



# South-South Series: Empowering and Growing Women-led Business

## Session 8: Artificial intelligence for women entrepreneurs

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UN Women × COLEAD | South-South Series

# Artificial Intelligence for Women Entrepreneurs

*How Soil Intelligence is Saving the Planet  
and Empowering Women Across Africa*

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**Priscilla Wakarera**

CEO & Co-founder, Rhea

April 15, 2026 | 5:00 PM Nairobi Time



# It began with an Obsession



## Soil Scientist & Researcher

A scientist who did not stop at the lab , Walked Kenya's farms, saw degraded soils and struggling women farmers, and chose to build the solution.

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## From Research to Entrepreneurship

My research background provided a rare edge: I understood the science, the data gaps, and the farmer's reality. Rhea was born from that intersection.

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## CEO, Rhea Soil Health Management Ltd

Leading Kenya's first AI-powered village level soil intelligence infrastructure company and building Africa's most comprehensive smallholder soil dataset, one test at a time.

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## Advocate for Inclusive Technology

Committed to technology that works for the last mile , offline, affordable, and multilingual. Reaching women historically excluded by design.

# The Problem That was hard to Walk Away From

60%

of Africa's arable land is degraded

30-35%

productivity loss from poor soil health

33M+

smallholder farmers in Kenya alone

*"During my research, I walked farms where the soil was acidic and dying. Women farmers were using guesswork ; buying the wrong fertilizers, losing entire seasons. A soil test meant a 14-day wait and a lab they could never afford. So I built Rhea."*



# Why AI and How Rhea Works



## Agripad Hardware + Lab Analysis

Portable device. Results in 48 hours, not 14 days. Under \$12 per test ; affordable by design.

## AI & Machine Learning Layer

Models trained on African soil data — generating precision fertilizer, crop, and timing recommendations in local context.

## WhatsApp Chatbot — Free to Farmers

Recommendations via WhatsApp. No app needed. Works offline. Reaches women who would never visit a lab.



*Rhea's Agripad device & field agent in action*

**AI for Environmental Conservation:** Every test builds Africa's largest soil dataset ; enabling carbon tracking, regenerative farming, and soil biodiversity protection for future generations.

# Rhea's Business Model is Built to Empower Women

## Soil Test Revenue

\$12 per test — affordable, scalable, mobile-first

## Agromony Advisory

On-farm visits with field-specific precision recommendations

## SaaS Platform (2027)

API access for agro-dealers, NGOs, and financial institutions

## Soil Data Intelligence

Anonymised datasets licensed to research bodies and government



## How Rhea Empowers Women Specifically

### Women as Customers

- Affordable testing replaces costly guesswork
- WhatsApp delivery ; no literacy barrier required
- Recommendations available in local languages
- Up to 40% yield improvement per season

### Women as Agents & Earners

- Trained as Rhea field agents earning an income
- Deliver last-mile access to remote communities
- Build technical skills in agritech & data
- Pathway to owning an agri-service business

# AI as an Equalizer for Women in Agriculture

## Barriers Women Face

- Only 23% of women use Generative AI at work vs. significantly higher rates for men
- In low-income countries, only 27% are online women face the highest exclusion
- Women underrepresented in AI workforce (29% interaction vs. 41% for men)
- Limited access to finance, digital tools, and skills training

## How AI Levels the Field

- Precision agriculture: optimize inputs, reduce waste, increase yields for women-led farms
- Market access: connect rural women producers to buyers and e-commerce platforms
- Climate resilience: predictive analytics on weather, soil health, and pest management
- Financial inclusion: AI fintech expanding credit and digital payments for women-owned SMEs

*“Women-led businesses, given adequate access to finance and resources, often generate higher returns on investment.”*

# A Future Where Every Woman Farmer Has Data to Grow

- Invest in women-led agritech to close the gender gap in AI adoption
- Prioritize affordable, locally-designed AI tools for the Global South
- Build ecosystems connecting women entrepreneurs to skills, markets, and capital
- Support South-South collaboration to scale proven AI solutions across regions

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**Thank you**



# Thank you

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