







TechnoServe's East Africa Coffee Initiative: An Example of System Leadership in Practice

TechnoServe's East Africa Coffee Initiative: An Example of System Leadership in Practice

Written by Piya Baptista and Beth Jenkins

Designed by Alison Beanland

Cover photographs: Nile Sprague and TechnoServe

© 2017 by the CR Initiative at the Harvard Kennedy School

TechnoServe's East Africa Coffee Initiative: An Example of System Leadership in Practice

Foreword	4
Executive Summary	5
1. The Need for System Leadership in East Africa's Coffee Sector	7
2. TechnoServe's East Africa Coffee Initiative	11
3. System Leadership in Practice	15
Role 1: Cultivating a Shared Vision for Change	15
Role 2: Empowering Widespread Innovation and Action	17
Role 3: Enabling Mutual Learning and Accountability for Progress	20
4. Lessons and Recommendations for System Leadership	24
Key Success Factors	24
Challenges	25
Recommendations for Key Stakeholders	27
Acknowledgements	29
Endnotes	30

Foreword

The achievement of more inclusive and sustainable growth depends on our ability to tackle complex challenges such as climate change, income inequality, food security and gender parity. These challenges are systemic, rooted in the actions and interactions of diverse yet interconnected and interdependent stakeholders.

One of the greatest leadership challenges of our generation is to align these stakeholders' incentives and build their capabilities in ways that accelerate and scale progress. This critical function has been called system leadership.

The Corporate Responsibility Initiative began to analyze examples of system leadership in practice with a report on the World Economic Forum's New Vision for Agriculture Initiative in 2016. We identified three key roles of system leaders: cultivating a shared vision for change, empowering widespread innovation and action, and enabling mutual accountability for progress.

The present report, also focused on the agriculture sector, reviews TechnoServe's East Africa Coffee Initiative. With support from the Bill & Melinda Gates Foundation, including \$65 million in funding over eight years and encouragement for an approach based on experimentation and learning, the Coffee Initiative engaged farmers, cooperatives, exporters, roasters, input providers, banks, and various levels of government in four countries from 2008 to 2015. Through this process it built the individual and institutional capacity of many of these stakeholders and ultimately helped to increase the coffee incomes of more than 250,000 smallholder farmers by 27%, among other outcomes.

In this example, we see TechnoServe playing the same system leadership roles as the New Vision for Agriculture (NVA), but on a different stage and in different ways. For example, whereas the NVA built buy-in to a common vision through global, regional and national convening and dialogue, TechnoServe built it by engaging stakeholders one-by-one through action on the ground. Whereas the NVA empowered widespread innovation and action primarily by facilitating strategic partnerships, TechnoServe took a more

operational approach—for example by directly training farmers in the latest coffee-growing techniques and building the capacity of cooperatives to do business with larger players. These differences reflect differences in the nature of the two organizations. The NVA is an initiative of the World Economic Forum, which specializes in convening leaders and building partnerships across sectors and offers flexible core funding. TechnoServe is a non-profit with a 50 year history of directly supporting people to lift themselves out of poverty, and it is funded primarily on a project basis.

In short, while system leadership is underpinned by common principles, what it looks like in practice will always be highly contextual. It will always be difficult and multidimensional, requiring continuous iteration based on evolving interests, incentives and realities on the ground, ranging from policy environments to operational constraints. The NVA and TechnoServe are evolving their approaches to system leadership as they learn from experience. Nevertheless, we hope that these two examples and future research will help demystify the concept, advance the practice, and surface useful insights about how to bring system leadership to new levels of scale and effectiveness.

We are grateful to TechnoServe for sharing its experience in the East Africa Coffee Initiative and to its partners who agreed to be interviewed. We believe the example offers lessons for other system leaders, and stakeholders wishing to support them, both in agriculture and beyond.

Jane Nelson

Director, Corporate Responsibility Initiative Mossavar-Rahmani Center for Business and Government Harvard Kennedy School

Executive Summary

TechnoServe's East Africa Coffee Initiative was established in 2008 to support transformation in the region's coffee sector. From 2008 to 2016 it helped nearly 268,000 East African smallholder farmers to transition from being commodity producers to integral parts of the high-value specialty coffee value chain, thereby increasing their coffee incomes by 27%.

This was no simple matter of training farmers and sharing their contact details. East African smallholder coffee farmers and their cooperative groups face low productivity, low quality, lack of access to finance, and limited linkages to specialty roasters. These challenges are complex and systemic, rooted in the actions and interactions of diverse yet interconnected, interdependent stakeholders: the farmers and their cooperatives, private traders, wet mills, exporters, roasters, input providers, financial institutions, and various levels of government. Such challenges cannot be addressed in a top-down, pre-planned, linear fashion. Instead, they require stakeholders to learn and to change the way they operate. Over time, they must develop and adopt new agricultural techniques, management practices, technologies, business models, public service delivery models, policy and regulatory innovations, and cultural norms that together deliver new results.

Through the East Africa Coffee Initiative, TechnoServe worked to align the efforts of diverse stakeholders to accelerate change, a role we call "system leadership." This involved:

- Cultivating a shared vision for change, working to understand the system and engaging its stakeholders both in dialogue and in experimentation and action on the ground.
- Empowering widespread innovation and action among stakeholders by building their capabilities, mobilizing financial resources, and facilitating linkages among them.
- Enabling mutual learning and accountability for progress through rigorous monitoring and evaluation, ongoing stakeholder consultation, and work to strengthen governance and transparency at the cooperative level.

A number of factors worked in TechnoServe's favor, in particular the following:

- Significant financial support, brand recognition, convening power, risk appetite and an eight-year timeframe from the Bill & Melinda Gates Foundation enabled the organization to take a system leadership role as opposed to a technical support role;
- TechnoServe's track record and its position outside the value chain, without a direct commercial interest, gave it credibility as an intermediary;
- Its focus on improving the incomes of smallholder coffee farmers helped create buy-in and advocates in government;
- High-quality capacity-building with farmers and cooperatives strengthened critical links in the value chain and provided the confidence other key stakeholders needed to get involved; and
- A focus on learning and innovation enabled TechnoServe to bring added value to stakeholders along the coffee value chain.

At the same time, ongoing challenges remain. For example, cooperative leaders are not properly compensated for their time or performance and need stronger incentives to work toward the best interests of their members. In some cases, this is due to regulation—and policy reform and innovation are still needed to unlock and accelerate progress across the coffee sector. Finally, there are still millions of East African coffee farmers and thousands of cooperatives that would benefit from high-quality, hands-on training. Local capacity to deliver such training is extremely limited. Linked to this are questions about sustaining and scaling progress made during the Coffee Initiative.

Eight years is a long time for a donor project, but not for systems change. TechnoServe worked hard to build the capacity and create the incentives for stakeholders to work together in new ways, and generate new value, even after the Coffee Initiative concluded. At the same time, the organization acknowledges that there may have been ways of making sustained impact at scale even more likely—for example, by helping to establish formal multi-stakeholder initiatives as part of its exit strategy.

TechnoServe's East Africa Coffee Initiative shows that systems change is complex, messy, and time-consuming. It also suggests that civil society organizations, their funders, and their corporate partners need to think and work in new ways to exercise and support system leadership—embracing ambiguity, experimentation, learning, sharing, and longer-term horizons in order to unlock new potential for progress toward more sustainable, inclusive growth and development.

1 The Need for System Leadership in East Africa's Coffee Sector

Agriculture is a social and economic mainstay in Africa. It contributes on average 15 percent of Gross Domestic Product¹ and provides livelihoods for millions of smallholder farmers and their families.²

About 80 percent of all farms in Africa, approximately 33 million, are less than two hectares in size,³ and directly employ 175 million people.⁴ These farms are critical to food security and nutrition, enabling farming families to grow crops for their own consumption and earn income they can spend on other foods that might be part of a healthy, well-balanced diet. Income from farming helps to pay for a host of other important products and services as well, ranging from school fees to health care.

Coffee is a major cash crop in the region. In 2014, the total value of green coffee beans exported from Africa was \$1.8 billion. Around 450,000 tons of Arabica coffee valued at more than \$1 billion departs from the East African ports of Dar Es Salaam, Djibouti, and Mombasa every year. In Ethiopia alone, coffee constitutes 25-30 percent of export revenues. And as in agriculture more broadly, smallholders dominate the production of coffee. The majority of coffee by volume is produced by five million smallholders who cultivate plots between half a hectare and two hectares.

Smallholders are in a vulnerable position in the coffee value chain. They are severely impacted by coffee price volatility, and are also the first to experience the effects of droughts, floods, and other extreme events that are intensified by climate change.

If produced and processed right, however, coffee offers an opportunity to increase smallholder farmers' incomes by connecting them to specialty markets. East Africa has particularly favorable conditions for growing high-quality Arabica coffee—ideal rainfall patterns, temperatures, and altitudes—which makes the region very competitive in the specialty coffee market. Arabica coffee is difficult and costly to grow, as it requires more inputs and processing, but it brings higher prices than Robusta. TechnoServe estimates that farmers typically receive 60 to 70 percent of the export price.

Although there are many country-specific nuances, several common challenges have prevented the East African coffee sector from realizing its full potential:

- Low Productivity: East Africa's per-hectare coffee yields are 50 percent lower than Central America's and 80 percent lower than those of demonstration plots in the region. A primary reason is that farmers have not adopted good agricultural practices due to the absence of formal training, largely as a result of insufficient government extension capacity. A secondary reason is that farmers have limited access to productivity-boosting inputs like fertilizers, which are difficult to purchase without credit and when profits are low.
- Low Quality: Farmers process coffee by sun-drying or partially washing it, which causes imperfections that affect coffee flavor if not properly managed. A primary reason for this is that few farmers have access to wet mills that process coffee using the wet processing technique that specialty coffee buyers favor. The dearth of wet mills can be explained by the lack of efficient wet mill business models and the challenges wet mills experience in accessing financing for their operations and infrastructure.

A secondary reason for low coffee quality is a lack of incentives for farmers. Although price premiums for high quality can be found, they are not always transparent. A third reason is that farmers experience droughts and other weather events which adversely affected coffee quality.

 Lack of Access to Finance: Farmer-based cooperatives face difficulties in managing and investing in their operations due to limited or lack of access to financing. A primary reason is that smallholder farmers and cooperatives are a low-priority segment for private financial institutions. Few banks are willing to provide working capital and capital expenditure loans to cooperatives given their poor governance and management as well as limited assets. Moreover, government regulations in some countries impose high collateral requirements and even restrict who can finance cooperatives, limiting the role of private players like exporters that can bridge the financing gap.

• Limited Linkages to Specialty Markets: Smallholder farmers have limited access to specialty buyers that are willing to pay price premiums for high-quality Arabica coffee. The primary reason is that the specialty coffee market is fairly new, and just now undergoing a dramatic expansion. A secondary reason is that national regulations restrict how coffee can be sold, whether through auctions, directly to exporters or buyers, or through other avenues. This means that specialty buyers have to work within the existing system, and cannot always directly work with cooperatives that have the potential to supply high-quality coffee.

These challenges are systemic in nature, caused by the actions and interactions of the players in East Africa's coffee value chain. Broadly speaking, the key players include farmers, private traders, cooperatives, wet mills, exporters, and global buyers such as Peet's Coffee & Tea and Starbucks Coffee Company, which are known as roasters. Cooperatives and private traders purchase coffee cherry from farmers. Some cooperatives own their own wet mills, also known as coffee washing stations, which process coffee cherries up to a point called coffee parchment. Private traders may also sell coffee cherry to private wet mills for processing, where those exist. Large volumes of coffee remain unwashed due to insufficient wet mill capacity in East Africa, except for in Kenya. Exporters then purchase the product and process it further to yield green coffee beans, which they market. Finally, roasters purchase green coffee beans from exporters, and sometimes directly from cooperatives, for roasting producing coffee for final consumption.

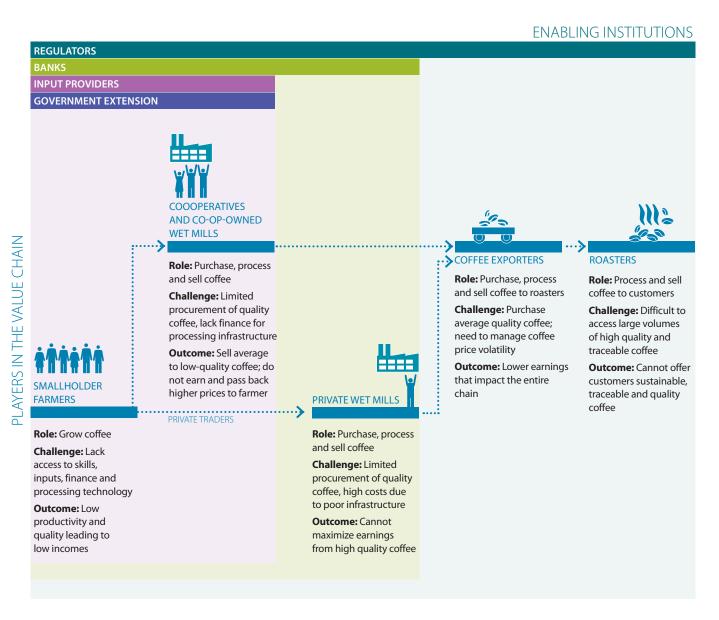
Enabling institutions such as governments, financial institutions, and input providers also play important roles. Government regulation, for example, affects how cooperatives form, who can finance them, and how coffee can be sold.

These players are interdependent, their challenges impacting each other as illustrated in Figure 1.

A system leadership approach is needed to unlock progress. It is not possible to increase productivity, quality, and incomes for smallholder coffee farmers by working with farmers alone. Farmers, cooperatives, exporters, banks, input companies, the government and other key stakeholders in the East African coffee sector all need to develop new processes, pricing structures, partnerships, policy and regulatory innovations, and norms of behaviors that can, together, deliver better results for everyone involved—and it doesn't make sense for any one stakeholder to act unless the others do, too.

This report describes how TechnoServe's East Africa
Coffee Initiative, with backing from the Bill & Melinda
Gates Foundation, helped to align the incentives and
build the capabilities of diverse stakeholders in order
to unlock progress and deliver gains for smallholder
farmers. We call this role "system leadership" (see Box 1).
It wasn't easy, and there is still work to be done. Therefore,
this report also highlights key lessons for TechnoServe, the
Bill & Melinda Gates Foundation, and other organizations
seeking to exercise and support system leadership—whether
in the East African coffee sector, agriculture more broadly,
or other sectors where more sustainable and inclusive
development is needed.

Figure 1 Key Players and Enabling Institutions



^{*}This visual broadly represents East Africa's coffee sector. There were structural and regulatory differences from country to country. For example, in Ethiopia, cooperatives were required to sell coffee through cooperative unions. Some of these unions were very large, managing up to 100 cooperatives each, and had significant influence in the value chain.

Box 1 Understanding System Leadership

System leadership¹⁰ is needed to tackle global challenges like food security, climate change, job creation, and gender parity. These challenges are complex and systemic, rooted in the actions and interactions of diverse yet interconnected, interdependent stakeholders. Leaders in business, government, and civil society increasingly recognize that they cannot be addressed in a top-down, pre-planned, linear fashion. Instead, these challenges require stakeholders to change the way they operate at the global, national, and local levels. Over time, they must develop new technologies, products, services, business models, public service delivery models, policy and regulatory innovations, voluntary standards, and cultural norms and behaviors that together deliver new results.

System leadership can help align the efforts of diverse stakeholders to accelerate change. As "systems thinking" guru Peter Senge crystallized it in a paper with Hal Hamilton at the Sustainable Food Lab and John Kania at FSG, the fundamental role of system leadership is to "shift the conditions through which [...] those who have a problem can learn collectively to make progress against it."¹¹

System leadership works by cultivating a shared vision for change, empowering widespread innovation and action, and enabling mutual learning and accountability for progress. A shared vision galvanizes diverse stakeholders and helps to ensure that their efforts align, complement, and build on one another, producing better results faster than they could otherwise have done.

While not all stakeholders will be early movers, a critical mass of leaders must innovate and act to "tip" the system and influence the rest. And mutual accountability is both a powerful incentive and a critical enabler. In a system, where stakeholders are interdependent, they will only sustain the investment of time, effort, and resources needed to play their parts if the others do, too.

Figure 2 Three Key Roles of System Leaders



Adapted from Nelson, Jane and Beth Jenkins. 2016. "Tackling Global Challenges: Lessons in System Leadership from the World Economic Forum's New Vision for Agriculture Initiative." Cambridge, MA: Corporate Responsibility Initiative at the Harvard Kennedy School.

2 TechnoServe's East Africa Coffee Initiative

Founded in 1968, TechnoServe is an international nonprofit with a track record of impact in the agriculture sector. Its mission is to work with enterprising men and women in the developing world to build competitive farmers, businesses, and industries.

Operating in 29 countries, the organization links people to information, capital, and markets to lift them out of poverty. As TechnoServe describes, a fundamental focus is to address market failures, which it does in three ways:¹²

- **Develop capacity:** TechnoServe helps individuals and communities gain the skills, knowledge and technologies they need to build successful farms and businesses.
- Strengthen market connections: TechnoServe works with industry to connect emerging businesses and farms to finance, networks, and suppliers.
- Improve the business environment: TechnoServe aims to enable economic activities to sustain by addressing the policies, information gaps, and incentives that make markets function better.

Established in 2008, TechnoServe's Coffee Initiative aimed to transform the coffee sector in East Africa.

At the time, it was the largest and most ambitious project in TechnoServe's history. Its objective was to turn coffee farmers from commodity producers into integral parts of a high-value specialty coffee chain, thereby increasing their incomes. The impetus to deepen its involvement in East Africa's coffee sector came not only from TechnoServe's own hands-on work in the sector since 1998 in Tanzania and 2006 in Rwanda, but also from a major coffee roaster. Jerry Baldwin, a co-founder of Starbucks and a TechnoServe board member, encouraged the organization to explore further, believing there was an opportunity to link East African smallholder coffee farmers to specialty roasters.

The Bill and Melinda Gates Foundation provided \$65 million in grant funding. TechnoServe pitched the idea in 2007, when the foundation was starting to explore different ways of supporting smallholder farming and agriculture in emerging markets. Being at an early stage in its journey, the foundation was more willing than most donors to take risk and fund long-term initiatives focused on systems change. The resulting initiative was carried out over two phases, from 2008 to 2011 (\$47 million) and 2012 to 2015 (\$18 million). The Coffee Initiative targeted Ethiopia, Kenya, Rwanda, and Tanzania in the first phase. In the second phase, the focus was mainly on Ethiopia with some transitional work in Kenya, Rwanda, and Tanzania in 2012 and 2013.

Since the end of the Coffee Initiative in 2015, TechnoServe has succeeded in replicating the model.

Funding partners have included international roasters Nespresso, Jacobs Douwe Egberts (JDE) and Mother Parkers, as well as development organizations the IDH Sustainable Trade Initiative and USAID. In all, it has mobilized \$25 million in funding—including \$17 million from Nespresso for a seven-year program to bring its AAA Sustainability Quality Program to Africa. The focus remains on Ethiopia, Kenya, Rwanda, and Tanzania, and is expanding to South Sudan. These programs are expected to benefit an additional 135,000 farmers over four years.

The Coffee Initiative was predicated upon demand for high-quality Arabica coffee among specialty coffee roasters. Without knowing there would be a market, that offered higher prices, farmers and cooperatives would have had no reason to invest their time or money, banks would have seen little reason to lend, and so on. TechnoServe assessed the market and value chain before getting started, and the Bill & Melinda Gates Foundation commissioned an additional, third-party market assessment before deciding to invest in a second phase.

The Coffee Initiative responded to this market opportunity through five primary activities:



AGRONOMY TRAINING



GOAL: Improve coffee productivity through training on good agricultural practices

TechnoServe established a "Farm College" program to provide monthly training to smallholder farmers, including women. Guided by regional agronomy experts and conducted by 130 local trainers, the trainings were aligned with the coffee tree growing cycle and tailored to local conditions. The curriculum included climate-smart farming techniques including tree rejuvenation, pruning, composting and integrated pest and disease management.

Farmer trainers were responsible for training nine to 13 groups of 30 farmers each. To maximize learning, participatory techniques such as hands-on activities, role playing, and discussions were used to engage farmers. Each group also appointed a focal farmer who provided a venue for trainings and a demonstration plot for farmers to see the benefits of agronomy best practices.

Box 2 Breaking down gender barriers

Women play an important role in agriculture, but their contributions convenient times—and children are often unrecognized due to limited land ownership and traditional social norms. Although they could benefit from agronomy training, they rarely participate unless targeted. The Coffee Initiative did not initially have an explicit focus on women, but adapted its approach to make gender a core priority within a year. A first step was to appoint a Gender Technical Advisor.

To increase women's participation, farmer trainers held meetings, often organized by community leaders, to sensitize farmers and cooperative leaders. Farmers were encouraged to bring their wives

to trainings, which were held at could attend, too, to alleviate the childcare burden. Men were often asked to share the benefits of their wives' participation to further sensitize their peers. Another priority was recruiting women, many of them farmers' daughters, as farmer trainers, and encouraging women to become focal farmers. At an institutional level, TechnoServe included a gender policy in its sustainability training for cooperatives, later evaluating their performance in promoting women's leadership, membership, and employment.



COOPERATIVE AND WET MILL CAPACITY-BUILDING



GOAL: Improve coffee quality by providing farmers access to wet mills

TechnoServe helped new and existing farmer cooperatives to establish new wet mills where coffee could be processed, as well as to turn around the operations of existing wet mills that were either failing or operating below capacity. Processing coffee at wet mills yielded fully-washed coffee that fetched higher prices than coffee hand-processed at home.

Business advisors appointed by TechnoServe worked handin-hand with cooperatives to improve governance, train managers in business skills, and share technical knowledge on how to operate a wet mill and produce high-quality coffee. Training also covered sustainability standards: labor practices, occupational health and safety, environmental responsibility, and economic transparency.

Box 3 Low-cost technology for wet mills

TechnoServe introduced a low-cost, environmentally-friendly wet mill business model in Tanzania in 2001 which gained significant uptake there and was later introduced in Ethiopia during the Coffee Initiative. The model included a \$4,000 de-pulping machine, a simple storage facility, plastic piping, a water tank, and drying tables. With a total capital cost of \$8,000, the technology was significantly more affordable for cooperatives—despite the need for credit—than industrial-size facilities that cost \$200,000.

The larger wet mills operated below capacity so couldn't offer farmers higher prices and were often located at a great distance from coffee farms. The low-cost wet mills, in contrast, were close to farms and could offer higher prices due to low operating costs, providing an economic incentive for farmers to shift from handprocessing semi-washed coffee at home to delivering coffee to wet mills for full washing.



ACCESS TO FINANCE



GOAL: Enable cooperatives to access working capital for operations and to invest in wet mills

TechnoServe partnered with local and international financial institutions such as the International Finance Corporation (IFC), Rabobank, Nib Bank, and the Cooperative Bank of Oromia to enable cooperatives to access financing. It even trained credit officers at banks on the wet mill business model so they could design more suitable financial products for cooperatives. TechnoServe's technical assistance to cooperatives, described earlier, strengthened governance and management, increasing banks' confidence to lend to a target group they considered high-risk. TechnoServe also established a digital platform that provided banks with access to financial information on cooperatives and wet mills, further increasing their confidence to lend.

In Rwanda, TechnoServe introduced the Coffee Service Provider model in which coffee exporters earned a percentage of the cooperatives' coffee sales (typically five to seven percent) in exchange for providing working capital, price risk management services, and capex funding for wet mills; offering high-quality processing services and export logistics; and managing sales to specialty buyers.



ACCESS TO INPUTS



GOAL: Improve productivity by facilitating access to inputs

TechnoServe conducted studies to understand the condition and nutrient needs of soils in the four target countries. These studies provided recommendations for fertilizers to enrich soil—and the information was incorporated into the Farm College training program. TechnoServe also took steps to improve smallholders' access to fertilizers. In Tanzania, for example, it worked with the input company Yara to appoint a distributor in a remote region. The Government of Rwanda also adopted a recommendation from one TechnoServe-commissioned study and began to distribute a fertilizer that was better suited to Rwandan soils.



ACCESS TO MARKETS



GOAL: Improve linkages between cooperatives and global coffee roasters

TechnoServe established linkages with a number of global coffee roasters such as Starbucks Coffee Company, Peet's Coffee & Tea, Stumptown Coffee Roasters and others to make them aware of the Coffee Initiative and the opportunity to work with smallholder cooperatives that could supply high-quality coffee. As described above, these linkages provided the rationale for farmers and cooperatives to invest and for banks to lend. During the first phase of the Coffee Initiative, Peet's Coffee & Tea purchased 1.7 million pounds of green coffee beans for nearly \$5 million, at an average of 31 percent above the average New York "C" market price. 13 It also launched its first African coffee blend consisting of coffee sourced entirely from Coffee Initiative cooperatives.

Another effort to improve market linkages was TechnoServe's training of 225 cooperative leaders and farmers in coffee tasting and its establishment of 35 coffee tasting labs. Cooperatives gained the ability to judge coffee quality according to industry guidelines, make improvements, and speak the language of specialty coffee roasters that valued cupping scores.

Table 1 Key Results of the Coffee Initiative 14

Markets	Established linkages with 20 global coffee roasters including Starbucks Coffee Company, Peet's Coffee & Tea, and Stumptown Coffee Roasters
Reach	 Nearly 268,000 farmers reached through agronomy training and support for wet mills, of which 36% were women Nearly 140,000 farmers trained in agronomy practices
Productivity	• 42% increase in productivity among trained farmers by the end of the project15
Processing	 340 cooperative-owned wet mills supported, including 195 new wet mills All wet mills were operating 2 years after graduating from TechnoServe support
Incomes	 Increased farmer coffee incomes by 27% by the end of the project Coffee exported at a premium of \$1.54/kg over the benchmark New York commodity price with farmers earning \$0.43/kg in farm-gate premiums by the end of the project¹⁶ Sustained price premiums between 25% and 45% in Rwanda and Ethiopia for washed coffee by the end of the project¹⁷
Finance	 \$18.7 million in working capital for cooperatives \$3.4 million in capital expenditure for cooperative-owned wet mills \$5 million a year in working capital for cooperative- and privately-owned wet mills continues to be provided by exporters in Rwanda¹⁸
Individual and Institutional Capacity	 56% of farmers participating in agronomy training adopted at least half of the practices as of 2015 Improved governance and management of cooperatives and wet mills Increased women's participation as farmer trainers and in management of cooperatives Increased knowledge and understanding of wet mill business among financial institutions, resulting in more suitable lending products Introduced new model for exporters to provide fee-based services to cooperatives

3 System Leadership in Practice

This section describes how TechnoServe exercised system leadership in the East African coffee sector, fulfilling the three key roles of systems leaders described in Box 1:

- ROLE 1: Cultivating a Shared Vision for Change
- ROLE 2: Empowering Widespread Innovation and Action
- ROLE 3: Enabling Mutual Accountability and Learning for Progress

ROLE 1. CULTIVATING A SHARED VISION FOR CHANGE



The Coffee Initiative vision was to improve the quality and volume of coffee produced by smallholder farmers and link them to specialty coffee buyers, thereby increasing their incomes. The organization brought stakeholders in the coffee sector together to share in this vision through three tactics:

- · Understanding the system
- Engaging all key stakeholders
- · Action-based engagement

As TechnoServe identified and engaged public and private sector stakeholders in East Africa's coffee sector, it found that some were more supportive of the vision than others. One reason was that both capacity and appetite for change varied among stakeholders. TechnoServe believed that dialogue alone would not be sufficient to convince stakeholders that had reservations about smallholders' ability to improve coffee productivity and quality to serve specialty markets, or that didn't believe the specialty coffee market was large enough to absorb the additional production. TechnoServe, therefore, employed an action-based approach. Its experience suggests that local stakeholder dynamics influence the type of approach that should be used to work toward systems change—there is no 'one-size-fits-all' approach.



UNDERSTANDING THE SYSTEM

While TechnoServe already had some experience in the East African coffee sector, the organization undertook deliberate efforts to deepen its understanding of how the sector worked, identify the key stakeholders and their roles, and develop insights on the persistent challenges facing the sector. Armed with this knowledge, TechnoServe could begin to engage and work with different stakeholder groups.

- VALUE CHAIN AND MARKET ANALYSIS: The Coffee Initiative
 was predicated on a full value chain and market analysis
 to understand the business case for all stakeholders.
 TechnoServe conducted this at the outset, and the Bill &
 Melinda Gates Foundation commissioned the consulting
 firm Monitor to do a second study before deciding to
 invest in the second phase.
- STAKEHOLDER MAPPING EXERCISES: These exercises identified the key players in the coffee value chain: farmers, cooperatives and their wet mills, private wet mills, cooperative unions, exporters and global coffee roasters. They also identified enabling institutions such as banks, input providers, and governments. Stakeholder mapping shed light on the relationships among value chain players, their roles in achieving the vision, and their incentives and disincentives to act (see Table 1). Through this process, TechnoServe was also able to determine which stakeholders were most relevant—and had the ability to either positively or negatively impact the Coffee Initiative.
- FARMER NEEDS ASSESSMENTS: TechnoServe conducted farmer needs assessments to better understand their challenges and identify opportunities to work with them.
- ENGAGEMENT WITH LOCAL EXPERTS: Regional teams
 of specialists hired by TechnoServe served as dedicated
 advisors to country-level staff during the set-up and
 implementation of the Coffee Initiative. They brought
 expertise in agronomy, finance, environmental
 sustainability, gender, information technology, adult
 education, coffee quality, and impact assessments, helping
 TechnoServe to build a broad and nuanced understanding
 of the coffee sector in each country.



2

ENGAGING ALL KEY STAKEHOLDERS

Because the challenges in the East African coffee sector were systemic, the product of actions and interactions of many interdependent stakeholders, it was critical for TechnoServe to work with all stakeholders simultaneously to achieve its vision. However, not all stakeholders were convinced that TechnoServe's vision was feasible.

TechnoServe hosted annual meetings with stakeholders to address their concerns and increase buy-in. The organization also engaged with many stakeholders one-on-one. These meetings generated insight and feedback as the Coffee Initiative unfolded, and helped to gradually bring on board stakeholders who were initially reluctant.

UPSTREAM VALUE CHAIN PLAYERS

Farmers and Cooperatives: While TechnoServe initially
worked with any cooperative it had been introduced to by
the government, by the second year, it shifted to working
with those who showed the most interest. It found that
farmers and cooperatives were reluctant to invest in
improving the quality of coffee since they weren't always
paid based on quality.

MID-STREAM VALUE CHAIN PLAYERS

- Cooperative Unions: In Ethiopia, cooperatives were assigned to Cooperative Unions based on region.

 Only unions were permitted to sell coffee to exporters, so TechnoServe had to work with them to help farmers reach specialty roasters. Some cooperative unions preferred to maintain the status quo which compensated farmers based on volume only, not quality—a system they viewed as more complex and less profitable.
- Coffee Exporters: There were a small number of coffee exporters in each country, so TechnoServe worked with those who were interested in its approach and had relationships with cooperatives and unions in its target areas. They helped TechnoServe to understand the coffee industry and refine plans to help cooperatives market coffee. However, many coffee exporters believed the specialty coffee market wasn't large enough to absorb much of an increase in production, and doubted that cooperatives had the business acumen to be reliable partners. For this reason, exporters were also reluctant to help cooperatives invest in the technologies and systems needed to improve coffee quality.

DOWNSTREAM VALUE CHAIN PLAYERS

Global Coffee Roasters: TechnoServe approached specialty roasters to ensure farmers would have a market for high-quality coffee. It also attended events hosted by the African Fine Coffees Association and Specialty Coffee Association of America to raise awareness about the Coffee Initiative. This direct engagement was important because roasters weren't aware of the opportunity to source high-quality coffee with a unique story from smallholder cooperatives—an important factor in the purchase decisions of some consumers.

ENABLING INSTITUTIONS IN THE COFFEE VALUE CHAIN

- Financial Institutions: TechnoServe approached several local banks to facilitate lending to cooperatives and brought in the International Finance Corporation, the private sector arm of the World Bank Group, and Rabobank to share the financial risk. This wasn't an easy task since cooperatives were considered high-risk borrowers due to weak management and governance.
- Input Providers: TechnoServe engaged organizations that helped to make inputs available to smallholders, such as Yara Tanzania and the Government of Rwanda, increasing access to appropriate fertilizers. But input providers, accustomed to limited demand among smallholders, weren't always willing to expand product lines or distribution.
- Government: TechnoServe worked with government leaders at the local, regional, and national levels to cultivate allies. Government agencies could also open doors to local communities. TechnoServe held regular meetings with the Ministry of Agriculture, Ministry of Trade, and the Coffee Board in each country to inform them about the goals and progress of the Coffee Initiative and to solicit input on strategic and operational issues. While governments were broadly supportive of the Coffee Initiative, TechnoServe found that the historical role of the public sector in agriculture and lingering mistrust of the private sector made governments hesitant to relax coffee sector regulations in ways that would allow the private sector to take on more important roles (e.g. investment in wet mills), despite the potential to improve competitiveness in the long term.





ACTION-BASED ENGAGEMENT

Although TechnoServe had built a strong reputation for training farmers and facilitating market access in East Africa prior to the Coffee Initiative, it was still an international nonprofit that needed to gain the trust of local stakeholders. There were also many stakeholders with conflicting views, which would make it difficult to build buy-in for the vision of increasing smallholders' incomes through linkages to

specialty coffee markets through dialogue alone. As a result, TechnoServe opted for action- and evidence-based engagement. It worked with key stakeholders one-on-one to test, iterate, and improve models that had shown promise in its previous work in Tanzania, enabling them to get to know the organization first hand and to experience the results of their work together.

ROLE 2. EMPOWERING WIDESPREAD INNOVATION AND ACTION



After identifying the key stakeholders and their roles in achieving the vision, as described in Role 1, TechnoServe needed to empower widespread innovation and action among them. The organization's approach centered on aligning incentives up and down the value chain, using three tactics:

- Building capabilities
- · Mobilizing financial resources
- · Forging links

Understanding the incentives and disincentives of disparate, yet interdependent key stakeholders was the first step in building alignment among them. Most stakeholders had financial incentives to play their roles in achieving the vision, namely the potential to earn more from high-quality coffee. At the same time, they had disincentives, mostly related to lack of capacity and to the behaviors of other stakeholders in the value chain. Understanding these disincentives

enabled TechnoServe to build capabilities, mobilize financial resources, and forge links among stakeholders at the right points in the value chain to address them—whether by training farmers, strengthening cooperatives, or sharing the risk for banks to invest in wet mills.







BUILDING CAPABILITIES, MOBILIZING FINANCIAL RESOURCES, AND FORGING LINKS

TechnoServe's integrated approach to empowering innovation and action in the East African coffee sector by building capabilities, mobilizing financial resources, and forging links among stakeholders is summarized in Table 2.

Table 2 TechnoServe's Integrated Approach to Empowering Innovation and Action in the

STAKEHOLDER	ROLE IN ACHIEVING THE VISION	INCENTIVES
UPSTREAM VALU	E CHAIN PLAYERS	
Farmers	Improve quality and increase production of coffee by adopting better growing and processing practices and technologies	 Earn more by producing high-quality coffee Earn more by increasing coffee production
Cooperatives and Cooperative- Owned Wet Mills	 Secure financing to improve operations Invest in better coffee processing technology (wet mills) to improve coffee quality Improve governance, transparency, and management to build confidence of farmer members and lenders Supply to specialty buyers 	 Earn more by processing and selling high-quality coffee More loyal members
MIDSTREAM VALUE CHAIN PLAYERS		
Cooperative Unions (Ethiopia only)	Pay farmers based on quality and increase transparency	 Earn more by selling high-quality coffee More loyal members
Exporters	 Facilitate access to specialty coffee buyers and compensate cooperatives and cooperative unions based on quality Provide value-added services (price risk management, etc.) to cooperatives and private wet mills 	 Earn more by selling high-quality coffee Develop long-term relations with specialty buyers interested in sourcing specialty coffees from cooperatives
Roasters	 Pay exporters or cooperatives a premium for high-quality coffee Invest in building brands that utilize specialty coffee from East Africa 	Tap consumer willingness to pay for high-quality, sustainable, traceable coffee
ENABLING INSTIT	UTIONS	
Financial Institutions	Lend to cooperatives to support annual working capital needs and investment in wet mills	Earn more by lending to new segment
Input Providers	Provide smallholder farmers with high-quality inputs	Gain access to new markets
Governments	Create a policy and regulatory environment that reduces inefficiencies, increases transparency, and supports innovation	 Increase incomes of smallholders Increase tax revenue from coffee exports

East African Coffee Sector

DISINCENTIVES AND CONSTRAINTS	TECHNOSERVE'S RESPONSE: building capabilities, mobilizing financial resources, and forging links
 Lack access to markets that pay premiums for quality Cooperatives do not pass on higher prices Can process coffee by hand at home and sell when prices may be higher 	 Train farmers to improve productivity and quality of coffee Sensitize farmers on their rights and responsibilities as cooperative members Link farmers to input providers to facilitate access to fertilizers Work with other value chain players, as described below
 Lack access to working capital finance for operations and capital investment in wet mills Limited technical and business skills Lack knowledge on how to improve governance, transparency, and management No links to specialty buyers Cooperative leaders are hesitant to take on loans as it infers personal financial liability Cooperative leaders are not properly compensated for their time, and are not compensated based on performance 	 Coach cooperatives to improve or develop wet mills Strengthen management and governance of cooperatives Train cooperatives on cupping to assess quality of coffee and install cupping labs Facilitate access to finance Facilitate links to exporters and roasters
Paying cooperatives based on quality would require transparency and new systems	 Strengthen management Raise awareness about payment based on quality Help broker agreements between cooperatives and unions Provide marketing support
 High transaction costs when buying small volumes Paying higher prices to farmers would reduce their margins Unable to recoup their investment in cooperatives if they engage in side-selling or break contracts 	 Facilitate links to cooperatives Introduced a service-based model in which exporters provide cooperatives with working capital, processing and marketing in exchange for a percentage of the sale price Facilitate links to specialty coffee roasters
Risk of inconsistent volume or quality of supply	 Build farmers' and cooperatives' capacity to consistently supply high-quality coffee Communicate information on cooperatives to roasters Communicate buyers' requirements to cooperatives Build partnerships with roasters to continue capacity building post Coffee Initiative
High risk of default due to cooperatives' limited management skills and lack of assets	 Help build confidence by strengthening cooperatives and training farmers Improve understanding of cooperatives and wet mills Establish partnerships with local and international financial institutions, exporters and equipment suppliers Reduce risk through risk-sharing facilities with international financial institutions
 Uncertain market potential due to lack of awareness, know-how, working capital among farmers Cost of reaching farmers in remote areas 	 Conduct soil and leaf studies to identify soil nutrient needs and appropriate fertilizers Train farmers in good agricultural practices to maximize return on investment in inputs, thus stimulating demand Introduce input providers to coffee-growing communities
Mistrust of private sector Limited resources and capacity	 Facilitate government access to policy and regulatory advice Convene multi-stakeholder dialogues to build understanding between public and private sectors Demonstrate that market-based approaches can benefit smallholders

ROLE 3. ENABLING MUTUAL LEARNING AND ACCOUNTABILITY FOR PROGRESS



The third role of a systems leader is to enable mutual learning and accountability for progress. In the context of the Coffee Initiative, the term "accountability" is used in a broad sense, since there was no formal multi-stakeholder agreement to which all stakeholders could be held to account. TechnoServe was morally accountable to participating smallholders and other value chain stakeholders, and formally and legally accountable to the sole funder of the Coffee Initiative, the Bill & Melinda Gates Foundation. Value chain stakeholders were accountable to one another, whether formally and legally—the way smallholder cooperatives are accountable to members, or borrowers are accountable to lenders—or more informally through market mechanisms—such as the decision to purchase or pay a premium for coffee.

As a result, for TechnoServe, an important part of enabling mutual accountability for progress was ensuring that stakeholders were learning from their own experience and each other's. This was critical for stakeholders not only to improve their own execution, but also to adapt to change as it unfolded in the system. Because systems change is complex and inherently hard to predict, a particular focus was learning from failure.

TechnoServe enabled mutual learning and accountability through three tactics:

- Developing a rigorous monitoring and evaluation system
- Establishing consultation structures
- · Improving governance and transparency



DEVELOPING A RIGOROUS MONITORING AND EVALUATION (M&E) SYSTEM

An M&E system was developed to measure and report on pre-agreed indicators with the Gates Foundation. The system also provided information for learning about approaches that worked and didn't work, helping the Coffee Initiative to determine progress, course correct when needed and remain accountable to its main funder over the duration of the project. At the same time, TechnoServe used this information to regularly update industry strategic plans it then shared with governments in order to highlight the opportunities associated with scaling its innovations.

The organization selected indicators that would reflect not only progress on outputs, outcomes, and impacts, but also changes in stakeholders' behavior. It also developed several new methodologies for measuring agronomy best practices, which it shared with the East African coffee industry as well as donors and universities.

TechnoServe then took a hands-on approach to gathering data. Staff visited cooperatives, for example, to monitor their performance through regular bookkeeping. TechnoServe not only measured farmer attendance in agronomy training and their adoption of good agricultural practices, but also metrics that indicated whether the incomes of farmers and cooperatives were increasing and whether governance and management practices were changing. This helped keep all project partners on track and invested in the project, and identified bottlenecks that needed to be addressed. Indicators included:

Productivity, Quality, and Price Changes

- · Increase in yield for farmers
- Increase in adoption of sustainable farming practices
- Increase in quantity and quality processed by cooperatives
- Price premium above the export price for cooperatives
- · Price premium achieved above the farm gate price

Institutional Changes

- · Number of women in leadership
- Membership and employment achieved by cooperative clients
- Amount of financing secured by wet mills

The M&E system provided tangible evidence of changes that were taking place and helped TechnoServe strengthen the case for stakeholders to continue to play their roles in achieving the vision.



ESTABLISHING CONSULTATION STRUCTURES

TechnoServe's approach to facilitating dialogue, soliciting input, and enabling mutual learning among stakeholders involved annual meetings with stakeholders as described below. These meetings provided an opportunity for stakeholders—including TechnoServe—to share their results and lessons learned, and demonstrate their commitment to the vision.

Two types of annual forums were used for dialogue, consultation, and learning:



Large-Scale Stakeholder Meetings: In Phase 1 of the Coffee Initiative, TechnoServe held meetings with a wide range of coffee sector stakeholders in each country: government representatives, cooperative leaders and members, private sector coffee players, research institutes, and NGOs. The aim of these meetings was to update the coffee industry about the Coffee Initiative's activities, to share learnings, and to solicit feedback. They were also an opportunity for project participants to offer in-person testimonials about the impact of the Coffee Initiative. Stakeholder meetings occasionally drew more than a hundred participants.

Smaller Country-level Advisory Councils: By Phase 2 of the Coffee Initiative, TechnoServe shifted its strategy to deeper engagement with a few representatives from each stakeholder group. Formal Advisory Councils were established with representatives from the Bill & Melinda Gates Foundation, the government, cooperative and cooperative union representatives, and the private sector. Advisory Councils typically had about 20 members. These were not governance mechanisms, but rather structures for discussion and detailed feedback on the progress and challenges of the Coffee Initiative among a smaller group of stakeholders. TechnoServe's experience suggested that disparate stakeholders needed to develop greater levels of trust in each other, and in some cases greater knowledge of the coffee sector, before they could effectively participate in governance.

In addition, the Coffee Initiative used surveys to solicit input from project participants:

Farmer Feedback Surveys: Independent M&E teams regularly conducted surveys with farmers to identify which Coffee Initiative services they considered most valuable. These surveys covered areas such as agronomy training, business skills training, support to the cooperative's wet mill, and visits by farmer trainers. The surveys helped TechnoServe to gauge its performance and adapt where needed.



TechnoServe helped make key stakeholders more accountable to one another by improving governance and transparency. Farmers and cooperatives were the main focus of these efforts, but all stakeholders in the coffee system benefited from this work as improved productivity and quality translated into opportunities to generate additional income all the way down the value chain. Some of the

ways in which TechnoServe improved governance and transparency included:

Strengthening farmers' voice in cooperatives: Many farmers were unclear about their rights in cooperatives and believed their leaders owned the cooperatives. Farmers had to be educated about their rights so they could hold cooperative leaders accountable. To this end, Coffee Initiative project staff participated in general assembly meetings, educating cooperative leaders about the importance of transparent, two-way communication and farmers about their rights and responsibilities as cooperative members.

Strengthening governance of cooperatives and wet mills: Coffee Initiative project staff worked with cooperatives to draft by-laws and address other governance issues. They introduced Transparency Sheets that provided comprehensive information on cooperative-owned wet mill finances, providing coops, exporters, and farmers with an accurate picture of wet mill performance annually and relative to average performance of other wet mills participating in the Coffee Initiative. TechnoServe also facilitated bulk contracting of auditing services for 35 cooperatives in Rwanda, which brought the cost down to a level they could afford (a role that has since been taken over by some exporters). These mechanisms have helped to shift expectations and norms of behavior toward transparency, as well as brought mismanagement and corruption to the surface, forcing stakeholders to take action.

Leveraging technology to increase accountability of wet mills: TechnoServe rolled out an SMS-based bookkeeping program to make wet mills in Ethiopia and Rwanda more accountable to the financial institutions from which they sought financing. Wet mill accountants were trained on how to enter the volume of coffee cherry delivered, wet mill operating expenses and the amount paid to farmers every day. This information was transmitted via text message to a digital platform called CoffeeTransparency.com. Banks and other lenders could monitor data in real time through the platform, giving them more confidence to extend working capital. Export companies also benefited from having realtime data on coffee volumes weeks before delivery, providing an opportunity to hedge against future price fluctuations. The SMS-based bookkeeping program continues in Rwanda and has been replicated in Tanzania.

CASE STUDY

THE COFFEE INITIATIVE IN ETHIOPIA

As described earlier, the Coffee Initiative spanned four countries. This case study takes a deeper look at its experience in Ethiopia, where the Initiative operated for the full eight years. Ethiopia has a long and proud history in coffee. This case highlights the context-specific challenges TechnoServe experienced entering the coffee sector in this country, and the solutions it employed to accelerate change.

Coffee supports more than one million households and accounts for 25-30 percent of Ethiopia's export revenues.19 The Coffee Initiative reached more than 160,000 farmers and 162 cooperatives in Ethiopia, increasing average coffee incomes by 21 percent. This increase is expected to grow as adoption of farming practices continues to pay off.20 It targeted the southwestern region of the country which has favorable climatic and soil conditions for coffee production, but where smallholder farmers have historically produced coffee of low quality. Poor farm management practices and the limited availability of wet mills in the region were some of the reasons for this low performance.

During Phase 1 of the project (2008-2011), TechnoServe focused on improving quality of coffee in post- harvest operations by helping cooperatives to establish wet mills to wash coffee, restoring defunct cooperatives, strengthening the management of existing cooperatives, and working with financial institutions to raise financing for wet mills. During Phase 2 (2012-2015), a greater emphasis was placed on agronomy training for farmers and government extension agents with the aim of increasing productivity of coffee trees.

The following paragraphs highlight some of the ways in which TechnoServe played a system leadership role in Ethiopia's coffee sector.

ROLE 1:

Cultivating a Shared Vision for Change



Given coffee's importance to Ethiopia's economy and to the millions of people who depend on it, the government plays a very active role in developing policies and regulations that govern the sector. And because of its very active role, farmers and cooperatives are more likely to participate in initiatives that have government support. TechnoServe therefore engaged a number of government stakeholders in Ethiopia, including Ministries of Agriculture and Trade, the Coffee Board and the Agricultural Transformation Agency (ATA) at the federal level. This dialogue helped raise awareness about its work.

However, unlike in other countries, TechnoServe didn't have an established track record or relationships in Ethiopia. Although its experience in Tanzania and Rwanda helped build the case for the Coffee Initiative in Ethiopia, TechnoServe encountered skepticism about its approach for the first few years. Only time and demonstration of results turned the tide. As the Ethiopian government began to embrace the Coffee Initiative, TechnoServe was able to work more visibly with the government, co-hosting events such as the Coffee Market Forum with the Ministry of Agriculture, cultivating further buy-in for the vision.

At the district level, government representatives helped spread the Coffee Initiative's message about the need and benefits of improving coffee quality. They also formally introduced TechnoServe

to cooperatives which helped increase buy-in among farmers. TechnoServe was then able to demonstrate its value-add by training farmers, cooperatives, and government extension agents in the latest coffee agronomy practices.

But as discussed earlier, dialogue alone was not sufficient to generate widespread buy-in, so TechnoServe had to establish proof of concept between 2008 and 2009. TechnoServe worked with cooperatives to set up wet mills and Starbucks Coffee Company released a specialty coffee from these cooperatives. One cooperative even won an award for the best coffee in Africa. These achievements helped bring more stakeholders on board.

In 2009, the government began to require that all cooperatives sell their coffee through cooperative unions. TechnoServe then had to work with another key stakeholder in the value chain. This wasn't easy, since TechnoServe was encouraging farmers to be paid based on the quality of their coffee. This system worked well in other major coffee-producing countries, but many Ethiopian cooperative unions wanted to avoid the investment this would require—for example, in infrastructure to store coffee of different quality grades separately—and the greater price transparency it would entail. While TechnoServe succeeded in introducing the new model with some unions, others continued to push back, demonstrating the complexities of systems change.

CASE STUDY

THE COFFEE INITIATIVE IN ETHIOPIA

ROLE 2:

Empowering Widespread Innovation and Action



Partnerships that shared risk helped unlock financing for cooperatives and their wet mills, enabling farmers to realize the full value of their coffee harvest through superior processing. In 2008, TechnoServe partnered with Nib Bank, a major commercial bank in Ethiopia with a growing agribusiness portfolio, to finance cooperative wet mill investments, guaranteeing 100 percent of the loan. By 2009, as Nib Bank grew more confident in the cooperatives, TechnoServe was able to reduce its loan guarantee to 65 percent. It also brought in the coffee trader Falcon Coffees to share the risk.

The following year, the International Finance Corporation (IFC) came on board to work with Nib Bank. IFC created a \$10 million risk-sharing facility, which offered working capital loans up to \$250,000 per cooperative, disbursed against cash flow requirements and collateralized by coffee stocks. This was an important innovation in collateral requirements given Ethiopia's strict collateral requirements—100 percent of the loan—which made it difficult for cooperatives to borrow. IFC agreed to cover Nib Bank's credit losses up to 75 percent.

Through this partnership, 62 cooperatives representing 47,000 farmers received financing enabling them to export 3,000 metric tons of high-quality, washed coffee to international buyers.²¹ Cooperatives received premiums averaging 40 percent above the price of previously produced low-quality, unwashed coffee.²² The cooperatives had increased annual exports to 7.5 million pounds of high-quality coffee to 12

international buyers in Europe and the United States as of 2015.²³

In 2011, a similar risk-sharing agreement was created between the Cooperative Bank of Oromia and Netherlands-based Rabobank, which unlocked \$2 million in working capital loans to cooperatives. Two years later, 21 cooperatives secured capex financing from the Cooperative Bank of Oromia without loan guarantees from Rabobank. This bank continues to finance many cooperatives that TechnoServe worked with during the Coffee Initiative.

ROLE 3:

Enabling Mutual Learning and Accountability for Progress



The Coffee Initiative provided hands-on support to cooperatives and wet mills through business advisors to embed internationally-recognized sustainability standards into operations. The standards covered environmental and social responsibility, ethics, occupational health and safety, economic transparency, and production and farm management. While sustainability training prepared cooperatives for certification if they so desired, TechnoServe recognized a growing trend among roasters to move away from expensive certification schemes, and opted to build the case for social and environmental responsibility based on the benefits for cooperative members, their families, and communities. Under environmental responsibility, for example, cooperatives would need to compost coffee cherry pulp to reuse on farms and improve wastewater management which benefited everyone.

Sustainability training was conducted over a two-year period. Business advisors then audited cooperatives and wet mills annually to assess changes. Each cooperative or wet mill received a Sustainability Scorecard which served as a management tool so they could identify gaps, develop action plans, and track progress from year to year. The Scorecards helped build internal accountability for sustainability practices, providing evidence that cooperatives and wet mills were 'doing the right thing' for their members and communities. Assigning a bronze, silver or gold status to cooperatives and wet mills helped instill a sense of pride among cooperative leaders and members, providing a further incentive to improve practices.

4 Lessons and Recommendations for System Leadership

TechnoServe's vision for the Coffee Initiative was to increase smallholder farmers' incomes by improving the quality and quantity of coffee they produced and linking them to specialty buyers. This was no "simple" matter of training farmers and sharing their contact details. Mindsets, behaviors, policies and practices needed to change among stakeholders system-wide, in the value chain and the broader enabling environment.

The Coffee Initiative experience provides further evidence that facilitating systems change is complex, like systems themselves. The process is organic, non-linear, and difficult to predict or fully plan in advance. Learning and adaptation are key.

TechnoServe's Coffee Initiative experience suggests a number of key success factors, challenges, and recommendations for future initiatives and for other organizations seeking to exercise and support system leadership.

Key Success Factors

- CREDIBILITY: TechnoServe's track record and its position outside the value chain gave it credibility as an intermediary. The organization began operating in East Africa in 1973. It also had coffee sector experience in Latin America and in Tanzania, where it began to work in 1998, helping Tanzanian smallholders organize into groups, training them to improve coffee quality, introducing a simple and affordable technology for coffee processing, and facilitating access to credit and markets. The organization had subsequently adapted the Tanzanian approach in Rwanda. Together, these experiences helped TechnoServe make the case for the Coffee Initiative and inform its initial activities. Yet TechnoServe didn't have a commercial interest in coffee, which helped it convene stakeholders and navigate difficult discussions. Stakeholders knew that TechnoServe didn't have a hidden agenda—it was there to improve the livelihoods of smallholder coffee farmers.
- ALIGNMENT WITH NATIONAL STRATEGIES:

TechnoServe's focus on improving the incomes of smallholder coffee farmers helped create buy-in and advocates in government. The Coffee Initiative was aligned with national strategies for poverty reduction such as Tanzania's National Strategy for Growth and Reduction of Poverty, Ethiopia's Growth and Transformation Plan, and Rwanda's Vision 2020 and national coffee strategy.

- This helped TechnoServe cultivate many advocates for the Coffee Initiative among government representatives at the national level. They, in turn, got the word out about the Coffee Initiative and their "stamp of approval" helped bring others on board.
- APPROPRIATE BACKING: Support from the Bill & Melinda Gates Foundation enabled TechnoServe to take a system leadership, as opposed to simple technical support, role. The foundation contributed brand recognition and convening power, a highly significant level of funding that helped buy down the risk for other stakeholders, and an eight-year time horizon—compared to the usual two to three TechnoServe was accustomed to receiving. The Foundation also encouraged risk-taking and recognition of failures, allowing TechnoServe to shift allocation of resources based on lessons learned. This type of support made an immense difference. It enhanced TechnoServe's own credibility and enabled it to be neutral. It provided time to establish relationships with key stakeholders and do the hard work of building their capabilities and aligning their incentives for change. It also enabled investment in testing, refining, and improving tools and approaches, demonstrating success as well as learning from failure in a way that shorter-term projects with more traditional accountability structures just do not allow—and that

Key Success Factors

- is critical in a process of systems change in which the answers are not all known in advance. Without this strong foundation, the organization would not have attracted international roasters to fund capacity building of farmers and cooperatives toward the end of the Coffee Initiative.
- CAPACITY-BUILDING: High-quality capacity-building with farmers and cooperatives strengthened critical links in the value chain and provided the confidence other key stakeholders needed to get involved.
 TechnoServe's hands-on approach at both the individual and institutional levels, with farmers and their cooperative groups, empowered stakeholders that were essential to the vision but initially lacked the capacity, leverage, or negotiating power to play their roles on their own. Its support enabled financial institutions, coffee exporters, and global roasters to engage more deeply with farmers and cooperatives they had previously considered risky partners.
- LEARNING AND INNOVATION: A focus on learning and innovation enabled TechnoServe to bring added value to stakeholders along the coffee value chain. The organization conducted research on a variety of issues, such as agronomy training practices, the effect of alternative processing methods on coffee quality, and price risk management for cooperatives. A partnership with the Abdul Latif Jameel Poverty Action Lab (J-PAL) at the Massachusetts Institute of Technology (MIT), for example, shed light on how agronomy techniques spread informally among farmers through traditional social networks. TechnoServe not only used the learnings from its research to design and implement activities under the Coffee Initiative, but also to share with the coffee industry at large.

Challenges

- GOVERNANCE OF COOPERATIVES. Cooperative leaders need stronger incentives to work toward the best **interests of their members.** Cooperative leaders are not properly compensated for their time, and they are not compensated based on performance. After the Coffee Initiative was over, TechnoServe piloted performancebased pay for cooperative leaders in South Sudan, which has been very successful. The organization considered this during the Coffee Initiative, but faced regulatory constraints. Cooperative laws in Rwanda, for example, do not permit remuneration for cooperative leaders. In Tanzania, TechnoServe worked within existing regulations, creating farmer business groups that were registered as partnerships rather than cooperatives. In retrospect, it could have reallocated some investment to exploring different approaches for this important area in Ethiopia, Kenya, and Rwanda as well.
- LOCAL CAPACITY TO DELIVER SUPPORT TO FARMERS **AND COOPERATIVES.** There are still millions of East African coffee farmers and thousands of cooperatives that would benefit from high-quality, hands-on training. At the beginning of the Coffee Initiative, TechnoServe found no local organizations capable of delivering it. This gap led the organization to recruit, train, and employ hundreds of local trainers and advisors on its own staff. Thinking ahead to its eventual exit, TechnoServe considered helping government agencies build their own training units to replicate its work, but there appeared to be little appetite to provide anything other than very light-touch extension services. TechnoServe also explored the possibility that some staff members might want to start their own local businesses continuing to support farmers and cooperatives, but none were willing to take on the challenge due to the high cost and personal liability involved in starting and operating businesses in Coffee Initiative countries. The organization still sees an opportunity for local private companies to provide farmer training services, as they are best-placed to win contracts from national governments. However, this will depend

Challenges

- on governments being prepared to invest in intensive training programs for farmers. Reaching this point will require collaborative engagement between international coffee companies and governments to agree on a joint strategy and coordinate their investments.
- POLICY AND REGULATORY CHANGE: East African governments still need to undertake fundamental policy reform and innovation in the coffee sector. As a result of lingering mistrust of the private sector within the public sector, there are still disincentives and roadblocks for value chain stakeholders to take risks and change their practices. Influencing policy was a Coffee Initiative objective from the outset, but TechnoServe's investment in this area was limited to embedding volunteer consultants within coffee regulatory boards to work on specific policy issues, meeting regularly to keep policymakers abreast of its work and seek advice, and sharing industry benchmark analysis. A notable achievement was the formal recognition of the Coffee Service Provider model in Rwandan regulation in 2010. TechnoServe also helped build government capacity by training government extension agents. However, as a non-commercial intermediary outside the value chain, TechnoServe lacked significant expertise or leverage with government and thus chose to use the lion's share of its time and resources to achieve the ambitious, time-bound farmer reach and income goals agreed with the Bill & Melinda Gates Foundation. In retrospect, the organization might have identified a partner or done more to mobilize donors to focus on government policy and capacity.
- SUSTAINING AND SCALING PROGRESS: Now that the Coffee Initiative is over, time will tell whether the change it catalyzed can be sustained and continue to scale of its own momentum. Eight years is a very long time for a donor project, but not for systems change. TechnoServe worked hard to build the capacity and create the incentives for stakeholders to work together in new ways, generating new value, even after the Coffee Initiative concluded. And there is evidence that farmers and cooperatives, for example, are sustaining the gains they have made (see Box 4). At the same time, TechnoServe staff acknowledge that there could have been ways of making sustained impact at scale even more likely.

Box 4 Evaluating the ability of farmers and cooperative-owned wet mills to sustain change

An evaluation of Phase 1 (2008-2011) of the Coffee Initiative in Ethiopia and Rwanda by IPE Triple Line highlights best practices that have been sustained four years on. In 2015, 78 percent of Rwandan farmers continued to use at least half of the agronomy practices they learned through the Coffee Initiative. Although this figure is lower than it was at the end of Phase 1 (97 percent), it is significantly higher than the baseline (45 percent). Farmers have adopted practices like erosion control, weeding, and composting, but find it difficult to maintain record-keeping of inputs, yields, and income as the record cards they received during training have been filled. Also, 91 percent of farmers who adopted at least half of the best practices report yield increases, suggesting an incentive to maintain them.

Another indicator of sustained change is the ability of cooperative-owned wet mills to secure price premiums for washed coffee. This is seen in wet mills in Ethiopia and Rwanda, which secured price premiums of 45 percent and 25 percent respectively for washed coffee in 2015. Profitability is also an important indicator, and this was demonstrated by Ethiopian wet mills between 2012 and 2015. Yet there is room for improvement. The evaluation indicated that wet mills in Ethiopia and Rwanda could benefit from refresher training in areas such as capacity utilization, technical maintenance, and member engagement, as well as general management and governance.

Challenges

For example, TechnoServe could have explored helping to establish formal multi-stakeholder initiatives as part of its exit strategy. It did this in a light-touch way in Tanzania, where a TechnoServe volunteer consultant embedded with the Tanzania Coffee Board helped to design a multi-stakeholder implementation structure for the country's 10-year coffee development strategy. In all four countries, the Coffee Initiative helped to build the conditions for multi-stakeholder initiatives to take root, such as greater sector knowledge, openness to the private sector and market-based approaches, appetite for innovation, and increasing levels of trust among the stakeholders involved. Working with them to establish formal organizational

structures would have involved considerable extra effort, but could have allowed the organization to pass the baton as systems integrator, turning the job of keeping stakeholders and their incentives aligned over to stakeholders themselves and paving the way for more formal accountability among them. Multi-stakeholder initiatives could also have continued to invest in tackling challenges the outlined above—strengthening the incentives of cooperative leaders, creating a market for farmer and cooperative support services, and reforming government policy and regulation—along with any new ones that emerged.

Recommendations for Key Stakeholders

System leadership must become more common if we are to address the many complex, systemic challenges facing our world today and unlock more sustainable and inclusive business growth and human development. Committing to system leadership will require organizations to adopt new mindsets and ways of working—embracing ambiguity, experimentation, learning (including from failure), sharing, collaboration, and longer-term horizons. TechnoServe's East Africa Coffee Initiative suggests a number of priorities.

For civil society organizations playing system leadership roles

- Redefine success. "Intangibles" like institutional strengthening and relationship building help ensure that "tangibles" like reach and impact can be sustained, and even scaled. But they are harder to measure and attribute, so talk to your funders up-front about your goals and theory of change.
- Push the concept of empowerment to its limit.
 Intensive, hands-on support may be needed to empower disadvantaged stakeholder groups like farmers to play their roles in systems change. Consider whether it is feasible to empower local organizations to deliver it more sustainably and at a greater level of scale than you could do alone—or how you could help shift conditions to make it feasible.
- Explore ways of increasing leverage with government.
 Government plays a critical role in systems change and therefore the scale and impact it is possible to achieve.

- Where individual organizations lack leverage to influence policy or public service provision, consider partnering—for example, with groups of major buyers, with bilateral donors or international financial institutions, or with multistakeholder initiatives.
- Consider whether a multi-stakeholder initiative should be part of your strategy. While agile intermediation may be the most effective approach in some circumstances, especially early on, multi-stakeholder initiatives can help sustain and scale activity over the long term that systems change requires. Increasing technical expertise, appetite for innovation and pre-competitive collaboration, stakeholder trust and willingness to bring funding to the table are all signs that a multi-stakeholder initiative may now have the potential to accelerate progress. Look for opportunities to build these conditions in the course of your work.

Recommendations for Key Stakeholders

For corporate partners

- Focus on the long-term business case. Move beyond corporate social responsibility, but don't stop at shortterm financial results. Security of supply, market development, and other strategic priorities depend on system strengthening. Invest in it, ideally jointly with other companies.
- Develop realistic measures. To inform business decisionmaking, find ways to quantify the value you gain while taking into account the time systems change takes.
- Contribute more than funding. Move beyond the traditional "funding partner, implementing partner" model and consider how to use your procurement, R&D, product development, marketing, government affairs, and other core competencies to accelerate change.

For foundations and other donors

- Fund longer-term projects. Recognize that system
 leadership takes time, but can deliver the results you are
 struggling to achieve. Consider giving grantees longer time
 horizons to work with, perhaps using stage-gate processes,
 including more gradual transition or exit periods.
- Encourage experimentation and learning. It is impossible to know all the answers in advance, and systems change rarely follows a plan. Encourage your grantees to take targeted risks and push to hear about what isn't working as well as what is. Expect course correction and develop grant agreements that facilitate the process.

Challenge the "cost per beneficiary" calculus.
 Cost per beneficiary values output over impact.
 For sustained impact at scale, it is necessary to strengthen systems, not just train farmers (to take just one example).
 Allocate the money and time it takes to encourage your grantees to do this, and make sure metrics that demonstrate institutional change are just as—or even more—important in grantmaking and grant management decisions.

For governments

- Make a commitment. Set measurable, time-bound targets—for example, percentage of coffee farmers living in poverty—and use projects like the Coffee Initiative to discover and test the kinds of policy innovations and reforms required to get there. Be prepared to invest in empowering disadvantaged groups to play their roles in systems change processes.
- Balance protection and innovation. To unleash progress, protect and empower disadvantaged groups—while at the same time encouraging the private sector to innovate and invest in technologies and business models with the potential to improve their lot substantially, and at scale. Basic regulatory stability and predictability are important, and an incremental approach can allow innovation to happen while adding new rules as new risks emerge.
- Ensure that regulatory responses are targeted and proportional. When issuing new rules, make sure they address the root causes of identified risks or impacts, and that the benefits outweigh the costs. Otherwise, unintended consequences and knock-on effects in the system may impede progress toward your goals.

Acknowledgements

This report would not have been possible without the time and insight of TechnoServe staff and other key stakeholders. The authors are deeply grateful to the individuals listed below for their willingness to share their experience with us. We would also like to thank the Director of the Corporate Responsibility Initiative, Jane Nelson, who provided invaluable insight and feedback on our findings. This case study was funded by the Bill & Melinda Gates Foundation's grant to TechnoServe.

Adolph Kumburu, former Director General of the Tanzania Coffee Board

Carl Cervone, former Deputy Director and Operations Manager, TechnoServe Ethiopia

Gashaw Amdetsion, Vice President of Strategic Initiatives, Nib International Bank

John Logan, Country Director, TechnoServe Kenya

Matt Smith, Chief Executive Officer, Falcon Coffees

Mefthe Tadesse, Country Director, TechnoServe Ethiopia

Nick Rosen, Senior Associate, External Communications, TechnoServe

Paul Stewart, Global Coffee Director, TechnoServe

Richard Rogers, former Senior Program Officer, Bill and Melinda Gates Foundation

Simon Winter, Senior Vice President, Development, TechnoServe

Endnotes

- Organisation for Economic Co-operation and Development (OECD) and Food and Agriculture Organization (FAO). 2016. "Agriculture in Sub-Saharan Africa: Prospects and Challenges for the Next Decade." OECD-FAO Agricultural Outlook 2016-2025.
- Mertule, Mariam. 2015. "African demography. The Young Continent." The Economist. Online at http://www.economist. com/news/briefing/21679781-fertility-rates-falling-more-slowly-anywhere-else-africa-faces-population.
- 3 New Partnership for African Development (NEPAD). 2013. "African Agriculture: Transformation and outlook."
- 4 Alliance for a Green Revolution in Africa (AGRA). 2014. "Africa Agriculture Status Report 2014: Climate Change and Smallholder Agriculture in Sub Saharan Africa."
- 5 International Coffee Organization (ICO). 2015. "Sustainability of the Coffee Sector in Africa."
- 6 TechnoServe. 2012. "The Coffee Initiative. Phase One Final Report. 2008 to 2011."
- 7 Data is for 2010 and 2011. Source: United States Department of Agriculture (USDA). 2012. "Ethiopia: Annual Coffee Report." Global Agriculture Information Network (GAIN) Report.
- 8 TechnoServe. 2016. "Brewing Prosperity in Africa. Coffee Initiative Final Report."
- 9 IBID
- 10 The concept of system leadership has a long history and shares attributes with other concepts of leadership, including adaptive leadership, network leadership, and collective leadership. All of these concepts can apply at the organizational level and at the broader level that we focus on in this paper comprising many organizations.
- 11 Senge, Peter, Hal Hamilton, and John Kania. 2015. "The Dawn of System Leadership." *Stanford Social Innovation Review* Winter 2015, page 28.
- 12 TechnoServe. No Date. "Our Approach." Online at http://www.technoserve.org/our-work/how-we-work/our-approach.
- 13 TechnoServe. 2012."Lessons Learned. The Coffee Initiative. 2008-2011."
- 14 All data unless otherwise noted is from TechnoServe. 2016. "Brewing Prosperity in Africa. Coffee Initiative Final Report."
- 15 IPE Triple Line. 2017. "Evaluation of the TechnoServe East Africa Coffee Initiative."
- 16 TechnoServe. 2016."Brewing Prosperity in Africa. Coffee Initiative Final Report."
- 17 In Ethiopia, the price premium for washed coffee at TechnoServe-supported wet mills was 45 percent in 2015 while it was 25 percent in Rwanda. Source: IBID
- 18 IPE Triple Line. 2017. "Evaluation of the TechnoServe East Africa Coffee Initiative."

- 19 Data is for 2010 and 2011. Source: United States Department of Agriculture (USDA). 2012. "Ethiopia: Annual Coffee Report." Global Agriculture Information Network (GAIN) Report.
- 20 TechnoServe. 2016."Brewing Prosperity in Africa. Coffee Initiative Final Report."
- 21 TechnoServe. 2012. "The Coffee Initiative. Phase One Final Report. 2008 to 2011."
- 22 IBID
- 23 TechnoServe. 2016."Brewing Prosperity in Africa. Coffee Initiative Final Report."

About the authors

About the Corporate Responsibility Initiative (CRI)

Piya Baptista and **Beth Jenkins** are Fellows at the Corporate Responsibility Initiative at the Harvard Kennedy School.

The Corporate Responsibility Initiative (CRI) at the Harvard Kennedy School's Mossavar-Rahmani Center for Business and Government (M-RCBG) is a multidisciplinary and multi-stakeholder program that seeks to study and enhance the public contributions of private enterprise. The initiative explores the intersection of corporate responsibility, corporate governance, and public policy, with a focus on analyzing institutional innovations that help to implement the corporate responsibility to respect human rights, enhance governance and accountability and achieve key international development goals. It bridges theory and practice, builds leadership skills, and supports constructive dialogue and collaboration among business, government, civil society and academics. Founded in 2004, the CR Initiative works with a small Corporate Leadership Group consisting of global companies that are leaders in the fields of corporate responsibility, sustainability or creating shared value. The Initiative also works with other leading corporate responsibility and sustainability organizations, government bodies, non-governmental organizations, foundations and companies to leverage innovative policy research and examples of good practice in this field.

CRInitiative.org www.hks.harvard.edu/centers/mrcbg/programs/cri



Corporate Responsibility Initiative

Harvard Kennedy School 79 John F. Kennedy Street Cambridge, MA 02138 USA

CRInitiative.org

www.hks.harvard.edu/centers/mrcbg/programs/cri