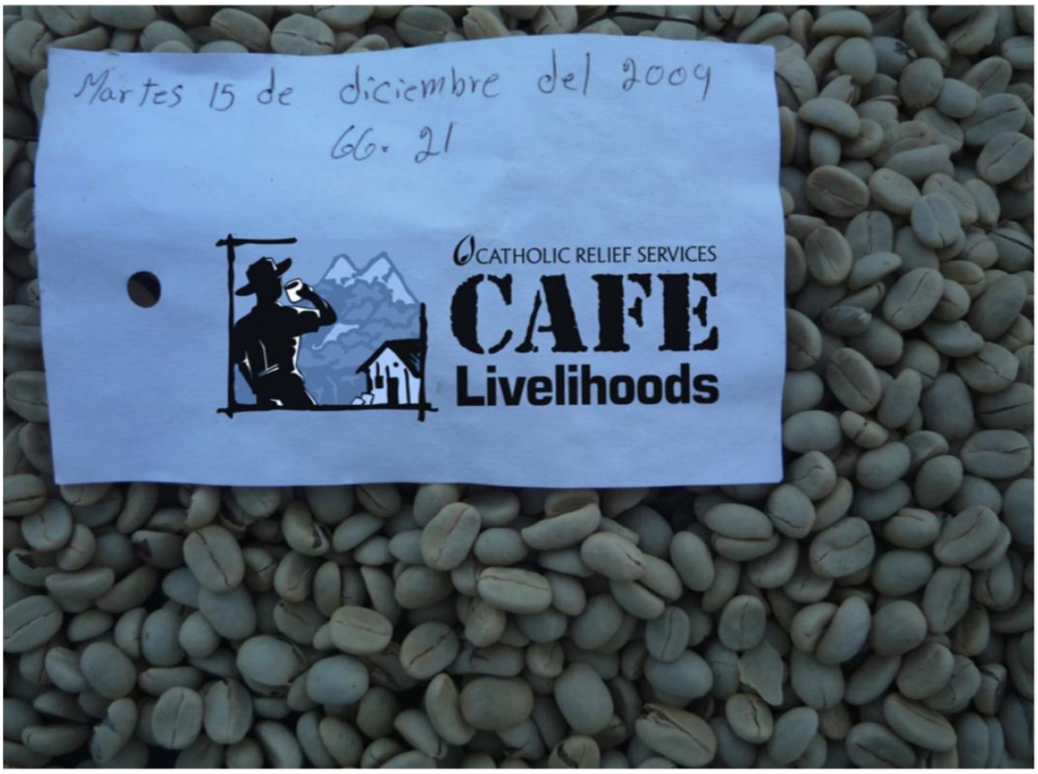

CAFE Livelihoods

(Coffee Assistance for Enhanced Livelihoods)

Final Report to the
Howard G. Buffett Foundation

October 2008 – September 2011

Catholic Relief Services

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ACRONYMS	
ACODEROL	*Asociación para la Coordinación del Desarrollo Rural de Olopa* (Guatemala) (Association for the Coordination of the Rural Development of Olopa)
APECAFORM	*Asociación de Pequeños Caficultores Orgánicos Maya-Mames* (Guatemala) (Association of Smallholder Maya-Mam Organic Coffee Farmers)
ASOCAMPO	*Asociación Campesina de Pochuta* (Guatemala) (Peasant Association of Pochuta)
CAFE Livelihoods	Coffee Assistance for Enhanced Livelihoods
CECOCAFEN	*Central de Cooperativas de Cafés del Norte* (Nicaragua) (Network of Coffee Cooperatives of the North)
CECOSEMAC	*Central de Cooperativas de Servicios Múltiples Aroma de Café* (Nicaragua) (Aroma de Café Multiple Services Cooperative Network)
CECOSPROCAES	*Central de Cooperativas de Cafés Especiales* (Nicaragua) (Network of Specialty Coffee Cooperatives)
CIAT	*Centro Internacional de Agricultura Tropical* (International Center for Tropical Agriculture)
COCIHP	*Coordinadora de Organizaciones Campesinas e Indígenas de la Huasteca Potosina* (Mexico) (Coordinating Committee for Peasant and Indigenous Organizations of the Huasteca Region of Potosi)
COMUS	*Comunidades Unidas de Usulután* (El Salvador) (United Communities of Usulután)
CRS	Catholic Relief Services
CUP	Coffee Under Pressure: Climate Change Adaptation in Mesoamerica
GMCR	Green Mountain Coffee Roasters
HGBF	Howard G. Buffett Foundation
IR	Intermediate Result
LACRO	Latin America and Caribbean Regional Office
MICHIZA	The Yeni Navan cooperative in Oaxaca, Mexico, does business as MICHIZA, an acronym comprised of the first letters of each of the six ethnolinguistic groups that comprise its membership: Mixteco, Mixe, Chinanteco, Chatino, Cuicateco and Zapoteco.
PRODECOOP	*Promotora de Desarrollo Cooperativo de las Segovias* (Nicaragua) (Promoter of Cooperative Development of Las Segovias)
SCAA	Specialty Coffee Association of America
SO	Strategic Objective

1.0 EXECUTIVE SUMMARY

Coffee Assistance for Enhanced Livelihoods (CAFE Livelihoods) was a three-year, four-country project funded by the Howard G. Buffett Foundation (HGBF) that proposed to help 7,100 smallholder farmers expand and sustain their participation in high-value coffee markets. The project took a value-chain approach, delivering integrated technical assistance in each of the links in the chain that connects coffee farmers in Mesoamerica with coffee consumers in the United States: **production**, **post-harvest processing** and **marketing**. These interventions were supported by specialized technical assistance from importer Cooperative Coffees and financial services provider Root Capital that advanced the project's cross-cutting focus on building the capacity of participating farmer organizations.

CAFE Livelihoods was implemented against a backdrop of rising prices in specialty and commodity coffee markets and increased demand for coffee differentiated on the basis of quality and/or certifications. The project helped participating farmers take advantage of these favorable market conditions by increasing current and future productivity, improving farmers' capacity to produce coffee that meets specialty market quality standards, facilitating value-added certification processes, directly fostering new and improved coffee-chain relationships, expanding access to trade finance and increasing the financial and business management capacity of participating organizations.

Key project outcomes and impacts by strategic objective include:

SO1: PRODUCTIVITY

CAFE Livelihoods helped thousands of smallholder farmers increase productivity over the short-term through improved agronomic practices and over the medium-term through heavy investment in renovation for aging coffee fields. Project data show an average increase in yield of 19 percent. This productivity increase permitted farmers to take fuller advantage of rising coffee market prices to increase per-hectare coffee revenues disproportionately, by 163 percent. The project's renovation efforts have positioned participating farmers for nearly $50 million in increased incomes over the next 10 years.

- Farmers for whom we tracked productivity data for all three years of the project achieved an average **increase in productivity of 19 percent, from a baseline value of 898 pounds per hectare to a final value of 1,070**; these productivity gains were achieved as farmers were simultaneously earning higher average prices for their coffee, and correspond to **an increase in the average revenue per hectare from $851 to $2,234**.
- **More than 3.8 million new coffee shrubs were planted** during the life of the project; **1.4 million more will be planted during the next three coffee cycles** – plants currently in nurseries and/or funded with farmer-managed revolving funds capitalized by the project; we estimate conservatively that this renovation will generate **nearly 28 million pounds of new coffee and more than $47 million in additional coffee revenue for smallholder farm families** over the next 10 years.

SO2: POST-HARVEST PROCESSES

The project helped thousands of smallholder farmers access improved post-harvest wet-milling and drying infrastructure. Many of these are processing coffee for the first time ever thanks to the support of the project. The project also helped participating cooperatives to develop written guidelines for coordination of all post-harvest processes. Collectively, these measures have positioned participating farmers to compete more effectively in specialty coffee markets by meeting industry quality standards and fulfilling contractual commitments to buyers.

- At the close of the project, **6,012 smallholder farmers are performing value-added processing** on their coffee, many of these for the first time ever.
- The project expanded access to **new and/or improved wet-milling infrastructure for 1,945 smallholder farmers accessed**, and to **new and/or improved drying infrastructure for 1,913 smallholder farmers**, improving their ability to meet specialty market quality standards.
- One cooperative built **specialized post-harvest processing infrastructure** and effectively managed a **pilot project involving new post-harvest technologies**; the special-process coffee it produced through the pilot was purchased by a celebrated U.S. roaster for **the highest prices recorded project-wide: $3.53 per pound**.
- Participating cooperatives successfully **avoided contract defaults** due to insufficient coffee collection or poor coffee quality at a time when an estimated 5 percent of smallholder Fair Trade cooperatives experienced defaults.

SO3: MARKETING

CAFE Livelihoods helped smallholder farmers take fullest advantage of a favorable coffee market by improving the quality and quantity of linkages to coffee buyers. The average increase in annual household coffee revenue for project participants was $2,967, and participating cooperatives recorded more than $6.3 million in increased sales revenues. Notable "firsts" achieved under the project include: first direct exports, first farm visit by coffee buyers, first participation in the annual Expo of the Specialty Coffee Association of America (SCAA), and first sales of differentiated microlots.

- Among farmers for whom we tracked revenue data for all three years of the project, **baseline average coffee revenues were $1,656** per farmer per year, and **final coffee revenues were $4,623** per farmer per year, **an increase of $2,967**; the average **year-on-year increase in coffee revenues was $1,484** per farmer and the average **cumulative increase in coffee revenues was $3,986** per farmer over the life of the project.
- Participating farmer organizations **increased exports of high-value coffee by 1.6 million pounds** and **generated more than $6.3 million in new coffee revenues** during the life of the project.
- One cooperative received its **first visit by a coffee buyer** – a visit that led directly to the sale of 9 containers of coffee at the highest prices the coop had ever achieved.
- Another made **first-ever direct exports**, negotiating six contracts over two years **worth a total of over $600,000**.
- A third cooperative **obtained Fair Trade Certification;** beginning with the 2011/12 harvest, the cooperative will qualify for the **10-cent-per-pound Fair Trade social premiums** for reinvestment in community development projects; based on its past export performance and ongoing trade development efforts, we estimate that the cooperative will access **$7,500 in social premiums during the 2011/12 crop year**.

CROSS-CUTTING IR: ORGANIZATIONAL CAPACITY

The CAFE Livelihoods project effectively enlisted the specialized services of Root Capital to measurably increase the management capacity of participating cooperatives and expand their access to external finance by more than $6 million – measures that will increase their competitiveness in specialty coffee markets.

- All **16 cooperatives** that participated in the project's financial management training registered **measurable increases in financial management performance**;
- 13 cooperatives **increased their credit rating with Root Capital**;
- 3 cooperatives **qualified for external trade finance for the first time ever**;
- Participating cooperatives **accessed $6.36 million in additional external finance from Root Capital** over the life of the project, including three Root Capital clients that **expanded access to credit by a total of $5.63 million** and three other cooperatives that **qualified for first-time credit totaling $730,000**;
- In Nicaragua, five cooperatives are independently managing **$1.2 million in internal credit funds** that have **improved the competitiveness of participating cooperatives** by improving their ability to secure supply, building essential post-harvest infrastructure, reinvesting in the rehabilitation and renovation of their farms and strengthening their financial management capacity.

INFLUENCE and LEVERAGING

The CAFE Livelihoods project served as an invaluable platform for CRS and its partners to expand their influence on issues of coffee-driven community development and attract additional investment from diverse public and private-sector actors in the development of participating cooperatives and their communities.

- CRS and its partners effectively paired HGBF's investment in CAFE Livelihoods with **$3.5 million in additional funding in support of project goals** from diverse public, private and non-profit sources.
- CRS has used the CAFE Livelihoods project as a **platform to develop an influential voice within the coffee industry** through participation in industry events and a communications effort that features the original content of the CRS Coffeelands Blog.

TOTAL RETURN on INVESTMENT

HGBF funding for CAFE Livelihoods has achieved significant progress against established project performance targets and catalyzed processes of coffee value chain development and reinvestment in coffee communities that have expanded the impact of the project beyond the scope originally contemplated in the project design.

- Considering only the measurable impacts of the project – increased coffee revenues, projected future revenue from new coffee plantations, expanded access to external finance, capitalization of farmer-managed revolving funds in Nicaragua and leveraged funding – CRS estimates that CAFE Livelihoods has generated **$66 million in total returns on the project's initial investment**.

For a full summary of project performance against established targets, see **Annex A: Advances Against Performance Indicator Targets.**

CRS has also enlisted the Cali, Colombia-based International Center for Tropical Agriculture (CIAT) to conduct an independent external desk review of the CAFE Livelihoods project. CIAT was tasked with evaluating the project against the internal performance standards agreed upon between CRS and HGBF, and comparing it externally to similar projects. The full review will be submitted by 9 December 2011.

Annex B: CIAT Desk Review – Draft Summary provides a preliminary review of findings and recommendations.

2.0 REVIEW OF GOALS AND OBJECTIVES

The overall goal and strategic objectives of CAFE Livelihoods were the following:

Goal: 7,100 smallholder farmers in Mexico and Central America strengthen livelihoods through sustainable participation in high-value coffee markets.

SOs:

SO 1: PRODUCTION.
Smallholder farmers have increased coffee yields and quality.

SO 2: POST-HARVEST.
Smallholder farmers have captured added value and increased coffee quality.

SO 3: MARKET ENGAGEMENT.
Smallholder farmers have increased income through deeper engagement in high-value coffee markets.

3.0 RESULTS TO DATE—ACTIVITIES AGAINST OBJECTIVES & ACHIEVED OUTCOMES

More than 6,000 farmers achieved the project goal: bolstering the mainstay of their fragile livelihoods through more sustainable participation in high-value coffee markets.

PROJECT GOAL	TARGET	GAIN	%
By 2011, the number of smallholder farmers who have strengthened their livelihoods through sustainable participation in high-value coffee markets.	7,100	6,019	85%

All participating farmers achieved some gains under the project, but not all satisfied the requirements of this indicator, whose definition includes two fundamental elements. The first is sustained participation in high-value coffee markets. This includes, but is not limited to, markets for certified "sustainable" coffees (Fair Trade, organic, Rainforest Alliance, etc.). It also includes specialty markets for coffee that generally meets a minimum standard of 80 points on a 100-point scale and is associated with price premiums in the marketplace. The second is fulfillment of at least two of the other performance objectives established here.

While most participating farmers adopted at least two improved agronomic practices, achieved increased productivity or higher household coffee revenues, or met one of the other performance targets established here, there were some who failed to sustain participation in high-value markets. Generally, these were farmers who had never accessed specialty coffee markets prior to the project and belong to relatively weak community-level farmer organizations. In some cases, the project managed to support first-time sales into specialty export markets, as in the case of COMUS in El Salvador during year one, or COCIHP in Mexico during year two. But these cooperatives, due to agroclimatic and organizational factors, were unable to sustain their participation in specialty markets, meaning their members did not satisfy the performance requirement for the project's overall goal.

3.1 Strategic Objective 1: Production

CAFE Livelihoods has helped participating farmers increase coffee yields over the short term through improved agronomic practices, while positioning themselves for sustained gains over the medium-to-long term through renovation.

STRATEGIC OBJECTIVE 1	TARGET	GAIN	%
By 2011, the number of smallholder farmers who have increased coffee production by 10 to 30 percent.	4,774	2,773	58%

The limited advance against the performance target for this indicator is primarily a measurement issue.

Due to community-level processes and cooperative management decisions beyond the scope and control of the project, there was considerable flux in the membership of partner organizations over the life of the project. This dynamic complicated performance measurement by making it hard to track productivity data for all farmers for all three years of the project. The project managed to capture complete productivity data on this indicator – baseline, year-two and year-three productivity data – for 4,633 participating farmers. Of these, 2,773 – or 60 percent – had achieved productivity gains during the life of the project.

The original target for this indicator was 4,774 of the 7,100 farmers participating, or 67 percent of all participants. Applying that percentage target to the full universe of farmers for whom the project gathered complete productivity data, we get a "data-adjusted" target of 3,115 farmers. Against this target, the project's performance reflects an 89 percent "data-adjusted" advance against the project target.

SO1: DATA-ADJUSTED PERFORMANCE	TARGET	GAIN	%
By 2011, the number of smallholder farmers who have increased coffee production by 10 to 30 percent.	3,115	2,773	89%

Although 11 percent of participating farmers did not meet the performance target, **the average productivity gain for all farmers exceeded the 10 percent goal**.

The baseline average productivity was 898 pounds of processed coffee per hectare. By year three, the average annual production per hectare increased by 19 percent, to 1,070 pounds per hectare, an increase of 172 pounds per hectare. The cumulative gain per household was 185 pounds per hectare over the life of the project. These productivity gains were achieved simultaneously with higher average prices, and corresponded average annual increases of $692 per hectare in coffee revenues.

HOUSEHOLD-LEVEL COFFEE PRODUCTIVITY DATA							
COUNTRY	# of FARMERS	BASELINE PRODUCTIVITY *(pounds/ha)*	FINAL PRODUCTIVITY *(QQ/ha)*	INCREASE *(Y3-Y1)*	CUMULATIVE INCREASE *(Y3-Y1) + (Y2-Y1)*	AVERAGE INCREASE *((Y3-Y2) + (Y2-Y1))/2*	COMPOUND ANNUAL GROWTH RATE
EL SALVADOR	425	895	1,219	325	538	162	17%
GUATEMALA	681	826	1,090	264	115	132	15%
MEXICO	832	396	532	136	315	68	16%
NICARAGUA	2,695	1,071	1,207	136	108	68	6%
TOTALS	**4,633**	**898**	**1,070**	**172**	**185**	**86**	**9%**

For more detail on the calculations of the project's achievements in productivity and related revenue gains, see **Annex D: Coffee Productivity Increases**.

3.1.1 *Improved practices*

The short-term productivity gains reported in section 3.1 above were driven primarily by improved agronomic practices among project participants.

INTERMEDIATE RESULT 1.1	TARGET	GAIN	%
A. By 2011, the number of smallholder coffee farmers who have adopted two improved production practices.	6,382	4,290	67%

Here again, the limited advance against the project's target for this indicator reflects primarily a performance measurement issue.

CRS/Mexico opted for a sampling approach to tracking final performance against this target, reducing the number of farmers with complete data for this indicator to 4,742. Of these, 4,290 – or 90.5 percent – met the performance target.

The original target for this indicator was 6,382 of the 7,100 farmers participating, or an 89.9 percent "success rate." Applying that percentage target to the full universe of farmers for whom the project gathered complete data on agronomic practices, we get a "data-adjusted" target of 4,262 farmers. Against this target, the recorded gain reflects a 101 percent "data-adjusted" advance against the project target.

IR 1.1 – DATA-ADJUSTED PERFORMANCE	TARGET	GAIN	%
A. By 2011, the number of smallholder coffee farmers who have adopted two improved production practices.	4,262	4,290	101%

3.1.2 *Renovation*

CAFE Livelihoods helped smallholder farmers plant more than 3.8 million new coffee shrubs were planted during the life of the project through the provision of financial support and technical assistance. We estimate that 1.4 million more plants will be grown during "year four," "year five" and "year six" of this three-year project, bringing the project's total direct contribution to 5.2 million new coffee plants.

The additional 1.4 million plants include over 800,000 in nurseries at the close of year three that will be transplanted to coffee fields during "year four" of the project. And in Nicaragua, where CAFE Livelihoods created coop-managed revolving funds to finance farm-level reinvestment, we estimate that nearly 600,000 new plants funded with project resources will be grown during "year four" and "year five."

We estimate conservatively that this renovation will generate nearly 28 million pounds of coffee and over $47 million in additional coffee revenue over the next 10 years. For more detail on project-funded renovation efforts and these production and revenue projections, see **Annex E: Renovation – Production and Revenue Projections**.

3.1.3 *Retaining organic certification.*

CAFE Livelihoods worked to stem the rising tide of defections from the organic certification system in Central America and Mexico.

INTERMEDIATE RESULT 1.1	TARGET	GAIN	%
B. By 2011, the number of smallholder coffee farmers who have retained organic certification.	3,074	2,661	87%

The baseline study identified 3,074 participating farmers whose farms were certified organic at the start of the project. Of these, 2,661 maintained the organic certification of their farms at the close of the project.

3.1.4 Organic transition.

As CAFE Livelihoods worked to help smallholder farmers maintain organic certification, it also worked to provide the incentives and support necessary for more farmers to move toward organic certification.

INTERMEDIATE RESULT 1.1	TARGET	GAIN	%
C. By 2011, the number of smallholder coffee farmers who have begun the transition to organic certification.	1,023	715	70%

The project fell short of its targets related to organic coffee certification, due in large measure to market-based disincentives for smallholder farmers to make the transition to organic farming.

- *Slow rate of growth in organic market.*
  The North American Organic Coffee Industry Report is the definitive source for industry information on certified organic coffee in the United States. The 2010 report indicates that the growth in the U.S. organic market as a whole slowed in 2009 to just 5 percent – the first year of single-digit growth since tracking began in the early 1990s – and the volume of organic coffee imports rose by just 4 percent. The market signal to expand organic certified production, in sum, is not as strong as it has been in recent years.

- *High market prices.*
  Daniele Giovannucci is the author of the annual North American Organic Coffee Industry Report and the preeminent authority on the U.S. organic coffee market. He explains that "with rising differentials being paid for quality coffees, the Organic premiums are relatively less appealing."

  Unpublished research completed earlier this year by the National Coffee Growers' Federation in Colombia demonstrates that the economic value of certifications erodes as market prices rise. The study examines the value of premiums for four leading coffee certifications – Rainforest Alliance, Utz Certified, Fair Trade and organic – as a percentage of the total value of coffee from 2005 to 2010, a period of sustained increases in coffee prices. Among these four certifications, organic retained the greatest percentage of its value over time. Even so, under the study it accounted for only 8 percent of the total value of farmers' coffee in 2010.

  High market prices have driven many smallholder farmers out of organic certification and created a powerful disincentive for farmers to complete the three-year period of farming practice audits required before they can qualify for organic premiums in the marketplace. Organic farming is more labor-intensive than conventional farming and, as an influential article published earlier this year in the journal *Ecological Economics* suggests, may have a higher fixed-cost structure than has generally been appreciated. Furthermore, farmers making the transition from conventional farming techniques involving synthetic fertilizers and pesticides generally experience several years of reduced yields as they adopt organic farming practices, in some cases up to 50 percent or more. With market prices rising steadily over the life of the CAFE Livelihoods project and reaching the $3 mark by April 2011, many smallholder farmers were reluctant to sacrifice certain production and income over the short-term for the potential for organic premiums over the medium-term.

Giovannucci told CRS that both the defection from organic certification documented in indicator 1.1.b and the reluctance to stick with the transition process documented in indicator 1.1.c are natural responses, especially among smallholder farmers for whom organic certification is primarily an economic strategy: "farmers who are mostly doing it for the extra cash tend not to stay long when the inevitable price rises come, and premiums diminish as a percentage of the total price."

The table below shows how these market disincentives led to "one-step-forward, two-steps-back" dynamic in our efforts to attract more smallholders to organic certification. As market prices rose steadily over the life of the project, new commitments to organic certification slowed and defections increased.

CAFE LIVELIHOODS: *IN and OUT of ORGANIC TRANSITION in NICARAGUA*			
Project Year	**In**	**Out**	**Total**
Year 1 (2008/09)	188	0	**188**
Year 2 (2009/10)	123	87	**224**
Year 3 (2010/11)	47	124	**147**

For more discussion of organic certification for smallholder farmers, see section 4.2 below.

3.1.5 Climate Change Adaptation

Research conducted by the CIAT prior to the start of CAFE Livelihoods projected significant loss of coffee suitability in Central America's premier coffee-growing regions by 2050 as a result of changing climate patterns. In 2009, CRS and CIAT teams up in response to a request for proposals from Green Mountain Coffee Roasters (GMCR) for projects to bring this information to bear on farm-level decision-making in coffee communities and assist in climate change adaptation. The joint CRS-CIAT proposal, titled Coffee Under Pressure: Climate Change Adaptation in Mesoamerica (CUP), won a $200,000, five-year grant led by CIAT and co-implemented by CRS in CAFE Livelihoods communities with project participants.

The innovative CUP methodology began with CIAT using georeferenced data points from CAFE Livelihoods and climate modeling programs to generate estimates of the impact of climate change on coffee and a broad range of alternative crops in the specific communities participating in CAFE Livelihoods. These projections identified which crops are likely to be "winners" and which will be "losers" under the most likely climate change scenario.

Joint CRS and CIAT teams then conducted field-level workshops in the project area to assess the degree of sensitivity among participating households and communities to the likely climate change. Through careful analysis of farming practices, economic activities, household and community assets, CIAT generated assessments of local coping capacity and vulnerability in each community.

Finally, CIAT and CRS studied the results of the climate change projections and the vulnerability analysis together with participating communities to identify areas of concern and preliminary climate change adaptation and mitigation strategies.

The pioneering approach of CUP has been effectively modified and applied to other CRS projects focusing on basic grains in Central America. It will be presented before the SCAA annual Expo this year.

All project documents and reports produced to data for CRS have been generated in Spanish. CRS can translate and share these results with HGBF upon request.

3.2 Strategic Objective 2: Post-Harvest

The CAFE Livelihoods strategy for improving post-harvest performance involved simultaneous investment in post-harvest "hardware" (IR 2.1.a and IR 2.1.b) and "software" (IR 2.2.a and IR 2.2.b).

Post-harvest "hardware" includes the construction, rehabilitation or upgrade of essential post-harvest infrastructure: wet mills and/or drying facilities at the farm or community level. Post-harvest "software" refers to processes that minimize losses and preserve quality: improvements in wet milling, drying, coffee collection, storage and transportation, and the communication and coordination required to implement these processes effectively.

Together, these interventions were designed to help farmer organizations earn more revenue from their coffee by ensuring it met minimum specialty coffee standards for processing (indicator 2.A) and quality (indicator 2.B).

3.2.1 Adding value through coffee processing

STRATEGIC OBJECTIVE 2	TARGET	GAIN	%
A. By 2011, the number of smallholder farmers who sell processed coffee.	6,695	6,012	90%

The project achieved 90 percent of its performance target for indicator 2.A. The countries with the largest numbers of participating farmers are El Salvador and Guatemala, where a combination of tradition and high prices for unprocessed cherries created disincentives to assume the risks associated with new post-harvest processing technologies.

3.2.2 Adding value through increased quality

STRATEGIC OBJECTIVE 2	TARGET	GAIN	%
B. By 2011, 16 partner organizations have increased cupping scores by 1 to 3 points.	16	4	25%

The project did not generate evidence to suggest it had met its goals vis-à-vis coffee cupping scores. The following analysis provides some context on project performance around coffee quality.

- *The project's approach obscures community-level changes in coffee quality.*
  This indicator tracks coffee quality improvements with a single data point at the partner level, aggregating and averaging quality data for all coffee samples submitted by each farmer organization to project consultant Cooperative Coffees for lab-based analysis. Some cooperatives submitted as many as 20 or 30 samples. This approach is convenient insofar as it assigns performance metrics for coffee quality to the partner level, but it obscures important variations at the community-level where the project's technical assistance related to coffee quality is delivered. In Nicaragua, for example, only one of five partner organizations registered an increase in coffee quality during the project. While the remaining four partners failed to achieve the project's performance target at the aggregate level, they still include 14 community-level organizations that *did* meet project goals for increases in cup quality.

- *Limited comparability.*
  Some cooperatives were excluded from this analysis because the project was unable to register valid baseline results. In two cases, project partners embraced a micro-origin approach during the second year of the project. Rather than blending coffees from all the communities where they work to create a single, uniform product, these cooperatives have begun working to identify flavor profiles unique to specific micro-climates in the areas where they work. Micro-lots have permitted many cooperatives to capture quality premiums by marketing these coffees individually on the basis of their distinctive attributes. While these processes represented an important advance in terms of the way these organizations approach the market, they precluded the comparability of samples from one year to the next.

- *This data is not necessarily representative.*
  This data is accurate, but it is not necessarily representative of the coffee quality potential of project partners. One cooperative in El Salvador that registered no quality improvement during the project prepared a sample for project monitoring purposes this harvest season that scored a 79 – just off the specialty market minimum standard. But that cooperative's "pre-shipment" sample to a U.S. roaster scored an 84.5. In other cases, project samples also registered more physical defects than specialty coffee standards allow, even when prepared by cooperatives that are accustomed to meeting those standards. The relatively low scores and high defect counts for project samples suggest that there is an incentive gap – a farmer organization is naturally inclined to work harder to preparation a sample for a coffee company that may purchase its coffee than an NGO that cannot.

See **Annex F: Coffee Quality Analysis – Complete Results** for more details.

3.2.3 Post-harvest "hardware"

Each facet of the post-harvest process for coffee is fraught with potential peril. Even minor missteps can have major repercussions in the cup quality and end value of a farmer's coffee. For smallholder farmers with inadequate post-harvest infrastructure, the risk is particularly great. CAFE Livelihoods has made essential investments to ensure that thousands of smallholder farmers have access to the post-harvest infrastructure need to meet the quality standards of specialty coffee markets. In addition to the measurable benefits of these interventions, the adoption of new post-harvest technology was an empowering experience for many smallholders who adopted new processing technologies for the first time. For the story of one cooperative whose post harvest hardware has been the source of real pride, see **Annex G: Seeing is Believing – A CAFE Livelihoods Success Story**.

INTERMEDIATE RESULT 2.1	TARGET	GAIN	%
A. By 2011, By 2010, the number of smallholder coffee farmers who have expanded access to new or improved wet coffee mills.	2,064	1,945	94%
B. By 2010, the number of smallholder coffee farmers who have expanded access to new or improved drying infrastructure.	2,024	1,913	95%

- *Wet-milling technology.*
  The project focused its support for wet-mill upgrades on three essential components: pulpers, fermentation tanks and washing canals. In some cases, the project has also invested in the installation of floating tanks that can increase efficiency and quality by allowing farmers to skim the defective beans that float to the surface and remove them from the process before it begins. Combined with additional classifications and sorting processes further downstream in the coffee process, this step helps to improve cup quality. In all cases, CRS and local partners have worked to identify wet mill technologies that minimize water use and wastewater.

  The project in some cases went beyond its formal commitment to expand access to "core" post-harvest wet-milling technology to also facilitate the construction of wastewater treatment systems and specialized post-harvest infrastructure for alternative post-harvest processes that meet the demands of high-value market niches.

- *Drying technology.*
  Concrete patios remain in most cases the most appropriate drying technology for farmers participating in CAFE Livelihoods. In parts of Mexico, where by tradition farmers prefer concrete roofs to patios to avoid losses to domestic or farm animals, the project has supported rooftop drying patios.

  In areas marked by significant cloud cover, humidity and/or irregular rains, the project has channeled investment into alternative drying technologies to avoid quality losses associated with patio drying cycles that exceed one week. Extended periods of drying can lead to the formation of mold on the coffee bean – an effect that produces a taint in cup quality for which the farmer is penalized at the time of sale. Plastic-covered solar dryers, in which the coffee is dried in screens with wooden frames suspended above the ground on wooden supports, are a leading low-cost option in these areas. The plastic intensifies the sun's heat and protects the coffee from rain, while the elevation of the coffee permits air to circulate all around the beans and further accelerates the process.

  In a few select cases in which cloudy and wet conditions are combined with significant volumes of coffee, the project has invested in the purchase or rehabilitation of large gas-fired Guardiola drum driers that can evenly dry coffee in two-three days.

3.2.4 Post-harvest "software"

Project partners developed formal, written standards for post-harvest coordination and did not register a single contract default during the life of the project.

INTERMEDIATE RESULT 2.2	TARGET	GAIN	%
A. By 2010, the number of partner organizations that have implemented coordinated strategies for post-harvest processing, including collection and transportation processes.	16	31	194%
B. By 2011, the number of partner organizations that have not failed to fulfill contracts for insufficient volume and/or quality.	16	16	100%

3.2.5 A "special process" innovation in Nicaragua

The 5 de junio cooperative in Nicaragua registered one of the project's signature innovations in the area of post-harvest processing. With a $25,000 grant from the Chuck and Ellen Haas Foundation, the cooperative invested in specialized post-harvest infrastructure and effectively applied a farmer-to-farmer training approach to expand adoption of a special post-harvest process alternatively referred to as the semi-washed, pulp natural or "honey coffee" process. The pilot produced a fine coffee that netted $3.53 per pound from a noted specialty roaster in the United States that was the highest price recorded in the project at the time. For more information on the "honey coffee" pilot, see **Annex H: This is What Innovation Looks Like – A CAFE Livelihoods Success Story**.

3.3 Strategic Objective 3: Marketing

CAFE Livelihoods increased household coffee revenues by combining increases in productivity with improved terms of trade. The project improved terms of trade through support to partners in marketing both "green" coffee for export and roasted coffee for domestic markets.

STRATEGIC OBJECTIVE 3	TARGET	GAIN	%
By 2011, the number of smallholder coffee farmers who have increased their revenue from coffee by 10 to 20 percent.	6,481	4,505	62%

The limited advance against the project's target for this indicator reflects primarily a performance measurement issue. The project captured complete revenue data on this indicator for 4,633 participating farmers. Of these, 4,045 – or 87 percent – had achieved productivity gains during the life of the project.

The original target for this indicator was 6,481 of the 7,100 farmers participating, or 91 percent of all participants. Applying that percentage target to the full universe of farmers for whom the project gathered baseline, year-two and year-three productivity values, we get a "data-adjusted" target of 4,229 farmers. Against this target, the recorded gain reflects a 96 percent "data-adjusted" advance against the project target.

SO3: DATA-ADJUSTED PERFORMANCE	TARGET	GAIN	%
By 2011, the number of smallholder coffee farmers who have increased their revenue from coffee by 10 to 20 percent.	4,229	4,045	96%

The baseline average annual coffee revenues for the 4,633 farmers for which the project has gathered data totaled $1,656. By year three, their average annual coffee revenue had increased by 179 percent, to $4,623 per household. The average annual year-on-year revenue gain for participating households was $1,484 per year, and the cumulative gain per household was $3,986 over the life of the project.

HOUSEHOLD-LEVEL COFFEE REVENUE DATA							
COUNTRY	# of FARMERS	BASELINE COFFEE REVENUE	FINAL COFFEE REVENUE	INCREASE *(Y3-Y1)*	CUMULATIVE INCREASE *(Y3-Y1) + (Y2-Y1)*	ANNUAL INCREASE *((Y3-Y1) + (Y2-Y1))/2*	COMPOUND ANNUAL GROWTH RATE
EL SALVADOR	425	$2,081	$5,989	$3,908	$4,900	$1,954	70%
GUATEMALA	681	$1,022	$2,539	$1,517	$1,825	$759	58%
MEXICO	832	$440	$1,997	$1,558	$2,085	$779	113%
NICARAGUA	2,695	$2,124	$5,745	$3,621	$4,975	$1,810	64%
TOTALS	**4,633**	**$1,656**	**$4,623**	**$2,967**	**$3,986**	**$1,484**	**55%**

For more detail on the calculations of the project's achievements in productivity and related revenue gains, see **Annex I: Coffee Revenue Increases**.

3.3.1 *Green coffee exports.*

Fourteen of the partner organizations participating in the project increased their export performance targets, and collectively they far exceeded the project's targets for volume.

INTERMEDIATE RESULT 3.1	TARGET	GAIN	%
By 2011, the number of marketing organizations that have increased the total annual volume of differentiated/ sustainable coffee exports.	(a.) 16 (b.) 15.8 (c.) 591,000	(a.) 14 (b.) 41.6 (c.) 1.58M	(a.) 88% (b.) 263% (c.) 267%

(This indicator is measured in: (a.) organizations, (b.) containers and (c.) pounds.)

Participating cooperatives reported $6.4 million in cumulative revenue increases over the life of the project. For complete export calculations, see **Annex J: Performance Against Export Targets**.

3.3.2 *Roasted coffee sales.*

Many smallholder cooperatives focused primarily on the export of "green" coffee also operate roasting operations to complement their core exporting business. Roasting offers an attractive way for cooperatives to find profitable use for *segundas* – coffee that doesn't meet the physical or organoleptic standards of specialty markets but is suitable for local consumption. Two partner organizations – Café Justo in Mexico and Granja Juan Ana in Guatemala – have opted for a different model, exporting roasted coffee through solidarity channels. The developmental vision behind this approach is the vertical integration of the coffee chain and the concentration of the economic value of roasting – the process that adds the most value to coffee – in the hands of local organizations. The third component of the performance target was included for these two organizations. The project far exceeded its objectives for each element of this performance indicator.

INTERMEDIATE RESULT 3.2	TARGET	GAIN	%
By 2011, number of cooperatives that have begun or expanded the sale of roasted coffee in the domestic market.	(a.) 7 (b.) 8 (c.) 15%	(a.) 11 (b.) 20.1 (c.) 57%	(a.) 157% (b.) 251% (c.) 380%

This indicator is measured in: (a.) increase in organizations, (b.) increase in tons for domestic market and (c.) % growth in roasted coffee exports.

3.3.3 Qualitative advances – "Relationship upgrades"

In addition to the significant qualitative gains in coffee marketing identified above, CAFE Livelihoods has helped participating farmer organizations "upgrade" their commercial operating by fostering new and improved trading relationships that include: direct contact with importers and roasters, open trade negotiations, greater transparency in supply chain communications, "upstream" transfer of market intelligence and new technologies, and improved and expanded service delivery. For one example of a cooperative whose relationship to the market was fundamentally transformed by the project, see **Annex K: Making a Name for Themselves - A CAFE Livelihoods Success Story**.

3.4 Cross-Cutting Intermediate Result: Increased Organizational Capacity

3.4.1 Financial and Business Management

The financial and business management training component of the CAFE Livelihoods project was implemented by Root Capital, a non-profit financial services provider specializing in financial and advisory services to smallholder coffee cooperatives and other grassroots enterprises. Under CAFE Livelihoods, Root Capital delivered technical assistance to select cooperatives in three areas: business and administrative management, finance and accounting, and internal credit and access to finance.

Root Capital applied its proprietary capacity assessment tools to initial business audits of each participating cooperatives. On the basis of its initial business audits, Root Capital scored each participating cooperatives in each skill set, assigned an overall credit rating, and developed customized work plans designed to address areas of weakness. Root Capital was not contracted to deliver external finance to participating cooperatives, but the project's aspiration was to help all participating cooperatives qualify for credit from Root Capital through improvements in credit ratings achieved through project support.

In pursuit of this objective, Root Capital's trained consultants delivered customized consulting services and syndicated workshops to key staff at participating cooperatives. By the close of the project, 13 of the 16 cooperatives that completed the Root Capital component of the project improved their credit rating, including five that jumped by two ratings or more. Three cooperatives had qualified for first-time credit from Root Capital, and three others had expanded their access to credit from Root Capital. The total value of additional credit delivered and committed for the 2011/12 harvest was $6.4 million.

OVERALL Country *Partner*	CREDIT RATING		BUSINESS AUDIT RATINGS			ACCESS to FINANCE			
						CAFE Internal Credit Funds	External Credit (Root Capital)		
	Initial	*Final*	*Initial*	*Final*	*Gain*		*Initial*	*Final*	*Gain*[1]
OVERALL	**C**	**BB**	**43%**	**68%**	**25%**		**$0**	**$0**	**-**
El Salvador	**C**	**B**	**46%**	**61%**	**15%**		*$0*	*$0*	-
COMUS	*B*	*BB*	*62%*	*78%*	*16%*		*$0*	*$0*	-
Coopuxtla	*B*	*B*	*53%*	*60%*	*7%*		*$0*	*$0*	-
El Salto	*D*	*C*	*24%*	*46%*	*22%*		*$0*	*$0*	-
Guatemala	**C**	**BB**	**40%**	**68%**	**25%**		**$0**	**$0**	**-**
ACODEROL	*B*	*BB*	*57%*	*80%*	*23%*		*$0*	*$0*	-
APECAFORM	*B*	*BB*	*56%*	*70%*	*11*		*$0*	*$0*	-[3]
ASOCAMPO	*C*	*BB*	*38%*	*69%*	*31%*		*$0*	*$0*	-[3]
Juan Ana	*E*	*BB*	*15%*	*78%*	*63%*		*$0*	*$0*	-
Santa Anita	*C*	*C*	*34%*	*42%*	*8%*		*$0*	*$0*	-
Mexico	**C**	**A**	**44%**	**81%**	**42%**		**$120k**	**$480k**[2]	**$410k**
COCIHP	*E*	*BB*	*17%*	*76%*	*59%*		*$0*	*$0*	-
Maya Vinic	*B*	*BB*	*50%*	*78%*	*28%*		*$130k*	*$300k*[2]	*$230k*
MICHIZÁ	*B*	*A*	*65%*	*90%*	*25%*		*$0*	*$180k*[2]	*$180k*
Nicaragua	**C**	**B**	**40%**	**61%**	**21%**	**$1.12M**	**$2M**	**$3.65M**	**$5.95M**
5 de junio	*D*	*BB*	*27%*	*68%*	*41%*	*$104,713*	*$0*	*$250k*	*$250k*
CECOCAFEN	*BB*	*Grad*	*75%*	*N/A*	*N/A*	*$202,308*	*$750k*	*$700k*	*$2.15M*
CECOSEMAC	*B*	*B*	*55%*	*61%*	*6%*	*$234,343*	*$0*	*$0*	-
CECOSPROCAES	*C*	*B*	*38%*	*55%*	*17%*	*$215,513*	*$0*	*$300k*[2]	*$300k*
PRODECOOP	*A*	*Grad*	*92%*	*N/A*	*N/A*	*$364,633*	*$1.25M*	*$2.4M*	*$3.25M*

[1]This column reports the cumulative gain in access to credit over four coffee cycles, beginning with the 2008/09 harvest (Y1) and ending with projections for lending during 2011/12 harvest set to begin this month (Y4). It is calculated according to the following formula: (Y4-Y1) + (Y3-Y1) + (Y2-Y1).
[2] Projected value.
[3] Root Capital did not extend credit directly to APECAFORM or ASOCAMPO under CAFE Livelihoods, but did expand its existing credit commitments to Manos Campesinas, a Root Capital client that exports the coffee from these two organizations. Root Capital is able to confirm that these organizations accessed additional credit on the basis of their improved credit ratings, without being in a position to specify the amount of the increases.

Of particular note are the three cooperatives that have accessed external finance for the first time under CAFE Livelihoods – MICHIZÁ in Mexico and *5 de junio* and CECOSPROCAES in Nicaragua. The first-year total of these three loans is relatively modest at $730,000. But lack of access to trade finance has historically been a limitation to the ability of smallholder cooperatives to secure supply of high-quality coffee from their members in competitive markets. More importantly, the experience of some of the larger cooperatives like CECOCAFEN and PRODECOOP demonstrates that with strong repayment performance, credit lines can grow and fuel expansion and increased competitiveness into the future.

For a full report on Root Capital's performance under CAFE Livelihoods, see **Annex L: Root Capital Final Report**.

3.4.2 Revolving Funds

In Nicaragua, CRS turned the project's modified the nature of the project's investments in farm rehabilitation, renovation and infrastructure development, turning one-time grants into cooperative-managed internal credit funds that could finance these activities sustainably while improving their own financial management practices.

The project provided more than $1.1 million in seed capital for five cooperative-managed revolving funds. The table below shows the original distribution of the funds, as well as the current rate of repayment.

REVOLVING FUNDS in NICARAGUA					
COOPERATIVE	USES			TOTAL (US$)	RATE of RECOVERY
	Farm rehabilitation	*Renovation*	*Infrastructure*		
5 de junio	45,948	8,121	50,645	104,713	89%
CECOCAFEN	102,790	34,788	64,279	202,308	90%
CECOSEMAC	136,941	18,168	79,234	234,343	95%
CECOSPROCAES	138,783	54,019	22,711	215,513	93%
PRODECOOP	158,639	84,105	121,889	364,633	98%
TOTALS	**583,100**	**199,201**	**339,210**	**1,121,511**	**93%**

Root Capital included in its advisory services in Nicaragua continuous support for the administration of these internal credit funds. For CECOSPROCAES, CAFE Livelihoods provided the first opportunity for the cooperative to manage internal funds. Root Capital accompanied the process from the outset, helping the cooperative to develop a credit manual, set and apply credit policies and administer the funds. To date the cooperative’s recovery rate of 93 percent matches the average repayment rate for all five cooperatives and suggests a high level of achievement with new competencies.

Generally, farm-level credits are granted for one year, with repayment periods for infrastructure loans ranging from 2 to 7 years. For more detail on the terms of credit established by each cooperative, and comparisons with the terms of credit provided by local lenders for the uses in question, see **Annex M: Nicaragua Revolving Funds – Terms of Credit**.

The short-cycle loans for farm-level activity have already been recycled twice, increasing the total value of the project in Nicaragua and capitalizing the cooperative-managed funds by as much as $1.4 million. CRS estimates the current value of the five cooperative funds to be $1.22 million.

The revolving funds have improved the competitiveness of participating cooperatives by helping them to:

- **Secure supply**
  Cooperatives used the provision of credit to their members to guarantee the supply of coffee, requiring the sale of all or part of a farmer’s coffee harvest to the cooperative as a condition of credit.
- **Build essential post-harvest infrastructure**
- **Reinvest in the rehabilitation and renovation of their farms**
- **Strengthen their financial management capacity and creditworthiness**
  The existence of internal credit policies and a successful track record in managing internal credit funds are among the criteria by which Root Capital assesses potential new clients. The strong performance of 5 de junio and CECOSPROCAES in the management of these funds contributed directly to Root Capital’s decision to extend trade finance to these cooperatives for the 2011/12 harvest.

3.4.3 Coffee Quality and Marketing

Cooperative Coffees delivered a series of workshops on coffee markets and coffee quality over the first two years of the project that improved the understanding among participating cooperatives of the dynamics and standards of specialty coffee markets in general, and in particular the quality standards for green and roasted coffees. Each workshop provided direct transfer of knowledge and was followed up by a summary report and recommendations that served as a resource for participants and their organizations.

The Coop Coffees workshops also created exceptionally valuable spaces for informal interaction between project partners and specialty coffee roasters – a first for many of the smaller organizations involved in the project that had no prior experience participating in specialty markets or had never managed to develop a direct trading relationship.

Finally, Cooperative Coffees' most lasting contribution may prove to be the comprehensive Spanish-language smallholder coffee manual it developed with project support. The document is divided into three sections – the farm, the mill and the market – and represents an invaluable resource for smallholder farmers and the organizations that accompany and support them. CRS is currently working to prepare the document for broader distribution via electronic means and expects to make it available beginning in early 2012.

For more information on the role of Cooperative Coffees in the project,
See **Annex N: Cooperative Coffees Final Report**.

4.0 LESSONS LEARNED

4.1 General: Performance measurement

4.1.1 Sampling

Project management made the strategic decision at the outset of CAFE Livelihoods to monitor and evaluate the project's progress against household-level performance targets through complete coverage of all participating farmers. CRS has used this approach effectively in other projects of similar scope. By the close of CAFE Livelihoods, however, churn in project participants and gaps in household-level data collection precluded the project from achieving complete coverage of all participating households for all three years of the project. In future HGBF-funded coffee value chain programming, CRS will consider partnering with qualified researchers to develop and implement a scientific sampling approach that will save project resources without sacrificing data quality.

4.1.2 Net Incomes

CAFE Livelihoods effectively measured coffee revenues at the cooperative and household levels, but did not track production costs or measure net coffee incomes. This decision was based on the complexities of income measurement, especially in a project of this scope, with more than 7,000 participating households in hundreds of communities across four countries. Furthermore, the project considered coffee revenues to be an adequate proxy for coffee incomes. Credible research published in a refereed journal in 2011 demonstrated that this assumption may not always and everywhere hold. See section 4.2 below for more discussion of this issue.

In retrospect, tracking household-level data on production costs would have created opportunities to improve smallholder well-being not only by increasing production and revenues, but through the identification of production inefficiencies and initiatives to reduce production costs and widen profit margins.

4.1.3 Coffee Quality

The project's failure to meet performance targets for indicator 2.b on coffee quality reflects primarily a flaw in project design. As noted in section 3.2.2 above, however, it also reflects a significant degree of measurement error that may be remedied in future coffee value chain programming. Rather than creating a parallel project-based system for coffee quality evaluation, future projects will seek to embed coffee quality scoring in existing value chain relationships. The ideal arrangement would be to identify each cooperative's "lead" trading partner from the outset of the project and collaborate with that lead partner over the life of the project to track quality improvement data. In the context of ongoing trading relationships, there is a natural alignment of economic and commercial incentives among key actors with project goals. CAFE Livelihoods used this approach to good effect on an ad hoc basis with four different roasters and importers when seeking additional feedback on partner coffee quality. This approach would mean more variability across project partners given the inevitable variations in roaster and importer standards and preferences. But it would resolve the incentive issue by embedding "project" activities within "commercial" relationships. It would furthermore foster the kinds of upstream transfer of technology and market intelligence that add value to trading relationships and improve the competitiveness of smallholder farmer enterprises.

4.1.4 Trading Relationships

The project's monitoring and evaluation system has generated valuable data on qualitative gains in coffee revenue. But the project's performance indicators do not effectively measure the qualitative upgrades alluded to in section 3.3.2 above, or the overall quality of the trading relationships on which so much of smallholder livelihood development depends. Moving forward, CRS will explore existing social network analysis methodologies as part of efforts to develop a chain-wide index that provides some quantitative rigor to monitoring upgrades in trading relationships, and explores the correlation between relationship quality and smallholder livelihoods.

4.2 Production: Organic certification.

The project's experience with organic certification described in section 3.1.4 above points to the need to systematically reassess the agency's promotion of organic certification for smallholder coffee growers. While the ecological advantages of organic farming are well-established and contribute to expanding the natural assets of smallholder farm families, the economic benefits or organic certification are perhaps less certain, especially when market conditions are generally favorable.

An article published in 2011 in the journal *Ecological Economics* reinforced this conclusion by showing data-based evidence that contradicts some of the most widely held convictions about certified "sustainable" coffees and their impacts on smallholder livelihoods, in particular organic certification. The study suggested that among a sample of smallholder coffee farmers in Nicaragua, those who were selling coffees that were certified organic and Fair Trade earned less than the cohort farming conventionally and selling coffees without certification. The principal variable responsible for the study's inflammatory conclusion – that Fair Trade and organic certifications made farmers poorer relative to their non-certified counterparts – was the cost structure for organic farming, which was significantly higher than even many experts appreciated given the hidden labor costs for smallholder families to meet the requirements of labor-intensive organic practices.

In discussion within the coffee industry following the publication of the article, some leading roasters concluded definitively that organic certification is not appropriate for smallholder farmers. While CRS does not share this perspective, the study was a valuable confirmation of the need to evaluate organic certification more carefully in our value chain work moving forward, and to measure production costs noted in section 4.1 above.

4.3 Post-Harvest: "Pre-competitive" v "competitive" investments.

With few exceptions, the project's investment in post-harvest hardware and software were essential "pre-competitive" investments designed to ensure that participating smallholder farmers had the minimum basic conditions to access dynamic, competitive markets for specialty coffee. While this level of infrastructure is necessary for market access, it is not sufficient over the long term for smallholder farmers to remain competitive in dynamic markets like the one for differentiated coffee. For that, "pre-competitive" investments must be closely followed by the kinds of "competitive" investments described below.

4.3.1 Competitive software

- *Coffee Cupping Training*
  Smallholder farmer organizations that aspire to participate in the specialty coffee market must commit to developing the capacity of select members to manage coffee control processes, including but not limited to the highly specialized practice of coffee cupping. There is increasing standardization around a set of broadly accepted standards for assessing and communicating around quality. The inability of farmer organizations to understand the quality of their coffee keeps them from targeting it to the appropriate segment of the market. The more local coffee cuppers can calibrate their palates and their cooperatives' overall quality control with those of roasters and importers in the specialty market, the more likely they are to be able to consistently meet specialty standards for coffee. Investment in the acquisition of this skill among a small number of cooperative leaders, and its general diffusion to the general membership through peer training opportunities, is an essential step toward sustained competitiveness that was not directly funded by CAFE Livelihoods.

- *Segmentation for quality-based differentiation.*
  Commercial data for the 2010/11 harvest from Nicaragua suggest that cooperatives that can segment their coffee on the basis of micro-origin, cup profile, varietal, special process or some other differentiating characteristic, may be able to achieve higher overall returns than those that do not. Rather than blend all of its members' coffee into a single offering according to common practice, the *5 de junio* cooperative in Nicaragua created four different offerings this harvest cycle: one conventional, one organic, one single-varietal and one special-process – the semi-washed coffee described in **Annex H: This is What Innovation Looks Like**. While the preparation of these special offerings has both real and opportunity costs that need to be calculated with some precision moving forward as indicated in section 4.1 above, it also permits cooperatives to capture value that evaporates

when outstanding coffees are blended with lower-quality coffees in a single, uniform product. This approach is most likely to succeed when paired with investment in training coffee cuppers and building cooperative-level cupping labs. The approach that *5 de junio* has taken is an integral part of a broader strategy to use coffee as an engine of social development in the communities where its members live. For more on this approach, see **Annex O: Quality of Coffee, Quality of Life – A CAFE Livelihoods Success Story**.

4.3.2 Competitive hardware

- *Cupping laboratories*
  Trained cuppers need a place to ply their trade. Investment in cupping laboratory "hardware" is modest compared to the costs of developing and maintaining coffee cuppers, and an essential complement.

- *Specialized post-harvest infrastructure*
  The potential contributions of specialized post-harvest infrastructure to coffee quality, household income and quality of life are detailed in **Annex H: This is What Innovation Looks Like** and **Annex O: Quality of Coffee, Quality of Life**. The 5 de junio experience was unique in the CAFE Livelihoods project. But as we worked together with cooperatives and roasters during year three to build stronger trading relationships and upgrade their value chains, we identified other opportunities for investment in specialized post-harvest infrastructure to help cooperatives meet market demand for specialized, higher-value coffees. Together with the 5 de junio experience, these opportunities served as a validation of the need for hardware investments as part of a comprehensive segmentation strategy.

4.4 Marketing

The CAFE Livelihoods project did not budget for marketing expenses such as the design and publication of promotional materials or participation in international trade shows. During the first year of the project, however, the need for this type of investment in new business development became clear. At the regional and country levels, project coordinators sought and found savings elsewhere in the project budget to enable investment in marketing activities. During year three, CAFE Livelihoods sponsored participation of partner organization representatives from all four countries in the annual SCAA Expo and the development of diverse materials to help them maximize the return on the project's investment in their participation.

CRS developed clear selection criteria to help participating cooperatives select the delegates who could most effectively represent them in the turbulent environment of SCAA, as well as the "Smallholder's guide to SCAA," a simple written Spanish-language resource that included specific suggestions on how to make the most of the event, including planning, materials development, sample preparation and follow-up.

CRS also helped 17 participating cooperatives develop promotional flyers for SCAA. These flyers consisted of brief "identity narratives" focused on geography, ethnicity, language, community history, shared values or other facets of cooperative identity that might help them differentiate themselves more effectively in the marketplace. They also included basic trading information –farm elevation, coffee volume, certifications, etc. – whose importance to buyers that was validated by project leadership through communications with leading coffee importers and roasters.

Finally, CRS facilitated a range of formal meetings and informal encounters between project participants and other value chain actors designed to help partners deepen existing relationships and develop new ones. These included formal meetings with roasters, importers, certifiers, brokers, financial services providers, consultants and vendors. Most of the meetings took place in a CAFE Livelihoods booth on the show floor that provided a kind of "home field advantage" for project partners at an event that can be overwhelming for smallholder farmers, especially those participating for the first time. The CRS Fair Trade Program also sponsored a CRS reception during the event to create opportunities for informal contact and relationship development between project staff and partners and other value chain actors, allies and friends of CRS. Nearly 100 people attended, including roasters, certifiers, NGOs and others.

In addition to creating opportunities for project staff and partners to address issues of common concern with current trading partners, the event produced first-time contacts with new buyers that are being actively pursued by CRS and its partners as we prepare for the 2011/12 harvest. We expect at least two new contracts this harvest as a direct result of the meetings at SCAA – with just one contract, the initial investment in these activities will pay for itself.

We have come to regard investment in these kinds of marketing activities as essential activities in support of smallholder farmers seeking to access or increase their competitiveness within dynamic markets such as the one for specialty coffee, and will program similar investments in coffee value chain projects into the future.

4.5 Strong Organizations

4.5.1 Financial and Business Management Training + Revolving Funds

Root Capital's financial and business advisory and farmer-managed revolving funds in Nicaragua combined to dramatically expand cooperative capacity and opportunity. Together, they represent two of the project's signature innovations and successes. Future programming will seek to incorporate these components into their work on commercial finance and organizational capacity building.

4.5.2 Industry Allies

Cooperative Coffees delivered significant value as a project consultant by bringing to bear the weight of its experience and specialized knowledge on project workshops and specific collaborations. The project would have benefitted from greater involvement of Cooperative Coffees in the development of annual work plans, especially vis-à-vis activities related to coffee quality and marketing. In future coffee value chain programming, CRS will seek to more systematically validate field-level interventions with market-based actors.

4.6 Learning and Innovation

As the preceding sections of this final report demonstrate, CAFE Livelihoods successfully fostered innovation at various points along the coffee chain. As section 5.1 below suggests, CRS has also effectively used the project as a platform for innovative engagement at the industry level in an effort to influence private sector practices.

In order to more effectively replicate project successes in our programming and to more effectively exert influence on key decision-makers in the public and private sectors, we will need to invest more in our internal capacity for impact evaluation and knowledge management, or pursue partnerships with universities or research institutes capable of conducting rigorous, credible research on priority issues.

5.0 OTHER RELEVANT INFORMATION

5.1 Influence and Leveraging

The CAFE Livelihoods project served as an invaluable platform for CRS and its partners to expand their influence on issues of coffee-driven community development and attract additional investment from diverse public and private-sector actors in the development of participating cooperatives and their communities. HGBF's investment in CAFE Livelihoods helped leverage $3.5 million in additional funding opportunities for project participants and their communities.

The two largest complementary investments were both made by GMCR: the CUP project mentioned in section 3.1.5 above, and Diversifying Livelihoods in Pochuta, a three-year project that is helping the members of the ASOCAMPO cooperative in Guatemala and residents of surrounding communities diversify their livelihood strategies through market-oriented farm diversification and small enterprise development activities, as well as community-based savings and lending groups.

For a complete summary of all leveraged projects, see **Annex P: CAFE Livelihoods Leveraging Table**.

5.2 Communications and Influence

CAFE Livelihoods has given CRS a platform to develop an influential voice in the ongoing discussion of sustainability in the coffee industry. CRS has sought to take advantage of this opportunity in two ways: strategic participation in industry events and ongoing communications efforts through the CRS Coffeelands Blog.

5.2.1 Industry Events.

- SCAA.
  For the past two years, CRS has been invited to participate in SCAA presentations on the issue of seasonal hunger in the coffeelands. During the 2010 event, CRS participated in a panel facilitated by GMCR on the issue that included a producer representative, an academic and another NGO. In 2011, CRS participated for the first time ever in the SCAA's Symposium, an executive-level gathering of industry leaders convened immediately prior to the SCAA Expo, as a featured NGO commentator on the occasion of the world premiere of the documentary film, "After the Harvest: The Fight Against Hunger in the Coffeelands." Together with ongoing advocacy by GMCR, its NGO partners such as CRS, and allies in the research community, the visibility of the issue has been raised in the industry and an increasing number of roasters are seeking ways to engage the issue in their own sourcing relationships.

- *Let's Talk Coffee*.
  In 2009, CRS was invited to co-facilitate an interest group discussion with GMCR on the issue of hunger in the coffeelands at Let's Talk Coffee, Sustainable Harvest's annual coffee value chain event and one of the most important events on the specialty coffee calendar. Organizers expected participation of 6-12 people and more than 100 participated.

- *Food Security Solutions.*
  Based in large measure on the overwhelming response to the interest group discussion during the 2009 Let's Talk Coffee event, Sustainable Harvest convened "Food Security Solutions" in 2010 with underwriting from GMCR, CRS and others. It was the first multi-stakeholder coffee-industry event devoted exclusively to the issue of hunger in the coffeelands. CRS participated in the design of the four-day event and was invited to present preliminary results of its work on climate change adaptation with CIAT.

5.2.2 The CRS Coffeelands Blog.

The CRS Coffeelands Blog went live on 26 April 2010. Its objective was to help CAFE Livelihoods establish an influential voice within the coffee industry on issues related to smallholder farmer livelihoods and to contribute to the industry's evolving work on issues of sustainability at origin. Among the influential readers who have commented on the site's content, both online and off, are industry leaders in sustainable trade: current officials and past presidents of the SCAA, roasters, importers, academics and researchers specializing in sustainable coffee and new business models, NGO peers, students and activists.

With the close of CAFE Livelihoods, CRS has committed to continue to use this platform for communication and influence, and to expand the content beyond HGBF-funded coffee programming in South America to include content from privately funded CRS coffee value chain development work in Haiti, and GMCR-funded work on food security in Latin America and East Africa.