

SEEDS OF RESILIENCE

G-BiACK AND BAKER CREEK PARTNERSHIP FOR BIODIVERSITY

Project Report – April–August 2025

Managed by Annet Nderitu and Mary Gitau



PREPARED BY SAM NDERITU



1. Introduction

The GROW BIOINTENSIVE Agriculture Centre of Kenya (G-BiACK) partnered with Baker Creek Seed Company (USA) to strengthen seed sovereignty and biodiversity in Kenya. Through this collaboration, G-BiACK received over 260 heirloom seed varieties of tomatoes, peppers, eggplants, and tomatillos for trial.

2. The objectives were to:

1. *Test adaptability of heirloom seeds under Kenyan agro-ecological conditions.*
2. *Apply seed-saving skills gained from training at Baker Creek.*
3. *Multiply and integrate resilient varieties into community seed banks.*
4. *Contribute to climate resilience, nutrition security, and biodiversity conservation.*



Annet and Mary (Managers)



Transplanting

Crop Trial Performance

Tomatoes



114 varieties received;
54 planted in the first season.

50% thrived, producing
healthy fruits.

3 varieties (Brown Sugar,
Gazahnite, Blue Beauty)
failed completely.

Resilient varieties are being
processed for seed saving.

Peppers



72 varieties received; partial
planting done.

Struggled due to erratic rain-
fall and limited irrigation.

Highlighted the importance of
improved irrigation systems.

Eggplants



47 varieties received; many
are still maturing.

Early results show strong
growth, with promising har-
vests expected soon.

Tomatillos



7 varieties planted; all
adapted excellently, with
high yields.
Strong potential for nutrition
diversification and farmer
adoption.

3. Second Season (October 2025 Trials)

✿ 46 tomato varieties and
21 pepper varieties reserved for
planting during the short rains.

✿ Improved conditions are
expected to provide more reliable
trial outcomes.

4. Challenges Encountered

- ✿ Unpredictable rain-
fall & dry spells – affected
germination and yields.
- ✿ Water shortages –
constrained irrigation and seed
cleaning.
- ✿ Pest and disease
pressure – especially fungal
infections in tomatoes.
- ✿ Limited infrastructure –
no permanent irrigation system,
shade structures, or controlled
drying spaces.



5. Seed Processing & Storage



Seeds from resilient varieties were processed using fermentation, cleaning, and drying techniques learned at Baker Creek.

All seeds are being dried, labeled, and stored under controlled conditions.

Next step: multiplication trials for adaptability, yield, flavor, and farmer preference.



6. Expansion for Next Season

To enhance biodiversity and nutrition, G-BiACK has requested new seed categories for trial, including:
Vegetables: melons, squash, cabbages, carrots, beets, cucumbers, okra, quinoa, lettuces, asparagus, Brussels sprouts.

Herbs: basil, mullein, chamomile, echinacea, lavender, thyme, stevia, dill.

Flowers: calendula, marigolds, zinnia, cosmos, butterfly pea.

This expansion will strengthen seed diversity, pollinator presence, and farmer resilience.

7. Impact and Significance

- ☞ Introduced over 260 heirloom seed varieties into Kenyan agro-ecosystems.
- ☞ Strengthened G-BiACK's role as a regional hub for seed sovereignty.
- ☞ Built local expertise in seed saving, processing, and storage.
- ☞ Identified promising varieties for scaling in farmer communities.
- ☞ Contributed to biodiversity conservation and climate adaptation..

8. Funding & Partnership Needs (2025–2026)

To ensure continuity and scale, G-BiACK requires support in:

- ☞ Infrastructure Development – irrigation system, greenhouse for trials, and seed-drying/processing facilities.
- ☞ Seed Multiplication – expansion of trials to at least 3 acres and integration into 20 community seed banks.
- ☞ Farmer Training – training 500 farmers in seed saving, processing, and biodiversity management.
- ☞ Documentation & Dissemination – producing manuals, seed catalogue, and farmer field guides



9. Long-Term Goal

G-BiACK's vision is to establish a robust, community-driven heirloom seed system adapted to Kenyan conditions, ensuring:

1. Food sovereignty for smallholder farmers.
2. Resilience to climate change.
3. Enhanced nutrition through diverse diets.
4. Conservation of biodiversity for future generations.
5. Establish a heirloom seed company



Proposed company logo

9. Challenges faced

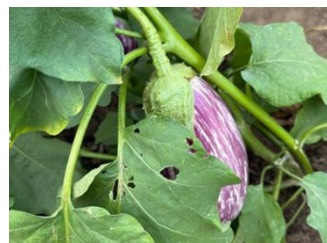
1. Water
2. Insufficient Organic Inputs
3. Organic fertilizers



Tomato performance



Eggplant Progress



GROW BIOINTENSIVE Agriculture



GROW BIOINTENSIVE AGRICULTURE CENTER OF KENYA (G-BiACK)

EMPOWERING COMMUNITIES, TRANSFORMING LIVES

Vision

Thriving communities with a healthy environment, healthy people, meaningful employment, and fulfilled lives.

Mission

To cultivate empowerment and self-reliance within communities, leading to enhanced food sovereignty.

Our Core Values

- ☞ Dignity and Autonomy.
- ☞ Community Led Growth and Empowerment.
- ☞ Celebration of Diversity and Indigenous Wisdom.

Our Strategic Objective

- ☞ Promote Food, Seed & Environmental Sovereignty.
- ☞ Empower Women, Youth & Communities through Agroecology
- ☞ Expand Sustainable Practices & Learning Hubs.
- ☞ Strengthen Market Access & Local Economies.
- ☞ Build Institutional Capacity & Strategic Partnerships.



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