

Rapid Impact Evaluation





955 Massachusetts Ave, 5th Floor Cambridge, MA 02139 (617) 661-5792 www.rootcapital.org Root Capital is a nonprofit agricultural lender that grows rural prosperity in poor, environmentally vulnerable places in Africa and Latin America by lending capital, delivering financial training and strengthening market connections for small and growing agricultural businesses. As of 2012, Root Capital has loaned \$489 million to 429 businesses reaching 500,000 farm families, or a total of 2.6 million individuals.

Our impact and metrics program has two prongs: our portfolio-wide social and environmental due diligence, and more detailed case studies with individual clients. Root Capital's loan officers use our Social and Environmental Scorecards to evaluate clients' social and environmental practices and their access to alternate sources of finance. The scorecards function as both a negative screen, filtering out undesirable practices, and a threshold test in which the loan officer must affirmatively identify how the client's business, and our support of that business, is expected to create positive impact. Our impact team synthesizes these ratings to categorize our portfolio of loans by type and depth of impact and to refine the client selection criteria moving forward.

In 2011, we began to supplement this portfolio-wide approach with deeper studies of selected clients to evaluate whether and how our client agricultural businesses support farmer livelihoods, to verify that we are truly reaching under-served businesses and to inform our assumptions about what social and environmental practices truly create positive impacts. These case studies are primarily intended to estimate, as a first approximation, two levels of impact: the impact of our lending on clients, and the impacts of our clients on the incomes of the small-scale farmers whom our clients serve. We qualitatively describe other types of social and economic impacts on farmers. Finally, we situate these impacts within the broader context of the country and value chain, to illustrate how agricultural businesses, end-buyers of agricultural products (such as Starbucks Coffee Company or Green Mountain Coffee), and financiers like Root Capital work together to grow rural prosperity for small-scale farmers.

These studies both inform and serve as pilots for larger impact studies that we are conducting in 2013. Future studies will include more structured surveys of a larger number of farmers, and will cover additional issues such as gender and the environment.

Note: Root Capital Financial Trainer Patrick Dessources conducted the primary research for this case study in December 2011–January 2012. In January 2013 Root Capital conducted an expanded impact assessment of COOPCAB, including interviews with more than 50 farmers representing each of the nine primary cooperatives.



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Overview

Coopérative des Planteurs de Café de l'Arrondissement de Belle-Anse (Coffee Growers Cooperative of Belle Anse, or COOPCAB) is a secondary-level cooperative that aggregates and markets the coffee from nine primary-level cooperatives in and around Thiotte, a town in southeastern Haiti near the border with the Dominican Republic. COOPCAB is an anchor institution in the region, offering economic opportunities for a majority of its inhabitants, and has been a Root Capital client since 2010.

The purpose of this study is to understand and document COOPCAB's various social and economic impacts. The study focuses particularly on the impact of COOPCAB on its farmer suppliers and the broader Belle-Anse community, as well as the impact of Root Capital's loans on COOPCAB's operations.

COOPCAB was founded in 1999 and began exporting to Japan in the early 2000s. COOPCAB's members produce specialty-grade, organic arabica coffee and export to Fair Trade buyers in the U.S., Japan and Europe, enabling them to achieve premiums over local market prices.

In the past, limited access to affordable credit constrained COOPCAB's ability to purchase large quantities of coffee from farmers. Prior to 2010, COOPCAB borrowed roughly \$100,000 to \$150,000 each season from local credit cooperatives. With this financing it was able to purchase coffee from 2,500 to 4,000 farmers, and export 40,000 to 80,000 pounds of coffee, the equivalent of one to two tractor-trailer loads. Root Capital began providing additional financing to COOPCAB in 2010, which allowed the cooperative to purchase coffee from an additional 1,000 farming households during the 2011-2012 season, and to export over 200,000 pounds of coffee, or roughly five tractor-trailer loads. Root Capital provided \$150,000 in loans to COOPCAB in 2010 and \$200,000 in 2011.





COOPCAB pays farmers a premium of \$0.10 to \$0.30 per pound over the prices offered by other local buyers, resulting in an estimated **\$40 to \$250 of extra income per farmer**, above what they would have received by selling their coffee elsewhere on the local market. Considering that each farmer typically supports a family of five, this is equivalent to one to eight percent of Haiti's average per capita income for each member of the farmers' households. For reference, \$40 is enough to buy a small goat; \$250 is enough to feed a rural family of five for well over a month or to pay for one child's school fees for a year. (Haiti's average annual per capita income was \$660 in 2011.) In aggregate, we conservatively estimate that **COOPCAB brought approximately \$200K to \$500K in incremental income to coffee farmers in 2011-2012.**

Beyond this increase in income, COOPCAB brings an array of social benefits to the community of Belle-Anse, such as stemming migration out of the Haitian countryside. In the 1990s and 2000s, the coffee sector in Haiti declined precipitously as a result of the 1991 trade embargo, low world coffee prices, diseases and pests and limited replanting. Many coffee producers in Haiti either migrated to the capital city of Port-au-Prince or emigrated to the Dominican Republic. Many of those who stayed uprooted their coffee trees, sold them for charcoal, and replaced them with staple crops that could be sold on the local market—such as cabbage, maize, chayotes, and beans. COOPCAB is one of the reasons that Belle-Anse continued to be a region known for the excellence of its coffee throughout the past two decades as coffee farmers in other parts of Haiti switched to staple crops or migrated to Port-au-Prince and the Dominican Republic.

COOPCAB has also made a variety of investments in the community, many funded by the social premium of \$0.20 per pound of coffee that cooperatives receive as a result of Fair Trade certification. COOPCAB's first project was to pave the Thiotte bus station, which previously was made of mud and became unusable under rainy conditions. COOPCAB also established a demonstration plot to educate farmers on effective coffee husbandry and to provide technical assistance on scolytus (insect) plague, which reduces yields on affected farms by roughly one-third. COOPCAB thereby reduced the percentage of farms affected by scolytus from 65 percent to 15 percent by year-end 2011.

Although COOPCAB has significant growth potential, it needs technical and financial assistance to reach its full potential. Particular opportunities include securing an industrial coffee drying machine; capitalizing an internal credit fund to make small loans to farmers in the off-season, and; replacing a truck to transport coffee from primary cooperatives to COOPCAB. Moreover, COOPCAB is managed by local Haitian farmers with little formal training in financial management and accounting, and COOPCAB's financial record-keeping, while more robust than most Haitian cooperatives, could be strengthened further. Root Capital continues to support COOPCAB's growth with both capital and financial management training, and is thereby supporting the livelihoods of 5,000 coffee farming households in rural Haiti.



Context: Coffee in Haiti

In the wake of the catastrophic magnitude 7.0 earthquake that struck outside Port-au-Prince on January 12, 2010, living conditions for the 10 million citizens of the poorest country in the Western Hemisphere became much worse. At the time of this research (early 2012), over 58 percent of Haitians were undernourished, 55 percent of the population lived below the international extreme poverty line of \$1.25 per day and average gross national income (GNI) per capita was \$660.



The agricultural sector has the potential to play an important role in reconstruction, by rapidly absorbing large amounts of labor and providing livelihoods for rural households. However, in Haiti, the agricultural sector is severely constrained by a lack of access to finance (among many other constraints). Although agriculture alone accounts for 25 percent of GDP and 51 percent of employment in Haiti, the transportation and agriculture sectors combined account for less than one percent of total bank credit.

Haiti's agricultural challenges are most evident in the coffee sector. According to a study conducted by the World Bank in 2010, the amount of land under coffee cultivation declined from 85,000 hectares in 1981 to 43,000 hectares in 2007, thereby accelerating deforestation as producers abandoned or felled both coffee trees and the surrounding shade trees to grow staple crops. Coffee production declined from a peak of 42,900 tons in 1980 to 21,000 tons in 2007, and the value of coffee exports fell from a peak of \$90 million to \$3.2 million. The decline of Haiti's coffee sector originated with the trade embargo imposed by the United States on Haiti from 1991 to 1994 as a result of the coup and exile of



President Jean-Bertrand Aristide, and has since been exacerbated by diseases and pests such as scolytus, outdated farming techniques, limited replanting and low international coffee prices in the 1990s and 2000s. Despite the decline in production and exports, however, coffee remains a significant source of income for more than 200,000 Haitian families, or roughly 10 percent of the overall population.

Root Capital began working in Haiti in late 2010, with the support of the Clinton-Bush Haiti Fund and The World We Want Foundation. COOPCAB was Root Capital's first client in Haiti.



COOPCAB Impacts on Small-Scale Farmer Livelihoods

Introduction to COOPCAB

Coopérative des Planteurs de Café de l'Arrondissement de Belle-Anse (Coffee Growers Cooperative of Belle Anse, or COOPCAB) was founded in 1999 with the help of Action Aid International and the Lutheran World Federation. COOPCAB is a secondary cooperative that aggregates and markets coffee from nine primary cooperatives. COOPCAB also roasts and exports three varieties of coffee under the brand name of Kafe Kreyol: Café Gwo Chwal, Café Mare Blanche and Café Blue Pine Forest.

COOPCAB is located in Thiotte, a remote town in the Belle-Anse (translation: "Beautiful Cove") Arrondissement of southeastern Haiti near its border with the Dominican Republic. COOPCAB's nine primary cooperatives comprise roughly 5,000 coffee farmers, of whom approximately 40 percent are women. The region surrounding Thiotte has a population of 25,000. Assuming an average household size of five people, COOPCAB and its network of primary cooperatives therefore likely reach a majority of the people in the region. According to Root Capital's Financial Advisory Services trainer in Haiti, Patrick Dessources, "in Belle-Anse, coffee growing, harvesting and processing is a religion."



Figure 1: Map of Haiti



As the Haitian coffee sector declined in the late 1980s and early 1990s, many coffee producers in Belle-Anse either migrated to the capital city of Port-au-Prince or emigrated to the Dominican Republic. Many of those that stayed uprooted their coffee trees, sold them for charcoal and replaced them with staple crops that could be sold on the local market during the trade embargo, such as cabbage, maize, chayotes and beans. Nevertheless, partially due to COOPCAB, Belle-Anse still maintains a high level of coffee production. Coffee is the main cash crop in the area and thousands of farmers use the proceeds to support their families.

The primary cooperatives affiliated with COOPCAB are:

- Societe Cooperative agricole de Dupuy (SOCAD) 357 members.
- Cooperative Agricole des Petits Planteurs (CAPP) 631 members.
- Cooperatives pour le Development de Ti Malanga (COOPDET) 421 members.
- Cooperatives des Planteurs unis de Terre Longe (COOPUT) 338 members.
- Cooperative Cafeiere Maraichere et Intrants Agricoles (CMIA) 359 members.
- Cooperatives Agricole du Morne des Commissaires (CAMDEC) 352 members.
- Societe Cooperative Etoile de Noel (SOCOPEN) 326 members.
- Societe Cooperative Agricole des Producteurs de Colin (SOCAPCOL) 327 members.
- Cooperative des Planteurs de Mare-Blanche et Platon Cedre (CPMPC) 393 members.

Many of these primary cooperatives have existed since the 1970s and 1980s. In addition to sourcing from them, COOPCAB has recently begun purchasing coffee from two local associations of coffee farmers: Renaissance Planteurs Independents, and Association des Planteurs de Café de l'arrondissement de Belle-Anse (APCAB).

When COOPCAB was founded, it was managed largely by employees of the Lutheran World Federation, although responsibilities were gradually transferred to Haitian farmers. COOPCAB's current staff consists of 13 people, including a general manager, an accountant, a production manager and an operations manager. During the seven-month harvest season, COOPCAB hires an additional 150 contractors, all female, to clean and sort the coffee. Retaining adequately trained staff is a challenge for Haitian businesses, especially rural ones, but many of the original leaders have stayed with the cooperative.

COOPCAB is governed democratically by its members. Specifically, it is governed by a general assembly, which includes three elected members from each primary cooperative, and by an executive committee, which is comprised of five members from the general assembly. The executive committee is elected by the 27 members of the general assembly, which meets monthly and votes on all major decisions concerning COOPCAB. A three-member supervisory committee ensures that the decisions of the executive committee are implemented. Both committees lack equal gender representation, as the executive committee includes one woman and the supervisory committee includes none. Patrick Dessources notes that "rural Haiti is a male-dominated environment, but in reality the female is the primary business operator and the backbone of the coffee sector in Thiotte."



Production

The majority of Haitian coffee is produced under the "Creole garden" agricultural system, whereby coffee is grown in a mixed-tree cropping system. Farmers own their own plots, though there are also land-sharing agreements. Plot sizes are roughly one hectare (10,000 square meters) on average. Crops like maize, banana and yams are grown to feed farmers' household members, while coffee is the main cash crop. Farmers use organic manure rather than chemical fertilizers in order to benefit from price premiums associated with COOPCAB's organic certification.

The farmers affiliated with COOPCAB produce Gwo Chwal/Mare-Blanche coffee and Blue Pine forest coffee. The first grows at an altitude of 5,200 to 6,000 feet and is of higher quality, while the second variety grows at between 4,000 to 5,200 feet. The harvest begins in September in the lower areas and culminates as late as February in the higher areas. The export period runs from January to August.

The collection process begins in the field, when the producers pick the ripe coffee cherries. Farmers do not hire additional labor; rather, community members help each other through a communal arrangement called kombit. In order to avoid over-fermentation, the freshly harvested coffee cherries must be depulped, in which the bean is removed from the outer flesh, within 12 hours of picking. This short window of time creates pressure for producers to quickly find buyers for their coffee.

Farmers transport the cherries on donkeys, mules or in baskets on their heads to wet mill processing centers located at the primary cooperatives. It typically takes 30–90 minutes for producers to walk to the primary cooperative closest to them. The primary cooperatives make an initial payment to the farmers (an average of \$1.04 per pound in 2011) using money provided by COOPCAB, and then depulp, ferment, wash, dry and bag the coffee.



COOPCAB then transports the bags of coffee in trucks to the final processing center, Centre de Traitement Final Abraham Shepherd (CETRAFAS), which is owned by COOPCAB. At CETRAFAS, the beans are cleaned, sorted by location of origin and color, graded for quality, and are finally roasted, packaged and shipped. The center includes receiving and sorting stations, roasting equipment, a warehouse for storing dried coffee and a testing lab.

One of COOPCAB's greatest challenges is to dry its coffee consistently. It is difficult to dry the coffee on outdoor drying patios in Thiotte because the weather is so variable. In 2003, COOPCAB lost 600,000 pounds of coffee beans due to an unusually heavy rainy season, and as a result declared a net operating loss of \$1 million, half of which was subsidized by a local NGO. Subsequently, one of COOPCAB's buyers, seeking both to support the cooperative and to access increased supplies of



quality coffee, provided an industrial drying machine to COOPCAB at a discount. However, the machine is currently being held at customs for regulatory reasons. If and when COOPCAB can secure the machine, it will significantly increase processing capacity while reducing delivery time to buyers.

COOPCAB roasts and packages 10 percent of its coffee for export under the Kafe Kreyol brand, and exports 90 percent in parchment (dried, unroasted) form to importers and roasters abroad. COOPCAB maintains a cupping and testing lab, with financial support from a Japanese aid agency, to ensure compliance with customer requirements. In addition, COOPCAB provides a technical assistant at each of the primary cooperatives' wet mills to monitor the wet-milling process.

COOPCAB uses a van and a pickup truck to transport the coffee to Port-Au-Prince, where it is shipped to its final destinations. Thiotte is located more than five hours' drive from Port-Au-Prince, and the heavy rains that sometimes render the roads impassable are a perennial problem for COOPCAB. Months later, when COOPCAB receives payment for the coffee from its buyers, it distributes the funds to the primary cooperatives, which in turn make second payments to the farmers (\$0.52 per pound in 2011).

In 2009 and 2010, COOPCAB's farmers' coffee volumes declined due to scolytus (insect) plague, which reduces yields by roughly one-third. This resulted in low export volumes for 2010 (namely, for the coffee harvested in Q4 2009 and exported in 2010). In those years, COOPCAB spent a portion of its Fair Trade premium to establish a demonstration plot to educate farmers on effective coffee husbandry and to provide technical assistance with treating scolytus. According to studies conducted in the field, COOPCAB's technical interventions with farmers reduced the percentage of farms affected by scolytus plague from 65 to 20 percent by year-end 2010 and to 15 percent by year-end 2011 (which, though still higher than desirable, is nevertheless a vast improvement).

In addition to scolytus, ongoing low productivity and crop yields in Haiti result from continued use of outdated farming techniques, decaying irrigation systems and limited replanting of aging plant stock. In the past two years, COOPCAB produced and distributed 250,000 coffee tree seedlings to its 5,000 members free of charge. These seedlings help to rejuvenate the coffee fields and accelerate the reforestation of Haiti's deforested hillsides. However, a study commissioned by COOPCAB estimates that it would cost up to \$2,000 per hectare to fully renovate the coffee fields and increase production.

Local Competitive Context

COOPCAB and its member cooperatives compete with multiple local buyers to purchase coffee from farmers. Its competitors include buying agents working on behalf of a Haiti-based agro-industrial conglomerate, middlemen working on behalf of other exporters and middlemen from the Dominican Republic. The Dominican middlemen cross the border into Haiti to purchase coffee cheaply, smuggle it into the Dominican Republic, and resell it as Dominican coffee (which usually fetches a higher premium than Haitian coffee on world markets).

The agro-industrial conglomerate is the largest coffee roaster in Haiti and has been operating in the country since the 1960s. In 2009, it began purchasing coffee in Thiotte. Its representative in Thiotte is a wealthy landowner, known informally as the "Grandon" in Haitian Creole, who often rents out his land under sharecropping arrangements. The Grandon also makes small loans to farmers in the off-season or if family emergencies arise. The terms of these loans are not known. The conglomerate rents a large building from him, provides him financing to purchase coffee from farmers, and processes coffee in the building. Hence, as Root Capital Financial Trainer Patrick Dessources reported, "What



the farmer sees is not the face of the local conglomerate; it is the face of the Grandon." The farmer may not even know that the conglomerate is ultimately purchasing the coffee. As a large and politically well-connected enterprise, the conglomerate obtains commercial loans to finance its purchase of coffee from farmers. In addition, it has strong processing capacity thanks to the installation of a coffee drying machine at the building in Thiotte, while COOPCAB's drying machine is currently being held at customs.

Other middlemen receive cash up front from their exporters. Much like the Grandon, middlemen sometimes make small loans to farmers in the off-season or purchase farmers' harvests in advance at a discounted price. For the farmers, access to credit is very limited and the interest rates offered by middlemen are so high that the farmers often refer to the loan as a "ponya," Creole for "dagger."

Other exploitative strategies by middlemen have been reported by farmers in Thiotte. If farmers do not sell their coffee cherries to COOPCAB, they typically depulp the cherries themselves using manual depulpers at their own or neighbors' homes, in hopes of achieving a better price from the middleman. However, if the farmers (most of whom are illiterate) do not understand the conversion rates for prices and volumes of different forms of coffee (such as coffee cherries and parchment), middlemen can take advantage of them. In addition, since both ripe and depulped coffee cherries are highly perishable, Dominican traders do not purchase in the morning, but wait until afternoon when the coffee is almost spoiling so that the farmers will accept a lower price. COOPCAB has held several information sessions at its CETRAFAS facility to educate the farmers about how the coffee market works, and to encourage them to be vigilant in their transactions with middlemen.

Finally, the competitive position of middlemen is strengthened by the fact that some primary cooperatives do not maintain well-organized collection centers. Because of this, farmers might not be able to know when the primary cooperative will be open to receive the coffee, nor whether it will have sufficient cash on hand to purchase the coffee.

In contrast to the local conglomerate, COOPCAB (like most cooperatives) has limited access to loans to finance the purchase of farmers' coffee harvests. COOPCAB therefore makes a partial payment to farmers upon delivery, and a second payment to farmers at the end of the season once it has received payment from its international buyers.

Before COOPCAB's creation, farmers used to receive less than \$0.60 per pound and as little as \$0.22 per pound in the late 1990s. In the 2011 to 2012 season, COOPCAB paid 50 gourdes per canister upon delivery and 25 additional gourdes per canister once COOPCAB received payment from the foreign buyer. Using exchange rates of \$1USD=40 gourdes and one canister=1.20 pounds, this amounts to \$1.04 per pound at delivery and \$0.52 per pound at the end of the season, for a total of \$1.56 per pound.

In the most recent season, the local conglomerate typically paid \$1.25 per pound. Dominican middlemen paid \$1.46 per pound, and other middlemen paid \$1.35 per pound. All of these were paid at time of delivery, with no second payment at the end of the season. Hence, COOPCAB offers the possibility of a higher price overall, but a lower upfront payment at time of delivery.



| | Payment at Sale (\$/Lb) | Payment at End of Season (\$/Lb) | Total Payment (\$/Lb) |
|------------------------------------|----------------------------|-------------------------------------|--------------------------|
| Local agro-industrial conglomerate | \$1.25 | - | \$1.25 |
| Other Middlemen | \$1.35 | - | \$1.35 |
| Dominican Middlemen | \$1.46 | - | \$1.46 |
| СООРСАВ | \$1.04 | \$0.52 | \$1.56 |

Table 1: Estimated prices paid by coffee buyers in Thiotte, December 2011

All else being equal, farmers associated with COOPCAB would prefer to sell to the cooperative to receive the higher total price, and also to have access to the social benefits COOPCAB provides (see Social Investments and Community Impacts). However, many factors influence which buyer each farmer will choose in any given season. There is no written contract binding farmers to the cooperative and they are free to sell their coffee to anyone. COOPCAB can only afford to make the second payment if it negotiates attractive export contracts before the season, and then fulfills them effectively during the season. If farmers doubt COOPCAB's ability to negotiate and fulfill export contracts, they will also doubt the cooperative's ability to make a second payment, and their economic incentive to sell to COOPCAB will therefore disappear.

According to FAS trainer Patrick Dessources, more farmers would sell to COOPCAB if it had more funds available to make initial payments to farmers. If the primary cooperative does not have enough cash on hand to make the initial payment, the farmer will typically sell his or her harvest to a middleman instead thereby forfeiting the cooperative's second payment. Indeed, as Patrick Dessources explains, "The farmer's code is to sell to the right buyer at the right time," meaning to anyone with cash readily available, as the farmer needs money immediately to meet household expenses, pay school fees or health fees or deal with household emergencies.

Farmers may not have the information necessary to make income-maximizing decisions about to whom to sell their coffee. As Patrick Dessources reports, "It is hard to say what the farmer knows about prices in the market." They may have only partial information. Price information becomes outdated rapidly—what was true last season, or even last month, may no longer be true—and obtaining new information requires significant effort.





In addition, the farmer may choose where to sell his or her coffee out of habit, or for social rather than economic reasons. For instance, word is circulating among the farmers that Dominican traders re-sell Haitian coffee with a 500–600 percent mark-up. Regardless of whether this is true, many farmers try to avoid selling to Dominican traders, preferring to sell to the local conglomerate even if the price is lower. While Haitian farmers used to carry their coffee to the Dominican border to meet traders there, Dominicans now have to cross over the border and come directly to Thiotte to secure coffee.

Root Capital Impact on Farmer Incomes

Given the competitive buyer landscape, COOPCAB estimates that its farmers sell approximately 80 percent of their coffee to the cooperative, and 20 percent to the conglomerate, Dominican middlemen and others. It is difficult to determine how much coffee COOPCAB's farmers produce in a year, given the lack of a tracking system at the farm-gate level. Preliminary interviews suggest that farmers who own approximately one hectare of land may produce an average of 600 to 650 canisters (720 to 780 pounds) per year.

Assuming that COOPCAB's farmers produce between 500 and 1000 pounds of coffee per year (which would indicate low to medium levels of productivity versus coffee farmers in other parts of the world), and that farmers sell 80 percent of their harvests to COOPCAB, we can calculate a range of possible levels of extra annual income per farm household as a result of selling to COOPCAB during the 2011-2012 season.

| | | Price Premium per Pound | | |
|----------------------------|--------------------------------------|----------------------------|------------------------|---------------------------|
| | | Vs. Dominican Middlemen | Vs. Other Middlemen | Vs. Local Conglomerate |
| Total Production (Lbs.) | Production Sold to COOPCAB (Lbs.) | \$0.10 | \$0.21 | \$0.31 |
| 500 | 400 | \$40.00 | \$84.00 | \$124.00 |
| 700 | 600 | \$60.00 | \$126.00 | \$186.00 |
| 100 | 800 | \$80.00 | \$168.00 | \$248.00 |

Table 2: Estimated farmer-level incremental income associated with selling coffee to COOPCAB

Given that average annual income per capita in Haiti is \$660 (and likely lower in rural areas), and assuming a rural household size of five (a recent World Bank report estimated 4.61), these premiums translate to incremental income per person of \$8 to \$50 (\$40 to \$250 per household), or one to eight

^{1 &}quot;Social Resilience and State Fragility in Haiti," World Bank, April, 2006.



percent of annual income per capita. To add perspective on how that increased income can benefit families, \$40 is enough to buy a small goat and \$250 is enough to feed a rural family of five for well over a month or to pay for one child's school fees for a year. Multiplying the more conservative estimates in the table by 5,000 farmer households, we estimate that COOPCAB brought a total of \$200,000 to \$500,000 in incremental income to coffee farmers in Thiotte in 2011-2012, above the income they would have realized from selling to other buyers.



Root Capital Impact on COOPCAB

Sales

In 2001, COOPCAB achieved Fair Trade certification (for which it pays \$780 annually), and has since also achieved organic certification. Organic certification brings a price premium of \$0.30 per pound over the base price, and Fair Trade certification entitles the cooperative to a price floor currently set at \$1.40 per pound for washed arabica coffee, plus a \$0.20 per pound Fair Trade social premium, which is added to the maximum of either the current market price or the floor price. The floor price is intended to protect small-scale coffee farmers from coffee price volatility, since small-scale farmers typically absorb the impact of price fluctuations and downward movements in the market.

World coffee prices exceeded \$1.40 during the commodity inflation of 2010–2011, so the floor price did not apply at the time of research. The premiums apply regardless of the market price, but in order to obtain them, cooperatives must secure buyers willing to pay the premiums. COOPCAB has been quite successful in this regard, selling approximately 85 percent of its coffee to Fair Trade buyers, perhaps because the coffee is of high quality in addition to being Fair Trade certified.

In the early 2000s, COOPCAB succeeded in marketing small volumes of its coffee to buyers in Japan, France, Italy and Canada. Japan has historically been its strongest market in terms of both price and volume. When COOPCAB gained access to the Japanese market it was able to negotiate a 50 percent increase in prices.² In 2009 and 2010, COOPCAB exported only to Japan, because of the better prices offered by Japanese importers.

As noted above, volumes declined in 2010 due to the scolytus plague. Following the down year in 2010, volumes grew significantly in 2011 for several reasons:

- COOPCAB realized higher prices in its latest contracts with Japanese buyers, enabling the cooperative to begin offering the second payment to farmers at the end of the season;
- Root Capital's first loan of \$150,000 in December 2010 provided COOPCAB with more cash to make first payments to farmers at time of delivery, thereby diminishing the quantity of coffee sold to Dominican and other traders; and
- There was an overall reduction in the proportion of the harvest damaged by scolytus.

With the benefit of larger loans in 2011 from Root Capital and Association Banque Communautaire de l'Arrondissement de Belle-Anse (ABCAB), COOPCAB expected to increase the volume of coffee it purchased from farmers in 2012 by nearly 50 percent. However, as Hurricane Isaac swept through Haiti in August 2012, it wiped out roughly 30 percent of the coffee crop. (A follow-up case study, based on research conducted in January 2013, will be published in 2013.)

In 2010-2012, COOPCAB has achieved a further 33 percent increase in pricing from international buyers. For every dollar that it receives in revenue, COOPCAB provides \$0.80 or more to the primary cooperatives, which in turn pay it to farmers for their coffee. COOPCAB retains the remainder to pay for operational expenses, and to fund community projects. COOPCAB supplements this operating

² Root Capital's confidentiality practices prohibit us from publishing the prices that our clients obtain from their buyers.



margin with \$50,000 to \$150,000 of donations and in-kind contributions per year. These donations and contributions cover a large portion of operating expenses.

External Financing

COOPCAB and each of the nine grassroots cooperatives have small funds with which to purchase coffee from farmers at the start of the harvest season. However, these funds are quickly depleted, and COOPCAB requires external financing to pay farmers in cash for their harvest. This need is particularly acute due to farmers' need to find buyers for their coffee cherries within 12 hours of picking them and to the competitive local market for coffee cherries. The primary need for financing arises during November and December, the initial months of the harvest.

In the past, COOPCAB has borrowed money from the following institutions:

- Caisse Régionale pour la Promotion Economique et Sociale (CREPES) COOPCAB last borrowed money from CREPES, a local credit cooperative, in 2008.
- Banque Nationale de Crédit (BNC) BNC provided a small loan to buy a pickup truck several years ago, but will not provide working capital to COOPCAB.
- Association Banque Communautaire de l'Arrondissement de Belle-Anse (ABCAB) In 2009, COOPCAB borrowed \$112,000 from ABCAB, a local credit cooperative. In December 2010, Root Capital lent COOPCAB \$150,000, while ABCAB loaned COOPCAB \$42,500. In November 2011, Root Capital lent COOPCAB \$200,000. (ABCAB was expected to provide a loan of up to \$350,000 but it is unknown how much was actually disbursed.)

It is impossible to know what would happen if Root Capital were not operating in Haiti. However, it seems unlikely that COOPCAB would be able to receive credit from local lenders as large as the ones from Root Capital. The larger amount of credit provided by Root Capital in 2011 enabled COOPCAB to reach an additional 1,000 farmers.



Social Investments and Community Impacts

In the 1990s, many farmers from the Thiotte region migrated to the capital city of Port-au-Prince or crossed the border to seek a better life in the Dominican Republic. Since its creation in 1999, COOPCAB has drawn many of these migrants back to their land, and encouraged those who had never emigrated to stay on their land.

The earthquake in January 2010 intensified the need for coffee production to support farmers' livelihoods, as many inhabitants of Port-au-Prince fled the ravaged city to stay with extended family members in rural areas. While there were no direct casualties of the earthquake in Thiotte, the need to support relatives who had come to stay indefinitely placed extra pressure on small-scale farmers.

As a Fair Trade certified cooperative, COOPCAB receives a social premium of \$0.20 per pound from its foreign buyers that must be invested in a democratically-chosen community project. COOPCAB's first project was to pave a bus terminal for Thiotte. The dirt lot where buses parked to load and unload passengers had become so muddy and rutted that it was unusable during periods of heavy rain. Paving the parking lot rendered it usable year-round, and consequently greatly improved farmers' mobility in the region. The Fair Trade premium also funded a demonstration plot for providing agronomic training to farmers, which helped to reduce the incidence of scolytus plague from 65 percent to 15 percent of COOPCAB farms. The next project planned is a health center.



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Future Directions for COOPCAB and Root Capital

To continue growing, COOPCAB will need both expanded trade credit to finance coffee purchases from farmers, and also longer-term loans for capital expenditures. In particular, COOPCAB will need to implement an internal credit fund to support farmers during the coffee off-season; replace a truck acquired eight years ago with a new one to transport coffee from the primary cooperatives to CETRAFAS; upgrade certain pieces of equipment and machinery (all manufactured in South America); secure the industrial dryer from customs to expand capacity and maintain operations during the rainy seasons, and; invest in the construction of additional concrete drying patios and storage units throughout the primary cooperatives. Root Capital's Financial Advisory Services are partnering with COOPCAB to strengthen the cooperative's financial management and improve its ability to support its farmers in the long-term.





APPENDIX: Methodology

This study results from Root Capital Knowledge and Impact Officer Mike McCreless' synthesis of several documents, primarily "COOPCAB Impact Assessment Report" by Patrick Dessources (a Root Capital Financial Advisory Services consultant), and secondarily, the two investment memos associated with Root Capital's two loans to COOPCAB.

To create his report, Patrick conducted the following activities during December 2011 and January 2012:

- Reviewed documents provided by COOPCAB
- Developed tools to collect primary data from the field visit
- Interviewed management of COOPCAB
- Interviewed staff at the Thiotte office
- S Carried out interviews with two farmers/members of the COOPCAB network
- Visited one primary coffee cooperative (SOCAD) and interviewed the personnel
- Visited the principal office and the Final Processing Center Abraham Shepherd of COOPCAB
- **N** Visited the warehouse and the laboratory
- Held discussions with the Cooperative Manager and the Accountant
- Visited the new school building in construction
- Held discussions with the Cooperative Manager
- Visited and held discussions with the owner of the installation rented to the local agro-industrial conglomerate

Patrick collected quantitative and qualitative data from primary and secondary sources over the course of five days. One day was spent in the field in Thiotte and the other four days were allocated to debriefing, researching and follow-up phone calls.



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