: ECX platforms, primary transaction centers, and market information forecast.
- Ongoing investment and initiatives: upgrading and expanding telecom infrastructure, Digital Ethiopia 2022, Sesame Business Networks

GOAL: Improve market inclusion and sustainable livelihoods for smallholder farmers

Pathway 1. Enhancement of the market efficiency of 55,000 sesame producers in Humera and Quara

- Improve access to market information
- Enhance collective action strategies
- Invest in innovative markets

Time frame: 2025 – 2027
Actors: existing partnerships, businesses, and services from cooperatives, regional trade offices, ECX, Ethio Telecom, Research Centers, and development projects

Pathway 2. Establishment of a foundation to scale SSM bundle reaching 70% sesame producers with market information

- Enhance stakeholders' orientation, awareness, and capacity
- Establish market and information networks

Time: 2025 – 2030
Actors: Existing partnerships, implementing partners, and all responsible public and private stakeholders

Honduras deep dive: Quality assessment

The **quality assessment** bundle has high scalability and neutral to high scaling preparedness**.** It is scalable but requires interventions to enhance stakeholder ownership, buy-in, and investments.

GOAL: Capitalize multi-stakeholder involvement to coordinate the implementation of strategies and technical assistance, quality measurement, and unlock business and culture challenges.

Pathway 1. Direct intervention by the State and other actors

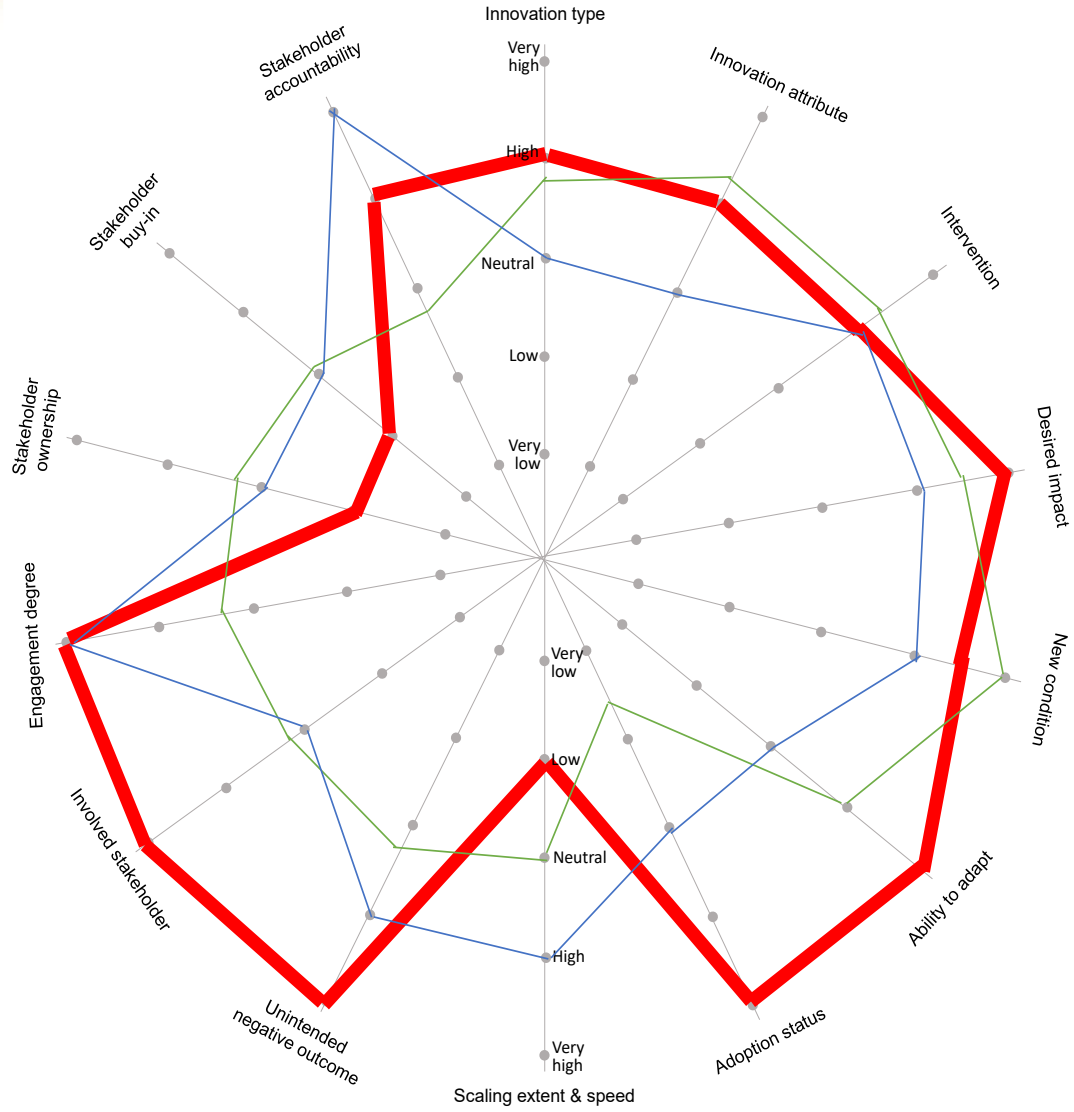
- Ensure compliance with regulations by the State
- Strengthen the capacity for producers by other actors
- Facilitate the implementation of strategies by the Global Coffee Platform
- Mobilize the involvement and investments from the private sector actors, i.e., BECAMO, AMUCAFE, ANACAFEH

Pathway 2. Creation of inclusive chain linkages

- Bring buyers closer to producers by integrating into existing business models and process automation
- Integrate donors, NGOs, the State, and other stakeholders to support implementing strategies
- Leverage long-term relationship reputation

Pathway 3. Enhancement of contract fulfillment

- Establish multi-actor contract-warranty agreements between the private sector (banks/ buyers), producers, and the government
- Monitor contract deployment and fulfillment to ensure seller-buyer business relationships and roles of buyer-as-guarantor for the bank



Nigeria deep dive: Cool transportation and cold storage

INITIATIVE ON Rethinking Food Markets

The **cool transportation and cold storage** bundle has high scalability and high scaling preparedness. It is scalable but requires concrete interventions to incentivize the private sector's investment and investors' funding to lower the initial investment and improve the enabling environment

GOALS: Eliminate food spoilage to enhance the sustainability of Nigeria's fruit and vegetable value chains

Pathway 1. Provide end-to-end cold chain infrastructure and services (2025-2027)

- Map and identify market and aggregation centers suitable for the cold facility installment
- Develop the technology/process from end-to-end
- Sensitize farmers on cold storage and transportation for pre-cooling.
- Train farmers on agronomy practices and harvesting for cold storage
- Develop flexible logistics and different types of products to be transported

Pathway 2. Improvement of enabling environment and infrastructure

- Optimize the transport route (Explore Onitsha, Port Harcourt)
- Policy intervention, e.g., price subsidy and good road networks and the transportation cost
- Collaborate with funders and stakeholders to lower the financial constraints to invest in cool transportation and cold storage

Nigeria deep dive:
Plastic crate rental and market support

INITIATIVE ON Rethinking Food Markets

The **plastic crate rental and market support** bundle has high scalability and relatively scaling preparedness**.** It is scalable under the conditions of mobilized investments and raised awareness amongst farmers.

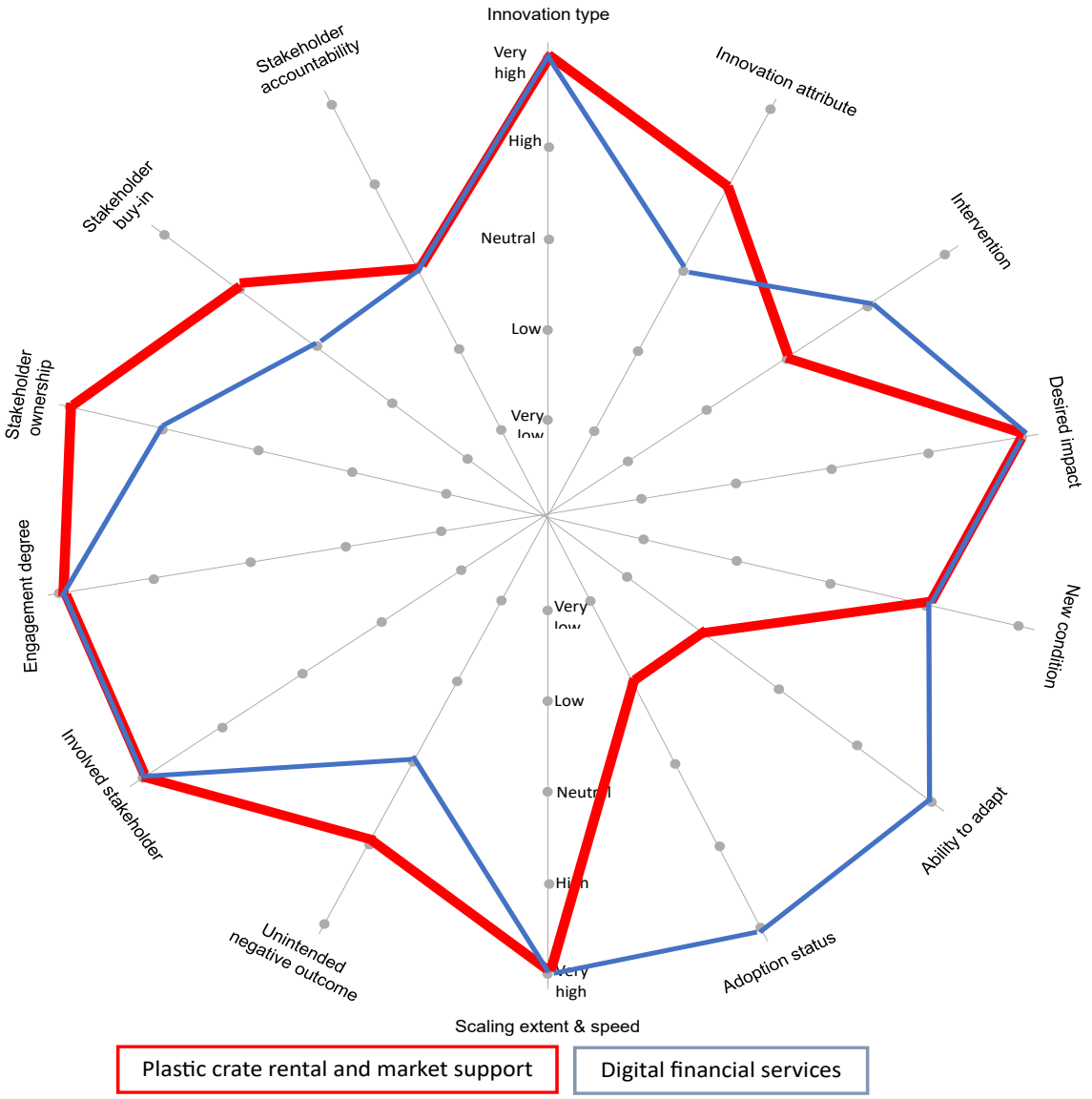
GOAL: Reduce post-harvest losses and improve logistics and food availability for smallholder vegetable producers

Pathway 1. Capitalization of investment in plastic crate rental and market support

- Increase plastic crates and invest in transportation means for returning crates
- Collaborate with the tomato association to buy and invest more in procuring plastic crates.
- Diversify markets and aggregation centers to increase/ensure reasonable profits from the investment in plastic crates
- Establish a direct market linkage with processing companies.

Pathway 2. Creating inclusive chain linkages

- Digitalize awareness creation and communication on plastic crates rental and market support
- Provide GAP and post-harvesting handling training for farmers
- Bundling cool transportation and sold storage with crate rental



Uganda deep dive: Milk analyzers

The **milk analyzer bundle** has neutral scalability and high scaling preparedness. It has high demand, and scaling is essential to speed up milk analyzer adoption, quality compliance, and bundling with other solutions to enhance market access.

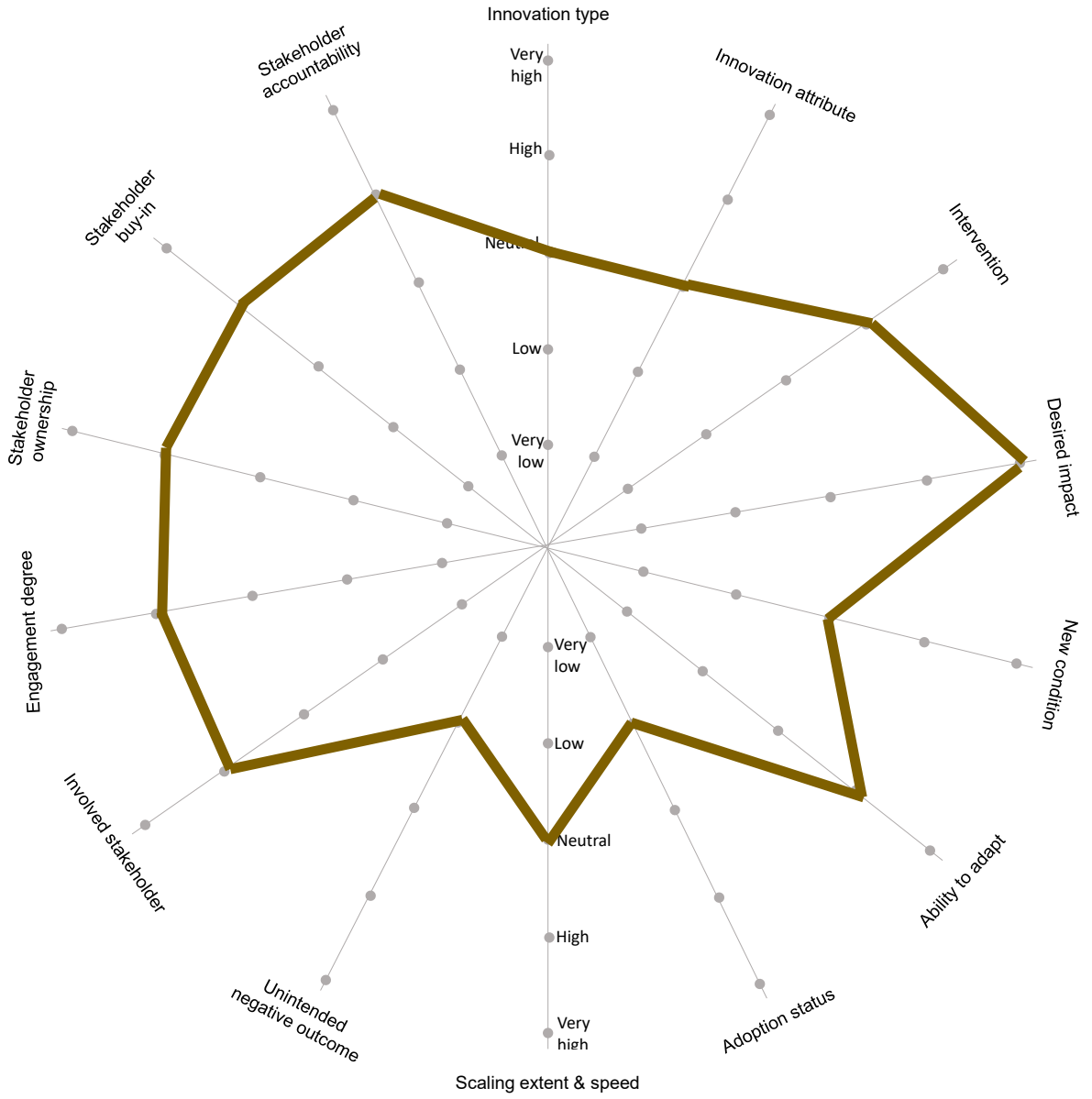
GOAL: Upgrade Uganda's dairy value chain by increasing milk quality and market access for milk collector centers and farmer suppliers

Pathway 1. Catalyzation of milk analyzers to target 600 milk collection centers (MCCs) in three milk sheds and 600,000 household suppliers (2025-2027)

- Facilitate licensing for 600 MCCs;
- Reduce post-harvest losses from 10% to 3% in two years
- Build a pool of technicians for repair and maintenance
- Enforce milk quality regulations
- Develop training centers and credit facilities in the areas

Pathway 2. Improvement of market access along Uganda's dairy value chain

- Link dairy farmers to profiled, quality input suppliers
- Rehabilitate and equip the existing MCCs
- Build capacity for technicians to use/repair/maintain milk analyzers
- Train farmers on hygienic milk handling and good animal husbandry for quality milk production
- Establish traceability, data management, and evaluation systems
- Formulate quality and disease control policies
- Improve feeding and breeding



Uganda deep dive: Ezy Agric Digital Platforms

The **Ezy Agric Digital Platforms** bundle has high scalability and neutral to high scaling preparedness. Its scaling is essential to enhancing the involvement and buy-in of stakeholders, especially input and information service providers.

GOAL: Improvement of digital literacy and input provision and information services for 400,000 registered farmers

Pathway 1. Equipment of digital agric services for 10,000 merchants/dealers

- Partner with capacity-strengthening institutions to provide tailor-made training for merchants
- Create awareness and strengthen capacity for merchants/dealers
- Build and operationalize trusted networks of merchants

Pathway 2. Increase of active usage by 20% of the registered farmers in 5 years

- Incentivize the provision and use of Ezy Agric Digital Platforms
- Improve extension support and services
- Leverage existing partnerships and business relationships to enhance the benefits of Ezy Agric Digital Platforms to the registered farmers

Highlights

- **Scalability** of most innovation bundles is from neutral to high, showing their high relevance and value-added to enhancing food market and value chain inclusion and sustainability
- Although **scaling preparedness** varies depending on the design of the intervention process, established partnerships, and stakeholder involvement, stakeholder ownership, buy-in, and accountability are generally limited.
- Across innovation bundles, their ability to adapt to new contexts, adaption status, scaling extent and speed, and stakeholder ownership, buy-in, and accountability are critical to their **scaling feasibility.**
- Scopes of **scaling pathways** vary depending on “who is leading and owning the pathway.”
- Capitalizing the existing partnerships, momentums, and stakeholder engagement is key to facilitating the investment and implementation of the scaling feasibility