

# HarvestNet

Cultivating Resilience in Kenya's Rift Valley

A Digital Ecosystem for Climate-Smart Agriculture and Food Security

HarvestNet

# The Challenge: A Silent Crisis Unfolds

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## Climate's Relentless Assault

Erratic rainfall, prolonged droughts, and heat stress threaten harvests. Maize yields average just 1.5 tonnes per hectare vs. global 5 tonnes.

## Soil Degradation Crisis

Over 40% of East African soils are degraded, reducing Kenya's agricultural output by an estimated 30%.

## Fragmented Market Access

Geographical isolation forces reliance on exploitative brokers, with limited infrastructure and market information.

## The Digital Paradox

Despite 95% mobile penetration, barriers persist: unreliable power, high data costs, and limited digital literacy.



*Smallholder farmers in Kenya's Rift Valley face increasingly harsh climate conditions, threatening their livelihoods and food security.*

These interconnected challenges form a "poverty trap" that no single intervention can solve.

# Our Solution: HarvestNet

HarvestNet is a comprehensive digital ecosystem that transforms how smallholder farmers access information, markets, and financial services. Our approach blends cutting-edge technology with human connection.

## Data for Action

We leverage real-time, ground-truth data to provide actionable insights that truly empower farmers to make informed decisions.

## Collaborative Ecosystem

We foster robust multi-stakeholder partnerships between farmers, government, NGOs, and private sector for synergistic impact.

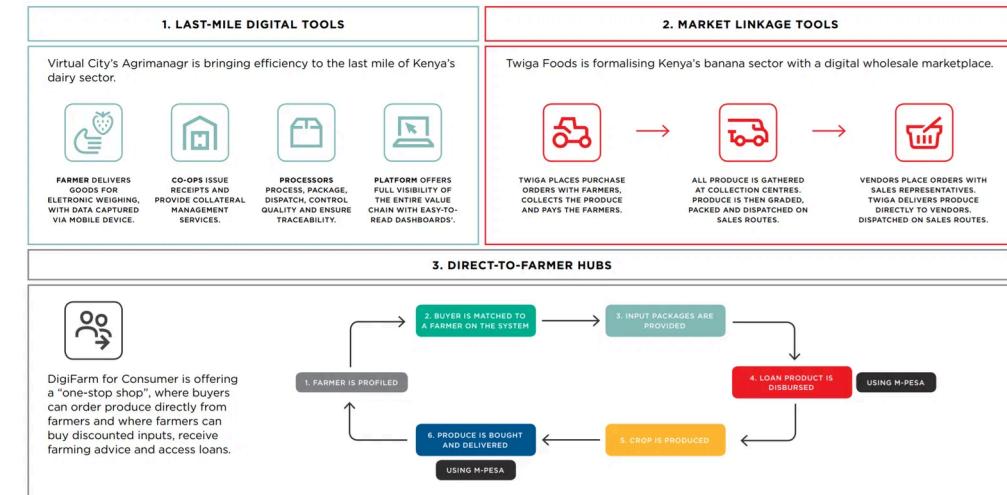
## User-Centricity

Our design philosophy puts the farmer first, ensuring accessibility, inclusivity, and genuine empowerment.

## Phased & Agile Development

We iteratively build and adapt based on continuous learning and feedback, ensuring relevance and effectiveness.

We are not merely building an application; we are cultivating a vibrant, interconnected community where knowledge flows freely and every harvest is a step towards food security.



*HarvestNet integrates multiple digital tools and human touchpoints to create a comprehensive support system for smallholder farmers.*

# The HarvestNet Difference

What sets HarvestNet apart from other agricultural solutions is our unique approach that addresses the complete ecosystem of challenges faced by smallholder farmers:

## Hyper-Localized AI

Personalized, data-driven advisories tailored to individual farmer needs and local conditions, trained on ground-truth data we collect.

## Robust Accessibility

USSD fallback, multi-lingual support, and community radio integration ensure inclusivity even in areas with limited connectivity.

## Hybrid Human-Digital Engagement

Digital Ambassadors bridge the technology gap, building trust through genuine human connection to ensure adoption and sustainability.

## Integrated Financial Inclusion

Access to flexible, data-informed microloans and financial services as a core enabler, empowering farmers to invest in their future.



*Our Digital Ambassadors help farmers navigate technology, ensuring that digital tools enhance rather than complicate their agricultural practices.*

"We understand that technology must serve people, not the other way around. Our hybrid approach ensures no farmer is left behind."

# Phased Implementation Approach

Our methodical, three-phase approach ensures that each step builds upon validated success, maximizing impact while minimizing risk:

## ● Phase 1: Pilot & Foundational Data Collection

**Months 1-12 | \$87,120**

Focused pilot in Njoro Sub-County establishing partnerships, recruiting Digital Ambassadors, deploying core platform features, and collecting ground-truth data to train our AI models.

## ● Phase 2: AI Model Development & Feature Integration

**Months 13-24 | \$350,000**

Develop and integrate AI-powered advisory services, advanced market linkage features, and financial inclusion tools. Expand to additional sub-county and conduct comprehensive impact assessment.

## ● Phase 3: Scaled Rollout & Ecosystem Expansion

**Months 25-36 | \$480,280**

Scale HarvestNet across the entire Rift Valley, develop advanced data analytics for policy advocacy, implement sustainability strategies, and create a replication blueprint for global application.



*Our phased approach ensures that technology adoption is gradual, supported, and aligned with farmers' actual needs and capabilities.*

### Key Success Metrics:

- Phase 1: 500+ active farmers, 50+ Digital Ambassadors
- Phase 2: AI model accuracy >85%, 15% income increase
- Phase 3: 5,000+ farmers across Rift Valley, 70% self-sustainability

"We focus on one activity at a time, ensuring its success before moving to the next, to maximize efficiency and impact."

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# Projected Impact

HarvestNet is designed to deliver measurable, transformative impact across multiple dimensions of farmer livelihoods and food security:

**5,000+**

**Farmers Reached**

Direct beneficiaries across the Rift Valley

**15-20%**

**Income Increase**

Average improvement in household income

**30%**

**Reduction in Crop Loss**

Through improved practices and warnings

**70%**

**Financial Inclusion**

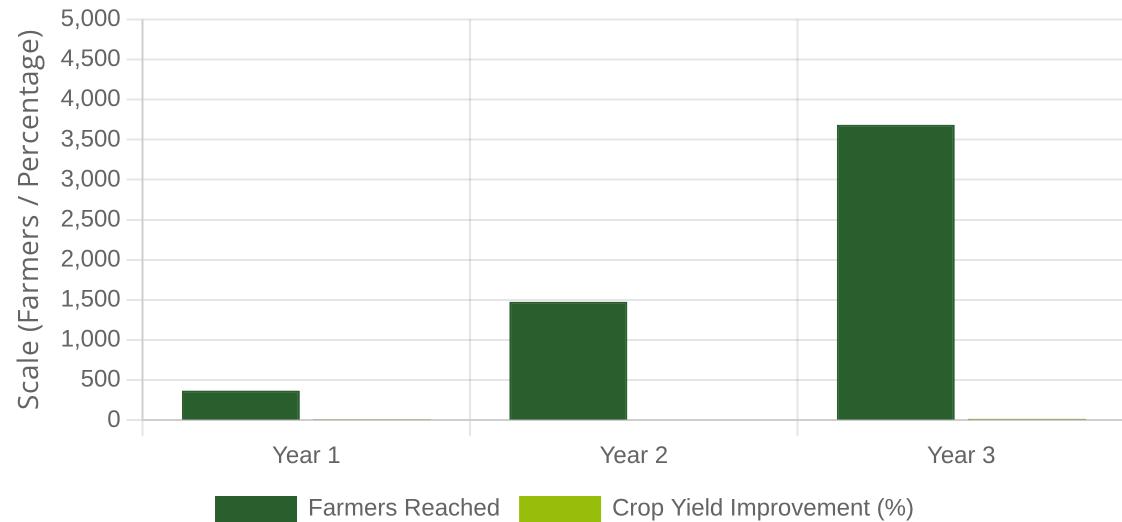
Of farmers accessing financial services

## Alignment with Sustainable Development Goals:

- ✓ SDG 2:Zero Hunger - Primary focus on food security
- ✓ SDG 1:No Poverty - Through increased farmer incomes
- ✓ SDG 13:Climate Action - Promoting climate-smart practices

"Our impact extends beyond numbers – we're building resilient communities and sustainable food systems."

## Projected Growth & Impact



*Climate-smart agricultural practices supported by HarvestNet lead to improved resilience and productivity.*

# Investment & ROI

Our budget is strategically structured to maximize impact while ensuring responsible stewardship of every dollar invested:

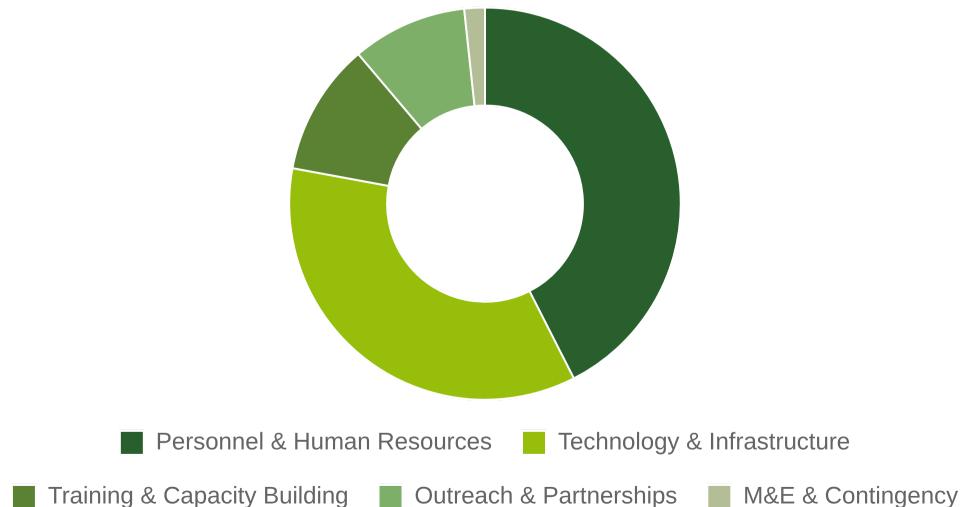
Phase	Duration	Budget (USD)
Phase 1: Pilot & Foundational Data Collection	Months 1-12	\$87,120
Phase 2: AI Development & Feature Integration	Months 13-24	\$350,000
Phase 3: Scaled Rollout & Ecosystem Expansion	Months 25-36	\$480,280
<b>Total Project Investment</b>	<b>36 Months</b>	<b>\$917,400</b>

## Return on Investment for Funders:

- Demonstrable Social Impact:** Quantifiable improvements in farmer income, crop yields, and food security.
- Replicable Model:** A proven, adaptable blueprint for addressing food insecurity globally.
- Long-Term Sustainability:** Clear path to financial self-sustainability within five years.

"By investing in HarvestNet, you're not just providing aid; you're catalyzing a sustainable transformation in Kenya's agricultural landscape."

**Budget Allocation by Category (%)**



*Investment in climate-smart agriculture yields returns across economic, social, and environmental dimensions.*

# Join Us in Cultivating Change

Your partnership can transform the lives of thousands of smallholder farmers in Kenya's Rift Valley and create a blueprint for food security across Africa. Together, we can build a future where every farmer thrives.

**1**

## Partner With Us

Become a founding partner in this transformative initiative through financial support or strategic collaboration.

**2**

## Share Your Expertise

Contribute technical knowledge, market connections, or domain expertise to strengthen our approach.

**3**

## Help Us Scale

Support our vision to expand beyond Kenya to other regions facing similar food security challenges.

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