

Published by

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

In cooperation with



Demonstration of production of fermented
compost, or bokashi.
© Baca Development Partners



COFFEE INNOVATION

Virtual Farm Estate Model

Promoting both regenerative practices and coffee sensory development
to help farmers increase their incomes and decrease cost of inputs

OVERVIEW: BACA DEVELOPMENT PARTNERS (KENYA)



CHALLENGE

Addressing the decline coffee livelihoods of smallholder coffee growers in Kenya related to increasing cost of production, declining coffee incomes and growing vulnerabilities to climate change.

INNOVATION

In the first phase, the intervention focused on introducing smallholder coffee growers to regenerative agriculture practices with a focus on building soil health fertility and operationalising a lead farmer and local service provider-driven extension service model. In the second phase, the intervention sought to focus on demystifying "Q grading" with the ambition of appropriating Q grade results to draw insights to inform growers on remedial production and processing actions needed to secure quality and realize better returns at the market level.



COMPANY DESCRIPTION

Baca Development Partners is a sustainability practice working in multiple sectors including energy, agriculture, water and housing. In the agricultural value chains, it primarily works with smallholder producers to integrate regenerative practices and innovative technologies into Agri-Food Systems with the view of enhancing sustainability and improving farming livelihoods.

KEY COMPANY STATS

NUMBER OF STAFF

Full time: Three

Field Agents: Three (local service providers)



COST

COSTS

Free for farmers to participate

EFFECTS ON REVENUE AND YIELD

Cost savings via low input requirement that leverages on-farm nutrient recycling through composting and the adoption of key regenerative practices including mulching and effective canopy management



PREPARATION

TIMELINE

Could not be determined

STAFFING REQUIREMENTS

Could not be determined

MATERIALS AND EQUIPMENT

- Simple hand tools and resources available at farm level
- Labor
- Agricultural residues
- Bokashi, including yeast and quarry dust available in the local markets
- Cupping equipment



LESSONS LEARNED

CHALLENGES

- Cooperatives are generally apathetic.
- Adoption of new farming practices takes time to implement and also to see results.

TAKEAWAYS

- Plan to market regenerative practices to private wet mills and the farmers and estates that utilize them as they are more motivated.
- Would temper our ambitions on using regenerative agriculture practices to enhance production capacity.
- Refresher training is needed to ensure good knowledge transfer to trainers.

As a result of Baca Development Partners's trial:



Close-up of farmer Tom's high yield from a well-managed coffee bush. © Baca Development Partners



20 LEAD FARMERS UNDERWENT TRAINING

for Training of Trainers (ToT) on Integrated Soil Fertility Management and Voluntary Savings and Lending Associations (VSLA).



507 SMALLHOLDER COFFEE GROWERS

engaged through the group level training with 47 % of these being women.



Top-worked coffee bushes that have regenerated their crown awaiting pruning with harvested maize stover residues retained for soil cover. © Baca Development Partners

STEP

1

Baseline soil testing and coffee cupping

STEP

2

Develop a Lead Farmer training program on low-input regenerative agriculture

STEP

3

Provide lead farmers with starter kits to establish demo plots showcasing regenerative practices

STEP

4

Measure improvements in soil health and coffee quality through regular follow-up soil testing and coffee cupping

The COFFEE INNOVATION FUND has been developed and funded by the German Federal Ministry for Economic Cooperation and Development (BMZ), and implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

MISSION: The Fund's objective is to increase the profitability of smallholder coffee farmers, and foster greater, more equitable value distribution along the supply chain through promoting innovative farming systems, transparent and inclusive business models, and access to new markets.

Contact details:

Paul Mbole
Baca Development Partners
P. O. Box 1495-90100,
Machakos, Kenya

Secretary General KESCOGA
P. O. Box 8068-00300,
Nairobi, Kenya



Published by:

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered Offices:

Bonn and Eschborn, Germany

Friedrich-Ebert-Allee 32 + 36,
53113 Bonn
T +49 228 44 60-0
F +49 228 44 60-17 66

E info@giz.de
I www.giz.de/en

**Sector Programme Initiative for
Sustainable Agricultural Supply Chains (INA)**

Editors:

Coffee Innovation Fund
Baca Development Partners
Jen Green, Indonesia

Design:

Shenny Purwadi, Jakarta

Photo credits:

© Baca Development Partners

On behalf of

German Federal Ministry for Economic Cooperation and Development (BMZ)
Division 122: Agriculture, Rural Development
Bonn

Bonn, Germany, 2024

On behalf of



Federal Ministry
for Economic Cooperation
and Development