Coffee Initiative





Adoption of GAP and rehabilitation programs lead to production uplift in East Africa in spite of ageing trees

Legend



The Coffee Initiative - TechnoServe

R&R type

Grant-based rehabilitation¹

Countries

East Africa (Ethiopia, Kenya, Rwanda, Tanzania)

Cost

USD 47 million in 2008 and USD 18 million in 2012²

Dates

2008 - 2016

Project context

Objectives,

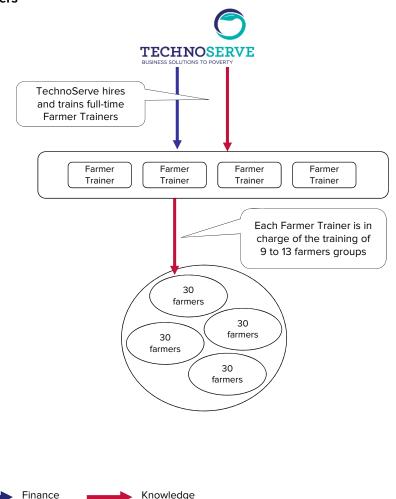
activities, and

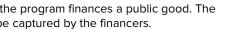
results

- The 5 million SHFs across East Africa have (on average) 50% lower yields than those in Central America. The primary reason is the lack of adoption of Good Agricultural Practices (GAP).
- Rehabilitation alongside GAP can enable farmers to reach good levels of productivity, even for trees above the productivity peak. Renovation is not always needed.
- The Coffee Initiative developed the Farm College program. The Coffee Initiative recruited farmer trainers, mostly daughters and sons of local coffee farmers, to deliver training on GAP and on rehabilitation practices to farmers. Each farmer trainer was responsible for training between nine and 13 groups of 30 or more farmers. Every training group selected a member who volunteered his/her land as a demonstration plot.
- The monthly lessons included sessions on pruning techniques, rejuvenation, pest and disease management, coffee planting, and the safe use of pesticides.
- In total, 139,609 farmers were trained.
- Value creation: increased yields of least productive SHFs and improved livelihoods.
- Value capture: the program finances a public good. The value is yet to be captured by the financers.

This amount was mobilized for the whole project and not specifically for the rehabilitation program. Sources: Coffee Initiative Final Report, TechnoServe — Dalberg interviews

Figure 1: Farm college programs – overview of technical assistance delivery to farmers





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Project context

Coffee viability



Relevance: SHFs in East Africa typically have low yields and have potential for yield uplift by applying GAP and R&R (e.g. potential of 92% net income increase from yield improvements in Ethiopia, 138% in Kenya, 85% in Tanzania and 63% in Uganda¹).

Willingness: SHFs lack short-term willingness to renovate old trees due to lack of knowledge and unwillingness to forego short-term income. This hurdle can be overcome by implementing demonstration plots.

Farmer segmentation



 Country situation: SHFs are mostly dependent on intermediaries to access markets and are largely disconnected from technical assistance, inputs and providers. However, situations differ across countries (e.g. cooperatives are stronger in Kenya)

Program segmentation: The program targets SHFs in loose value chains or with inconsistent access to markets

R&R need



 Country need: Over 50% of the coffee trees in East Africa are over 50 years old. However, renovation is not always needed. A good level of productivity can be obtained through rehabilitation.

 Program objectives: Train close to 140,000 farmers around GAP and rehabilitation techniques to increase their productivity.

Management of the three R&R components

- Providers: Third party companies
- Challenges faced: Few farmers use fertilizers, and lack knowledge on how to use them correctly (amount, timing, and type of fertilizers).

Inputs

Solution: The Coffee Initiative commissioned soil and leaf surveys
to better understand the existing soil conditions and nutrient needs
in each country, allowing the development of localized nutrition
recommendations included in Farm College trainings. Private agroinput suppliers were supported to adopt recommendations and
linkages to cooperatives.

Finance

- Providers: The Bill and Melinda Gates Foundation to TechnoServe.
- Challenges faced: More investment is needed in the sector, but the private sector is reluctant to engage alone.
- **Solution:** The project aims to create partnerships between business, public sector, and NGOs. For example, Nib Bank (Ethiopia) agreed to continue providing working capital to cooperatives when the Coffee Initiative ended on the condition that the coffee unions hire business advisors to provide TA.

Knowledge

- Providers: The Coffee Initiative
- Challenges faced: Farmers have low access to TA and may be reluctant to implement new practices.
- Solution: The Coffee Initiative developed a decentralized training program, the "Farm College program": they recruited full-time Farmer Trainers to deliver training to groups of farmers. This structure enables Farmer Trainers to make visits and follow up with individual farmers.

Lessons learned

- **Rehabilitation is sometimes preferable to renovation:** Rehabilitation is less risky, results are faster and requires less investment than renovation. Whenever old trees can maintain productivity via intensive rehabilitation, this option should be preferred over renovation.
- Adoption of a set of yield enhancing practices is essential to support R&R: After the training, 56% of participating farmers had adopted at least 50% of the agronomic techniques from a baseline of 15%.
- Farmers sometimes have to "See it to believe it": Each farmer group elected a "Focal Farmer" who provided a venue for trainings and a 40-tree demonstration plot. This approach proved to be effective as farmers immediately practiced the techniques they learned.

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