



USAID
FROM THE AMERICAN PEOPLE

ASSESSING USAID'S INVESTMENTS IN RWANDA'S COFFEE SECTOR- BEST PRACTICES AND LESSONS LEARNED TO CONSOLIDATE RESULTS AND EXPAND IMPACT



April 2006

This publication was produced for the United States Agency for International Development by Chemonics International Inc.

TABLE OF CONTENTS

TABLE OF CONTENTS	1
LIST OF ACRONYMS.....	3
EXECUTIVE SUMMARY	4
SECTION I.....	6
INTRODUCTION	6
SECTION II.....	8
2.0 AN OVERVIEW OF RWANDAN COFFEE FROM 1904 TO 2001	8
2.1 <i>Role in the Economy</i>	8
2.2 <i>Fluctuating Prices</i>	9
2.3 <i>Production Environment and Systems</i>	9
2.4 <i>Coffee Marketing and Financing from 1990 to 2001</i>	11
2.4.1 <i>Factors Responsible for Poor Quality and Low Productivity</i>	11
2.5 <i>The GOR Coffee Development Strategy</i>	12
SECTION III	14
3.0 USAID INVESTMENTS IN THE COFFEE SECTOR	14
3.1 <i>An Overview of Primary Implementing Partners: ACDI-VOCA, ADAR and PEARL</i>	15
3.1.1 <i>ACDI-VOCA</i>	15
3.1.2 <i>The ADAR Project</i>	15
3.1.3 <i>The PEARL Project</i>	16
3.2 <i>Results Achieved through 2005</i>	17
3.3 <i>Significant Issues Which Must Be Addressed to Sustain Progress:</i>	22
3.3.1 <i>Decreasing the proportion of ordinary grade coffee produced by washing stations</i>	22
3.3.2 <i>Tempering Producer Expectations with Regard to Cherry Purchase Price</i>	22
3.3.3 <i>Increasing Processing Capacity Utilization</i>	22
3.3.4 <i>Improving Site Selection of Future Washing Stations</i>	22
3.3.5 <i>Environmental Compliance</i>	23
3.3.6 <i>Quality Control</i>	23
3.3.7 <i>Financial Management of Washing Stations</i>	23
SECTION IV.....	25
4.0 BEST PRACTICES EMPLOYED.....	25
4.1 <i>Project Planning</i>	25
4.1.1 <i>Thorough Investigation of Market Potential</i>	25
4.1.2 <i>Careful Selection of Cooperative and Private Sector Partners</i>	25
4.1.3 <i>Implication of Local Government Authorities into the CWS Development Plan</i>	26
4.2 <i>Implementation</i>	26
4.2.1 <i>Use of Regional Expertise for Training in Coffee Processing</i>	26
4.2.2 <i>Creation of Traceability Systems from Farm to Destination Market</i>	27
4.2.3 <i>Integrating Environmental Mitigation Measures in CWS Design</i>	27
4.2.4 <i>Establishment of Cupping Capacity and Cupping Labs</i>	28
4.2.5 <i>Establishment of Small Dry Milling Facilities</i>	28
4.3 <i>Access to Finance:</i>	29
4.3.1 <i>Establishing a Climate of Confidence with Commercial Banks</i>	29
4.3.2 <i>Using Grant Funding to Jump-Start Investments in the Coffee Sector</i>	30
4.3.3 <i>Establishment of the DCA Loan Portfolio Guarantee Program</i>	31
4.4 <i>Marketing</i>	31
4.4.1 <i>Financing In-Bound Trade Missions</i>	32
4.4.2 <i>Engaging U.S. Based Marketing Consultants</i>	32

4.4.3	<i>Verifying Product Quality Prior to Distributing Samples to Potential Buyers</i>	33
4.4.4	<i>Strategically Planning Product Marketing</i>	33
SECTION V		34
5.0	CONSOLIDATING RESULTS	34
5.1	<i>On-Farm Production</i>	34
5.1.1	<i>Improving Cherry Quality through Better On-Farm Management</i>	35
5.1.2	<i>The Use of Media Campaigns to Promote Better Coffee Husbandry</i>	35
5.1.3	<i>Inauguration of Certified Supplier Programs with Associated Incentives</i>	35
5.1.4	<i>Support for CWS-Based Extension Services</i>	35
5.1.5	<i>Establishment of Tracability to the Sector Level for Certain CWS</i>	36
5.2	<i>Coffee Processing</i>	36
5.2.1	<i>Reinforcing Existing Processing Skills</i>	36
5.2.2	<i>Creating Cupping Capacity at Privately-Owned Washing Stations</i>	36
5.3	<i>Environmental Management</i>	37
5.3.1	<i>Conformity to Fair Trade, Preferred Supplier and Organic Standards</i>	37
5.3.2	<i>Improving Compost Management and Distribution</i>	38
5.4	<i>Financial Management of CWS</i>	38
5.4.1	<i>Promotion of Increased Financial Transparency of Cooperatives</i>	38
5.4.2	<i>Consolidation of CWS Financial Management Skills</i>	38
5.5	<i>Reinforcing the Capacities of RWASHOSCCO and the Rwanda Fine Coffee Association (RFCA)</i>	39
5.6	<i>Transferring Project Functions to Indigenous Organizations</i>	39
SECTION VI		42
6.0	CONCLUSION	42

LIST OF ACRONYMS

ADAR	Assistance à la Dynamisation de l'Agribusiness au Rwanda
ACDI-VOCA	U.S. based- Non-Governmental Organization
COOPAC	Coopérative pour la Promotion des Activités Café
CLI	Coffee Lab International
CWS	Coffee Washing Station
DCA	Development Credit Authority
FLO	Fair Trade Labeling Organization
GOR	Government of Rwanda
ISAR	Institut des Sciences Agronomiques du Rwanda
NGO	Non-governmental Organization
OCIR Café	Office des Cultures Industrielles du Rwanda/Café
PEARL	Partnership for Enhancing Agriculture in Rwanda through Linkages
RFCA	Rwanda Fine Coffee Association
RWANDEX	Largest Rwandan exporter of semi-washed coffee
RWASHOSCCO	Rwandan Small Holder Specialty Coffee Company
RWF	Rwandan Francs
SNV	Dutch International Development Organization
UCAR	Union des Caféculteurs du Rwanda Central
UPROCA	Union pour la Promotion du Café
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

During the last five years, Rwanda has made great progress in developing a quality coffee industry. Prior to 2001, Rwanda was unknown on the specialty coffee market. Today, Rwanda is a sought-after specialty coffee origin that supplies specialty roasters and large retail chains in the United States and Europe. Demand far exceeds supply. Approximately 50,000 households have seen their incomes from coffee production double, and some 4,000 jobs have been created at coffee washing stations. The rapid growth of the specialty coffee industry in Rwanda has been widely covered by the international media and industry press.

The United States Agency for International Development (USAID) has been the principle provider of technical assistance, training, and targeted financial support to the nascent specialty coffee sector through primary program implementers: ACDI-VOCA; the ADAR Project, implemented by Chemonics International; and the PEARL Project, executed by Michigan State and Texas A&M Universities. Through agency investments in technical assistance, training, and direct financial support through grants and the Development Credit Authority (DCA) loan guarantee program, 46 coffee washing stations have been constructed and several hundred Rwandans have been trained in improved coffee production, coffee processing, washing station management and marketing. USAID support is largely responsible for the sector's early success. Despite relatively modest investments in the sector, USAID financed programs have generated significant results. The mission's coffee program is widely regarded by industry players, the Government of Rwanda (GOR), and other donor agencies as being a reference for agri-business development programs.

There were several key factors identified as being critical to the success of the program. The potential to produce specialty coffee in Rwanda was thoroughly investigated by several international industry experts who visited all of Rwanda's coffee growing regions. USAID's implementing partners carefully selected the cooperative and private sector partners with whom they worked and targeted assistance to those clients who were best positioned to capitalize on USAID resources. The implication and buy-in of local government authorities during the early phases of project development was crucial to success.

USAID made wide and effective use of regional expertise in coffee processing, and employed upwards of 15 Kenyans and Burundians to train Rwandans in coffee processing techniques. The establishment of cupping labs and training of Rwandans in coffee cupping permitted individuals to assess coffee quality and isolate different lots of coffee based on quality.

USAID implementing partners and their cooperative and private sector clients were able to establish a climate of confidence with local banks, by virtue of the quality of business plans developed, the training provided to loan officers and the establishment of three-way partnerships between investors, banks and different USAID-financed projects. The creation of a DCA loan guarantee program was essential to increasing access to finance for coffee sector investors.

USAID partners pursued a vigorous and effective marketing program which privileged in-bound trade missions. These in-bound trade missions were instrumental in raising the profile of

Rwandan fully-washed coffee. The employment of U.S. based marketing consultants who hosted seminars and cupping sessions for industry importers and roasters proved very useful. The consultants provided an effective way to introduce specialty coffee actors to Rwandan coffee and served as a relay between the Rwanda-based projects and specialty importers and roasters.

Notwithstanding the enormous achievements of the USAID coffee program, there are several areas which require continued support in order to consolidate results and expand impact. There is a need to improve on-farm coffee production techniques, specifically mulching, pruning and composting, as a high proportion of the cherries currently being processed by coffee washing stations is of poor quality. The transport of cherries to coffee washing stations is sometimes slow and this has an adverse impact on cup quality. There is a need to reinforce processing skills of washing station staff as a significant number of workers have not yet mastered processing methods.

Environmental management at washing stations needs reinforcement. Many stations are not equipped with water recycling pumps which increases water use and production costs. Virtually all stations must improve liquid and solid effluent disposal to avert contamination of surrounding water sources. Improved environmental management is also critical to obtaining sought after organic and preferred supplier certifications which can add significantly to the sales price.

Financial management of washing stations should be reinforced. Despite significant efforts by USAID-implementing partners, cooperative and privately owned stations need to diligently apply management tools to insure transparency and accurate cost accounting.

Two recently created industry groups, RWASHOSCCO, representing cooperatives and RFCA, representing privately owned enterprises, require continued support in order to provide the services furnished by USAID-financed projects.

The success of the USAID financed activities in the coffee sector has spurred interest on the part of several other donors such as the European Union, IFAD, the Dutch and the World Bank. The Government of Rwanda has an ambitious program to dramatically increase the number of coffee washing stations from 46 to 210 within the next four years. There is a pressing need for donors, to harmonize approaches to sector activities and discuss with the GOR and industry actors optimum ways to provide continued technical assistance and training given the dramatic increase in projected coffee washing station construction.

SECTION I

Introduction

Over the past five years, Rwanda has made spectacular strides in developing a quality coffee industry. Prior to 2001, Rwanda, a traditional producer of mediocre quality semi-washed Arabica coffee, was unknown to importers, roasters, and consumers of specialty and premium grade coffees. Today, Rwandan coffee is a sought after origin. The country's fully-washed arabicas are being sold through more than 30 renowned specialty roasters and importers in the United States, Europe and Japan. Demand far outstrips supply, and importers regularly purchase coffee at prices two to three times the international reference price months before the cherries have been harvested and processed. Rwandan fully washed coffees now regularly place among the top entrants in African tasting competitions, frequently scoring higher marks than coffees from established world class origins such as Kenya and Ethiopia. The explosion of Rwanda on the quality coffee market has been covered by international and national media such as CNN, the New York Times, Time Magazine and the Washington Times among others.

The nascent Rwandan fully washed specialty coffee market has, in five production seasons, generated sales of more than \$3.6 million. According to USAID implementing partner project reports, approximately 50,000 rural households have seen their incomes from coffee production more than double and some 2,000 jobs have been created within coffee washing stations. The impact of this additional money into rural areas is perceptible. Micro credit banking services have sprung up near washing stations and primary school enrollment is increasing as heads of households are better able to meet school fees.

In 2000, there were only two coffee washing stations (cws) in country, neither of which was operational. There was no knowledge of processing and storage techniques, financial and administrative management of washing stations, and no established marketing contacts with premium quality importers and roasters. Today, there are 46 coffee washing stations, 38 of which were constructed, with USAID assistance. In 2005, the 46 stations produced 1,107 metric tons of fully washed coffee. Thousands of Rwandans have been trained in improved production techniques, wet processing, storage, cupping, financial and cooperative management, and marketing. The rapidity with which the sector has evolved is unprecedented and has surprised virtually every knowledgeable industry insider.

The United States Agency for International Development (USAID) has been the principle provider of technical assistance, training, and targeted financial support to the nascent specialty coffee sector; USAID support is largely responsible for the sector's early success. Despite relatively modest investments in the sector, USAID financed programs have generated significant results. The mission's coffee program is widely regarded by industry players, the Government of Rwanda (GOR), and other donor agencies as being a reference for agri-business development programs.

The mission's coffee development strategy has been based on a value chain approach to commodity development which seeks to address all links in the farm to importer continuum through the integration of business development and financial services to both rural cooperatives

and private investors. Business development services have run the gamut from training in improved on-farm production techniques, feasibility studies for cws construction, construction supervision, training in coffee processing and washing station management, coffee evaluation (cupping), and product marketing. Financial services have been provided through direct grants to cooperatives and the establishment of a Development Credit Authority loan guarantee program administered through a local bank.

USAID/Rwanda's focus during the immediate post-genocide years was on assisting the country to meet basic food security needs. As the political and economic situation stabilized, and the country moved towards reconciliation and reconstruction, the mission shifted its focus for the 1998-2003 Strategic Plan towards economic growth activities, and expected its implementing partners to act as catalysts by developing replicable models to stimulate interest and investment in agribusiness. As such, much of the sector's early success is directly attributable to technical assistance, training, and financial support provided by transitory USAID-financed projects which jump started the production and marketing of fully-washed coffees.

USAID's investments in the sector to date have produced exceptional preliminary results, but Rwanda's nascent fully washed coffee industry is both fragile and small. The establishment of a new, specialty coffee sub-sector which can depend on local human and financial resources is a long-term challenge. Although significant local capacity has been built through USAID-financed projects, this capacity needs to be reinforced. The provision of technical assistance, training, and financial support, which has heretofore been provided mostly by USAID and other donors, must be transferred over time and anchored into permanent Rwandan public and private sector institutions in order to place the sector on a path to sustainable development.

Despite the construction of 46 washing stations over the last five years, only 7% of Rwandan coffee is fully washed and only 5% of coffee producers are reaping the economic benefits accruing from the production of premium quality fully washed coffee. If fully washed coffee is to be an engine of widespread rural economic growth, processing capacity and fully washed production must continue to expand.

The purpose of this report is two-fold: (i) to examine the explanatory factors which were responsible for the initial success of the USAID coffee program and draw lessons learned which may be applicable to other USAID commodity development programs, and (ii) identify key activity areas that need to be addressed in the coming years to transfer services provided by USAID to indigenous organizations in order to place the coffee sector on a path towards sustainable growth. As such, the report is not a value chain analysis and does not examine the attributes of OCIR-CAFÉ, the GOR's coffee regulatory authority, the performance of the national agronomic research institute, the role played by other donors in the coffee sector or the pertinence of the GOR's coffee development strategy. The report focuses on USAID investments in the sector and provides suggestions on ways to consolidate results achieved to date.

The report is divided into five main sections. It provides an overview of the coffee sector, examines USAID investments over the last five years, and describes best practices employed by USAID implementing partners. It concludes by offering suggestions as to how best to consolidate results and expand impact.

SECTION II

2.0 An Overview of Rwandan Coffee from 1904 to 2001

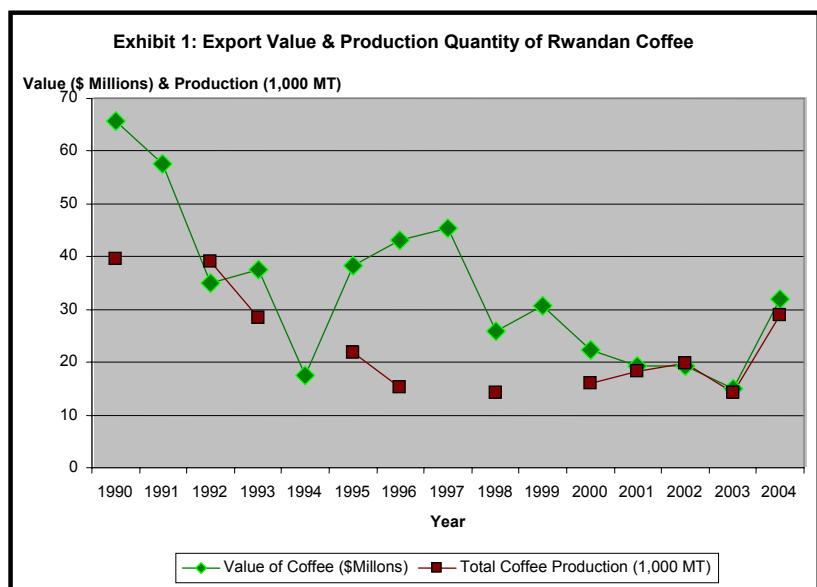
Coffee in Rwanda dates from its introduction in 1904 with its first exports occurring in 1917. Upon its introduction, coffee became the major source of income in rural Rwanda and benefited from strong political support from colonial and post-colonial authorities. Its cultivation was made compulsory in 1933 and legislation passed at Independence in 1963 prohibits uprooting of coffee trees.

As suggested by the GOR imposed production requirements, the state was heavily implicated in all phases of coffee production, marketing, dry milling, and export. *OCIR CAFÉ* (*Office Nationale des Cultures Industrielles-Café*), the GOR agency responsible for the coffee sub-sector, distributed inputs such as seedlings, chemical fertilizers, and phytosanitary products, at either no cost or at highly subsidized rates. Before partial liberalization of coffee exports in 1995¹, RWANDEX, the sole dry milling and export company (majority-owned by the GOR), held a monopoly on coffee exports. Prior to the establishment of the COOPACABI coffee cooperative of Bicumbi in 1996, no coffee cooperatives existed in Rwanda. Farmers sold semi-washed coffee directly to RWANDEX agents, at prices pre-determined by the GOR. However, coffee producer associations did exist, but served the limited function of input distribution (and eventual reimbursement) of products supplied by *OCIR-CAFÉ*.

2.1 Role in the Economy

Since its introduction into the agricultural economy, coffee has been, in all but the most recent years, the country's leading source of foreign exchange. According to GOR statistics, coffee was the leading export earner throughout the 1990s accounting on average for 56.7% of the value of all exports. 2000 is the first year (for which data is available) that tea surpassed coffee in terms of export revenue

generation. During that year, tea accounted for 34% of exports compared to 32.5% for coffee. As can be seen from Exhibit 1, production and revenues generated by coffee exports fluctuated widely. Exports accounted for anywhere from \$65.7 million to \$17.4 million, in function of



¹ Although the export market was opened to other operators, the GOR continued to set producer prices through 1998.

prevailing international coffee prices and national production.² During the 1990s, production peaked at 39,000 metric tons (mt) in 1992, fell by more than half following the 1994 genocide, then recovered slightly during the later part of the 1990s, reflecting both the implosion of the rural economy caused by the genocide and producer response to historically low prices.

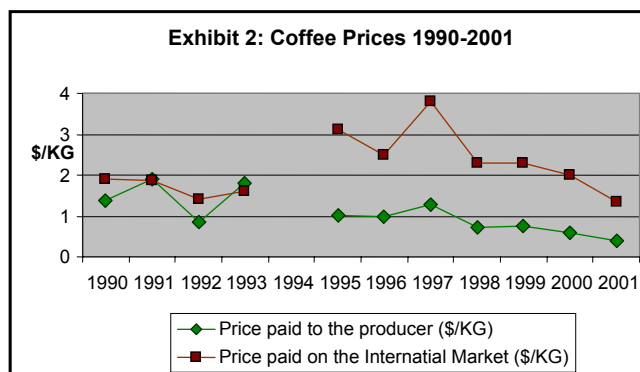
2.2 Fluctuating Prices

The world coffee market follows a classic agricultural commodity cycle. Higher prices spurred by low production, (generally due to climatic conditions, in particular, drought or frost in Brazil) encourage new planting which, three years later becomes productive and drive prices lower. During the 1990s, this cycle was accentuated by significant increases in world coffee supply from Brazil and Vietnam, resulting in an increase from 97 million to 117 million 60 kg. bags during the decade and, starting in 1997, sent world coffee prices towards a historic low of \$0.52/lb in 2001.

During the 1990s, and early into the following decade, administered prices paid to Rwandan farmers closely mirrored international market fluctuations and the downward trend. In 1990, Rwandan farmers received an average (in dollar equivalent) of \$1.18 per kilo of partially washed coffee; by 2001, the price had shrunk to 40¢ (Exhibit 2).

2.3 Production Environment and Systems

Rwanda possesses nearly ideal growing conditions for Arabica coffee.³ Rich volcanic soils, high altitudes that slow bean development and favour taste enhancement, adequate rainfall, and clement temperatures are key parameters shared by Rwanda and other renowned coffee origins. While coffee is produced throughout Rwanda, with the exception of the northeast and extreme southeast corners, production is concentrated in the central and western parts of the country. Harvesting occurs between March and June, although there is a small harvest between September and November.



According to the GOR Poverty Reduction Strategy Paper, Rwanda is the most densely populated country in Africa and land holdings average less than 0.5 hectare per capita, generally divided among often far flung plots. Some 450,000 farmers produce coffee along with other crops, notably beans, savory banana and corn. The average number of trees per farmer varies from 150 to 300, depending on the region, qualifying the production system as one of micro rather than

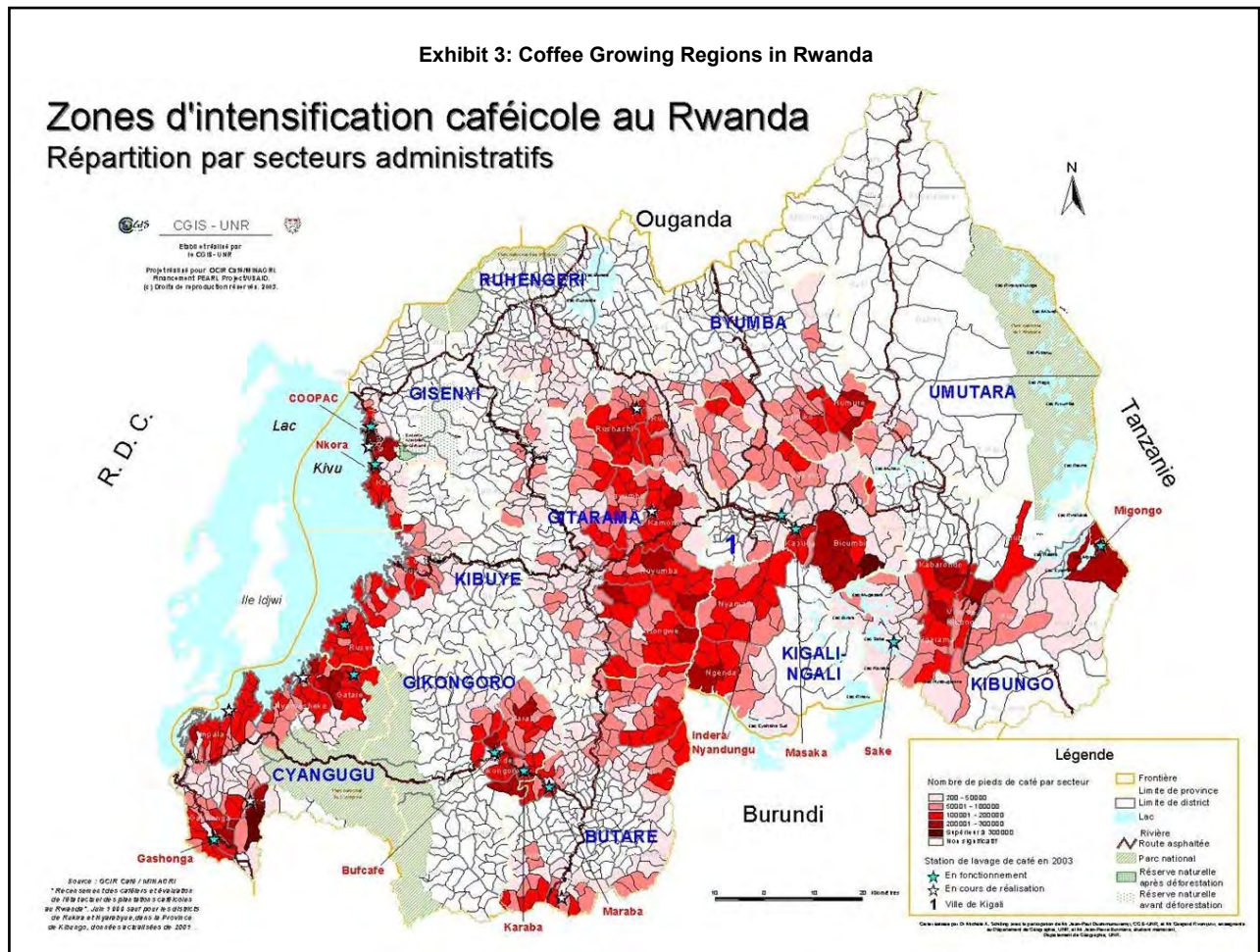
² It goes without saying that during the 1990s, all aspects of the national economy were deeply impacted by the civil war, genocide, rehabilitation, and reconstruction of the country.

³ There are two main coffee varieties in the world: Arabica and Robusta. The former represents 60% of world output and produces finer coffees. The later accounts for 38% of the world market, has generally higher caffeine content, is of poorer intrinsic quality, and is used for ordinary, commercial grade coffee and as filler in blends. The remaining 2% is Liberica and Excelsa, poorer varieties cultivated mainly in South Asia and West Africa.

smallholder.⁴ There are, however, a handful of large coffee plantations, the biggest being 53 hectares.

Historically, few chemical inputs are applied to coffee trees, and as such, yields are low because of poor plant nutrition, and fungal and insect damage. Losses attributable to fungal damage, primarily Leaf Rust, are estimated to be as high as 40%. Moreover, poor crop husbandry and the advanced age of most of the country's coffee trees further compromise productivity.

The most widely found coffee varieties in Rwanda are Bourbon varieties of Jackson, Mibilizi and Mayaguez, which are particularly susceptible to disease. Prior to 2001, all coffee pulping was done either on-farm using mortar and pestle, or at rural centers using hand-turned manual pulping machines. The freshly pulped beans were then soaked in water overnight within households and set on the ground to dry. Traditional artisanal methods of coffee processing do not favour the preservation of the bean's inherent qualities. Drying the beans on the ground inhibits the free circulation of air and impedes uniform drying. Additionally, it is much more difficult to conduct effective hand sorting of beans when they are spread on mats. This process tends to decrease quality which is reflected in lower prices obtained on the market.



⁴ To provide perspective, small holder coffee producers in Central America have on average 12,000 trees, or 80 times the productive capacity of Rwandan farmers.

2.4 Coffee Marketing and Financing from 1990 to 2001

Before the liberalization of coffee marketing in 1995, all coffee was sold to RWANDEX, either directly through their field agents or through middlemen. As mentioned earlier, a producer price was fixed by OCIR-CAFÉ at the beginning of the production season, based on price expectations of the international market and estimations of production costs throughout the production chain, from farmer to exporter. RWANDEX then dry milled the coffee⁵ in one of their two large milling complexes (Kigali, Gisenyi). No price differential was accorded to quality.

In 1995, the new government opened the coffee market to competition. Six new exporters established operations, two of which closed after two years of processing because of financial insolvency. Some of the exporting firms were partially owned by European coffee importers, mainly from Belgium, which facilitated supply chain management. This semi-washed coffee was sold to large European importers, historically at prices discounted by anywhere from \$0.10 to \$0.20 per pound below the prevailing New York Commodity Exchange's "C" market price, reflecting poorer quality relative to other comparable coffee origins.

Historically, producers received limited financing for inputs. OCIR-CAFÉ advanced pesticides to producer groups and coffee cooperatives, but repayment levels were low. In 1998, the European Union provided 2,000 tons of chemical fertilizers to farmers, but the vast majority of the fertilizers were used on crops other than coffee.

Local banks provided credit to small businesses to finance the purchase of parchment coffee from farmers which was resold to exporters. High losses during the 2001 campaign prompted banks to discontinue financing sector middlemen. Banks did, however, continue to provide credit to exporters for the purchase of coffee. Exporters directly financed middlemen, thereby shifting bank credit risk from middlemen to the more financially solvent exporting firms.

2.4.1 Factors Responsible for Poor Quality and Low Productivity

Prior to 2001, Rwanda was trapped in a poor quality/low productivity paradigm. Because of low producer prices, farmers had no incentive to invest limited resources in coffee production. Moreover, no price premium was accorded for better quality, further dissuading producers from making requisite investments of time and resources. Finally, with the exception of the small washing station located at ISAR, the government agronomic research facility, used for demonstration purposes, there were no operating coffee washing stations (cws) in country⁶ to produce fully washed coffee, which could increase product value.⁷

Soil fertility in plantations decreased as farmers did not apply chemical or organic fertilizers to

⁵ Dry milling removes the parchment (or skin) surrounding the bean, and then sorts and grades the bean, rendering export-ready "green coffee".

⁶ Two cws did exist, Nkora, near Gisenyi which was constructed in the late 1950s and Masaka, on the outskirts of Kigali which was built in the 1980s. The stations only functioned intermittently, using a variety of management structures. Neither station produced quality coffee and production levels remained anecdotal.

⁷ Conventional wisdom asserts that the typical value added from fully washing coffee is around \$0.25/kg above the price for the same coffee, if semi-washed on-farm by producers. The increase in price achieved for fully washed coffee, however, must be balanced against significant investment and production costs involved in the construction and operation of a cws.

coffee trees. When chemical or organic fertilizers were available, farmers choose to apply them on other crops, vegetables and potatoes in particular, which were often sold in local markets and for which the perceived economic benefit of fertilizer applications was more readily apparent. In the 1990s, a high percentage of the existing coffee tree stock had passed the age of peak productivity and farmers had no motivation to renew plantings. Best production practices were not routinely applied to coffee holdings; tree stock was not regenerated through cut backs, and pruning, mulching, and weeding were rarely conducted. Crop losses were high, due to the prevalence of coffee fungal diseases, notably leaf rust, and insect infestation, mainly from antestia to which the existing bourbon coffee varieties were particularly susceptible. These agronomic factors both decreased productivity and had a significant negative impact on the quality of coffee produced in Rwanda. In 1987, 40% of Rwandan coffee was classified as “standard grade” and 60% as “ordinary grade”.⁸ In 2000, 90% of production was classified as “ordinary grade”, reflecting the steady quality decline of Rwanda’s leading export crop.⁹

By the end of the 1990s, the heyday of coffee in Rwanda appeared to be over. Producers had all but given up on coffee as a viable source of revenue. Many farmers uprooted trees and replaced them with food crops. Plantations were almost universally neglected and coffee was often left on trees as the effort involved in harvesting did not seem warranted.

2.5 The GOR Coffee Development Strategy

In response to the steady decline in production, quality and export earnings, and in view of the recognized potential contribution that the sector could make to increased economic growth, the GOR adopted the 1999-2003 Coffee Strategy and Action Plan. Key tenets of this strategy included:

- *Increasing production* through the dissemination of improved varieties, the adoption of better crop husbandry practices, appropriate and timely use of inputs and by supporting grower associations to assume progressively greater responsibility for production activities;
- *Improving coffee quality* through producer education, improved infrastructure, investment in washing stations and strengthened cooperative and association management;
- *Promoting greater equity in value distribution* through producer participation in coffee marketing.

Although modest progress was achieved in executing the strategy, due overwhelmingly to USAID coffee investments begun in 2001 and discussed in the following section, key strategic objectives were only partially met. Only 50 percent of the projected 20 million coffee trees were planted during the period. Less than three percent of the 8000 mt of chemical fertilizers programmed for distribution were effectively delivered.¹⁰

In 2004, the GOR, with significant assistance from ontheFrontier, a U.S. consulting firm hired

⁸ Standard grade coffee is that with less than 36 defective beans out of a sample of 300 and no undesirable cup defects. Ordinary coffee is that which does not meet both requirements.

⁹ Grading percentages obtained from OCIR-CAFÉ.

¹⁰ GOR Horizon Action Plan, pg. 12

under a long-term contract by the Office of the Presidency, elaborated the “Horizon 2010 Coffee Action Plan”. The new program reaffirms the focus, objectives and targets of the 1999-2003 Plan, continues on-going activities and spells out additional responsibilities for the public sector. The Plan calls for investing nearly \$60 million during the period 2005-2010 to develop and support the quality coffee sector. Though it does not specify sources of funding, the text of the Plan implies that strong support is expected from international donors.

The major thrusts of this follow-on plan include:

- **Production:** The activities proposed under the 2010 Plan will continue to heavily support increased production and productivity by increasing plantings of appropriate varieties, improving production technology and increasing the use of chemical inputs. The production of fully washed coffee is projected to reach 24,000 MT in 2010, representing 60% of total coffee output. The primary vehicles for carrying out these activities will be producer cooperatives and associations, the National Coffee Office (OCIR Café) and the Rwandan Agricultural Sciences Research Institute (ISAR). In order to improve on its 1999-2003 track record, the GoR proposes to strengthen these three implementing mechanisms, paying special attention to improving cooperative management, OCIR Café’s supervisory capacity and ISAR’s contribution to technology recommendations and improved varieties.
- **Quality:** The centerpiece of its strategy is an increased number of coffee washing stations (CWS) in the hands of cooperatives and private investors. Support is proposed in the form of financial assistance (subsidies, grants and loan guarantees), rural infrastructure (electricity, roads and water) and technical assistance and training in CWS management and operation. The Plan also proposes to strengthen quality control capacity by training a greater number of cuppers to provide services to the washing stations.
- **Marketing:** The Plan’s marketing strategy focuses on branding “Rwanda Origin” and creating a credible mechanism to guarantee the “legitimacy of origin” to buyers. It also assigns increased scope and responsibility to the GoR for promoting and marketing coffee at home and in international markets. OCIR Café is slated in the Plan to play a predominant role in quality control, branding and marketing.

SECTION III

3.0 USAID Investments in the Coffee Sector

During the 1990s, the USAID project portfolio changed to respond to the dramatic events of the early years of the decade which culminated in the genocide of 1994. Prior to the genocide, USAID investments in the agriculture/natural resource management sector focused on reforestation, reinforcing agricultural research capacity, and improved crop production. The destruction and desolation caused by the genocide and the subsequent displacement of a large portion of Rwanda's population, shifted USAID priorities from agricultural development to reconstruction in which food aid-based programs held pride of place. As the country began to recover from the ordeals of the civil war, genocide, and aftermath, USAID moved from a program based on disaster assistance to one where economic growth could become a realistic strategic objective.

In the beginning of 2001, several new USAID economic growth projects were implemented. USAID mission leadership unequivocally mandated these new projects to generate tangible results through the implementation of pilot activities that would demonstrate the profitability of well conceived ventures, and serve as a model and catalyst for future investment in Rwanda's nascent agribusiness sector.

The mission's approach to economic growth, as seen through the design and subsequent implementation of this new generation of projects, had several salient characteristics. An emphasis was placed on value chain methodology, whereby projects were encouraged to work with all links in the commodity chain, from production to final destination market. Mission projects targeted a wide spectrum of vehicles to promote economic growth. Implementing partners worked with both private sector investors and rural cooperatives, and mobilized financing from commercial banks, microfinance institutions, and grant funding from the Food for Peace Program. Importantly, financing available to implementing partners and their clients was adequate to fund both significant capital investments in infrastructure and as seasonal loans for operating costs. The mission emphasized leveraging resources, "external" programmatic resources such as the Global Development Alliance and the Development Credit Authority, as well as internal project resources, whereby implementing partners were encouraged to co-finance activities that promoted Rwanda's economic growth. The mission's economic growth portfolio also sought to reinforce agricultural research, decimated during the genocide, through training and technical assistance provided to local research institutes.

The mission did not specifically encourage its implementing partners to target the coffee sector. In fact, coffee was one commodity among several which received USAID support and for which significant results were generated. Although a general consensus existed that there was a significant opportunity to create value by improving coffee quality, even experienced importers of African coffee were surprised by the rapidity with which Rwanda established a presence in the highly competitive specialty coffee market.

3.1 An Overview of Primary Implementing Partners: ACDI-VOCA, ADAR, and PEARL

The USAID coffee program was primarily implemented by three partners: ACDI-VOCA, ADAR and PEARL.

3.1.1 ACDI-VOCA

ACDI-VOCA is an American non-governmental organization which works primarily in cooperative development, and has provided assistance for coffee cooperatives in several countries. In Rwanda, ACDI-VOCA, through public auctions, sells vegetable oil and wheat provided by the U.S. Government's Food for Peace Program and uses the proceeds of these sales to finance cooperative development activities in several areas including rice production, fisheries, food processing, road and rural infrastructure rehabilitation and coffee.

Between 2001 and 2003, the NGO provided approximately \$600,000 financial and technical assistance to nine cooperatives¹¹, with 85% of the funding allocated to four entities: COOPAC (\$300,000), UCAR (\$105,000), ABAHUZAMUGAMBI, commonly referred to as Maraba (\$77,000) and IAKAKA/Karaba (\$42,000). Seven of the nine cooperatives, with the exception of UPROCA and COOPAC, were assisted by the PEARL Project for coffee production, processing and marketing.¹² Assistance provided by ACDI-VOCA varied according to the needs of the individual cooperatives. ACDI-VOCA inputs ran the gamut from the development of feasibility studies and business plans, grant funding for cws construction and equipment purchases, cws management assistance, the development of market connections, Fair Trade certification and study tours. With the exception of the COOPAC cooperative, ACDI-VOCA's active involvement with the individual cooperatives generally concluded once the specific inputs had been provided. ACDI-VOCA does, however, continue to maintain a close working relationship with the COOPAC cooperative and provides advisory services and limited financial support for a Burundian coffee processing specialist during the coffee production season.

The nature of ACDI-VOCA's support was largely dictated by the types of available financial and human resources. The organization had significant local currency resources generated through the sale of commodities provided through the Food for Peace Program. These were used to provide grants, locally sourced technical assistance and training, financing for study tours and in-bound and out-bound marketing missions. The NGO had very limited U.S. currency resources and expatriate technical assistance could only be obtained through the ACDI-VOCA expert volunteer program.

3.1.2 The ADAR Project

The ADAR Project (Agribusiness Development Assistance to Rwanda) is a six-year project,

¹¹ The nine coffee cooperatives that received assistance are: UPROCA, ABAHUZAMUGAMBI (Maraba), COOPAC, UCAR, ABURWAGASABO, IAKAKA, COCAGI, DUKUNDE KAWA, and NICOFA.

¹² COOPAC received most of its technical assistance, training and financial support from ACDI-VOCA. PEARL and ADAR provided the cooperative with limited technical assistance during cws construction (ADAR) and for the establishment of market linkages (PEARL). The UPROCA cooperative entered into a partnership with a local investor who received support from the ADAR project.

began in January 2001 that is implemented by Chemonics International.¹³ As per its original Statement of Work, ADAR's mandate is to act as a catalyst for increased investment in Rwandan agribusinesses through the provision of technical assistance and training for processing and marketing to small and medium-sized agribusiness firms. ADAR provides assistance in horticultural production (passion fruit, Bird's Eye Chillies), tea, food processing, honey and pyrethrum, as well as coffee.

The project has an annual budget of approximately \$1.4 million and employs five technical specialists in the areas of coffee, horticultural production and business development services. Roughly 50 percent of the annual budget is devoted to the coffee sector. ADAR works exclusively with private sector investors and, in 2005, provided direct assistance to 16 washing stations. Services provided include implementation of feasibility studies, business plan development, advice on equipment selection, elaboration of construction plans, construction supervision, and training in coffee processing, cws financial management and establishment of market linkages. ADAR provides limited financial support through a \$300,000 small matching grants fund where individual grants are capped at \$25,000 per client. Approximately \$220,000 in grant money has been disbursed to coffee sector clients.

Most services are provided on a no-cost basis, although ADAR clients are expected to pay incidental costs such as in-country per diems during training programs and certain transportation and housing costs. Core project services, such as the provision of Kenyan master trainers to provide instruction in coffee processing, are limited to a two-year period, after which time clients are considered to have graduated from the ADAR program. These clients, however, can continue to receive limited assistance for the establishment of new market contacts, the expedition of samples to prospective clients or training in project-sponsored events, as required.

3.1.3 The PEARL Project

The PEARL Project (Partnership for Enhancing Agriculture in Rwanda through Linkages) is a six-year project which started activities in October 2000 and is implemented by Michigan State and Texas A&M Universities. PEARL works closely with the National University of Rwanda and has a dual mandate to provide human and resource development for Rwanda's agricultural institutions and establish community development outreach programs. In its outreach program, PEARL works almost exclusively with rural cooperatives and provides assistance in Bird's Eye Chilli Production, processed cassava products for the European ethnic market and coffee.

PEARL provides assistance to coffee cooperatives in cooperative formation, business plan development, credit negotiations, agronomy, cws construction, coffee processing, Fair Trade certification, cupping and marketing. It employs 6 full-time professional staff in the coffee program, including three senior agronomists, two technicians, a cooperative development specialist, and a part-time financial management specialist who works across programs. The project budget is approximately \$1 million per year and is supplemented by \$300,000 to \$500,000 in additional funds garnered through coffee industry partnerships and other competitive grant sources. The project staffs an outreach center which provides market information and

¹³ Both the ADAR and PEARL Projects were originally three year activities but were extended for an additional three years in early 2003.

internet access to the local agribusiness community.

In the following graphic, the specific services provided by USAID implementing partners are detailed.

Exhibit 4: USAID Implementing Partner Services Offered to the Coffee Sector

TECHNICAL ASSISTANCE

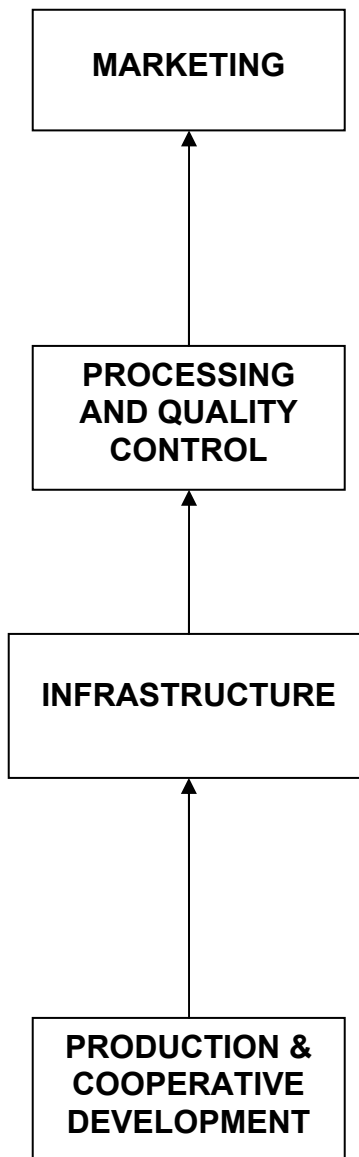
FINANCIAL SERVICES

- Trade Shows (Financing & Organizing)
- In-Bound Marketing Missions
- Out-Bound Marketing Missions
- Creation of Promotional Materials
- Fair Trade Registration
- Samples Distribution

- Training in Coffee Processing
- Training in CWS Management Storage, Personnel Management, Cost Accounting
- Construction of Cupping Labs
- Cupping Training

- Feasibility Studies
- Topographical and Hydraulic Surveys
- Environmental Assessments
- Development of Construction Plans
- Construction Supervision
- Equipment Selection, installation, and Testing

- Provision of Extension Services
- Provision of Inputs
- ToT in Crop Husbandry
- TA in Plantation Establishment
- Facilitating Coop Registration
- Training in Coop Organization and Governance



- Seasonal Loans for Cherry Purchase (DCA, Ecologic, Commercial Banks)
- DCA Loans for CWS Construction
- Commercial Loans for CWS Construction
- Grants for CWS Construction
- Business Plan Development and assistance in loan negotiations

- Business Plan Development

3.2 Results Achieved through 2005

The entry of Rwanda into the specialty market can be traced to March 2001. Following a visit by the rector of the National University in Butare and the PEARL director to the district of Maraba, the PEARL project entered into a partnership with a small group of Maraba producers to increase

income by improving coffee productivity and quality. PEARL financed the construction of a small washing station which was inaugurated in July 2001 that produced a meagre 200kg of fully washed coffee. Samples were then sent to Dr. Sam Oliveri, an experienced specialty coffee producer and acquaintance of the PEARL director for assessment. Based on this assessment, Dr. Oliveri believed that the coffee had significant potential and would be of interest to Community Coffee of Louisiana, a former buyer of Dr. Oliveri's coffee.

In late 2001, the PEARL and ADAR projects co-financed a visit by Dr. Oliveri to assess the country's potential to produce premium quality coffee. Based on a combination of agro-climatic factors, altitude and existing bourbon variety coffee species, Dr. Oliveri considered Rwanda's potential to be vast. Upon returning to the United States, he contacted Community Coffee of Louisiana to solicit their interest in sourcing product from Rwanda.

At the end of the production season, the PEARL Project, with a \$77,000 grant from ACIDI-VOCA and significant resources from the National University in Butare, OCIR-CAFÉ and ISAR, expanded the capacity of the existing station in Maraba and installed a spring water supply system. During the 2002 season, Dr. Oliveri returned to Rwanda during a two month period, as part of the PEARL coffee team, to assist the Maraba cooperative to execute quality interventions from production through cherry transport to processing. Thirty –three tons of 16+ A1 green coffee were produced.

Based on samples received in early 2002, Community Coffee's chief buyer travelled to Rwanda to meet with members of the Maraba cooperative and, during his visit, was received by President Kagame. Impressed with the quality of the coffee, the buyer purchased one of two containers of Maraba Bourbon produced during its first full season at \$3.00 per kilogram, or three times the price of coffee sold through Rwandan exporters of semi-washed coffee.

Later in 2002, John Schluter, a well known buyer of African coffees and a long time advisor to the Rwandan coffee industry, suggested the Maraba cooperative to Union Roasters, a British firm who wanted to source a high quality, Fair Trade Certified coffee produced by Rwanda. Following a trip to Rwanda by Union Roasters management, the firm purchased the second container of Maraba coffee which was well received and subsequently commercialized through Sainsbury's supermarkets in Britain. The sale of this coffee was subject to significant media coverage; a ceremony was organized by Union Roasters and Sainsbury's, presided over by Claire Short, the then British Minister for

Exhibit 5: What is Specialty Coffee?

There is no definitive definition of specialty coffee. Certain industry actors define specialty coffee in quantitative terms: coffees which receive grades higher than 80 on a scale of 100 during cupping evaluations conducted by cupping experts are considered "specialty". The higher the grade, the more "special" the product. The Specialty Coffee Association of America says the following: "Sometimes called "gourmet" or "premium" coffee, specialty coffees are made from exceptional beans grown only in ideal coffee producing climates. They tend to feature distinctive flavors, which are shaped by the unique characteristics of the soil that produces them".

Other generally admitted attributes of specialty coffee are: specialty coffees are sold by specific and traceable lot rather than in bulk; the beans are generally larger than standard grade beans; specialty coffees are marketed based on perceived product differentiation, be it by origin, cupping qualities or certification. Purchases by importer, roaster, retailer and consumer are dictated more by perceptions of quality and back story rather than on price. Specialty coffee can be fully washed, semi-washed or unwashed. Coffee processing methods have no bearing whatsoever on the definition of specialty coffee.

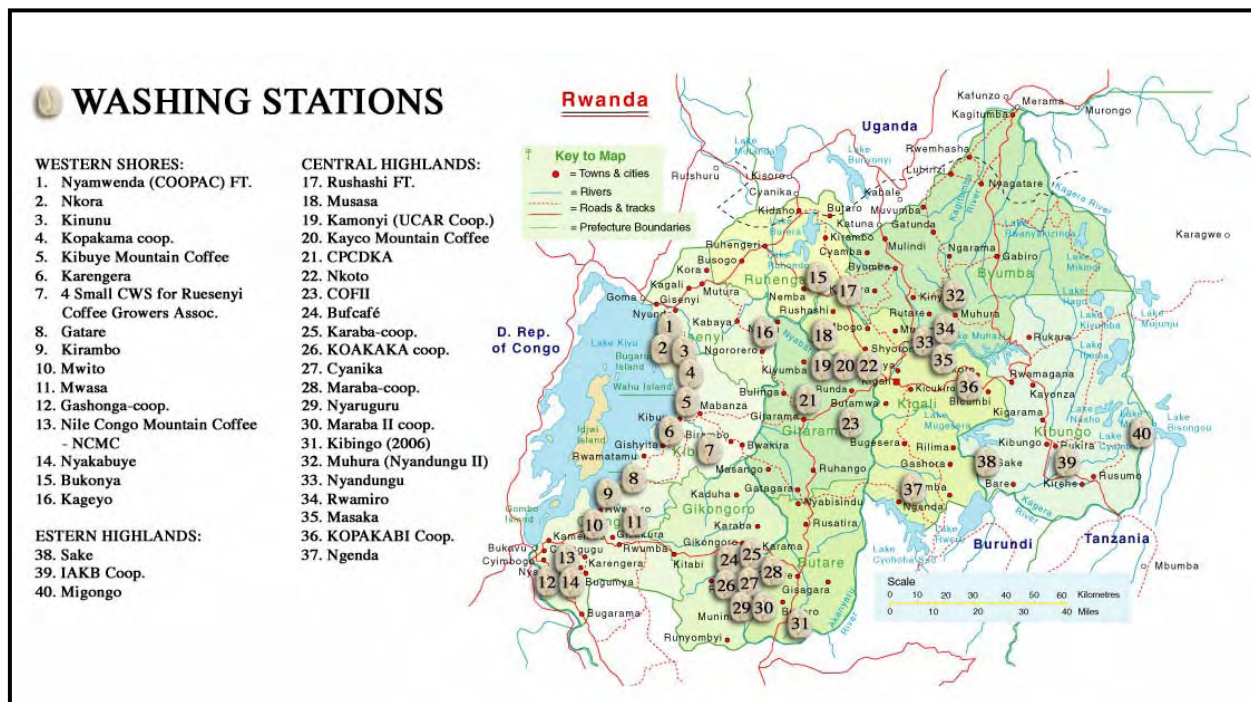
International Development and the Rwandan Minister of Commerce. The sale of the coffee was subsequently featured on CNN’s Inside Africa.

In 2003, several new coffee washing stations began processing fully washed coffee, including four ADAR-assisted, privately owned washing stations, one ACIDI-VOCA financed station and three additional PEARL-assisted stations. Three hundred and forty tons of fully washed coffee was produced during the season.

In June 2003, PEARL, ADAR and ACIDI-VOCA co-financed an inbound trade mission comprising of BD Imports of Illinois, Intelligentsia Coffee of Chicago and Thanksgiving Coffee of California who were identified by a U.S.-based PEARL marketing consultant. The trade mission was very successful. Upon returning to the United States, the participants ordered coffees from five different cooperative and privately owned washing stations and spread the word about the promise of Rwandan coffee to the U.S. specialty importer and roaster community. The trip resulted in the publication of several articles in trade journals. By the end of the 2003, 162 tons of coffee had been sold to seven American and European buyers.¹⁴ For those fully washed coffees exported, prices varied from \$1.56 to \$3.00 per kilo.

In 2004, 20 cws operated, almost all of which had received significant assistance from USAID,

Exhibit 6: Map Depicting Localization of Washing Stations in 2005



Legend: Map depicting the localization of 40 of the 46 washing stations in 2005. USAID has provided assistance to all but four of the depicted stations.

¹⁴ The buyers were Community Coffee (USA), Union Roasters (UK), Intelligentsia (USA), BD Imports (USA), Jobin (France), Schluter (Switzerland), Thanksgiving Coffee (USA). Out of the 334 tons produced, 172 tons were sold locally to traditional exporters at significantly higher prices than the semi-washed which they process and export.

and 737 tons of fully washed coffees were produced. Average sales prices increased to \$2.40 per kilo and the number of international buyers expanded to 15. The average sales price for fully-washed coffee during the year was more than double the price (\$1.18) achieved by Rwanda's semi-washed exporters. As a result of meticulous care through the production chain, five tons of Maraba coffee achieved an exceptionally high price of \$4.85 per kilo. 2004 also marked the beginning of sales to Starbucks Coffee Company, via Schluter and Sons.

A key factor responsible for increases in quality and prices was the launching of several training initiatives in cupping to improve the ability of private and cooperative washing station personnel to evaluate coffee gustatory characteristics. Both PEARL and ADAR financed the participation of washing station staff to attend third-country cupping training programs. PEARL also facilitated a series of cupping trainings carried out by the Coffee Corps during the year.

The number of cws stations continued to expand in 2005, with 38 of the 46 existing stations receiving technical assistance and training from USAID. The creation of new cws was facilitated by the establishment of a USAID Development Credit Authority loan guarantee program. The program, administered through the Bank of Kigali, guaranteed 40 percent of agribusiness medium and short term loans extended by the bank. As of November, \$1.6 million in loans had been provided to 11 clients, 10 of whom were private sector operators in the coffee sector.

During the season, one thousand one hundred and nine tons of fully-washed coffee was produced at an average price of \$3.10 per kilo. The commercial relationship with Starbucks' was expanded; approximately 20 percent of the fully-washed coffee was sold to the large coffee wholesaler/retailer and the company selected two of ADAR's clients for inclusion in their "Black Apron Exclusives" marketing program which will distribute limited quantities of the coffee through its 5000 outlets in the early part of 2006. COOPAC, the ACDI-VOCA assisted coffee washing station produced 95 tons of green coffee at prices ranging from \$2.77 to \$2.99 per kilo. PEARL-assisted cooperatives sold 14 containers of coffee at \$3.42 per pound and approximately 10 tons of coffee achieved prices in excess of \$5.00 per kilo, with one ton fetching the price of \$7.72 per kilo, or more than three times the average price of fully-washed Arabica quoted on the New York Commodity Exchange.

The speed with which the USAID-financed coffee activities have been able to develop infrastructure,

train Rwandans and produce some very excellent coffees has surprised even the most seasoned industry experts. Many specialty coffee professionals believe that, if progress continues apace, Rwanda can produce some of the world's finest coffees.

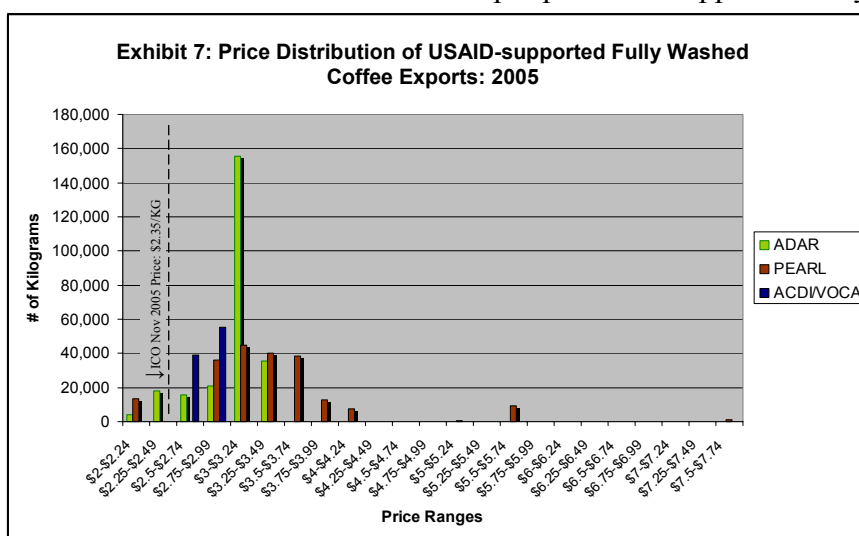


Exhibit 7 shows the price distribution of fully-washed coffees exported with the assistance of USAID implementing partners relative to the average November 2005 “C” price for “Other Mild Arabicas” on the New York coffee futures market.¹⁵ One notes that the vast majority of Rwandan coffee sold directly to importers has achieved very significant price premiums related to the average November 2005 New York “C” price. This is an eloquent testament to the achievements of Rwandan producers of fully washed coffee.

The graph, however, does not show sales of fully washed coffees to local exporters as complete statistics were not available. Coffees sold to these firms were of poorer quality (B and C grades) and volumes were significant, reflecting poor cherry quality, delays in transporting cherries to certain coffee washing stations and lack of adequate access to clean water for processing.

Exhibit 8: Key Milestones in the Evolution of Rwanda’s Fully-Washed Coffee

- June 2000: Publication of report advocating the development of fully-washed capacity.
- January 2001: PEARL and ADAR Projects begin operations.
- March 2001: ACDI-VOCA extends construction grant to the Maraba cooperative.
- March 2002: President Kagame receives Community Coffee representatives at Maraba
- July 2002: First sale of commercial volumes of specialty coffee (33mt) to Community Coffee
- December 2002: Maraba receives Fair Trade certification
- February 2003: Maraba coffee distributed through 350 Sainsbury’s (U.K.) supermarkets
- March 2003: First fully-washed coffees produced by private investors.
- April 2003: President Kagame inaugurates the COOPAC coffee cooperative
- June 2003: Inbound trade mission by three U.S. specialty coffee buyers
- November 2003: COOPAC awarded Fair Trade certification
- June 2004: First sales to Starbucks Coffee Company
- August 2004: 14 Rwandans graduate from seven week cupping course
- January 2005: First DCA loans extended.
- November 2005: Maraba receives Goteborg International Prize for Sustainable Development
- November 2005: Coffee from two privately-owned washing stations selected for the Starbucks’ Black Apron Exclusives Marketing Program for distribution in 5000 Starbucks retail outlets

Caveats. In five years, Rwanda has established itself as the “hot” new specialty coffee origin, generating international recognition and praise by the American and European specialty coffee industry. The USAID program has improved the lives of thousands of Rwandan families and is surely one of the agencies most tangible success stories. It is critical, however, to place this success in its proper context. There are several major issues which must be addressed to sustain fully-washed coffee sector development.

Today, only 7 percent of Rwandan coffee is fully washed, and roughly five percent (approximately 50,000) of Rwandan coffee producers have been directly impacted by the USAID program. A significant proportion of the 1107 metric tons of fully washed coffee produced in 2005 is of undistinguished quality and does not fetch the higher prices crucial to long-term financial stability. Best practices for production, processing and marketing are not yet uniformly applied in all washing stations, thus the required transfer of knowledge to place the sector on a sustainable footing is far from complete. Capital loans used to finance the

¹⁵ Certain coffees, notably those sold to Schluter and Company, are sold on a Free on Truck (FOT) basis, while others are sold on a Free on Board (FOB Mombassa) basis. For those coffees sold on a FOT/Kigali basis, prices have been increased by \$0.12/kg to reflect transport costs to the port of Mombassa.

construction of coffee washing stations have not yet come due, so a key litmus test has not yet been passed. The evolution of specialty coffee in Rwanda coincided with an upturn in world coffee prices. Rwandan fully washed coffee has not yet weathered the financial challenges posed by depressed market conditions. Steep challenges lie ahead.

3.3 Significant Issues Which Must Be Addressed to Sustain Progress

3.3.1 Decreasing the Proportion of Ordinary-grade Coffee Produced by Washing Stations

While much of the 1107 tons of fully-washed coffee produced in 2005 was very good, and some even exceptional, there is still far too much ordinary grade coffee produced by cws. The high percentage of ordinary grade coffee is due to the poor quality of some cherry coffee produced in the field. Poor cultural practices and lack of access to inputs are key factors in the high proportion of “floaters” and insect-damaged beans that are purchased by the stations. It costs the same amount of money to purchase and process ordinary grade as “A” grade coffee. Reducing the amount of ordinary grade would significantly increase profits of cws.

3.3.2 Tempering Producer Expectations with Regard to Cherry Purchase Price

In 2005, because of high coffee prices on the international market and vigorous competition for coffee between exporters of semi-washed coffee and producers of fully washed coffee due to low production in Rwanda, cherries were purchased at prices which at times exceeded 100 RWF per kilo. At a cherry to green coffee conversion rate of 5.5 to 1, this translated into raw material costs of almost \$1.00 per kilo for fully washed coffee. While this price might be sustainable during a strong market, given the inevitable fluctuations in international coffee prices, cherry prices must change to reflect different market conditions. At the beginning of the 2005 production season, OCIR-CAFÉ, recommended a minimum price of 100 RWF per kilo of cherries. This minimum “suggested” price was interpreted as a floor price by Rwandan producers and was not changed as the price for coffee decreased on the international market. Inflexible “recommended” prices are detrimental to sustained growth of cws and an alternative system must be developed that fairly remunerates both producers and processors.

3.3.3 Increasing Processing Capacity Utilization

Processing capacity utilization remains low. PEARL-assisted cws registered a utilization capacity of 60 percent in 2005, whereas other stations were only at 28 percent capacity. Several factors explain this low level of utilization. In 2005, coffee production was very low, reflecting poor rainfall during a critical period in flower development above and beyond a usual bi-annual downturn in the coffee production cycle. The price of coffee on the international market, as determined by the New York Board of Trade “C” commodity price was at a seven year high, thus Rwandan exporters of semi-washed coffee could offer unusually high prices for on-farm processed coffee and competed directly with cws for a limited supply of coffee. Increased capacity utilization will decrease per unit production costs.

3.3.4 Improving Site Selection of Future Washing Stations

The ability of several cws to produce high quality coffee is compromised by poor site selection. Many stations have an inadequate supply of spring water or are obliged to pump water,

sometimes of dubious quality, from lakes or other sources. The quality and quantity of water used for fermenting and washing is a key determinant in the final product. Several stations have experienced water problems and, in consequence, have not been able to produce coffee which can attract high prices. Other persistent problems related to site selection pertain to inadequate space dedicated for waste water treatment and composting of coffee pulp. Despite efforts to train Rwandan civil engineers in coffee washing station design, there is a pressing need to reinforce capacity in that area.

3.3.5 Environmental Compliance

Many of the USAID-financed washing stations have not incorporated environmentally sound design elements in their construction plans to mitigate the detrimental impacts of coffee processing on the surrounding environment and untreated wash water is entering water sources directly. Other stations have incorporated environmentally sound design elements in station construction but are poorly managing liquid and solid effluent disposal. In addition to the negative environmental consequences of poor waste management, non-compliance with best environmental practices can severely compromise the ability of stations to gain revenue-enhancing certifications, be they Fair Trade, Preferred Supplier or Organic.

3.3.6 Quality Control

While rigorous quality control is an essential element in the production of specialty coffee, it is particularly critical in Rwanda where the existence of “potato taste”, a strong off-flavor resulting from the interaction between agro-climatic conditions and antestia bug infiltration, is endemic to the Great Lakes Region. The presence of a few tainted beans in a one pound bag of coffee can spoil the entire contents. At present, cws have only limited capacity to evaluate their coffee. This is particularly the case with privately-owned stations which, as yet, do not have the experience or the cupping infrastructure to evaluate their production. The effects of this weakness have been somewhat mitigated by cupping services performed by Schluter and Company, a principal buyer of Rwandan coffees, but ability to evaluate production and isolate lots by characteristics is essential for continued progress.

3.3.7 Financial Management of Washing Stations

Financial management and governance of both private and cooperatively owned cws remains problematic. Despite significant investments of time and resources by USAID-financed coffee projects, the application of sound financial monitoring tools remains inconsistent. Rigorous financial management is critical to achieving maximum returns, continued access to financing and sustainability. Fair Trade and Strategic Supplier certification programs offered by selected importers provide significant price premiums to producers but require the implementation of detailed and transparent financial reporting requirements. Failure to meet and maintain these requirements results in missed opportunities to enhance cws revenues.

Washing stations, be they privately or cooperatively owned, require significant operating funds to finance cherry purchases, and, in virtually all cases, recourse to bank financing is sought. Rigorous and transparent financial records reinforce the confidence of lending institutions and favour the development of sustained business relationships between bank and borrower.

Financial rigor and transparency is particularly important in cooperatively owned enterprises. Sustainability of cooperatives, particularly in Rwanda, where the social fabric remains fragile and problems with cooperative governance are common, requires irreproachable transparent financial management to maintain cooperative cohesion.

SECTION IV

4.0 Best Practices Employed

This section identifies best practices employed by USAID/Rwanda's coffee program. Some best practices were employed by all three projects while others were not. Many of the following best practices have wide applicability to economic growth programs, regardless of the sector or country concerned. Best practices are groups in three categories: project planning, implementation, and marketing.

Although not a best practice as such, highest level political support for the development of Rwanda's coffee sector proved crucial to the success of the program. President Kagame was an early and vocal supporter of USAID's work in the coffee sector, promoting the development of a quality coffee industry by inaugurating recently constructed cws, visiting USAID-funded projects, and encouraging farmers and investors to improve product quality. This political support greatly facilitated cooperation and coordination with local government authorities, access to finance for capital and operating costs, and stimulated farmers to replant coffee trees and improve the care of existing plantations.

4.1 Project Planning

4.1.1 Thorough Investigation of Market Potential

Coffee washing station construction is expensive and can cost up to \$200,000 depending on production capacity, choice of pulping machinery, source of water supply, and existence of water recycling and waste disposal systems; an ill advised investment can have dire repercussions for private investors and coffee cooperatives alike. USAID implementing partners thoroughly investigated the market potential for producing fully washed coffee. Prior to the implementation of the ACIDI-VOCA, PEARL and ADAR programs, a study, "Development of Washed Processing within a Framework of Private Investment"¹⁶ recommended the initiation of a cws construction program, but cautioned against the significant risks inherent in cws development.

In order to further investigate the potential of Rwanda to enter into the specialty market, in late 2001 PEARL and ADAR co-financed a month long mission by a South American producer of specialty coffee to assess Rwanda's potential. The consultant travelled extensively to all of the country's coffee production zones, examined coffee plantations and existing varieties, and analyzed various agronomic parameters. The consultant's conclusions highlighted Rwanda's potential and provided USAID implementing partners with needed assurances to pursue specialty coffee development.

4.1.2 Careful Selection of Cooperative and Private Sector Partners

Demand for technical assistance, training, and financial support, in Rwanda far exceeds supply, as is the case in all developing countries. Projects are routinely overwhelmed with requests for assistance. ACIDI-VOCA, PEARL and ADAR all carefully selected their clients based on

¹⁶ J.E. Schluter, A. Finney, 2000.

demonstrated engagement and commitment. In cases where the projects began to assist cooperatives or private investors but engagement and commitment proved to be lacking, the projects reallocated their resources in order to focus on clients who held more potential for success. ADAR, which worked almost exclusively with private investors, also vetted potential clients for financial solvency. Given that commercial banks required investors to assume a minimum of 40 percent of the investment cost, the project conducted due diligence to insure that potential clients would be loan eligible before undertaking a feasibility study for the construction of a cws.

4.1.3 Implication of Local Government Authorities into the CWS Development Plan

The construction of a cws in a remote rural area is a major investment of financial and human resources. Moreover, given Rwanda's historical context, all rural investments are politically sensitive and have the potential to reopen deep social fractures. Securing the commitment of local government authorities through early consultation proved to be a crucial factor in the success of cws establishment. ACIDI-VOCA and PEARL, in conjunction with cooperative leadership, worked closely with local authorities during the planning phases of cws construction. Given that ADAR did not work directly with producers, the project encouraged its private sector investors to engage local authorities in the very early stages of project development. Local government representatives were consulted prior to cws site identification and throughout cws establishment.

4.2 Implementation

4.2.1 Use of Regional Expertise for Training in Coffee Processing

The use of Kenyan and Burundian coffee processing technicians to provide training for Rwandan cws staff was an important element in the success of the coffee program. ACIDI-VOCA and ADAR recruited seasoned coffee technicians and placed them on-site at each assisted cws for the duration of the coffee production season. These technicians provided guidance in the organization of the workforce and instructed staff in all aspects of coffee processing including equipment installation, testing and maintenance, cherry reception, sorting, pulping, fermentation, washing, drying, lot identification, and storage. The training was particularly useful because it was hands-on and practical. Regional technicians had a thorough knowledge of local production systems and processing equipment, and were able to effectively communicate with Rwandans either through Kinyarwanda or Kiswahili. Moreover, using regional coffee trainers was extremely cost-effective.



Exhibit 9: A Kenyan master trainer provides assistance in recirculation pump maintenance at the Masaka CWS.

4.2.2 Creation of Traceability Systems from Farm to Destination Market

One of the features that distinguishes specialty coffee production from the production of standard or ordinary grade coffee is the establishment of traceability systems which permit identification of specific lots as far back as the collection zone, or even field. Lot identification serves to segregate particular batches of coffee, from the delivery of cherries to the cws through the processing and storage stages, and permits processors to recognize characteristics, be they good or bad, of specific batches. Lot identification is a key quality control measure used in the production of finer coffees, but is particularly important in Rwanda given the existence of the aforementioned “potato taste”. Rigorous lot identification allows processors to isolate tainted coffee batches. By the same token, it also allows processors to recognize exceptional batches of coffee which can be treated separately and marketed at prices as high as four times the price of other coffees produced by the same washing station.

All three of USAID’s implementing partners promoted the establishment of lot identification systems. The PEARL Project strategy, focused on specialty coffee production, instituted a lot identification system which permitted tracability back to the specific production zone. Cherry coffee is segregated by specific zone within administrative districts and the integrity of this geographical lot identification was maintained throughout processing. This finely tuned lot identification scheme allowed PEARL to isolate small exceptional batches of coffee, some of which were sold for as much as \$7.72/kg. Although the number of exceptional lots, or “e-lots” was small, their existence provided motivation for cooperative members to pursue quality enhancement measures and served to further burnish the growing reputation of Rwandan specialty coffee.

4.2.3 Integrating Environmental Mitigation Measures in CWS Design

Pulping coffee can generate significant environmental problems, if not addressed during the cws design and correctly implemented during pulping operations. The principal problems involve pollution of the water table, neighboring water sources, and soil surrounding discharge areas caused by contamination from pulping, fermentation and washing water and pulp; the use of vast quantities of water for pulping can waste scarce resources and significantly add to the costs of production; water requirements for de-pulping, fermentation and washing are estimated at 80 to 100 m³ per ton of parchment coffee. Responsible environmental stewardship is not only a best practice, but is a requirement for certification to many preferred supplier programs such as Starbucks’ C.A.F.E. Practices Program and Neumann’s Sustainable Coffee Production Guidelines.



Exhibit 10: Pulp separator of waste water discharge at the Masaka CWS.

Several privately owned washing stations incorporated mitigation measures in the design of their stations. These included water recirculation systems to decrease resource use, sediment ponding

systems and composting areas. The incorporation of these measures in all stations should be strongly encouraged and additional training should be provided to insure that these measures are correctly applied.

4.2.4 Establishment of Cupping Capacity and Cupping Labs

The ability to produce a consistently high quality of coffee depends on a processor's capacity to evaluate the taste characteristics of individual lots. By evaluating, or cupping, each lot, processors can identify exceptional batches of coffee or, conversely, batches that contain tainted tastes, and process these lots separately. Developing the ability to evaluate coffee requires significant training and practice, acquired by tasting literally thousands of cups of coffee and is a fundamental skill needed to develop exceptional coffees.

Rwanda has no tradition of coffee consumption. As such, producers of fully washed coffee, be they private investors or cooperative members, were not able at the outset to evaluate what they produced. To develop cupping capacity, USAID, through the PEARL Project, leveraged resources from the Coffee Corps, a public-private partnership which provides cupping and roasting experts on a voluntary basis. World renowned cupping experts came to Rwanda on several occasions to provide training to the staffs of cooperative and privately-owned cws. Although much needs to be done to further develop capacity, the training programs have allowed many producers to evaluate their coffee and exercise a degree of quality control required to be successful in the specialty market.

The PEARL Project has constructed a fully equipped specialty coffee quality laboratory and training center in Butare, with support from the Bunn Corporation, an American coffee equipment manufacturer, La Spagiale, an Italian espresso machine maker and Union Roasters, which serves as a nexus for instruction in cupping. The project has also installed nine low cost cupping labs in several of the cooperatives which it assists.

Cooperative cuppers can now evaluate each batch of coffee on-site and identify taste characteristics in order to group similar quality coffees together. Many of the Rwandan cuppers have rapidly gained cupping skills and are able to competently train novice cuppers both from Rwanda and also the sub-region. In joint cuppings with internationally recognized experts, there was a remarkable degree of consistency in scores between the international and Rwandan cuppers, attesting to the great strides that Rwandans have made in coffee evaluation. The creation of this cupping capacity has been fundamental to the success of USAID's coffee program.



Exhibit 11: Coffee cupping at the PEARL cupping laboratory in Butare

4.2.5 Establishment of Small Dry Milling Facilities

Prior to export, generally after a sales contract has been negotiated, coffee is hulled in dry mills

to remove parchment, producing export-ready green coffee. Rwandan exporters of semi-washed coffee, who typically export 4,000 to 5,000 tons of coffee, have large dry milling facilities to deparch their product. During the first seasons of fully-washed production, cooperative and privately-owned enterprises had no dry mills and were obliged to use the milling services of one of the large exporters of semi-washed coffee. Dry milling has an impact on final product quality. Milling which is done with poorly maintained or inadequately cleaned equipment can result in significant depreciation of quality, either through excessive bean breakage or dust and dirt entering into the hulled product. Moreover, it can be difficult to insure that coffee delivered to the mill is the same coffee that one receives after hulling. In Rwanda, the charges for dry milling by semi-washed exporters are significantly higher than those in neighboring countries.

Based on a financial analysis conducted by the ADAR project which identified dry mill technical requirements and options, estimated costs of production and breakeven points, two cooperatives, Maraba and COOPAC, purchased small dry mills to mill their own production and provide services to other local washing stations. Other washing stations are following suit. Given the rapid increase in specialty and better quality coffee production, the installation of small dry mills allows washing stations to exercise quality control during the final stage in green coffee processing and develop additional income generating opportunities through the provision of milling services to other stations.

4.3 Access to Finance:

4.3.1 Establishing a Climate of Confidence with Commercial Banks

The rapid development of fully washed capacity in Rwanda could not have occurred unless banks had confidence in both the credibility of USAID implementing partners and the clients whom they assisted.¹⁷ ACDI-VOCA, PEARL and ADAR and their clients undertook several measures which established a climate of confidence with local banks, notably: educating bank loan officers in the details of coffee processing and marketing, requiring maximum involvement of private investors and cooperative presidents in the business plan development process, producing top quality business plans and providing technical assistance and training to clients both in the planning and execution of their projects.¹⁸

The projects placed great importance on educating bank loan officers regarding coffee production, processing, and marketing. Loan officers were included early on in the project development process. Formal training sessions were conducted on determining financial viability of sector investments. Numerous on-site visits were affected to cws construction sites, round table discussions were held between implementing partners and bank personnel regarding risk mitigation, and at least one project financed the participation of loan officers to an international coffee fair in order to increase exposure and understanding of coffee marketing.

¹⁷ Although much of the finance for both capital investments and operating expenditures was sourced through a Development Credit Authority loan guarantee program, the presence of such a program does not insure that the participating bank will extend financing, given that the loan guarantee only covers a portion of the bank's risk (in Rwanda's case, 40 per cent).

¹⁸ In addition to sourcing loans from local banks, Rwandan cooperatives and privately owned enterprises also borrowed from EcoLogic Finance, a U.S. NGO which, through an innovative program, provided funding for washing station cherry purchases and operating costs at 9% interest and required only a signed purchase contract with a recognized importer as collateral.

Private operators and certain cooperative presidents were intimately involved in the development of business plans drafted by the USAID “coffee projects,” and thus had an in-depth knowledge of projected costs and financing needs. This knowledge, which clearly manifested itself during bank negotiations, engendered the confidence of loan officers and helped clients secure approval while positioning them to better manage their investments.¹⁹

The projects placed great emphasis on developing comprehensive feasibility studies and business plans. Most feasibility studies included detailed analyses of water sources, topographical surveys, available cherry supply, and fully researched estimates of construction costs and projected revenues. The quality of the business plans was universally high and this reinforced bankers’ confidence in financing cws investments.

Each USAID “coffee project” developed very close relationships with its clients, be they private investors or cooperatives, and the projects were involved in all aspects of cws planning and execution, from business plan preparation to marketing. The scope of the involvement and the knowledge of the sector by USAID implementing partners provided a certain assurance to banks that their clients would have access to technical resources to support bank investments.

4.3.2 Using Grant Funding to Jump-Start Investments in the Coffee Sector

“Nothing breeds success like success” is an axiom clearly applicable to the development of Rwandan specialty coffee. In 2002, during its first full year of operation, the Maraba cooperative registered the sector’s first resounding success, with the sale of two containers (33 tons) of fully-washed, Fair Trade certified coffee. One container was sent to Union Roasters in the United Kingdom and was subsequently marketed in over 300 Sainsbury’s supermarkets. The other container was sold to Community Coffee of Louisiana. Maraba’s initial success increased interest in cws investments by both coffee cooperatives and private sector investors. The rehabilitation of the Maraba washing station was made possible by a \$77,000 grant accorded by ACDI-VOCA.

ACDI-VOCA, through its PL 480 food monetization program, provided almost \$600,000 in grant funding for business plan development, cws construction, fair trade registration, study tours, and training for nine coffee cooperatives between 2001 and 2003, during the early stages of the coffee sector renaissance. The Maraba grant was extended in March 2002 and was the first significant investment in the specialty coffee sector. Shortly there after, a \$300,000 grant was extended to the COOPAC cooperative for cws construction. The initial success of projects funded by ACDI-VOCA grants increased demand for commercial financing on the part of cooperatives and investors, demonstrated the potential of Rwandan specialty coffee, and provided assurances to local financial institutions of the viability of investments in the specialty coffee sector.

The overwhelming portion of local grant funding was allocated to cooperatively owned enterprises. Seven private sector operators received cost-sharing grants from the ADAR project totalling \$175,000, to fund environmental mitigation measures. While the liberal use of grant

¹⁹ Often in donor funded projects that provide business development services, investors are only tangentially, if at all, involved in the development of the business plan and loan application. This lack of implication is almost always revealed during discussions with the bank and is often a principal motive for loan application rejection.

funding was necessary to jump-start investments in the sector, continued use of large grants to finance capital costs for coffee cooperatives risks crowding out future private investment and may seriously jeopardize the financial viability of current privately-owned washing stations, given that those private investments are more highly leveraged and consequent debt service is significantly more onerous. Modalities need to be developed which will provide liquidity for the establishment of cooperatively owned washing stations without placing private investors at an undue disadvantage.

4.3.3 Establishment of the DCA Loan Portfolio Guarantee Program

USAID established a Development Credit Authority Loan Portfolio Guarantee program with the Bank of Kigali on September 28, 2004. This loan guarantee program, available for all types of agribusiness investments, has proven instrumental in facilitating access to finance for the construction of coffee washing stations and seasonal operating costs. The DCA program guarantees up to 40% of the Bank of Kigali loan, which carries interest rates of 15.75% for short-term loans for working capital and 12.75% for long-term investment loans. The first DCA guaranteed loan was provided in October 2004. Over the next six months, ten additional loans were extended in the amount of \$1.6 million (out of the current \$2 million DCA loan portfolio guarantee) which financed ten additional cws. Of the eleven loans provided, nine have been for private investors and two were for coffee cooperatives (COOPAC and KOAKAKA in association with MIG).

Commercial banks in Rwanda, as in most developing countries, are reluctant to provide financing for medium term capital investments in the agriculture sector, where projected revenue streams are far less certain than in other types of investments such as building construction. Typical collateral required to secure loans in Rwanda are so high as to be beyond the possibility of all but the wealthiest investors. As a result, many viable investment projects do not receive funding. The 40% DCA loan guarantee reduced bank risk, and consequent reticence, and provided access to bank finance to a group of investors who would not have been otherwise eligible.

4.4 Marketing

Specialty coffee importers and roasters demand consistent high quality product from their suppliers. Persuasive marketing is no substitute for quality, but effective marketing initiatives which promote exceptional products can create significant added value.

Specialty coffee is sometimes referred to as “relationship coffee”. Importers and roasters don’t just buy and sell the product; they also buy and sell the history, stories, and relationships behind the coffee. Rwanda has an engaging story to tell. A small, geographically isolated country of stunning beauty, its



Exhibit 12: Inbound trade mission in 2003

physical attributes and recent history of genocide, reconstruction, and recovery provide a poignant back story to the development of Rwandan specialty coffee. ACIDI-VOCA, PEARL, and ADAR recognized the impact that Rwanda's story could have on potential buyers and developed marketing interventions that would foster key relationships with specialty buyers and roasters.

Nevertheless, the most powerful marketing tool to the specialty coffee industry is the promise of exceptional coffee quality. The quality of coffees produced has generated a wave of interest among international importers and roasters and several articles have appeared in industry publications vaunting the development of the sector. Today there is far less need to engage in promotional activities. In the earliest stages of specialty coffee development, concerted marketing activities were required to introduce the industry to this new specialty coffee origin. In 2003, USAID completely funded the first in-bound marketing mission. The following year, marketing missions were financed on a cost share basis with importers and roasters. In 2005, more than 30 importers and roasters paid the entire cost for their marketing trips, attesting to the increased commercial interest in Rwandan specialty coffee. The following section describes activities that were implemented to promote Rwandan coffee.

4.4.1 Financing Inbound Trade Missions

The three projects placed a premium on financing in-bound trade missions. These missions afforded potential buyers an opportunity to see first-hand the coffee production zones, cultivation techniques and washing stations, and to develop key relationships with Rwandan coffee producers and the projects which assisted them. In June 2003, the three projects jointly funded an in-bound trade mission composed of three specialty roasters: Intelligentsia Coffee, Thanksgiving Coffee and BD Imports. The roasters visited several production zones and washing stations, and cupped coffees, many of which were very favourably reviewed. The visit had a significant impact on the participants and generated valuable public relations (in addition to sales) upon their return to the United States. The participants documented their experiences and posted them on the companies' websites. Travelogues were drafted and published in industry trade journals. Ensuing publicity was worth many times more than the costs incurred for transport and lodging by the projects. The projects financed other in-bound trade missions, but as the reputation of Rwandan coffee mounted, the need to pay for transport and lodging of buyers progressively diminished. Today, a steady stream of specialty buyers finances their own trips to Rwanda in hopes of filling an order for coffee.



Exhibit 13: U.S.-based marketing consultant visiting Rwanda

4.4.2 Engaging U.S. Based Marketing Consultants

The ADAR and PEARL projects both hired U.S. based marketing consultants to promote Rwandan coffee in the U.S. and Europe. The consultants distributed samples to influential importers and roasters, developed promotional materials, organized cupping, and made video and

PowerPoint presentations in major U.S. cities such as Seattle, Chicago, San Francisco, and New York. They also prepared Rwandan participation in the Specialty Coffee of America Association's annual trade show and conference. The use of seasoned U.S. based coffee marketing consultants provided the projects with an invaluable set of contacts among specialty coffee buyers and roasters. This was particularly important during the early phases of specialty coffee development as PEARL and ADAR project management had limited contacts within the industry. Given the geographic isolation of Rwanda, its mediocre telecommunications network and its newness as a specialty coffee producer, the consultants served as a critical bridgehead between the projects and importer/roasters.

4.4.3 Verifying Product Quality Prior to Distributing Samples to Potential Buyers

In the early stages of specialty coffee development in Rwanda, there were no cupping labs and cupping expertise was extremely limited.²⁰ There was thus little opportunity to verify sample quality in-country. ADAR had samples evaluated at Coffee Lab International (CLI), an independent coffee cupping service located in Vermont. The feedback from CLI permitted the projects and producers to gain an idea of the quality of different lots and expedite samples from the best batches. In the absence of local cupping capacity, this allowed the producers to put their best foot forward when sending samples to prospective buyers.

4.4.4 Strategically Planning Product Marketing

Many donor funded projects involved in commodity development precipitate promotional and marketing activities prematurely through ill-conceived participation in international trade fairs. Projects frequently finance booth rentals, develop marketing pamphlets, and expedite product samples for trade fair display, but have no product, packaging, finance, or method of transport to deliver orders to interested buyers. This all too common situation is counterproductive; it wastes the time of interested buyers and broadcasts an unprofessional approach to marketing to all serious buyers who visit the stand.

USAID implementing partners recognized the value of a measured approach to product marketing and did not begin to actively promote coffee at trade fairs, or directly to importers, until there was a critical mass of product for sale, a fairly clear indication of general product quality obtained through independent cupping, and a reasonably sound expectation that the first sale would meet buyer expectations at a fair market price. During 2001 and 2002, the projects did not finance a booth for their clients at major events, but did organize "study tours" to the Specialty Coffee Association of America and the Specialty Coffee Association of Europe annual trade shows to expose clients to important marketing forums and develop preliminary contacts with industry professionals.

²⁰ OCIR-CAFÉ did have an antiquated cupping lab. Given that Rwandan production had focused on producing ordinary grade coffee, OCIR's quality control manager who was responsible for cupping only had limited exposure to and knowledge of specialty coffee cupping characteristics.

SECTION V

5.0 Consolidating Results

Rwanda has established a strong beachhead on the specialty coffee market, but in many ways the greatest challenges lie ahead. To place the revitalized Rwandan coffee sector on a sustainable path to continued development, USAID must assist cooperatives and private investors to consolidate results by continuing to improve product quality, reinforcing local capacity in processing, logistics, and management, and progressively transfer the provision of services from USAID-funded projects to indigenous organizations.

As stated earlier, USAID implementing partners were given a mandate early on to serve as catalysts for agribusiness investment by developing replicable models which would demonstrate the profitability of targeted investments. Sustainability was not an immediate goal but it was anticipated that significant capacity building would be developed through hands-on practical training.

There are clear trade-offs between a program focus on results versus sustainability. Had sustainability been an immediate goal of the coffee program, there would have certainly been far fewer coffee washing stations constructed, much less premium quality coffee produced, significantly less benefits for coffee producers, less investment in the sector, and Rwanda's beachhead on the specialty market would have been much narrower.

Specialty coffee production is in its infancy in Rwanda. Despite a programmatic results orientation, enormous local capacity has been developed during the five years of fully-washed production. One cannot reasonably expect, however, that a comprehensive transfer of knowledge could occur in such a short time, particularly given the fact that specialty coffee production is really a new industry for Rwanda. High value commodities in Africa which are now completely autonomous²¹ have typically taken ten years to develop into wholly sustainable sub-sectors. To insure the longevity of USAID investments in coffee, significant additional capacity must be developed. The following section discusses initiatives that need to be undertaken to consolidate results and expand impact.

5.1 On-Farm Production

Coffee in the cup can be no better than the intrinsic quality of the beans harvested from the tree. In many cases, the recent success of Rwandan coffee has occurred in spite of poor crop husbandry practiced in the field. If production practices and access to inputs improve, coffee quality and consequent prices could increase markedly.

Many of the following recommendations are equally applicable to the production of semi-washed coffee, as there is an opportunity to obtain significantly higher prices on the international

²¹ The mango sub-sector in Cote d'Ivoire is a clear case in point. Historically, RCI produced about 1000 tons of mango for export per year. During a ten year period in the 1980s-1990s, French development agencies provided sustained technical and financial assistance to the industry. Today, the RCI is one of the largest mango exporters in the world and averages 14,000 tons of exports per year.

market by improving the quality of the semi-washed product.

5.1.1 Improving Cherry Quality through Better On-Farm Management

The success of Rwanda's entry into the specialty coffee market has revitalized the interest of farmers in coffee production. Demand for coffee seedlings has increased enormously over the last two years and plantings of high quality varieties such as POP and BM have augmented significantly. There is, however, enormous room to improve berry quality through systematic mulching, weeding, pruning and application of compost. Future activities in the coffee sector need to have, as one area of focus, improved on-farm production. There are several possible avenues to promote better crop husbandry practices that merit consideration.

5.1.2 The Use of Media Campaigns to Promote Better Coffee Husbandry

There is an opportunity to use rural radio to promote better on-farm practices. Rural media campaigns should focus on the benefits, both quantitative and qualitative, that better husbandry can have on the farmer's coffee crop. Informational radio spots could include interviews with successful coffee farmers discussing the impact of expanded coffee production on their standard of living. Spots could also feature discussions of crop production techniques by ISAR coffee program personnel and OCIR-CAFÉ agronomists. President Kagame's support for the coffee sector has been an important factor in promoting re-engagement of farmers in coffee production. His continued implication, particularly if it focused on crop production, would be a valuable asset.

5.1.3 Inauguration of Certified Supplier Programs with Associated Incentives

Coffee washing stations, be they cooperative or privately owned, could institute certified supplier programs. Certification would be contingent on use of best production practices. In the past, Rwanda recognized its best coffee producers by offering prizes to those farmers who employed recommended practices. This program should be restarted. Coffee washing stations could reward its best producers by paying a premium for coffee cherry from certified suppliers. This would benefit both producers and cws. Certified producers would increase their returns and cws would receive a better quality of cherry, presumably increase the portion of their first quality coffee, and recoup the additional cost through higher prices.

5.1.4 Support for CWS-Based Extension Services

Reinforcing extension services, be they public or private, is critical to improving the quality of coffee supplied to the cws. PEARL assisted the cooperatives develop a sophisticated local extension service that provided advisor services to cooperative members. Sector-level "animateurs" or model farmers served as relays to disseminate messages at the farm level. In addition, the project employed two full-time production and processing agronomists. UNR students trained under a PEARL/Faculty of Agriculture human resource development program also provided extension support.

Private sector operators received only limited support from OCIR-CAFÉ extension agents. Some operators did hire "agronomes" to provide extension services. Their effectiveness, however, was limited, given that much of the cherry coffee of ADAR's first clients was sourced from localities

far away from the cws. The selection of areas for the implantation of the first cws was made by the individual owners who generally chose to establish cws on land which they already owned or for which they had long standing ties. These areas were not necessarily those that were closest to adequate supplies of coffee. ADAR's more recent clients have established cws in areas with higher and better quality coffee production thus cherries are now sourced in proximity to the cws. This greatly facilitates the provision of effective extension services.

Further support is required to extend best practices at field level. This could include training of public and private extension agents and progressive farmers in composting, mulching, pruning, coffee tree regeneration, replanting and phytosanitary problem identification and remediation. Limited financial support may be warranted to help cooperatives and private cws defray the costs of the provision of extension services.

5.1.5 Establishment of Tracability to the Sector Level for Certain CWS

The practicality and necessity of establishing tracability to the local level is dictated by the proximity of cherry supply to the coffee washing station. One of the principal factors that determine coffee quality is the amount of time between cherry harvest and pulping. A limited number of cws must travel long distances, sometimes up to 100 kilometers, to acquire cherry pending an increase in cherry supply from their recently established plantations.²² The stations are currently sourcing cherry coffee from middlemen who collect from geographically dispersed areas. This occasions long delays between harvest and pulping and has a negative impact on the quality of coffee produced. It is virtually impossible to establish reliable tracability systems under these circumstances.

For the more recently established private cws which are in close proximity to cherry supplies, tracability back to the sector level will allow cws to develop flavour profiles and better segregate different lots of coffee.

5.2 Coffee Processing:

5.2.1 Reinforcing Existing Processing Skills

In 2005, the vast majority of the 38 USAID assisted washing stations that produced coffee have been in operation for less than two seasons. In 2006, USAID will assist approximately an additional 15 stations. Although significant processing skills have been developed, continued support for training of washing station personnel in cherry reception, pulping, drying, equipment maintenance and storage is essential to insure sustainability. ADAR has relied heavily on regional expertise from Kenya and Burundi to provide direct training to cws personnel. There is an evident need to progressively transfer these responsibilities to permanent, indigenous structures.

5.2.2 Creating Cupping Capacity at Privately-Owned Washing Stations

While privately owned cws have developed some capacity to evaluate coffee, they do not have

²² These stations are the privately-owned stations Masaka, Ndera, Sake and Migongo.

cupping labs that will permit refinement of skills and facilitate regular lot cupping throughout the production season. Additional support is required to finance the establishment of a central cupping lab and continue a robust training program for industry cuppers through the continued support of Coffee Corps.

5.3 Environmental Management

5.3.1 Conformity to Fair Trade, Preferred Supplier and Organic Standards

Sound environmental management at coffee washing stations is not only the responsible course of action, it is a requirement for certification under the Fair Trade Labelling Organization (FLO) and preferred supplier programs such as Starbucks' C.A.F.E. Practices and is obviously a centerpiece for organic certification.²³ These standards identify specific requirements regarding water conservation, effluent discharge and solid waste management and provide exacting measures for independent auditors to determine conformity. The sustainability of USAID investments in the coffee sector largely depends on the ability of coffee washing stations to maintain current certified status and gain organic and preferred supplier status by adhering to these standards.

To date, five of Rwanda's fully-washed cooperative coffees have benefited from Fair Trade certification. Ten privately owned stations which are currently supplying Starbucks seek to achieve Strategic of Preferred Supplier Status. RWASHOSCCO, PEARL's recently formed non-profit coffee marketing and export company, has targeted organic certification as a key future market. In order to maintain current certification and obtain additional certifications, significant progress must be made to bring cws in line with the requirements of the different organizations.

During a May 2005 consultancy by a Chemonics' environmental expert, a sample of both cooperative and privately owned cws was visited to conduct fieldwork for the development of an environmental training program for washing stations.²⁴ Systemic problems included: absence of water recirculation to minimize resource use and decrease production costs,²⁵ improper wastewater disposal techniques, poor pulp and wastewater separation, and absence of effective composting.

It is essential that these systemic problems be corrected. An environmental audit of all USAID funded cws should be conducted to identify specific remedial measures at each station and a training program on environmental management of coffee washing stations should be implemented. Unless corrective measures are instituted, cws will not be able to obtain the desired additional certifications.

²³ The Fair Trade Labeling Organization requires under their Environmental Development Chapter that "Producers are expected to protect the natural environment and to make environment protection a part of farm management." Minimum requirements include "the protection of natural waters, virgin forest and other ecosystems of high ecological value, erosion and waste management."

²⁴ The training program was not implemented due to a budget reduction for all USAID/Rwanda economic growth programs.

²⁵ PEARL assisted cws do not have water recycling systems. This is one reason why cws construction costs are less than those of ADAR assisted stations. Other key problems identified were poor citing of certain cws and inadequate supply of water for coffee washing. These problems will be discussed in a following section.

5.3.2 Improving Compost Management and Distribution

Dried coffee pulp makes excellent compost, as it provides a valuable soil amendment, and is standard operating practice at well managed coffee plantations throughout the world. At present, pulp remaining at cws is an underused resource. It is generally not managed correctly, as aeration to promote drying and decomposition is not practiced. This represents not only a missed opportunity to improve product quality, but also poses significant environmental costs when not correctly managed and distributed.

Compost management training should be instituted and correct procedures implemented at the cws.

Washing station management needs to be encouraged to transport compost to production zones to enhance soil characteristics and liberate limited storage space at the washing station sites.



Exhibit 14: Untreated pulp represents a lost opportunity and environmental hazard

5.4 Financial Management of CWS:

Rigorous financial management is essential to the long term viability of coffee washing stations. It provides a basis for transparency which is, in particular, critical to cooperative development. It permits management to monitor costs and program anticipated operating expenses and it is a requirement for certification under the Fair Trade Labelling Organization which has significantly increased sales prices of Rwanda's cooperative coffees. Transparent financial management is also a requirement for inclusion in preferred supplier programs. Key measures to enhance financial management include:

5.4.1 Promotion of Increased Financial Transparency of Cooperatives

Assurance of total financial transparency is critical to the sustainability of cooperative coffee development. Cooperative-led development efforts have had a checkered past in Rwanda and financial malfeasance has often resulted in the implosion of cooperative businesses. Given the country's particular historical context, even the perception of a lack of financial clarity can sow suspicion and distrust among members and have a serious, if not fatal, impact on cooperative growth. With the programmed increase in the number of cws, it is critical that uniform and transparent accounting procedures and reporting requirements be instituted to avert problems that have historically plagued Rwanda's cooperatives.

5.4.2 Consolidation of CWS Financial Management Skills

Although all USAID-assisted coffee washing stations employ financial management systems, there is a need to reinforce these skills as the application of these systems is not uniformly followed. Continued training is required to insure recertification of Fair Trade Status and

preparation for certification into importers' preferred supplier programs.

5.5 Reinforcing the Capacities of RWASHOSCCO and the Rwanda Fine Coffee Association (RFCA)

RWASHOSCCO, a recently established "non-profit" company, was established by the PEARL Project with grant funding from USAID to serve as a relay for its activities. The company, which is directed by a recent master's degree graduate of the Texas A&M agribusiness program, seeks to provide a complete menu of services to its shareholders who are the PEARL assisted cooperatives. Services offered concern assistance for cws construction, training in cooperative, financial and production management, quality control, preparation for Fair Trade certification, client relationship management, marketing and export related logistical services.

RWASHOSCCO anticipates that 20 cooperatives will eventually become shareholders. According to a company prospectus, RWASHOSCCO will become financially independent in 2009, generating adequate revenues through a 2.5 percent fee assessed on the coffee that it handles on behalf of its shareholders.

The Rwanda Fine Coffee Association (RFCA) was officially created in August 2005 by investors who felt the need to establish an institution to represent industry interests. The objectives of the association are to promote continuous improvement in productivity and quality of Rwandan coffee, promote the commercialization of Rwandan coffee on the international market, support training of industry actors and mobilize financial resources for the coffee sector through dialogue with donors. The association currently has 18 members and has recently secured office space within OCIR-CAFÉ. The association has recruited an executive secretary to manage operations. Annual membership fees of 100,000 RWF have been established and 50% of the 22 members have paid to date.

These two new organizations have yet to assume significant responsibilities but supporting their establishment provides a key opportunity to absorb at least some of the functions provided by USAID implementing partners.

5.6 Transferring Project Functions to Indigenous Organizations

Starting in 2001, USAID was the first donor to promote Rwandan specialty coffee. Because of the success engendered by the USAID-financed program, several other donors, notably the European Union, the International Fund for Agricultural Development, SNV and the World Bank have developed programs to assist in coffee development. Each organization is using its own approach and associated support mechanisms to provide support to the sector.

Over the course of the next four years, the number of washing stations will increase significantly as a plethora of donors provide funding for the development of fully washed capacity. The need for technical assistance and training for new entrants, combined with the required continued support for existing cws, will grow exponentially. If this "second phase" of the development of fully-washed capacity is not managed judiciously, it could severely compromise achievements registered to date. Rwanda could follow the path of Burundi which has significant washing capacity but produces mostly mediocre fully washed coffees.

The Ministry of Commerce (MINICOM) has established extremely ambitious targets for the future development of Rwanda's coffee industry. Targets for 2008 include the production of 35,000mt of coffee from the current 17,000mt, an increase in the number of washing stations from 46 to 120 and an augmentation in the quantity of fully-washed coffee produced from 1,110mt to 15,000mt.

A presidential task force was convened in late 2005, composed of members of OCIR-CAFÉ, MINICOM, the Ministry of Agriculture and chaired by a representative of the Ministry of Defence.²⁶ In December, it published a report which described the current situation in the sector and proposed actions to meet the enunciated targets. The report identified three pillars upon which to base future efforts: an increase in overall coffee production, a continued focus on quality and a strengthening of coordination between the various organs involved in the coffee sector. The task force identified five priority actions:

- Improve access to financing along the entire value chain.
- Privatize inputs and pesticide provision.
- Enforce quality control at the production, processing and export stages.
- Increase existing washing stations' production capacity and construct additional stations.
- Promote Rwandan coffee internationally.

The report recommends the formation of regionally-based coffee companies to provide the services that are currently being supplied by USAID implementing partners and other donor funded projects. The companies, which would operate with oversight from national and regional boards comprised of cooperatives, washing station owners and local government representatives, would depend on ADAR, PEARL, SNV (Dutch aid agency) and ISAR to train their staffs. Approximately 15 cooperatives and/or private operators would be served by each company. The task force projects that the companies would begin operations by November 2006.

Proposed services related to production would include microfinance for producers, farmer training in improved production techniques and the provision of inputs. Processing services envisioned are advice on financing for coffee washing station construction and operating costs, laboratory quality control, the elaboration of construction plans for washing station construction and training in coffee processing techniques. Proposed marketing and distribution attributes would be the management of relations with buyers, representation at trade shows and the elaboration of brochures and other marketing materials.

This proposal raises many key questions which require clarification prior to passing judgement on the advisability of the proposed model. What would be the relationship between RWASHOSCCO and RFCA and these new coffee companies? Would adherence be voluntary or obligatory? What are the positions of current cooperative and private sector operators with regard to the establishment of the coffee companies? To what extent is there adherence to this proposal? How will the company insure equitable distribution of services among all members? In

²⁶ Several entities provided input to the task force, including the Rwanda National Innovation and Competitiveness Program, and the PEARL and ADAR Projects.

the absence of direct donor involvement in company operations, will member cooperatives and privately-owned washing stations have confidence in the impartiality and integrity of company officers, particularly regarding the negotiation of sales agreements? Given the vertiginous rise in the number of cws, where will one find adequate, experienced staff to operate existing cws and train a multitude of new cws personnel? How will USAID provide training manpower for new stations when, given the current USAID budget reduction, they are hard pressed to provide assistance to current coffee sector clients?

There is a pressing need for coffee sector donors, the GOR and industry actors to discuss next steps but precipitous courses of action could have a severe negative impact on the continued development of the sector. At present, there is significant overlap among donors with respect to sector assistance. While this overlap was not problematic during the early stages of coffee sector development, a harmonization of roles and responsibilities of the different actors is now required.

SECTION VI

6.0 Conclusion

Five years ago, Rwanda was unknown to international importers and roasters of specialty coffee. Today, Rwanda is an established specialty coffee origin, producing world-class coffees. Rwanda's best coffees regularly receive international acclaim and demand far outstrips supply. The development of Rwanda's specialty coffee industry has significantly improved the lives of more than 50,000 rural families by dramatically increasing revenues through the production, processing and exporting of high quality product. Increased revenues have raised standards of living, improved access to healthcare and education and given thousands of Rwandans concrete reasons to believe in a brighter future. The rapidity with which Rwanda's specialty coffee industry has established itself has surprised industry experts who believe it unparalleled in industry annals. The rapid development of the sector is a testament to the exceptional dedication, drive and entrepreneurial spirit of Rwandan farmers and investors and the enlightened strategies and policies of the Government of Rwanda.

Over the last five years, USAID has been the principal provider of technical and financial assistance to Rwanda's coffee sector, assisting 38 of 46 existing washing stations. The agency has trained thousands of Rwandans in improved crop husbandry, coffee washing station construction, equipment maintenance, wet processing, quality control, cupping, financial and technical management and marketing. Through hands-on, personalized advisory services and seminars, cooperatives and private investors are developing sound business skills which allow them to elaborate bankable business plans, receive loans from financial institutions and strategically manage their investments. USAID's Development Credit Authority has significantly defrayed bank risk inherent in any new investment area by providing a partial guarantee for up to \$2 million in loan capital. The establishment of this program has been decisive in expanding fully-washed production capacity. The agency, through its implementing partners, provided grants to cooperatives and private investors to jump start productive capacity and develop momentum within the sector.

The initial success of the program has incited industry groups (Specialty Coffee Association of America and the Coffee Quality Institute) and importers and roasters to donate significant technical and financial support to Rwanda's specialty coffee development. The willingness and enthusiasm to assist in the sector's development is a tangible demonstration of both the specialty coffee industry's confidence in the future of Rwandan coffee and a belief in the transformational role that coffee can play in the country's development.

If coffee is to play a true transformational role in Rwanda's future, the exceptional achievements registered to date must be deepened and expanded. Improved crop husbandry must be adopted by more coffee washing station suppliers and access to production inputs increased. Linkages between producers and privately owned washing stations must be strengthened to insure an adequate supply of quality cherries at prices that permit an equitable remuneration of both producer and processor. Cupping skills must be reinforced and the number of cupping labs increased. Financial management and corporate governance must be strengthened to secure and maintain value adding certifications (Fair Trade, organic and strategic supplier). Exporters need

to gain experience in transport logistics and contract negotiation.

Today, only seven percent of Rwandan coffee is specialty grade and approximately five percent of Rwandan farmers are reaping the increased economic and social benefits derived from producing specialty coffee. Given the motivation and discipline of Rwanda's farmers, the entrepreneurial spirit of its investors and the political will of the government, Rwanda has an opportunity to become a preeminent specialty coffee origin by expanding premium coffee production to a significant portion of the 95 percent of coffee producers who continue to produce and process using traditional methods.

USAID has provided visionary leadership and the necessary means to establish specialty coffee production in Rwanda. The agency has the opportunity to make good on its goal of affecting transformational development by building on the unprecedented results thus far achieved. In this time of reduced budgetary resources, the agency must judiciously target its investments in economic growth initiatives. No investment merits greater consideration than continued support to Rwanda's specialty coffee sector.