



Enset Innovation Institute Inc.

Advancing Indigenous Innovation for Food Security and Climate Resilience

Executive Brief

Scaling Enset for Food Security, Women's Economic Empowerment, and Climate Resilience in Africa

Prepared by: Enset Innovation Institute Inc.

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1. Strategic Case: Why Enset, Why Now

Enset (*Ensete ventricosum*) is one of Africa's most underleveraged climate-resilient food systems. Indigenous to Ethiopia and central to the livelihoods of more than 20 million people, Enset is drought-tolerant, perennial, nutritionally dense, and deeply embedded in women-led agricultural and processing systems. Despite these attributes, Enset has remained largely invisible in global food security, climate finance, and gender investment frameworks.

Recent evidence demonstrates that **modernized, hygienic Enset processing**, combined with **women-led SME models** and **improved landrace productivity**, can generate step-change gains across food security, income, and climate resilience:

- **Household food security and nutrition:** Increased caloric availability and dietary stability reduce seasonal hunger gaps. In Southern Ethiopia (e.g., Wolaita Zone), households experience food shortages of up to six months annually, underscoring the importance of resilient staple systems such as Enset (Multi-Agency Seasonal Assessment, 2020).
- **Women's income and enterprise ownership:** Transitioning traditional, labor-intensive processing into women-led, technology-enabled SMEs increases earned income, strengthens enterprise ownership, and elevates women into leadership and decision-making roles within local agribusiness value chains (Fischer & Qaim, 2012).
- **Climate adaptation and long-term carbon sequestration:** Enset's perennial biomass and deep rooting system enable substantial above- and below-ground carbon storage—estimated at approximately **250 tCO₂e per hectare**, equivalent to **~12.5 million tCO₂e across 50,000 hectares** under improved Enset systems (Laekemariam & Kibebew, 2020).
- **Post-harvest loss mitigation:** Standardized hygienic fermentation, handling, and storage protocols can reduce post-harvest losses by **15–30%**, improving food safety, shelf life, and value retention across Enset value chains (Kader, 2005; Affognon et al., 2015).



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A compelling demonstration of impact comes from a two-year **EU-funded pilot** implemented by Enset consortium partners, where improved processing technology reduced women’s labor time from **10 hours to 40 minutes per plant—a 93% reduction**. These validated results establish readiness for scale.

The Initiative has reached a clear inflection point: pilot success is proven, institutional partnerships are in place, and scalable delivery models are ready. What is required now is **catalytic institutional capital** to transition from fragmented pilots to a coordinated national and regional platform.

2. Scale & Impact Logic: From Ethiopia to Africa

Ethiopia Scale (Core Focus, Years 1–5)

With a catalytic investment of **USD 15 million over five years**, the Enset Initiative will scale across Southern Ethiopia through a **hub-based, women-led SME model** anchored in cooperatives. The program benefits from economies of scale, with declining per-beneficiary costs as coverage expands.

By Year 5, the Initiative will deliver:

- 163+ Enset SME hubs
- 200,000+ women farmers and processors reached
- 50,000+ hectares under improved Enset cultivation
- Durable gains in household income, food availability, and climate resilience

Core interventions include:

- Deployment of hygienic processing kits and fermentation technologies
- Landrace productivity improvement and seedling dissemination
- Women-centered finance, training, and cooperative development
- Digital monitoring, evaluation, learning (MEL), and adaptive management systems

Implementation will be led by **Ethiopian institutions**, including SOS Sahel Ethiopia and Arba Minch University, with Enset Innovation Institute Inc. providing coordination, innovation support, and international linkages.

Regional Expansion Logic (Medium-Term Optionality)

Enset’s adaptability across the **East African Highlands and comparable agro-ecologies** positions it as a scalable continental model for indigenous crop commercialization and climate resilience. Suitable regions include Uganda (southwestern highlands and Mt. Elgon), Rwanda, western Kenya, Burundi,



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eastern DRC (Kivu), western Cameroon, and southern Tanzania (Mbeya and Iringa) (Dawson et al., 2019).

Beginning in Years 4–5, the Initiative will pilot South–South replication through:

- Regional research partnerships and field trials
- Women-led agroforestry and perennial crop systems
- Policy engagement via IGAD, African Union, and CAADP platforms
- A centralized Addis Ababa–based knowledge hub providing technical assistance and digital MRV services

This positions Enset not as a single-country intervention, but as a **continental climate–nutrition platform**.

3. Financing, Governance, and the Catalytic Ask

Catalytic Investment Requirement

Total Ask: USD 15 million over five years

This investment will fund:

- Women-led SME scale-up and enterprise development
- Monitoring, evaluation, and adaptive learning systems
- Digital innovation and applied field research
- Core staffing, governance, and operational integrity

The financing model is intentionally philanthropy-led, with optional co-financing streams—such as carbon markets, government programs, and women’s finance platforms—designed to enhance long-term sustainability without introducing delivery risk.

Carbon and Co-Financing Optionality

Improved Enset systems offer significant carbon sequestration potential (up to ~250 tCO₂e/ha). While carbon revenues are not required for program viability, verified and monetized credits offer long-term upside that can be reinvested into women’s SMEs and local institutions (Laekemariam & Kibebew, 2020). This optionality strengthens the investment case without dependency.



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Governance and Hosting Pathways

To ensure fiduciary rigor and strategic alignment, three hosting options are available:

1. Fully hosted program within a foundation
2. Anchored initiative with independent field execution
3. Embedded fellowship or platform model

All models preserve Ethiopian institutional leadership, safeguard donor accountability, and enable adaptive scaling. Final structure will be selected collaboratively with the anchor partner.

4. The Opportunity for an Anchor Partner

An anchor funder or host institution gains:

- Leadership in a **globally distinctive, African-led food system**
- Measurable impact across **SDGs 1, 2, 5, 13**, and climate adaptation agendas
- A scalable platform linking **gender equity, climate, and nutrition**
- A credible pathway from **catalytic grant capital to system transformation**
- An opportunity to shape—not merely fund—the future of climate-resilient food systems in Africa.

We are seeking **USD 15 million in catalytic grant capital** to establish 163+ SME hubs and reach 200,000 women farmers and processors. We welcome the opportunity to explore alignment with your strategic priorities in gender-smart climate finance and food system transformation.

Contact

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ETHIOPIA'S ENSET (FALSE BANANA)

A CONSORTIUM OF SOS SAHEL ETHIOPIA, ARBA MINCH UNIVERSITY, AND ENSET INNOVATION INSTITUTE INC.



A group of 7-10 women labor more than 10 hours/day to process 250kg of Enset plant

Hygienic and labor-reducing intervention takes only 40 minutes to process 250kg of Enset Plant

**From Survival Crop to Scalable Innovation.
Empowering Women, Sustaining Ethiopia.**

CONSORTIUM LED BY ENSET INNOVATION INSTITUTE INC OF USA.

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